![Mitsubishi Electric logo]

GRAPHIC OPERATION TERMINAL
GOT2000 Series

User's Manual (Utility)

● SAFETY PRECAUTIONS ●

(Always read these precautions before using this equipment.)

Before using this product, please read this manual and the relevant manuals introduced in this manual carefully and pay full attention to safety to handle the product correctly.
The precautions given in this manual are concerned with this product.
In this manual, the safety precautions are ranked as "WARNING" and "CAUTION".

⚠ WARNING	Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.
⚠ CAUTION	CAUTION Indicates that incorrect handling may cause hazardous conditions, resulting in minor or moderate injury or property damage.

Note that the ⚠ caution level may lead to a serious accident according to the circumstances. Always follow the instructions of both levels because they are important to personal safety.

Please save this manual to make it accessible when required and always forward it to the end user.

[DESIGN PRECAUTIONS]

⚠ WARNING

● Some failures of the GOT, communication unit or cable may keep the outputs on or off.
Some failures of a touch panel may cause malfunction of the input objects such as a touch switch.
An external monitoring circuit should be provided to check for output signals which may lead to a serious accident.Not doing so can cause an accident due to false output or malfunction.

● Do not use the GOT as the warning device that may cause a serious accident.
An independent and redundant hardware or mechanical interlock is required to configure the device that displays and outputs serious warning.
Failure to observe this instruction may result in an accident due to incorrect output or malfunction.

● The GOT backlight failure disables the operation on the touch switch(s).
When the GOT backlight has a failure, the POWER LED blinks (orange/blue) and the display section dims. In such a case, the input by the touch switch(s) is disabled.

● The display section of the GOT is an analog-resistive type touch panel.
[GT27]
The GOT is multi-touch compliant; however, do not touch three points or more simultaneously on the display section. Doing so may cause an accident due to incorrect output or malfunction.
[GT23]
If you touch the display section simultaneously in two points or more,the switch that is located around the center of the touched point, if any, may operate.Do not touch the display section in two points or more simultaneously.Doing so may cause an accident due to incorrect output or malfunction.

● When programs or parameters of the controller (such as a PLC) that is monitored by the GOT are changed, be sure to reset the GOT or shut off the power of the GOT at the same time.
Not doing so can cause an accident due to false output or malfunction.

[DESIGN PRECAUTIONS]

⚠ WARNING

● If a communication fault (including cable disconnection) occurs during monitoring on the GOT, communication between the GOT and PLC CPU is suspended and the GOT becomes inoperative.
For bus connection (GT27 Only) : The CPU becomes faulty and the GOT becomes inoperative.
For other than bus connection : The GOT becomes inoperative.
A system where the GOT is used should be configured to perform any significant operation to the system by using the switches of a device other than the GOT on the assumption that a GOT communication fault will occur.
Not doing so can cause an accident due to false output or malfunction.

⚠ CAUTION

● Do not bundle the control and communication cables with main-circuit, power or other wiring.
Run the above cables separately from such wiring and keep them a minimum of 100mm apart.
Not doing so noise can cause a malfunction.
● Do not press the GOT display section with a pointed material as a pen or driver.
Doing so can result in a damage or failure of the display section.
● When the GOT is connected to the Ethernet network, the available IP address is restricted according to the system configuration.
   • When multiple GOTs are connected to the Ethernet network :
     Do not set the IP address (192.168.3.18) for the GOTs and the controllers in the network.
   • When a single GOT is connected to the Ethernet network :
     Do not set the IP address (192.168.3.18) for the controllers except the GOT in the network.
Doing so can cause the IP address duplication.
The duplication can negatively affect the communication of the device with the IP address (192.168.3.18).
The operation at the IP address duplication depends on the devices and the system.
● Turn on the controllers and the network devices to be ready for communication before they communicate with the GOT.
Failure to do so can cause a communication error on the GOT.
● When the GOT is subject to shock or vibration, or some colors appear on the screen of the GOT, the screen of the GOT might flicker.

[MOUNTING PRECAUTIONS]

⚠ WARNING

● Be sure to shut off all phases of the external power supply used by the system before mounting or removing the GOT main unit to/from the panel.
Not doing so can cause the unit to fail or malfunction.
● Be sure to shut off all phases of the external power supply used by the system before mounting or removing the option unit onto/from the GOT.

[MOUNTING PRECAUTIONS]

⚠CAUTION

- Use the GOT in the environment that satisfies the general specifications described in this manual. Not doing so can cause an electric shock, fire, malfunction or product damage or deterioration.

- When mounting the GOT to the control panel, tighten the mounting screws in the specified torque range (0.36 N·m to 0.48 N·m) with a Phillips-head screwdriver No.2.
  Undertightening can cause the GOT to drop, short circuit or malfunction.
  Overtightening can cause a drop, short circuit or malfunction due to the damage of the screws or the GOT.

- When loading the communication unit to the GOT, fit it to the connection interface of the GOT and tighten the mounting screws in the specified torque range (0.36 N·m to 0.48 N·m) with a Phillips-head screwdriver No.2.
  Under tightening can cause the GOT to drop, short circuit or malfunction.
  Overtightening can cause a drop, failure or malfunction due to the damage of the screws or unit.(GT27 Only)

- When closing the USB environmental protection cover, fix the cover to the GOT by pushing the [PUSH] mark on the latch firmly to comply with the protective structure.(GT27 Only)

- Remove the protective film of the GOT.
  When the user continues using the GOT with the protective film, the film may not be removed.In addition, for the models equipped with the human sensor function, using the GOT with the protective film may cause the human sensor not to function properly

- Operate and store the GOT in environments without direct sunlight, high temperature, dust, humidity, and vibrations.

- When using the GOT in the environment of oil or chemicals, use the protective cover for oil.Failure to do so may cause failure or malfunction due to the oil or chemical entering into the GOT.

[WIRING PRECAUTIONS]

⚠WARNING

- Be sure to shut off all phases of the external power supply used by the system before wiring.
  Failure to do so may result in an electric shock, product damage or malfunctions.

⚠CAUTION

- Make sure to ground the FG terminal and LG terminal of the GOT power supply section to the protective ground conductors dedicated to the GOT with a ground resistance of 100 Ω or less.
- When tightening the terminal screws, use a Phillips-head screwdriver No.2.
- Terminal screws which are not to be used must be tightened always at torque 0.5 N·m to 0.8 N·m.
  Otherwise there will be a danger of short circuit against the solderless terminals.

[WIRING PRECAUTIONS]

⚠CAUTION

- Use applicable solderless terminals and tighten them with the specified torque.
  If any solderless spade terminal is used, it may be disconnected when the terminal screw comes loose, resulting in failure.
- Correctly wire the GOT power supply section after confirming the rated voltage and terminal arrangement of the product.
  Not doing so can cause a fire or failure.
- Tighten the terminal screws of the GOT power supply section in the specified torque range (0.5 N·m to 0.8 N·m).
  Undertightening can cause a short circuit or malfunction.
  Overtightening can cause a short circuit or malfunction due to the damage of the screws or the GOT.
- Exercise care to avoid foreign matter such as chips and wire offcuts entering the GOT.
  Not doing so can cause a fire, failure or malfunction.
- The module has an ingress prevention label on its top to prevent foreign matter, such as wire offcuts, from entering the module during wiring.
  Do not peel this label during wiring.Before starting system operation, be sure to peel this label because of heat dissipation.
- Plug the communication cable into the GOT interface or the connector of the connected unit, and tighten the mounting screws and the terminal screws in the specified torque range.
  Undertightening can cause a short circuit or malfunction.
  Overtightening can cause a short circuit or malfunction due to the damage of the screws or unit.
- Plug the QnA/ACPU/Motion controller(A series) bus connection cable by inserting it into the connector of the connected unit until it "clicks".
  After plugging, check that it has been inserted snugly.
  Not doing so can cause a malfunction due to a contact fault.(GT27 Only)

[TEST OPERATION PRECAUTIONS]

⚠WARNING

- Before performing the test operations of the user creation monitor screen (such as turning ON or OFF bit device, changing the word device current value, changing the settings or current values of the timer or counter, and changing the buffer memory current value), read through the manual carefully and make yourself familiar with the operation method.
  During test operation, never change the data of the devices which are used to perform significant operation for the system.
  False output or malfunction can cause an accident.

[STARTUP/MAINTENANCE PRECAUTIONS]

⚠WARNING

- When power is on, do not touch the terminals.
  Doing so can cause an electric shock or malfunction.
- Correctly connect the battery connector.
  Do not charge, disassemble, heat, short-circuit, solder, or throw the battery into the fire.
  Doing so will cause the battery to produce heat, explode, or ignite, resulting in injury and fire.
- Before starting cleaning or terminal screw retightening, always switch off the power externally in all phases.
  Not switching the power off in all phases can cause a unit failure or malfunction.
  Undertightening can cause a short circuit or malfunction.
  Overtightening can cause a short circuit or malfunction due to the damage of the screws or unit.

⚠CAUTION

- Do not disassemble or modify the unit.
  Doing so can cause a failure, malfunction, injury or fire.
- Do not touch the conductive and electronic parts of the unit directly.
  Doing so can cause a unit malfunction or failure.
- The cables connected to the unit must be run in ducts or clamped.
  Not doing so can cause the unit or cable to be damaged due to the dangling, motion or accidental pulling of the cables or can cause a malfunction due to a cable connection fault.
- When unplugging the cable connected to the unit, do not hold and pull from the cable portion.
  Doing so can cause the unit or cable to be damaged or can cause a malfunction due to a cable connection fault.
- Do not drop the module or subject it to strong shock. A module damage may result.
- Do not drop or give an impact to the battery mounted to the unit.
  Doing so may damage the battery, causing the battery fluid to leak inside the battery.If the battery is dropped or given an impact, dispose of it without using.
- Before touching the unit, always touch grounded metals, etc. to discharge static electricity from human body, etc.
  Not doing so can cause the unit to fail or malfunction.
- Use the battery manufactured by Mitsubishi Electric Corporation.
  Use of other batteries may cause a risk of fire or explosion.
- Dispose of used battery promptly.
  Keep away from children.Do not disassemble and do not dispose of in fire.
- Be sure to shut off all phases of the external power supply before replacing the battery or using the dip switch of the terminating resistor.
  Not doing so can cause the unit to fail or malfunction by static electricity.

[TOUCH PANEL PRECAUTIONS]

⚠ CAUTION
● For the analog-resistive film type touch panels, normally the adjustment is not required. However, the difference between a touched position and the object position may occur as the period of use elapses. When any difference between a touched position and the object position occurs, execute the touch panel calibration. ● When any difference between a touched position and the object position occurs, other object may be activated. This may cause an unexpected operation due to incorrect output or malfunction.

[PRECAUTIONS WHEN THE DATA STORAGE IS IN USE]

⚠ WARNING
● If the SD card mounted on drive A of the GOT is removed while the GOT is accessed, processing for the GOT might be interrupted about for 20 seconds. The GOT cannot be operated during this period. The functions that run in the background including a screen updating, alarm, logging, scripts, and others are also interrupted. Since this interruption makes an impact to the system operation, it might cause failure.After checking the light off of SD card access LED, remove the SD card.

⚠ CAUTION
● If the data storage mounted on the GOT is removed while the GOT is accessed, the data storage and files are damaged. To remove the data storage from the GOT, check that the access to the data storage in SD card access LED, the system signal, and others is not performed. ● When inserting a SD card into the GOT, make sure to close the SD card cover. Failure to do so causes the data not to be read or written. ● When removing the SD card from the GOT, make sure to support the SD card by hand as it may pop out. Failure to do so may cause the SD card to drop from the GOT, resulting in a failure or break. ● When inserting a USB device into a USB interface of the GOT, make sure to insert the device into the interface firmly. Failure to do so may cause the USB device to drop from the GOT, resulting in a failure or break. ● Before removing the USB device from the GOT, follow the procedure for removal on the utility screen of the GOT. After the successful completion dialog is displayed, remove the USB device by hand carefully. Failure to do so may cause the USB device to drop from the GOT, resulting in a failure or break.

[DISPOSAL PRECAUTIONS]

⚠CAUTION

- When disposing of this product, treat it as industrial waste.
  When disposing of batteries, separate them from other wastes according to the local regulations.
  (Refer to the GOT2000 Series User's Manual (Hardware) for details of the battery directive in the EU member states.)

[TRANSPORTATION PRECAUTIONS]

⚠CAUTION

- When transporting lithium batteries, make sure to treat them based on the transport regulations.
  (Refer to the GOT2000 Series User's Manual (Hardware) for details of the regulated models.)
- Make sure to transport the GOT main unit and/or relevant unit(s) in the manner they will not be exposed to the impact exceeding the impact resistance described in the general specifications of this manual, as they are precision devices.
  Failure to do so may cause the unit to fail.
  Check if the unit operates correctly after transportation.
- When fumigants that contain halogen materials such as fluorine, chlorine, bromine, and iodine are used for disinfecting and protecting wooden packaging from insects, they cause malfunction when entering our products.
  Please take necessary precautions to ensure that remaining materials from fumigant do not enter our products, or treat packaging with methods other than fumigation (heat method).
  Additionally, disinfect and protect wood from insects before packing products.

INTRODUCTION

Thank you for choosing Mitsubishi Graphic Operation Terminal (Mitsubishi GOT).
Read this manual and make sure you understand the functions and performance of the GOT thoroughly in advance to ensure correct use.

CONTENTS

1. UTILITY FUNCTION

2. GOT BASIC SETTING

3. SPECIAL FUNCTION SETTING

4. MAINTENANCE

5. MONITOR

6. DATA CONTROL

7. INSTALLATION OF BOOTOS AND BASIC SYSTEM APPLICATION

REVISIONS

WARRANTY

The following table lists the manual relevant to this product.
Refer to each manual for any purpose.

■ Screen creation software manuals

Manual name	Manual number (Model code)
GT Works3 Version1 Installation Procedure Manual	-
GT Works3 (GOT2000) Help	-

■ Connection manuals

Manual name	Manual number (Model code)
GOT2000 Series Connection Manual (Mitsubishi Product) For GT Works3 Version1	SH-081197ENG (1D7MJ8)
GOT2000 Series Connection Manual (Non Mitsubishi Product 1) For GT Works3 Version1	SH-081198ENG (1D7MJ9)
GOT2000 Series Connection Manual (Non Mitsubishi Product 2) For GT Works3 Version1	SH-081199ENG (1D7MK1)
GOT2000 Series Connection Manual (Microcomputer, MODBUS, Products, Peripherals) For GT Works3 Version1	SH-081200ENG (1D7MK2)

■ GT SoftGOT2000 manuals

Manual name	Manual number (Model code)
GT SoftGOT2000 Version1 Operating Manual	SH-081201ENG (1D7MK3)

■ GOT2000 manuals

Manual name	Manual number (Model code)
GOT2000 Series User's Manual (Hardware)	SH-081194ENG (1D7MJ5)
GOT2000 Series User's Manual (Utility)	SH-081195ENG (1D7MJ6)
GOT2000 Series User's Manual (Monitor)	SH-081196ENG (1D7MJ7)

■ Creating a project

Obtaining the specifications and operation methods of GT Designer3	GT Designer3 (GOT2000) Help
Setting available functions on GT Designer3	
Creating a screen displayed on the GOT	
Obtaining useful functions to increase efficiency of drawing	
Setting details for figures and objects	GT Designer3 (GOT2000) Help
Setting functions for the data collection or trigger action	
Setting functions to use peripheral devices	
Simulating a created project on a personal computer	GT Designer3 (GOT2000) Help

■ Connecting a controller to the GOT

Obtaining information of Mitsubishi products applicable to the GOT	GOT2000 Series Connection Manual (Mitsubishi Products) for GT Works3 Version1 (ELE)
Connecting Mitsubishi products to the GOT	
Connecting multiple controllers to one GOT (Multi-channel function)	
Establishing communication between a personal computer and a controller via the GOT (FA transparent function)	
Obtaining information of Non-Mitsubishi products applicable to the GOT	• GOT2000 Series Connection Manual (Non-Mitsubishi Products 1) for GT Works3 Version1
Connecting Non-Mitsubishi products to the GOT	• GOT2000 Series Connection Manual (Non-Mitsubishi Products 2) for GT Works3 Version1
Obtaining information of peripheral devices applicable to the GOT	GOT2000 Series Connection Manual (Microcomputer, MODBUS Products, Peripherals) for GT Works3 Version1
Connecting peripheral devices including a barcode reader to the GOT	
Connecting α2 with GOT	GOT1000 Series Connection Manual (α2 Connection) for GT Works3 (ELE)

■ Transferring data to the GOT

Writing data to the GOT	GT Designer3 (GOT2000) Help
Reading data from the GOT	
Verifying a editing project to a GOT project	

■ Others

Obtaining specifications (including part names, external dimensions, and options) of each GOT	GOT2000 Series User's Manual (Hardware)
Installing the GOT	
Operating the utility	GOT2000 Series User's Manual (Utility)
Configuring the gateway function	GT Designer3 (GOT2000) Help
Configuring the extended function and option function	GOT2000 Series User's Manual (Monitor)
Using a personal computer as the GOT	GT SoftGOT2000 Version1 Operating Manual for GT Works3 Version1 (ELE)

■ GOT

Abbreviations and generic terms			Description
GOT2000 Series	GT27	GT2712-S	GT2712-STBA, GT2712-STWA, GT2712-STBD, GT2712-STWD
		GT2710-S	GT2710-STBA?GT2710-STBD
		GT2710-V	GT2710-VTBA, GT2710-VTWA, GT2710-VTBD, GT2710-VTWD
		GT2708-S	GT2708-STBA?GT2708-STBD
		GT2708-V	GT2708-VTBA?GT2708-VTBD
	GT23	GT2310-V	GT2310-VTBA?GT2310-VTBD
		GT2308-V	GT2308-VTBA?GT2308-VTBD
	GT SoftGOT2000		GT SoftGOT2000 Version1
GOT1000 Series			GOT1000 Series
GOT900 Series			GOT-A900 Series, GOT-F900 Series
GOT800 Series			GOT-800 Series

■ Communication unit

Abbreviations and generic terms	Description
Bus connection unit	GT15-QBUS, GT15-QBUS2, GT15-ABUS, GT15-ABUS2, GT15-75QBUSL, GT15-75QBUS2L, GT15-75ABUSL, GT15-75ABUS2L
Serial communication unit	GT15-RS2-9P, GT15-RS4-9S, GT15-RS4-TE
MELSECNET/H communication unit	GT15-J71LP23-25, GT15-J71BR13
CC-Link IE Controller Network communication unit	GT15-J71GP23-SX
CC-Link IE Field Network communication unit	GT15-J71GF13-T2
CC-Link communication unit	GT15-J61BT13
Serial multi-drop connection unit	GT01-RS4-M
Connection conversion adapter	GT10-9PT5S

■ Option unit

Abbreviations and generic terms		Description
Video/RGB unit	Video input unit	GT27-V4-Z (A set of GT16M-V4 and GT27-IF1000)
	RGB input unit	GT27-R2-Z (A set of GT16M-R2 and GT27-IF1000)
	Video/RGB input unit	GT27-V4R1-Z (A set of GT16M-V4R1 and GT27-IF1000)
	RGB output unit	GT27-ROUT-Z (A set of GT16M-ROUT and GT27-IF1000)
Multimedia unit		GT27-MMR-Z (A set of GT16M-MMR and GT27-IF1000)
Video signal conversion unit		GT27-IF1000
External I/O unit		GT15-DIO, GT15-DIOR
Sound output unit		GT15-SOUT

■ Option

Abbreviations and generic terms		Description
SD card		L1MEM-2GBSD, L1MEM-4GBSD
Battery		GT11-50BAT, GT11-BAT
Protective sheet	For GT27	GT27-12PSCC, GT25-10PSCC, GT25-08PSCC, GT27-12PSCB-UC, GT25-10PSCB-UC, GT25-08PSCB-UC
	For GT23	GT23-10PSCB, GT23-08PSCB
Protective cover for oil		GT20-10PCO, GT20-08PCO
USB environmental protection cover		GT25-UCOV
Stand		GT15-90STAND, GT15-80STAND, GT15-70STAND, GT15-60STAND
Attachment		GT15-70ATT-98, GT15-70ATT-87, GT15-60ATT-97, GT15-60ATT-96, GT15-60ATT-87, GT15-60ATT-77

■ Software

(1) Software related to GOT

Abbreviations and generic terms	Description
GT Works3	SW1DNC-GTW3-J, SW1DND-GTW3-J, SW1DNC-GTW3-E, SW1DND-GTW3-E, SW1DND-GTW3-C
GT Designer3 Version1	Screen drawing software GT Designer3 for GOT2000/GOT1000 series
GT Designer3	Screen drawing software for GOT2000 series included in GT Works3
GT Designer3 (GOT2000)	
GT Designer3 (GOT1000)	Screen drawing software for GOT1000 series included in GT Works3
GT Simulator3	Screen simulator GT Simulator3 for GOT2000/GOT1000/GOT900 series
GT SoftGOT2000	Monitoring software GT SoftGOT2000 series
GT Converter2	Data conversion software GT Converter2 for GOT1000/GOT900 series
GT Designer2 Classic	Screen drawing software GT Designer2 Classic for GOT900 series
GT Designer2	Screen drawing software GT Designer2 for GOT1000/GOT900 series
DU/WIN	Screen drawing software FX-PCS-DU/WIN for GOT-F900 series

(2) Software related to GOT

Abbreviations and generic terms	Description
GT Works3	SW1DNC-GTW3-J, SW1DND-GTW3-J, SW1DNC-GTW3-E, SW1DND-GTW3-E, SW1DND-GTW3-C
GT Designer3 Version1	Screen drawing software GT Designer3 for GOT2000/GOT1000 series
GT Designer3	Screen drawing software for GOT2000 series included in GT Works3
GT Designer3 (GOT2000)	
GT Designer3 (GOT1000)	Screen drawing software for GOT1000 series included in GT Works3
GT Simulator3	Screen simulator GT Simulator3 for GOT2000/GOT1000/GOT900 series
GT SoftGOT2000	Monitoring software GT SoftGOT2000 series
GT Converter2	Data conversion software GT Converter2 for GOT1000/GOT900 series
GT Designer2 Classic	Screen drawing software GT Designer2 Classic for GOT900 series
GT Designer2	Screen drawing software GT Designer2 for GOT1000/GOT900 series
DU/WIN	Screen drawing software FX-PCS-DU/WIN for GOT-F900 series

(3) Other software

Abbreviations and generic terms	Description
GX Works2	SW□DNC-GXW2-J (-JA, -JAZ) type programmable controller engineering software (□ indicates a version.)
GX Simulator2	GX Works2 with the simulation function
GX Simulator	SW□D5C-LLT-J (-JV) type ladder logic test tool function software package (SW5D5C-LLT (-V) or later versions) (□ indicates a version.)
GX Developer	SW□D5C-GPPW-J (-JV)/SW□D5F-GPPW (-V) type software package (□ indicates a version.)
GX LogViewer	SW□DNN-VIEWER-J type software package (□ indicates a version.)
PX Developer	SW□D5C-FBDQ-J type FBD software package for process control (□ indicates a version.)
MT Works2	Motion controller engineering environment MELSOFT MT Works2(SW□DNC-MTW2-J) (□ indicates a version.)
MT Developer	SW□RNC-GSV type integrated start-up support software for motion controller Q series (□ indicates a version.)
MR Configurator2	SW□DNC-MRC2-J type servo configuration software (□ indicates a version.)
MR Configurator	MRZJW□-SETUP type servo configuration software (□ indicates a version.)
FR Configurator	Inverter setup software (FR-SW□-SETUP-WJ) (□ indicates a version.)
NC Configurator	CNC parameter setting support tool NC Configurator
FX Configurator-FP	Parameter setting, monitoring, and testing software packages for FX3U-20SSC-H (SW□D5CFXSSCJ) (□ indicates a version.)
FX3U-ENET-L Configuration tool	FX3U-ENET-L type Ethernet module setting software (SW1D5-FXENETL-J)
RT ToolBox2	Robot program creation software (3D-11C-WINJ)
MX Component	MX Component Version□(SW□D5C-ACT-J, SW□D5C-ACT-JA) (□ indicates a version.)
MX Sheet	MX Sheet Version□(SW□D5C-SHEET-J, SW□D5C-SHEET-JA) (□ indicates a version.)
QnUDVCPU·LCPU Logging Configuration Tool	QnUDVCPU·LCPU logging configuration tool (SW1DNN-LLUTL-J)

■ License key (for GT SoftGOT1000)

Abbreviations and generic terms	Description
License key	GT27-SGTKEY-U

■ Others

Abbreviations and generic terms	Description
IAI	IAI Corporation
AZBIL	Azbil Corporation
OMRON	OMRON Corporation
KEYENCE	KEYENCE CORPORATION
KOYO EI	KOYO ELECTRONICS INDUSTRIES CO., LTD.
JTEKT	JTEKT Corporation
SHARP	Sharp Manufacturing Systems Corporation
SHINKO	Shinko Technos Co., Ltd.
CHINO	CHINO CORPORATION
TOSHIBA	TOSHIBA CORPORATION
TOSHIBA MACHINE	TOSHIBA MACHINE CO., LTD.
PANASONIC	Panasonic Corporation
PANASONIC IDS	Panasonic Industrial Devices SUNX Co., Ltd.
HITACHI IES	Hitachi Industrial Equipment Systems Co., Ltd.
HITACHI	Hitachi, Ltd.
FUJI ELECTRIC	FUJI ELECTRIC CO., LTD.
YASKAWA	YASKAWA Electric Corporation
YOKOGAWA	Yokogawa Electric Corporation
RKC	RKC INSTRUMENT INC.
ALLEN-BRADLEY	Allen-Bradley products manufactured by Rockwell Automation, Inc.
GE IP	GE Intelligent Platforms KK
LS IS	LS Industrial Systems Co., Ltd.
SCHNEIDER	Schneider Electric SA
SICK	SICK AG
SIEMENS	Siemens AG
PLC	Programmable controller manufactured by each corporation
Control equipment	Control equipment manufactured by each corporation
Temperature controller	Temperature controller manufactured by each corporation
Indicating controller	Indicating controller manufactured by each corporation
Controller	Controller manufactured by each corporation

MEMO

1. UTILITY FUNCTION

Utility is a function, which carries out connection of GOT and controller, screen display and operation method settings, program/data control and self-check etc.

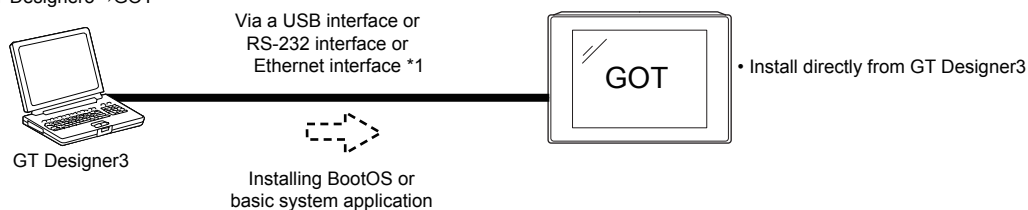Refer to the following for the utility function list.

➡ 1.2 Utility Function List
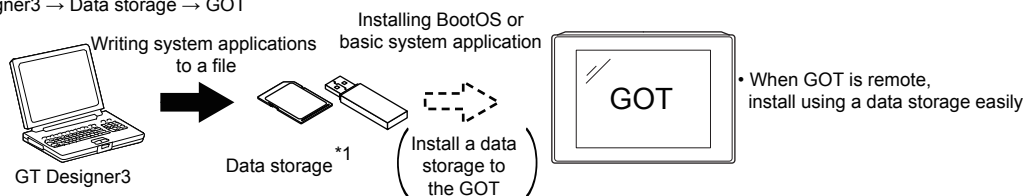
1.1 Utility Execution

For utility execution, utility has to be displayed by installing BootOS and basic system application in the C drive (built in flash memory).

There are following three types for the installing BootOS and basic system application methods.
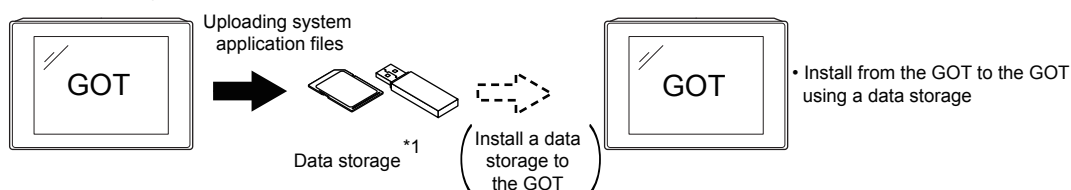
1) GT Designer3→GOT

Via a USB interface or
RS-232 interface or
Ethernet interface *1

GT Designer3

Installing BootOS or
basic system application

GOT

• Install directly from GT Designer3

2) GT Designer3 → Data storage → GOT

Writing system applications
to a file

GT Designer3

Data storage *1

Installing BootOS or
basic system application

Install a data
storage to
the GOT

GOT

• When GOT is remote,
install using a data storage easily

3) GOT → Data storage → GOT

GOT

Uploading system
application files

Data storage *1

Install a data
storage to
the GOT

GOT

• Install from the GOT to the GOT
using a data storage

*1   When installing the BootOS and basic system application, standard monitor OS has to be installed in GOT in advance.

Refer to the following for the installation which uses GT Designer3.

➡ GT Designer3 (GOT2000) Help

Refer to the following for the installation which uses GOT.

➡ 7. INSTALLATION OF BOOTOS AND BASIC SYSTEM APPLICATION

1.2 Utility Function List

The items in the following list can be set/operated on the utility screens.
For GT Designer3 of an old version, displayed screens, setting items and others may differ from those described in the manual.

Item			Functions overview	Reference
GOT basic setting	Display		Setting the startup screen display time and screen saving time	
			Setting the backlight to ON or OFF during screen saving	
			Setting the battery alarm display to ON or OFF	
			Setting the detect level/detect time of human sensor	
			Adjusting brightness and contrast	
	Language		Switching message languages	
	Inherent information		Setting the GOT ID number	
	IP address		Setting the GOT IP address, subnet mask, and default gateway Setting the GOT operation when a device with the same IP address as that of the GOT is added to the network afterwards.	
	Operation		Setting the buzzer volume and window move buzzer Setting a musical interval for the buzzer sound Setting the key sensitivity and key reaction speed Setting the pressing pressure Setting the access switch for the drive A	
	Utility call key		Setting the utility call keys	
	USB host		Setting the USB mouse/keyboard	
	Time		Displaying and setting the clock current time	
	Controller	Assign Ethernet I/F	Setting the assign Ethernet I/F	
		Channel - Driver assign	Displaying the communication driver assigned to each channel	
		Channing assignment	Changing the assigned communication driver	
		5 V power supply	Setting 5 V power supply for channel No. 1	
		Communication detail setting	Setting communication parameters, setting or deleting sequence program protection key words, canceling sequence program protection status (When connecting to FX series CPU)	
	Ethernet communication		Displaying the contents of Ethernet setting, changing the host	
	Transparent mode		Setting the channel No. to be used for the communication for the FA transparent function	
	Security	Security level authentication	Authenticating security levels	
	Operator authentication	Operator management	Managing operator	
		Password change	Changing a password	
		Function setting	Setting the operator authentication function	

Item			Functions overview	Reference
Special function setting	SoftGOT-GOT link function		Setting the SoftGOT-GOT link function	
	VNC server function		Setting the VNC® server function	
	Sequence program monitor		Starting the sequence program monitor	
	Backup/restoration setting		Setting the backup and restoration	
		Trigger backup setting	Setting the trigger backup	
		Trigger time setting	Setting the trigger time	
	License management		Displaying the screen for registering and releasing the license	
	Video/RGB		Displaying the screen for setting the video/RGB I/O unit	
	Multimedia		Displaying the screen for setting the multimedia	
Maintenance	Batch self check		Executing various diagnostics collectively and copying the result to a data storage	
	USB device management		Displaying the status of USB device	
	Cleaning		Displaying the screen for cleaning the display	
	Touch panel calibration		Adjusting the touch panel	
	Maintenance timing setting		Setting the maintenance time notification period for backlight and display section, and the maintenance time notification period for touch key and built-in flash memory	
	Addition times reset		Resetting accumulated hours and counts for maintenance time notifications	
	System alarm		Displaying the system alarm	
	Drawing check		Checking the drawing	
	Font check		Checking the font	
	Touch panel check		Checking the touch panel	
	I/O check		Checking the I/O of RS-232 interface	
	Ethernet status check		Checking the connection status of Ethernet	
	GOT information		Displaying the GOT information	

Item		Functions overview	Reference
Monitor	Device monitor	Starting the device monitor	
	Sequence program monitor	Starting the sequence program monitor	
	Network monitor	Starting the network monitor	
	Intelligent module monitor	Starting the intelligent module monitor	
	Servo amplifier monitor	Starting the servo amplifier monitor	
	Motion monitor	Starting the motion monitor	
	CNC monitor	Starting the CNC monitor	
	Sequence program monitor (SFC)	Starting the SFC monitor	
	Motion SFC monitor	Starting the motion SFC monitor	
	Log viewer	Starting the log viewer	
	Network status display	Displaying the network status	
	A list editor	Starting the A list editor	
	FX list editor	Starting the FX list editor	
	Ladder edit	Starting the ladder edit	
	CNC data I/O function	Starting the CNC data I/O function	
	Motion program (SV43) editor	Starting the motion program (SV43) editor	
	Motion program (SV43) I/O	Starting the motion program (SV43) I/O	
	MELSEC-L troubleshooting	Starting the MELSEC-L troubleshooting	
Data control	Alarm information	Deleting or copying alarm log files	
		Converting alarm log files in G2A format → CSV/TXT format	
		Displaying graphs of alarm log files	
	Image file management	Deleting/copying image files, changing image file names	
	Recipe information	Converting recipe files in G2P → CSV/TXT format, deleting/copying/moving/creating recipe files, deleting/moving/changing recipe folder names, writing/reading/verifying record values with the recipe record list, deleting device values	
	Logging information	Converting logging files in G2L format → CSV/TXT format	
		Deleting/copying/moving logging files, changing logging file names	
	Deleting logging folders, creating a new logging folder	Converting operation log files in G20 → CSV/TXT format	
		Deleting/copying/moving changing operation log file names, deleting/creating operation log files	
	Package data management	Installing/uploading/package data, checking the data	
	Backup/restoration	Starting the backup/restoration function	
	SRAM control	Confirming the SRAM user area usage, backing up or restoring the data in the SRAM user area, and initializing the SRAM user area	
	Memory card format	Formatting a data storage	
	Memory check	Write/read check of a data storage and built-in flash memory	
	GOT data package acquisition	Copying the data stored in the GOT to an SD card in a batch	

1.3   Utility display

To display setting screens for each utility, the main menu has to be displayed first.
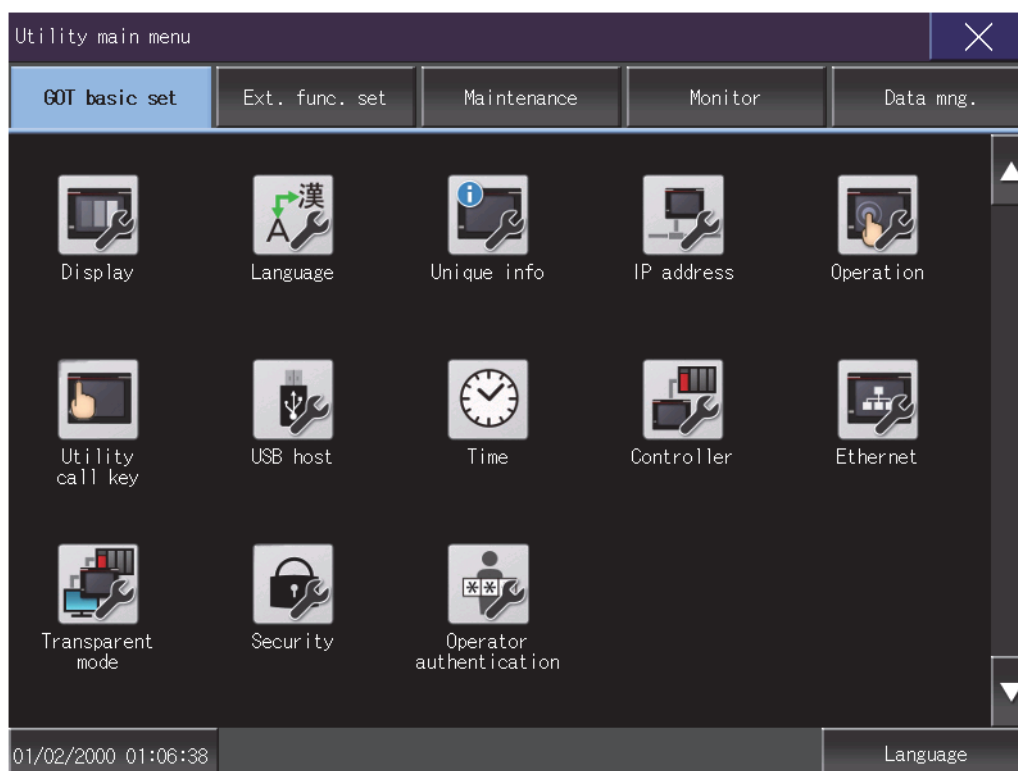

(1) Main menu
The menu items that can be set at the GOT utility are displayed.
Touching a menu item in the main menu will display the setting screen or following selection screen for the item.

(2) System message switch button
This button switches the language used for the utility or system alarms.

When touching the ⌑Language⌑ button, the Select Language screen is displayed.
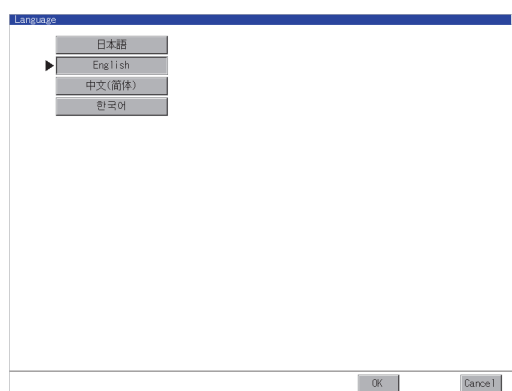
1.   Touch the button of the language to be displayed.

2.   Touching the [OK] button restarts the GOT and the language on the utility is switched to the selected one.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

When starting the GOT without selecting any language or the selected language and the installed fonts are not matched

The following screen will be displayed.

Touching the button of a desired language restarts the GOT and the language is switched to the selected one.

HINT

(1) Selectable languages

The system message switch button is displayed only for the selectable languages.

The selectable languages differ depending on the fonts installed in the GOT.

For the relation between the selectable languages and the fonts, refer to the following.

➡ GT Designer3 (GOT2000) Help

(2) System language switching using the device

The system language can be switched using the system language switching device set with GT Designer3.

For the setting method of the system language switching device, refer to the following.

➡ GT Designer3 (GOT2000) Help

1.3.1 Display operation of main menu

The following three types of operation can display the main menu.
(Display the main menu after installing the basic system application from GT Designer3 to the GOT built in flash memory.)

(1) When project data is undownloaded

If the power supply of GOT turns ON, the main menu is displayed automatically after title display.

GOT basic setting

Turning on the power supply of the GOT
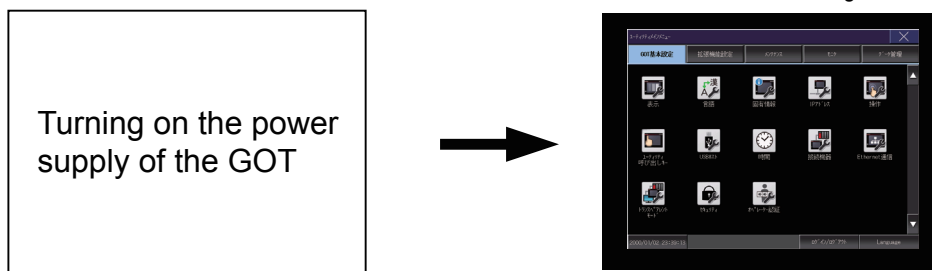
(2) When touching menu call key

If you touch the menu call key while user-created screen is displayed, the main menu is displayed.
The menu call key is set in the position on the GOT screen upper left corner at factory shipment.

Utility call key
Touch a top left corner.

GOT basic setting
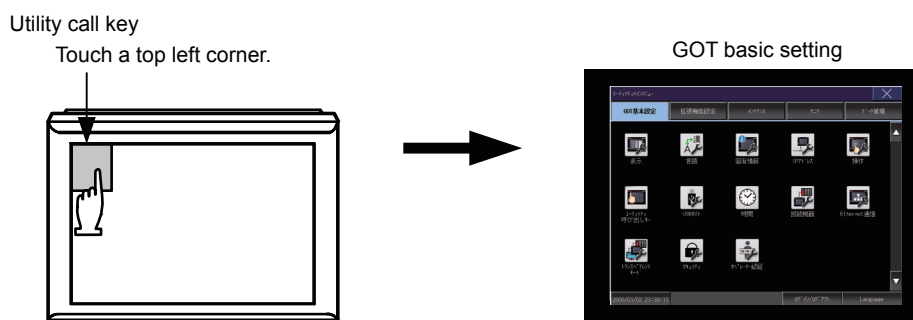
The menu call key can be set by the GOT utility or GT Designer3.
For the setting method of the utility call key, refer to the following.

➡ 2.6.3 Utility call key setting operation
GT Designer3 (GOT2000) Help

POINT

(1) Prohibited simultaneous 2-point presses

Do not touch 2 points or more on the GOT screen simultaneously. Touching 2 points or more simultaneously may activate a part other than the touched point.

(2) When setting menu call key to 1-point

When having set [Pressing time] of the menu call key setting screen to other than "0 (s)", keep pressing the touch panel for the period set to [Pressing time] or more before leaving the finger from the touch panel.
For menu call key setting, refer to the following.

➡ 2.6.3 Utility call key setting operation

(3) When touching special function switch (utility)

If you touch the special function switch (utility) while user-created screen is displayed, the main menu is displayed.

The special function switch (utility) can be set as a touch switch that is displayed on a user-created screen by GT Designer3.

GOT basic setting

Special function switch
(Utility)
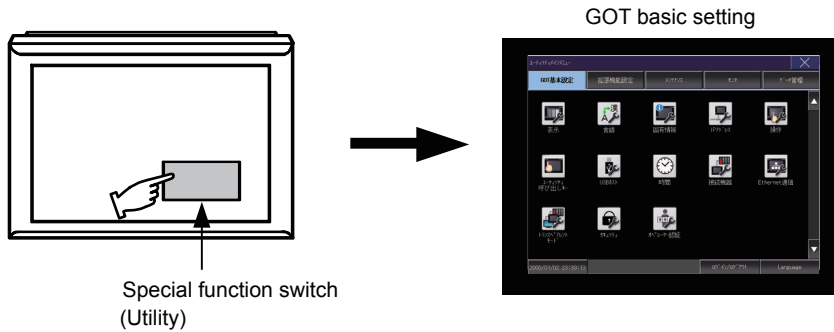
For the details of the special function switch, refer to the following.

➠ GT Designer3 (GOT2000) Help

1

UTILITY FUNCTION

HINT

Locking the utility display by password

When you try to display the utility main menu while the password is set to the GOT by GT Designer3, the display for password input will be appeared.

(Set a password from the common setting menu.)
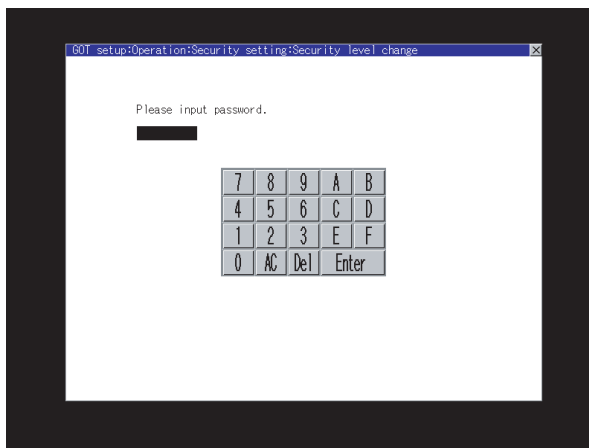
When the password is not matched, displays the error message.

When touching the [OK] button, the screen returns to the monitor screen.

(1) Input operation of password

1. Input the password after touching [0] to [9], [A] to [F] key.

2. Define the password by touching [Enter] key, after password input.

3. To correct the input character, touch [Del] key to delete the correcting character and reinput/retype the new character.

(2) Password input cancel operation

When the ⊠ button is touched, it returns to the monitor screen.

Refer to the following for the details related to the password setting.

➡ GT Designer3 (GOT2000) Help

1.3.2   Utility basic configuration

The basic configuration of utility is as follows.

Title display   Close/Return button

Scroll button
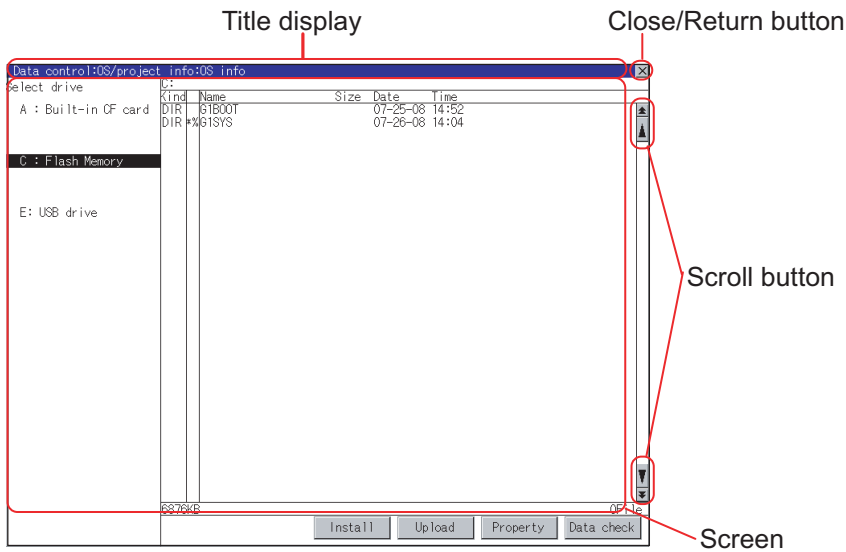
Screen

(1)   Title display
The screen title name is displayed in title display part.
As the screen is composed of multiple layers, the title including these layers is displayed.

Title display
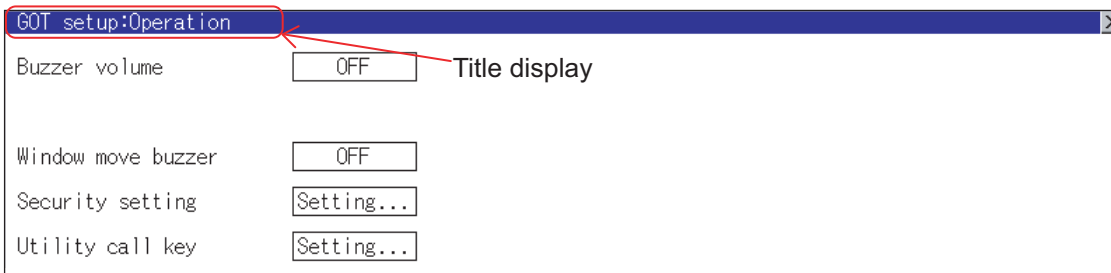
(2)   Close/Return button
When a middle screen of the layers is displayed, if the ⊠ (Close/return) button in the right corner of screen is touched, returns to the previous screen.
If this button is touched when directly displayed from monitor screen, the screen is closed and returns to monitor screen.

(3)   Scroll button
For screens in which the content does not fit on one screen page, there is a right or down scroll button on the screen.
▲ ▼/◀/▶/ Scroll one line/column.
⬆ ⬇/⏪/⏩/ Scroll window.

1.3.3   Basic operation of settings change

■ Change of setting value
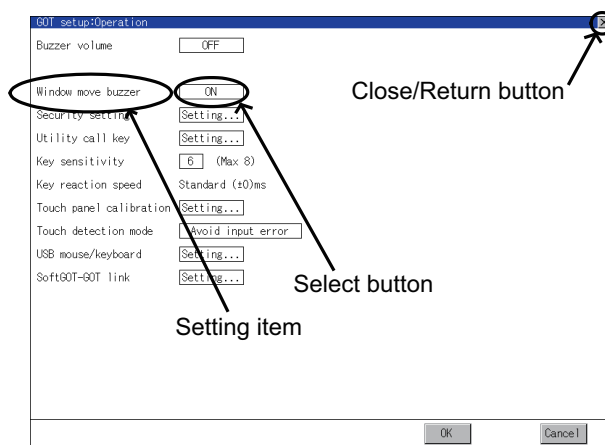
Example: [Operation] screen

(1) Setting item, select button
Touch the select button to change the settings.
The setting methods differ depending on the setting items.
The following types of setting method are available.

(a) Switching the setting value

Touch the button to switch the setting value as shown in ON OFF .

(b) Enter the setting value with a keyboard.
Touch the button to display a keyboard on the GOT screen.

(c) Move to another setting screen.
Touch the button to move to another setting screen.

For the setting method of each setting item, refer to the setting operation of each setting screen.

(2) [OK] button, [Cancel] button, ⊠ (Close/Return) button
Reflect or cancel the changed settings.
• [OK] button
Touch this button to reflect the changed settings and return to the previous screen.
Depending on the setting item, the GOT restarts.
• [Cancel] button
Touch this button to cancel the changed settings and return to the previous screen.

• ⊠ (Close/Return) button
Touching the button displays the following dialog. (If no setting is changed, the dialog is not displayed.)
Operate following the message of the dialog.

MEMO
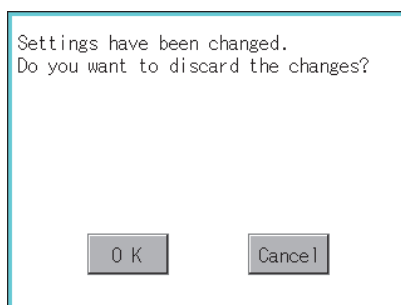
2.   GOT BASIC SETTING

Setting screen for display and setting screen for operation can be displayed from the GOT utility screen.
In the setting screen for display and the setting screen for operation, the following settings can be set.

Item	Description	Reference
Display	Title display period, screen save time, battery alarm display, human sensor, sensor detect level, sensor detect time, sensor off delay, brightness adjustment	2.1
Language	Language setting	2.2
Inherent information	Number setting, GOT name display, GOT description display	2.3
IP address	IP address setting, subnet mask setting, default gateway setting, operation setting for IP address duplication	2.4
Operation	Buzzer sound, musical interval, window move buzzer volume, Key sensitivity, Key reaction speed, Touch detection mode	2.5
Utility call key	Call key setting, pressing time setting	2.6
USB host	USB mouse setting, interlock with mouse cursor touch operation, USB keyboard setting, USB keyboard type setting	2.7
Time	Clock setting, clock display, GOT internal battery voltage status	2.8
Controller	The setting contents of the communication interface can be checked or changed.	2.9
Ethernet communication	The contents of the Ethernet setting can be checked and the host can be changed.	2.10
Transparent mode	Channel No. setting	2.11
Security	Security level authentication	2.12
Operator authentication	Operator management, password change function setting	2.13

2.1 Display

2.1.1 Display setting functions

Configure display settings.
The items which can be set are shown below. When each item part is touched, the respective setting becomes possible.

Item	Description	Setting range
Opening screen time	The title display period at the main unit boot can be set.	0 to 60 seconds[*1] <At factory shipment: 5 seconds>
Screen save time	The period from the user stops the touch panel operation till the screen save function starts can be set.	0 to 60 minutes <At factory shipment: 0 minutes>
Battery alarm display	Whether to display system alarm when the voltage of the GOT internal battery has dropped can be specified.	ON/OFF <At factory shipment: OFF>
Human sensor	Screen saver status cancel by human sensor can be set to Effective or Invalid.	Valid/Invalid <At factory shipment: Invalid>
Sensor detect level[*2]	The sensor detect level can be set.	0 to 10 <At factory shipment: 10>
Sensor detect time[*2]	The time corresponding to the [Sensor detect level] is displayed. (setting is disabled) When the [Sensor detect level] is changed, the corresponding time is reflected by touching [OK] button.	0 to 4 <At factory shipment: 0 seconds>
Sensor off delay	The time period from when the human sensor detects no human movement until the Human Sensor Detection Signal (System Signal 2-1.b5) turns OFF can be set.	0Min 10Sec to 60Min 0Sec <At factory shipment: 0Min 10Sec>
Brightness setting	The brightness can be adjusted.	1 to 32 <Default: 32>

*1   If setting 0, the title screen is not hidden.
     The title screen is always displayed for 4 seconds or longer (which changes depending on the project data contents).
*2   The monitoring time corresponding to the sensor detect level (0 to 10) is as follows.
     As the sensor detect level becomes greater, the sensitivity of the human sensor becomes higher.

Sensor detect level	10	9	8	7	6	5	4	3	2	1	0
Sensor detect time [s]	0	0.1	0.2	0.4	0.8	1	1.5	2	2.5	3	4

POINT

(1) Display setting by GT Designer3

Set the title display period and screen save time in [GOT setup] in [Environmental Setting] of GT Designer3. When change a part of the setting, change the setting by the GOT display setting after downloading the project data.

➡ GT Designer3 (GOT2000) Help

(2) Screen save time

Using the system information function can compulsorily switch the controller to the screen saving status (Forced Screen Saver Disable Signal) or disable the screen save time (Automatic Screen Saver Disable Signal) set with Utility.

➡ GT Designer3 (GOT2000) Help

(3) Display control by human sensor

The human sensor is a function that releases the GOT from the screen saving mode without the necessity to touch the GOT.

This function releases the GOT from the screen saving mode when the operator has come closer to the GOT.
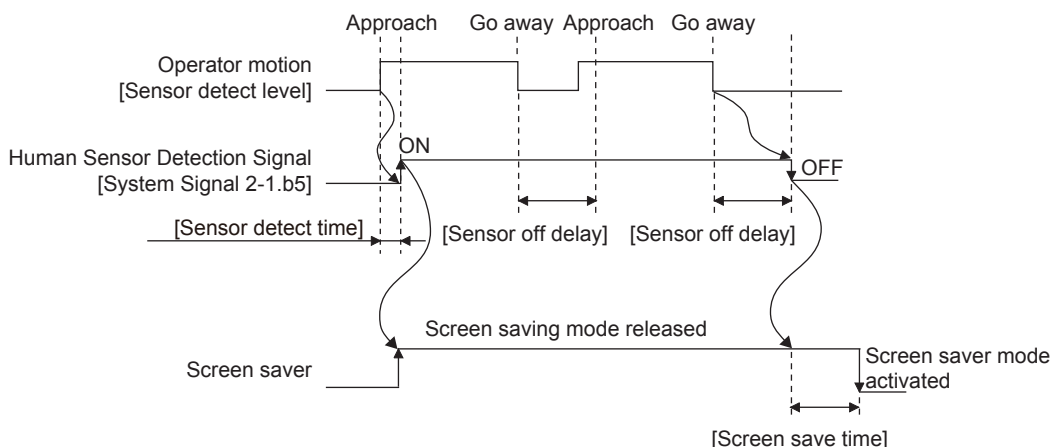
When there is no operator around the GOT for the time set as "Sensor OFF delay", the "Human Sensor Detection Signal" turns OFF.

When the time set as the "Screen save time" elapses after the "Human Sensor Detection Signal" turns OFF, the GOT enters the screen saving mode.

Refer to the following for the Human Sensor Detection Signal (System Signal 2-1.b5).

➡ GT Designer3 (GOT2000) Help

(4) When setting the human sensor to invalid

Even if setting the human sensor to invalid by the utility, the Human Sensor Detection Signal (System Signal 2-1.b5) turns ON when the human sensor detects human movement.

Unintended operation may result, therefore, if controlling the Forced Screen Saver Enable Signal (System Signal 1-1.b1) and Human Sensor Detection Signal associating them with each other by a sequence program, etc.

When setting the human sensor to invalid, review the related sequence program, etc.

2.1.2 Display operation of display

GOT basic setting

Touch [Display].

Display

Touch an item to be changed.
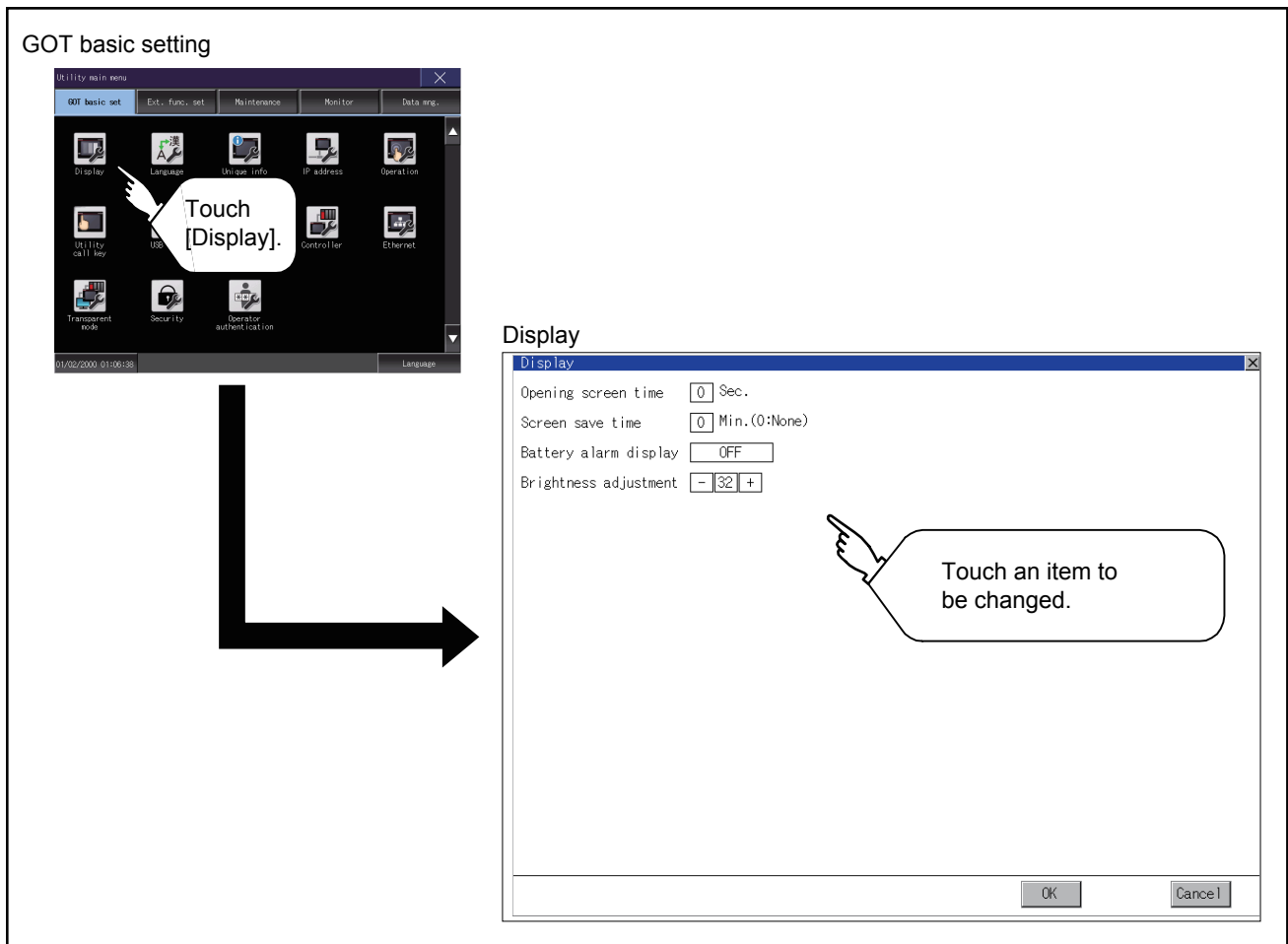
2.1.3 Display setting operations

■ Opening screen, screen save time
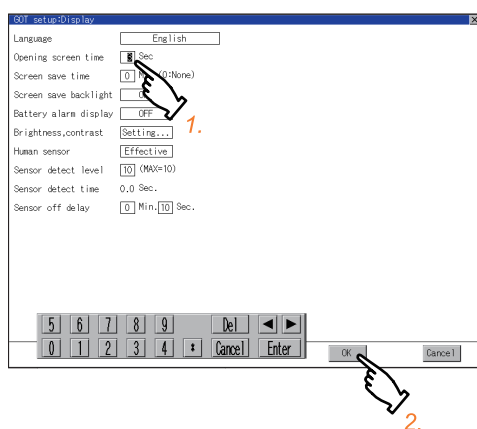
1. If touching the setting item (number), keyboard is displayed.
   Input numeric with the keyboard.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
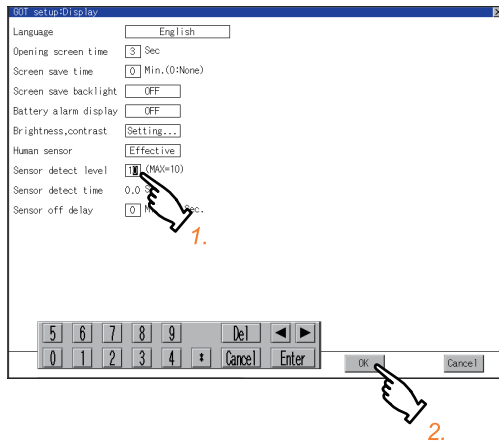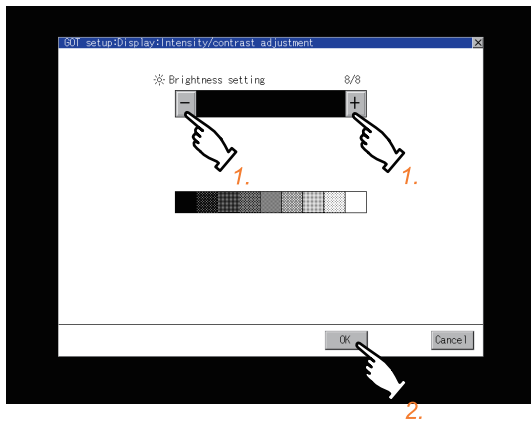   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ Battery alarm display
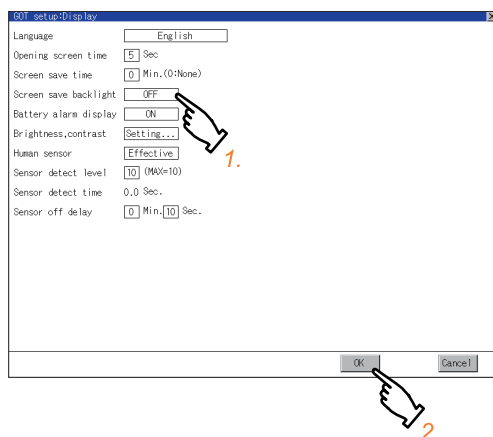
1. If touch the setup item, the setup contents is changed. (ON ⟷ OFF)

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ Human sensor
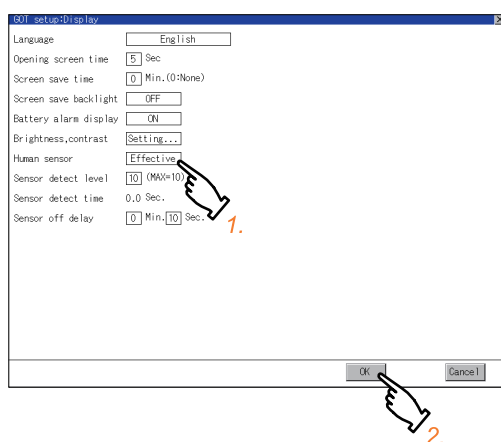
1. If touch the setup item, the setup contents is changed. (Valid ⟷ Invalid)

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ Sensor detect level, sensor off delay

1. If touching the setting item (number), keyboard is displayed.
   Input numeric with the keyboard.
   To move the cursor, touch the ◀ or ▶ button.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ Brightness adjustment

1. Brightness can be adjusted by touching [+], [-] key of brightness adjustment.

2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Display] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Display] screen.

2.2 Language

2.2.1 Language setting functions

Configure language settings.

Item	Description	Setting range
Language*1	Confirmation of the current language and switching language can be performed regarding with the language displayed by utility and dialog.	日本語 (Japanese) English (English) 中文(简体) (Chinese (Simplified)) 中文(繁體) (Chinese (Traditional)) 한국어 (Korean) (At factory shipment: User's selection>

*1 Only selectable languages are displayed.
The selectable languages differ depending on the fonts installed in the GOT.
For details of the fonts, refer to the following.

➠ GT Designer3 (GOT2000) Help

2.2.2 Display operation of language display
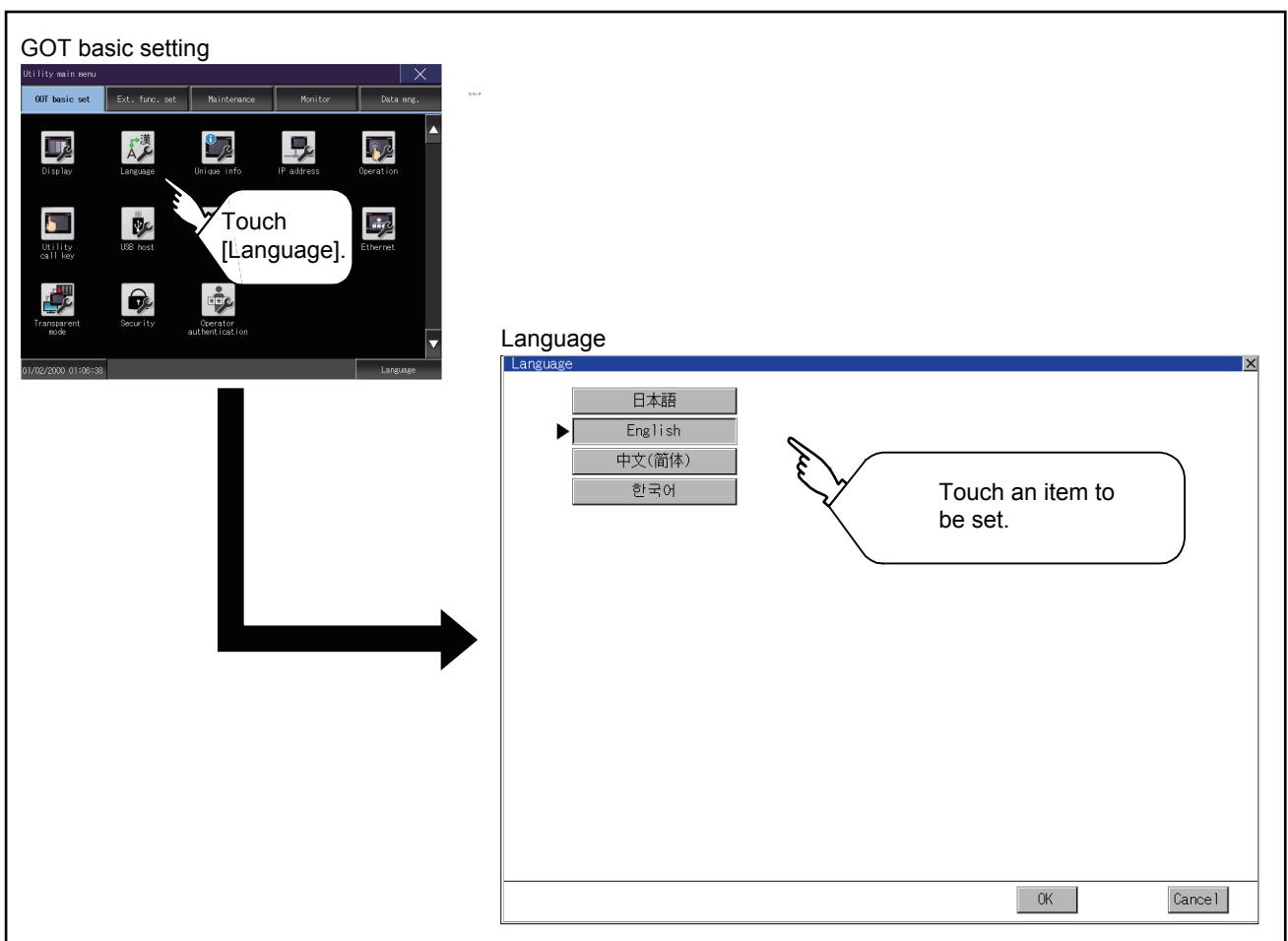
2.2.3 Setting operation of language

■ Language
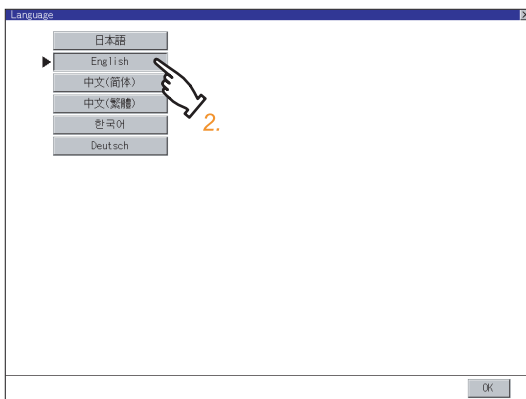
1. If touch the language to be displayed, the language is selected.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.
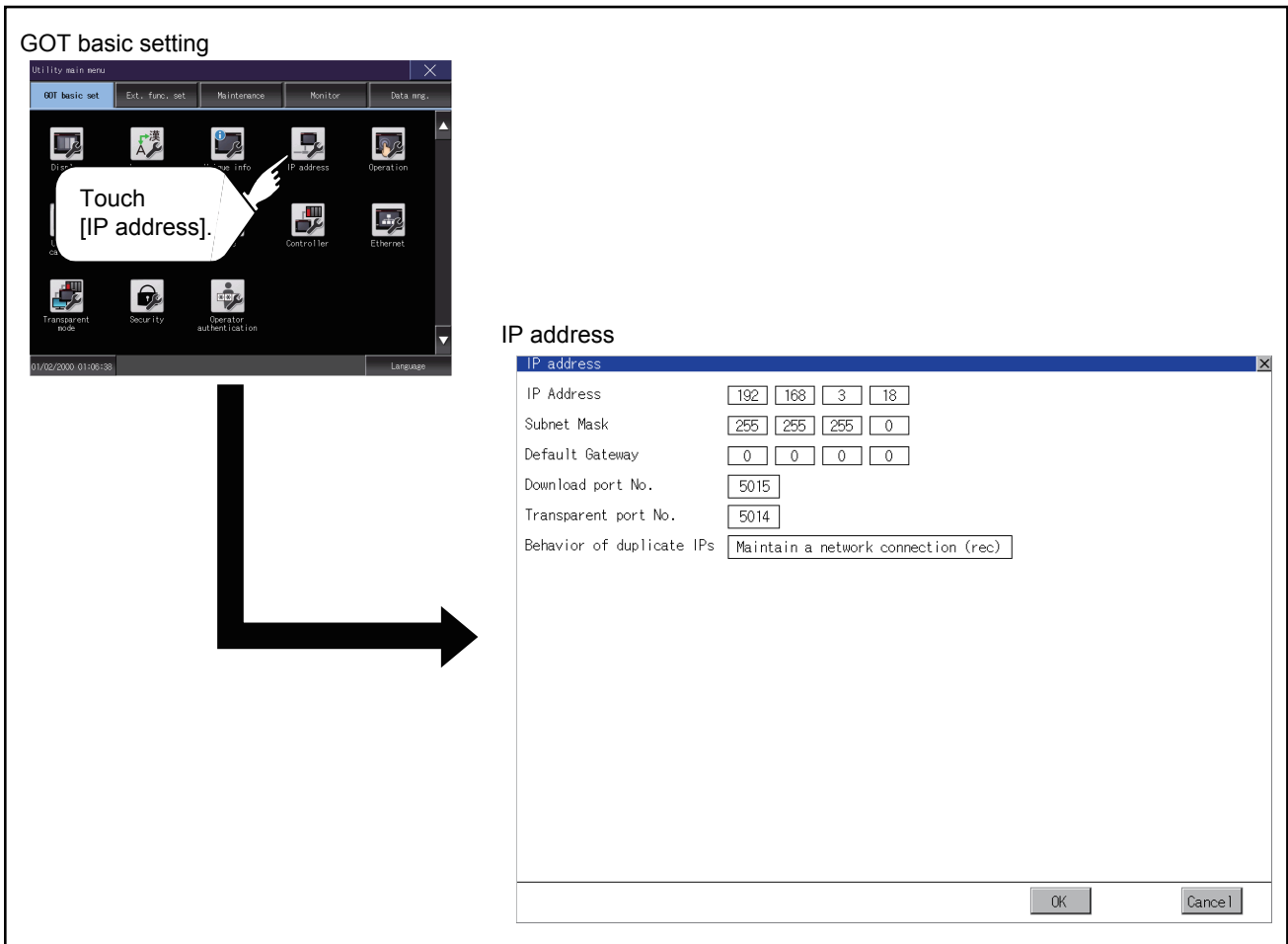
HINT

(1) Selectable languages
The system message switch button is displayed only for the selectable languages.
The selectable languages differ depending on the fonts installed in the GOT.
For the relation between the selectable languages and the fonts, refer to the following.

⟾ GT Designer3 (GOT2000) Help

(2) System language switching using the device
The system language can be switched using the system language switching device set with GT Designer3.
For the setting method of the system language switching device, refer to the following.

⟾ GT Designer3 (GOT2000) Help

2.3 Inherent Information

2.3.1 Setting function for inherent information

Configure inherent information settings.

Item	Description	Setting range
GOT ID No.	Set the ID No. as the inherent information for the GOT.	0 to 32767 <Default: 0>

2.3.2 Display operation of inherent information
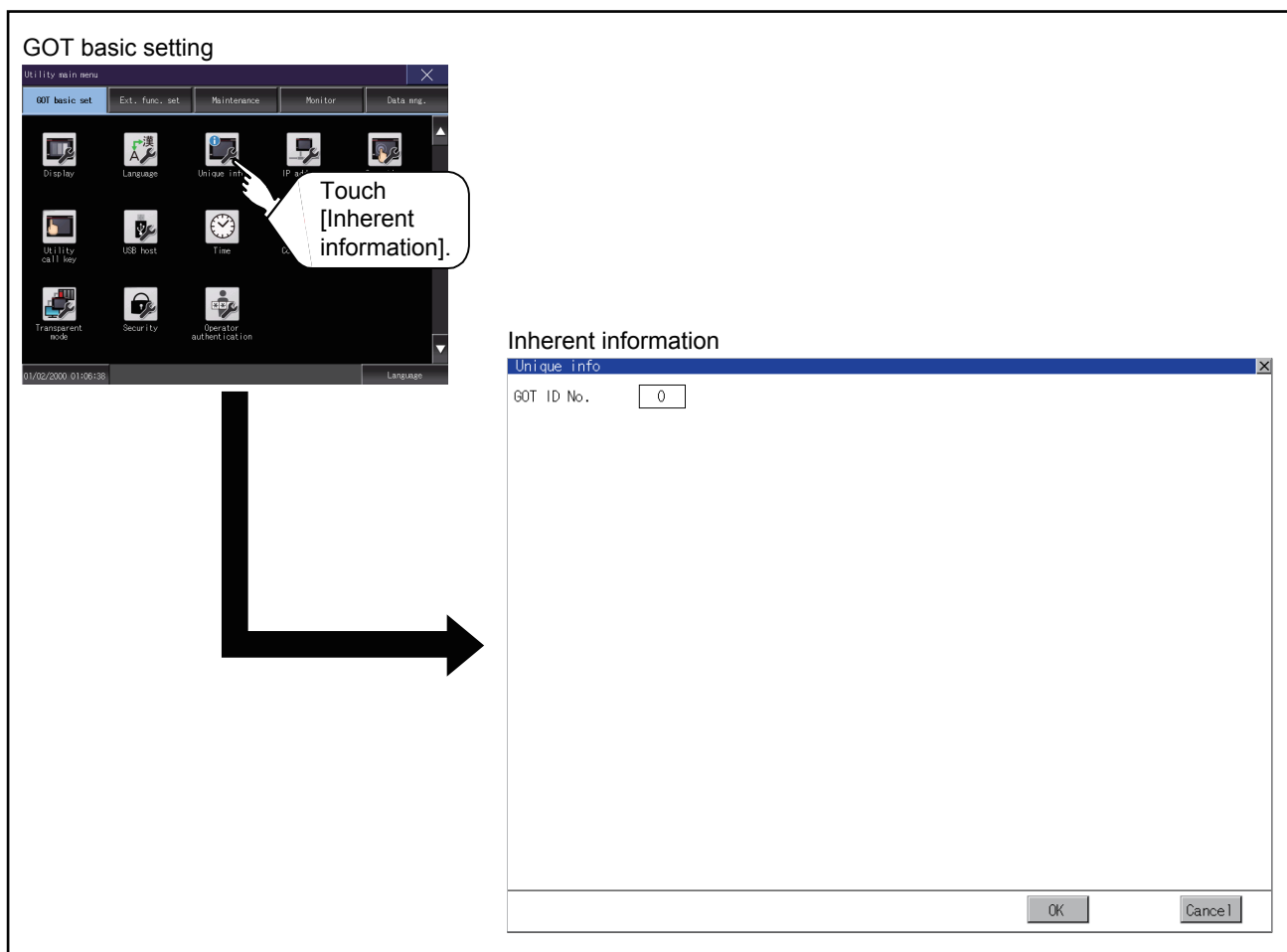
2.3.3 Setting operation for inherent information

■ GOT ID No.
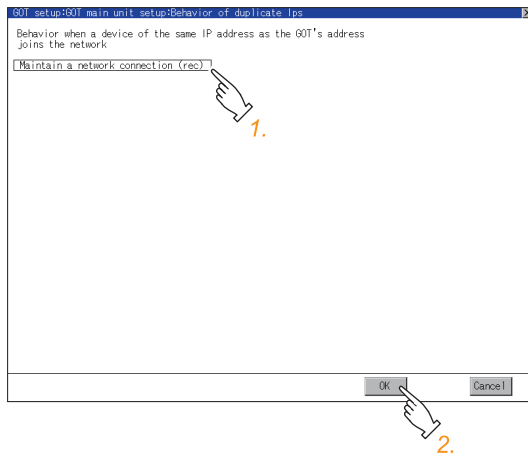
1. If touching the setting items, keyboard is displayed.
Input numeric with the keyboard.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.
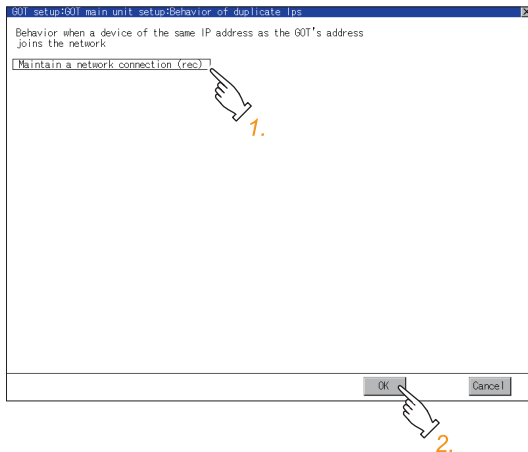
2.4 IP Address

2.4.1 IP address setting function

Set the IP address.

Item	Description	Setting range
IP address setting	Displays and sets the IP address.	0 to 255 <Default: 192.168.3.18>
Subnet mask setting	Displays and sets the subnet mask.	0 to 255 <Default: 255.255.255.0>
Default gateway setting	Displays and sets the router address of the default gateway.	0 to 255 <Default: 0.0.0.0>
Port number for GOT download setting	Set the port number for the GOT download.	1024 to 5010, 5014 to 49152, 49171 to 65534 <Default: 5014>
Port number for transparent setting	Set the port number for the transparent of the GOT.	1024 to 5010, 5014 to 49152, 49171 to 65534 <Default: 5015>
Behavior of duplicate IPs	The GOT operation can be set when a device with the same IP address as that of the GOT is added to the network afterwards.	Maintain a network connection (rec)/Do not maintain a network connection <Default: Maintain a network connection (rec)>

2.4.2　Display operation of IP address

GOT basic setting

Touch [IP address].

IP address

2.4.3　IP address setting operation

■ Setting the GOT ID number, subnet mask, and default gateway
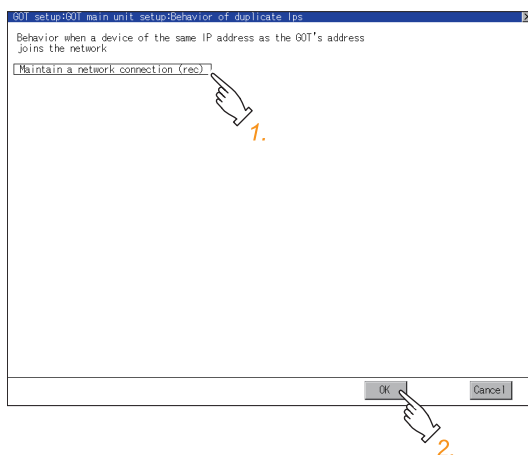
1. If touching the setting items, keyboard is displayed.
Input numeric with the keyboard.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ Port numbers for download and transparent
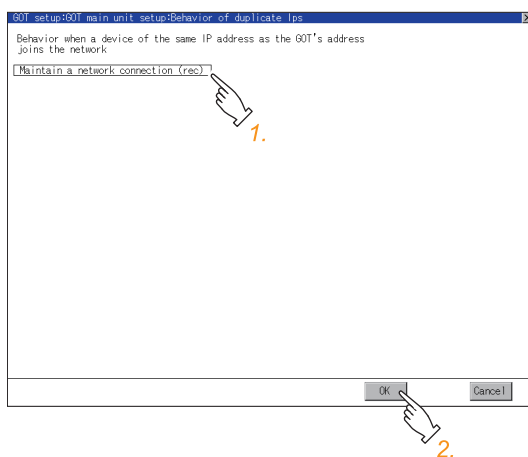
1. If touching the setting items, keyboard is displayed.
Input numeric with the keyboard.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ Setting operation for Behavior of duplicate IPs

1. If touch the setup item, the setup contents is changed.
   - Maintain a network connection (rec):
     The GOT keeps the network connection when a device with the same IP address as that of the GOT is added to the network afterwards. A system alarm occurs.
   - Do not maintain a network connection:
     The GOT is disconnected from the network when a device with the same IP address as that of the GOT is added to the network afterwards.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

POINT

(1) When the IP address duplication is not checked

    (a)   When the IP address of the GOT is set to 192.168.0.18, the IP address duplication check is not performed.

    (b)   Depending on the device to connect with the GOT, the IP address duplication check may not be performed.

(2) When the GOT is added to the network in which a device with the same IP address as that of the GOT exists

GOT goes into offline status and the following dialog appears.

```
IPアドレスが重複しています。通信ケーブルをはずし、
再起動後にIPアドレスを再設定してください。

The IP address is dupulicated.
Remove the communication cable and specify
the IP address again after rebooting the GOT.

IP地址重复。拔掉通讯电缆,
重启后请重新设置IP地址。

   IP  Address : 192.168.0.181
   MAC Address : 08:00:70:38:C0:60

   [ Clear        ]         [ Reboot GOT ]
   [ IP Address   ]
```
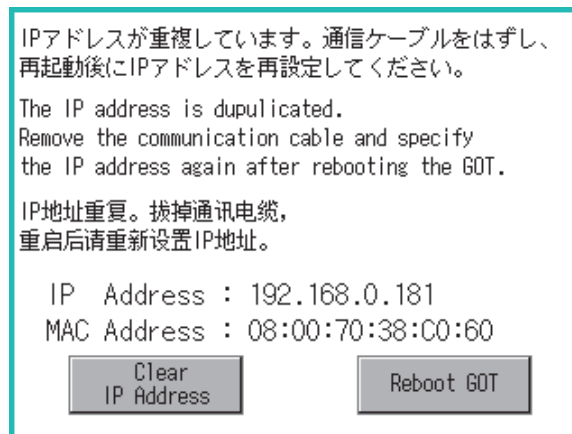
  • When correcting the same IP address of other device as that of GOT
     After correcting the same IP address of other device as that of GOT, touch the [Reboot GOT] button to restart the GOT.
  • When changing the IP address of GOT
     Touch the [Clear IP Address] button to clear the IP address of the GOT.
     After touching the [Reboot GOT] button to restart the GOT, change the IP address of the GOT by the utility.

(3) Precautions for selecting [Do not maintain a network connection]

When selecting [Do not maintain a network connection], the GOT is disconnected from the network at the addition of a device with the same IP address as the GOT.

Therefore, there is a possibility that the running GOT cannot be communicated by IP address setting mistakes or intended actions by malicious users, and the system control may be influenced by those errors.

Please change the setting of [Behavior of duplicate IPs] after carefully examining the necessity.

(4) Precautions for using a switching hub compatible with the spanning tree protocol

For the switching hub port connected with the GOT, configure the setting (PortFast or others) that makes the GOT be ready for communications (forwarding state). The setting is required to make sure that the delay right after the connection by the spanning tree protocol does not occur.

Without the setting, the Ethernet IP address duplication is not correctly detected.

Additionally, the GOT may not be connected to Ethernet correctly.

For the setting that makes the GOT be ready for communications (forwarding state), refer to the user's manual for the switching hub used.

2.5 Operation

2.5.1 Operation setting functions

Setting regarding GOT operation can be set.
The items which can be set are described below. If touch the each item part, the respective setting becomes possible.

Function	Description	Setting range
Buzzer volume setting	Buzzer volume setting can be changed.	OFF/SHORT/LONG <At factory shipment: SHORT>
Musical interval setting	The setting of the musical interval for the buzzer sound can be changed.	1 to 5 <Default: 4>
Window move buzzer volume setting	Whether turn ON/OFF buzzer when move window can be selected.	ON/OFF <At factory shipment: OFF>
Key sensitivity setting	The touch panel sensitivity when touching the GOT screen can be set. E.g. a setting can be changed when double-touch is made when touching the GOT screen only once. (For preventing chattering)	1 to 8[*1] <Default: 6>
Access switch for the drive A	Set whether to access drive A or not while the cover of an SD card interface is open.	Unignore/Ignore <Default: Unignore>

*1 Relation between the [Key sensitivity] setting and reaction speed

The larger the set value in [Key sensitivity] is, the shorter the time taken from touching the touch panel until the GOT responds becomes. E.g. decrease the value set for [Key sensitivity] when double-touch is made when touching the GOT screen only once. (Decrease the reaction speed.)

POINT

Operation setting by GT Designer3
Set buzzer volume and window move buzzer volume by [GOT setup] in [Environmental Setting] of GT Designer3.
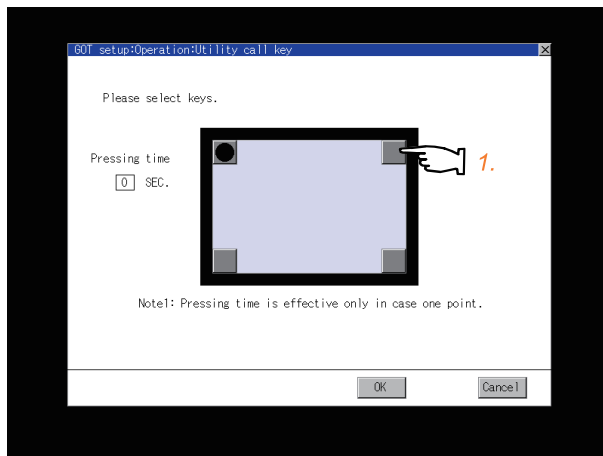When change a part of the setting, change the setting by the GOT display setting after downloading the project data.

➡ GT Designer3 (GOT2000) Help

2.5.2 Display operation of operation

GOT basic setting

Touch [Operation].

Operation

Operation		
Buzzer volume	OFF	
Pitch	4	1 (low) to 5 (high)
Window move buzzer	ON	
Key sensitivity	6	(Max 8)
Drive A access switch	Not ignore	

OK   Cancel
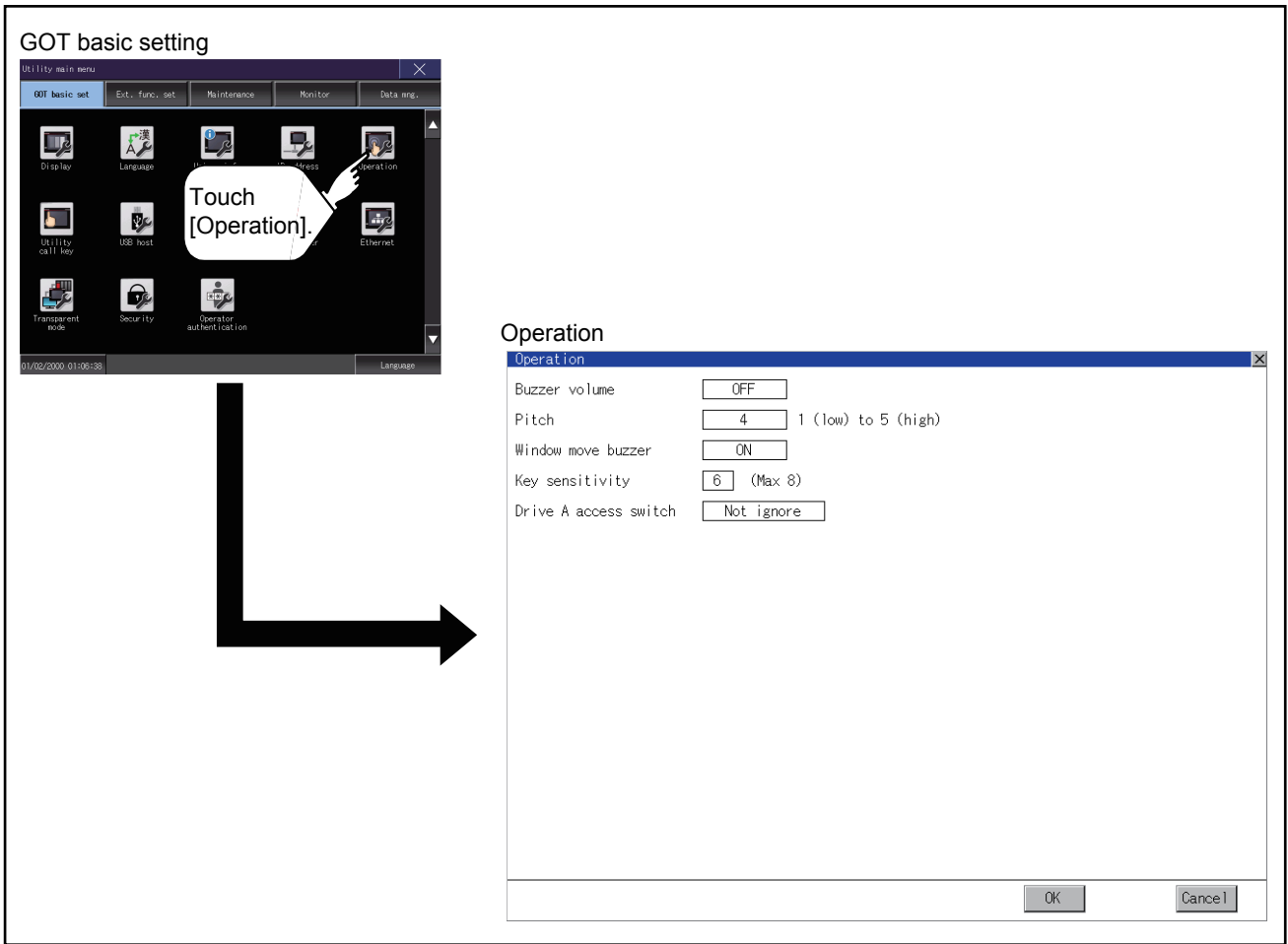
2.5.3　Setting operation of operation

■ **Buzzer sound, musical interval, window move buzzer volume, access switch for the drive A**
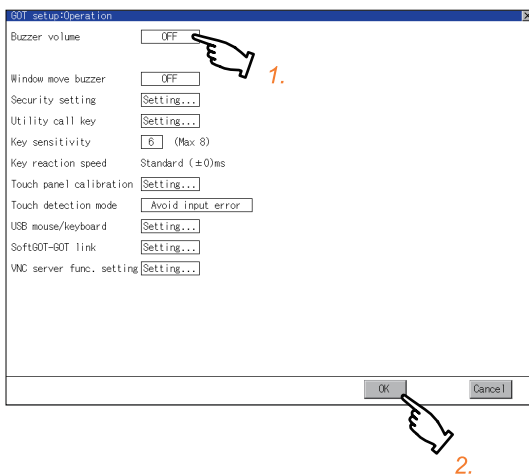
1. If touch the setup item, the setup contents is changed.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ **Key sensitivity setting**
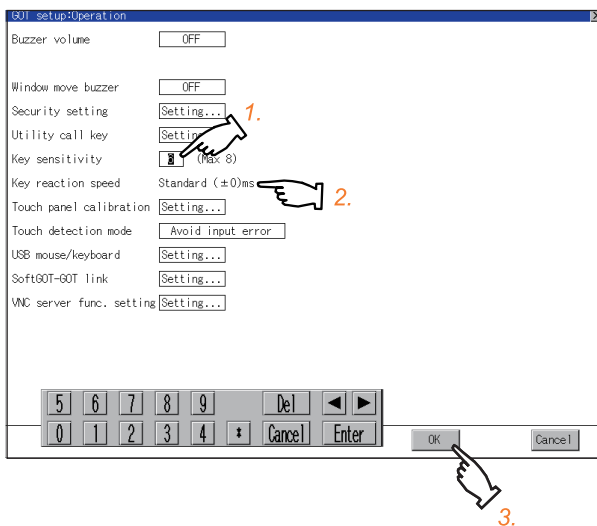
1. If touching the setting items, keyboard is displayed.
   Input numeric with the keyboard.

2. The key response speed corresponding to the [Key sensitivity] setting is displayed.

3. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

2.6 Utility Call Key

2.6.1 Utility call key setting function

The key position for calling the main menu of the utility can be specified.
For the key position, the specification of 1 point from 4 corners on the screen, or no specification, can be set.
(No specification can be set when GT Designer3 is used.)
By keeping pressing the screen, a setting to switch the screen to the utility is available.
This prevents a switching to the utility by an unintentional operation.

POINT

Operation setting by GT Designer3
Set the utility call key at [GOT set up] in [Environmental Setting] of GT Designer3.
When change a part of the setting, change the setting by the GOT display setting after downloading the project data.

➡ GT Designer3 (GOT2000) Help

2.6.2 Utility call key display operation

GOT basic setting

Touch [Utility call key].

Utility call key

Please select keys.
Pressing time
5 SEC.

Note1: Pressing time is effective only in case one point

Touch a button
to be set
as the utility call key.

OK   Cancel
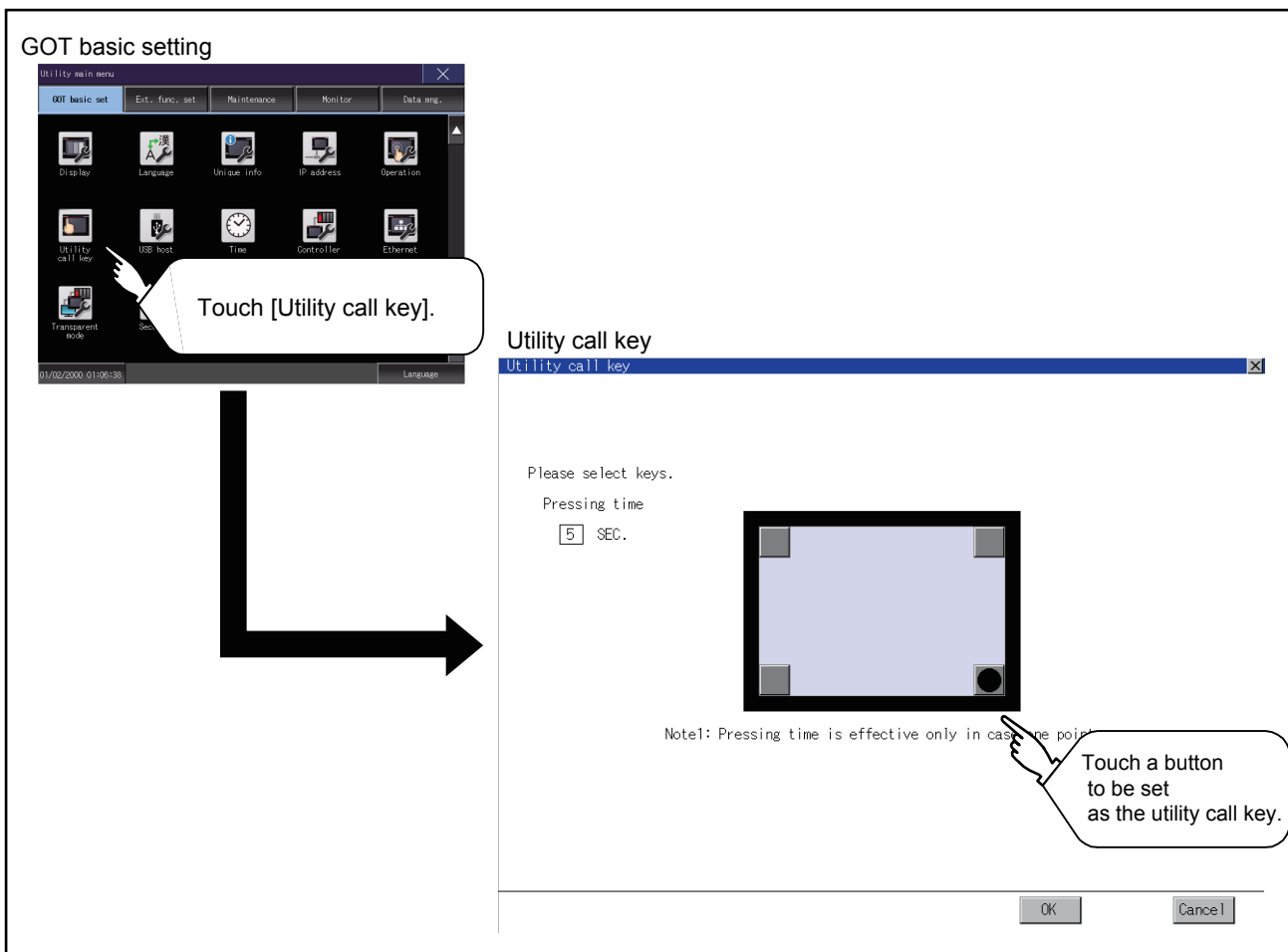
2.6.3　Utility call key setting operation

1. Touch [●] or [ ] displayed at the 4 corners of the setting screen. The button repeats [●] ↻ [ ] with every touch Set the corner to be specified as a key position to [●].
For the key position, up to 1 point can be specified.
When the key position is not specified, displaying the utility with the utility call key is not available.
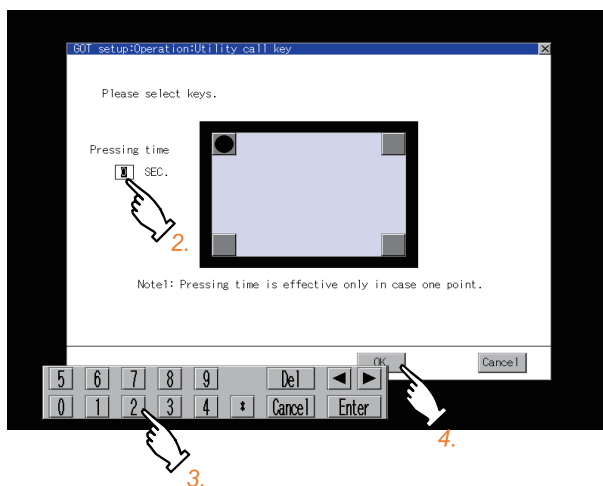
2. When setting 1 point, specify the time to switch to the utility in case of keeping pressing the key position.
Touch the time input area.

3. Touching the input area displays a keyboard. Input numeric with the keyboard.

4. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Operation] screen.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Operation] screen.

5. In the [Operation] screen, touching the [OK]/ [Cancel]/[×] button restarts and operates the GOT with the changed settings.

POINT

(1) **When the utility call key is not specified**
The followings are the method for displaying the utility without using the utility call key.
  (a) Changing the project data in GT Designer3

  1. Read the project data in GT Designer3.

  2. Set either of the followings in GT Designer3.
    • Set the utility call key in the [Display/Operation] tab of the [Environmental Setting] dialog.
    • Set a special function switch to display the utility at the user-created screen.

  3. Write the project data whose setting is changed to the GOT.

  (b) Operating the forced start-up of the utility with the GOT
  After powering on the GOT, pressing the S.MODE switch during [Booting] displayed on the upper left displays the utility in the screen.
  When restricting the display of the utility, set a password in GT Designer3.

  ⇒ GT Designer3 (GOT2000) Help

(2) Precautions on using the alarm popup display

When [Display Position Switching] is set to [Switch] in the alarm popup display setting, set either of the following for the utility call key.

• Setting the position of the utility call key to the upper-right or lower-left corner
• Setting [Pressing Time] of the utility call key to 1 or more seconds

When [Pressing Time] is set to 0 and the key position is set to the lower-left corner, the operation is as described below. If the positions of the key and the alarm popup display overlap, the utility screen appears by switching the display position of the alarm popup display.

For the alarm popup display, refer to the following.

➡ GT Designer3 (GOT2000) Help

2.7　USB Host

2.7.1　Setting function for USB host

To install and use the USB mouse/keyboard on the GOT, set the USB mouse/keyboard.

Item	Description	Setting range
Use USB mouse	Set whether to use a USB mouse.	YES/NO <Default: NO>
Interlock with mouse cursor touch operation	The mouse cursor can be moved to the touched position.	YES/NO <Default: NO>
Use USB keyboard	Set whether to use a USB keyboard.	YES/NO <Default: NO>
USB keyboard type	Set the USB keyboard type.	Japanese 106 keyboard/English 101 keyboard <Default: Japanese 106 keyboard>

2.7.2　Display operation of USB host

2.7.3 Setting operation of USB host
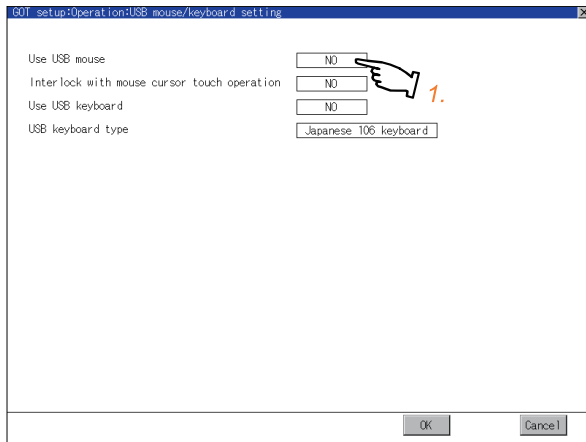
1. To use the USB mouse, touch the setting item of [Use USB mouse].
The setting content is changed by touching.
(YES ⟳ NO)
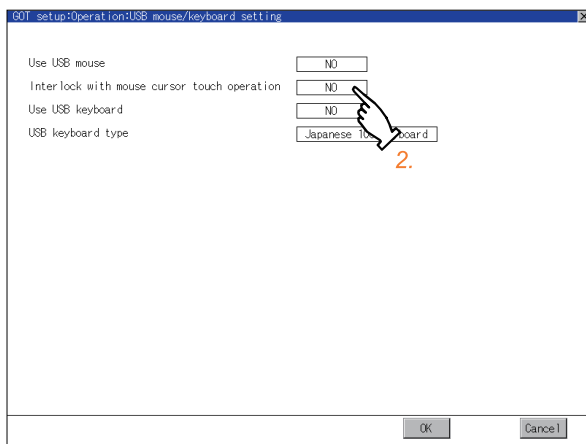
2. To move the mouse cursor to the touched position, touch the setting item of [Interlock with mouse cursor touch operation].
The setting content is changed by touching.
(YES ⟳ NO)
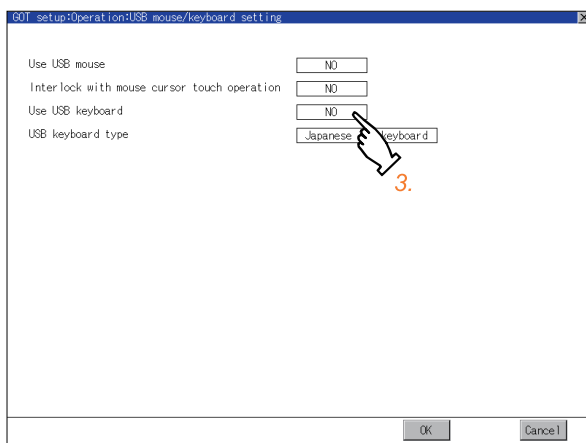
3. To use the USB keyboard, touch the setting item of [USB keyboard type].
The setting content is changed by touching.
(YES ⟳ NO)

(Continued to next page)
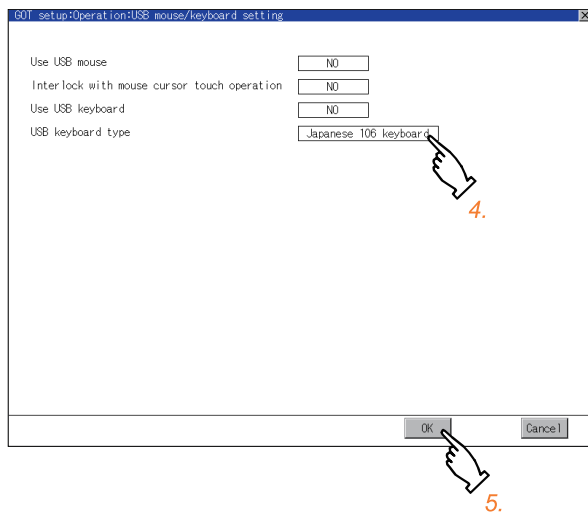
4. To use the USB keyboard, touch the setting item of [USB keyboard type].
The setting content is changed by touching.
Japanese 106 keyboard ⟷ English 101 keyboard

5. If touch the [OK] button, the changed settings are reflected and the screen returns to the [USB Host] screen.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [USB Host] screen.

6. In the [Operation] screen, touching the [OK]/ [Cancel]/[×] button restarts and operates the GOT with the changed settings.

2.8 Time

2.8.1 Time setting functions

Configure time settings.

Function	Description	Reference
Time setting	Setup the method to adjust the time between GOT clock data and clock data of controller connected to the GOT.	(1) Time setting
Clock display	Carry out the display and setup of GOT clock data.	(2) Clock display
GOT internal battery voltage status	Displays GOT internal battery voltage status.	(3) GOT internal battery voltage status

> **POINT**
>
> **Changing times**
> When the time is changed on the Time setting & display screen, the changed time is written in a programmable controller even though [Adjust] or [Broadcast] is set for [Time setting].
> As a result, the time of the programmable controller can be changed on the GOT even though [Adjust] is set for [Time setting].
> (The clock data of the controller set as [Adjust CH No.] of [Clock data GOT is matched to clock data External (Adjust)] in [GOT Setup] ([Clock Setting]) of GT Designer3 is changed.)
> For details of [Adjust] and [Broadcast], refer to the following.
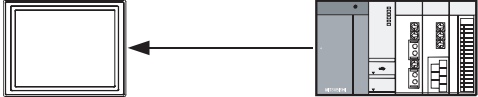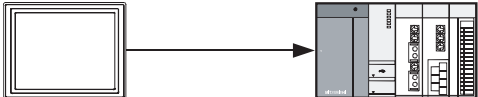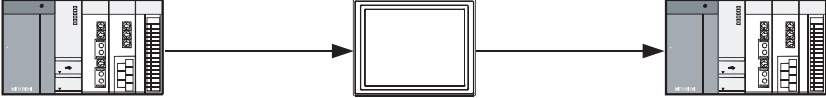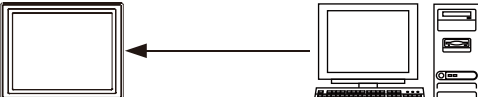>
> ➡ GT Designer3 (GOT2000) Help

2.8.2　Display operation of time

GOT basic setting

Touch [Time].

Time

Clock setting ⬚ None

01/02/2000 01:12:38　SUN

GOT internal battery　None/Low
voltage status

Control and set the time.

OK　Cancel
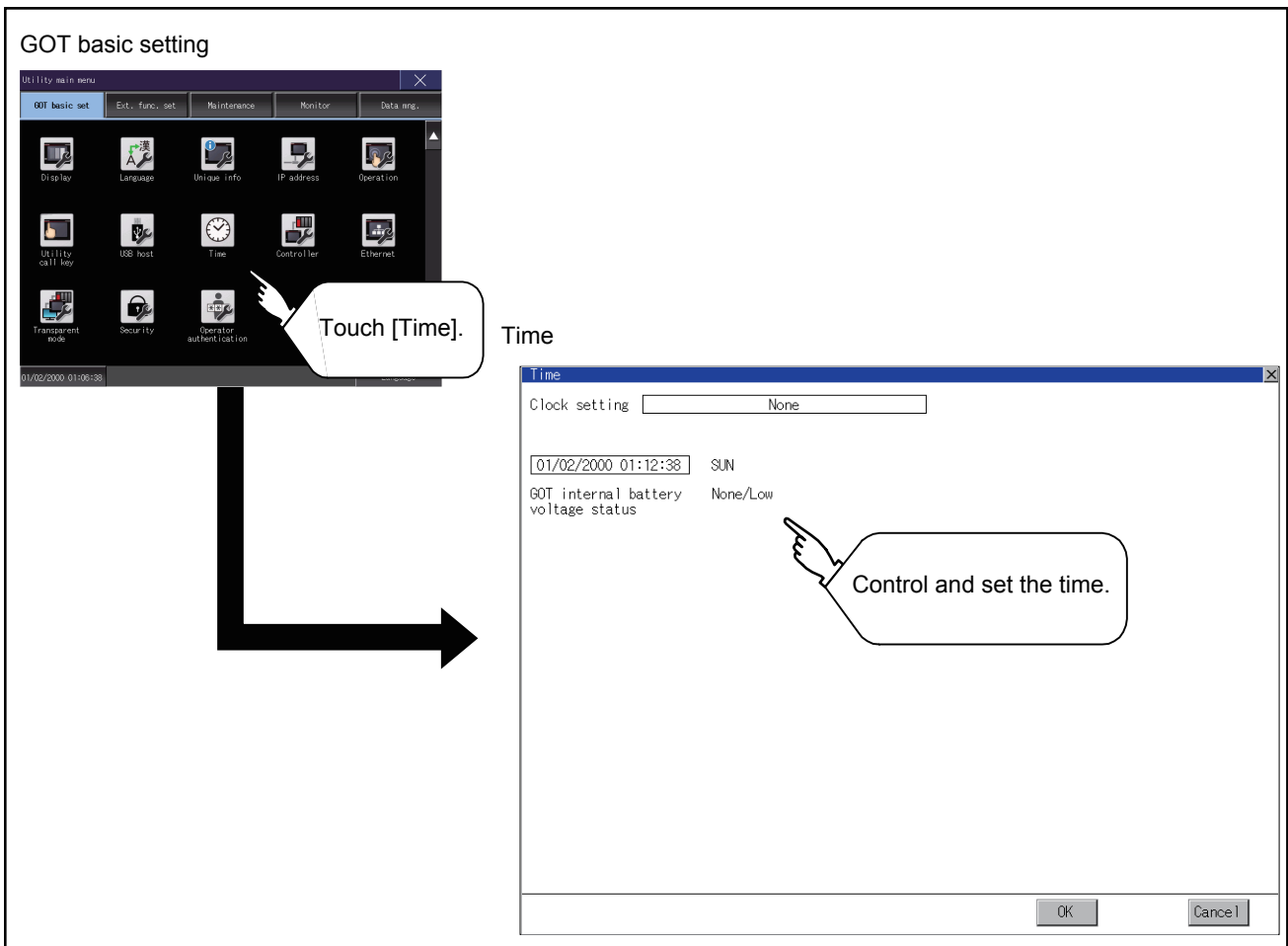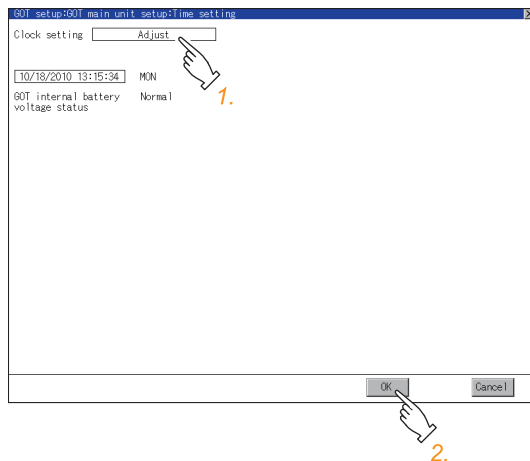
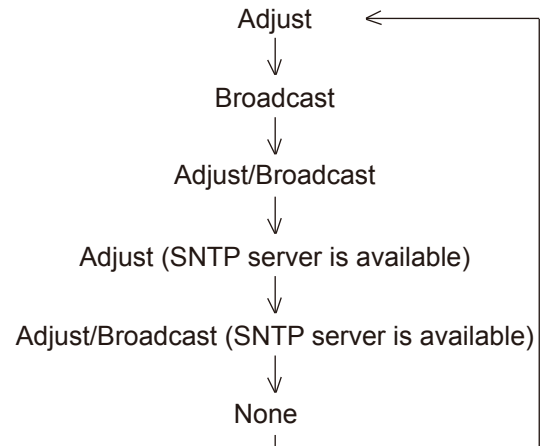## 2.8.3 Setting operation of time

(1) Time setting

Setup the method to adjust the time between GOT data and the clock data of controller connected to the GOT.

Setting	Description
Adjust	Synchronizes the clock data of the GOT with the clock data of the controller. It is same as set in the GOT setup in Environmental Setting of GT Designer3. ➠ GT Designer3 (GOT2000) Help
Broadcast	Synchronizes the clock data of the controller with the clock data of the GOT. It is same as set in the GOT setup in Environmental Setting of GT Designer3. ➠ GT Designer3 (GOT2000) Help
Adjust/Broadcast	Adjust the GOT and controllers to the controller whose clock data is used as a base. It is same as set in the GOT setup in Environmental Setting of GT Designer3. ➠ GT Designer3 (GOT2000) Help
Adjust (SNTP server is available)	Synchronize the clock data of the GOT with the clock data of the SNTP server. It is same as set in the GOT setup in Environmental Setting of GT Designer3. ➠ GT Designer3 (GOT2000) Help
Adjust/Broadcast (SNTP server is available)	Adjust the GOT and controllers to the SNTP server whose clock data is used as a base. It is same as set in the GOT setup in Environmental Setting of GT Designer3. ➠ GT Designer3 (GOT2000) Help
None	No adjustment of clock data.

```
┌─────────────────────────────────────────────┐
│ GOT setup:GOT main unit setup:Time setting  ⊠│
│ Clock setting      [ Adjust    ]             │
│                            ☞                 │
│  [10/18/2010 13:15:34]  MON      1.          │
│  GOT internal battery   Normal               │
│  voltage status                              │
│                                              │
│                                              │
│                                              │
│                                              │
│                                              │
│                                              │
│                                              │
│                                              │
│                                              │
│                                              │
│              [  OK  ]    [Cancel]            │
│                  ☞                           │
│                                              │
│                  2.                          │
└─────────────────────────────────────────────┘
```

1. If touch the setup item, the setup contents is changed.

Adjust ⟵
↓
Broadcast
↓
Adjust/Broadcast
↓
Adjust (SNTP server is available)
↓
Adjust/Broadcast (SNTP server is available)
↓
None ⟶

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

POINT

(1) When connecting to an external device which does not have clock function

If set to [Adjust] or [Broadcast] for clock setting while the GOT is connected to external devices (PLC or microcomputers) which do not have clock function, the clock data will not be adjusted.
Refer to the following for the list of PLC installed with clock function.

➟ GOT2000 Series Connection Manual for the controller used

GT Designer3 (GOT2000) Help

(2) Clock setting when using the multi-channel function

The channel No. of a controller whose clock is used as a base or adjusted cannot be set by the utility.
The controller whose clock is used as a base or adjusted can be set by GT Designer3.
For channel settings, refer to the following.

➟ GOT2000 Series Connection Manual for the controller used

GT Designer3 (GOT2000) Help

(3) Setting of clock setting and battery

The connector of the GOT is not connected to the battery connector at purchase.
When selecting [Broadcast] or [None] in clock setting, set the clock of the GOT once with connecting a battery to the GOT.

(4) Operation setting by GT Designer3

Set the clock management at [GOT set up] in [Environmental Setting] of GT Designer3.
When change a part of the setting, change the setting by the GOT display setting after downloading the project data.

➟ GT Designer3 (GOT2000) Help

---

(2) Clock display

Carry out the display and setting of GOT clock data.
The setup methods of clock data are shown below.
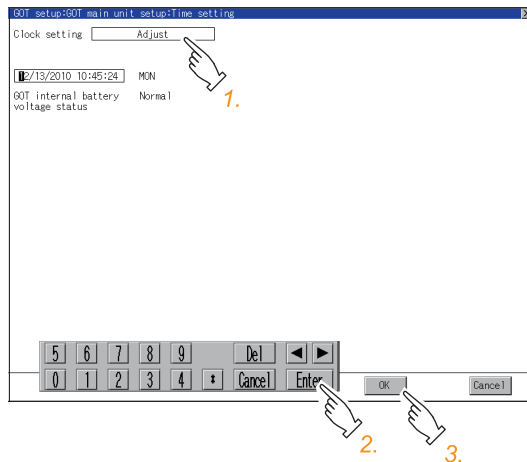
1. If touch the clock display section, the keyboard for input is displayed and the clock update stops.

2. Input time with the keyboard by referring to the table below.
Input the scheduled time when the operation of step3 is to be carried out since the input time is reflected at the time of the operation of step3.
The day of the week is displayed automatically according to the input date.
The effective range of clock setting is as follows.
Jan. 1, 2000 to Dec. 31, 2037

Key	Description
[0] to [9]	Input numeric value in cursor position.
◄ ►	Move the cursor.
[Del]	Move the cursor to the left by one character when [Del] Key is touched while inputting year, month, day, time, minutes, seconds. Carry out nothing when touched other than when inputting the above.
[Enter]	Close the keyboard after the input time is displayed in clock display. The update of the clock display does not restart even if the keyboard is closed. The update of the clock display restarts with the operation of step3.
[Cancel]	Cancel the input time and returns the time of clock display to the time at which the keyboard was displayed and close the keyboard. The update of the clock display does not restart even if the keyboard is closed. The update of the clock display restarts with the operation of step3.

3. If touch the [OK] button, the changed settings are reflected and the screen returns to the Main Menu.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

(3) GOT internal battery voltage status

Displays battery voltage status.

Display	Status
Normal	Normal
Low/None	Low voltage

When the battery voltage is low, replace the battery immediately.
Refer to the following for battery replacement procedure.

➠ GOT2000 Series User's Manual (Hardware)

2.9 Controller

2.9.1 Communication setting functions
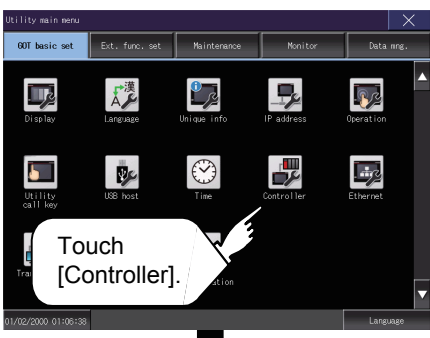
Configure controller settings.
The items which can be set are shown below. When each item part is touched, the respective setting becomes possible.

Function	Description
Assign Ethernet I/F	Change the assignment of channel No. and communication driver name of the device connected using the Ethernet interface.
Channel-Driver assign	Change the assignment of channel No. and communication driver name.
Channel no. (Ch No.) setting	Set the channel numbers of the communication interface (Standard interface/Extend interface).
5 V power supply	When connecting a controller to the RS-232 interface, whether to supply 5 V DC power or not to the controller through 9 pins can be selected.
Communication Detail Setting	Set communication parameters of communication devices.

2.9.2   Communication detail setting display operation

GOT basic setting

Touch [Controller].

Controller

2.9.3 Controller contents

This section describes setting items and display contents for a controller.
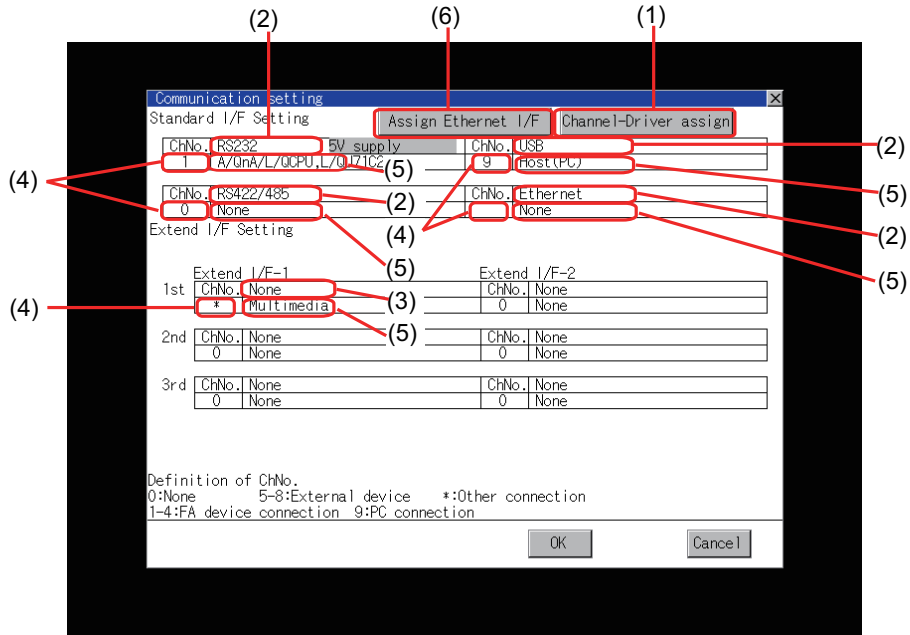
(1) Channel-Driver assign

    (a) Assignment of communication drivers to channels
Communication drivers installed in the GOT can be assigned to channels.
Even without setting [???????] on GT Designer3, communication with controller is available by assigning channel No. with this function.

➡ 2.9.4 ■Channel-Driver assign operation

    (b) Changing the assignment of communication drivers to channels
Without using GT Designer3, the assignment of communication drivers to channels can be changed.
When change a communication driver, the alternative communication driver has to be installed in GOT in advance.

(2) Standard interface display BOX

Display the communication interface included as standard in GT16.
There are the following 4 types.

RS-232...........   For communicating with PC (GT Designer3), controller
RS-422/485..   For communicating with controller
USB.................   For communicating with PC (GT Designer3)
Ethernet.........   For communicating with PC (GT Designer3), controller

(3) Extend interface display BOX

The name of the unit installed in the extend interface is displayed.
(Displays [None] when any unit is not mounted.)
For details of each unit, refer to the following.

➡ GOT2000 Series User's Manual (Hardware)

(4) Channel number specification menu BOX

Set channel No. to use with standard interface or extend interface.

Refer to this section (5) for driver that can be assigned to each channel.

0:	Set when the communication interface is not used.
1 to 4:	Set when connecting to a controller.
	(Except fingerprint unit, bar code reader, RFID controller and PC)
5 to 7:[*1][*2]	Set when connecting to a barcode reader, an RFID controller or a PC.
	Only extend I/F setting is possible.
8:[*1][*2]	Set when connecting to a fingerprint unit, a barcode reader, an RFID controller or a PC.
	Only standard I/F setting is possible.
9:[*1]	Set when connecting to a personal computer (GT Designer3). (For USB and RS-232 interface, the simultaneous setting is possible. However, when either interface is during communication, communication is not possible for another interface.)
*:	Set when using the function that uses the gateway function (when connection types except the Ethernet connection is used for connecting to controllers), MES interface function, Ethernet download function, report function, hard copy (when printing), video display, RGB display, RGB output, external I/O, operation panel function, sound output, Multimedia.

• Fixed to 9 for the USB interface.

*1 Cannot be assigned with Ethernet I/F Assignment.
*2 The same device cannot be used for ChNo.5 to Ch No.8 simultaneously.
   For restrictions on external devices, refer to the following.

➡ GOT2000 Series Connection Manual for the controller used
   GT Designer3 (GOT2000) Help

(5) Driver display BOX

The name of communication driver assigned to the channels or the driver set with the Communication Setting of GT Designer3 is displayed.

For details of drivers to be displayed, refer to the following.

➡ GOT2000 Series Connection Manual for the controller used

   GT Designer3 (GOT2000) Help

Display [None] in the driver display BOX in case of the followings.

• The communication driver is not installed.
• In channel number specification menu BOX, [0] is set.
• The communication unit type and the communication driver are mutually not corresponding at the extend interface side.

When the channel number for the standard I/F-1 is set to [9], the communication driver [Host (PC)] or [Host (Modem)] can be selected.

When the channel number for the standard I/F-2 is set to [9], the communication driver [Host (PC)] is automatically assigned.

For how to set the communication driver, refer to the following.

➡ 2.9.4 ■Host (PC)/Host (Modem) settings

(6) Assign Ethernet I/F

The communication settings for the Ethernet connection can be made.
Ethernet I/F Assignment can assign up to four channels per interface.

➡ 2.9.4 ■Assign Ethernet I/F operation

Precautions for communications between GOT and controller

(1) Installing communication driver and downloading Communication Setting

The followings below are required for the communication interface to communicate with the controller.

1) Installing communication drivers (Up to 4 communication drivers)

2) Assigning the channel number and communication driver for the communication interface

3) Downloading the contents (project data) assigned in 2).

Perform 1), 2), 3) by GT Designer3.
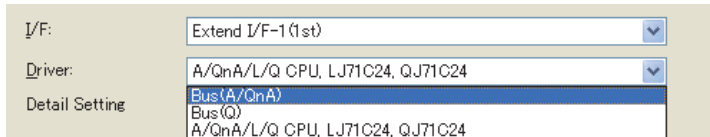
Refer to the following for details.

➡ GOT2000 Series Connection Manual for the controller used
GT Designer3 (GOT2000) Help

(2) When Communication Setting has not been downloaded.

The GOT automatically assigns the installed communication driver in the order of 1 to 4 as follows.
(Only the extend interface is assigned automatically.)
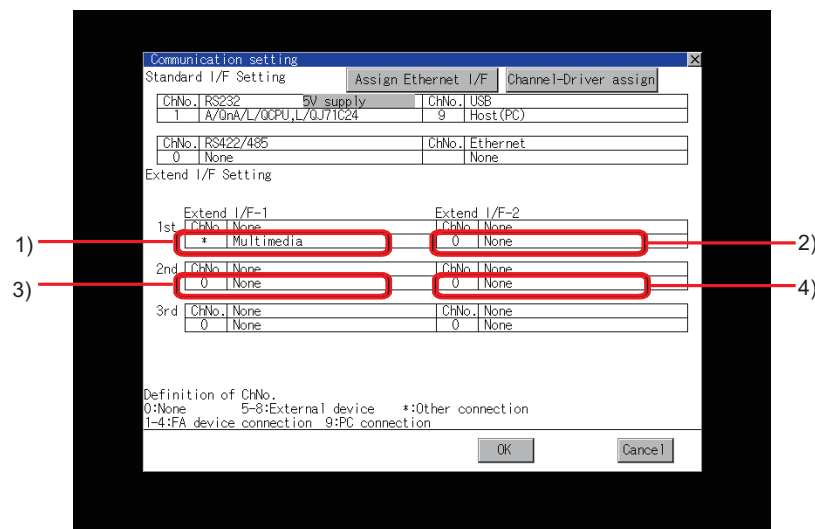
1): ChNo.1, Communication driver installed at 1st

2): ChNo.2, Communication driver installed at 2nd

3): ChNo.3, Communication driver installed at 3rd

4): ChNo.4, Communication driver installed at 4th

(a) After communication driver is assigned automatically.
When saving the settings to the GOT with [OK] button after the automatic assignment of communication driver, automatic assignment will not be performed at the next time and after.

(b) Priority against [???????] of GT Designer3
If download the communication settings to the GOT with GT Designer3 after the automatic assignment, the GOT will operate with the communication settings of GT Designer3. (The GOT operates with the latest communication settings.)

(3) When the communication driver does not match with the unit that is installed in the GOT

An error is displayed on the GOT when displaying [Communication setting].
If an error is displayed, confirm the combination of the communication driver and communication unit.
Refer to the following manual for the combination.

➡ GOT2000 Series Connection Manual for the controller used

2.9.4   Controller setting operation

■ Assign Ethernet I/F operation

The following describes how to operate the Ethernet I/F assign.
The setting operation is same as that of the communication setting screen.
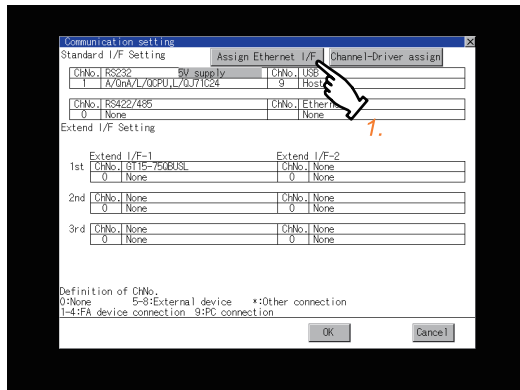
1. Touch the [Assign Ethernet I/F] button in [????].
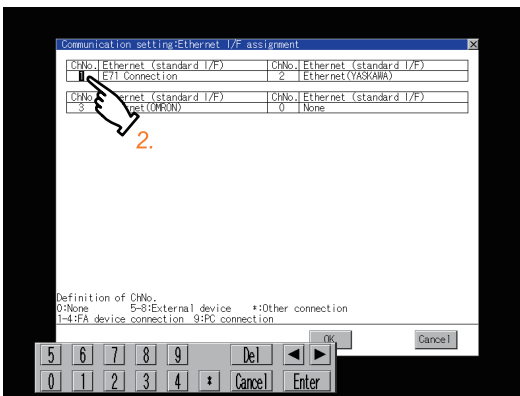
2. After the screen shown left is displayed, touch the channel number specification menu BOX when changing the channel number.
   ➡ ■Channel number setting operation
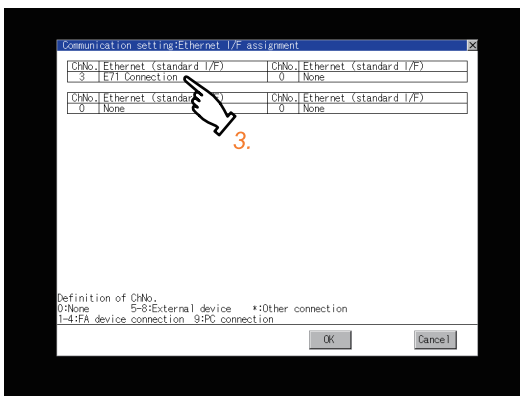
3. For changing the parameter settings, touch the driver display BOX.
   ➡ 2.9.5 Communication detail setting

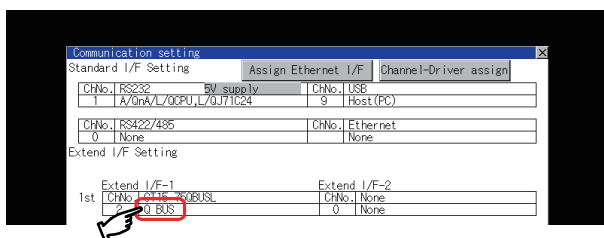4. If touch the [OK] button, the changed settings are reflected and the screen returns to the [????] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [????] screen.

5. In the [????] screen, touching the [OK]/[Cancel]/[×] button restarts and operates the GOT with the changed settings.

■ Channel-Driver assign operation

The following describes how to operate the Channel-Driver assign.

The example of changing to the direct CPU connection (Communication driver: [AJ71QC24, MELDAS C6*]) for the GOT of the computer link connection (Communication driver: [Q/L/QnA/A CPU, QJ71C24, LJ71C24]) is used.

POINT

Before the operation

The GOT automatically restarts after executing this setting.

If project data has been downloaded, the GOT starts monitoring of the controller after restarting.

Execute this setting after carefully confirming the safety.
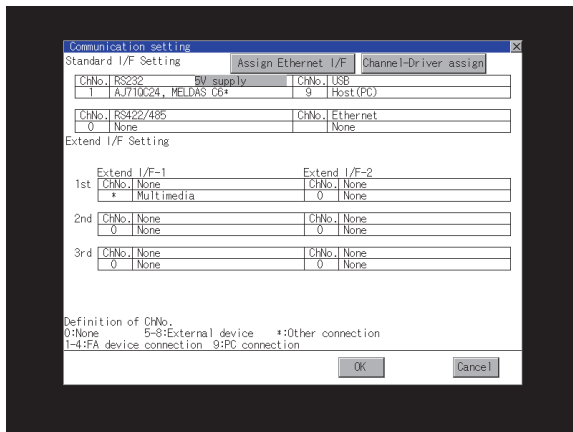
1. Install communication driver [Q/L/QnA/A CPU, QJ71C24, LJ71C24] to GOT.
(Download of [???????] from GT Designer3 is not required.)
After installing communication driver, touch the [Channel Driver assign] button in [????].
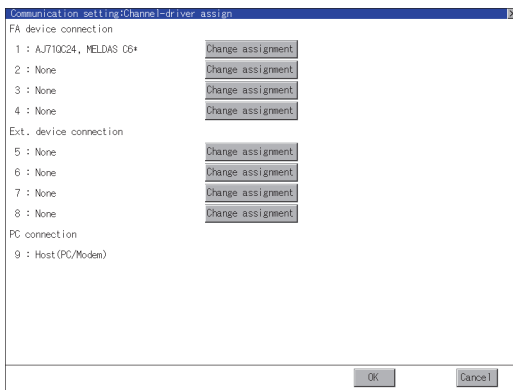
2. Touch the [Change assignment] button on the displayed screen as shown left.

3. As the communication driver ([Q/L/QnA/A CPU, QJ71C24, LJ71C24]) installed in the GOT is displayed, touch it.

(Continued to next page)
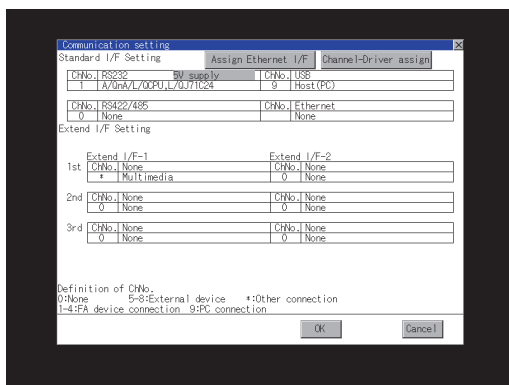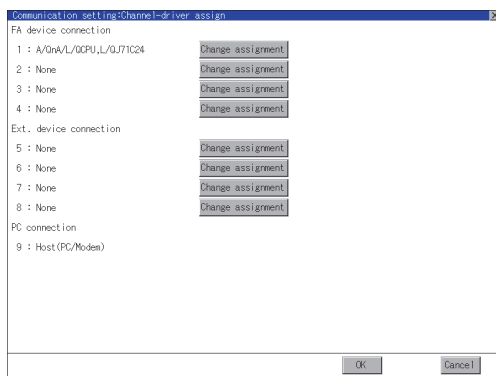
4. The screen returns to the [Channel-Driver assign] screen. If touch the [OK] button, the changed settings are reflected and the screen returns to the [????] screen.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [????] screen.

5. Confirm that the selected communication driver ([Q/L/QnA/A CPU, QJ71C24, LJ71C24]) is assigned.

6. After the confirmation, if touch the [OK]/ [Cancel]/[×] button, the GOT restarts and operates with the changed settings.

■ **Channel number setting operation**

Keyboard

1. Touch channel number specification menu BOX to be set.

2. The cursor for the channel number specification menu BOX is displayed.
Simultaneously the keyboard for a numerical input is displayed.

3. Input the channel number from the keyboard and touch [Enter] key, and the value is defined.
Simultaneously, the name of the communication driver corresponding to the channel number assigned by GT Designer3 is displayed in the driver display BOX.

■ **Communication detail setting switching operation**

1. If the driver display BOX is touched on the communication setting screen or Ethernet I/F assign screen, the screen switches to the detailed setting screen of the related controller device.
(➡ 2.9.5 Communication detail setting)

■ 5V power supply setting operation

When connecting a controller to the RS-232 interface, whether to supply 5 V DC power or not to the controller through 9 pins can be selected.
Thus, it is not necessary to connect an external power supply.
When setting the RS-232 interface to "9" (Host (PC)), the 5V supply is automatically changed to [NO].
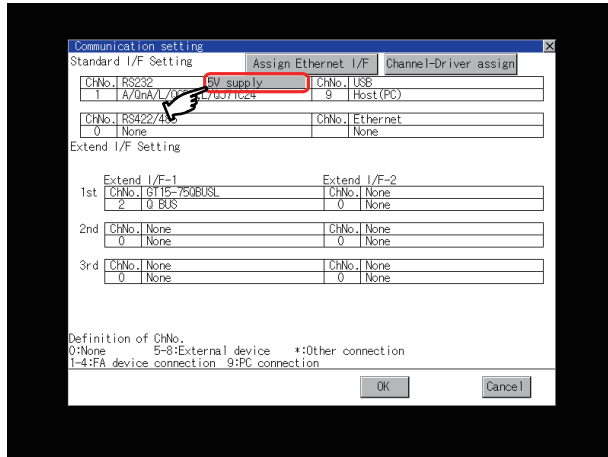
1. Touch [5V supply].
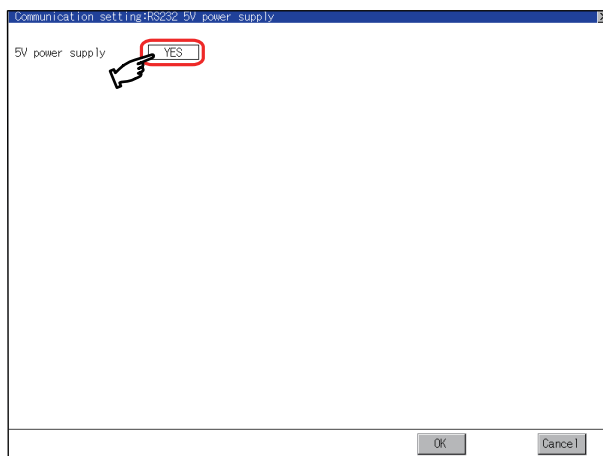
2. Select whether 5 V power supply is supplied or not.
If touch the [OK] button, the changed settings are reflected and the screen returns to the [????] screen.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [????] screen.
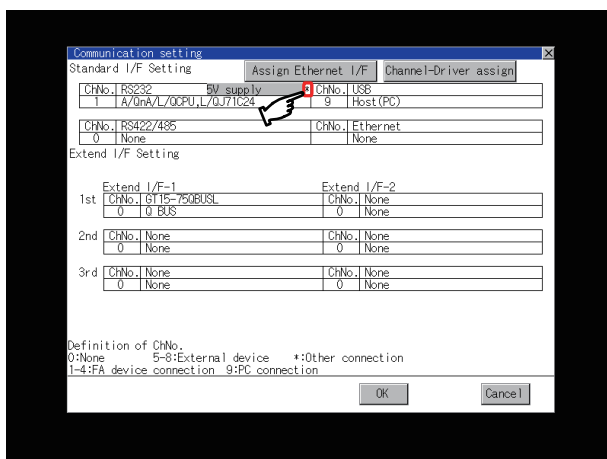
3. After setting completion, [*] is displayed indicating that 5V power supplying setting is on.

4. If touch the [OK]/[Cancel]/[×] button, the GOT restarts and operates with the changed settings.

■ Host (PC)/Host (Modem) settings

The following describes how to set [Host (PC)] and [Host (Modem)].
When setting [Host (PC)] for [PC connection type], the following settings are not required.
Set as follows only when selecting [Host (Modem)].

Item	Description	Setting range
PC connection type	The connecting method to the personal computer can be selected.	Host (PC)/Host (Modem) Default: Host (PC)
Transmission Speed	Set the transmission speed for communication.	9600/19200/38400/57600/115200 Default: 115200
Data Bit	Set the data bit for communication.	7/8 <Default: 8>
Stop Bit	Set the stop bit for communication.	1/2 <Default: 1>
Parity	Set whether to check the parity for communication and select the format to check.	Odd/Even/None <Default: Odd>
Timeout Time (SEC.)	Displays the timeout time (sec.) for communication.	<Default: 5 (fixed)>
Retry (TIMES)	Displays the number of retry (times) for communication.	Default: 1 (fixed)
Init. AT command	Set the AT command to initialize the modem.	English one byte characters within 255 characters[1] Default: AT&FE0%C0&K0&D0W2S0=1
Modem operation	Touch the [Init.] button to initialize the modem. Touch the [Disc.] button to disconnect the line.	-

*1 The maximum number of characters of the AT command depends on the specifications of the modem.
When the maximum number of characters of the AT command which can be used for a modem is less than 255, the initializing command is set according to the specifications of the modem.

2.9.5　Communication detail setting

■ Communication detail setting setting function

Function	Description
Communication parameters setting	Set various communication parameters of communication devices. The settable parameters differ according to the communication device.
Keyword setting	For the FX series PLCs, key word for protecting program in the PLC can be set.
Key word deleting	For the FX series PLCs, key word for protecting program in the PLC can be deleted.
Key word protection cancel	For the FX series PLCs, the program protection status in the PLC can be cancelled.
Keyword protection	For the FX series PLCs, the cancelled program protection status in the PLC can be returned to the protection status again.

■ Communication detail setting display operation

(1)　Communication settings
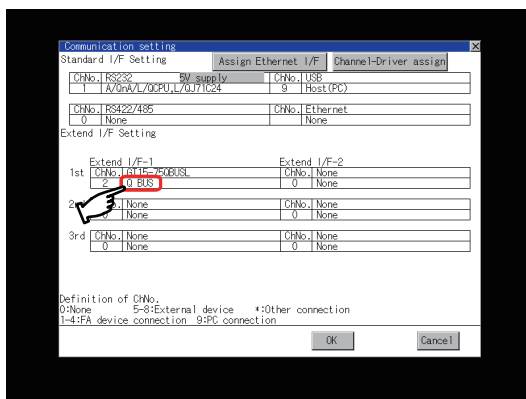
1. Touch the driver display BOX of the communication parameter to be set in the communication setting screen.
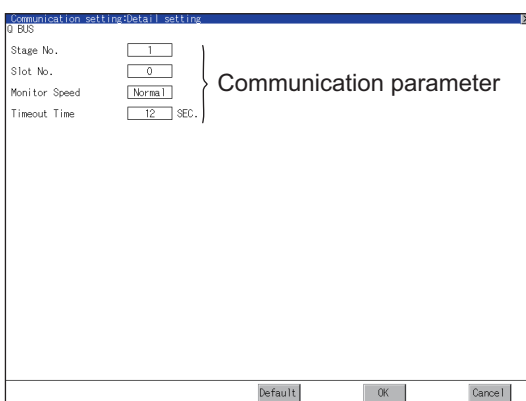
2. The screen switches to the detail setting screen. Set communication parameters from this screen.
Refer to the following for the setting change operation.
　⇒　1.3.3 Basic operation of settings change

POINT

(1) Communication parameter setting by GT Designer3

Set the communication parameters for each communication driver at [Communication Settings] in [Controller Setting] of GT Designer3.

When change the communication parameters after downloading project data, change the setting at communication detail setting of GOT.

➡ GOT2000 Series Connection Manual for the controller used
GT Designer3 (GOT2000) Help

(2) For the Ethernet multiple connection

Touch the driver display BOX of the Ethernet connection, and then the communication detail setting screen of Channel No. 1 is displayed.

(2) Assign Ethernet I/F

Several drivers are assigned to the same Ethernet interface. However, only one GOT IP address is assigned per interface.

By changing the settings of one interface, the GOT IP address, GOT port No. download, default gateway and subnet mask settings of other drivers, which are assigned to the same interface, are also changed.

1. Touch the [Assign Ethernet I/F] button in [????].
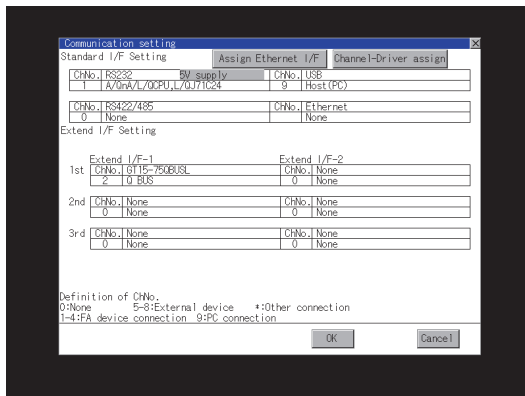
2. Touch the driver display BOX of the communication parameter to be set in the [Ethernet I/F assignment] screen.
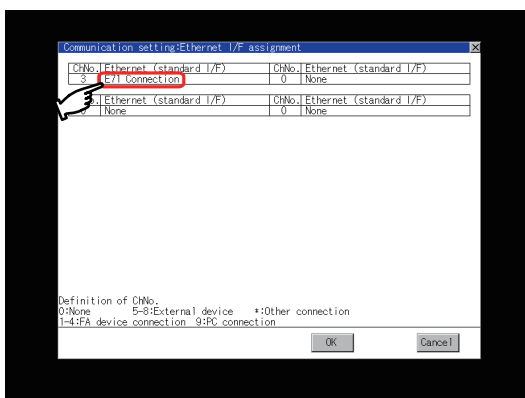
(Continued to next page)
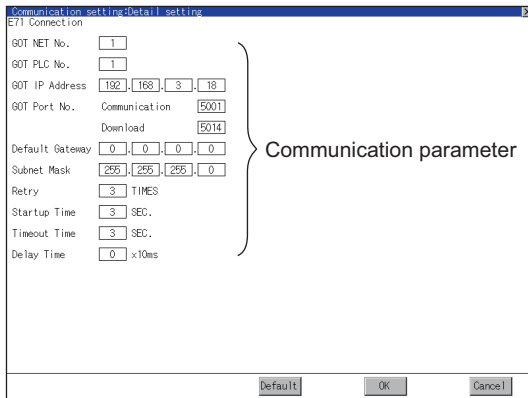
3. The screen switches to the detail setting screen.
Set communication parameters from this screen.
Refer to the following for the setting change operation.

➠ 1.3.3 Basic operation of settings change

POINT

Communication parameter setting by GT Designer3
Set the communication parameters for each communication driver at [Communication Settings] in [???????] of GT Designer3.
When change the communication parameters after downloading project data, change the setting at communication detail setting of GOT.

➠ GOT2000 Series Connection Manual for the controller used

GT Designer3 (GOT2000) Help

■ Display contents of communication detail setting

The contents of communication detail setting varies according to driver type.

This section explains setting items different from the communication detail setting of GT Designer3.
For setting items other than described in this section, refer to the following.

➠ GOT2000 Series Connection Manual for the controller used

GT Designer3 (GOT2000) Help
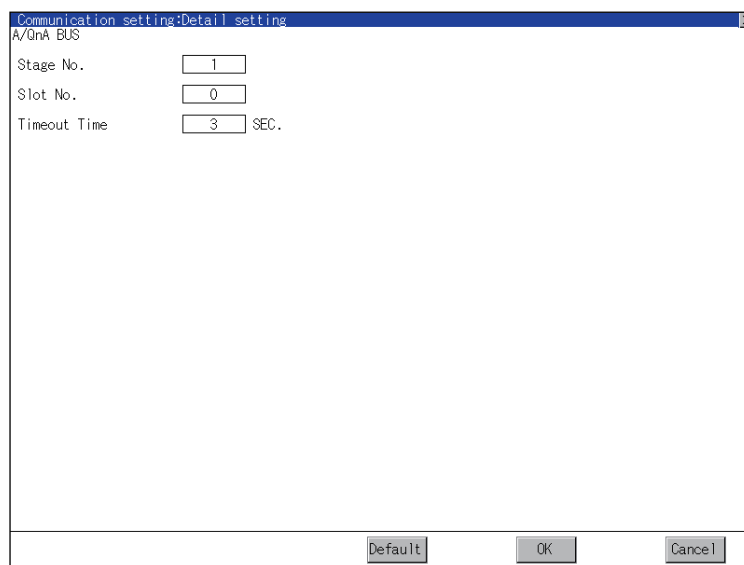
For bus (A/QnA)

(1) Keyword registration, deletion and protection delete
MELSEC-FX
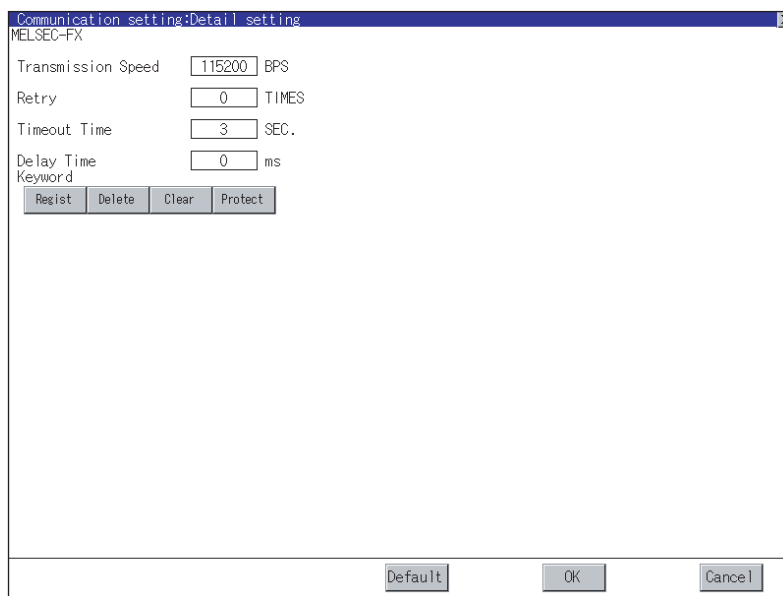
(a) Registration
Register key words.

1. Touching the [Regist] key pop-up displays the keyboard for inputting a keyword.

2. Input a keyword and touch the [Enter] key, and the registration completes.
Up to 8 characters can be set for keyword with using A to F and 0 to 9.
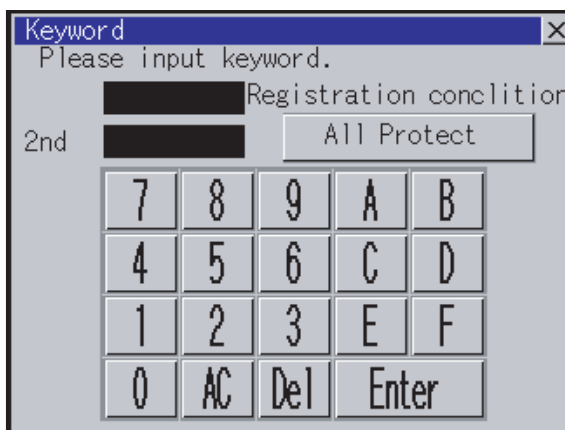
PLC connected	Setting	
	When registering keyword and 2nd keyword	When registering keyword only
FX CPU compatible with 2nd keyword	[Registration condition][1] can be selected.	[Registration condition][1] cannot be selected.
FX CPU not compatible with 2nd keyword	-	

*1 [Registration condition]
The access restriction can be selected from [Read/Write Protect], [Write Protect], and [All Protect].
For access restriction on each setting, refer to the following manual.

⟾ The User's Manual of the FX series PLC you are using

POINT

(1) How to select a keyword protection level

For equipments that are allowed to operate the FX PLC on line, 3 levels of protection level can be set.
When performing monitoring or changing settings with any on-line equipment is required, set password with referring to the following.

(a) When setting keyword only
   Select a protection level by the initial letter of keyword.

All operation protect: Set a keyword with initial letter of "A", "D" to "F", or "0" to "9".

   Read/Incorrect write protection: Set a keyword with initial letter of "B".
   Incorrect write protect: Set a keyword with initial letter of "C".

(b) When setting keyword and 2nd keyword
   Select a protection level by [Registration condition].

(2) Monitoring availability at each keyword protection level

Device monitoring availability at each keyword protection level is shown in the following.

Item		When setting keyword only			When setting keyword and 2nd keyword			Keyword not registered or protection canceled
		All operation protect	Read/ Incorrect write protection	Incorrect write protect	All on-line operation protect	Read/write protect	Write protect	
Monitoring devices		○	○	○	✕	○	○	○
Changing devices	T, C set value and file register (D1000 and the following)	✕	✕	✕	✕	○	○	○
	Other than the above	○	○	○	✕	○	○	○

(3) Difference between all online operations prohibition and all operations prohibition

When specifying All online operations prohibited, displaying devices and inputting data with a programming tool or GOT are all prohibited.
When all operations are prohibited, displaying devices and inputting data with the GOT are enabled while all operations using a programming tool are prohibited.

(b) Deletion
Delete a registered keyword.

1. Touching the [Delete] key pop-up displays the keyboard for inputting a keyword.

2. Input a key word and touch the [Enter] key, and the keyword is deleted.
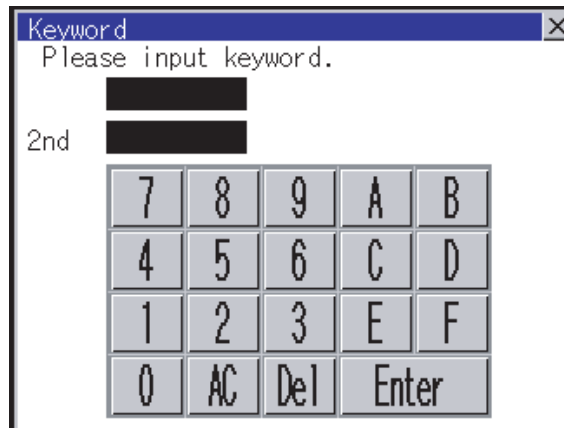
PLC connected	Setting
FX CPU compatible with 2nd keyword	Input a keyword to delete.
FX CPU not compatible with 2nd keyword	Input the keyword to delete only into the keyword. The 2nd keyword will be ignored.

(c) Protection delete
Delete the protection by key word in order to access to a FX PLC to which a key word is registered.

1. Touching the [Clear] key pop-up displays the keyboard for inputting a keyword.

2. Input a keyword and touch the [Enter] key to delete the protection.
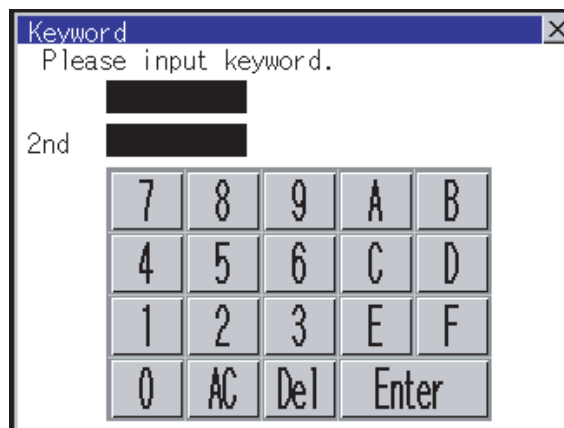
PLC connected	Setting
FX CPU compatible with 2nd keyword	Input a keyword to delete the protection.
FX CPU not compatible with 2nd keyword	Input a keyword to delete only into the keyword. The 2nd keyword will be ignored.

(d) Protection
Reset the keyword in which protection has been deleted to the protection status.

1. Touch the [Protect] key, and the keyword goes to a protected status.

2.10 Ethernet Communication

2.10.1 Setting function for Ethernet communication

The contents of the Ethernet set in GT Designer3 can be checked.
The setting of the host station can be changed.
For the Ethernet setting, refer to the following.

➠ GOT2000 Series Connection Manual for the controller used

2.10.2 Display operation of Ethernet communication

GOT basic setting

Touch
[Ethernet
communication].

Ethernet communication

■ Display contents of Ethernet setting

The following describes the setting items and the display contents of the Ethernet setting.

(1) ──
(2) ──

	Host	NET No.	PLC No.	Model	IP Address	Port No.	Communication
1	*	1	1	0J71E71	192.168. 3. 1	5001	UDP
2		1	2	0J71E71	192.168. 3. 2	5001	UDP
3		1	3	0J71E71	192.168. 3. 3	5001	UDP

Communication setting:Ethernet setting

1 CH | 2 CH * | 3 CH | 4 CH

(3) ── Restore default settings

OK   Cancel
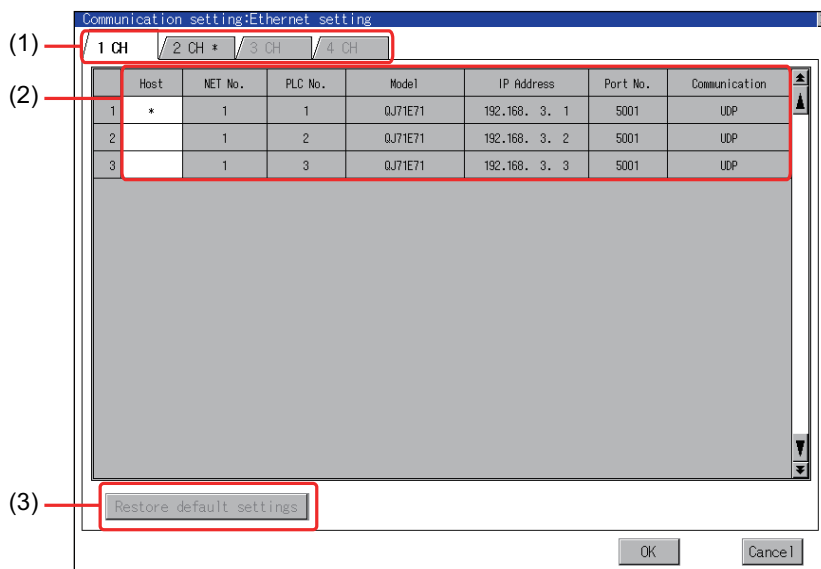
(1) Channel select tab
Channels can be switched.
Switching to the channel which does not have the Ethernet setting is not available.
[*] is displayed on the tab of the channel whose setting is changed.

(2) Ethernet setting items
The contents of the Ethernet setting configured in GT Designer3 are displayed.
The setting of the host station can be changed.

➡ ■Change of host

(3) Restore default settings
If touch this button, the change of the setting is canceled and the setting returns to the status when the project data was written.

POINT

(1) How to cancel the change of the setting in the [Ethernet setting] screen.
Cancel the settings changed in the [Ethernet setting] screen with the [Restore default settings] button.
The changed settings remain until they are canceled with the [Restore default settings] button.
The changed settings are not canceled even if writing the project data or system application to the GOT.
When the project data is written to the GOT without canceling the changed settings, those changed settings are reflected to the Ethernet setting of the written project data.
(If the written project data does not have a channel with same Ethernet settings as that of the channel changed in [Ethernet setting] screen, the changed settings are not reflected.)

(2) Range where the settings changed in the [Ethernet setting] screen are reflected
The settings changed in the [Ethernet setting] screen are valid in the GOT. On the other hand, they are not overwritten to the project data written to the GOT.
The changed settings are not reflected to the project data which is read from the GOT after changing the settings.
If the GOT data is copied with the GOT data package acquisition, the change in the [Ethernet setting] screen is reflected to the copied data.

■ Change of host
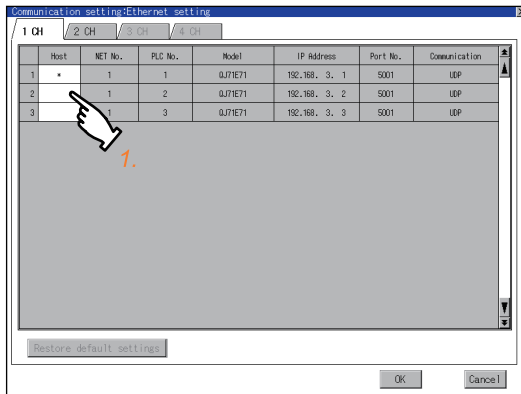
1. Touch the device to be set as the host.
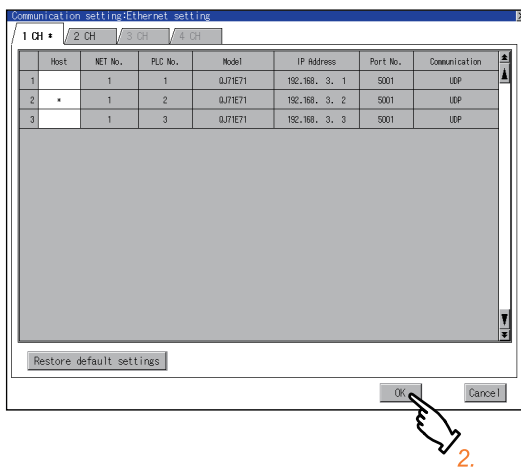
2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [????] screen.

2.11 Transparent Mode

2.11.1 Function of the transparent mode

When using the multi-channel function, the channel No. of a controller to which the FA transparent function is executed can be set. For the multi-channel settings, refer to the following.

➡ GOT2000 Series Connection Manual (Mitsubishi Products)

GT Designer3 (GOT2000) Help

Also, refer to the following for the FA transparent function.

➡ GOT2000 Series Connection Manual (Mitsubishi Products)

Function	Description	Setting range
ChNo.	The channel No. of a controller to which the FA transparent function is executed can be set.	1/2/3/4 <Default: 1>

2.11.2 Operation the transparent mode

2.11.3 Operation the transparent mode

```
GOT setup:GOT main unit setup:Transparent mode setting        ☒

ChNo.        1




                                                    OK        Cancel
```
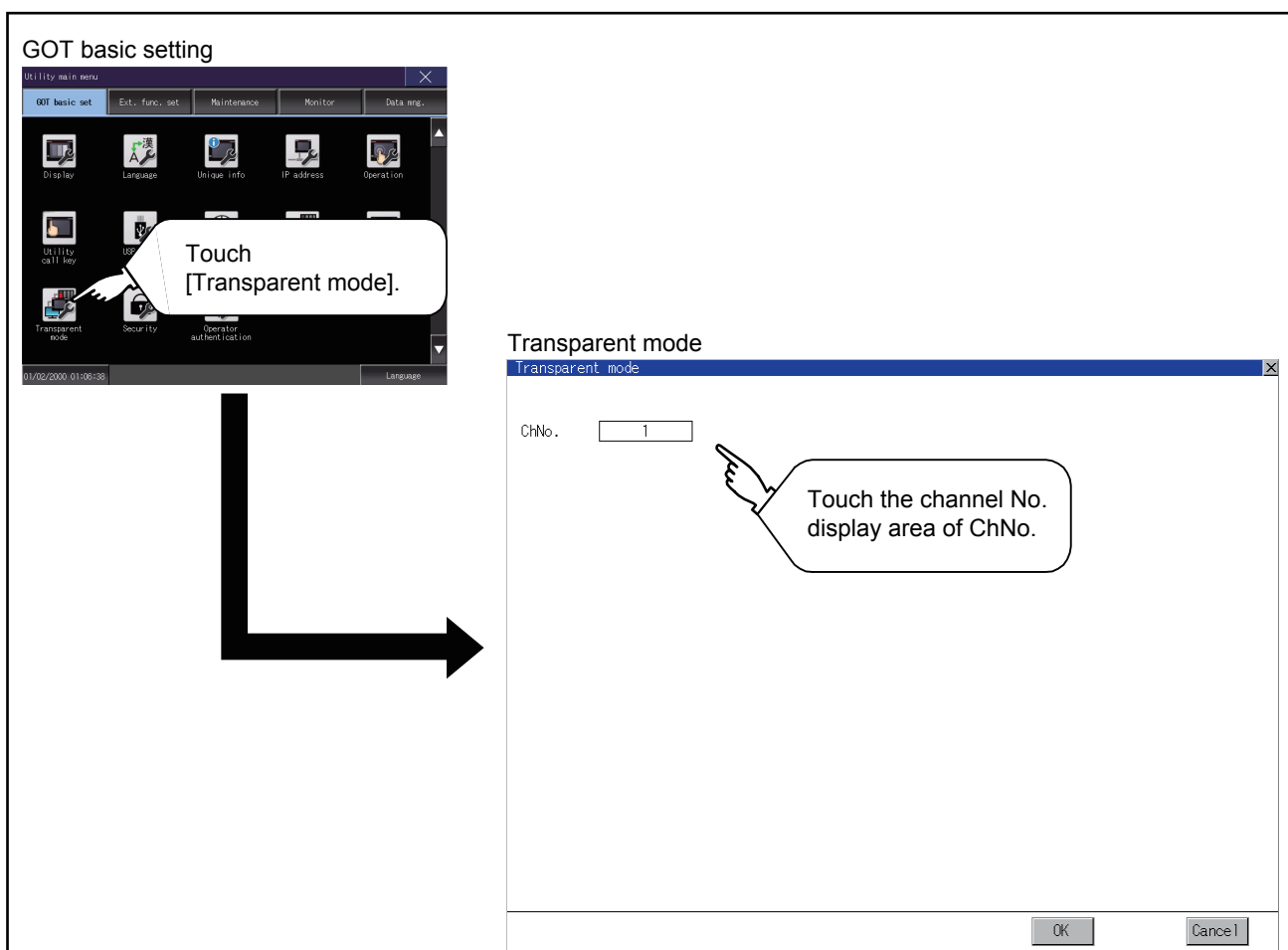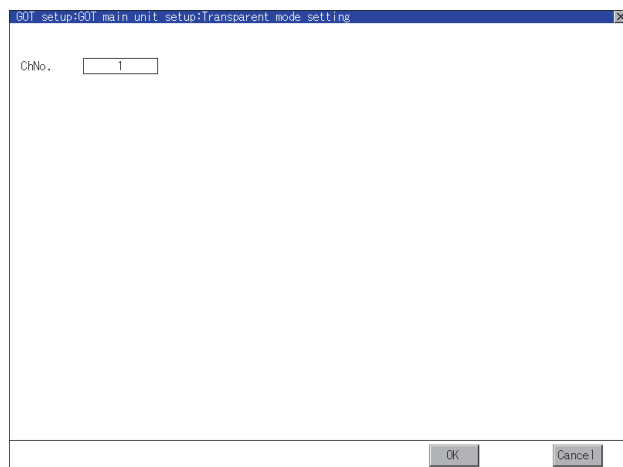
1. Touching the transparent ChNo. (numerical part) on the left, the keyboard is displayed. Input numerical value by the keyboard.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

2.12 Security

2.12.1 Security level authentication

■ Security level change functions

Authenticates the security level set by each object or screen switch.

Refer to the following for the security level.

Security level setting......... ➡ GT Designer3 (GOT2000) Help

Password setting........................ ➡ GT Designer3 (GOT2000) Help

POINT

Restrictions on screen display

The security level change screen cannot be displayed when project data do not exist in GOT.

Change the security level after downloading the project data to GOT.

■ Display operation of security level

■ Setting operation of security level

(1) Password input operation

```
GOT setup:Operation:Security setting:Security level change    ☒

        Please input password.
        ▂▂▂▂▂

              7  8  9  A  B
              4  5  6  C  D
              1  2  3  E  F
              0  AC Del Enter
```
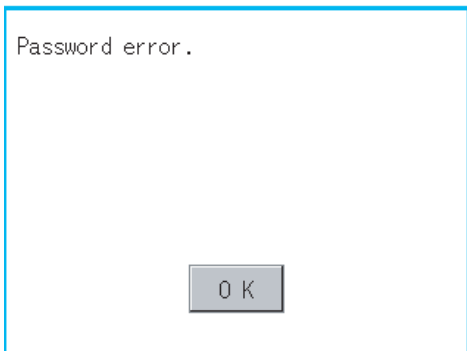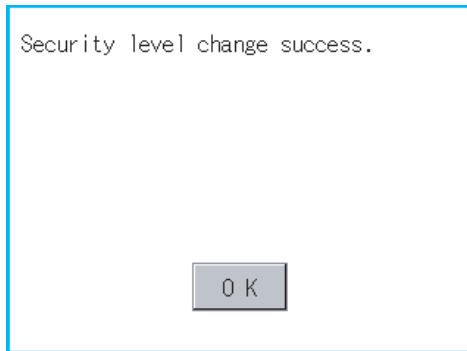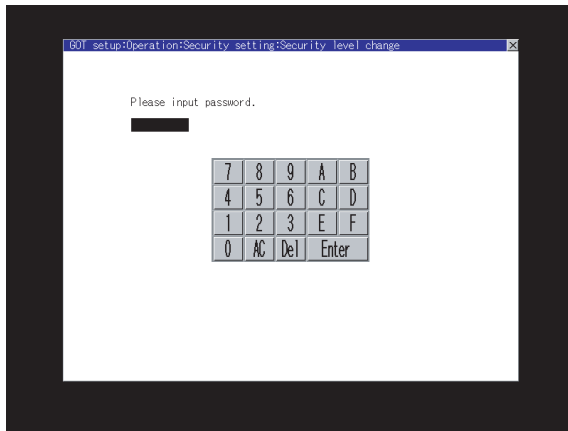
1. By touching [0] to [9], [A] to [F] key, the password of the changed security level is input.

2. When correcting the input character, touch [Del] key to delete the correcting character and input the password again.

```
Security level change success.




              O K
```

3. After inputting password, touch the [Enter] key. When the password matches, the normal completion message is displayed. When the password is not matched, displays the error message.

4. If [OK] button is touched it returns to the password input screen again.

```
Password error.




              O K
```

5. If [×] button is touched it returns to security setting screen.

HINT

About forgetting to return to the original level after changing security level temporarily
When use GOT after temporarily changing the security level, do not forget to return the security level to the original level.

2.13 Operator Authentication

2.13.1 Operator management

■ Operator management

(1) Operator management function

The function enables displaying a list of the operator information and adding, changing, or deleting the operator information to be used.

A password for operator authentication can be changed when the password is out of date.

Functions for the operator authentication (automatic logout time, authentication method, password expiration date, etc.) can be set.

For details of operator authentication functions, refer to the following.

➡️ GT Designer3 (GOT2000) Help

Function	Description	Reference
Operator management	Enables adding, editing, deleting, importing, and exporting the operator information.	(2) Display operation of operator management?(4) Operator management operation
Add operation	Add operator information to the GOT.	(a) Add operation
Edit operation	Edit the operator information stored in the GOT.	(b) Edit operation
Deletion	Delete the operator information stored in the GOT.	(c) Deletion operation
Undo	Restore the current operator information to the previous saved one.	(d) Undo operation
Import operation	Import the operator information that is already exported to a CF card to the GOT.	(e) Import operation
Export operation	Export the operator information stored in the data storage.	(f) Export operation
Password change	Enables changing passwords to be used for login and logout in/out of the GOT.	■Password change
Function setting	Enables setting the automatic logout time and password expiration date.	■Function setting

(2) Display operation of operator management

GOT basic setting

Touch
[Operator
authentication].

Operator management

オペレータ管理

オペレータ名	ID	レベル	更新日
Administrator	–	–	–
OP0001	1001	10	2009/08/25
OP0002	1002	11	2009/08/25
OP0003	1003	12	2009/08/25

Operator authentication

Touch
[Operator
authentication].

使用ドライブ A　インポート　エクスポート　保存

追加　編集　削除　元に戻す

(3) Display example of operator management

(a) Operator information management screen

No.	Item	Description
(a)	Operator Name	Displays operator names.
(b)	ID	Displays operator IDs.
(c)	Level	Displays security levels for operators.
(d)	Update	Displays the last updated dates of the operator information.
(e)	Operation keys	Execution keys for each function
(f)	Drive in use	Displays and sets the storage location for imported and exported operator information. To switch the drive, touch the key. (A: Standard SD card/B: USB drive/E: USB drive/F: USB drive/G: USB drive) Only when the drive B, drive E, drive F, or drive G is installed on the GOT, the user can switch the drive.

(b) Operator information edit screen
Touch the [Add] button or touch the [Edit] button with the operator information selected on the Operator information management screen, and then the Operator information edit screen is displayed.
The operator information can be edited.

No.	Item	Description
(a)	Operator Name	The operator name to be edited is displayed or input an operator name to be added. (Up to 16 alphanumeric characters)
(b)	Operator ID	The operator ID to be edited is displayed or input an operator name to be added. (Setting range: 1 to 32766, Maximum number of registrations: 255)
(c)	Level	The operator security level to be edited is displayed or input an operator security level to be added. (0 to 15)
(d)	Password	Input a password. (Up to 16 alphanumeric characters)
(e)	Make a permanent password	Switches the setting of the item disabled and enabled. (☐ : Disabled ☑ : Enabled)
(f)	Use ext. auth. ID	Switches whether to use the external authentication ID. (☐ : Not Used ☑ : Used)
(g)	Ext.auth. ID	The external authentication ID is displayed or input an external authentication ID. (Fingerprint authentication ID setting range: numbers 1 to 7 digits, External authentication ID setting range: alphanumerics[*1] 4 to 32 digits) ➠ ■Function setting

*1   Since the key window is for hexadecimal format, the setting range can be input in the range of A to F or 0 to 9.

(4) Operator management operation
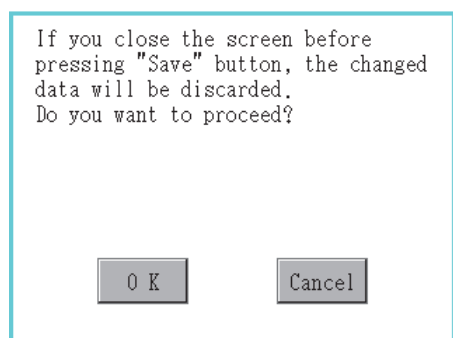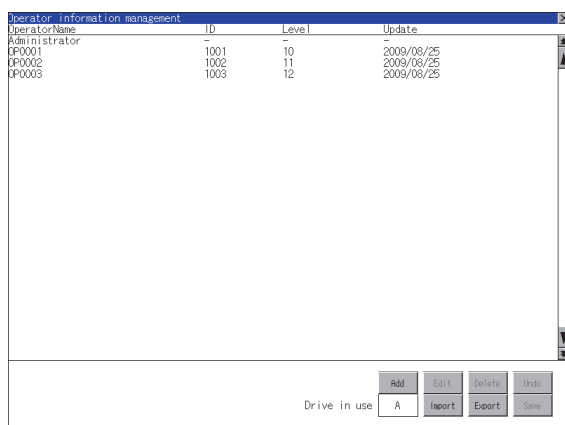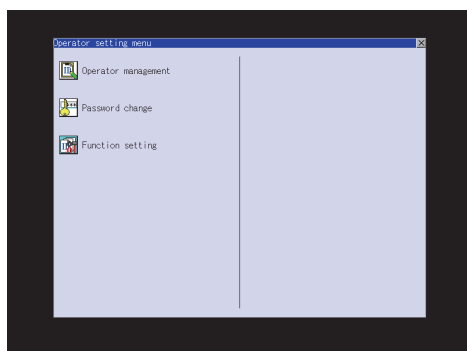
1. Touch [Operator management] in the operator setting menu.

2. The Admin password authentication screen is displayed, and then input the administrator password.
   Character types to be input can be changed with touching the following buttons.

   [A-Z]: Alphabet capital

   [a-z]: Alphabet small letter

   [0-9]: Numeric

   When the input is completed, touch the [Enter] key.

3. When the administrator password is correctly input, the Operator information management screen in displayed.
   For operation of operating switches, refer to the following.
   Add.................... ➠ (a) Add operation
   Edit.................... ➠ (b) Edit operation
   Delete................ ➠ (c) Deletion operation
   Undo.................. ➠ (d) Undo operation
   Import................ ➠ (e) Import operation
   Export................ ➠ (f) Export operation

4. After all settings are completed, touch the [Save] button, and then the settings are saved.

5. If you touch the [×] button without touching the [Save] button, the dialog on the left is displayed.

(a) Add operation
Add operator information to the GOT.
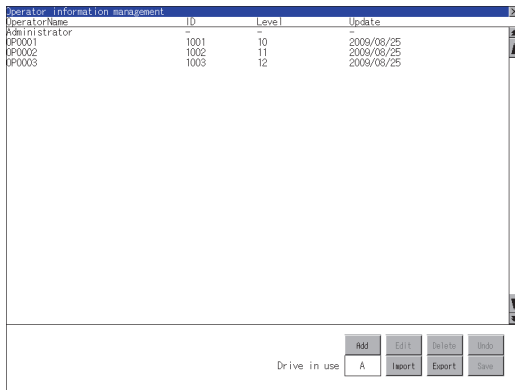
1. Touch the [Add] button.
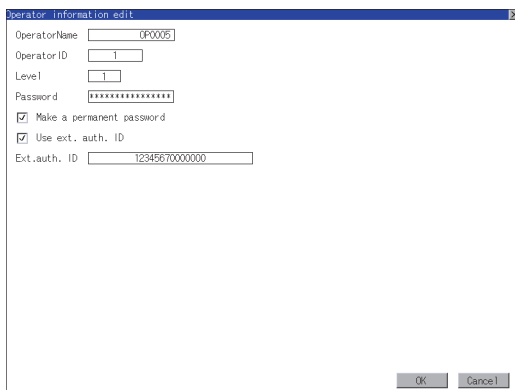
**2.** The Operator information edit screen is displayed, and then touch an item to be edited.
(a) OperatorName
(b) OperatorID
(c) Level
(d) Password
(e) Make a permanent password
(f) Use ext. auth. ID
(g) Ext.auth. ID

(a) Touch the OperatorName, and then the Operator name input dialog is displayed. Input an operator name. Character types to be input can be changed with touching the following buttons.
[A-Z]: Alphabet capital
[a-z]: Alphabet small letter
[0-9]: Numeric
When the input is completed, touch the [Enter] key.
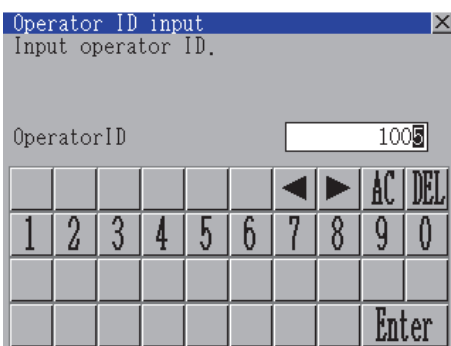
(b) Touch the Operator ID, and then the Operator ID input dialog is displayed. Input an operator ID.
When the input is completed, touch the [Enter] key.

(Continued to next page)

```
Operator level input                    [X]
Input operator level.


Level                          [          ]■

[   ][   ][   ][   ][   ][ ◀ ][ ▶ ][ AC ][ DEL ]
[ 1 ][ 2 ][ 3 ][ 4 ][ 5 ][ 6 ][ 7 ][ 8 ][ 9 ][ 0 ]
[   ][   ][   ][   ][   ][   ][   ][   ][ Enter ]
```

```
New password input                      [X]
Input a new password.


New password                   [          ]■

[A-Z][a-z][0-9][   ][   ][ ◀ ][ ▶ ][ AC ][ DEL ]
[ Q ][ W ][ E ][ R ][ T ][ Y ][ U ][ I ][ O ][ P ]
[ A ][ S ][ D ][ F ][ G ][ H ][ J ][ K ][ L ]
[ Z ][ X ][ C ][ V ][ B ][ N ][ M ][ Enter ]
```

```
Operator information edit                        [X]
OperatorName    [    OP0005    ]
OperatorID      [    1    ]
Level           [    1    ]
Password        [****************]
[✓] Make a permanent password
[✓] Use ext. auth. ID
Ext.auth. ID    [    12345670000000    ]




                                    [ OK ] [ Cancel ]
```
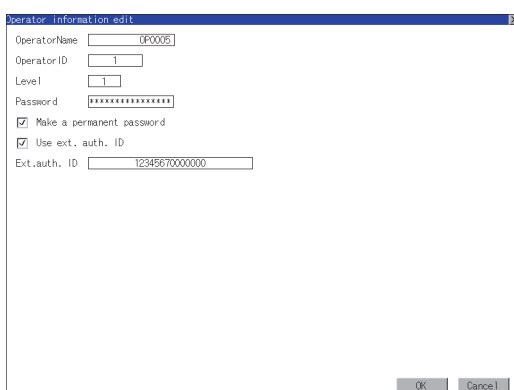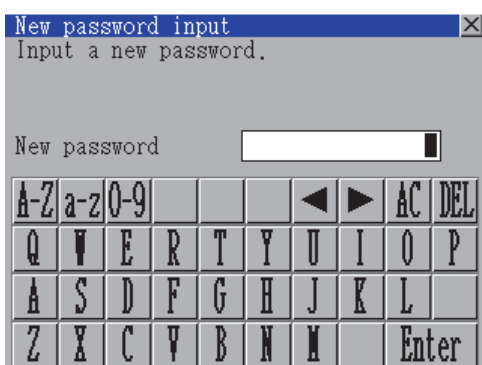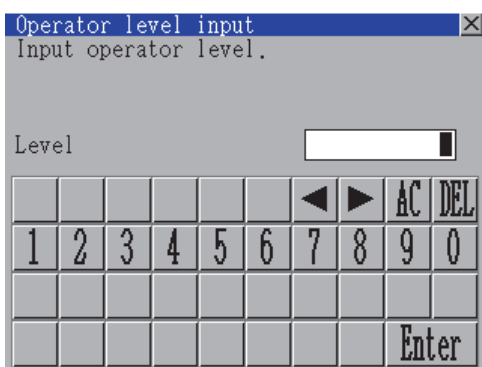
(c) Touch the level, and then the Operator level input dialog is displayed. Input an operator level.
When the input is completed, touch the [Enter] key.
When the level of the operator being login is changed during editing the operator information, a new level is not reflected until you log out of the GOT once and log in the GOT again.

(d) For changing passwords during editing, touch the password.
The New password input dialog is displayed, and then input a password.
When the input is completed, touch the [Enter] key.
When the password input is completed, the New password input confirmation dialog is displayed. Input the same password.

(e) For enabling the setting of [Make a permanent password], touch the check box for [Make a permanent password], and then the setting is switched.

[ ] : Disabled

[✓] : Enabled

(f) For using the external authentication ID, touch the check box "Use ext. auth. ID" and switch the setting.

[ ] : The external authentication ID is not used.

[✓] : Use ext. auth. ID

(g) Touch Ext.auth ID to display the external authentication ID input dialog, and enter the external recognition ID.
When the input is completed, touch the [Enter] key.
When the authentication method is set to "Fingerprint auth" or "External auth (general)", the external authentication ID can be input with the external authentication device.
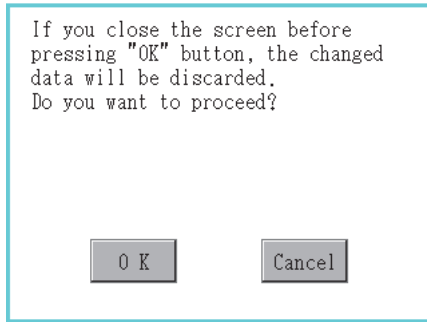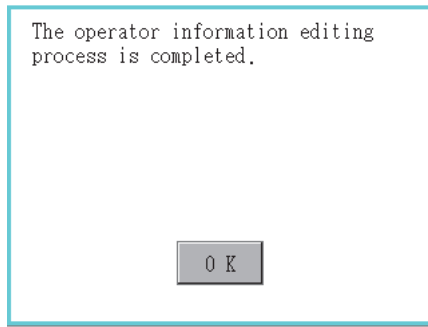
```
The operator information editing
process is completed.




              O K
```
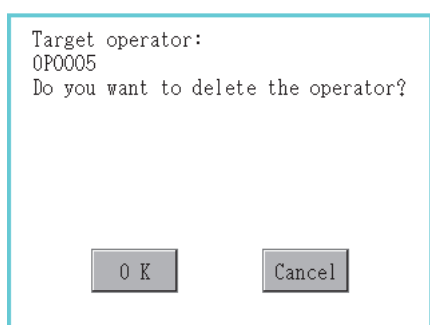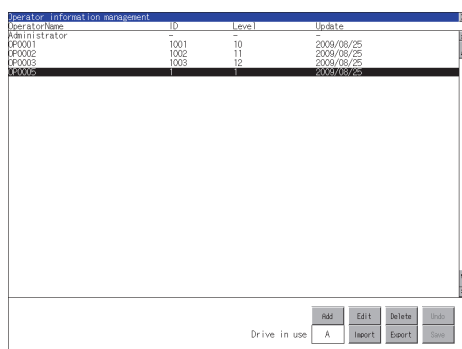
3. Touch the [OK] button after all items are input, and then the dialog shown left is displayed and the input operator information is added.



```
If you close the screen before
pressing "OK" button, the changed
data will be discarded.
Do you want to proceed?



      O K          Cancel
```

4. Touch the [Cancel] button or the [×] button, and then the dialog box shown left is displayed.

(b) Edit operation

Edit the operator information stored in the GOT.
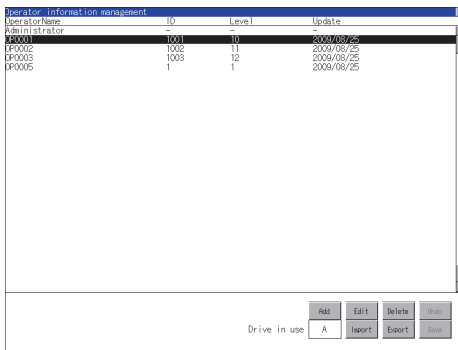
1. Select the operator information to be edited with touching the operator information.

2. Touch the [Edit] button.
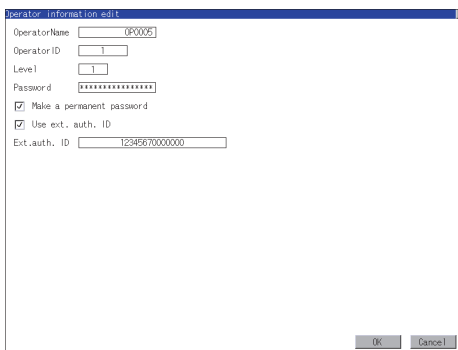
3. The Operator information edit screen is displayed, and then touch an item to be edited.
(a) Level
(b) Password
(c) Make a permanent password
(d) Use ext. auth. ID
(e) Ext.auth. ID
For how to edit operator information, refer to the following.

➠ (a) Add operation

(Continued to next page)
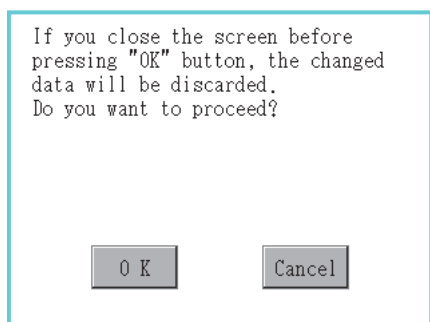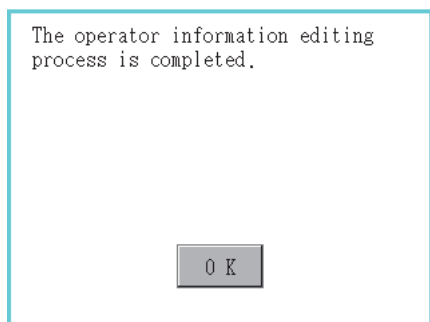
The operator information editing
process is completed.

O K

4. Touch the [OK] button after all items are input,
and then the dialog shown left is displayed and
the input operator information is changed.

If you close the screen before
pressing "OK" button, the changed
data will be discarded.
Do you want to proceed?

O K   Cancel

5. Touch the [Cancel] button or the [×] button, and
then the dialog box shown left is displayed.

(c)   Deletion operation
Delete the operator information stored in the GOT.

Operator information management				
OperatorName	ID	Level	Update	
Administrator	-	-	-	
OP0001	1001	10	2009/08/25	
OP0002	1002	11	2009/08/25	
OP0003	1003	12	2009/08/25	
OP0005	1	1	2009/08/25	

Add   Edit   Delete   Undo
Drive in use   A   Import Export Save

1. Select the operator information to be deleted
with touching the operator information.

Target operator:
OP0005
Do you want to delete the operator?

O K   Cancel

2. If touch [Del] button, the dialog box mentioned
left is displayed.
Touch the [OK] button, and then the selected
operator information is deleted.
If touch [Cancel] button, the deletion is
canceled.

(Continued to next page)
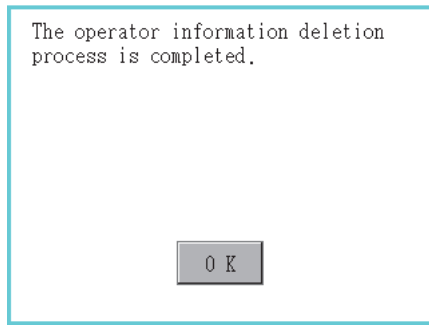
3. When the deletion is completed, the completion dialog is displayed.
Touching the [OK] button closes the dialog box.

(d) Undo operation
Restore the current operator information to the previous saved one.
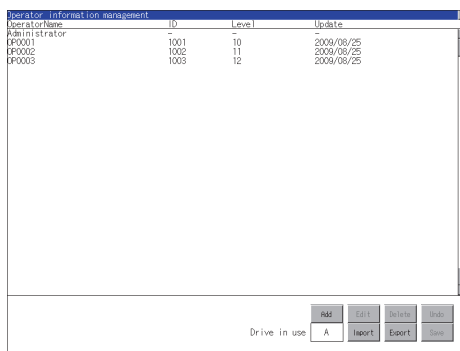
1. Touch the [Undo] button.
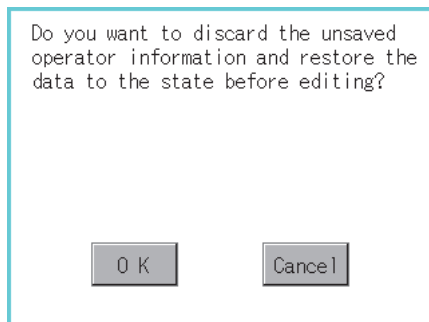
2. The dialog shown left is displayed, and then touch the [OK] button.

3. The Admin password authentication screen is displayed, and then input the administrator password.
Character types to be input can be changed with touching the following buttons.

[A-Z]: Alphabet capital

[a-z]: Alphabet small letter

[0-9]: Numeric

When the input is completed, touch the [Enter] key.

(Continued to next page)
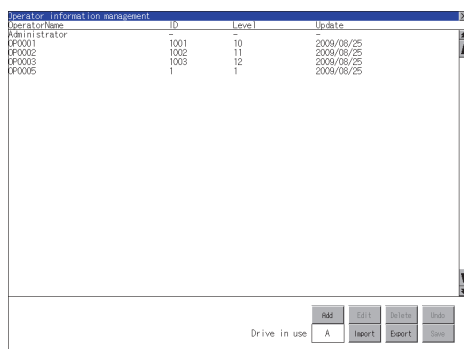
4. When the administrator password is correctly input, the current operator information is restored to the previous saved one.

(e) Import operation
Import the operator information that is already exported to an SD card to the GOT.
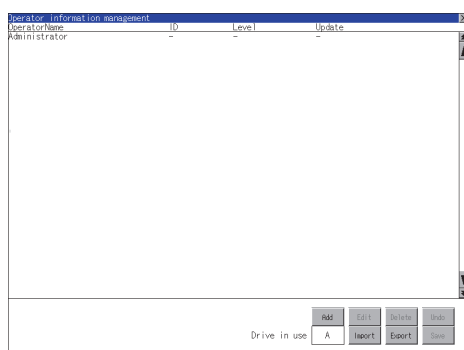
1. Touch the [Import] button.
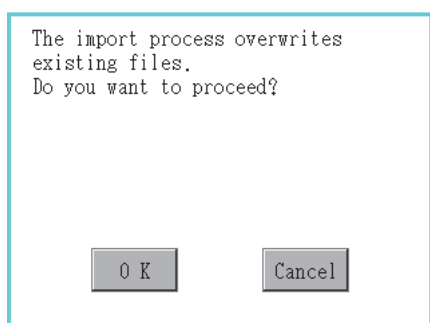
The import process overwrites existing files.
Do you want to proceed?

O K   Cancel

2. The dialog shown left is displayed.
Touch [OK] button, and then the Admin password authentication screen is displayed.
Input the administrator password.
Character types to be input can be changed with touching the following buttons.

[A-Z]: Alphabet capital

[a-z]: Alphabet small letter

[0-9]: Numeric

When the input is completed, touch the [Enter] key.

The import process of operator information file is completed.

O K
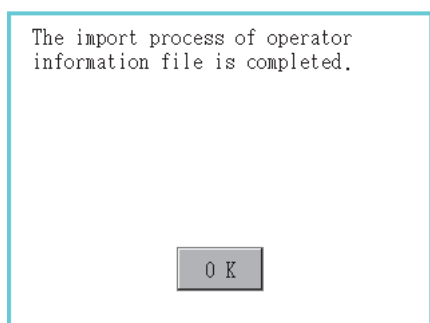
3. When the administrator password is correctly input, the dialog shown left is displayed and the operator information stored in an SD card is imported to the GOT.

(f) Export operation

Export the operator information stored in the GOT to an SD card.
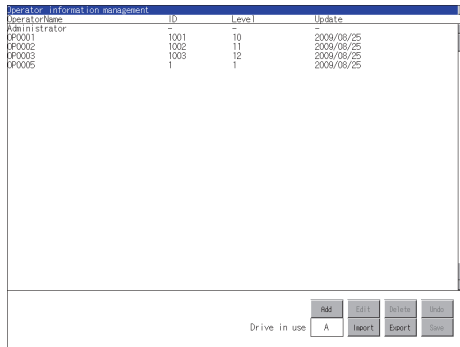
1. Touch the [Export] button.
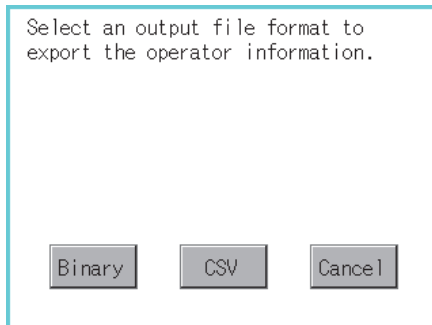
2. The dialog shown left is displayed.
   Touch the following buttons according to the output format for the file.
   • Binary file: [Binary] button
   • CSV file: [CSV] button
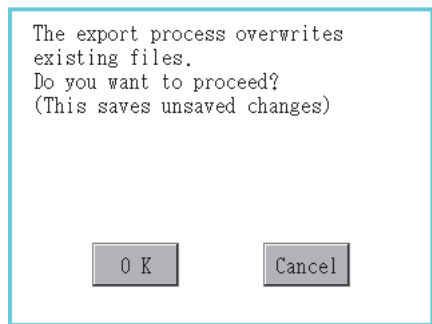
3. The dialog shown left is displayed.
   Touch [OK] button, and then the Admin password authentication screen is displayed.
   Input the administrator password.
   Character types to be input can be changed with touching the following buttons.

   [A-Z]: Alphabet capital

   [a-z]: Alphabet small letter

   [0-9]: Numeric

   When the input is completed, touch the [Enter] key.
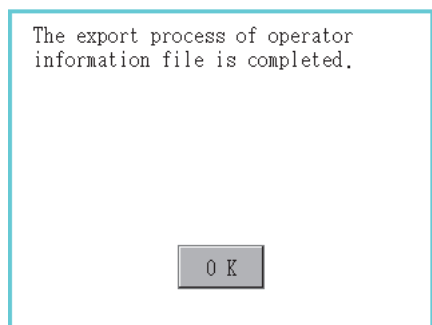
4. When the administrator password is correctly input, the dialog shown left is displayed and the operator information stored in the GOT is exported to an SD card.
   (file name: AUTHINF.G1U)

2.13.2 Password change

■ Password change

(1) Password change function

The passwords to be used for the operator authentication can be changed.

For the password change, log into the GOT in advance with the operator name corresponding to the password to be changed.

(2) Display operation of password change
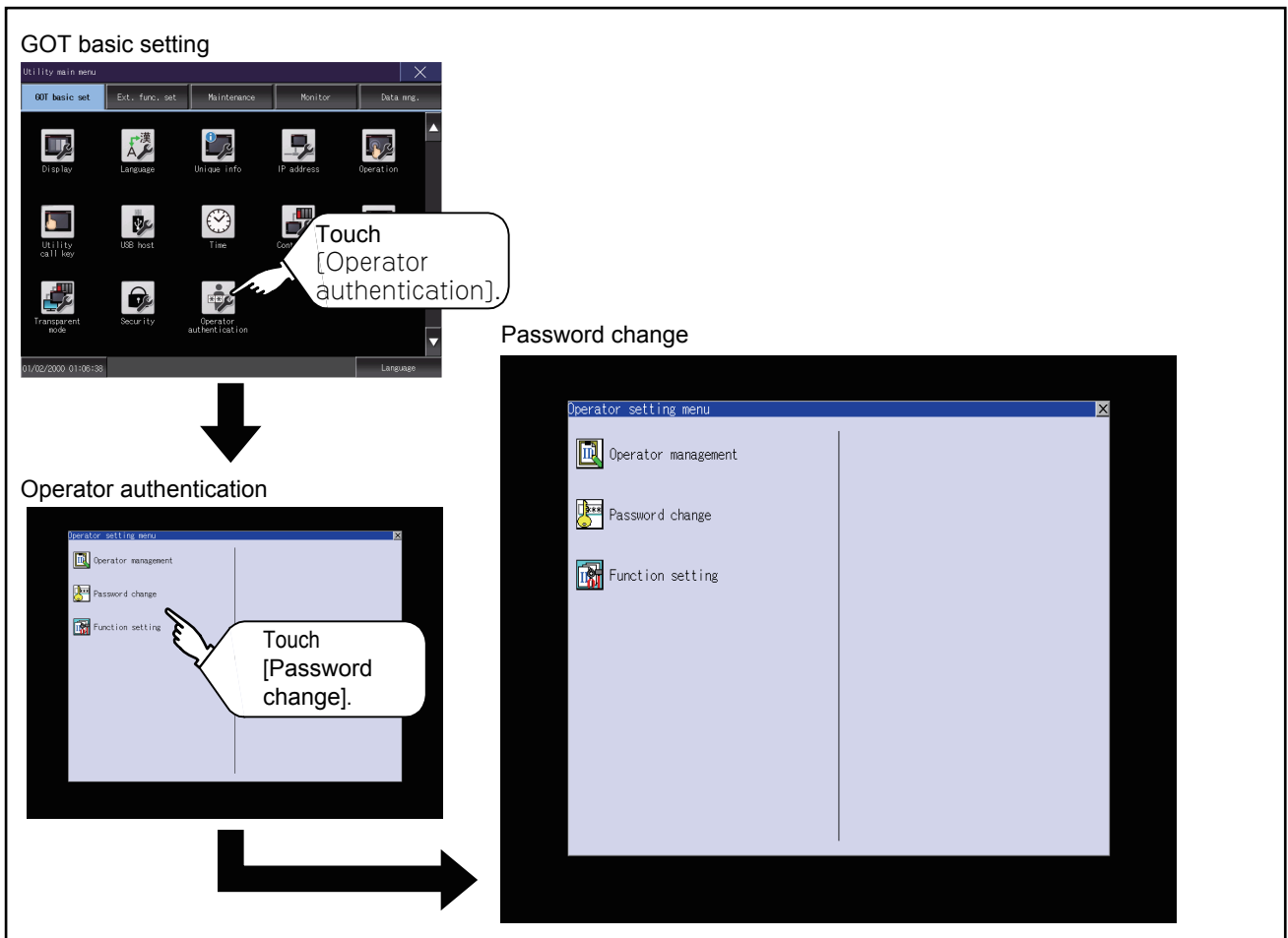
(3) Password change operation
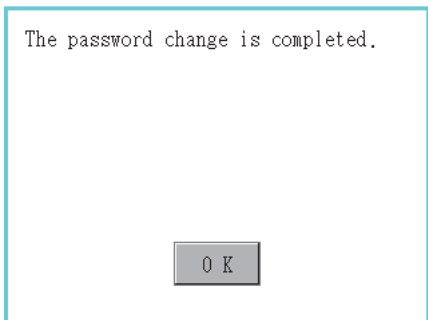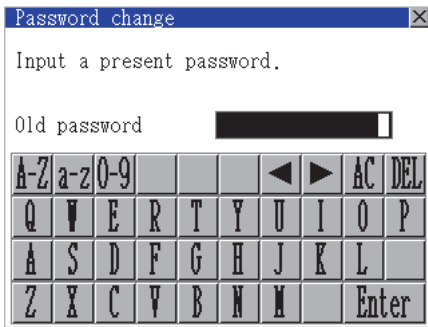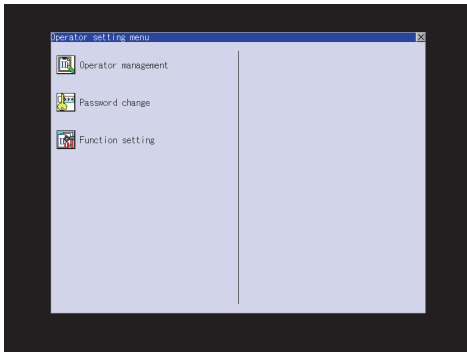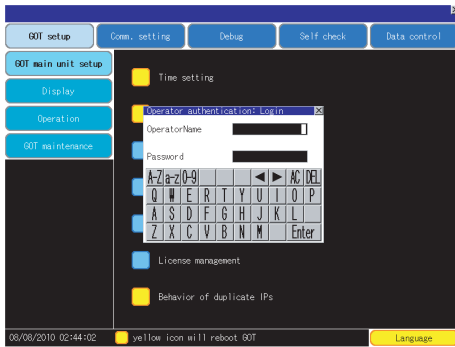
1. Log into the GOT with the operator name corresponding to the password to be changed on the Main Menu screen for the utility.

2. Touch [Password change] in the operator setting menu, and then the Password change dialog is displayed.

3. Input the current password on the Password change dialog.
   Character types to be input can be changed with touching the following buttons.

   [A-Z]: Alphabet capital
   [a-z]: Alphabet small letter
   [0-9]: Numeric

   When the input is completed, touch the [Enter] key.

4. Input a new password.

5. After inputting a new password, input the new password again.

6. When the new password is correctly input, the dialog shown left is displayed and the password is changed.

2.13.3   Function setting

■ Function setting

(1)   Function setting function
The functions for the operator information can be set.
The following items can be set.

Item	Description	Reference
Automatic logout time	The time from when the last time the GOT is operated until when you automatically log out of the GOT can be set. (1 to 60 minutes, 0 is invalid.)	(a) ?????????
Auth method	The authentication method can be switched. ("Operator name + password", "External auth (general)", "Fingerprint auth") When [External auth (general)] or [Fingerprint authentication] is selected, the check box for [Operator name + password] is displayed.	(b) ????
Password expiration date	Set the item for regularly changing the password to be used for the operator authentication. (1 to 1000 days, 0 is invalid.) When the password is out of date after setting the password, the GOT requests the password change.	(c) ?????????
Initial position input	Set the initial position input (byte count) of external authentication ID from among the data read from the external authentication device. (0 to 1998 bytes)	(d) ?????ID????
Valid byte count input	Set the valid byte count for external authentication ID. (2 to 16 bytes)	(e) ????ID??????

(2)   Display operation of function setting

GOT basic setting

Touch [Operator authentication].

Operator authentication

Touch [Function setting].

Function setting

(3) Function setting operation

1. Touch [Function setting] in the operator setting menu, and then the Admin password authentication dialog is displayed.

2. Input the administrator password.
   Character types to be input can be changed with touching the following buttons.

   [A-Z]: Alphabet capital
   [a-z]: Alphabet small letter
   [0-9]: Numeric

   When the input is completed, touch the [Enter] key.

3. When the administrator password is correctly input, the Function setting screen in displayed.
   Touch an item to be set.
   (a) Automatic logout time
   (b) Auth method
   (c) Password expiration date
   (d) Initial position input
   (e) Valid byte count input

(a) Touch [Automatic logout time], and then the Automatic logout time edit dialog is displayed. Input the time.
When the input is completed, touch the [Enter] key.

(b) Authentication method
Switch the authentication method.
Touch the item to switch the display between [Operator name + password] → [External auth (general)] → [Operator name + password]. When [External auth (general)] or [Fingerprint authentication] is selected, the check box for [Operator name + password] is displayed. If the check box is selected, the login is also enabled with [Operator name + password].

(Continued to next page)

```
Password expiration date edit          ×
Input password expiration date.


Password expiration date       3□

            ◄  ►  AC DEL
  1  2  3  4  5  6  7  8  9  0


                      Enter
```

```
The function setting editing process
is completed.




            O K
```

```
If you close the screen before
pressing "OK" button, the changed
data will be discarded.
Do you want to proceed?




    O K        Cancel
```

(c) Touch [Password expiration date], and then the Password expiration date edit dialog is displayed. Input the expiration date.
When the input is completed, touch the [Enter] key.

(d) Initial position input
Set the initial position input (byte count) of external authentication ID from among the data read from the external authentication device.

(e) Valid byte count input
Set the valid byte count for external authentication ID.
(Only available when the external authentication (general) is set as the authentication method.)

4. Touch the [OK] button after all items are input, and then the dialog shown left is displayed and the input setting is saved.

5. If you touch the [×] button without touching the [OK] button, the dialog on the left is displayed

MEMO

3.   SPECIAL FUNCTION SETTING

Screens set for the special function can be displayed from the GOT utility screen.
The following table lists the settings that can be configured in the setting screens of the special function.

Item	Description	Reference
SoftGOT-GOT link function	The authorization of the SoftGOT-GOT link function can be set, and the exclusive authorization can be obtained or released.	3.1
VNC server function	The authorization guarantee time for the VNC server function can be set.	3.2
Sequence program monitor	The storage location for sequence programs can be set.	3.3
Backup/restoration	The storage location for backup data can be set.	3.4
License management	Registering/releasing the license	3.6
Video/RGB	Video unit, video display, RGB display	3.7
Multimedia	Multimedia equipment, video display, long time recording setting	3.8

3.1 SoftGOT-GOT Link Function

3.1.1 SoftGOT-GOT link function

The authorization of the SoftGOT-GOT link function can be set, and the exclusive authorization can be obtained or released.
Only the GOT can obtain the exclusive authorization.
While the GOT has the exclusive authorization, GT SoftGOT2000 cannot obtain the authorization.
For the details of the SoftGOT-GOT link function, refer to the following.

➡ GT SoftGOT2000 Version1 Operating Manual

Function	Description	Setting range
Exclusive authorization obtained state	The status whether or not the GOT obtains the exclusive authorization is displayed. Obtaining or releasing the exclusive authorization can be executed by the GOT.	Obtain/Release <At GOT startup: Release>
Authorization obtained time	The time length from the last operation of GT SoftGOT2000 after obtaining the authorization until the GOT automatically obtains the authorization can be set.	0 to 3600 seconds <At factory shipment: 60 seconds>
Operating priority guaranteed time	The time period that the authorized equipment (GOT or GT SoftGOT2000) keeps the authorization after the last operation of the authorized equipment can be set. (The unauthorized equipment cannot obtain the authorization until the set time elapses.)	0 to 3600 seconds <At factory shipment: 0 seconds>
Operation status popup notification	When the authorization is not obtained in GT SoftGOT2000/GOT, whether to display or not the information of the authorized side in pop-up can be set.	YES/NO <At GOT startup: NO>

3.1.2 Displaying the SoftGOT-GOT link function setting
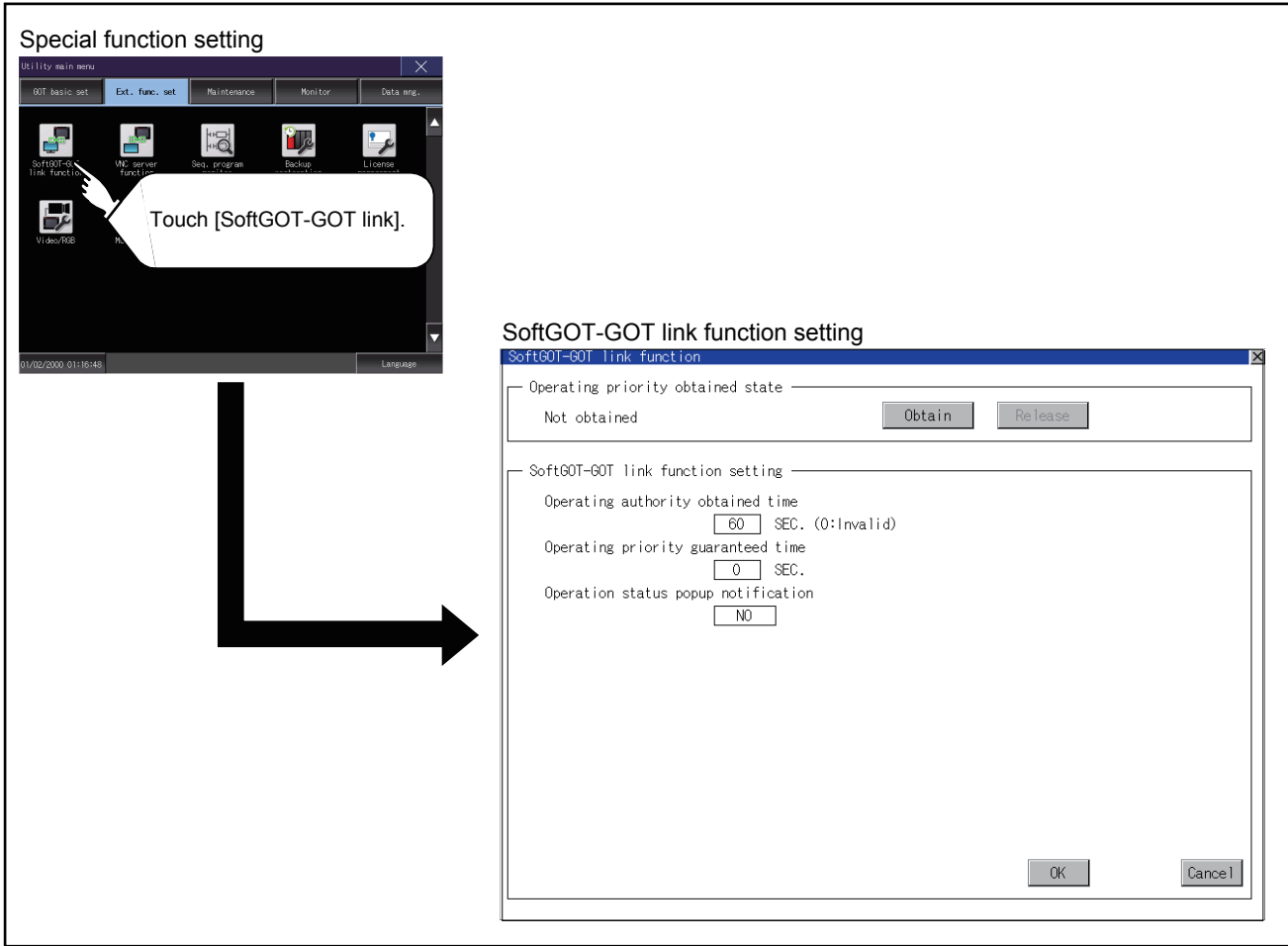
Special function setting

Touch [SoftGOT-GOT link].

SoftGOT-GOT link function setting

SoftGOT-GOT link function

Operating priority obtained state

Not obtained   Obtain   Release

SoftGOT-GOT link function setting

Operating authority obtained time
60   SEC. (0:Invalid)
Operating priority guaranteed time
0   SEC.
Operation status popup notification
NO

OK   Cancel

■ **Exclusive authorization obtained state**

(1)　Obtaining the exclusive authorization
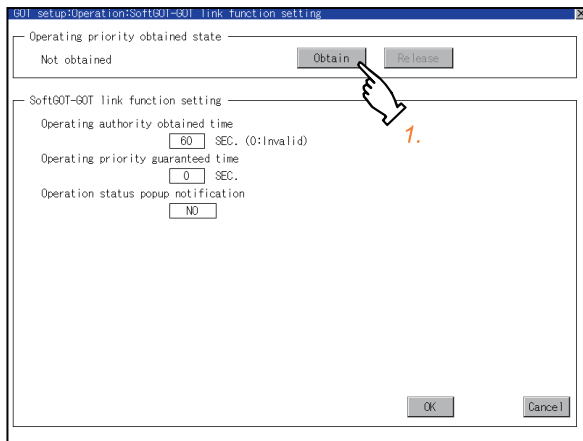
1. Touch the [Obtain] button to display the dialog.

2. Touch the [OK] button to obtain the exclusive authorization.
Touch the [Cancel] button to stop obtaining the exclusive authorization.

(2)　Releasing the exclusive authorization
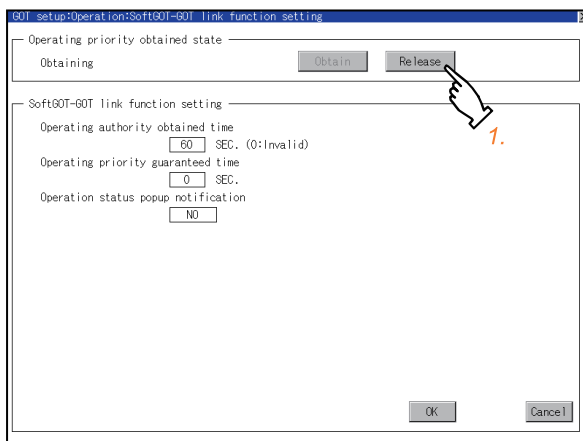
1. Touch the [Release] button to display the dialog.

2. Touch the [OK] button to release the exclusive authorization.
Touch the [Cancel] button to stop releasing the exclusive authorization.

■ **Authorization obtained time**
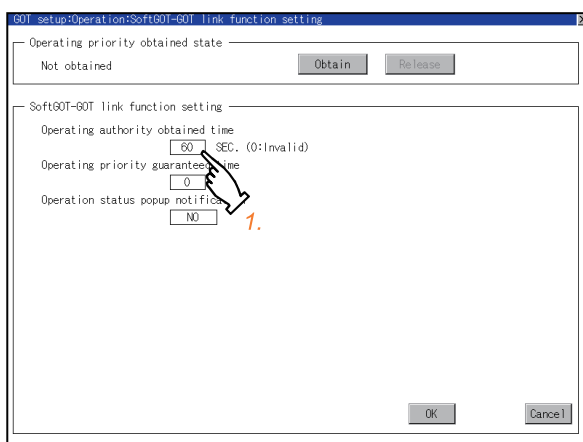
1. If touch the select button of the authorization obtained time, a keyboard is displayed.
Enter the authorization obtained time with the keyboard.
When setting to 0 second, the authorization is not automatically obtained by the GOT.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [??????] screen.

■ **Operating priority guaranteed time**
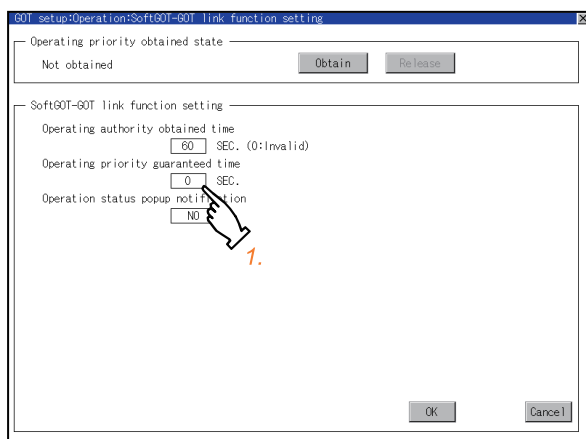
1. If touch the select button of the operating priority guaranteed time, a keyboard is displayed.
Enter the operating priority guaranteed time with the keyboard.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [??????] screen.

POINT

Relation between the authorization obtained time and the operating priority guaranteed time

When the followings are set, the authorization obtained time is prioritized. (After the authorization obtained time is elapsed, the GOT automatically obtains the authorization.)
  • 1sec or more is set for the authorization obtained time.
  • The authorization guarantee time is set longer than the authorization obtained time.

■ **Operation status popup notification**
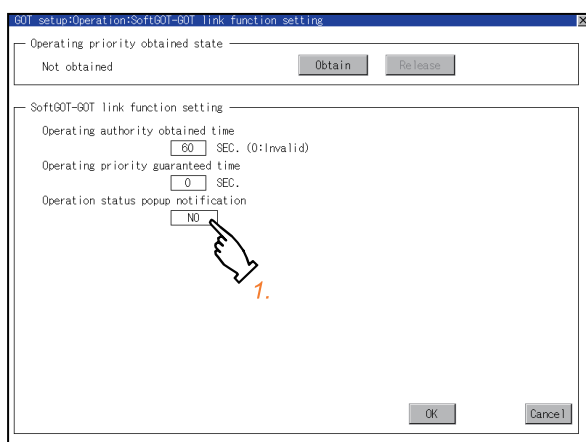
1. When you touch the setting item, the setting contents change.
(YES ⟳ NO)

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [??????] screen.

3.2　VNC Server Function

3.2.1　VNC server function setting

In the VNC server function setting, the authorization guarantee time for the VNC server function can be set.
For the details of the VNC server function, refer to the following.

➡　GT Designer3 (GOT2000) Help

Function	Description	Setting range
Operating priority guaranteed time	The time that the authorized equipment holds the authorization after you operate the authorized equipment can be set. (The unauthorized equipment cannot obtain the authorization until the set time elapses.)	0 to 3600 seconds <At factory shipment: 0 seconds>

POINT

Authorization guarantee time cancel signal (GS1792.b8)
When the Authorization guarantee time cancel signal (GS1792.b8) turns on, the authorization guarantee time setting is disabled.

3.2.2　Displaying the VNC server function setting

Special function setting

Touch [VNC server].

VNC server function setting
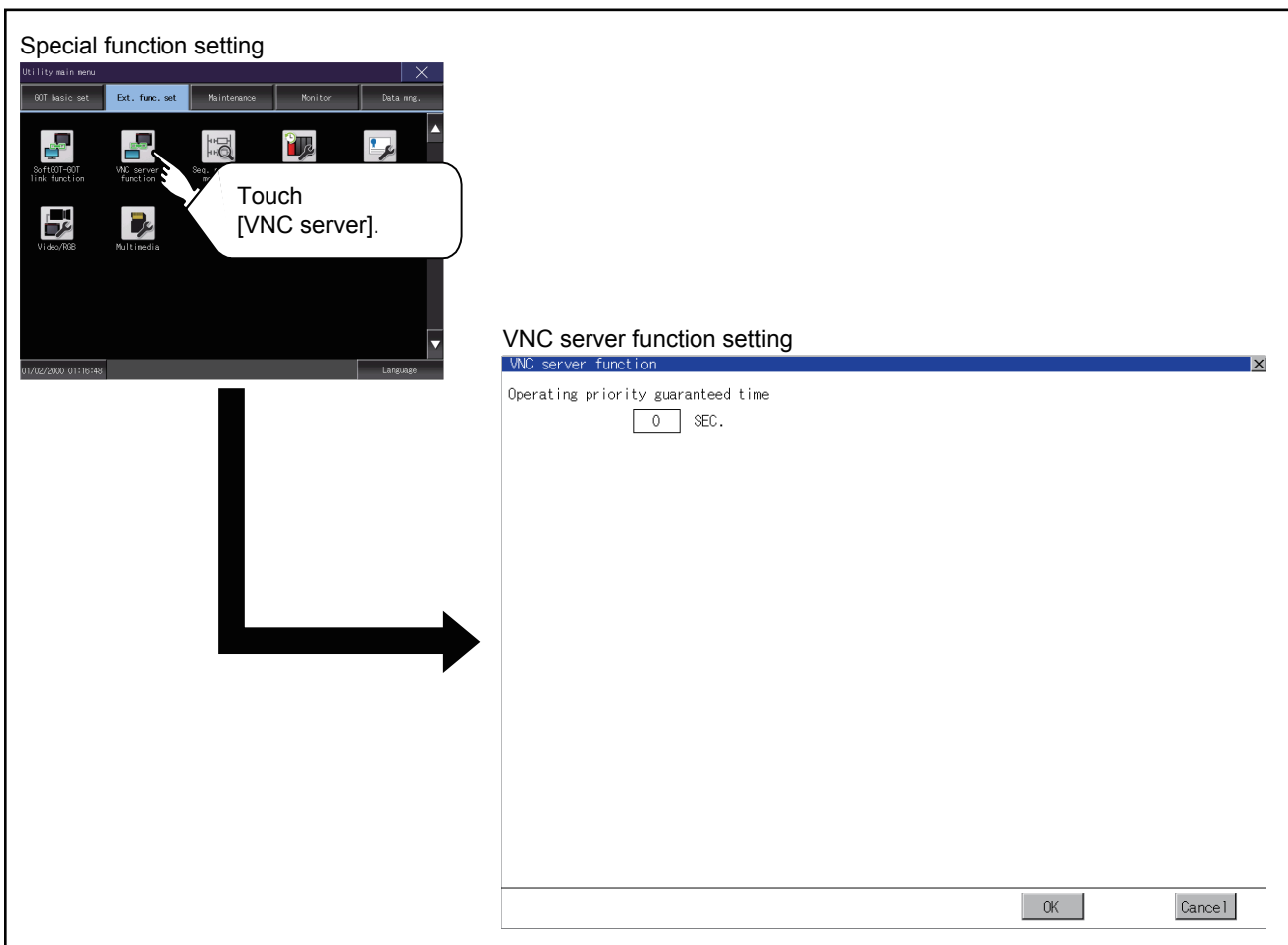
3.2.3 VNC server function setting operation

■ Operating priority guaranteed time
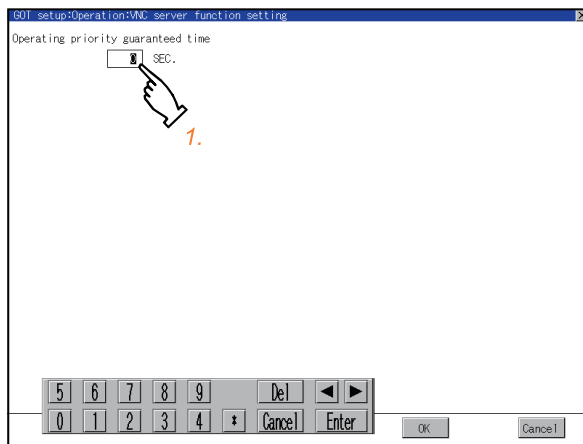
1. Touch the input field for [Operating priority guaranteed time] to display a keyboard.
   Input the authorization guarantee time with the keyboard.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [??????] screen.

3.3 Sequence Program Monitor

3.3.1 Sequence program monitor setting

Storage locations and others for data to be used for the sequence program monitor function can be set.
Storing a sequence program eliminates the need for reading the program from the PLC CPU at the next GOT startup.
This shortens the time required for the execution of the sequence program monitor.
For the details of the sequence program monitor, refer to the following.

➡ GOT2000 Series User's Manual (Monitor)

Function	Description	Setting range
Data save location	Select the storage location for the sequence program monitor.	A: ??SD??? B: USB???? E: USB???? F: USB???? G: USB???? ????? <Default: A: ??SD???>
Automatic program read	Select whether to automatically read sequence programs when the sequence program monitor starts from a touch switch or alarm display.	YES/NO <Default: YES>
Priority comment	If both Common comment and Each program comment are set for the same device in a sequence program, select either of the comments to be displayed in the sequence program monitor.	Common comment/Each program comment <Default: Common comment>
Local device monitor	Select if monitoring local devices is executed or not when monitoring devices with the sequence program monitor.	YES/NO <Default: NO>
Drive for device comment	Select the drive to be used for reading comment data for the sequence program monitor.	A: ??SD??? B: USB???? E: USB???? F: USB???? G: USB???? <Default: A: ??SD???>
Comment setting	Select if the comment data used in the sequence program monitor is displayed/hidden.	Hide comment/Display comment/32-char comment <Default: Hide comment>
Setting to save ladders	Select [Save a ladder program]/[Save ladder programs] for the save setting of sequence programs to be used in the sequence program monitor.	Save ladder programs/Save a ladder program <Default: Save a ladder program>

■ Sequence program to be saved

The sequence program to be saved is used by the GOT to execute the sequence program monitor.
The sequence program can be saved in the SD card with this function, however it cannot be copied in the personal computer to be referred/edited with GX Developer, etc.

3.3.2 Display operation of the sequence program monitor

Special function setting

Touch
Sequence program monitor].

Sequence program monitor setting

Select the storage location for the sequence program monitor.
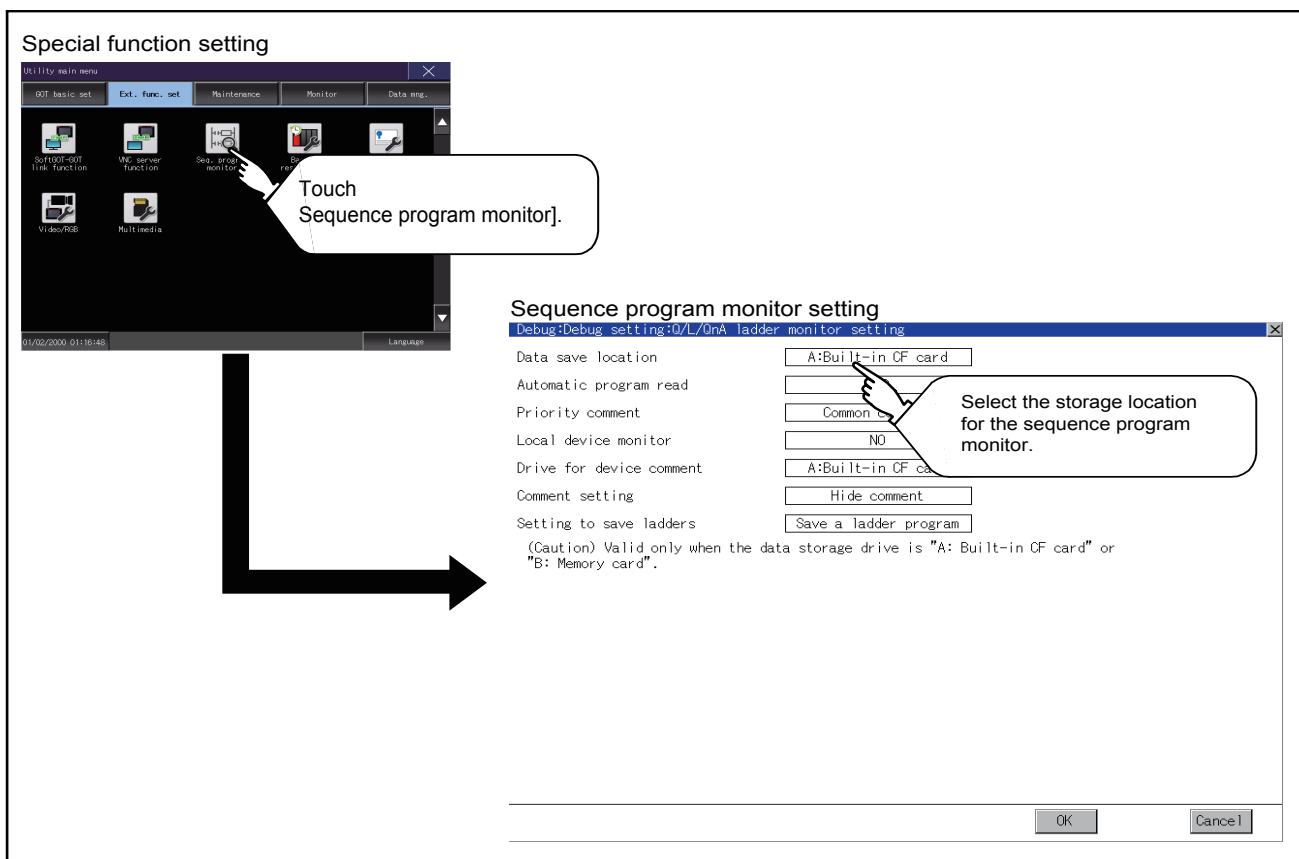
3.3.3 Sequence program monitor setting operation
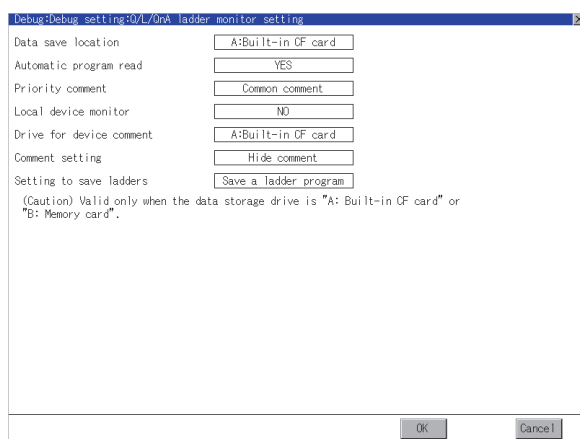
1. When you touch the setting item, the setting contents change.

2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [??????] screen.

3.4 Backup/Restoration

3.4.1 Backup/restoration setting

The storage location for backup data can be set.
For how to use the backup/restoration, refer to the following.

➡ GOT2000 Series User's Manual (Monitor)

Set the following items with touching the items on the GOT.

Item	Description	Setting range
Drive for backup setting	The drive for storing backup settings, including parameters and passwords for controllers, can be selected.	A: ??SD??? B: USB???? C: ?????????? E: USB???? F: USB???? G: USB???? <Default: A: ??SD???>
Drive for backup data	The drive for storing backup data can be selected.	A: ??SD??? B: USB???? C: ?????????? E: USB???? F: USB???? G: USB???? <Default: A: ??SD???>
Trigger backup setting	The GOT automatically backs up data when triggers (Rise, Time) specified for each backup setting are met.	None/Rise/Time <Default: None> ➡ 3.5 Trigger Backup Setting
Max. of backup data	Set the maximum number of backup data to be stored. (When 0 is specified, the GOT does not check the number of backup data to be stored.)	Setting range: 0 to 50 <Default: 0>
Enable CPU No. setting	Set whether to specify the CPU No. at a backup. (When [YES] is selected, the GOT starts to communicate with only the specified PLC. Therefore the network batch backup/restoration on the multiple PLCs cannot be executed.)	YES/NO <Default: NO>

3.4.2 Display operation of backup/restoration setting

Special function setting

Touch [Backup/restoration].

Backup/restoration setting

Touch an item to be changed.
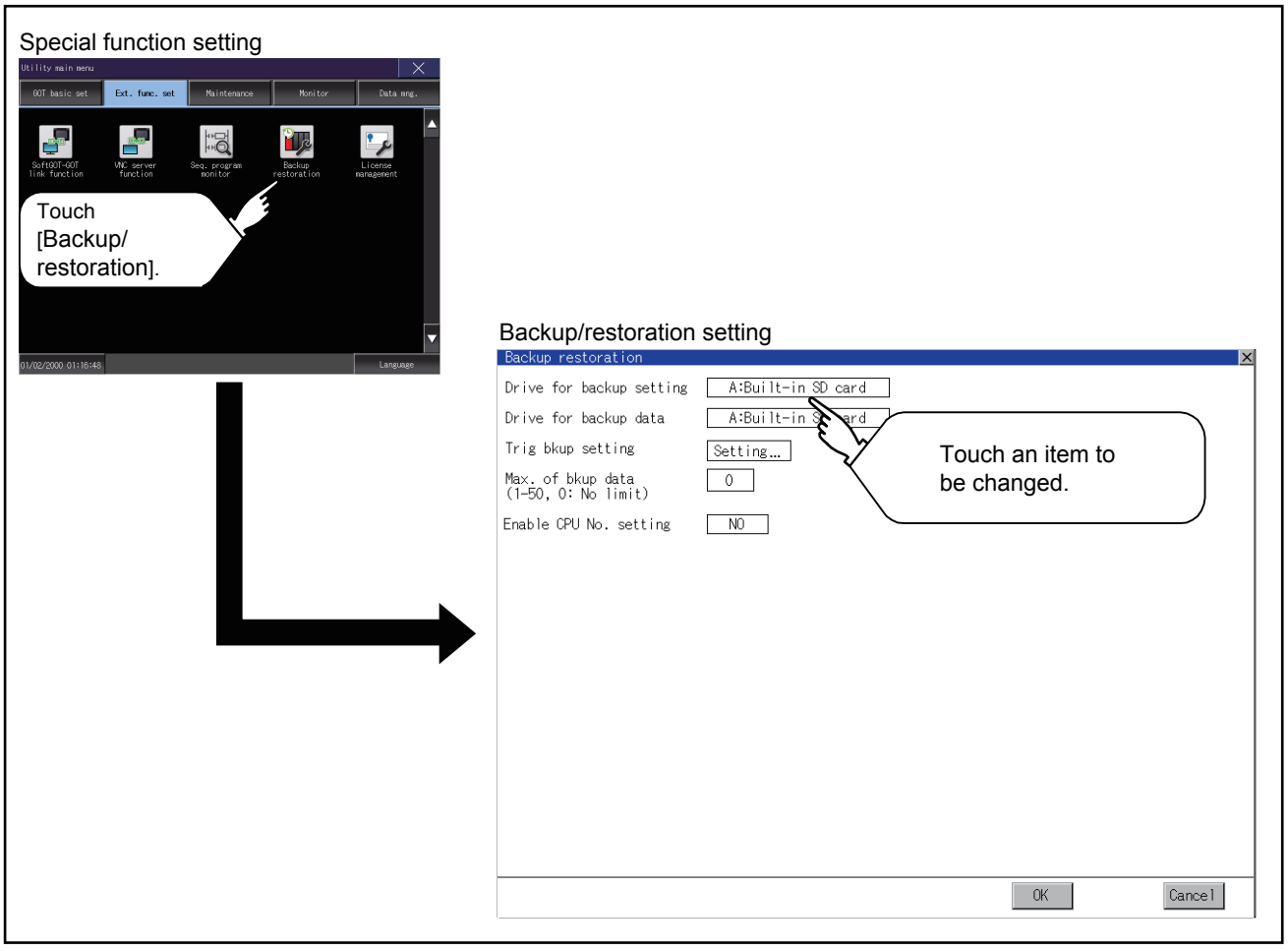
3.4.3 Backup/restoration setting operation

■ Drive for backup setting, drive for backup data
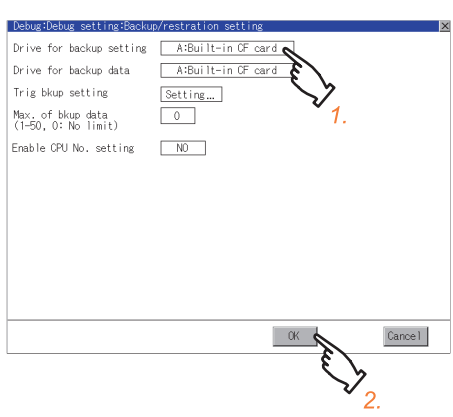
1. If touch the setup item, the setup contents are changed.

2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [??????] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [??????] screen.

■ Trigger backup setting

For operations of the trigger backup setting, refer to the following.

➠ 3.4.3 Backup/restoration setting operation

■ Max. of backup data
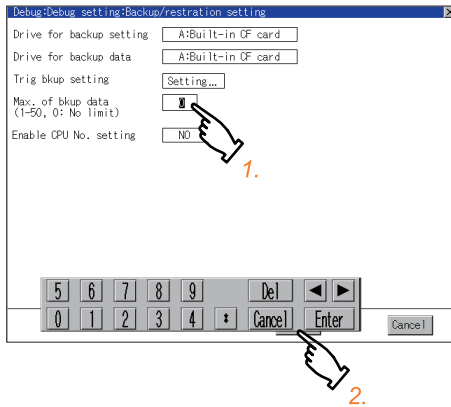
1. If touching the setting items, keyboard is displayed.
   Input numeric with the keyboard.

   Setting range: 0 to 50, Default: 0
   (When 0 is specified, the GOT does not check the number of backup data to be stored.)

2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [??????] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [??????] screen.

■ Enable CPU No. setting
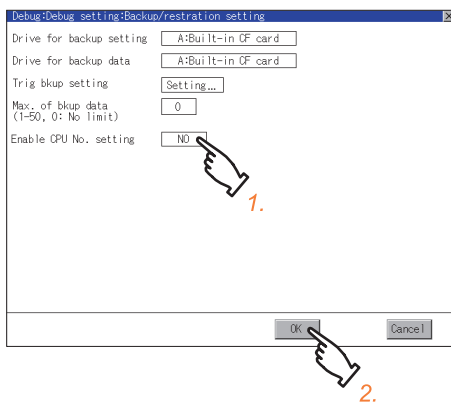
1. If touch the setup item, the setup contents are changed.

2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [??????] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [??????] screen.

3.5 Trigger Backup Setting

3.5.1 Trigger backup setting

When the conditions of the trigger specified for each backup setting (Rise, Time) are met, the GOT automatically backs up data.
For how to use the trigger backup, refer to the following.

➠ GOT2000 Series User's Manual (Monitor)

3.5.2 Display operation of trigger backup setting

3.5.3 Trigger backup setting operation
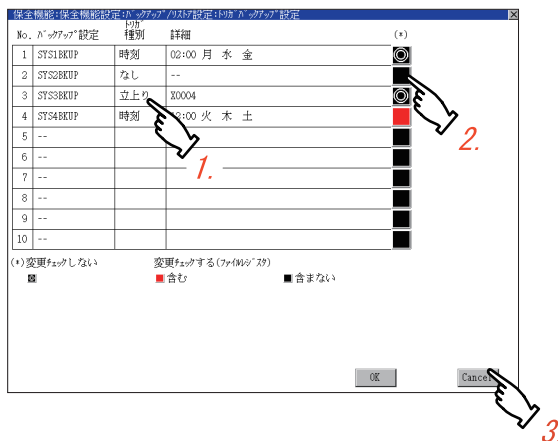
1. Touch a setting item for the trigger type, and then the setting is changed.

(None   Rise   Time)

   None : The GOT does not execute the trigger backup.

   Rise : The GOT backs up data when the trigger device turns on.

   Time : The GOT backs up data at the specified time.

2. Touch a setting item for check changes, and then the setting is changed.

   ◎ : Backup is executed regardless of whether the backup data has been changed.

   ■ : When the backup is executed, the GOT checks if the backup data and the data stored in the file register have been changed after the previous backup. When the data has been changed, the GOT backs up the changed data.

   ■ : When the backup is executed, the GOT checks if the backup data has been changed after the previous backup. When the data has been changed, the GOT backs up the changed data.

3. When the trigger type is changed, a password input window appears by touching the [OK] button.
Input the password for the backup/restore.
When the password is verified, the settings are reflected, and then the screen returns to the [trigger backup setting] screen.
When the trigger type is not changed, touching the [OK] button reflects the settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Backup/restoration] screen.

POINT

Precautions for setting
When the trigger type is set to [Rise], set the trigger device with GT Designer3 in advance.
Failure to do so disables the backup setting with [Rise] set.

3.5.4 Trigger time setting operation
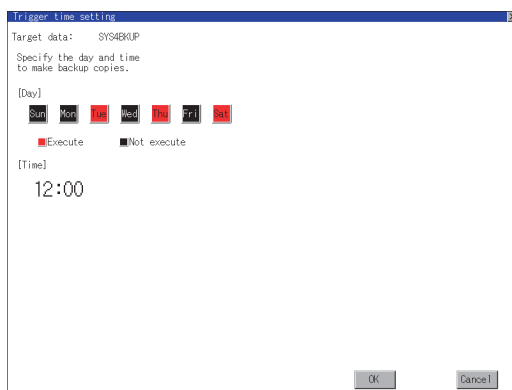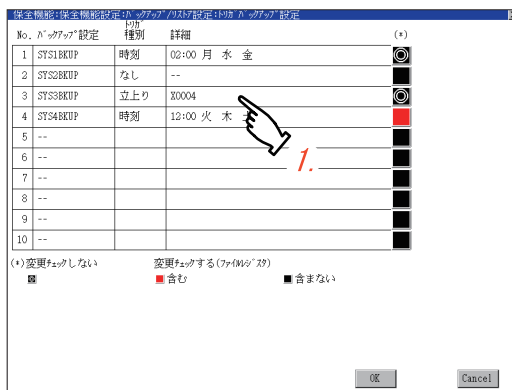
1. When the trigger type is set to [Time], touch a setting item for [Detail] and the screen is switched to the trigger time setting screen.

2. In the screen, specify the days and time that the GOT executes the backup.

   Day : Select days that the GOT executes the backup by touching displayed items.
   Multiple days can be selected.

   Time : Set the time that the GOT executes the backup by touching the displayed item.

3.6 License Management

3.6.1 License management setting

To use functions which require a license, register the license for the GOT.
To release a registered license for the GOT, also execute on the license management screen.

Item	Description	Setting range
Remote personal computer operation (Ethernet)	Registers and deletes the license of the remote personal computer operation (Ethernet).	-
VNC server function	Registers and deletes the license of the VNC server function.	-

For the remote personal computer operation function (Ethernet) and the VNC server function, the license registration and the cancellation of the license registration are available.

For details of the remote personal computer operation function (Ethernet) and the VNC server function, refer to the following.

➡ GT Designer3 (GOT2000) Help

3.6.2 Display operation of license management
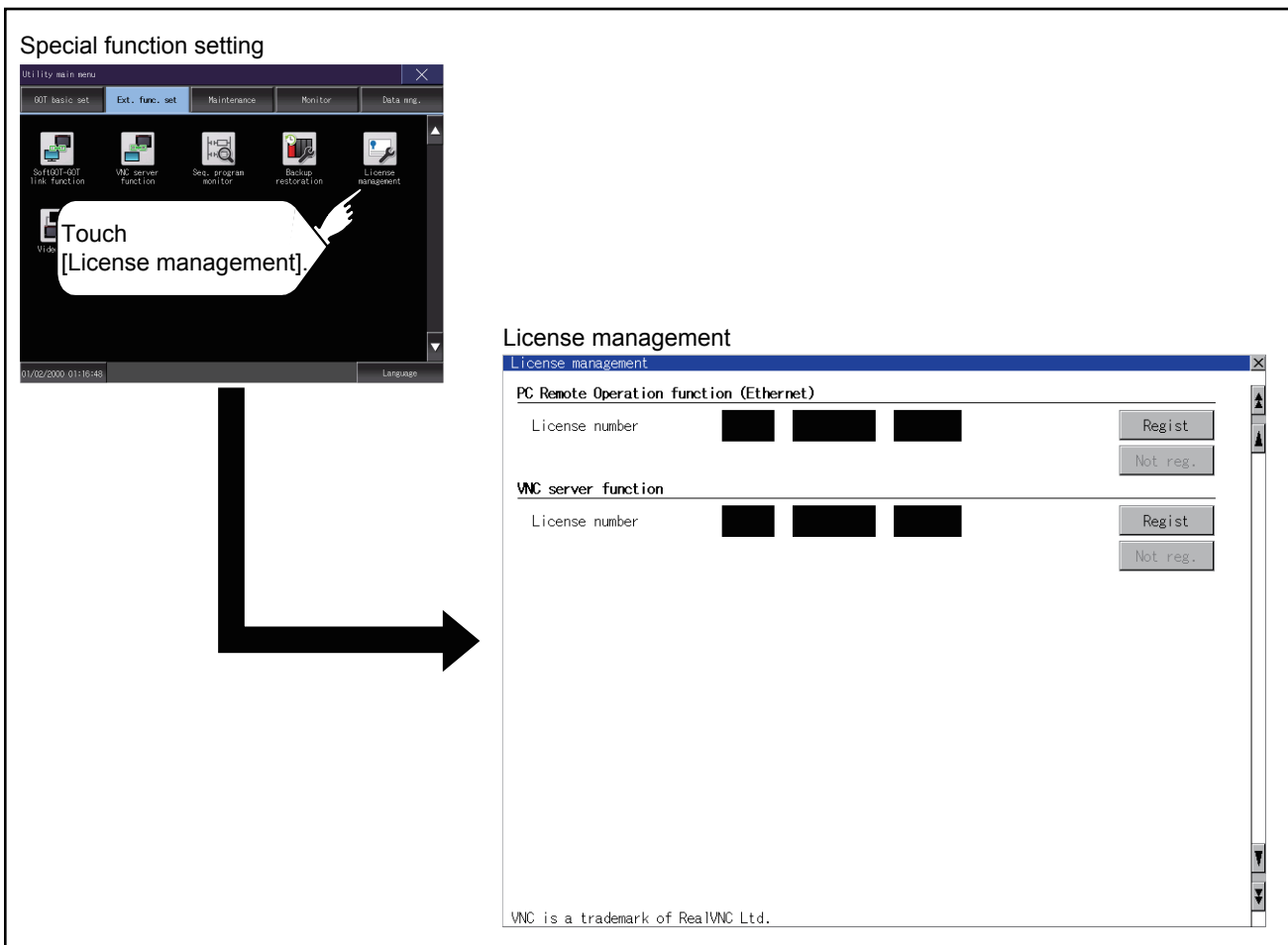
3.6.3 Setting operation of license management

■ When registering a license number for the GOT

```
GOT setup:GOT main unit setup:License management          ×
PC Remote Operation function (Ethernet)
License number      123  4567  8901        Regist
                                           Not reg.
VNC server function
License number      ▮▮▮  ▮▮▮  ▮▮▮          Regist
                                           Not reg.



          5  6  7  8  9   Del  ◄ ►
          0  1  2  3  4  ↑ Cancel Enter
VNC is a trademark of RealVNC Ltd.
```
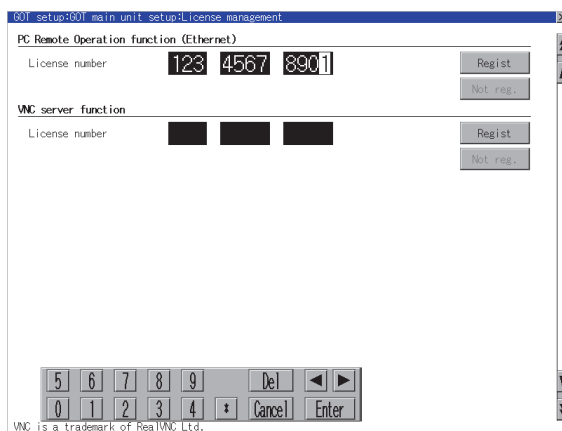
1. Touch the license number input area on the license management screen, and then the keyboard appears on the bottom of the screen.

2. Touch the [Regist] button to register the input license number.
If the ⊠ button is touched without touching the [Regist] button, the license number is not registered.

3. After a license number is registered, touch the ⊠ button to close the license management screen.

■ When releasing a license number for the GOT

```
本体機能設定:GOT本体機能設定:ライセンス管理               ×
パソコンリモート操作機能(Ethernet)
ライセンス番号      123  4678  9012        登録済み
                                           登録解除
VNCサーバ機能
ライセンス番号      ▮▮▮  ▮▮▮  ▮▮▮          登録
                                           未登録




『VNC』はRealVNC 社の商標です。
```
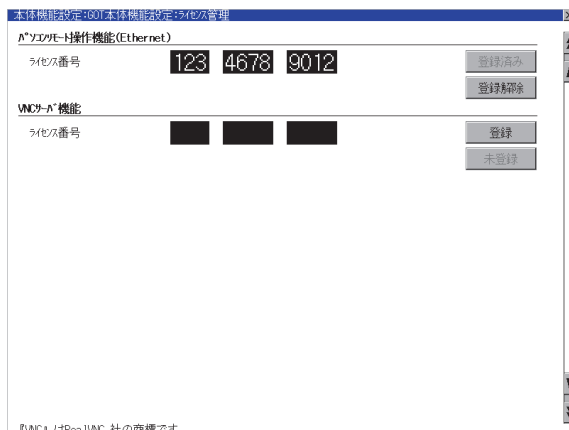
1. Touch the [Cancel reg.] button to release the registered license number.

2. Touch the ⊠ button to close the license management screen.

POINT

How to acquire a license number
For how to acquire a license number, please consult your local Mitsubishi (Electric System) Service center or representative.

3.7 Video/RGB

3.7.1 Video unit setting

■ Video unit setting function

The video input signal and resolution can be selected.

Item	Description	Setting range
Video unit setting	The input signal and resolution can be selected.	Input signal: NTSC format, PAL format <At factory shipment: NTSC format> Resolution: 640 × 480, 720 × 480[*1], 768 × 576 <At factory shipment : 640 × 480>

*1　Can be selected only in PAL format

POINT

Input signal settings

Set the input signal as follows according to the output format for the video camera or the like connected.
If the settings made differ from these, video images may not be displayed correctly.

Output format for video camera or the like	Input signal setting
NTSC format	NTSC
PAL format	PAL
EIA format	NTSC
CCIR format	PAL

■ **Displaying the video unit setting**

Special function setting

Touch [Video/RGB].

Video/RGB setting menu

Touch [Video Unit Settings].

Communication setting

Touch [Video/RGB].

Video unit setting

Video Unit Settings

Input Signal   NTSC

Resolution   640x480

WARNING:
Changes are valid after rebooting the GOT.

Touch an item to be set.

Confirm

■ Operating the video unit setting

Video Unit Settings

Input Signal [NTSC]

Resolution [640x480]

WARNING:
    Changes are valid after
    rebooting the GOT.

[Confirm]

Changes are discarded if you close
the window before pressing "Confirm."
Do you want to proceed?

[O K]   [Cancel]

1. When you touch the setting item, the setting contents change.
    Input signal: PAL
                  NTSC
    Resolution: 720   480
                768   576
                640   480

2. When you touch the [Confirm] button, the setting contents are determined.

3. If you touch the [×] button without touching the [Confirm] button, the dialog on the left is displayed.

4. After completing the settings for all the items you want to change in [Video Unit Settings], when closing [Video Unit Settings] and [Video/RGB Setting]/[Communication Setting] with the [×] button, the GOT is restarted, and the new setting contents are reflected.

3.7.2　Video display setting

■ Video display setting function

The target for the video settings and the preview channel can be selected and the captive area and image quality can be set.

Item	Description	Setting range
Video Display Setting	The target for the video settings and the preview channel can be selected and the captive area (in the horizontal direction and vertical direction) and image quality (color tone, contrast, brightness, color intensity) can be set. The captive area and image quality can be set for each channel.	Channel 1/2/3/4 <At factory shipment : 1> Captive area Horizontal: -100 to 100 <At factory shipment : 0> Vertical: -100 to 100 <At factory shipment : 0> Image Quality and Color Tone: -100 to 100 <At factory shipment : 0> Contrast: -100 to 100 <At factory shipment : 0> Brightness: -100 to 100 <At factory shipment : 0> Intensity: -100 to 100 <At factory shipment : 0>

■ Displaying the video display setting
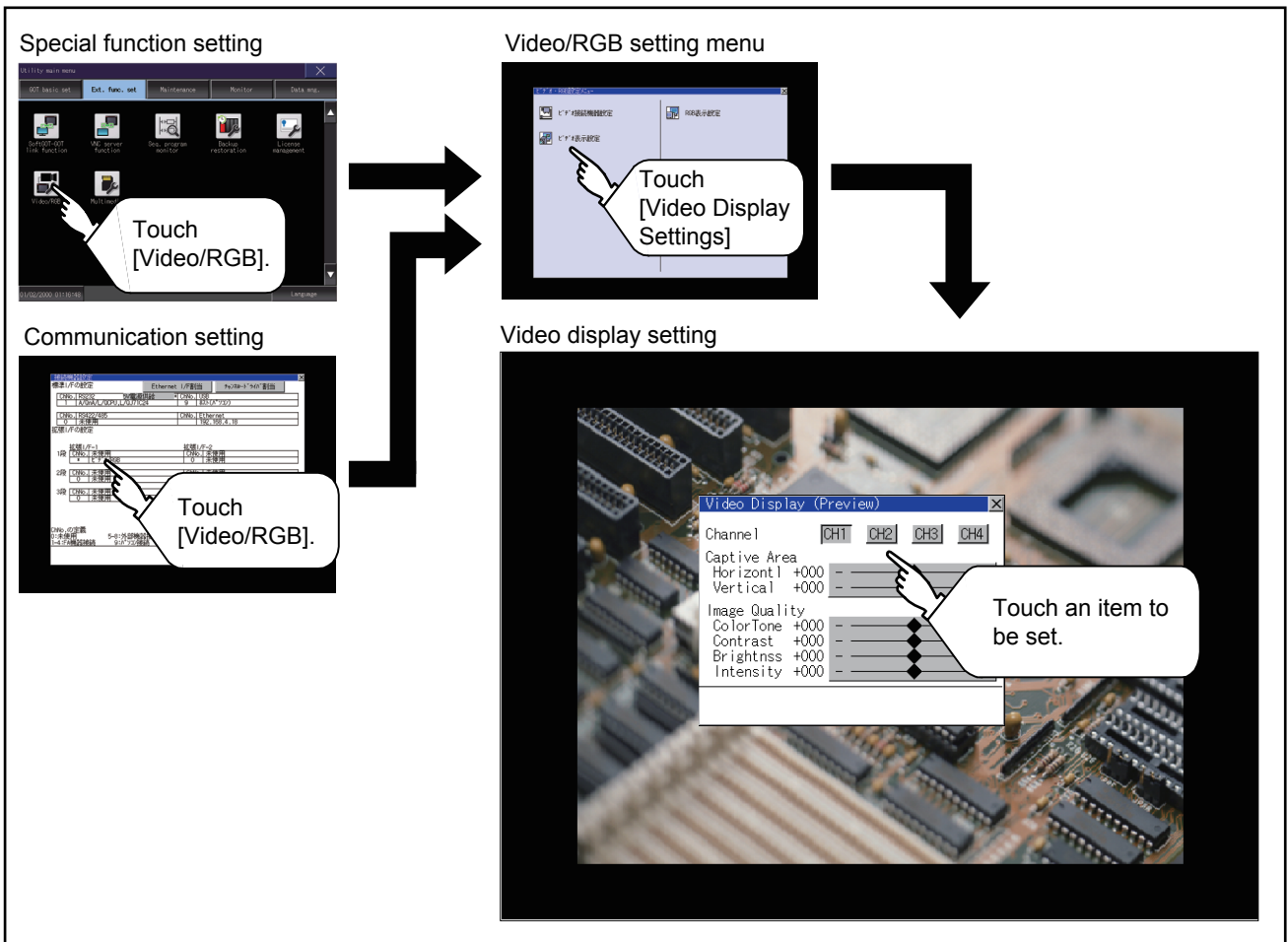
■ Video display setting operation
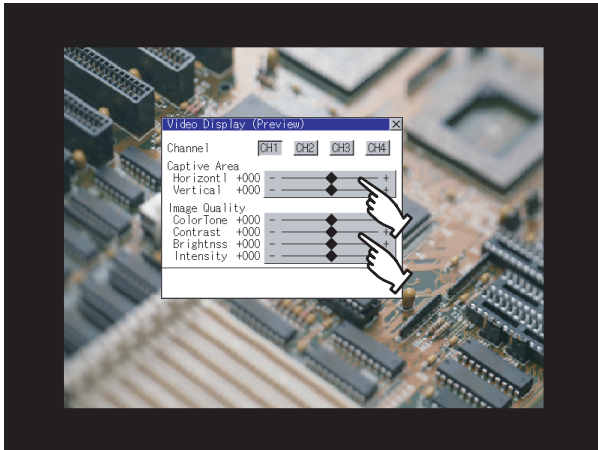
1. Select a video channel No. to be displayed. The video image for the selected channel No. is previewed.

2. To change the captive area or image quality, touch the display section of each item.
   Captive Area: Refer to step 3 to step 6.
   Image Quality: Refer to step 7 to step 10.
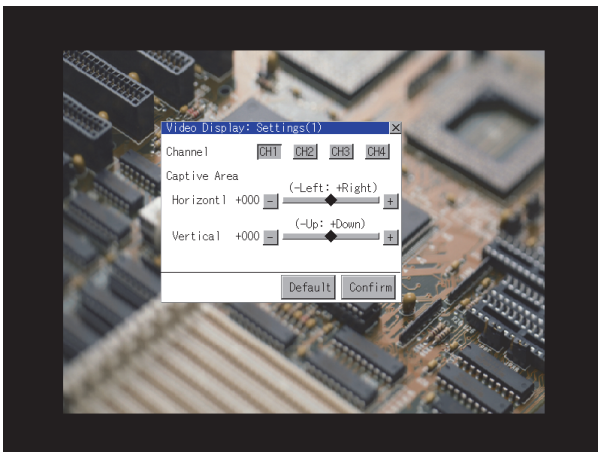
3. The captive area (horizontal direction/vertical direction) for the selected channel No. can be changed.

| Moves the captive area a certain distance in | Moves the captive area to the touched | Moves the captive area a certain distance in |
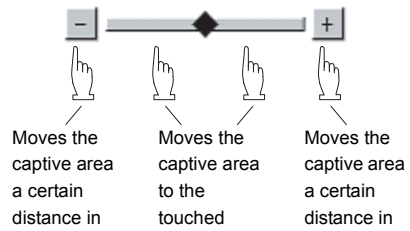
Touching the [Default] button returns to the default status.

4. When you touch the [Confirm] button, the setting contents are determined.
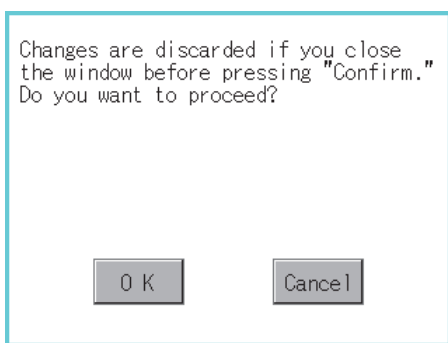
5. If you touch the [×] button without touching the [Confirm] button, the dialog on the left is displayed.

6. After completing all the items to set, if you touch the [×] button, the display returns to the preview screen step1.
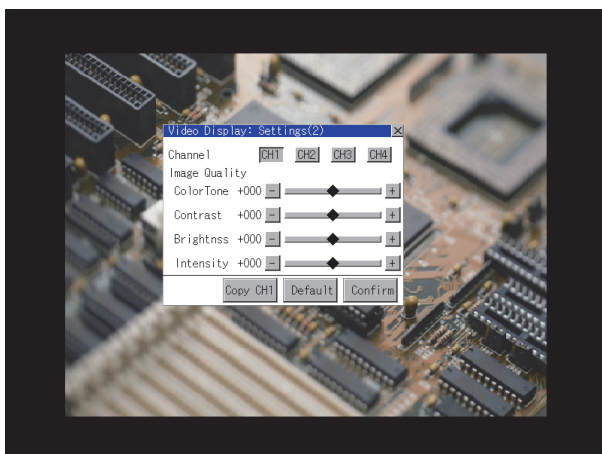
7. The image quality (color tone, contrast, brightness, color intensity) for the selected channel No. can be changed.
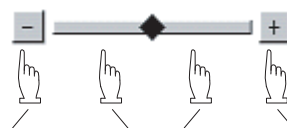
| Changes the number a certain | Changes the number to the touched | Changes the number a certain |

Touching the [Default] button returns to the default status.
When touching the [Copy CH1] button, the image quality (color tone, contrast, brightness, color intensity) for the selected channel No. is matched with the image quality settings for Channel No. 1 ([CH1]).

8. When touching the [Confirm] button, the setting contents are determined.

9. If you touch the [×] button without touching the [Confirm] button, the dialog on the left is displayed.
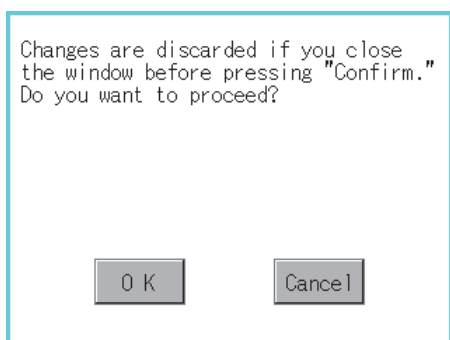
10. After completing all the items to set, if you touch the [×] button, the display returns to the preview screen step1.

11. After completing the settings for all the items you want to change in the video display settings, when closing [Video Display (Preview)] with the [×] button, the display returns to [Video/RGB Setting].

POINT

Precautions for setting

Incorrect settings may disrupt or stop the video image.
(If this happens, returning the settings to their default values restores normal display.)
This phenomenon depends on the video camera or other device connected.
Use setting values that provide proper display.

3.7.3　RGB display setting

■ RGB display setting function

The RGB clock phase and screen position can be set.

Item	Description	Setting range
RGB Display Setting	The target for the RGB settings and the preview channel can be selected and the RGB clock phase [*1] and screen position (horizontal direction and vertical direction) can be set.	Channel: 1/2 <At factory shipment : 1> ClockPhase: -100 to 100 <At factory shipment : 0> Display position Horizontal: -100 to 100 <At factory shipment : 0> Display position Vertical: -100 to 100 <At factory shipment : 0>

*1　Adjust when a noise is displayed along the horizontal direction or characters are blotted or the contours are unclear.

■ Displaying the RGB display settings
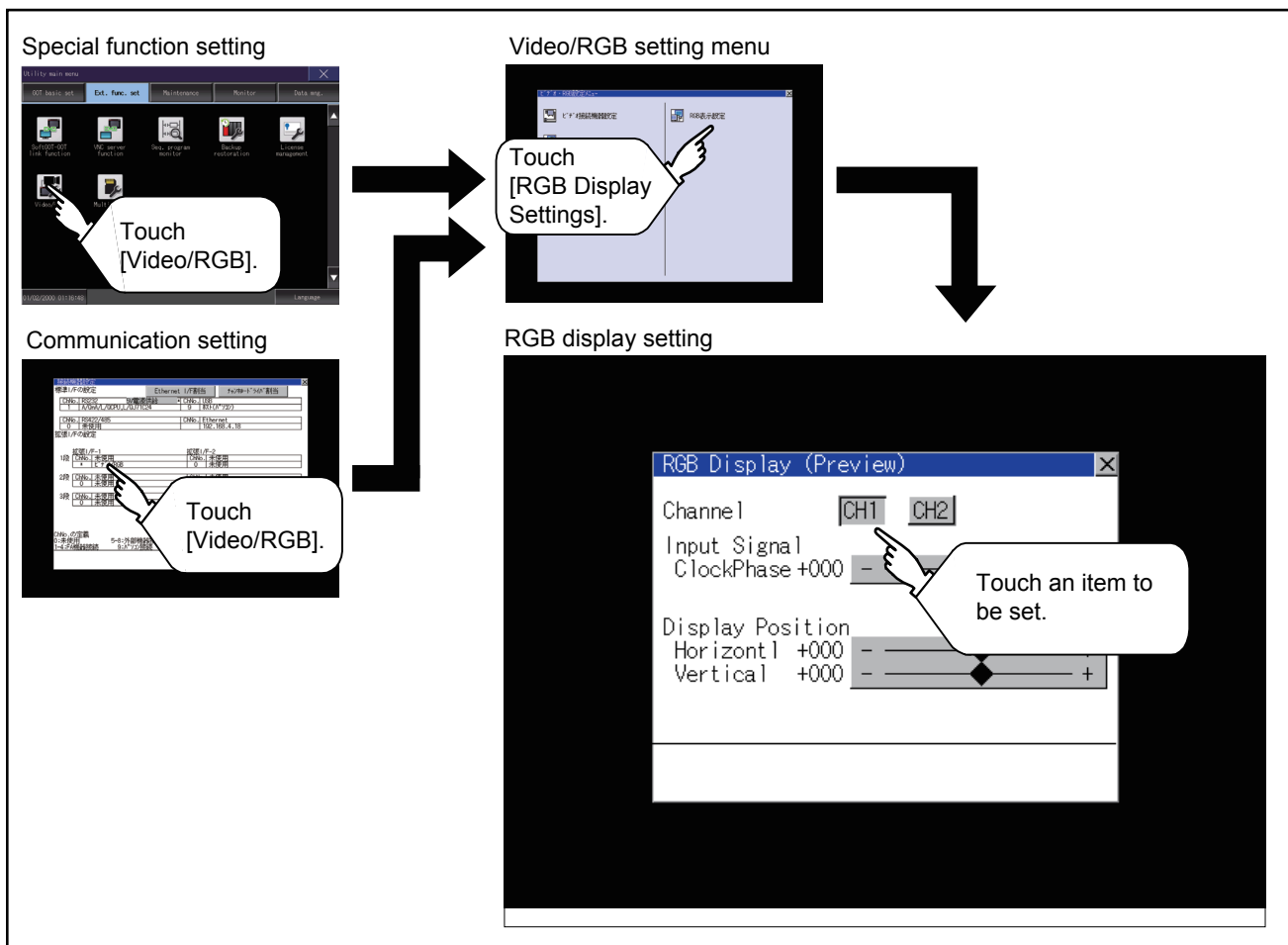
■ RGB display setting operation
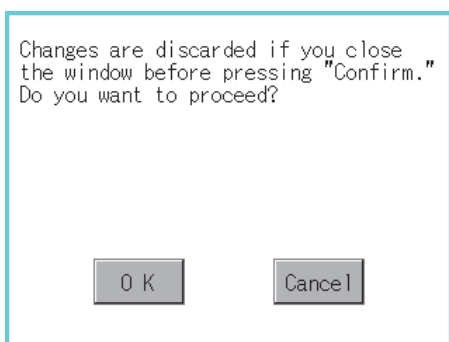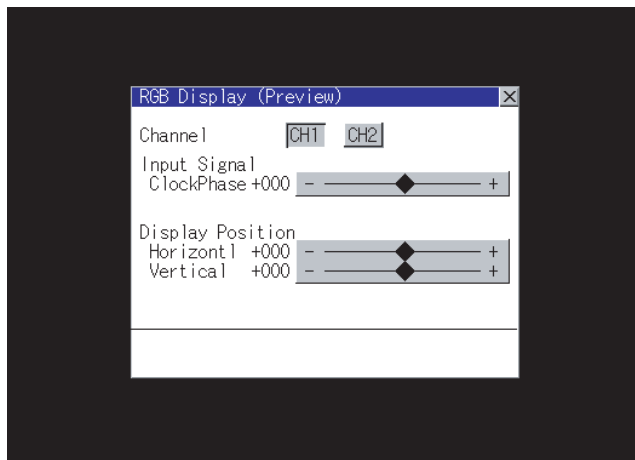
1. Select an RGB channel No. to be displayed. The RGB image for the selected channel No. is previewed.

2. The clock phase and screen display position (horizontal direction or vertical direction) can be changed.
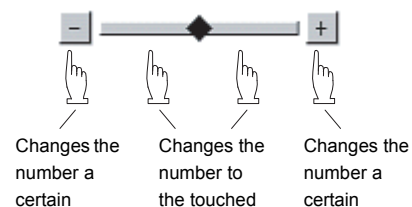
Changes the number a certain

Changes the number to the touched

Changes the number a certain

3. When you touch the [Confirm] button, the setting contents are determined.

4. If you touch the ⊠ button without touching the [Confirm] button, the dialog on the left is displayed.

5. After completing all the items to set, if you touch the ⊠ button, the display returns to [Video/RGB Setting].

POINT

Precautions for setting

If the value for [Horizontal] or [Vertical] is too large, RGB display may not be performed or the display may be disrupted or stopped.

If this happens, return the settings to their default values and make settings in the range where RGB display is possible.

3.8 Multimedia

3.8.1 Video unit setting

■ Video unit setting function

The video input signal and resolution can be selected.

Item	Description	Setting range
Video unit setting	The input signal and resolution can be selected.	Input signal: NTSC format, PAL format <At factory shipment: NTSC format> Resolution: 640 × 480[*1], 768 × 576[*2] <At factory shipment : 640 × 480>

*1 When NTSC format is selected, the resolution is fixed to 640 × 480.
*2 When PAL format is selected, the resolution is fixed to 768 × 576.

POINT

Input signal settings

Set the input signal as follows according to the output format for the video camera or the like connected.
If the settings made differ from these, video images may not be displayed correctly.

Output format for video camera or the like	Input signal setting
NTSC format	NTSC
PAL format	PAL
EIA format	NTSC
CCIR format	PAL

■ Displaying the video unit setting

Special function setting

Touch [Multimedia].

Communication setting

Touch [Multimedia].

Multimedia setting menu

Touch [Video Unit Settings].

Video unit setting

Video connection setting

Input Signal   NTSC

Resolution   640x480

WARNING:
Changes are valid after rebooting the GOT.

Touch an item to be set.

Confirm

■ Operating the video unit setting

1. When you touch the setting item, the setting contents change.

   > Input signal: PAL
   >   NTSC
   > Resolution: 768 × 576
   >   640 × 480

   Resolution automatically switches to 640 × 480 when NTSC is selected and to 768 × 576 when PAL is selected.

2. When you touch the [Confirm] button, the setting contents are determined.

3. If you touch the ⊠ button without touching the [Confirm] button, the dialog on the left is displayed.

4. After completing the settings for all the items you want to change, close [Video Unit Settings] with the ⊠ button.

5. When closing [Multimedia Setting] or [Communication Setting] with the ⊠ button, the new setting contents are reflected.

3.8.2　Video setting

■ Video setting function
The captive area and image quality can be set.

Item	Description	Setting range
Video setting	The captive area (in the horizontal direction and vertical direction) for the video and the image quality (color tone, contrast, brightness, color intensity) can be set.	Captive area Horizontal: -100 to 100 <At factory shipment : 0> Vertical: -100 to 100 <At factory shipment : 0> Image Quality and Color Tone: -100 to 100 <At factory shipment : 0> Contrast: -100 to 100 <At factory shipment : 0> Brightness: -100 to 100 <At factory shipment : 0> Intensity: -100 to 100 <At factory shipment : 0>

■ Display operation of Video setting
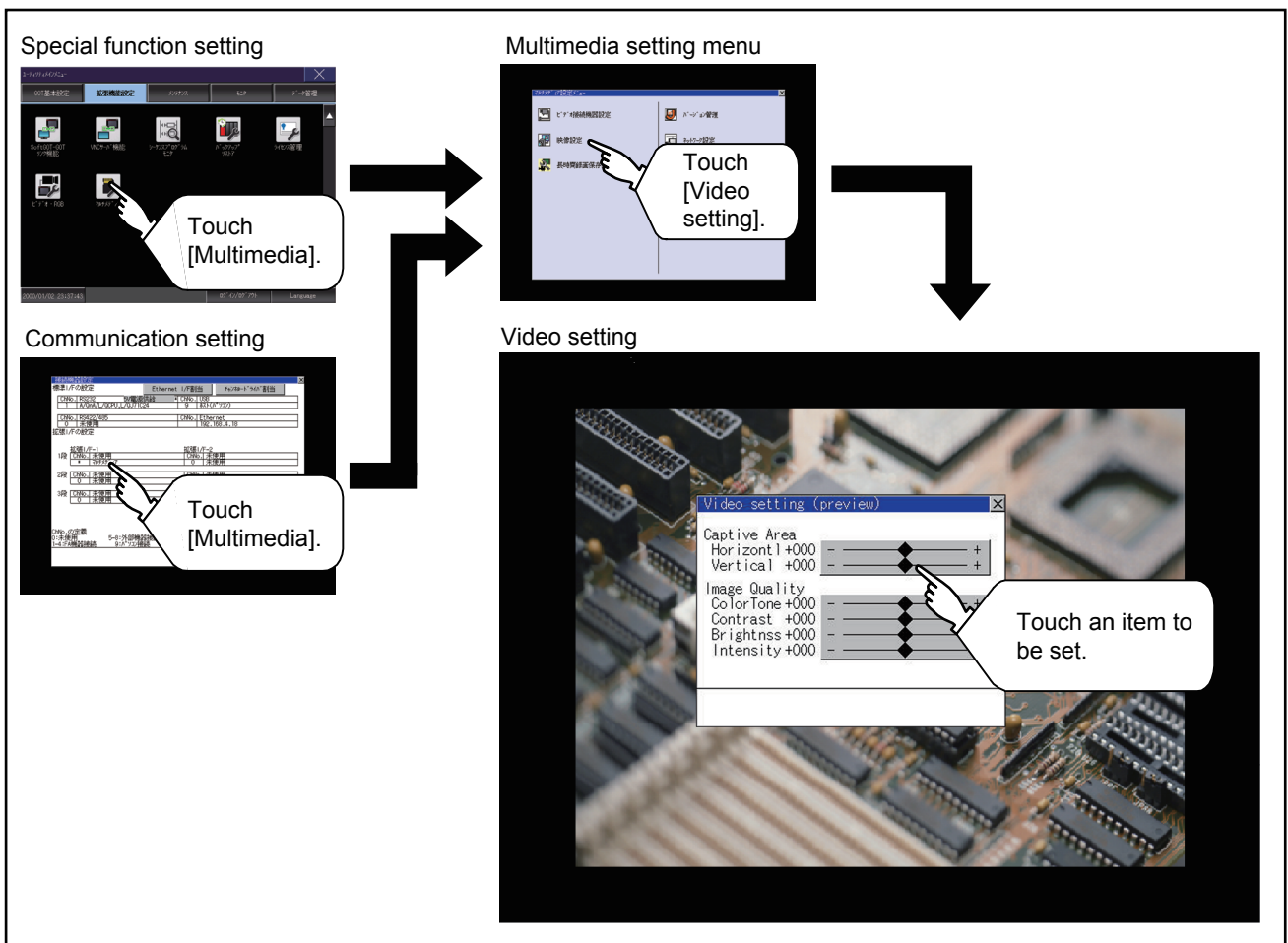
■ Operation of Video setting
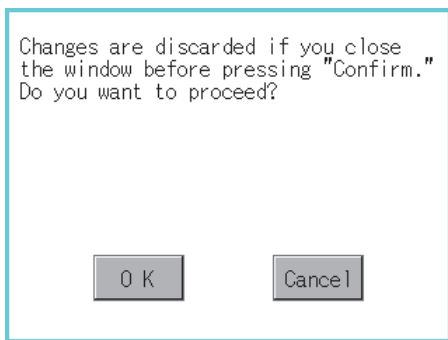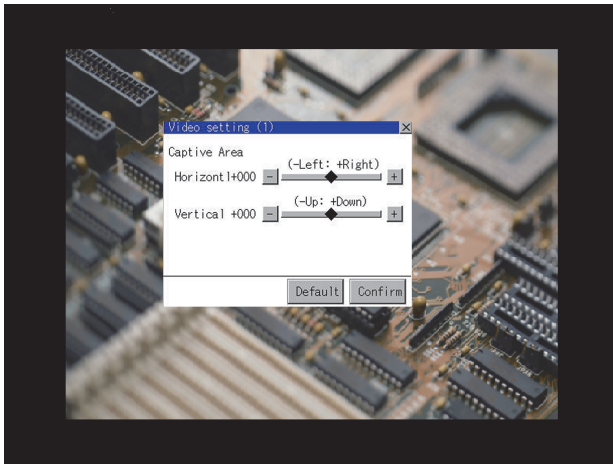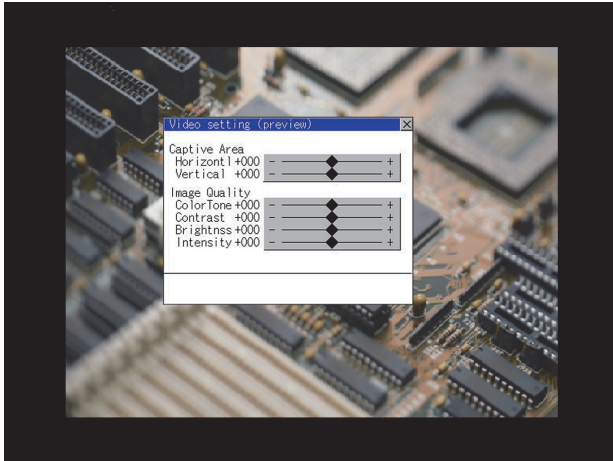
1. To change the captive area or image quality, touch the display section of each item.
   Captive Area: Refer to step 2 to step 5.
   Image Quality: Refer to step 6 to step 9.

2. The captive area (horizontal direction or vertical direction) can be changed.

| Moves the captive area a certain distance in the "-" direction. | Moves the captive area to the touched position. | Moves the captive area a certain distance in the "+" direction. |
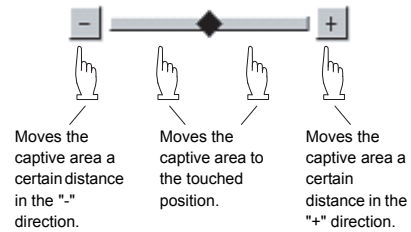
   Touching the [Default] button returns to the default status.

3. When you touch the [Confirm] button, the setting contents are determined.

4. If you touch the ⊠ button without touching the [Confirm] button, the dialog on the left is displayed.

5. After completing all the items to set, if you touch the ⊠ button, the display returns to the preview screen step1.

6. The image quality (color tone, contrast, brightness, color intensity) for the selected channel No. can be changed.

Changes the number a certain amount in the "-"

Changes the number to the touched position.

Changes the number a certain amount in the "+" direction.
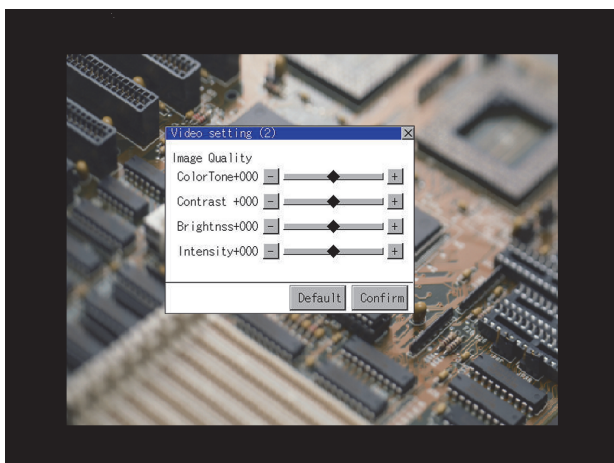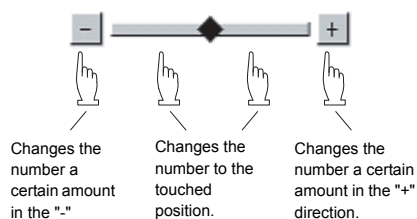
Touching the [Default] button returns to the default status.

When touching the ⊠ button, the setting contents are determined.

Changes are discarded if you close the window before pressing "Confirm." Do you want to proceed?

O K   Cancel
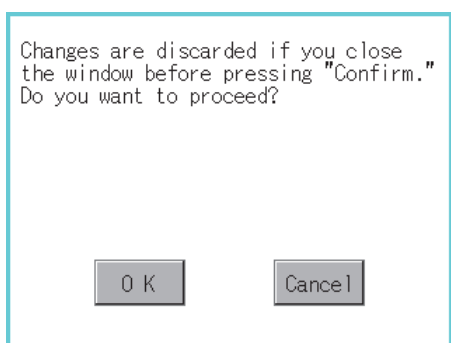
7. If you touch the ⊠ button without touching the [Confirm] button, the dialog on the left is displayed.

8. After completing all the items to set, if you touch the ⊠ button, the display returns to the preview screen step1.

9. After completing the settings for all the items you want to change in [Video setting], when closing [Video setting (preview)] with the ⊠ button, the display returns to [?????????].

POINT

Precautions for setting
Incorrect settings may disrupt or stop the video image.
(If this happens, returning the settings to their default values restores normal display.)
This phenomenon depends on the video camera or other device connected.
Use setting values that provide proper display.

3.8.3   Long time recording setting

■ Long time recording setting function

In the long time recording settings, the saving method of video files for long time recording can be set.

Item	Description	Setting range
Continuous save	At the long time recording, whether to start recording after deleting all the video files which are previously recorded or to start recording without the deletion can be set.	Valid/Invalid <At factory shipment: Invalid>

■ Displaying the long time recording settings

Special function setting

Touch [Multimedia].

Communication setting

Touch [Multimedia].

Multimedia setting menu

Touch [Long timerecording settings].

Long time recording setting

Long time recording settings

Continuous save   Invalid

Valid:
Start recording from where you stopped previously.

Invalid:
Delete old files and record a new file.

Confirm

Set the saving method of video files for long time recording.

■ Operating the long time recording settings
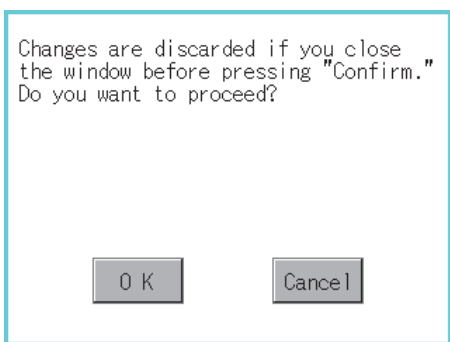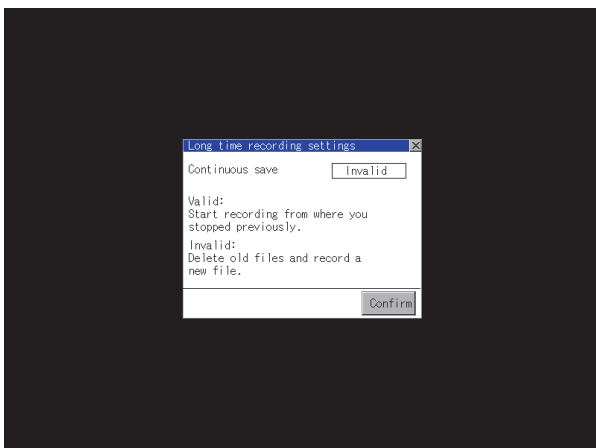
1. When you touch the setting item, the setting contents change.
   Continuous recording: Valid/Invalid

2. When you touch the [Confirm] button, the setting contents are determined.

3. If you touch the ⊠ button without touching the [Confirm] button, the dialog on the left is displayed.

4. After completing the settings for all the items you want to change, close [Long time recording settings] with the ⊠ button.

5. When closing [Multimedia Setting] or [Communication Setting] with the ⊠ button, the new setting contents are reflected.

3.8.4　Unit software version upgrade

Unit software version upgrade is executed when the software version of the multimedia unit is upgraded.

■ Display operation of multimedia setting unit software version upgrade

By installing an SD card in which the updated program is stored, the program can be updated.
Prepare the updated program from either of the followings.
- DVD or CD-ROM of GT Works3
- Contact your local distributor.

Special function setting

Touch [Multimedia].

Multimedia setting menu

Touch [Unit software version upgrade].

Communication setting

Touch [Multimedia].

Unit software version upgrade

マルチメディア設定：バージョン管理

ユニット バージョン：　　　　　　　　00

ユニット ソフトウェア バージョン：　01．00．23

ユニット ソフトウェア
更新メニュー

Touch the unit software update menu to switch to the software update screen.

注：　ユニットソフトウェアの更
　　　メディアユニットの処理を停
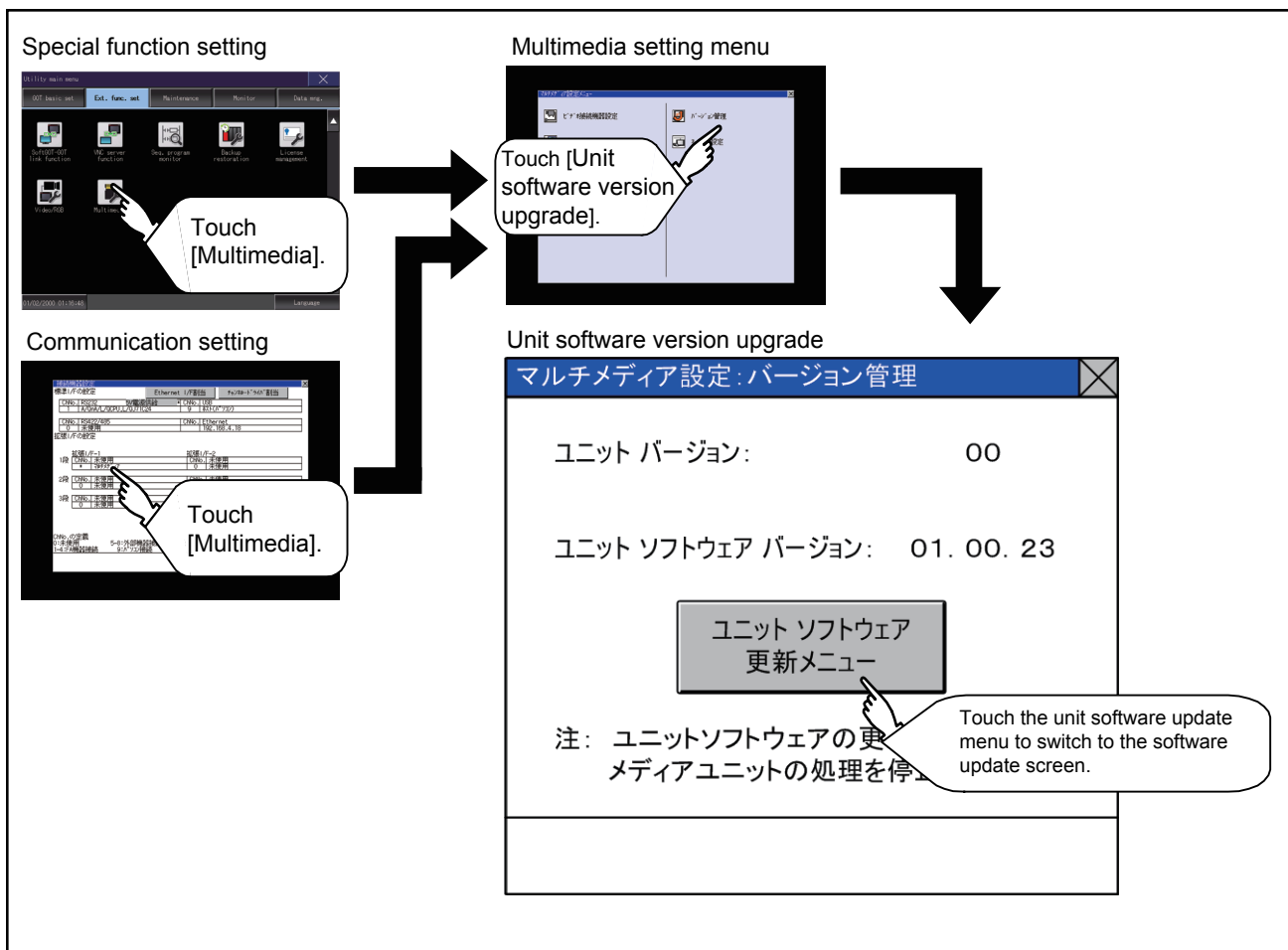
■ Setting operation of multimedia setting unit software version upgrade
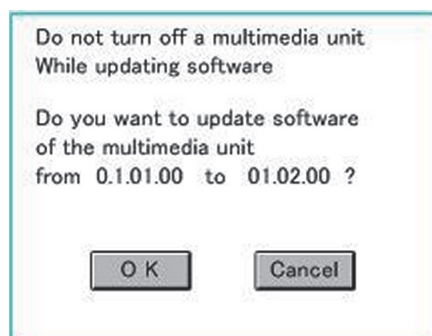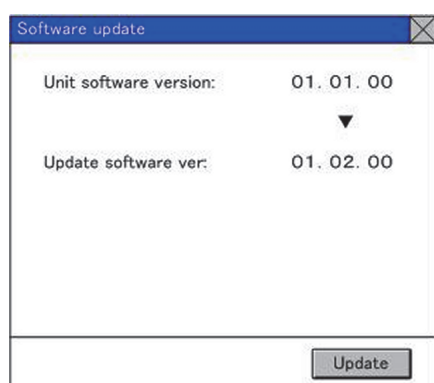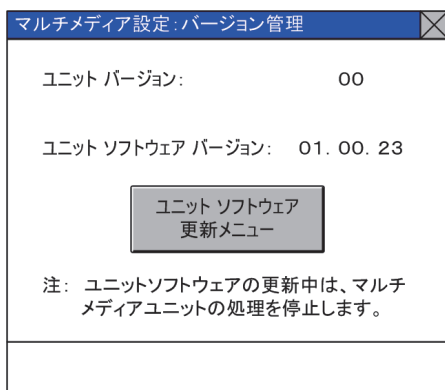
1. Check the version displayed in Unit software version.
   It is the version of the software currently installed in the multimedia unit.
   Touch the [Unit software Update menu] button, and then the update program transfer screen is displayed.

2. By installing an SD card in which the updated program is stored, the program can be updated.
   Only when the updated program newer than the unit software version is stored, the version of newer updated program is displayed in Update software version.

3. To update the program to the new version, touch [Update] button.

4. The dialog shown left is displayed.
   Touch [OK] button, and then the software is updated.
   Touch [Cancel], and then the software is not updated.

```
Updating multimedia unit software

Caution: Do not power off the unit
          while updating.
```
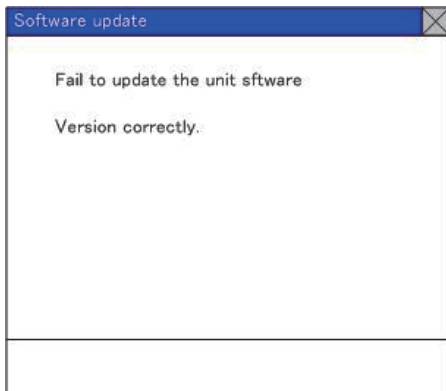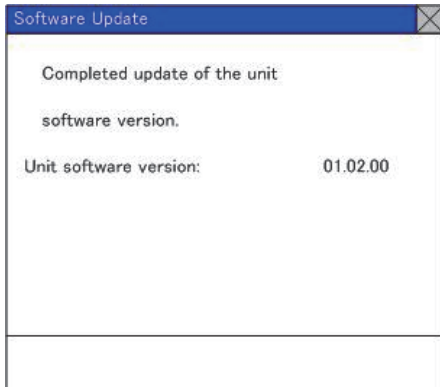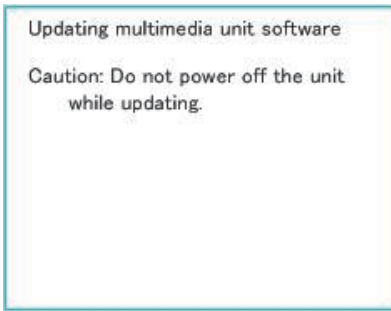
5. The dialog shown left is displayed during the update of update program.
Do not pull out the SD card or power OFF the GOT while the dialog shown left is displayed.
Do not turn off the SD card access switch of the multimedia unit.
The software is not updated properly.

```
Software Update                         ☒

  Completed update of the unit

  software version.

  Unit software version:        01.02.00
```

6. When the update of update program is completed normally, the dialog shown left is displayed.

```
Software update                         ☒

    Fail to update the unit sftware

    Version correctly.
```

7. When the update program is not correct or the update of update program failed, the dialog shown left is displayed.
After restarting the GOT, apply the steps starting from step1 again.

3.8.5 Network setting

■ Network setting function

The network setting is executed when the network connection is made using the Ethernet I/F of the multimedia unit.
The following settings can be made in the network setting.

Item	Description	Setting range
MAC address	Displays the MAC address.	-
IP address	Displays and sets the IP address.	0.0.0.0 to 255.255.255.255 <Default: 192.168.3.51>
Default gateway	Displays and sets the router address of the default gateway. For the connection via a router, the setting is required.	0.0.0.0 to 255.255.255.255 <Default: 0.0.0.0>
Subnet mask	Displays and sets the subnet mask. For the connection via a router, the setting is required.	0.0.0.0 to 255.255.255.255 <Default: 255.255.255.0>

■ Displaying the network setting
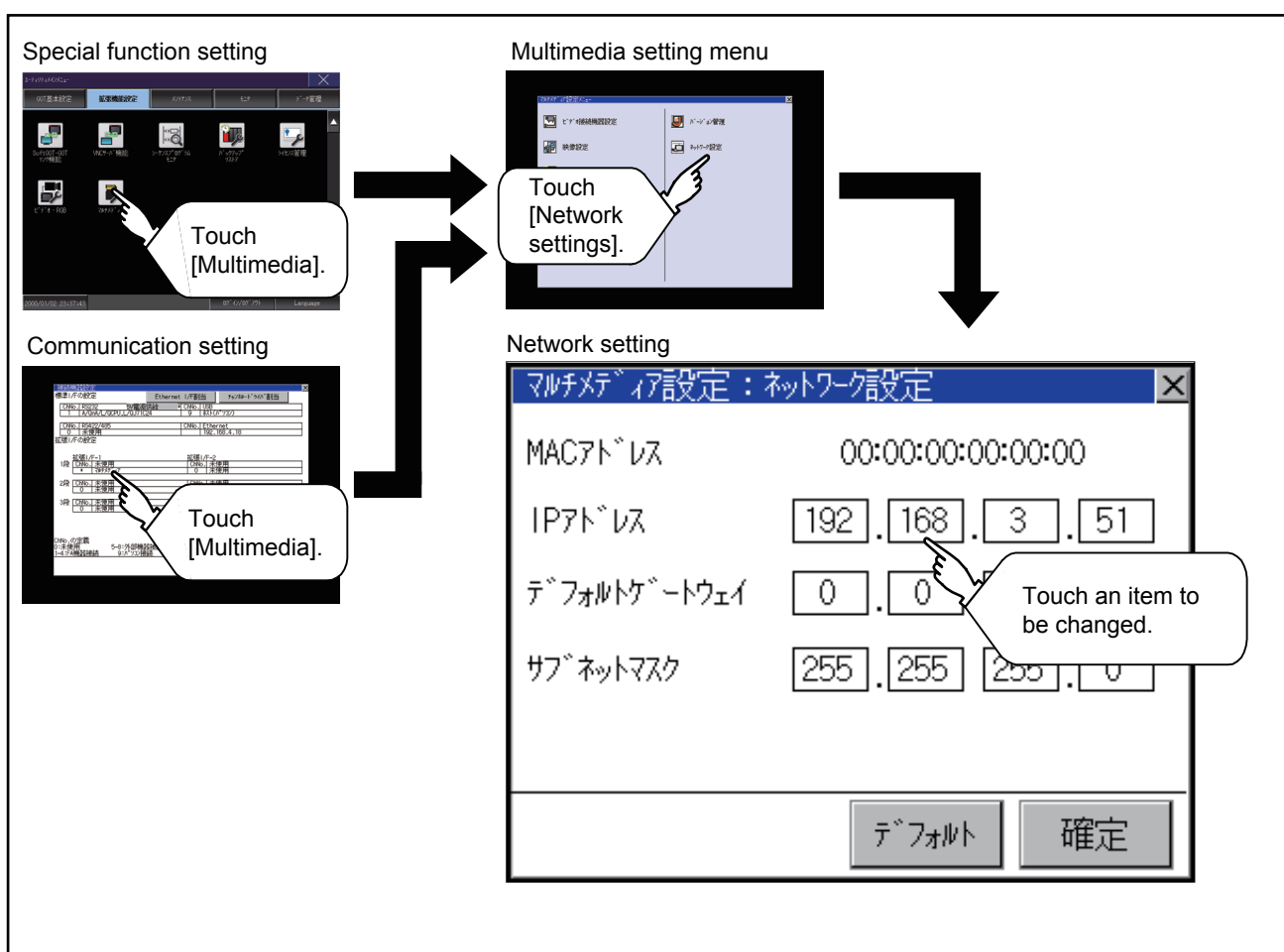
■ Operating the network setting

The following shows the setting operation of the IP address.
The same setting operation is applied to the default gateway and the subnet mask.
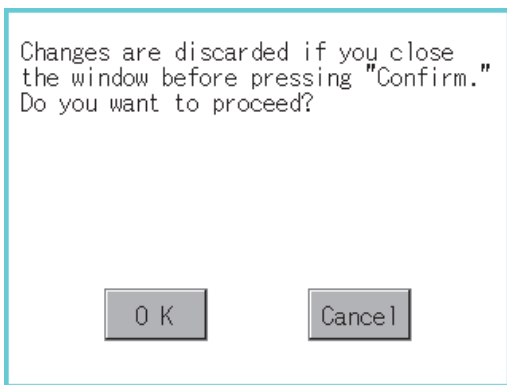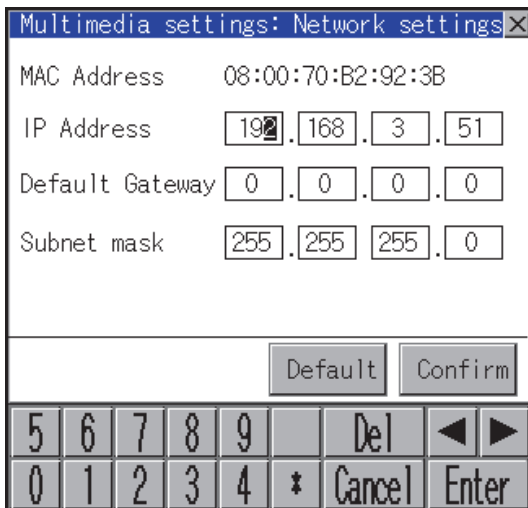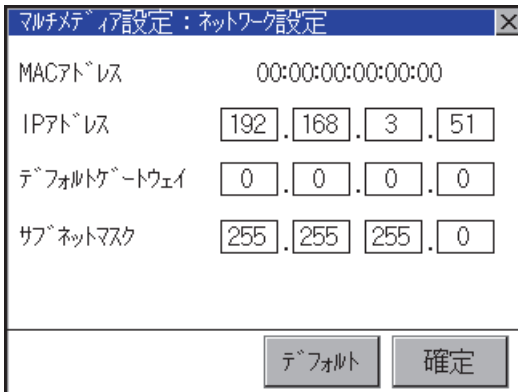
1. Touch the IP address display box.

2. The keyboard appears. Enter numerical values.

3. When you touch the [Confirm] button, the setting contents are determined.
If you touch the [Default] button, the setting contents can be returned to the initial values.

Changes are discarded if you close the window before pressing "Confirm."
Do you want to proceed?

OK   Cancel

4. If you touch the ⊠ button without touching the [Confirm] button, the dialog on the left is displayed.

5. After completing the settings for all the items you want to change in [Network settings], when touching the ⊠ button, the display returns to [?????????].

3.8.6 Multimedia screen

■ Display operation of multimedia screen

Create the multimedia screen switch used to display the multimedia screen on the project screen.

Touch the multimedia screen switch so that the screen is switched to the multimedia screen.

The video image, play video and file selection menu can be switched on the multimedia screen.

For details of the procedures for creating the special function switch used to display the multimedia screen, refer to the following.

⇒ GT Designer3 (GOT2000) Help

SPECIAL FUNCTION SETTING

■ Operation of multimedia screen

(1) Video image screen

Images taken with a video camera connected to the multimedia unit can be displayed on the GOT screen.
Images taken with a video camera can be recorded.
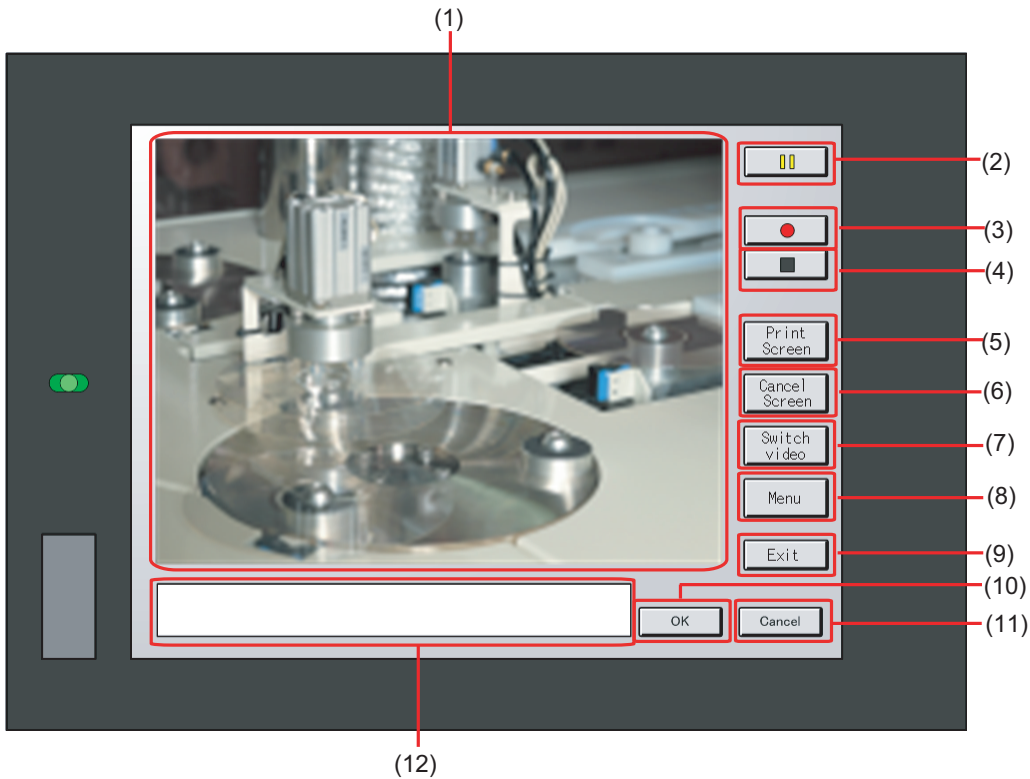
| Item	Item	Description
(1)	Image display screen	Screen to display images taken with a video camera
(2)	▮▮ button	Button to pause images taken with a video camera
(3)	● button	Button to start recording images taken with a video camera
(4)	■ button	Button to stop recording
(5)	Print Screen button	Button to start printing the screen
(6)	Cancel Screen button	Button to cancel printing the screen
(7)	Switch video button	Button to switch the display to the play video screen
(8)	Menu button	Button to switch the screen to the file menu screen
(9)	Exit button	Button to exit the multimedia screen switch and to return to the utility screen
(10)	OK button	Button to accept messages
(11)	Cancel button	Button to stop messages
(12)	Message display screen	Screen to display error messages, etc.

(2) Play video screen
Video files saved in the SD card installed on the multimedia unit can be played and displayed.
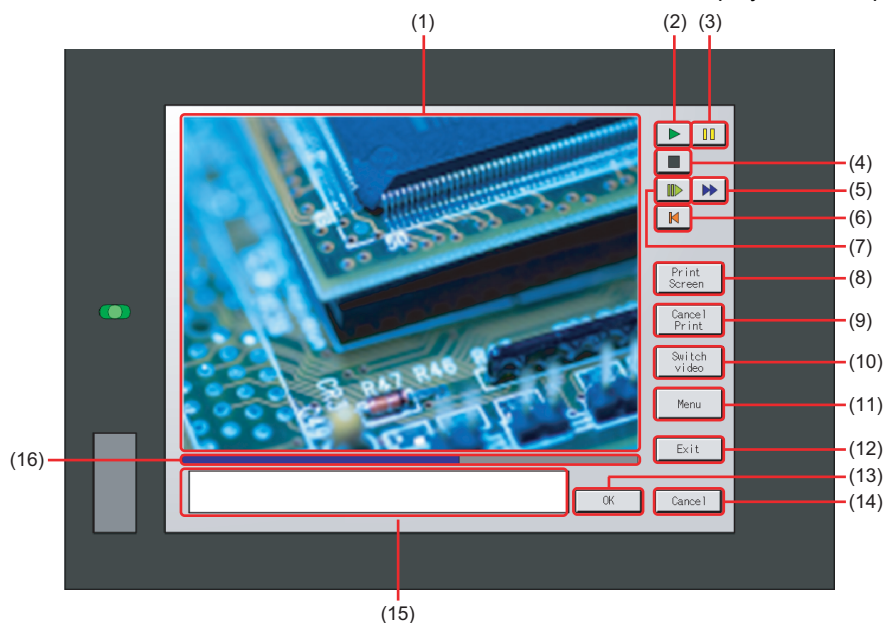
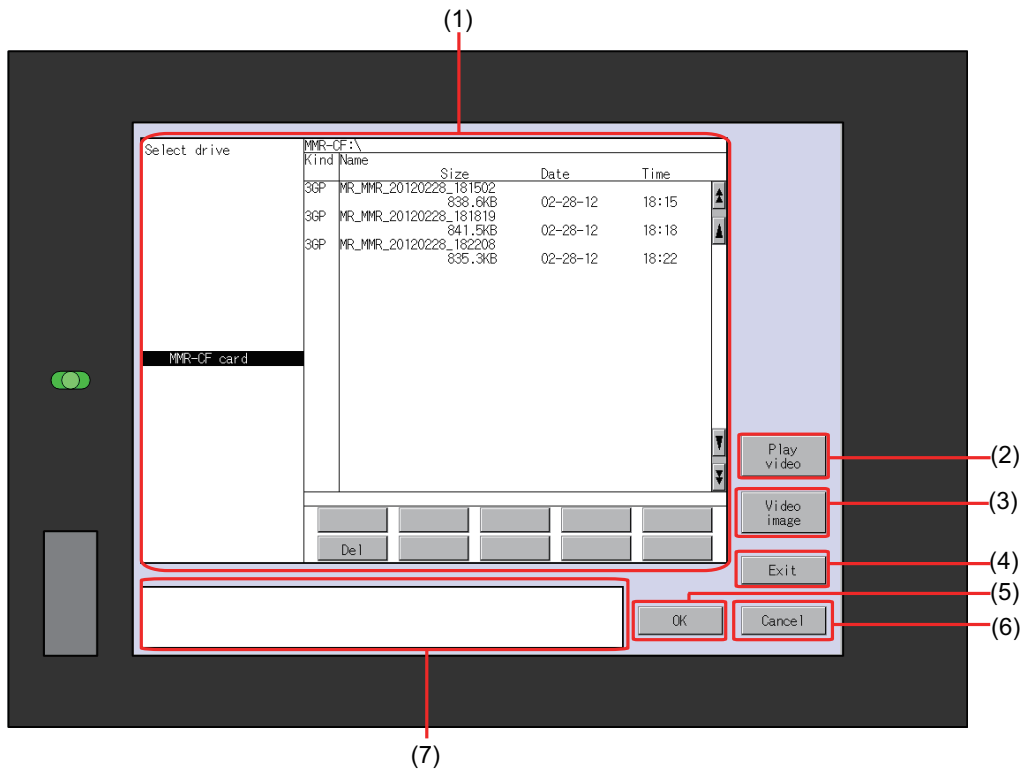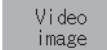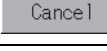| Item	Item	Description
(1)	Image display screen	Screen to display images taken with a video camera or to play video taken with a video camera
(2)	▶ button	Play button for playing video
(3)	❚❚ button	Button to pause images or video taken with a video camera
(4)	■ button	Button to stop playing
(5)	▶▶ button	Button to return to the beginning of video files and to play the video
(6)	◀❙ button	Button to return to the beginning of video files and to play the video
(7)	▶▶ button	Button to play the video in slow motion
(8)	Print Screen button	Button to start printing the screen
(9)	Cancel Print button	Button to cancel printing the screen
(10)	Switch video button	Button to switch the display to the video image screen
(11)	Menu button	Button to switch the screen to the file menu screen
(12)	Exit button	Button to exit the multimedia screen switch and to return to the utility screen
(13)	OK button	Button to accept messages
(14)	Cancel button	Button to stop messages
(15)	Message display screen	Screen to display the file name and shooting time of the video being played and messages
(16)	Play position display bar	Bar to display the play position of the video

(3) File menu screen
Video files of the SD card installed on the multimedia unit can be searched.
Searched video files can be displayed on the play video screen.

Item	Name	Description
(1)	File menu display screen	Screen to display video files in the SD card selected by Select drive or to delete video files.
(2)	Play video button	Button to switch the display to the play video screen
(3)	Video image button	Button to switch the display to the video image screen
(4)	Exit button	Button to exit the multimedia screen switch and to return to the utility screen
(5)	OK button	Button to accept messages
(6)	Cancel button	Button to stop messages
(7)	Message display screen	Screen to display error messages, etc.

4.   MAINTENANCE

The GOT can display the screen for maintenance.
The following describes the functions available as the maintenance.

Item	Description	Reference
Batch self check	This function collects data about energization time, installed system application and others, and can display it in View self check results menu.	4.1
USB device management	This function controls the USB peripheral device connection status in the GOT.	4.2
Clean	The screen can be set as not to be effected by touching the screen when clean with clothes.	4.3
Touch panel calibration	Touch panel reading error can be corrected.	4.4
System alarm	Displays error code and error message when error occurs.	4.5
Drawing check	Carries out missing bit check, color check and drawing check.	4.6
Font check	Displays the character data on the screen to check visually.	4.7
Touch panel check	Checks whether there are no dead zone area in the Touch key minimum unit (16 dots x 16 dots).	4.8
I/O check	Carries out RS-232 connecting target confirmation and self-loopback check.	4.9
Ethernet status check	Sends a ping to check the Ethernet connection status.	4.10
GOT information	Displays information of the GOT.	4.11

4

MAINTENANCE

4.1　Batch Self Check

The Batch self check collects data about energization time, installed system application and others, and can display it in View self check results menu.
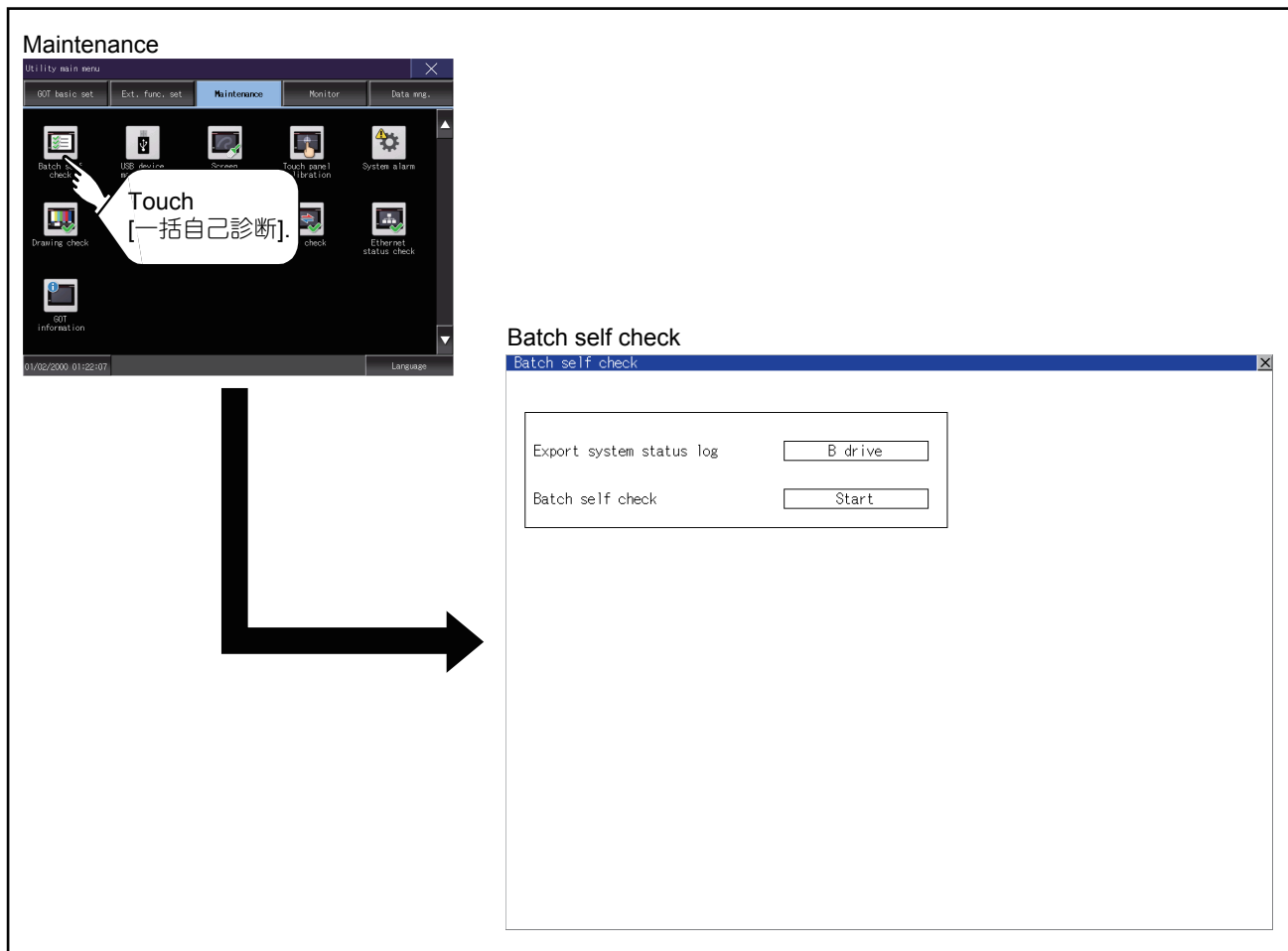
4.1.1　Batch self check

When an export destination of the system status log is specified in the batch self check screen, the data can be logged.

Item	Description
System status log,	Diagnostic data that the GOT system status has been logged

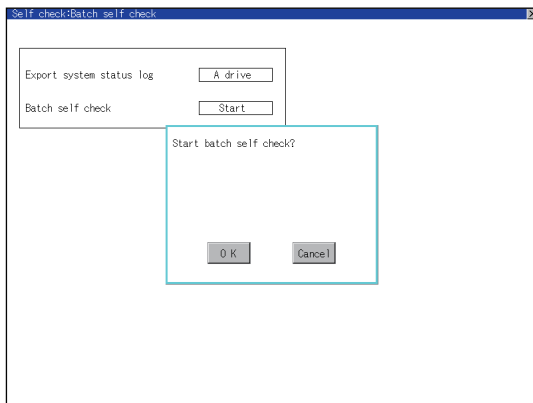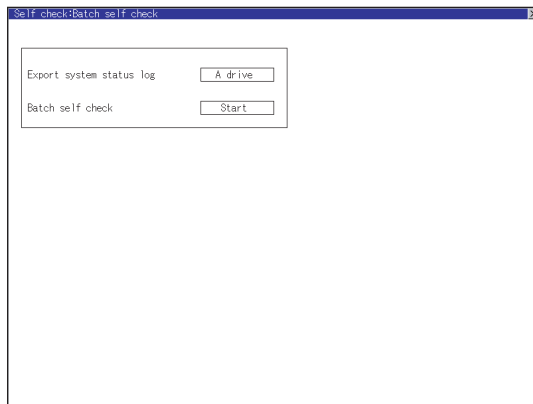Also, the following information are displayed in View self check results menu.

Item	Description
Start up information	Information at power-on, Information at system start up, Maintenance time notification information
System status 1	Installed system application, installation history
System status 2	Communication driver, GOT system configuration information
Communication setting contents	Displays the controller status.
Operation history	Displays the operation history and execution time.
Screen switching history	Displays the screen switching history and execution time.
Clock change history	Displays the time before and after clock change.
System alarm history	Displays the alarm and alarm occurrence time.
CPU error history	Displays the ChNo., error messages and error occurrence time.
GOT start time history	Displays the time GOT was powered on.

4.1.2 Display operation of batch self check

Maintenance

Touch [一括自己診断].

Batch self check

| Export system status log | B drive |
| Batch self check | Start |

4.1.3 Operation of batch self check

■ Batch self check

1. Each time the Export item on system status log is touched, the displayed drive changes as follows: A drive → B drive → E drive → Not exported → A drive.
   When selecting A drive or B drive, install the SD card. When selecting the E drive, install the USB memory.
   If Batch self check is started without installing the CF card or USB memory, the system status log will not be saved.
   (The system status log is for manufacturer investigation only. Customers cannot view it.)

2. Touch the [Start] button to start Batch self check.
   Touch the [×] button to return to the main menu.

■ View self check results menu

After completion of Batch self check, the following screen is displayed.
Touch each item to display the details screen.
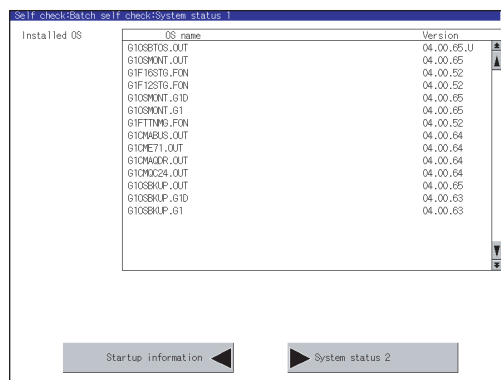Touch the [Stop] button to return to the Batch self check screen.
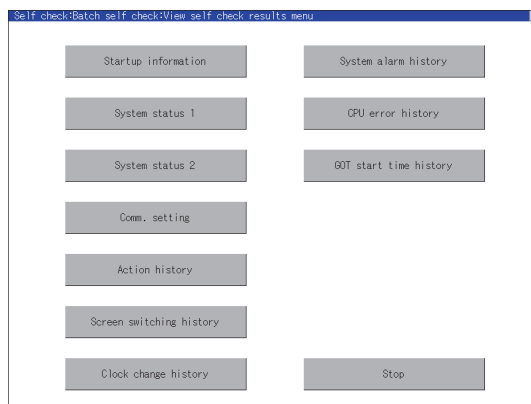
Display example of details screen
Touch the items to display the following screens.
Touch the [×] button to return to the View self check results menu.

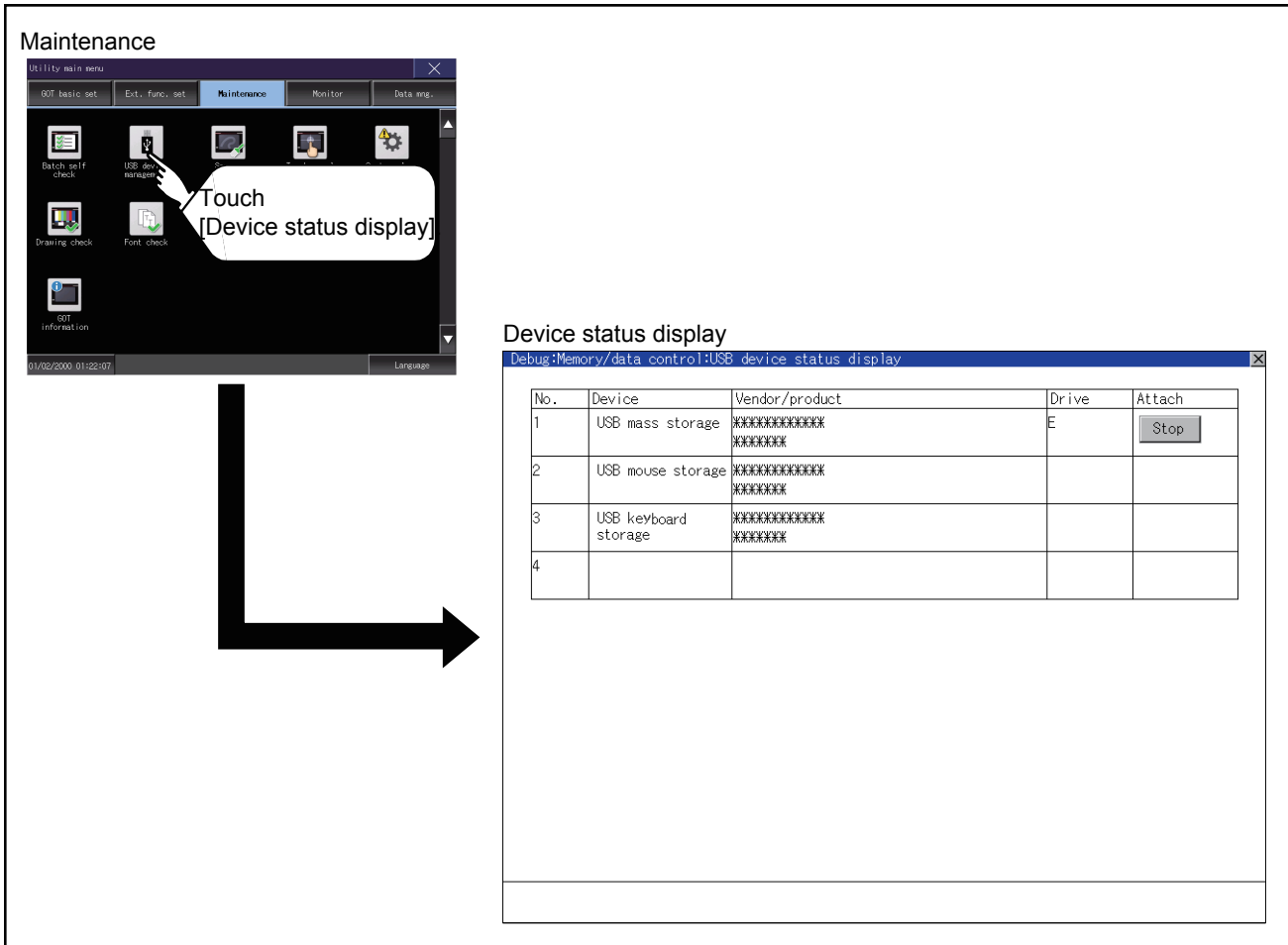Touch the button in the left bottom of the screen to display the previous screen.
Touch the button in the right bottom of the screen to display the next screen.

4.2 USB Device Management

4.2.1 Function of the USB device management

This function displays a list of the USB peripheral device connection status in the GOT.
Also, this screen is used to remove the USB peripheral device from GOT.

4.2.2 Display operation of the USB device management

Maintenance

Touch
[Device status display]

Device status display

No.	Device	Vendor/product	Drive	Attach
1	USB mass storage	✳✳✳✳✳✳✳✳✳✳✳✳ ✳✳✳✳✳✳✳	E	Stop
2	USB mouse storage	✳✳✳✳✳✳✳✳✳✳✳✳ ✳✳✳✳✳✳✳		
3	USB keyboard storage	✳✳✳✳✳✳✳✳✳✳✳✳ ✳✳✳✳✳✳✳		
4				

4.2.3   USB device status display operation

1. When the USB peripheral device is installed to GOT, the screen shown left is displayed.

2. USB mass storage is displayed in Device, and [Stop] button is displayed in Attach.

3. When the [Stop] button is touched, the dialog box shown left is displayed.
   Touch the [OK] button to prepare the USB peripheral devices removal.
   Touch the [Cancel] button to cancel the preparation of USB peripheral devices removal.

4. When the preparation of removal is ready, the dialog box shown left is displayed.

5. To close the dialog box, touch the [OK] button.

4.3   Cleaning

4.3.1   Function of the cleaning

In utility, the screen can be set as not to be effected by touching the screen when clean with clothes.
Refer to the below for the cleaning procedure.

➡   GOT2000 Series User's Manual (Hardware)

4.3.2   Display operation of Clean
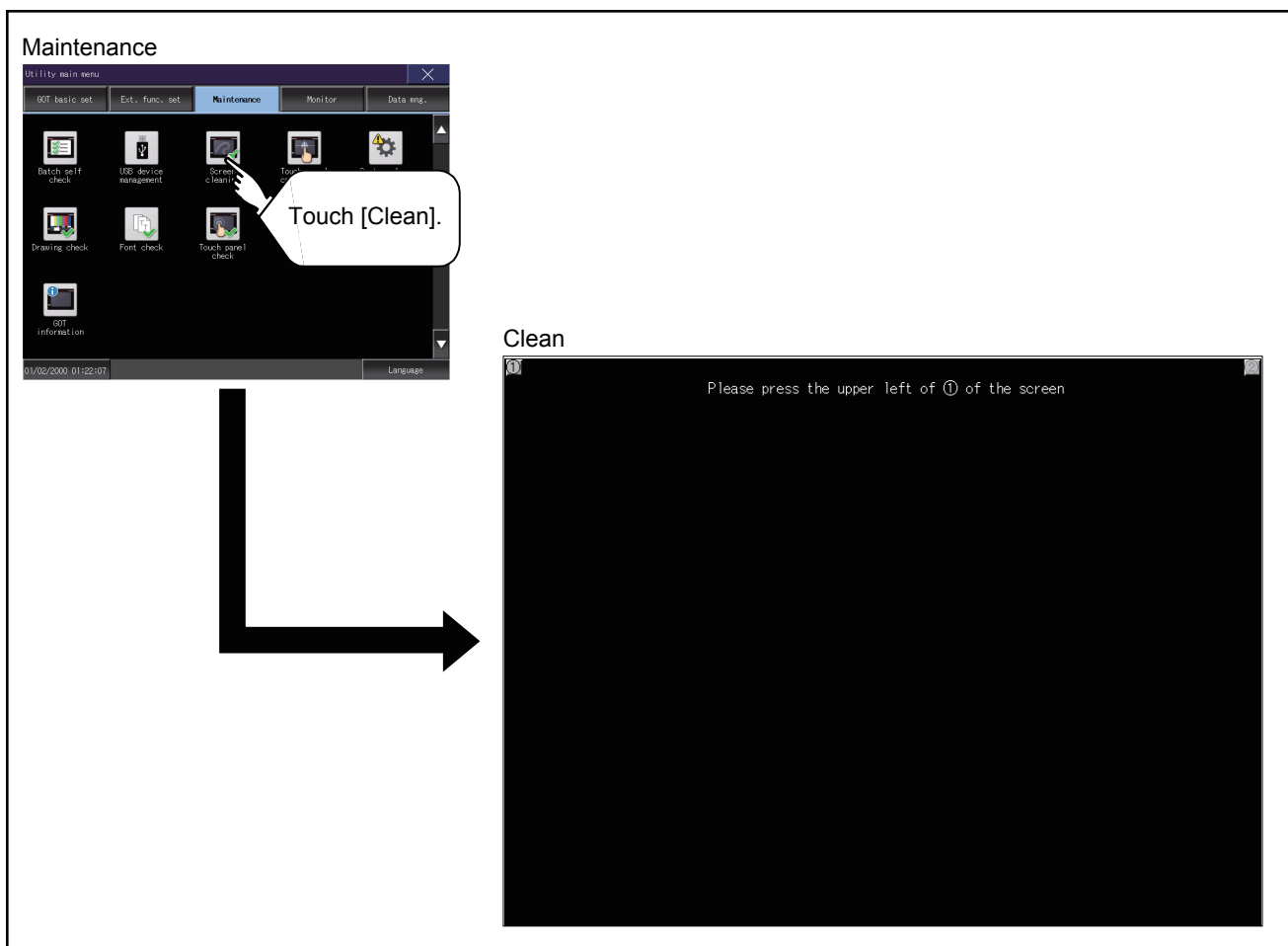
Even if touch points other than the upper left corner and upper right corner of the screen, the GOT does not operates.

4.3.3 Operation of clean

After cleaning the screen, touch the screen following the instruction displayed.
After touching the screen, the screen returns to the Main Menu.
The following screen is displayed.

Please press the upper left of ① of the screen

4.4 Touch Panel Calibration

4.4.1 Touch panel calibration setting function

Touch panel reading error can be corrected.
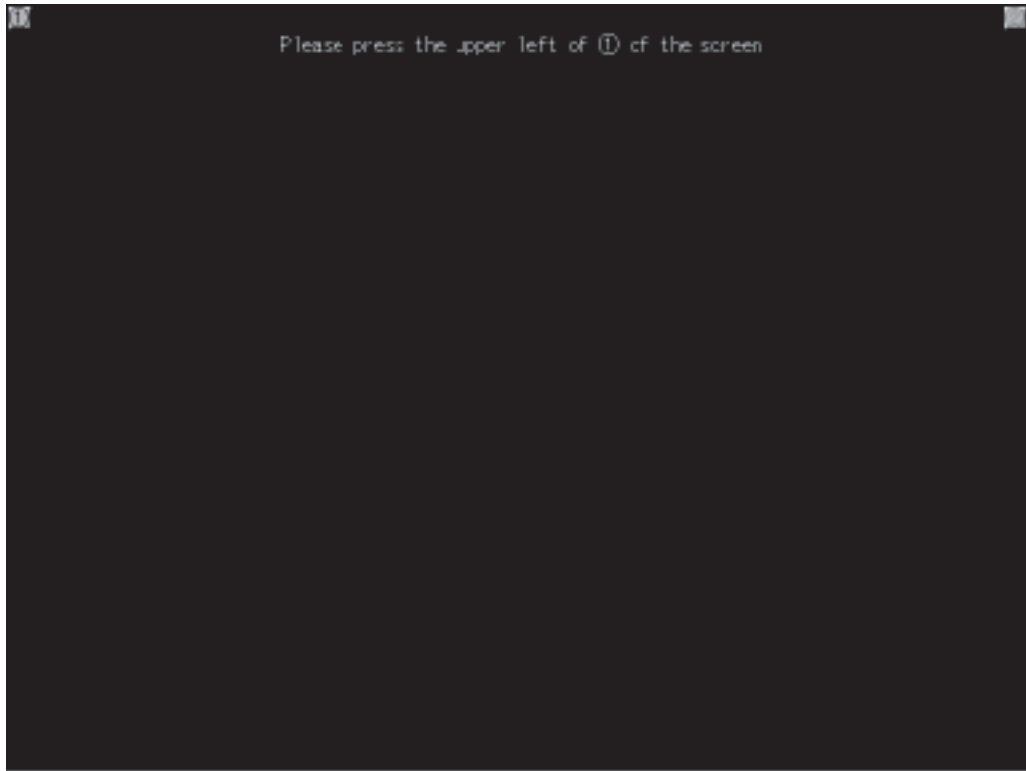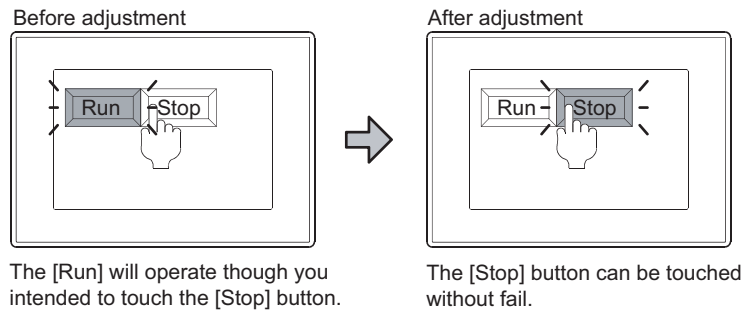Normally the adjustment is not required, however, the difference between a touched position and the object position may occur as the period of use elapses.
When any difference between a touched position and the object position occurs, correct the position with this function.

Before adjustment

After adjustment

The [Run] will operate though you intended to touch the [Stop] button.

The [Stop] button can be touched without fail.

4.4.2 Touch panel calibration setting display operation

Maintenance

Touch [Touch panel calibration].

Touch panel calibration

Touch panel calibration

Press on the X mark to calibrate the touch panel.

Note) 1: The positions, where the finger is released, are coordinate setting points.
Note) 2: Calibration can be performed using 4 points being displayed.
Note) 3: Calibration is aborted when the process is left for 10 seconds.

1／4

Perform touch panel calibration.

4.4.3 Touch panel calibration operation

Touch the point displayed on the screen with the finger one by one to make the setting.

1. Touch the center of the displayed on the upper left precisely.
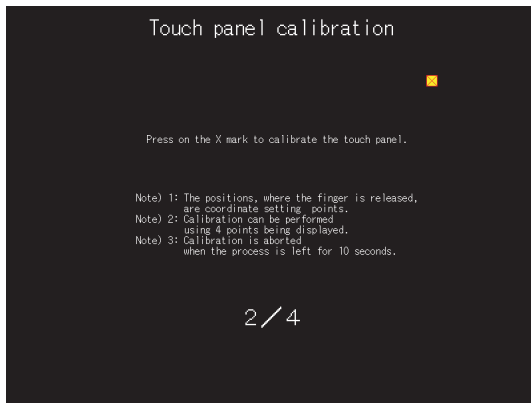
2. Touch the point displayed on the upper right.
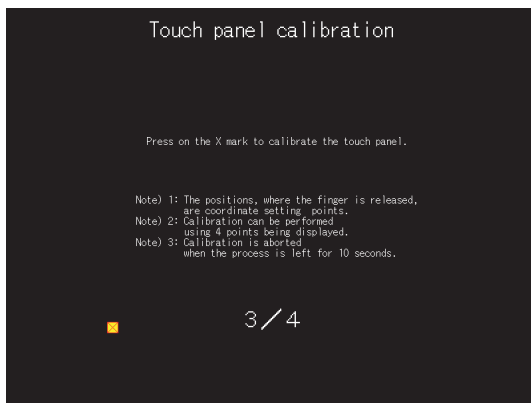
3. Touch the point displayed on the lower right.

4. Touch the ☒ point displayed on the lower right.
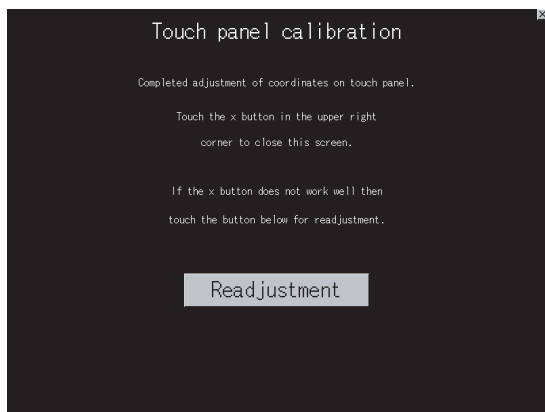
5. Touching the ☒ button displayed on the upper right returns to the previous screen.
When the precise touch could not be made, touch the [Readjustment] button to make the setting from step1 again.

4.5   System Alarm

4.5.1   System alarm

System alarm is the function to display error code and error message when an error occurs in GOT, controller or network.
System alarms can be reset on the System alarm display screen.
For the details of the system alarm, refer to the following.

➡ GT Designer3 (GOT2000) Help

4.5.2   Display operation of system alarm

Maintenance

Touch [System alarm].

System alarm display

When [Reset] is touched, the system alarm display of the GOT error is reset.
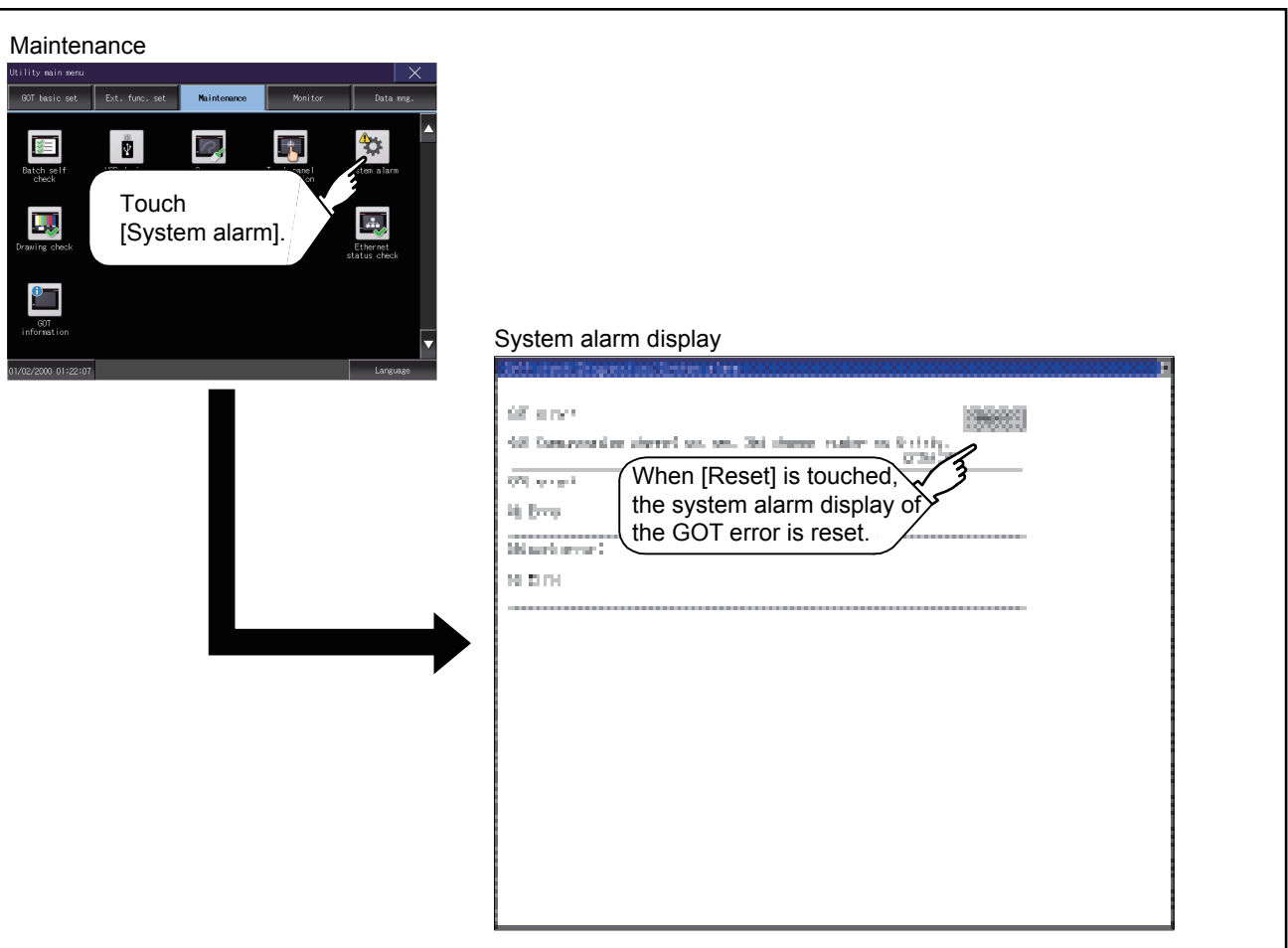
4.5.3　Operation of system alarm display

■ System alarm display resetting
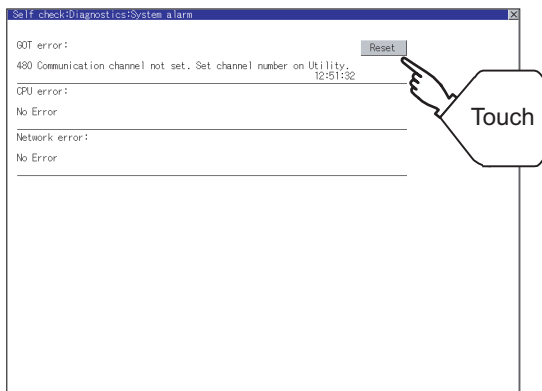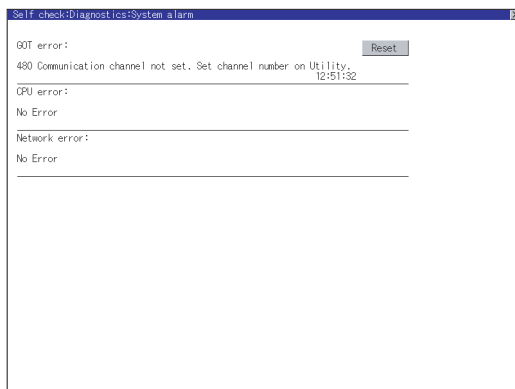
1. Eliminate each cause of the system alarm being occurred.
   Error causes can be identified by the error code, error message and channel No. displayed on the System alarm screen.
   ➡ GOT2000 Series User's Manual (Hardware)

2. A method for resetting system alarm depends on an error.
   - GOT error
     Touch the [Reset] button to reset system alarms.

   - CPU error and Network error
     The system alarm is automatically reset after its cause is eliminated.

POINT

(1)　Before resetting the system alarm display in the GOT error
Eliminate the system alarm cause before resetting the system alarm display in the GOT error.
If not eliminated, the system alarm display in the GOT error will not be reset even after the reset operation.

(2)　Processings with reset operation
The following data in the system information are also reset.
- GOT error code (Write device)
- GOT error detection signal (System Signal 2-1.b13)

4.6 Drawing Check

4.6.1 Drawing check function

The drawing check function carries out display checks as missing bit check, color check, basic figure display check, move check among screens.

4.6.2 Display operation of drawing check

Maintenance

Touch [Drawing check].

Drawing check

Finish   Next

Drawing check

Note1:Touch top-right of screen, for displaying next page.

Note2:Touch top-left of screen, for finishing check.

Note3:The symbols [Next] and [Finish] is not displayed during a check.

Note4: In amount pages: 14
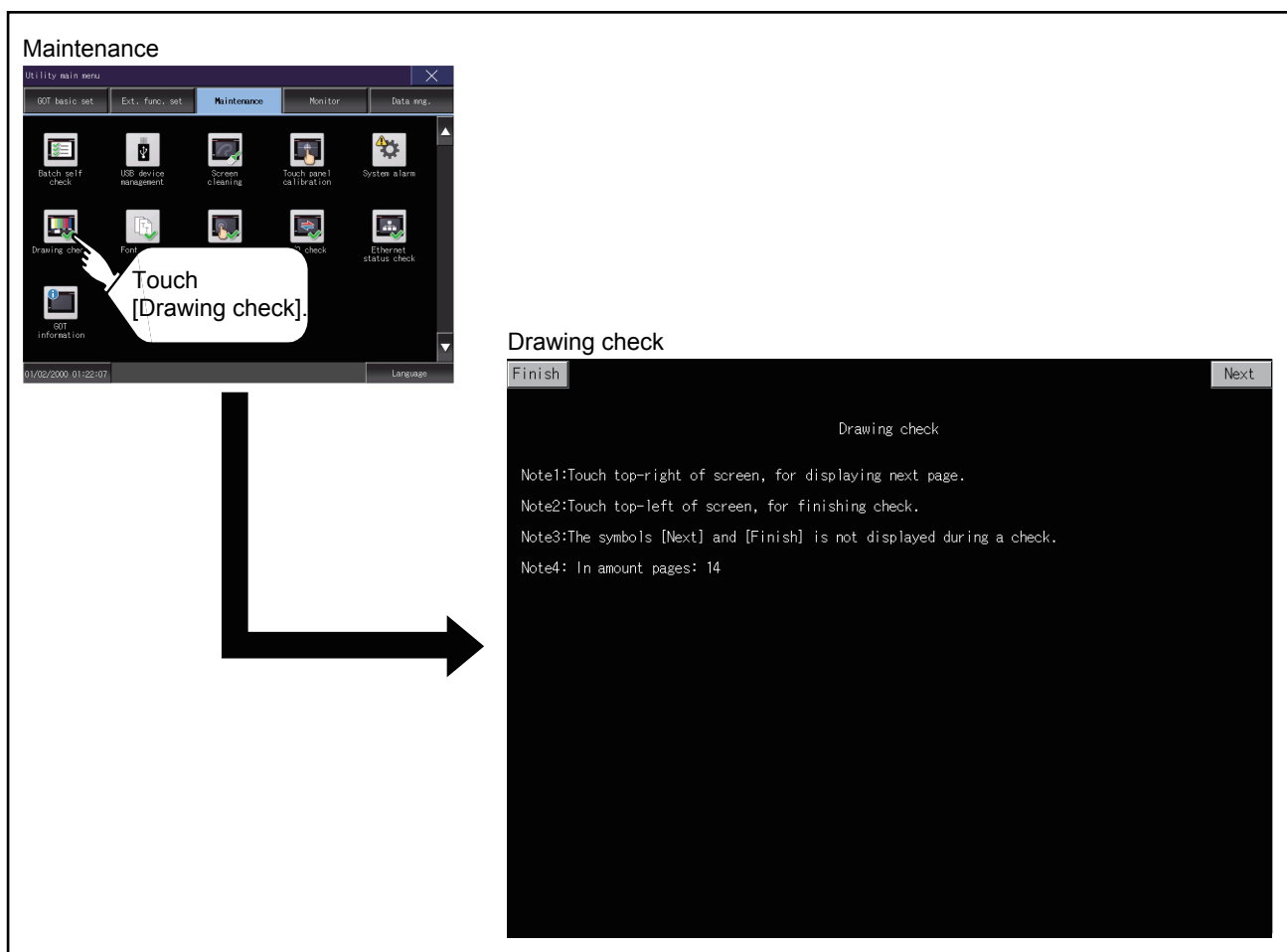
POINT

Notes on drawing check

Missing bits is occurred in the following cases.

1. There are parts drawn in different color with the filled color.

2. There are parts of basic figure and drawing patterns which are not drawn according to the layout and procedures described in " ➡ 4.6.2 ■Display operation of drawing check".

When missing bits occurs, contact your local Mitsubishi (Electric System) Service.

4.6.3 Drawing check operation

The screen for drawing check can be displayed by touching [Drawing check] on the Display check menu.

■ Before execute drawing check

Touching the upper right part of the screen proceeds to the next check in each step during drawing check.
Touching the upper left part of the screen returns to the [Display check] screen.

Upper-left touch position

Upper-right touch position
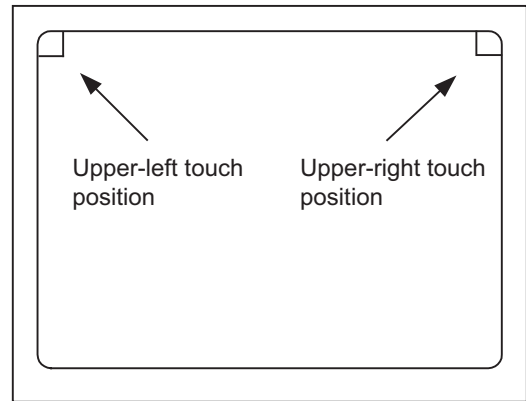
(1) Missing bit, Color Check
Each touch of the upper-right part of the screen, the entire screen color changes in the following order: blue, black, red, purple, green, light blue, yellow, white, and gray.
Check missing bit and color visually.

| Blue | Black | Red | Purple | Green | Light blue | Yellow | White | Gray |

To (b) Basic figurecheck screen
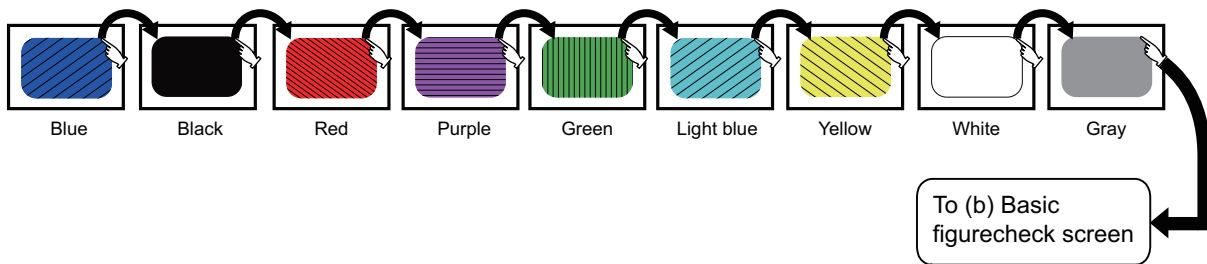
If touch the upper right part of the screen at the final color (white screen), the following 2) Basic figure check screen is displayed.

(2) Basic figure check
Check whether there is no shape transformation of basic figure or display losses.
The basic figure drawn has 4 types: 1. Filled circle, 2. Line, 3. Rectangle, 4. Ellipse.

To Pattern 1 of (c) Move check among screen
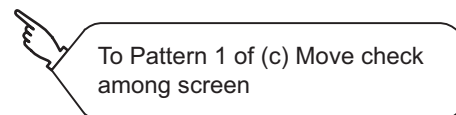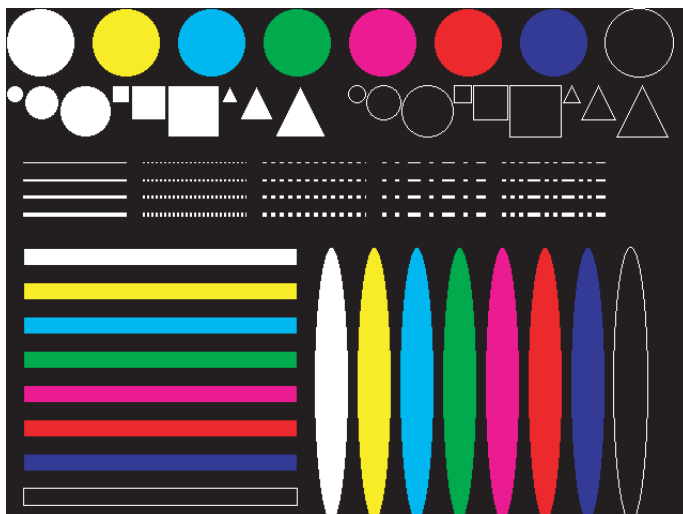
(3) Move check among screens

    (a)   Pattern 1: Shape transformation, color check
           The drawn figures are displayed in order and at regular intervals.
           If the shape and color are displayed visually in order, it is normal.
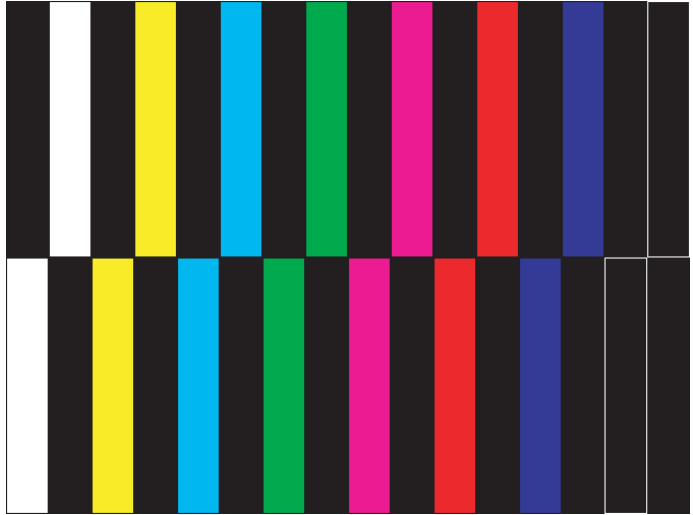
To Pattern 2
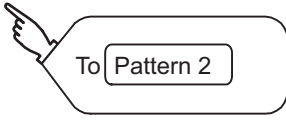
Pattern 1

    (b)   Pattern 2: Shape transformation, color check
           The drawn figures are displayed in order and at regular intervals.
           If the shape and color are displayed visually in order, it is normal.

To Pattern 3

Pattern 2

(c) Pattern 3: Shape transformation, color check
    The overlapped shapes of pattern 1 and pattern 2 are displayed.
    If the shape and color are displayed visually in order, it is normal.
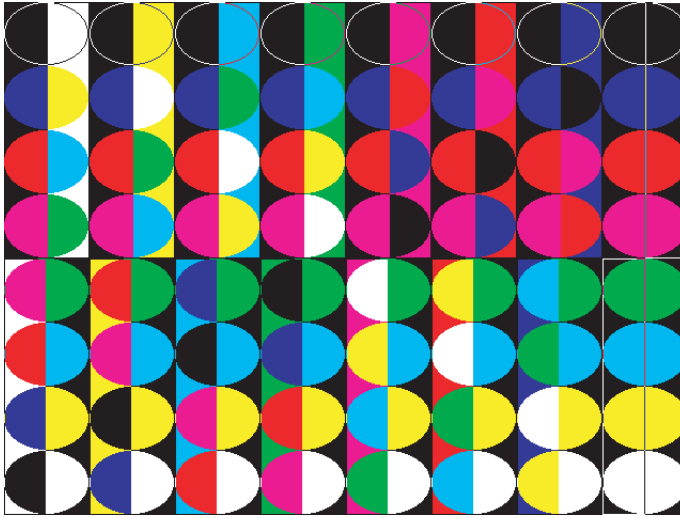
To Pattern 4

(d) Pattern 4: Shape check
    The drawn figures are displayed in order and at regular intervals.
    If the shape and color are displayed visually in order, it is normal.
    If touch the upper right part of the screen, returns to [Display check] screen.
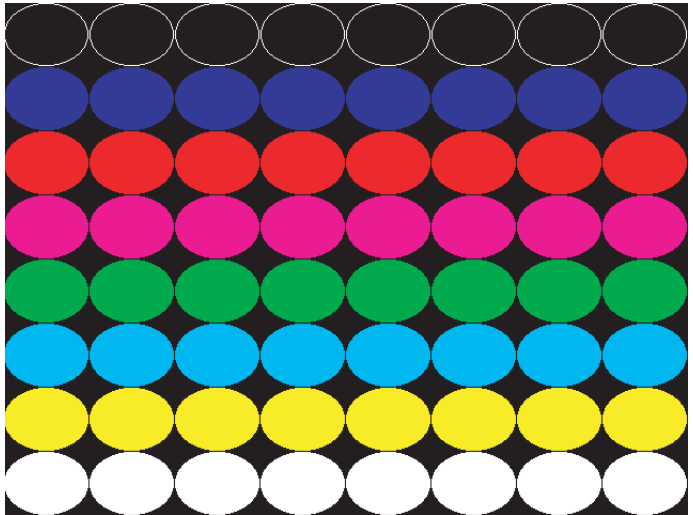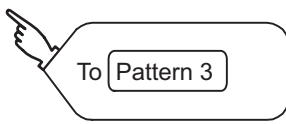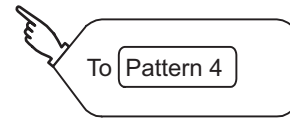

To [Display check]
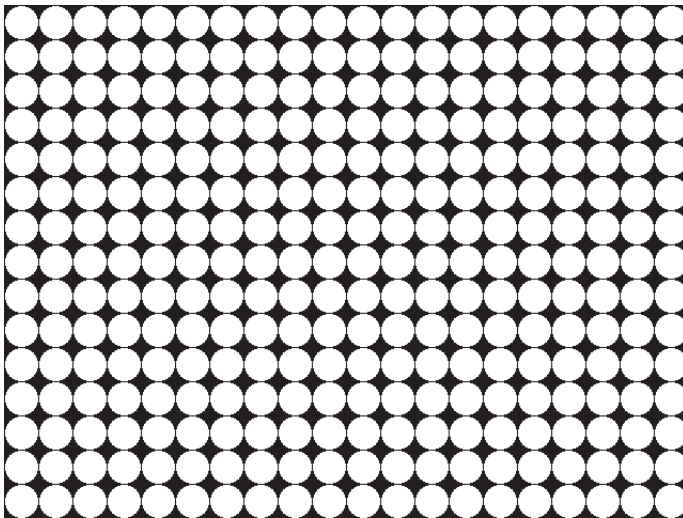
The main screen image after the screen information read and write is executed

4.7 Font Check

4.7.1 Font check function

The font check is a function which confirms fonts installed in GOT. The character data of the font is displayed on the upper left part of the screen one by one.

4.7.2 Display operation of Font check
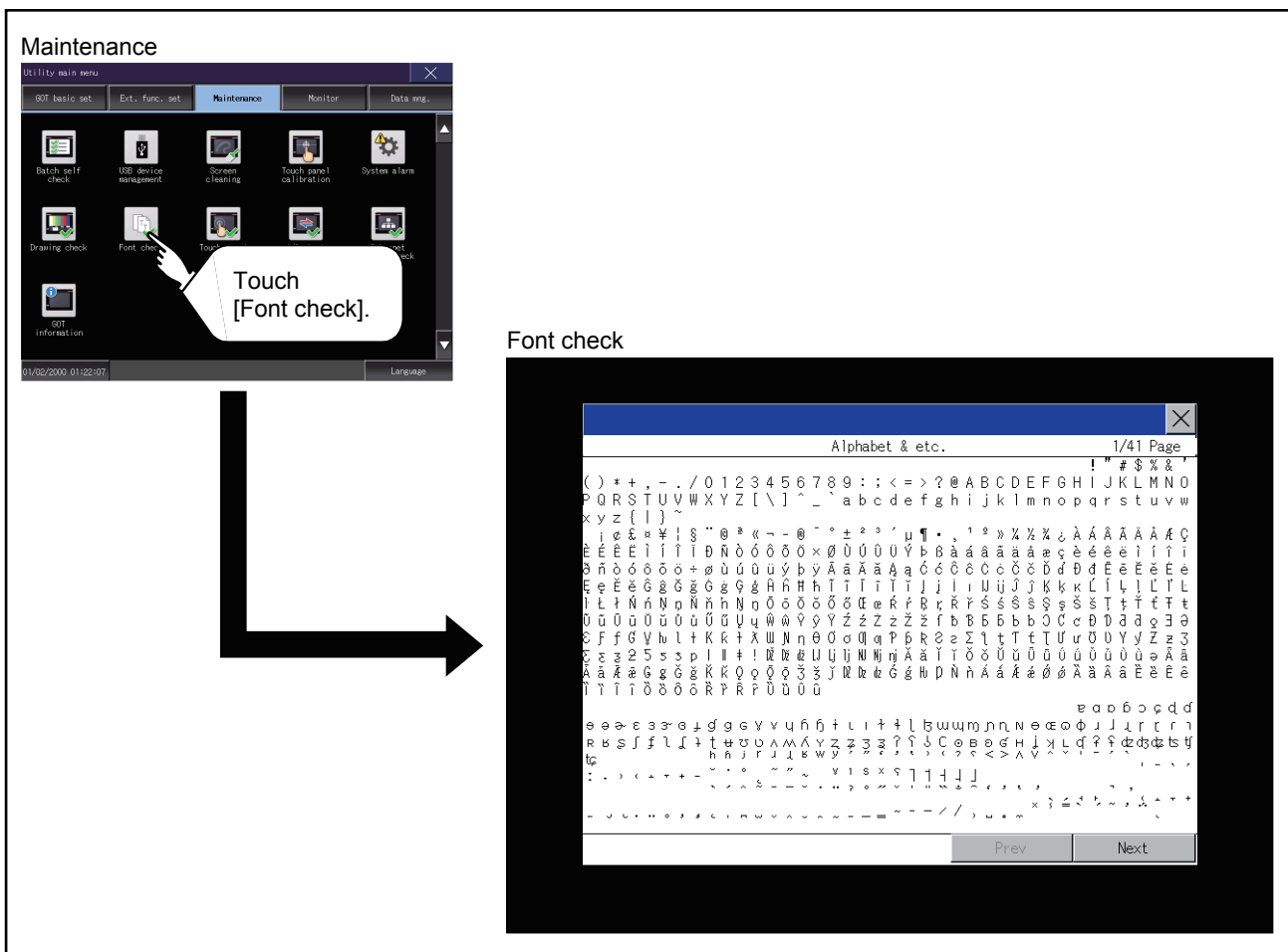
Display operation of Font check

Judged as normal if the following characters are correctly displayed. (UNICODE)
Alphabetic characters etc.　: 0x0000 to 0x04F9 (From basic Latin to Kirill)
Hangul characters　　　　　: 0xAC00 to 0xD7A3 (Hangul/Hangul auxiliary)
Kanji　　　　　　　　　　: 0x4E00 to 0x9FA5 (CJK integrated Kanjis)
If the characters above are not displayed correctly, the fonts may not be installed. Install the system application again.

4.7.3　Font check operation

Font check starts by touching [Font Check] in the [Display check] screen.
The character data of the built-in font (in the built-in flash memory) can be checked visually to confirm the font drawings by displaying the character data serially on the screen.

■ Before execute font check

Touching the upper right part of the screen proceeds to the next check in each step during Font check.
Touching the upper left part of the screen returns to the [Display check] screen.

Upper-left touch position

Upper-right touch position
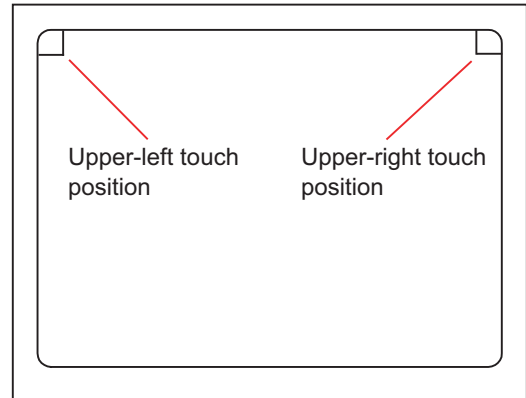
The installed font data is displayed by touching the upper right part of the screen.

Font data
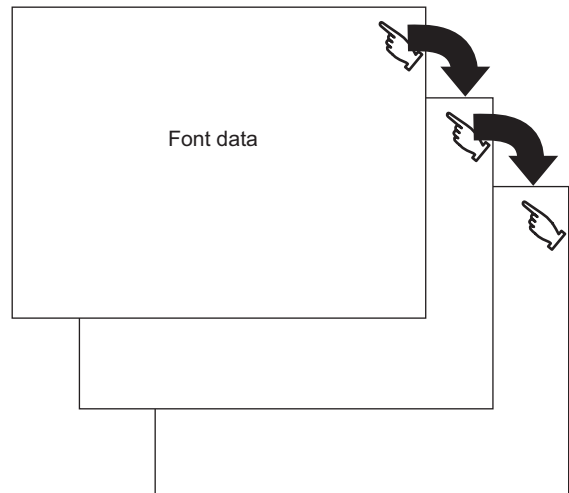
POINT

Option fonts

To display optional fonts, the following is required.
 • The option font installation

The option fonts are displayed at the end.

4.8　Touch Panel Check

4.8.1　Touch panel check function

Touch panel check is a function which checks whether there is no dead zone area in touch key minimum unit (16 dots × 16 dots).

4.8.2　Display operation of Touch panel check

Maintenance

Touch
[Touch panel check].

Touch panel check

> Touch panel check
> Note1:Check the area you touched turn ON.
> Note2:Touch top-right of screen, for aborting.
>
> Start
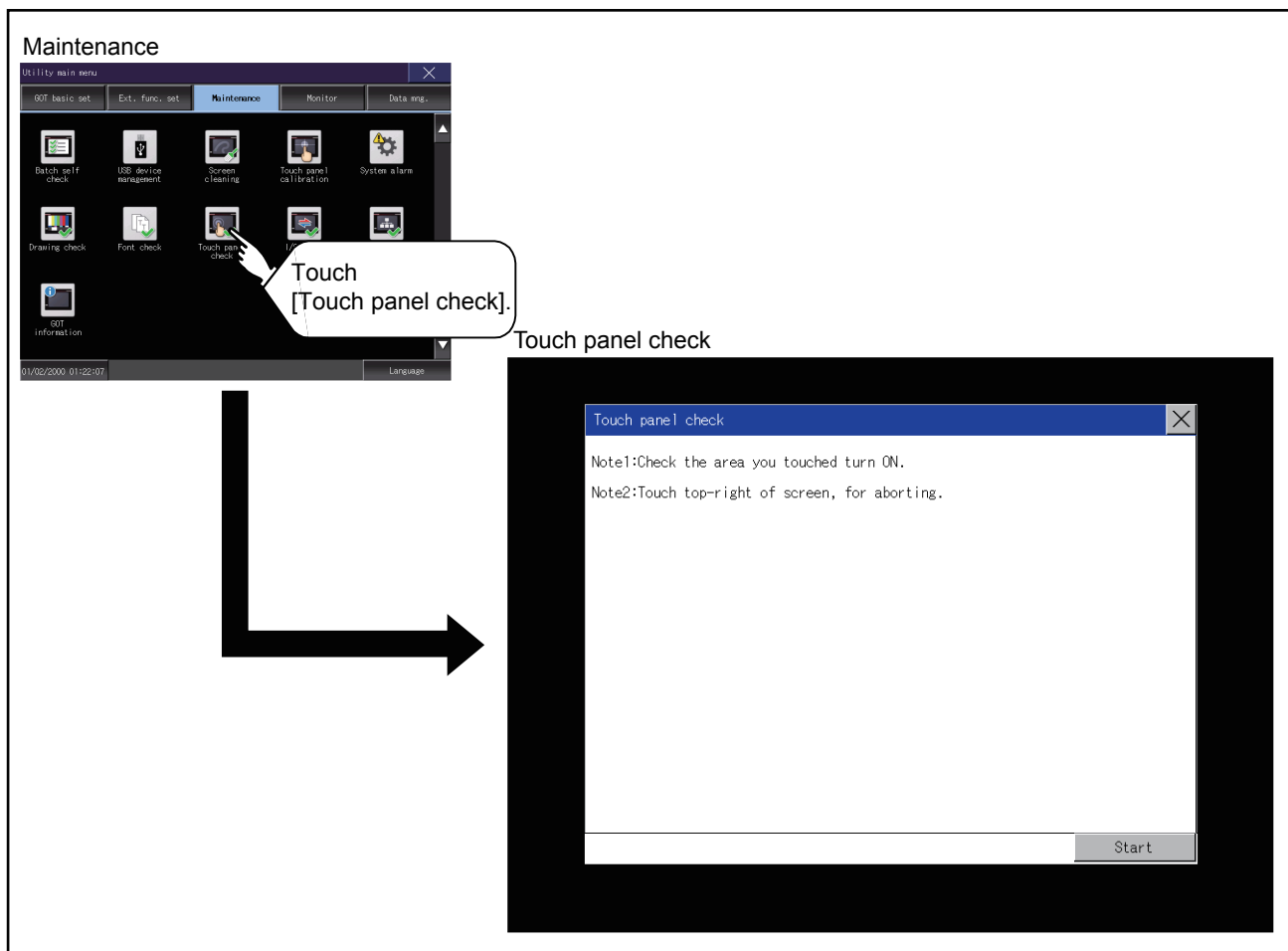
POINT

Notes on Touch panel check
If the touched part is not filled with yellow color, there are the following two possible causes.
?1. Display part failure
?2. Touch panel failure

In that case, contact your local Mitsubishi (Electric System) Service.

MAINTENANCE

4.8.3   Touch panel check operations

If touch [Touch panel check] of self-check, a black-filled screen is displayed over the entire screen area.

1. Touch a part of the screen.
The touched part becomes a yellow-filled display.

Black-filled screen

Yellow color
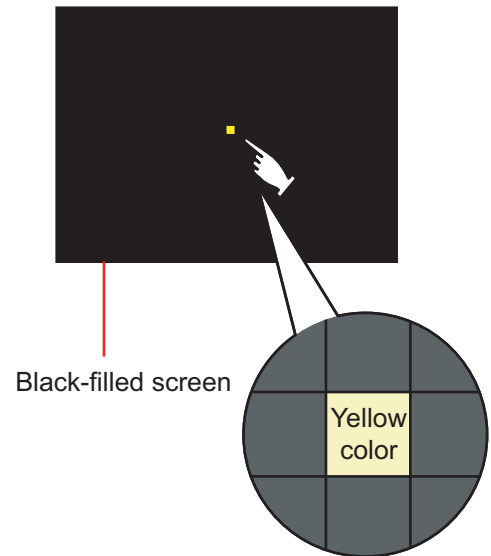
2. If touch the upper left part, returns to the self-check.

Upper-left touch position

HINT
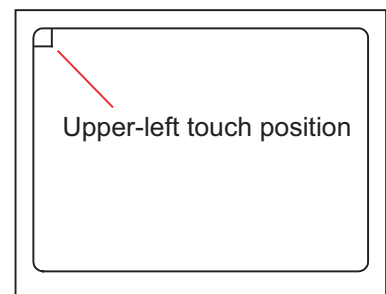
Checking the upper left part of the screen

Only the upper left part of the screen cannot be filled with yellow.
If returns to the self-check by touching the upper left part, judge that the upper left area operates normally.

4.9 I/O Check

4.9.1 I/O check function

The I/O check is a function which checks whether GOT and PLC can communicate with each other.
If I/O check ends normally, the communication interface and the connection cable hardwares are normal.
To execute I/O check, the communication driver has to be installed in GOT in advance from GT Designer3 or GT Designer2.
Note that the GOT restarts when this function is performed.
Refer to the following for the details related to the installation of the communication driver.

➡ GT Designer3 (GOT2000) Help

■ Communication drivers inapplicable to I/O check

When the following communication drivers are used, the I/O check cannot be executed.

Connection type		Communication driver
Connection to MITSUBISHI PLC	MELSECNET/H connection	MELSECNET/H
	MELSECNET/10 connection	MELSECNET/H
	CC-Link IE Controller Network connection	CC-Link IE Controller Network
	CC-Link IE Field Network connection	CC-Link IE Field Network
	CC-Link connection (Intelligent device station)	CC-Link Ver.2(ID)
	Ethernet connection	Ethernet (MELSEC), Q17nNC, CRnD-700, gateway
Connection to FUJI PLC		FUJI PXR/PXG/PXH
Connection to YASKAWA PLC		YASKAWA GL YASKAWA CP9200(H) YASKAWA CP9300MS (MC compatible) YASKAWA MP2000/MP900/CP9200SH Ethernet (YASKAWA), gateway
Connection to YOKOGAWA PLC		YOKOGAWA FA500/FA-M3/STARDOM Ethernet (YOKOGAWA), gateway
Connection to ALLEN-BRADLEY PLC		EtherNet/IP(AB), gateway
Connection to SIEMENS PLC		SIEMENS S7-200 SIEMENS S7-300/400 Ethernet(SIEMENS S7), gateway
Microcomputer connection		Microcomputer connection
Inverter connection		FREQROL 500/700
MODBUS(R)/TCP connection		MODBUS/TCP, gateway
AZBIL control equipment connection		Azbil SDC/DMC
Connection to RKC temperature controller		RKC SR Mini HG (MODBUS)

4.9.2　Display operation of I/O Check

Maintenance

Touch [I/O check].

I/O check

		ChNo.	Interface/Unit name	I/O check execution
Standard I/F	I/F-1	0	RS422/485	
	I/F-2	1	RS232	CPU
Extend I/F	1st	0	None	
	2nd	0	None	
	3rd	0	None	
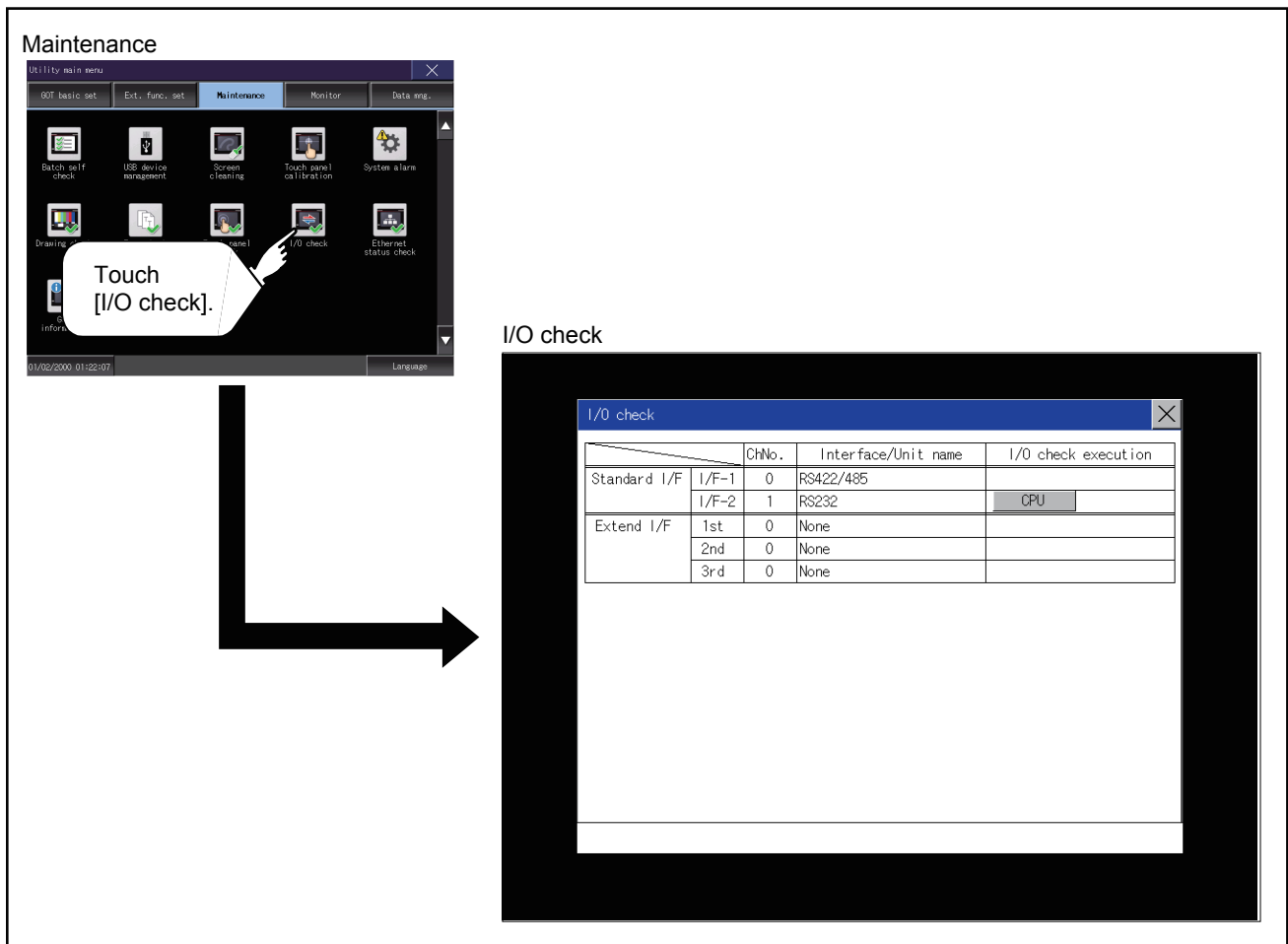
4.9.3　I/O check operation

■ Connecting target confirmation

If touch [CPU] button, the connecting target confirmation communication check is carried out.

1. After the CPU communication starts normally, the dialog mentioned right notifying that it is on checking, until the connecting target confirmation communication ends normally.

2. When the connecting target confirmation communication ends, its result is notified by dialog.

If the connecting target confirmation communication ends normally, the dialog notifying of the normal termination mentioned right is displayed. If touch [OK] button in the dialog after confirming the result, returns to [I/O check].
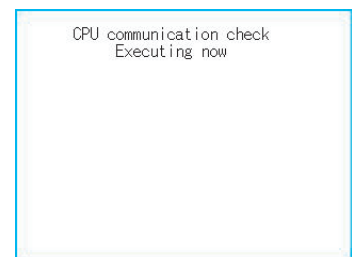
If the dialog mentioned right is displayed after selecting connecting target confirmation or during CPU communication check, confirm the following.

- No misconnection with CPU
  ➡ GOT2000 Series Connection Manual for the controller used
- No missettings of parameter
  ➡ //2.9??????
- Check if the hardware has no problems.
  ➡ GOT2000 Series User's Manual (Hardware)

If touch [OK] button in the dialog after confirming the result, returns to [I/O check].
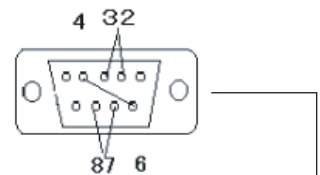
■ Self-loopback

If touch [Self], the hardware check of RS-232 interface is carried out.

1. For preparation for the self-loopback communication check, insert the connector for self-loopback check (Customer purchased) shown in the diagram right in the RS-232 interface.
For this connector, short 2 and 3 pins, 7 and 8 pins and 4 and 6 pins, respectively.

In the communication setting of the GOT utility, set the channel number for the RS-232 interface to 0 ([None]).
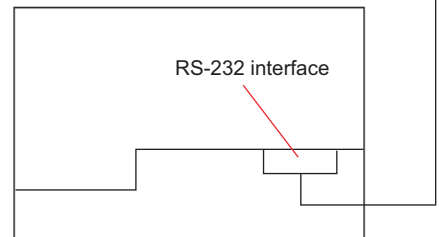
2. After selecting [Self], the transferred data and received data are verified through the self-loopback connector. When the GOT cannot receive the data during the data transmission, the dialog shown right appears and the GOT restarts in five seconds.
When the dialog shown right appears, check the following.
- Check if the pins of the connector for self-loopback check are incorrectly shorted.
- Check if the channel number for the RS-232 interface is set to 0 ([None]) in the communication setting of the GOT utility.
  ➡ //2.9.*?????????
- Check if the hardware has no problems.
  ➡ GOT2000 Series User's Manual (Hardware)
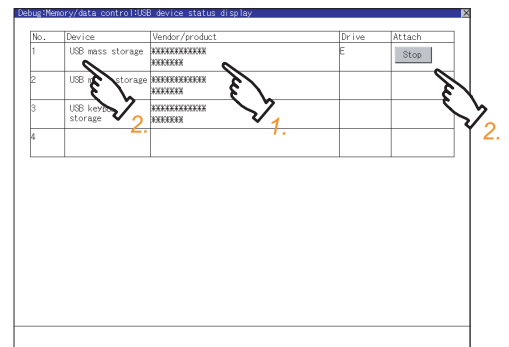
3. During check, the dialog shown right is displayed.
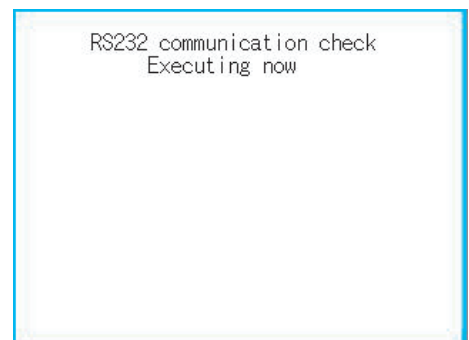
4. When the all checks ended normally, the dialog shown right is displayed. And the GOT restarts in five seconds.

```
RS232 communication check
        No error
        Restart
```

5. When an error occurs, the dialog that shows the GOT abnormal termination and the byte with the error appears, and then the GOT restarts in five seconds.
   When the dialog shown right appears, check the following.
   • Check if the hardware has no problems.

   ➠ GOT2000 Series User's Manual (Hardware)

```
RS232 communication check
        Error
     Verify 4 BYTE
        Restart
```

4.10 Ethernet Status Check

4.10.1 Ethernet status check function

Ethernet status check is a function that sends a ping to check the connection status with the equipment on the Ethernet.

4.10.2 Display operation of Ethernet status check

Touch [Ethernet status check].

Ethernet status check
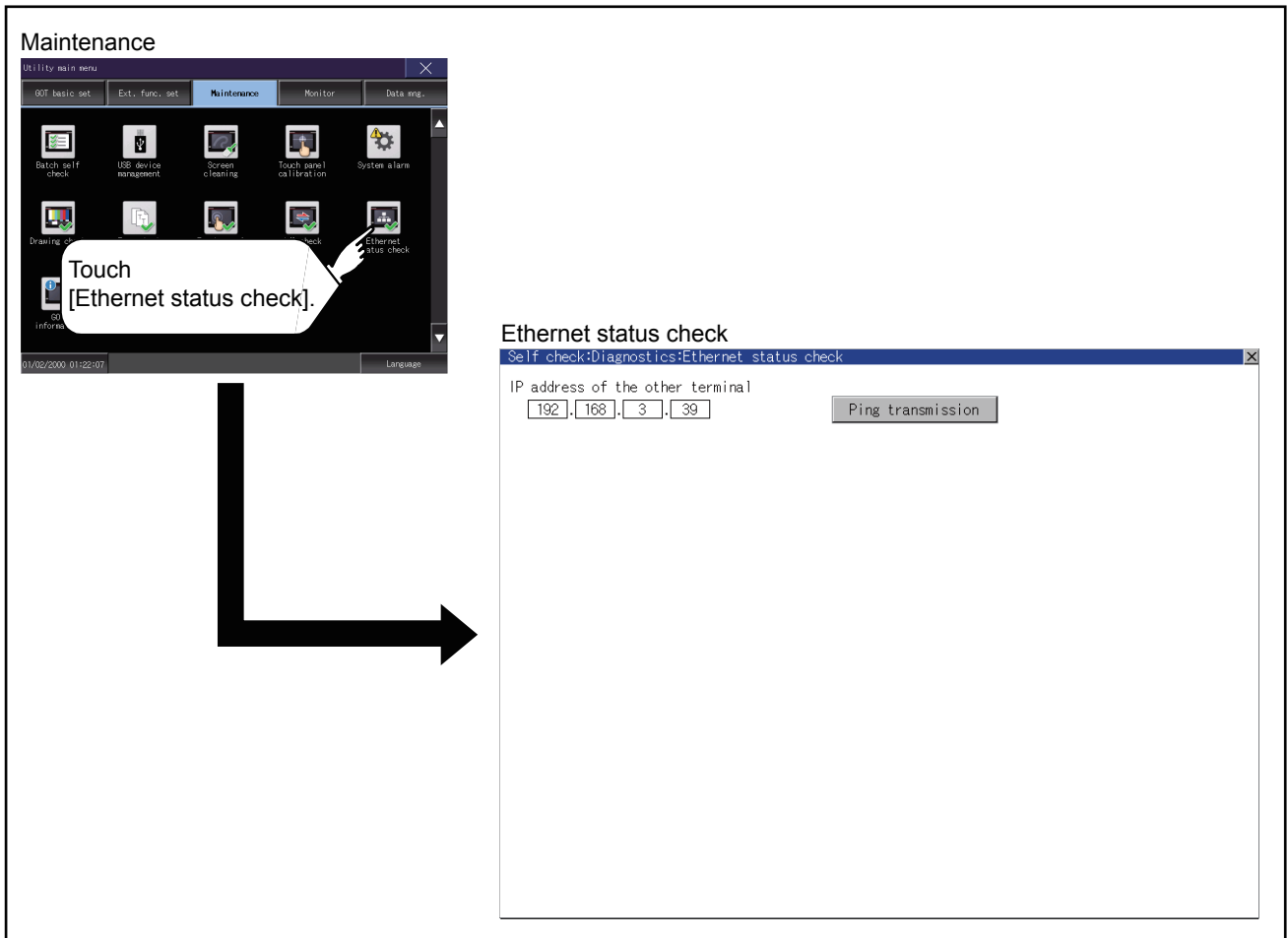
4.10.3 Operation of Ethernet status check
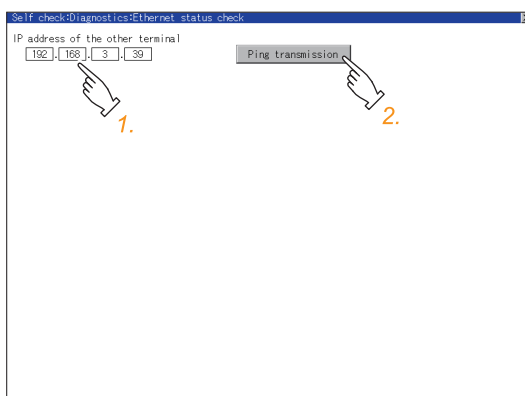
1. If touch the select button of [IP address of the other terminal], a keyboard is displayed.
   Enter the IP address of the other terminal with the keyboard.
   <Default: 192.168.3.39>

2. If touch the [Ping transmission] button, a ping is sent to the IP address entered in [IP address of the other station].
   The result is displayed in the dialog.
   The timeout time is about 5sec.

4.11 GOT Information

4.11.1 GOT information function

GOT information is the function to display the following GOT information.
- Communication driver written in the GOT
- Serial number
- MAC address
- H/W version
- S/W version at factory shipment
- Communication unit mounted on the GOT
- Option unit mounted on the GOT
- Capacity of the SD card mounted on A drive/B drive

4.11.2 Display operation of GOT information

4.11.3 Display of GOT information

```
GOT setup:GOT maintenance function:GOT information                    [X]

   Communication driver          A/QnA/L/QCPU,L/QJ71C24          Ver.05.16.50


   GOT system architecture info    S/N        GOT08616AA02001A
                                   MAC address 08-00-70-AB-23-84
                                   H/W version AA
                                   S/W version AA
                                   UNIT




                                   OPTION
                                   CFCard   A:    511664128 byte
                                            B:            0 byte
```
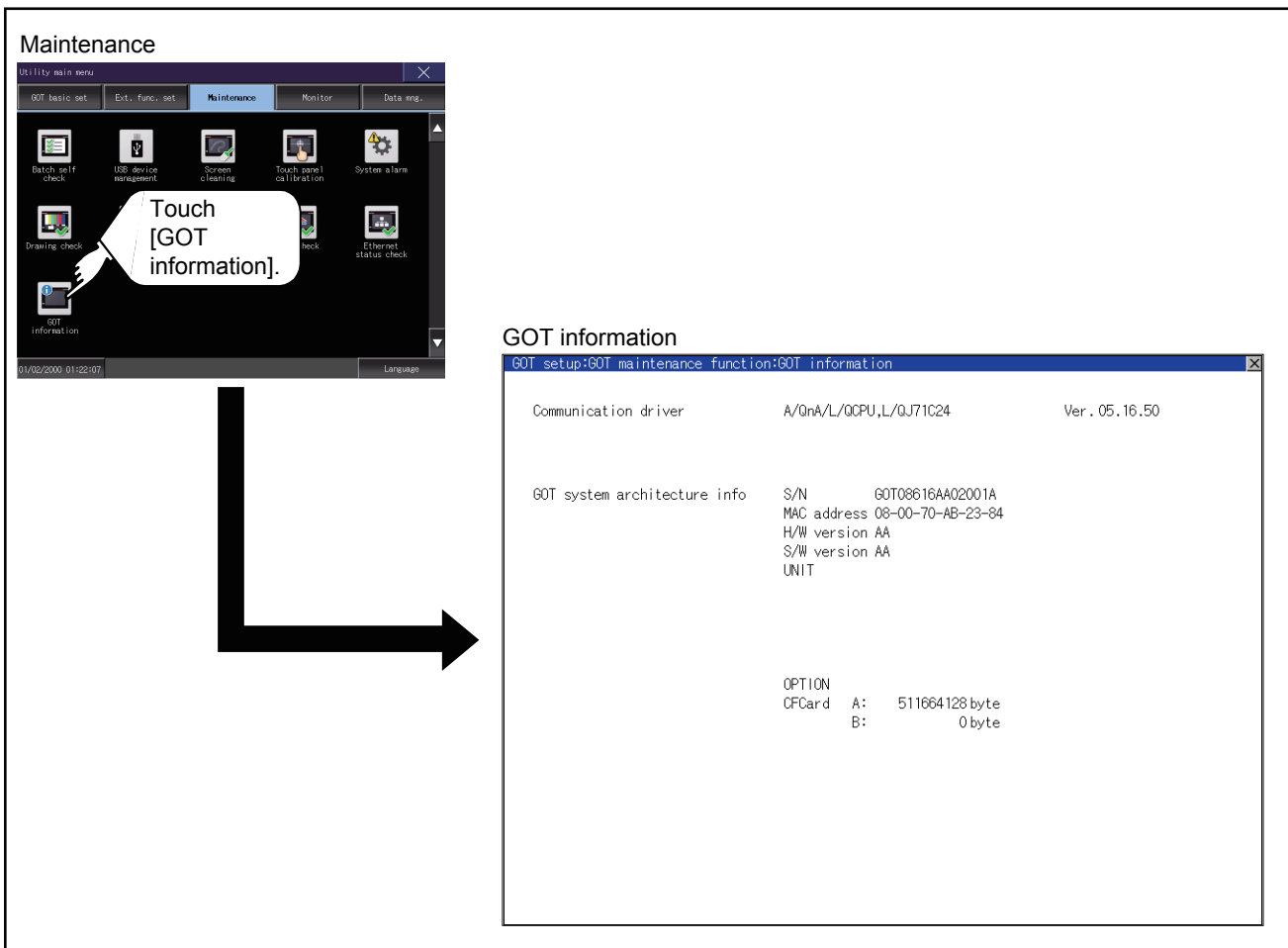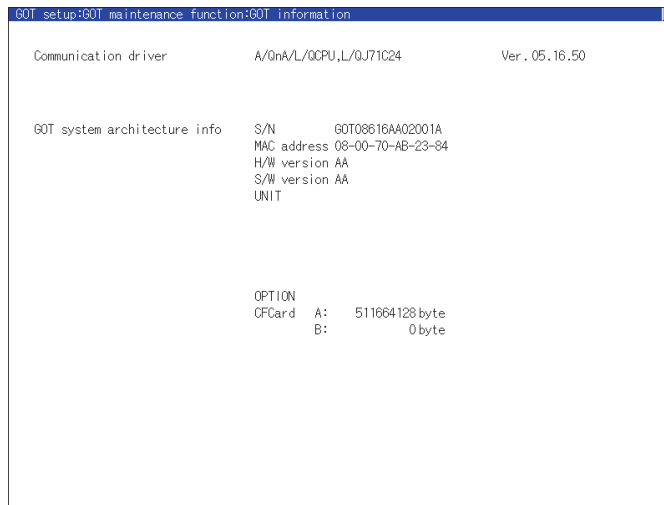
Item	Description
Communication driver	Displays the communication driver written to the GOT.
S/N	Displays the serial number.
MAC address	Displays the MAC address.
H/W version	Displays the H/W version.
S/W version	Displays the S/W version at factory shipment.
UNIT	Displays the communication unit mounted on the GOT.
OPTION	Displays the option unit mounted on the GOT.
SDCard	Displays the capacity of the SD card mounted on A drive/B drive.

MEMO

5. MONITOR

5.1 Monitor Screens

The Monitor screens are designed to confirm the device status of PLC CPU and to make the response for PLC system trouble more efficient.
In this manual, the overview of the monitor screens and the operation procedure until displaying the screen are described.
For display contents and operation procedure of monitor screens, refer to the following manual.
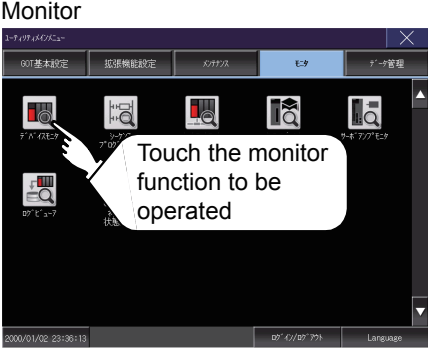
➠ GOT2000 Series User's Manual (Monitor)

5.1.1 Function of monitor screens

The following shows the functions that can be performed with the Monitor screens.

Item	Description
Device monitor	The device of PLC CPU and buffer memory of intelligent function module can be monitored or tested.
Sequence program monitor	The program of PLC CPU can be monitored in ladder format.
Network monitor	The network status of the MELSECNET/H, MELSECNET(II), CC-Link IE Controller Network and CC-Link IE Field Network can be monitored.
Intelligent module monitor	Buffer memory in the intelligent function module can be monitored or the data can be changed on the dedicated screen. And the signal status of I/O modules can be monitored.
Servo amplifier monitor	Various monitor functions, parameter change, test operation, etc. of the servo amplifier are available.
Log viewer	Logging data collected by the high speed data logger module and the LCPU can be browsed, and the logging data can be read via the GOT.
Network status display	The network module status is displayed.
FX list editor	The sequence program of FXCPU can be list edited.
MELSEC-L troubleshooting	The status of MELSEC-L CPU and buttons for functions related to the troubleshooting are displayed.

## 5.1.2　Display operation of monitor screens

6. DATA CONTROL

A system application, project data (screen data), or alarm data which is written in the GOT or data storage can be displayed, and the data can be transferred between the GOT and data storage.
The format of the data storage is also possible.

6.1 Data Type and Storage Location

■ System

The data storage location and transferring (write/read) route for each data type are shown below.
Also, the data storage locations are shown below.
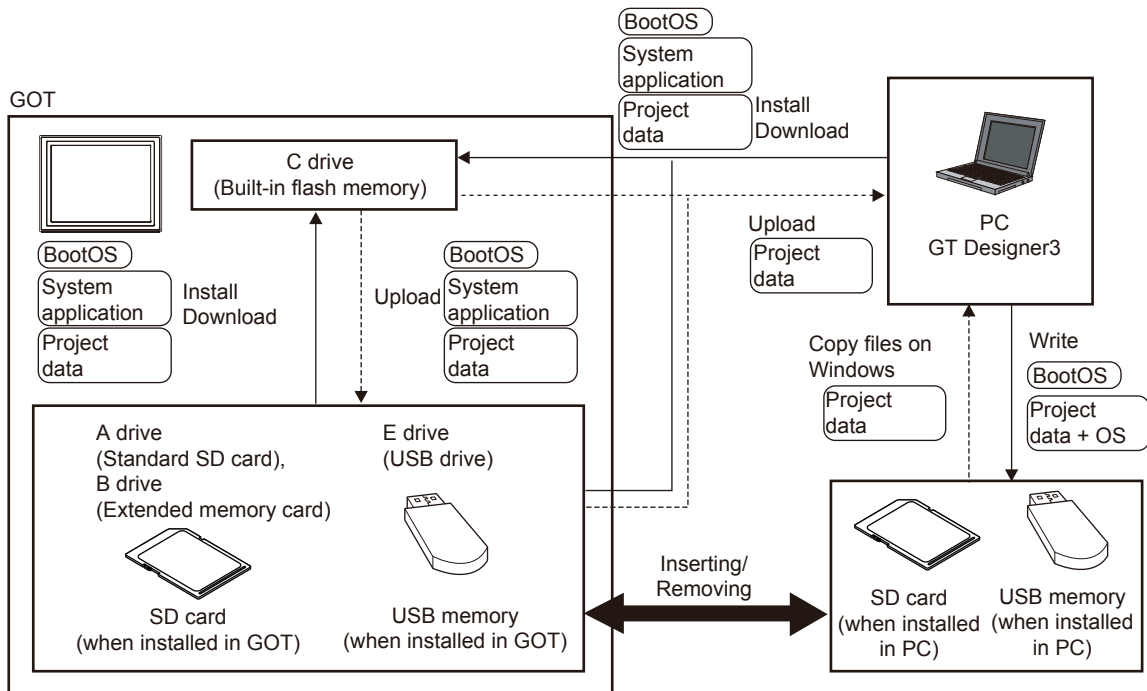
Item	Data type	Storage location
BootOS	BootOS	• Built in flash memory (C drive)
System application [*1]	Basic system application	• Standard SD card (A drive)
	PLC communication driver	• Built in flash memory (C drive)[*2]
	Advanced system application	
Project data [*1]	Project data (Including recipe setting, alarm conditions, time action, and GOT setup.)	• Standard SD card (A drive)[*2] • Built-in flash memory (C drive)[*2]

*1   The USB memory can be used from Utility.

➡   7.3.2 Installing using the data control function (Utility)

*2   When using the project data stored in the Standard SD Card (A drive) with the GOT, hold the SD card installed to the GOT.
For the USB memory, store the project data to the Standard SD Card (A drive) or built-in flash memory (C drive).

■ At maintenance

GOT

C drive
(Built-in flash memory)

Copy
(Alarm)
(Hard copy)

Copy
(Alarm)
(Hard copy)

A drive
(Standard SD card),
B drive
(Extended memory card)

E drive
(USB drive)

SD card
(when installed
in GOT)

USB memory
(when installed
in GOT)

Resource data
Upload
(Alarm)
(Recipe)
(Logging)
(Operation log)
(Hard copy)

PC
GT Designer3

Copy files on
Windows

(Alarm)
(Recipe)
(Logging)
(Operation log)
(Hard copy)

SD card
(when installed
in PC)

USB memory
(when installed
in PC)

Inserting/Removing

Install, Download, Write: ⟶

Upload, Read: ◂----------

The data of the build in flash memory (Project data, etc.) can be saved even if the battery voltage becomes low.

Item	Data type	Storage location
(Alarm)	Alarm data (Alarm log file)	• Standard SD card (A drive) • USB drive (B drive)[*1] • USB drive (E drive)[*1] • USB drive (F drive)[*1] • USB drive (G drive)[*1]
(Recipe)	Recipe data (Advanced recipe file, Recipe file)	
(Logging)	Logging (Logging file)	
(Operation Log)	Operation log (Operation log file)	
(Hard copy)	Image file (Hard copy function)	

*1 The USB memory can be used from Utility.

⇒ 7.3.2 Installing using the data control function (Utility)

■ OS version confirmation

Confirm the system application version carefully when installing the BootOS and basic system application.
When the system application is installed, the GOT checks and compares the system application version automatically.

(1) When install BootOS

When the BootOS to be installed has the older major version, GOT displays the installation disapproving message to cancel the installation so that the older version may not be written.
(Even when the version of the BootOS to be installed has the same or later version, the version information and the dialog box for selecting continue/not continue will be displayed.)
Depending on the installation method, the dialog to be displayed varies.
- When installing from the standard SD card, the dialog is displayed by the main unit.
- When installing from GT Designer3 via USB, RS-232, or Ethernet, the dialog is displayed by GT Designer3.

(2) When install basic system application, communication driver, or advanced system application

When a basic system application, communication driver, or advanced system application has already been installed, the version information of the system application which has been installed and the dialog for selecting whether to continue the installation or not will be displayed.
Moreover, when the different versions will coexist among all applications (basic system application, communication driver, and advanced system application) by installing the system application, the installation disapproving dialog will be displayed and the installation process is canceled.

(3) When download project data

The GOT automatically compares the version between the project data to be downloaded and the installed system application.
When the versions are different, the dialog confirming whether to install the system application together is displayed.

When downloading the project data from a data storage, storing the project data and system application beforehand is recommended.

POINT

Version confirmation of BootOS by rating plate

Confirm the version of BootOS installed in the GOT at product shipment by rating plate of GOT rear face.

BootOS version
(In case that the BootOS is two digits, only the first digit
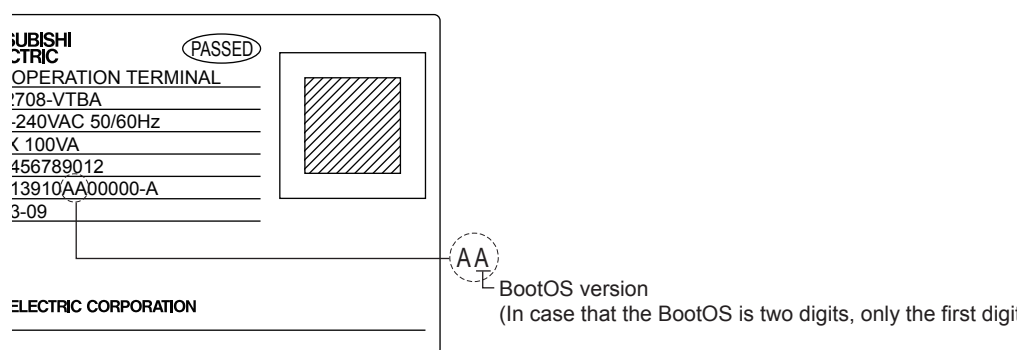
■ Capacity confirmation of the project data downloading location

When download the project data, confirm the capacity of the user area in the drive to which transferred, the transferred project data size, the transfer size and buffering area size of the advanced system application in advance to judge whether to carry out the download.
The capacities can be confirmed by GT Designer3.
Refer to the following for details.

➡ GT Designer3 (GOT2000) Help

6.2　Alarm Information

6.2.1　Function of alarm information

The alarm log file held by each drive (A: Standard SD card, B: USB drive, C: built-in flash memory, E: USB drive, F: USB drive, G: USB drive) is displayed.
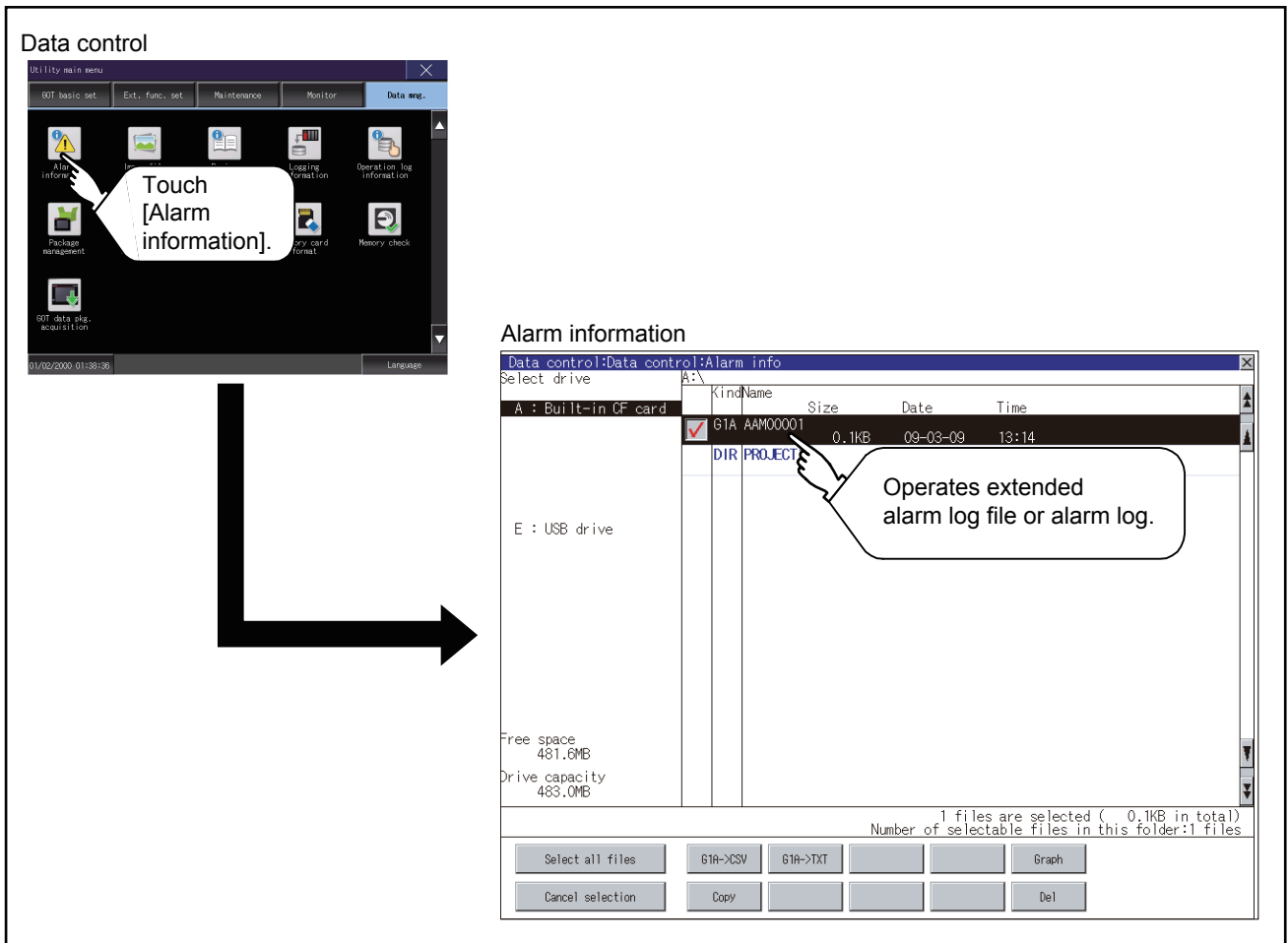The functions below can be carried out for files.
The USB drive only stores log files, and cannot be displayed.
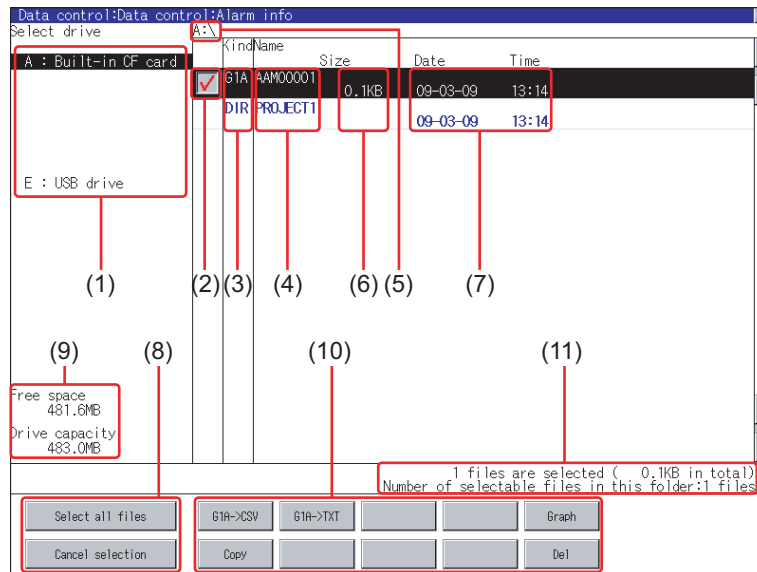For details of the alarms, refer to the following.

　　　　⫸　• GT Designer3 (GOT2000) Help

Function	Description	Reference
Information display of files and folders	Displays name, data size, creation date and time of file or folder.	6.2.3 The display example of alarm information, 6.2.4 Alarm information operation
G2A → CSV conversion	Converts the G2A file of an advanced alarm log file to a CSV file.	■G2A → CSV conversion operation, G2A → TXT conversion operation
G2A → TXT conversion	Converts the G2A file of an advanced alarm log file to a TXT file.	■G2A → CSV conversion operation, G2A → TXT conversion operation
Deletion	Deletes the file.	■Deletion operation
Copy	Copies the file.	■Copy operation

6.2.2 The display operation of alarm information

Data control

Touch [Alarm information].

Alarm information

Operates extended alarm log file or alarm log.

DATA CONTROL

6

6.2.3 The display example of alarm information

| Number	Item	Description
(1)	Select drive	The drive which displays file or folder can be selected. When an SD card or USB memory is not installed, the following drives are not displayed. ?• SD card: [A: SD????] ?• USB memory: [B: USB????], [E: USB????], [F: USB????], and [G: USB????]
(2)	Check box	If the check box is selected, up to 512 files can be selected.
(3)	Kind	Indicates whether the displayed name is file or folder. Displays the extension for a file and "DIR" for a folder.
(4)	Name	Displays the file name or folder name. For the long file/folder name, entire part may not be displayed. Confirm the non-displayed part with the [Copy] button, etc. ➡ ■Copy operation After confirmation, touch the [Cancel] button to cancel the operation.
(5)	Path name	Displays the path name of drive /folder which is currently displayed.
(6)	Size	Displays the size of the file displayed in Name.
(7)	Date and time	Displays the creation date and time of each file.
(8)	The size of drive	Displays the size in use and the entire size of the drive which is selected by drive selection.
(9)	Select all files/Cancel selection	Multiple files can be selected or canceled at once. Touch the [Select all files] button to select all files. If the number of the displayed files exceeds 513, the first 512 files are selected.
(10)	Operation switch	Execution switch of each function.
(11)	Number of folders and files	Displays the total number of the displayed files and folders.

POINT

Display of creation date and time
The creation date and time display is not updated even if a file is created or updated while displaying the alarm information display screen.
If close the screen currently displayed (moving the screen to the folder of the upper hierarchy, etc.) and display the screen again, the updated contents are displayed.

## 6.2.4 Alarm information operation

■ The display operation of alarm information
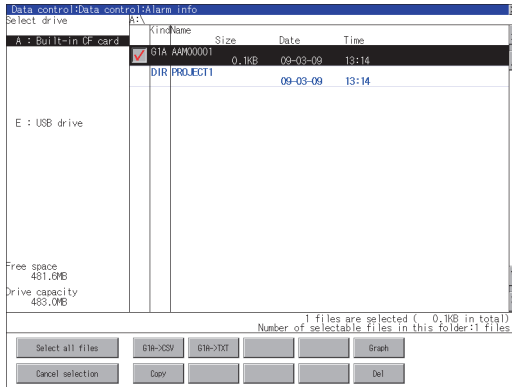
1. If touch a drive of [Select drive], the information of the touched drive is displayed.

2. If touch a folder name, the information of the touched folder is displayed.

3. If touch a folder of ". .", the information of the folder of the one upper hierarchy is displayed.

4. If touch the ▲ ▼ button of the scrollbar, the screen scrolls up/down by one line.
   ⬆ ⬇ If touch the ### button, the screen scrolls up/down by one screen.

5. Touch the check box to select the file.

6. For operations of G2A → CSV conversion, G2A → TXT conversion, deletion, and copy, refer to the following.
   G2A → CSV,
   G2A → TXT................. ➡ ■G2A → CSV conversion operation, G2A → TXT conversion operation

   Delete............................. ➡ ■Deletion operation

   Copy.......................... ➡ ■Copy operation

7. If touch the [×] button, the screen is closed.

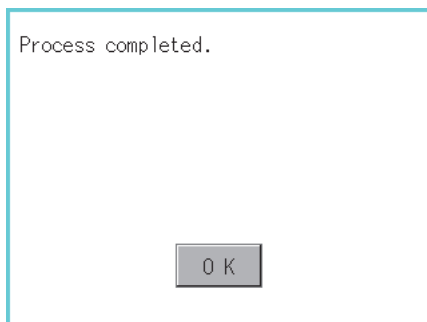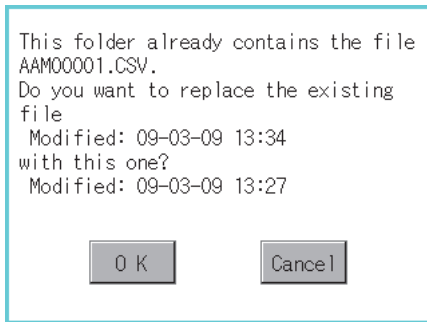### ■ G2A → CSV conversion operation, G2A → TXT conversion operation
The selected G2A file is converted to a CSV file or TXT file.
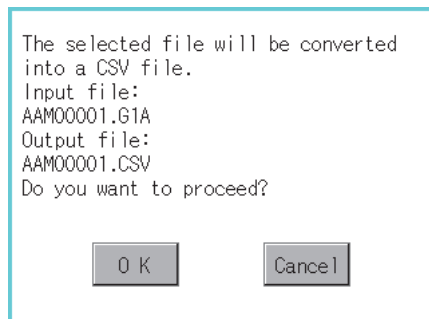
1. Touch the check box of the G2A file which is to be converted to a CSV file or TXT file to select the file.

2. The following dialog box is displayed when touching the following button according to the file type to convert to.
   • CSV file: [G2A → CSV] button
   • TXT file: [G2A → TXT] button

(Continued to next page)

(Example: Dialog box when the [G2A → CSV] button is touched)

```
This folder already contains the file
AAM00001.CSV.
Do you want to replace the existing
file
 Modified: 09-03-09 13:34
with this one?
 Modified: 09-03-09 13:27


       [ O K ]        [ Cancel ]
```
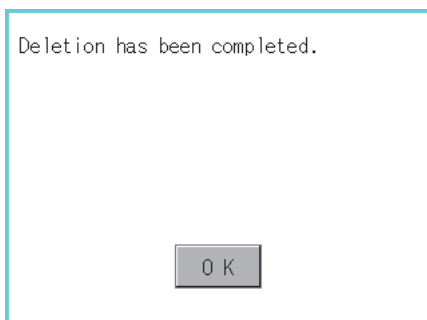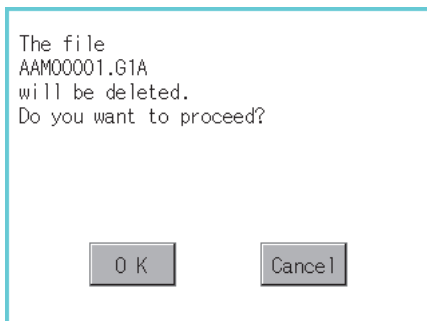
```
Process completed.




             [ O K ]
```

3. Touch the [OK] button.
When the file, whose name is the same, exists in the destination folder, the dialog box showed at left appears without starting the conversion. To overwrite the file, touch the [OK] button. To cancel the conversion, touch the [Cancel] button.

4. The message of completion is displayed in dialog box when conversion is completed. To close the dialog box, touch the [OK] button.

■ **Deletion operation**
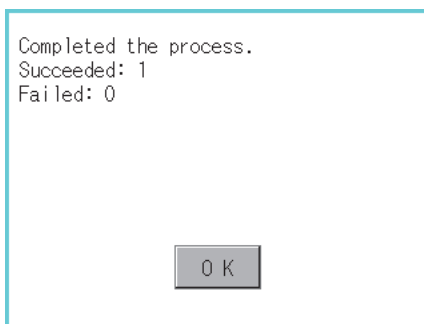Deletes the selected file.

```
The file
AAM00001.G1A
will be deleted.
Do you want to proceed?



      [ O K ]        [ Cancel ]
```

```
Deletion has been completed.




             [ O K ]
```
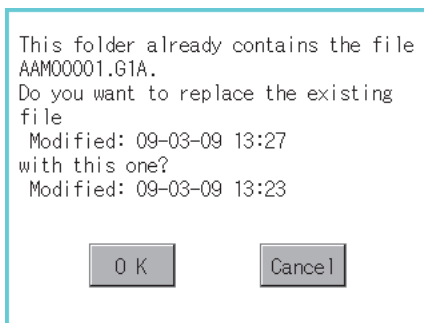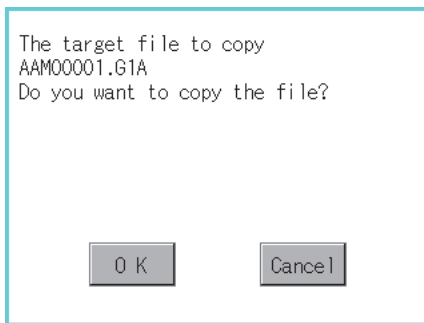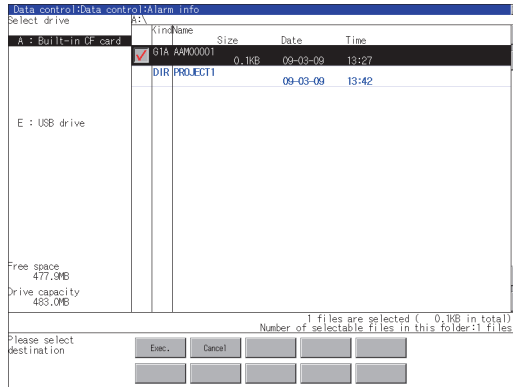
1. Touch the check box of the file to delete to select the file.

2. If touch the [Del] button, the dialog box mentioned left is displayed. If touch the [OK] button, the file is deleted. If touch the [Cancel] button, the deletion is canceled.

3. When the deletion is completed, the completion dialog box is displayed. To close the dialog box, touch the [OK] button.

■ Copy operation

Copies the selected file.

1. Touch the check box of the file to copy to select the file.

2. If touch the [Copy] button, the message [Please select a destination.] is displayed in the left bottom of the screen.

3. If the copy destination folder is touched, the screen display is changed to the folder of copy destination.
   At this time, it cannot be copied into the same folder where the file exists.
   Select other folders.

4. If touch the [Exec] button, the dialog box mentioned left is displayed.

5. Touch the [OK] button.
   If there is a file of the same name in the copy destination folder, the following dialog is displayed without starting the copy.
   If touch the [OK] button, overwrites the file.
   If touch the [Cancel] button, cancels to copy.

6. When the copy is completed, the dialog box of completion is displayed.
   To close the dialog box, touch the [OK] button.

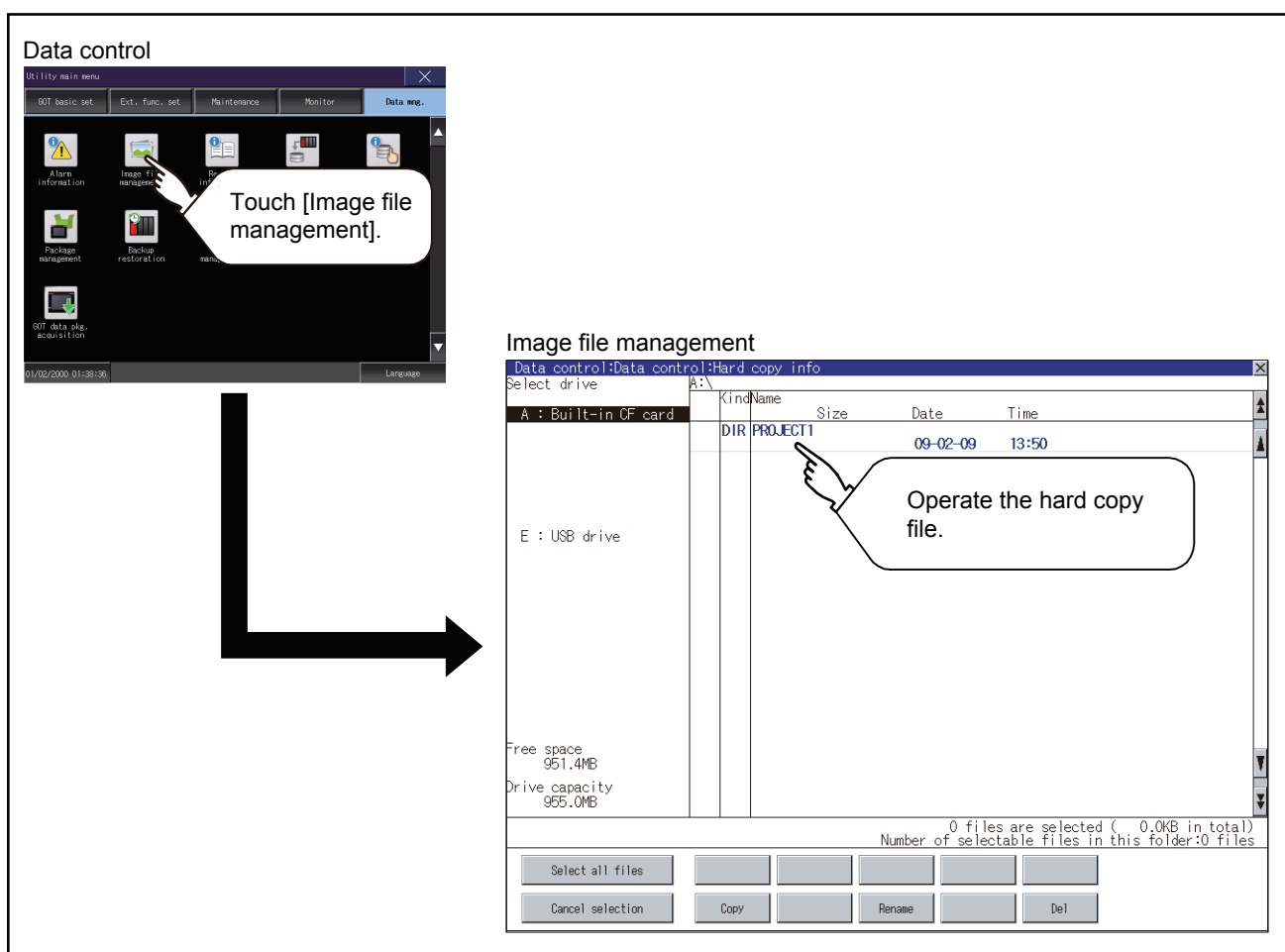6

DATA CONTROL

6.3　Image File Management

6.3.1　Function of image file management

Deletes, copies, moves, and rename the file created by the hard copy function and creates a new folder for such a file.
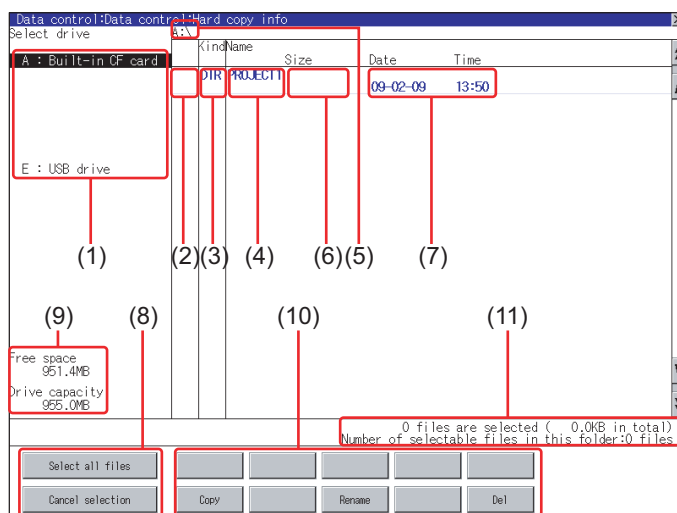For details of the hard copy function, refer to the following.

➩　GT Designer3 (GOT2000) Help

Function	Description	Reference
Information display of files and folders	Displays the kind, name, data size, creation date and time of the file or folder.	6.3.3 Display example of image file management6.3.4 Operation of image file management
Deletion	Deletes the file.	■Deletion operation
Copy	Copies the file.	■Copy operation
Move	Moves the file.	■Move operation
Rename	Renames the file.	■Rename operation
Create Folder	New folder is created.	■Folder create operation

6.3.2　Display operation of image file management

Data control

Touch [Image file management].

Image file management

Operate the hard copy file.

6.3.3 Display example of image file management

| Number	Item	Description
(1)	Select drive	The drive which displays file or folder can be selected. When an SD card or USB memory is not installed, the following drives are not displayed. • SD card: [A: SD????] • USB memory: [B: USB????], [E: USB????], [F: USB????], and [G: USB????]
(2)	Check box	If the check box is selected, up to 512 files can be selected.
(3)	Kind	Indicates whether the displayed name is file or folder. Displays the extension for a file and "DIR" for a folder.
(4)	Name	Displays the file name or folder name. For the long file/folder name, entire part may not be displayed. Confirm the non-displayed part with the [Copy] button, etc. ➠ ■Copy operation After confirmation, touch the [Cancel] button to cancel the operation.
(5)	Path name	Displays the path name of drive /folder which is currently displayed.
(6)	Size	Displays the size of the file displayed in Name.
(7)	Date and time	Displays the creation date and time of each file.
(8)	The size of drive	Displays the size in use and the entire size of the drive which is selected by drive selection.
(9)	Select all files/Cancel selection	Multiple files can be selected or canceled at once. Touch the [Select all files] button to select all files. If the number of the displayed files exceeds 513, the first 512 files are selected.
(10)	Operation switch	Execution switch of each function.
(11)	Number of folders and files	Displays the total number of the displayed files and folders.

POINT

Display of creation date and time

The creation date and time display is not updated even if a file is created or updated while the image file management screen is displayed. To display the updated creation date and time, close the screen currently displayed (by moving to the upper hierarchy folder, etc.) and display the screen again.

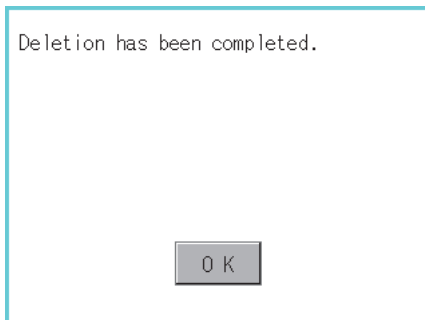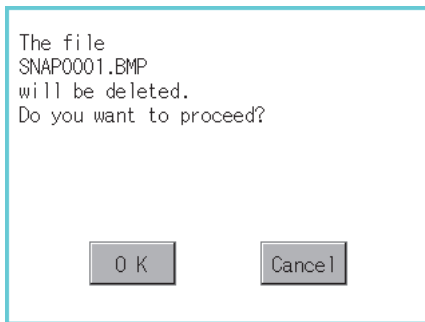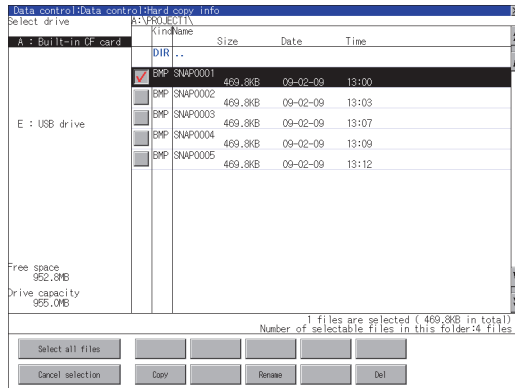## 6.3.4 Operation of image file management

■ **Display operation of image file management**
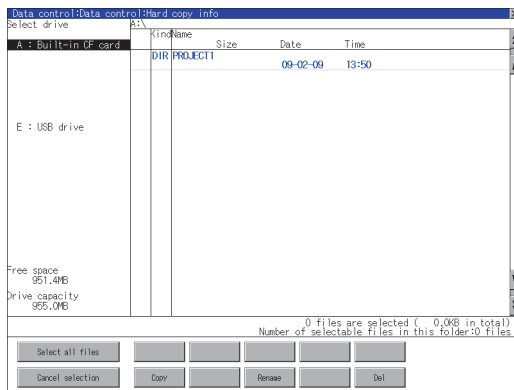
1. If touch a drive of [Select drive], the information of the touched drive is displayed.

2. If touch a folder name, the information of the touched folder is displayed.

3. If touch a folder of ". .", the information of the folder of the one upper hierarchy is displayed.

4. If touch the ▲ ▼ button of the scrollbar, the screen scrolls up/down by one line.

5. Touch the check box to select the file.

6. For the operations of the delete, copy, and rename, refer to the following.
   Delete............................. ➞ ■Deletion operation

   Copy.......................... ➞ ■Copy operation

   Rename............... ➞ ■Rename operation

7. If touch the [×] button, the screen is closed.

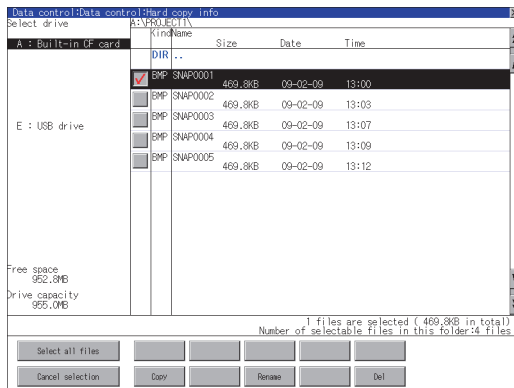## ■ Deletion operation

Deletes the selected file.

1. Touch the check box of the file to delete to select the file.

2. If touch the [Del] button, the dialog box mentioned left is displayed.
If touch the [OK] button, the file is deleted.
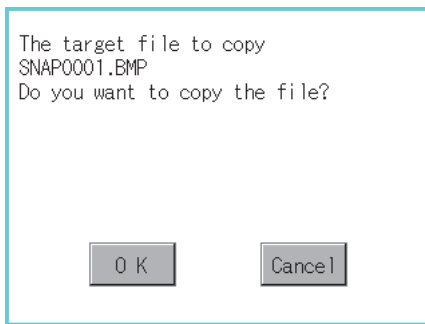If touch the [Cancel] button, the deletion is canceled.

3. When the deletion is completed, the completion dialog box is displayed.
To close the dialog box, touch the [OK] button.
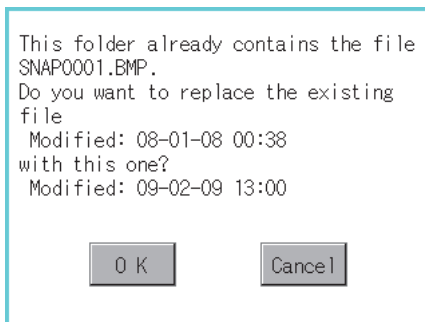
■ Copy operation

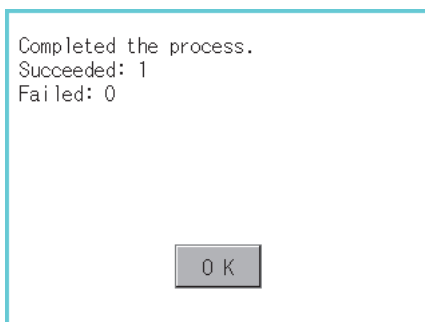Copies the selected file.

1. Touch the check box of the file to copy to select the file.

2. If touch the [Copy] button, the message [Please select a destination.] is displayed in the left bottom of the screen.

3. If the copy destination folder is touched, the screen display is changed to the folder of copy destination.
   At this time, it cannot be copied into the same folder where the file exists.
   Select other folders.

4. If touch the [Exec] button, the dialog box mentioned left is displayed.

5. Touch the [OK] button.
   If there is a file of the same name in the copy destination folder, the following dialog is displayed without starting the copy.
   If touch the [OK] button, overwrites the file.
   If touch the [Cancel] button, cancels to copy.

6. When the copy is completed, the dialog box of completion is displayed.
   To close the dialog box, touch the [OK] button.

■ Rename operation

Rename the selected file.
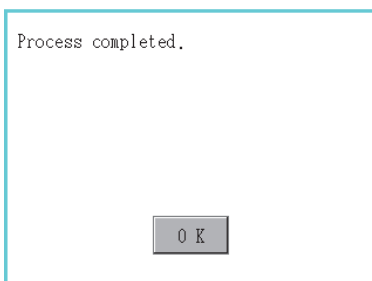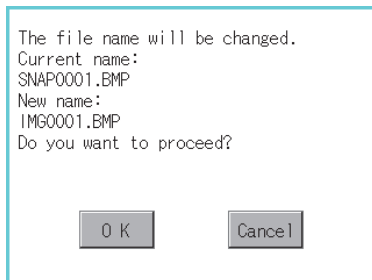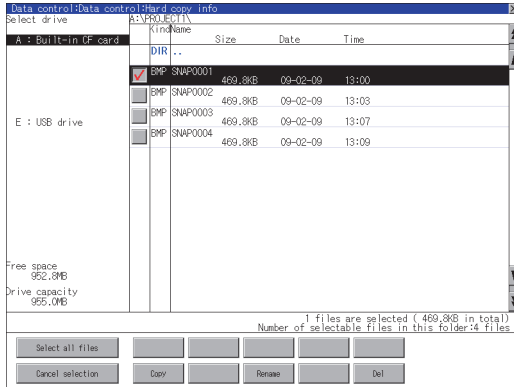
1. Select the check box of the file to be renamed by touching.

2. Touch the [Rename] button, and then the screen shown left is displayed. Input a new file name. By touching the following button, input text type is changed.

[A-Z]: Alphabet capital

[0-9]: Numeric/Symbol

3. Touch the [Enter] button, and then the dialog box shown left is displayed.

4. Touch the [OK] button, and then renaming the file is started.

5. When renaming the file is completed, a completion dialog box is displayed.
To close the dialog box, touch the [OK] button.

6.4 Recipe Information

POINT

Before using recipe information

For writing/reading into/from a controller with this function or editing of recipe files on the personal computer, refer to the following.

Specifications and operating procedure are described.

➠ • GT Designer3 (GOT2000) Help

6.4.1 Function of recipe information

The recipe file used in the recipe function can be copied, deleted, and output in a file.
In addition, it is possible to writing/reading into/from a controller by using this function, without creating the screen to operate the recipe. (Recipe setting of GT Designer3 is required.)

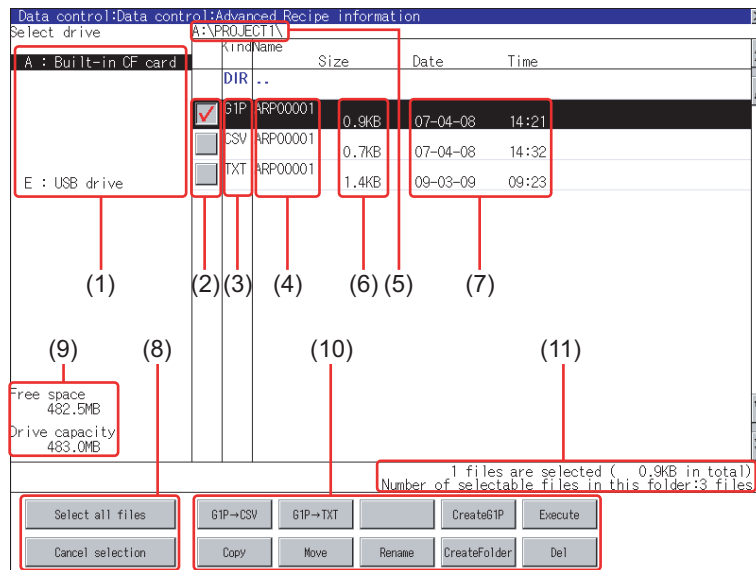| Function	Description	Reference
Information display of files and folders	Displays name, data size, creation date and time of file or folder.	6.4.3 Example of advanced recipe information display, 6.4.4 Recipe information operation
G2P → CSV conversion	Converts a G2P file of a recipe file to a CSV file.	■G2P → CSV conversion operation, G2P → TXT conversion operation
G2P → TXT conversion	Converts a G2P file of a recipe file to a Unicode text file.	■G2P → CSV conversion operation, G2P → TXT conversion operation
CSV/TXT → G2P conversion	Converts a CSV file or TXT file to a G2P file of a recipe file.	■CSV/TXT → G2P conversion operation
Deletion	Deletes a file or holder.	■Deletion operation
Copy	Copies the file.	■Copy operation
Move	Moves the file.	■Move operation
Rename	Renames the file.	■Rename operation
Create Folder	New folder is created.	■Folder create operation
Create G2P	A new G2P file of a recipe file is created.	■G2P file create operation

6.4.2 Display operation of recipe information

Data control

Touch [Recipe information].

Recipe information

Operate the recipe file.

DATA CONTROL

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6.4.3 Example of advanced recipe information display

| Number	Item	Description
(1)	Select drive	The target drive can be selected. (Even if an SD card is not installed, this message appears.)
(2)	Check box	If the check box is selected, up to 512 files can be selected.
(3)	Kind	Indicates whether the displayed name is file or folder. Displays the extension for a file and "DIR" for a folder.
(4)	Name	Displays the file name or folder name. For the long file/folder name, entire part may not be displayed. Confirm the nondisplayed part with the [Rename] button, etc. ⫸ ∎Rename operation After confirmation, touch the [Cancel] button to cancel the operation.
(5)	Path name	Displays the path name of drive /folder which is currently displayed.
(6)	Size	Displays the size of the file displayed in Name.
(7)	Date and time	Displays the creation date and time of each file.
(8)	The size of drive	Displays the size in use and the entire size of the drive which is selected by drive selection.
(9)	Select all files/Cancel selection	Multiple files can be selected or canceled at once. Touch the [Select all files] button to select all files. If the number of the displayed files exceeds 513, the first 512 files are selected.
(10)	Operation switch	Execution switch of each function.
(11)	Number of folders and files	Displays the total number of the displayed files and folders.

POINT

About the displayed file
The files other than that for recipe are not displayed on the recipe information screen.

6.4.4　Recipe information operation
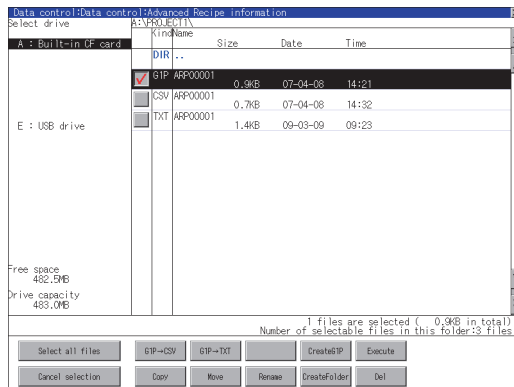
### ■ Display operation of recipe information

1. If touch a drive of [Select drive], the information of the touched drive is displayed.

2. If touch a folder name, the information of the touched folder is displayed.

3. If touch a folder of ". .", the information of the folder of the one upper hierarchy is displayed.

4. If touch the ▲ ▼ button of the scrollbar, the screen scrolls up/down by one line. ⬆ ⬇ If touch the ### button, the screen scrolls up/down by one screen.

5. Touch the check box to select the file.

6. For operation of operating switches, refer to the following.
G2P → CSV, G2P → TXT
.... ⟹ ■G2P → CSV conversion operation, G2P → TXT conversion operation
CSV/TXT → G2P conversion
.... ⟹ ■CSV/TXT → G2P conversion operation

Delete.............................. ⟹ ■Deletion operation

Copy........................... ⟹ ■Copy operation

Move ⟹ ■Move operation

Rename................ ⟹ ■Rename operation

Create Folder....... ⟹ ■Folder create operation

Create G2P.............. ⟹ ■G2P file create operation

7. If touch the [×] button, the screen is closed.

DATA CONTROL

## ■ G2P → CSV conversion operation, G2P → TXT conversion operation

A recipe file (G2P file) is converted to a CSV file or Unicode text file that can be displayed/edited on a personal computer.
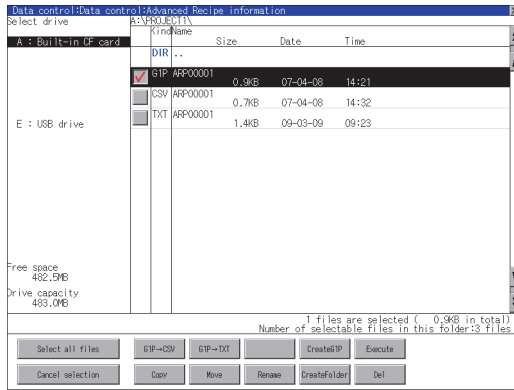
1. Touch the check box of a G2P file which is to be converted to a CSV file or Unicode text file to select the file.

2. Touch the following button in accordance with destination file type.
   • CSV file:
     [G2P → CSV] button
   • Unicode text file:
     [G2L → TXT] button
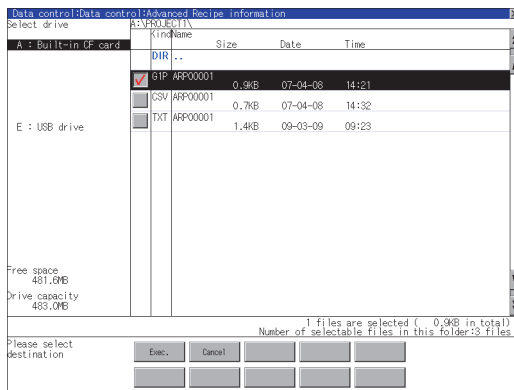
3. Select the target folder.
(Selecting a folder is not needed for outputting directly below the drive.)
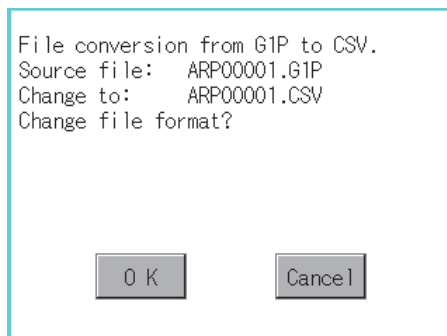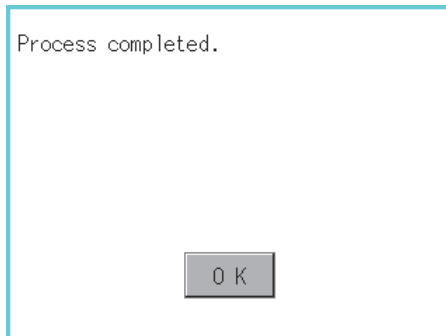

(Example: Dialog box if the [G2P → CSV] button is touched)

4. If touch the [Exec] button, the dialog box mentioned left is displayed.
Touch the [OK] button.
(While executing, "Processing..." message appears on the screen.)

```
This folder already contains the file
ARP00001.CSV.
Do you want to replace the existing
file
 Modified: 07-04-08 14:32
with this one?
 Modified: 07-04-08 14:21


      O K            Cancel
```

5. When the file, whose name is the same, exists in the destination folder, the dialog box showed at left appears without starting the conversion.
To overwrite the file, touch the [OK] button.
To cancel the conversion, touch the [Cancel] button.

```
Process completed.




          O K
```

6. The message of completion is displayed in dialog box when conversion is completed.
To close the dialog box, touch the [OK] button.

6

DATA CONTROL

■ CSV/TXT → G2P conversion operation

A CSV file or Unicode text file is converted to a recipe file (G2P file).
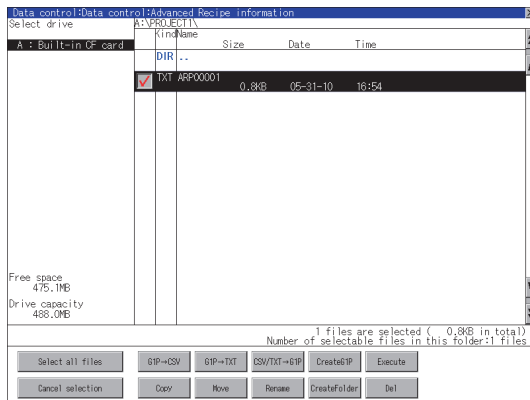
1. To select the file, touch the check box of a CSV file or Unicode text file to be converted to a G2P file.
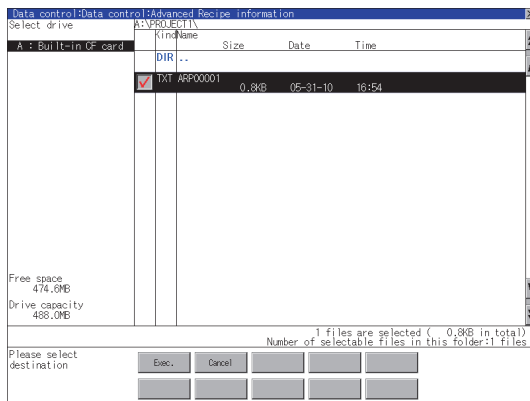
2. Touch the [CSV/TXT → G2P] button to display [Please select destination] at the lower left corner of the screen.

3. Select the target folder.
(Selecting a folder is not needed for outputting directly below the drive.)


```
File conversion from TXT to G1P
Source file:    ARP00001.TXT
Convert to:     ARP00001.G1P
Do you want to convert the file?


         O K              Cancel
```

4. If touch the [Exec] button, the dialog box mentioned left is displayed.
Touch the [OK] button.
(While executing, "Processing..." message appears on the screen.)

(Continued to next page)
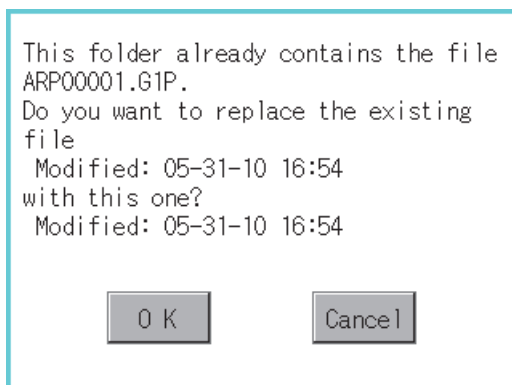
```
This folder already contains the file
ARP00001.G1P.
Do you want to replace the existing
file
 Modified: 05-31-10 16:54
with this one?
 Modified: 05-31-10 16:54


        O K          Cancel
```

5. When the file, whose name is the same, exists in the destination folder, the dialog box showed at left appears without starting the conversion.
To overwrite the file, touch the [OK] button.
To cancel the conversion, touch the [Cancel] button.

6. The message of completion is displayed in dialog box when conversion is completed.
To close the dialog box, touch the [OK] button.

■ Deletion operation

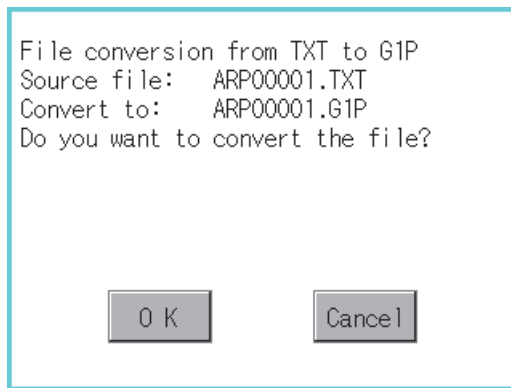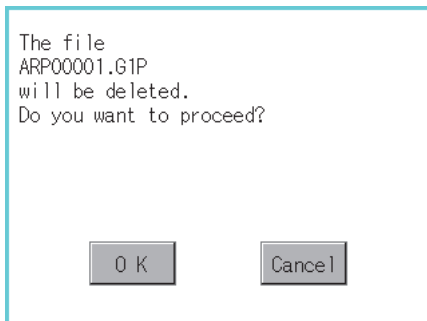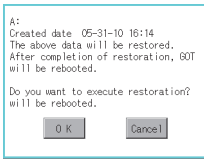Folders and files to be used on recipe are deleted.

```
A:
Created date  05-31-10 16:14
The above data will be restored.
After completion of restoration, GOT
will be rebooted.

Do you want to execute restoration?
will be rebooted.

   [ O K ]      [ Cancel ]
```

1. Touch the folder to delete or the check box of the file to delete to select the file.

```
The file
ARP00001.G1P
will be deleted.
Do you want to proceed?




   [ O K ]         [ Cancel ]
```
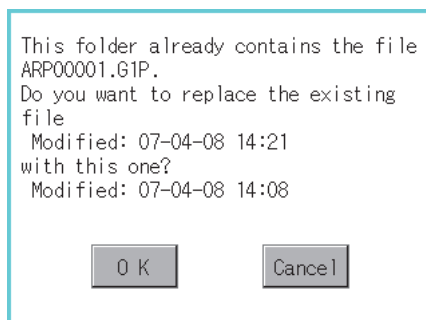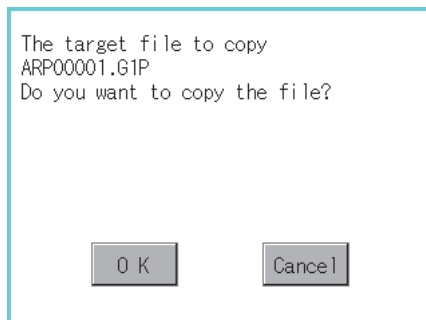
2. If touch the [Del] button, the dialog box mentioned left is displayed.
If touch the [OK] button, the file/folder is deleted.
(While executing, "Processing..." message appears on the screen.)
If touch the [Cancel] button, the deletion is canceled.

```
Deletion has been completed.





           [ O K ]
```

3. When the deletion is completed, the completion dialog box is displayed.
To close the dialog box, touch the [OK] button.

```
The folder cannot be deleted because
files or folders exist.
Hidden files may exist in the GOT.




           [ O K ]
```

4. When it cannot be deleted, the dialog box showed at left appears. (Only when deleting a folder is executed.)
Verify that there is no file in the folder and execute the delete operation again.
➡ 6.5.5 Precautions

■ Copy operation

Folders to be used in recipe are copied.

1. Touch the check box of the file to copy to select the file.

2. Touch the [Copy] button.

3. Select the target folder.
   (Selecting a folder is not needed for outputting directly below the drive.)
   At this time, it cannot be copied into the same folder where the file exists.
   Select other folders.

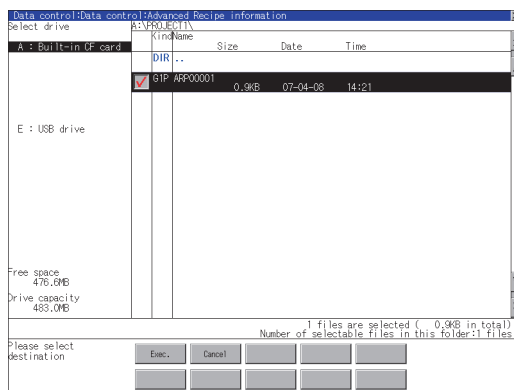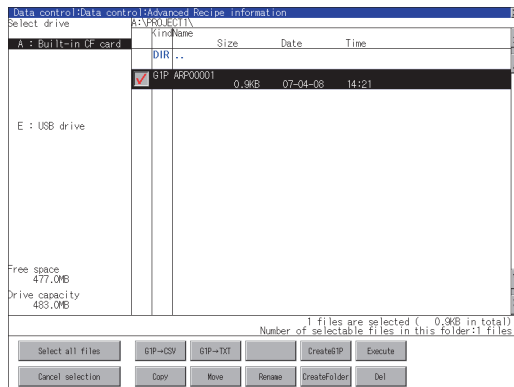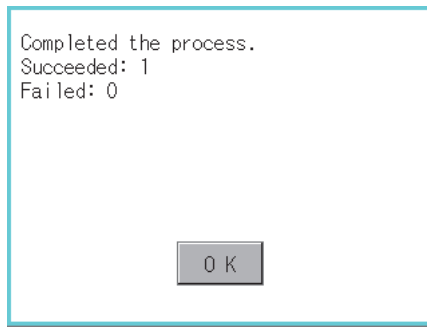The target file to copy
ARP00001.G1P
Do you want to copy the file?

OK   Cancel

4. If touch the [Exec] button, the dialog box mentioned left is displayed.
   Touch the [OK] button.
   (While executing, "Processing..." message appears on the screen.)

This folder already contains the file
ARP00001.G1P.
Do you want to replace the existing
file
 Modified: 07-04-08 14:21
with this one?
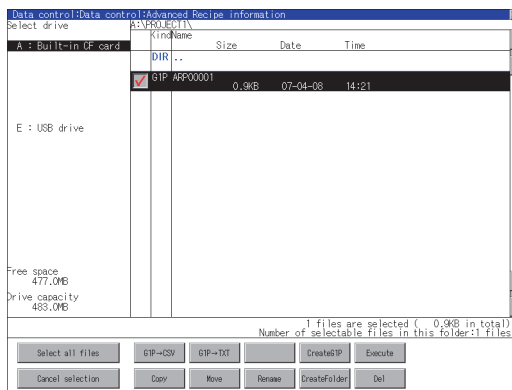 Modified: 07-04-08 14:08

OK   Cancel

5. If there is a file of the same name in the copy destination folder, the following dialog is displayed without starting the copy.
   If touch the [OK] button, overwrites the file.
   If touch the [Cancel] button, cancels to copy.

(Continued to next page)

```
Completed the process.
Succeeded: 1
Failed: 0




        O K
```

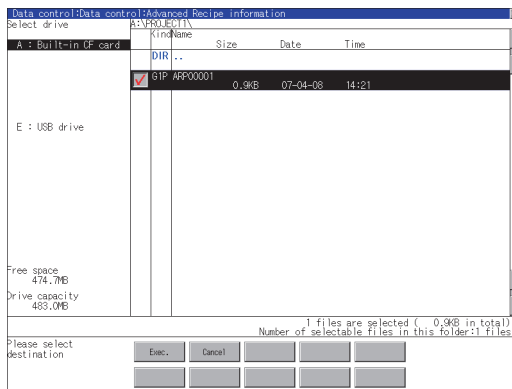6. When the copy is completed, the dialog box of completion is displayed.
   To close the dialog box, touch the [OK] button.

■ **Move operation**
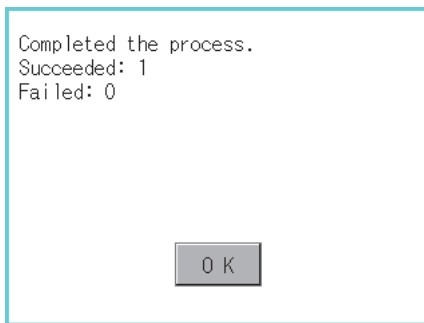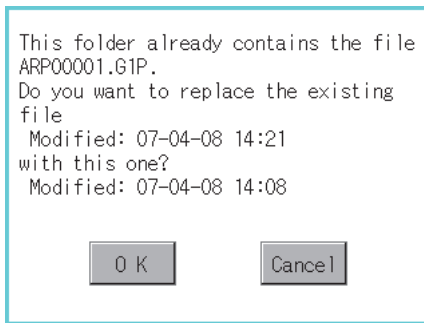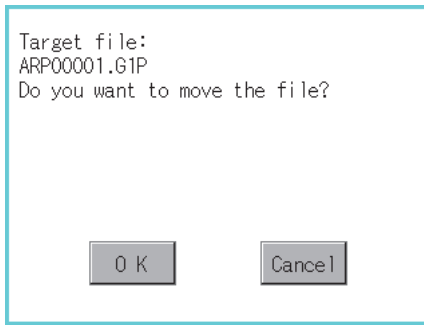
Files to be used in recipe are moved.

1. Touch the check box of the file to be moved to select the file.

2. Touch the [Move] button.

3. Select the target folder.
   (Selecting a folder is not needed for moving directly below the drive.)

(Continued to next page)

```
Target file:
ARP00001.G1P
Do you want to move the file?




        ┌─────┐      ┌──────┐
        │ O K │      │Cancel│
        └─────┘      └──────┘
```

4. If touch the [Exec] button, the dialog box mentioned left is displayed.
Touch the [OK] button.
(While executing, "Processing..." message appears on the screen.)

```
This folder already contains the file
ARP00001.G1P.
Do you want to replace the existing
file
 Modified: 07-04-08 14:21
with this one?
 Modified: 07-04-08 14:08

        ┌─────┐      ┌──────┐
        │ O K │      │Cancel│
        └─────┘      └──────┘
```

5. When any file with the same name exists in the destination folder, the dialog box shown left appears without starting the movement.
Touching the [OK] button overwrites the file.
If touch the [Cancel] button, cancels moving.

```
Completed the process.
Succeeded: 1
Failed: 0




          ┌─────┐
          │ O K │
          └─────┘
```

6. When moving is completed, completion dialog box is displayed.
To close the dialog box, touch the [OK] button.

6

DATA CONTROL

■ Rename operation

File names to be used in recipe are changed.
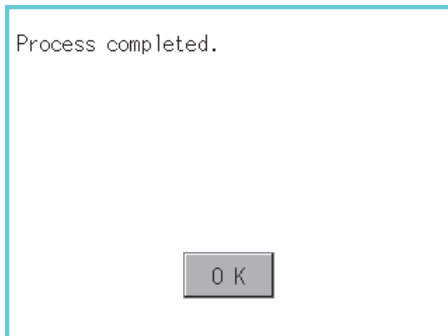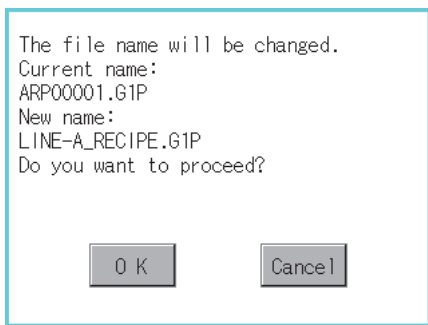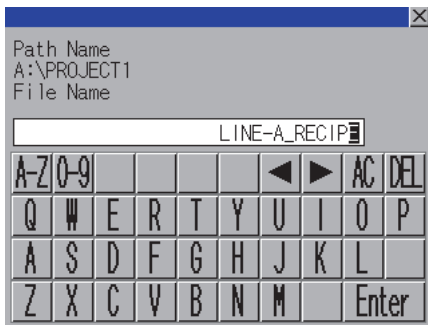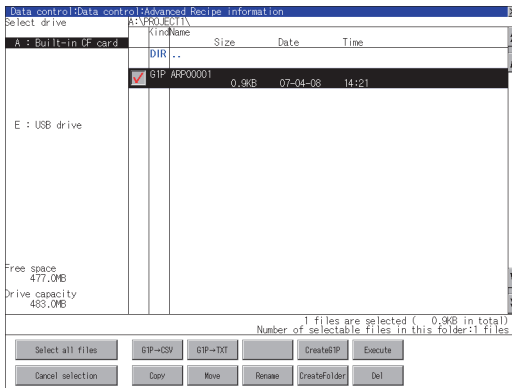
1. Select the check box of the file to be renamed by touching.

2. Touch the [Rename] button, and then the screen shown left is displayed. Input the file name to be changed.
By touching the following button, input text type is changed.

   [A-Z]: Alphabet capital

   [0-9]: Numeric/Symbol

3. Touch the [Enter] button, and then the dialog box shown left is displayed.

4. Touch the [OK] button, and then renaming the file is started.
(While executing, "Processing..." message appears on the screen.)

5. When renaming the file is completed, a completion dialog box is displayed.
To close the dialog box, touch the [OK] button.

■ Folder create operation

Folders to be used in recipe are created.
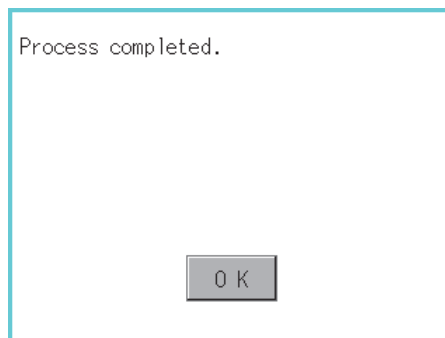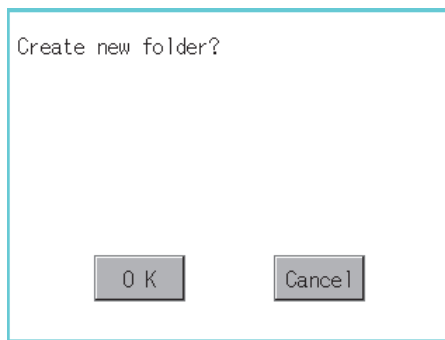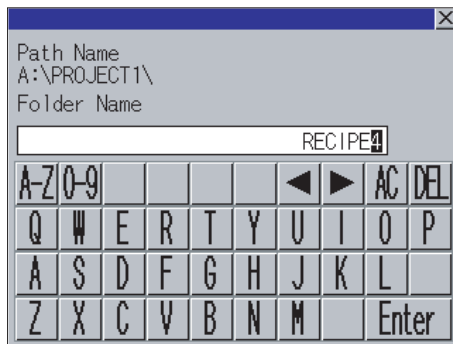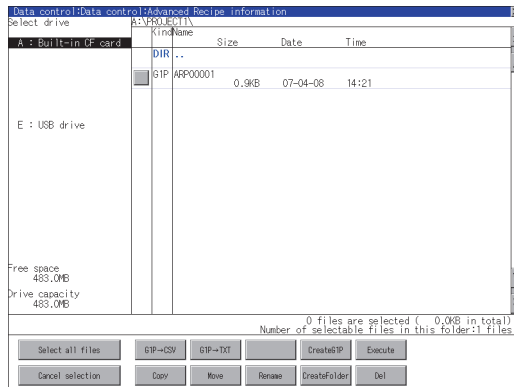
1. Touch the [Create Folder] button.

2. The input key window shown left appears, then input the file name to be created. By touching the following button, input text type is changed.

   [A-Z]: Alphabet capital

   [0-9]: Numeric/Symbol

3. Touch the [Enter] button, and then the dialog box shown left is displayed.

4. If touch the [OK] button, starts creating folder.

5. When creating folder is completed, completion dialog box is displayed. To close the dialog box, touch the [OK] button.

■ G2P file create operation

A recipe file (G2P file) is created.

When recipe is only executed on Utility, the recipe file should be created with this function in advance.
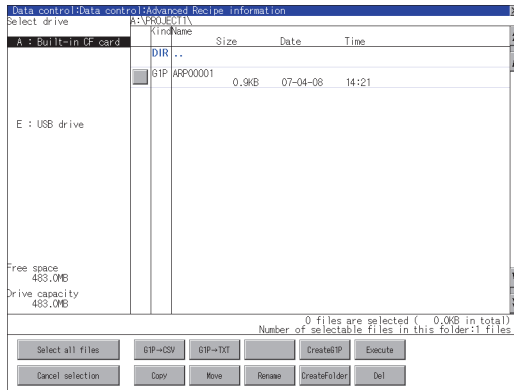
1. Touch the [Create G2P] button.
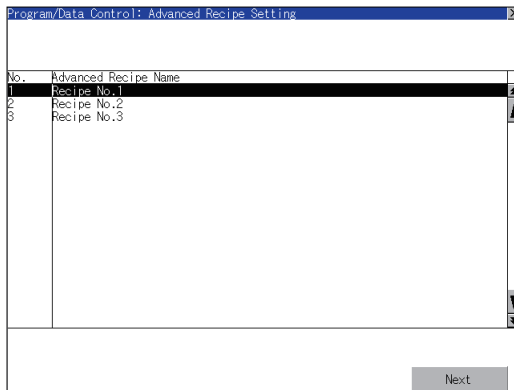
2. The screen to select the recipe setting is displayed.
Select the recipe setting to be used for a new file.
After selecting, touch the [Next] button.

⇩

(Continued to next page)
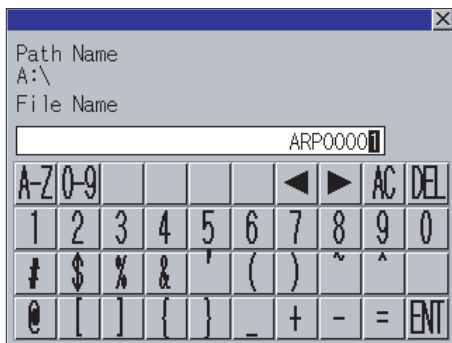
3. As the input key window is displayed, input the file name for new file.
By touching the following button, input text type is changed.

[A-Z]: Alphabet capital

[0-9]: Numeric/Symbol

```
Target file:     A:\ARP00001.G1P
Do you want to create the file?




        OK          Cancel
```

4. Touch the [Enter] button, and then the dialog box shown left is displayed.
   Touch the [OK] button.

```
Target file:     A:\ARP00001.G1P
Do you want to Overwrite the file?




        OK          Cancel
```
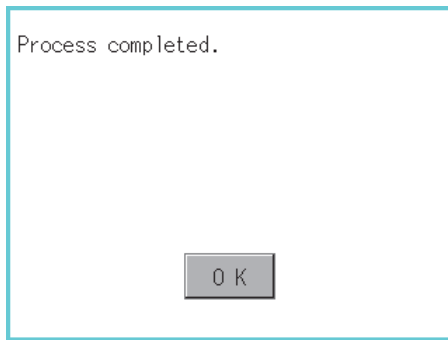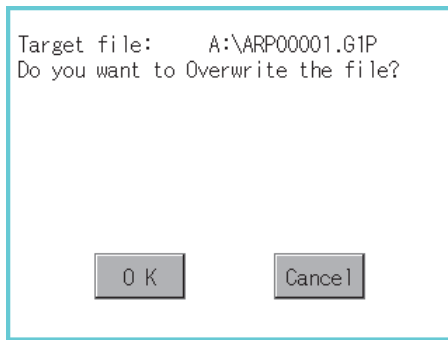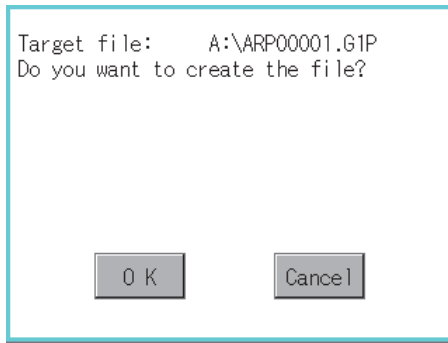
5. When the file, whose name is the same, exists in the destination folder, the dialog box shown left appears without starting the creation.
   Touching the [OK] button overwrites the file.
   If touch the [Cancel] button, cancels creating.

```
Process completed.




            OK
```

6. When creating is completed, completion dialog box is displayed.
   To close the dialog box, touch the [OK] button.

6

DATA CONTROL

6.4.5 Precautions

■ When creating or deleting folders or files

(1) Number of characters set for a folder or file name when creating a folder or file

GOT recognizes file location according to path explained below.

Specify folder or file name, and total characters of path cannot exceed 78 characters.

Users only can rename folder or file name.

(Other than folder/file name is automatically printed.)

Example: CSV file path in a data storage

HINT

If folder is assigned the hierarchy.

The \ mark is displayed between a folder name and folder name, a folder name and file name. The \ mark is also counted as one character.

---

(2) Character strings that cannot be set to a folder/file

The following character strings cannot be used as a folder name or a file name. Even small characters of those cannot be used.

- COM1 to COM9   • LPT1 to LPT9   • AUX   • CON
- NUL   • PRN   • CLOCK$

In addition, the folder/file name showed below cannot be used.
  - The folder name which begins with G2
  - Folder name and file name which begins with . (period)
  - Folder name and file name which ends with . (period)
  - Folder name and file name which has only . (one period) or ..(two periods)

(3) For deleting the folder

The folder in which the file exists cannot be deleted.

Delete the folder after having deleted the files.

In addition, on the recipe information screen, the file other than that for recipe is not displayed on the GOT.

When the folder, in which there is no file displayed on the screen, cannot be deleted, confirm whether there is other file in the data storage by using a personal computer, etc.

■ Precautions for operation

(1) Precautions during folder/file operation (Create/Delete/Copy/File output, etc)
Even if the cover of the SD card interface is opened while the GOT is processing folders and files, the processing continues to be executed. (Example: Even if the cover of the SD card interface is opened while the GOT is creating a folder, the folder is created.)
Therefore, do not pull out the SD card while the "Processing..." message is on the screen after the cover of the SD card interface is opened.

(2) While GOT is accessing to other file (Alarm data, etc)
When folder/file processing for the recipe is executed while the GOT is in access to other file (SD card access LED ON), the GOT executes folder/file processing for the recipe after the processing for other file has completed.
Therefore, it may take some time to finish the process of recipe folder/file.(The "Processing..." message is displayed on the screen.)

HINT

Estimation of processing time
The process may take time depending on the setting of advanced recipe file to be operated. (The more number of blocks increases, the longer it takes to process recipe folder/file.)

(Reference value)
Direct connection to QCPU and CPU(device point:32767 points setting, transmission speed: 115200bps)
  • When the block setting number to1: about 17 seconds
  • When the block setting number to 2048: about 4 minutes

---

(3) For executing the saving/loading of device value with recipe file which has been moved or whose name has been changed
Adjust the [Recipe File] setting of the recipe setting with GT Designer3 or GT Designer2 to the file which has been moved or whose name has been changed.
After the setting has been changed, download the recipe setting to the GOT.

6.5 Logging Information

6.5.1 Function of logging information

Logging files created with the logging function can be copied, deleted or renamed, etc.
Without using a personal computer, you can manage logging files on the GOT.
For details of the logging function, refer to the following.

➠ GT Designer3 (GOT2000) Help

Function	Description	Reference
Information display of files and folders	Displays name, data size, creation date and time of file or folder.	6.5.3 Example of logging information display, 6.5.4 Logging information operation
G2L → CSV conversion	Converts a G2L file of a logging file to a CSV file.	■G2L → CSV conversion operation, G2L → TXT conversion operation
G2L → TXT conversion	Converts a G2L file of a logging file to a Unicode text file.	■G2L → CSV conversion operation, G2L → TXT conversion operation
Deletion	Deletes a file or holder.	■Deletion operation
Copy	Copies the file.	■Copy operation
Move	Moves the file.	■Move operation
Rename	Renames the file.	■Rename operation
Create Folder	New folder is created.	■Folder create operation

6.5.2　Display operation of logging information

Data control

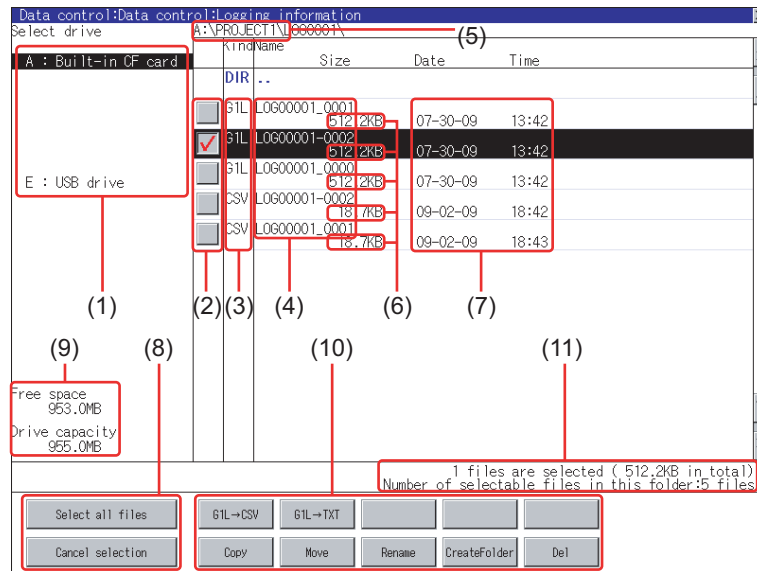Touch [Logging information].

Logging information

Operate the logging file.

DATA CONTROL

6

6.5.3 Example of logging information display

| Numb er	Item	Description
(1)	Select drive	The target drive can be selected. (Even if an SD card is not installed, this message appears.)
(2)	Check box	If the check box is selected, up to 512 files can be selected.
(3)	Kind	Indicates whether the displayed name is file or folder. Displays the extension for a file and "DIR" for a folder.
(4)	Name	Displays the file name or folder name. For the long file/folder name, entire part may not be displayed. Confirm the nondisplayed part with the [Rename] button, etc. ■ Rename operation After confirmation, touch the [Cancel] button to cancel the operation.
(5)	Path name	Displays the path name of drive /folder which is currently displayed.
(6)	Size	Displays the size of the file displayed in Name.
(7)	Date and time	Displays the creation date and time of each file.
(8)	The size of drive	Displays the size in use and the entire size of the drive which is selected by drive selection.
(9)	Select all files/Cancel selection	Multiple files can be selected or canceled at once. Touch the [Select all files] button to select all files. If the number of the displayed files exceeds 513, the first 512 files are selected.
(10)	Operation switch	Execution switch of each function.
(11)	Number of folders and files	Displays the total number of the displayed files and folders.

POINT

About the displayed file
The files other than that for logging are not displayed on the logging information screen.

6.5.4 Logging information operation
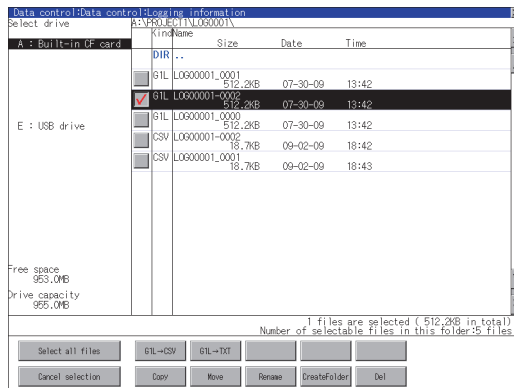
■ Display operation of logging information

1. If touch a drive of [Select drive], the information of the touched drive is displayed.

2. If touch a folder name, the information of the touched folder is displayed.

3. If touch a folder of ". .", the information of the folder of the one upper hierarchy is displayed.

4. If touch the ▲ ▼ button of the scrollbar, the screen scrolls up/down by one line.
   ⬆ ⬇ If touch the ### button, the screen scrolls up/down by one screen.

5. Touch the check box to select the file.

6. For operation of operating switches, refer to the following.
   G2L → CSV, G2L → TXT
   .... ➡ ■G2L → CSV conversion operation, G2L → TXT conversion operation

   Delete................ ➡ ■Deletion operation

   Copy........................... ➡ ■Copy operation

   Move.................. ➡ ■Move operation

   Rename............. ➡ ■Rename operation

   Create Folder..... ➡ ■Folder create operation

7. If touch the [×] button, the screen is closed.

DATA CONTROL

■ G2L → CSV conversion operation, G2L → TXT conversion operation

A logging file (G2L file) is converted to a CSV file or Unicode text file that can be displayed/edited on a personal computer.

(Example: Dialog box if the [G2L → CSV] button is touched)

(Continued to next page)

1. Touch the check box of a G2L file which is to be converted to a CSV file or Unicode text file to select the file.

2. Touch the following button in accordance with destination file type.
- CSV file:
  [G2L → CSV] button
- Unicode text file:
  [G2L → TXT] button

3. Select the target folder.
(Selecting a folder is not needed for outputting directly below the drive.)

4. If touch the [Exec] button, the dialog box mentioned left is displayed.
Touch the [OK] button.
(While executing, "Processing..." message appears on the screen.)

```
This folder already contains the file
LOG00001-0002.CSV.
Do you want to replace the existing
file
 Modified: 09-02-09 18:42
with this one?
 Modified: 07-30-09 13:42


        O K          Cancel
```

5. When the file, whose name is the same, exists in the destination folder, the dialog box showed at left appears without starting the conversion.
   To overwrite the file, touch the [OK] button.
   To cancel the conversion, touch the [Cancel] button.

```
Process completed.




            O K
```

6. The message of completion is displayed in dialog box when conversion is completed.
   To close the dialog box, touch the [OK] button.

■ Deletion operation

Folder and file to be used on logging are deleted.

1. Touch the folder to delete or the check box of the file to delete to select the file.

2. If touch the [Del] button, the dialog box mentioned left is displayed.
If touch the [OK] button, the file/folder is deleted.
(While executing, "Processing..." message appears on the screen.)
If touch the [Cancel] button, the deletion is canceled.

3. When the deletion is completed, the completion dialog box is displayed.
To close the dialog box, touch the [OK] button.

4. When it cannot be deleted, the dialog box showed at left appears. (Only when deleting a folder is executed.)
Verify that there is no file in the folder and execute the delete operation again.
➠ 6.5.5 Precautions

■ Copy operation

Folder to be used in logging is copied.

1. Touch the check box of the file to copy to select the file.

2. Touch the [Copy] button.

3. Select the target folder.
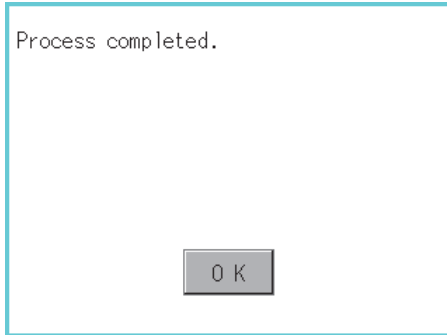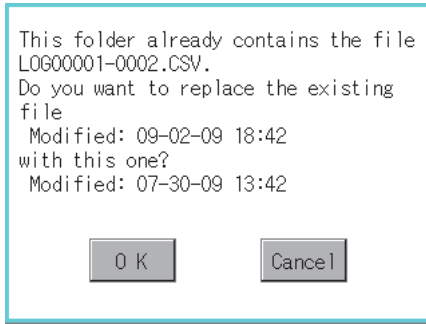   (Selecting a folder is not needed for outputting directly below the drive.)
   At this time, it cannot be copied into the same folder where the file exists.
   Select other folders.

Invalid destination folder.
Failed to copy the file
LOG00001-0002.G1L.

O K

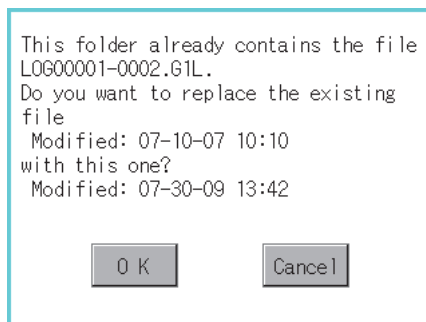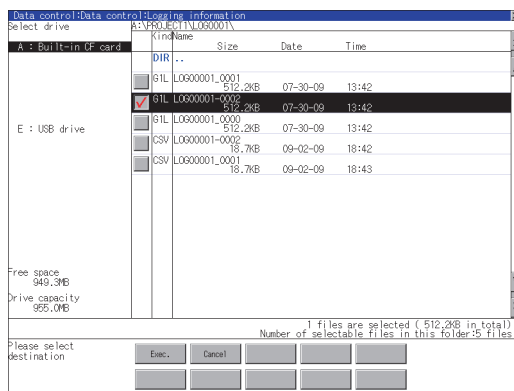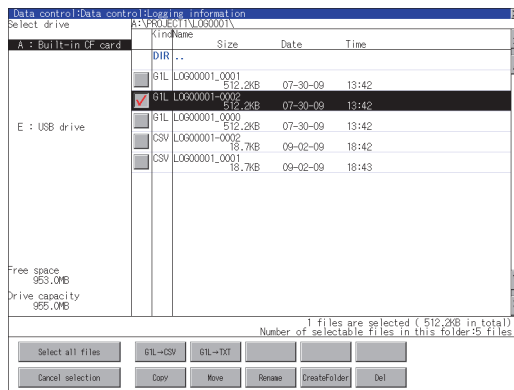4. If touch the [Exec] button, the dialog box mentioned left is displayed.
   Touch the [OK] button.
   (While executing, "Processing..." message appears on the screen.)

This folder already contains the file
LOG00001-0002.G1L.
Do you want to replace the existing file
 Modified: 07-10-07 10:10
with this one?
 Modified: 07-30-09 13:42

O K   Cancel

5. If there is a file of the same name in the copy destination folder, the following dialog is displayed without starting the copy.
   If touch the [OK] button, overwrites the file.
   If touch the [Cancel] button, cancels to copy.

(Continued to next page)

6

DATA CONTROL

6. When the copy is completed, the dialog box of completion is displayed.
To close the dialog box, touch the [OK] button.

■ Move operation
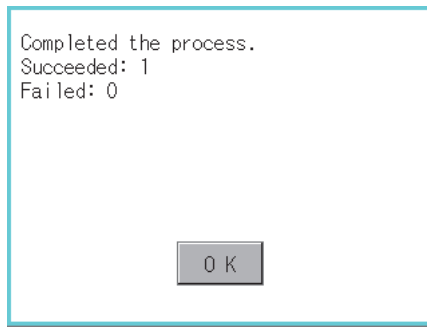
An operation log file is moved.

1. Touch the check box of the file to be moved to select the file.

2. Touch the [Move] button.

3. Select the target folder.
(Selecting a folder is not needed for moving directly below the drive.)

⬇

(Continued to next page)

```
Target file:
LOG00001-0002.G1L
Do you want to move the file?




       O K         Cancel
```

4. If touch the [Exec] button, the dialog box mentioned left is displayed.
[OK] Touch the ### button.
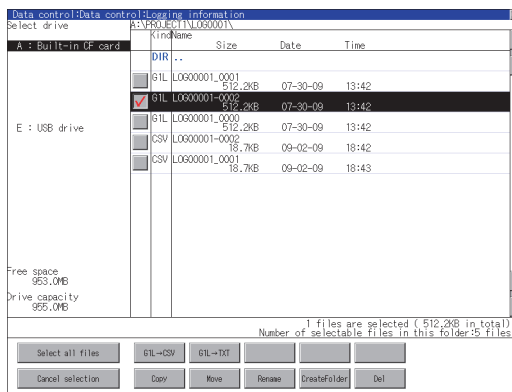(While executing, "Processing..." message appears on the screen.)

```
This folder already contains the file
LOG00001-0002.G1L.
Do you want to replace the existing
file
 Modified: 07-10-07 10:10
with this one?
 Modified: 07-30-09 13:42

       O K         Cancel
```

5. When any file with the same name exists in the destination folder, the dialog box shown left appears without starting the movement. Touching the [OK] button overwrites the file. If touch the [Cancel] button, cancels moving.

```
Completed the process.
Succeeded: 1
Failed: 0




            O K
```

6. When moving is completed, completion dialog box is displayed.
To close the dialog box, touch the [OK] button.

6

DATA CONTROL

■ Rename operation

An operation log file is changed.

1. Select the check box of the file to be renamed by touching.

2. Touch the [Rename] button, and then the screen shown left is displayed. Input the file name to be changed.
   By touching the following button, input text type is changed.

   [A-Z]: Alphabet capital

   [0-9]: Numeric/Symbol

3. Touch the [Enter] button, and then the dialog box shown left is displayed.

4. Touch the [OK] button, and then renaming the file is started.
   (While executing, "Processing..." message appears on the screen.)

5. When renaming the file is completed, a completion dialog box is displayed.
   To close the dialog box, touch the [OK] button.

■ Folder create operation

An operation log folder is created.

1. Touch the [Create Folder] button.

2. The input key window shown left appears, then input the file name to be created.
By touching the following button, input text type is changed.

[A-Z]: Alphabet capital

[0-9]: Numeric/Symbol

3. Touch the [Enter] button, and then the dialog box shown left is displayed.

4. If touch the [OK] button, starts creating folder.

5. When creating folder is completed, completion dialog box is displayed.
To close the dialog box, touch the [OK] button.

6.5.5 Precautions

■ When creating or deleting folders or files

(1) Number of characters set for a folder or file name when creating a folder or file
GOT recognizes file location according to path explained below.
Specify folder or file name, and total characters of path cannot exceed 78 characters.
Users only can rename folder or file name.
(Other than folder/file name is automatically printed.)

Example: CSV file path in a data storage

HINT

If folder is assigned the hierarchy.
The \ mark is displayed between a folder name and folder name, a folder name and file name. The \ mark is also counted as one character.

---

(2) Character strings that cannot be set to a folder/file
The following character strings cannot be used as a folder name or a file name. Even small characters of those cannot be used.

- COM1 to COM9   • LPT1 to LPT9   • AUX   • CON
- NUL   • PRN   • CLOCK$

In addition, the folder/file name showed below cannot be used.
  • The folder name which begins with G2
  • Folder name and file name which begins with . (period)
  • Folder name and file name which ends with . (period)
  • Folder name and file name which has only . (one period) or ..(two periods)

(3) For deleting the folder
The folder in which the file exists cannot be deleted.
Delete the folder after having deleted the files.
In addition, on the logging information screen, the files other than logging files are not displayed on GOT.
When the folder, in which there is no file displayed on the screen, cannot be deleted, confirm whether there is other file in the data storage by using a personal computer, etc.

■ Precautions for operation

(1) Precautions during folder/file operation (Create/Delete/Copy/File output, etc)
Even if the cover of the SD card interface is opened while the GOT is processing folders and files, the processing continues to be executed. (Example: Even if the cover of the SD card interface is opened while the GOT is creating a folder, the folder is created.)
Therefore, do not pull out the SD card while the "Processing..." message is on the screen after the cover of the SD card interface is opened.

(2) While GOT is accessing to other file (Alarm data, etc)
When folder/file processing for the logging is executed while the GOT is in access to other files (SD card access LED ON), the GOT executes folder/file processing for the logging after the processing for other files is completed.
Therefore, it may take some time to finish the process of the logging folder/file. (The "Processing..." message is displayed on the screen.)

6.6 Operation Log Information

6.6.1 Function of operation log information

Operation log files created with the operation log function can be copied, deleted or renamed, etc.
Without using a personal computer, you can manage operation log files on the GOT.

For details of the operation log function, refer to the following.

➡ GT Designer3 (GOT2000) Help

Function	Description	Reference
Information display of files and folders	Displays name, data size, creation date and time of file or folder.	6.6.2 Display operation of operation log information
G2O → CSV conversion	Converts a G2O file of an operation log file to a CSV file.	■G2O → CSV conversion operation, G2O → TXT conversion operation
G2O → TXT conversion	Converts a G2O file of an operation log file to a Unicode text file.	■G2O → CSV conversion operation, G2O → TXT conversion operation
Deletion	Deletes a file or holder.	■Deletion operation
Copy	Copies the file.	■Copy operation
Move	Moves the file.	■Move operation
Rename	Renames the file.	■Rename operation
Create Folder	New folder is created.	■Folder create operation
List	Displays operation logs in a list and allows searching.	■List display
Switching display order	Display order of operation log is switched.	(1) Display order switching operation
Displaying screen image	Displays the screen image for the operation logs in the selected row.	(2) Display operation of screen image
Search	Operation logs are searched.	(3) Search operation
Latest	Displays the latest operation log in a list.	■Latest display

6.6.2 Display operation of operation log information

Data control

Touch [Logging Information].

Operation log information

Operate the operation log file.
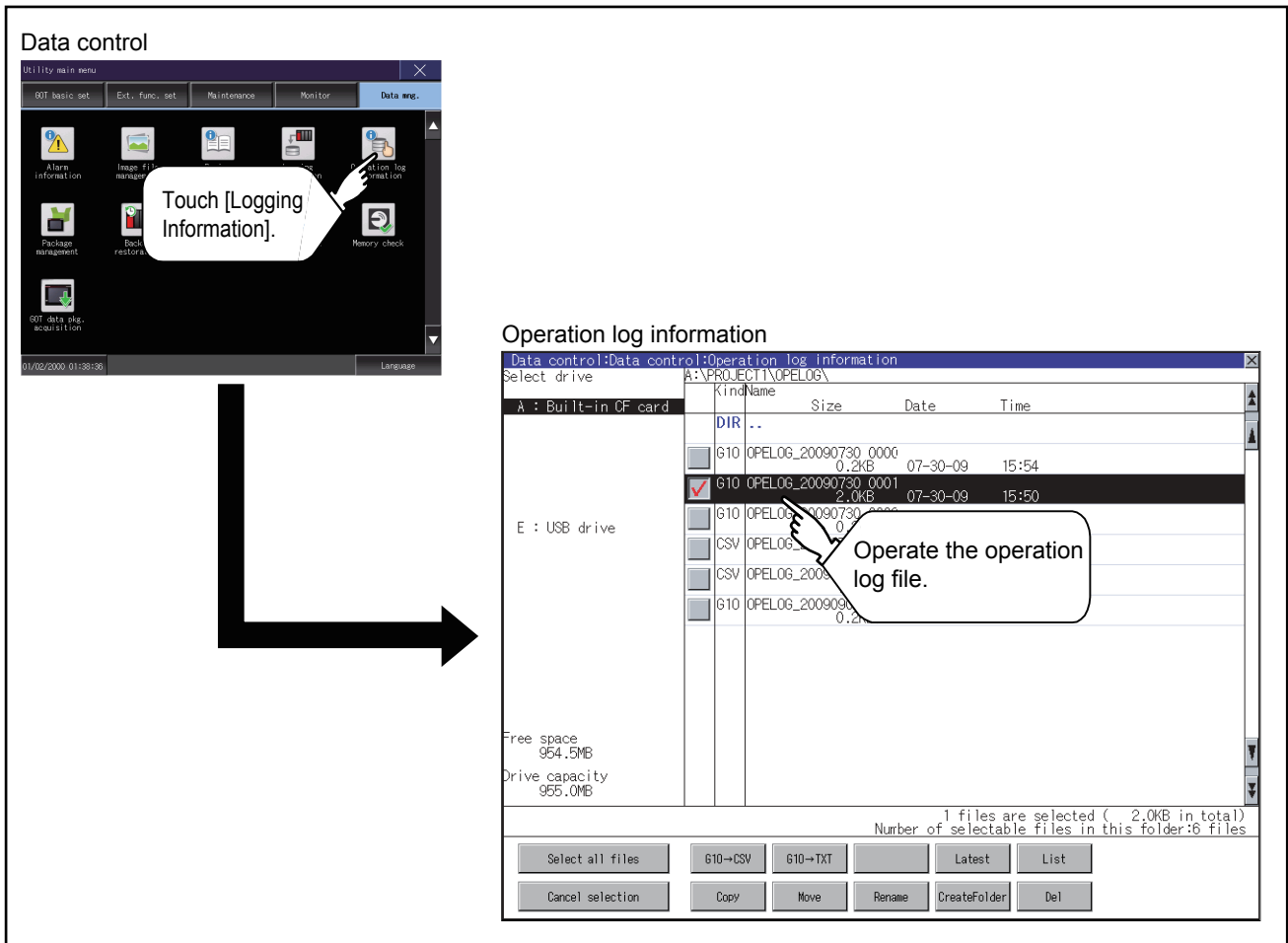
HINT

Default display drive when displaying the operation log information screen.

When [Save to] of the [Environmental Setting] dialog is set in GT Designer3, the default display drive for displaying the operation log information screen is the drive set in GT Designer3.
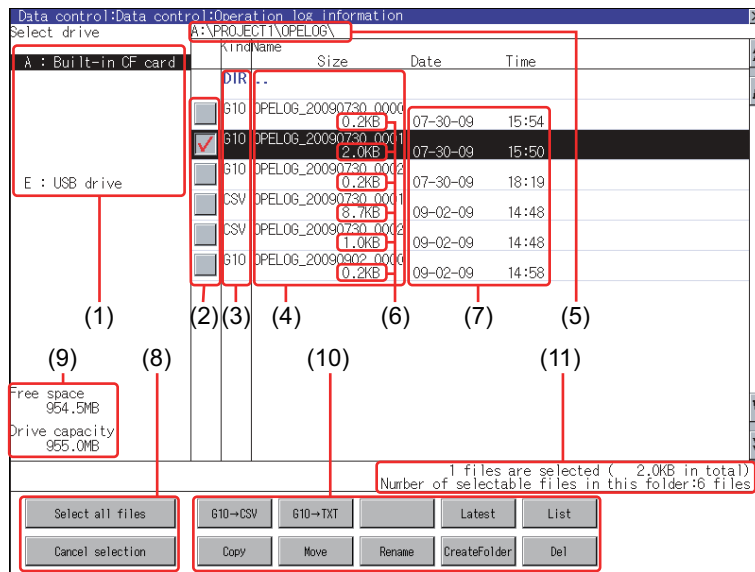
➟ GT Designer3 (GOT2000) Help

In the following cases, the default display drive is A drive.

- [Save to] is not specified in GT Designer3.
- The drive set as [Save to] in GT Designer3 is not found.

6.6.3 Example of operation log information display

| Number	Item	Description
(1)	Select drive	The target drive can be selected. (Even if an SD card is not installed, this message appears.)
(2)	Check box	If the check box is selected, up to 512 files can be selected.
(3)	Kind	Indicates whether the displayed name is file or folder. Displays the extension for a file and "DIR" for a folder.
(4)	Name	Displays the file name or folder name. For the long file/folder name, entire part may not be displayed. Confirm the nondisplayed part with the [Rename] button, etc. ➡ ■Rename operation After confirmation, touch the [Cancel] button to cancel the operation.
(5)	Path name	Displays the path name of drive /folder which is currently displayed.
(6)	Size	Displays the size of the file displayed in Name.
(7)	Date and time	Displays the creation date and time of each file.
(8)	The size of drive	Displays the size in use and the entire size of the drive which is selected by drive selection.
(9)	Select all files/Cancel selection	Multiple files can be selected or canceled at once. Touch the [Select all files] button to select all files. If the number of the displayed files exceeds 513, the first 512 files are selected.
(10)	Operation switch	Execution switch of each function.
(11)	Number of folders and files	Displays the total number of the displayed files and folders.

POINT

About the displayed file
The files other than that for operation log are not displayed on the operation log information screen.

6.6.4 Operation log information operation
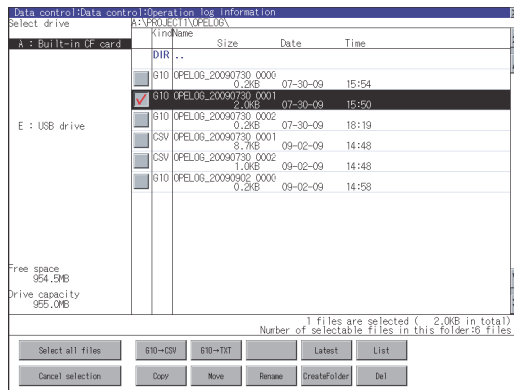
■ Display operation of operation log information

1. If touch a drive of [Select drive], the information of the touched drive is displayed.

2. If touch a folder name, the information of the touched folder is displayed.

3. If touch a folder of ". .", the information of the folder of the one upper hierarchy is displayed.

4. If touch the ▲ ▼ button of the scrollbar, the screen scrolls up/down by one line.
   ⬆ ⬇ If touch the ### button, the screen scrolls up/down by one screen.

5. Touch the check box to select the file.

6. For operation of operating switches, refer to the following.
   G2O → CSV, G2O → TXT
   .... ⟹ ■G2O → CSV conversion operation, G2O → TXT conversion operation

   Deletion......................... ⟹ ■Deletion operation

   Copy............................ ⟹ ■Copy operation

   Move.................. ⟹ ■Move operation

   Rename............. ⟹ ■Rename operation

   Create Folder..... ⟹ ■Folder create operation

   List................... ⟹ ■List display

   Latest................. ⟹ ■Latest display

7. If touch the [×] button, the screen is closed.

DATA CONTROL

6

■ G2O → CSV conversion operation, G2O → TXT conversion operation

An operation log file (G2O file) is converted to a CSV file or Unicode text file that can be displayed/edited on a personal computer.

(Example: Dialog box if the [G2O → CSV] button is touched)

(Continued to next page)
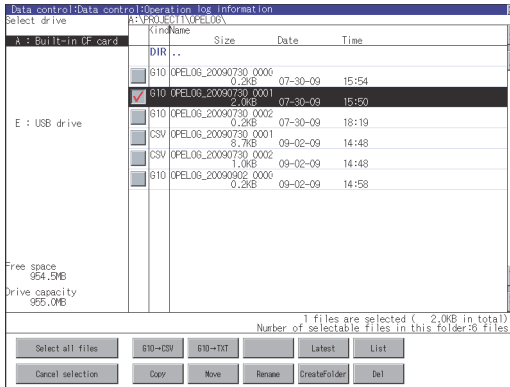
1. Touch the check box of a G2O file which is to be converted to a CSV file or Unicode text file to select the file.

2. Touch the following button in accordance with destination file type.
  - CSV file:
    [G2O → CSV] button
  - Unicode text file:
    [G2O → TXT] button

3. Select the target folder.
(Selecting a folder is not needed for outputting directly below the drive.)

4. If touch the [Exec] button, the dialog box mentioned left is displayed.
Touch the [OK] button.
(While executing, "Processing..." message appears on the screen.)

```
This folder already contains the file
OPELOG_20090730_0001.CSV.
Do you want to replace the existing
file
 Modified: 09-02-09 14:48
with this one?
 Modified: 07-30-09 15:50


        [ O K ]        [ Cancel ]
```

5. When the file, whose name is the same, exists in the destination folder, the dialog box showed at left appears without starting the conversion.
To overwrite the file, touch the [OK] button.
To cancel the conversion, touch the [Cancel] button.

```
Process completed.




               [ O K ]
```

6. The message of completion is displayed in dialog box when conversion is completed.
To close the dialog box, touch the [OK] button.

■ Deletion operation

Folder and file to be used on operation log are deleted.

1. Touch the folder to delete or the check box of the file to delete to select the file.

2. If touch the [Del] button, the dialog box mentioned left is displayed.
If touch the [OK] button, the file/folder is deleted.
(While executing, "Processing..." message appears on the screen.)
If touch the [Cancel] button, the deletion is canceled.

3. When the deletion is completed, the completion dialog box is displayed.
To close the dialog box, touch the [OK] button.

4. When it cannot be deleted, the dialog box showed at left appears. (Only when deleting a folder is executed.)
Verify that there is no file in the folder and execute the delete operation again.
➠ 6.6.5 Precautions

■ Copy operation

An operation log file is copied.


```
The target file to copy
OPELOG_20090730_0001.G10
Do you want to copy the file?

        O K        Cancel
```



```
This folder already contains the file
OPELOG_20090730_0001.G10.
Do you want to replace the existing
file
 Modified: 07-30-09 15:50
with this one?
 Modified: 07-30-09 15:50

        O K        Cancel
```

(Continued to next page)

1. Touch the check box of the file to copy to select the file.

2. Touch the [Copy] button.

3. Select the target folder.
(Selecting a folder is not needed for outputting directly below the drive.)
At this time, it cannot be copied into the same folder where the file exists.
Select other folders.

4. If touch the [Exec] button, the dialog box mentioned left is displayed.
Touch the [OK] button.
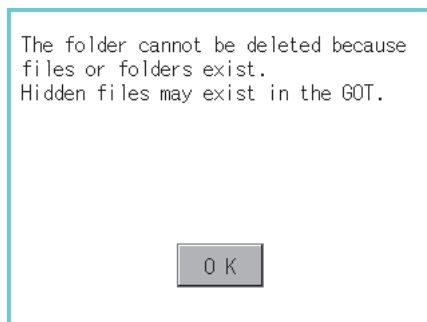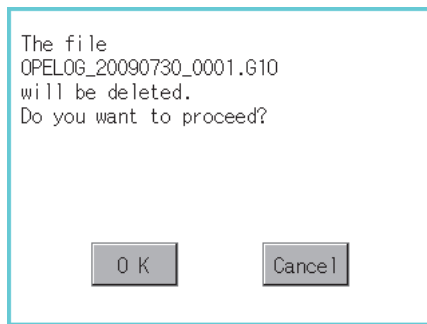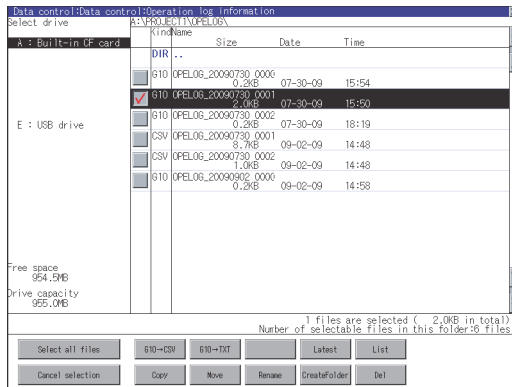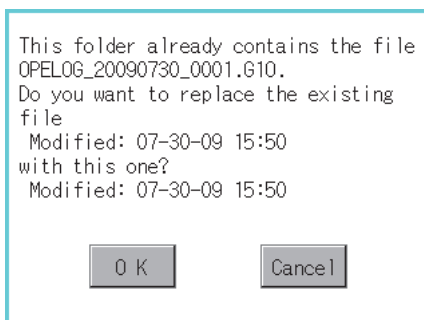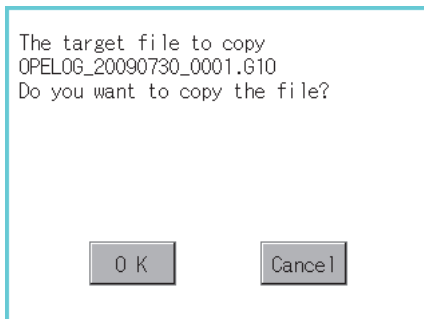(While executing, "Processing..." message appears on the screen.)

5. If there is a file of the same name in the copy destination folder, the following dialog is displayed without starting the copy.
If touch the [OK] button, overwrites the file.
If touch the [Cancel] button, cancels to copy.

6

DATA CONTROL

6. When the copy is completed, the dialog box of completion is displayed.
To close the dialog box, touch the [OK] button.

■ Move operation

An operation log file is moved.

1. Touch the check box of the file to be moved to select the file.

2. Touch the [Move] button.

3. Select the target folder.
(Selecting a folder is not needed for moving directly below the drive.)

(Continued to next page)

```
Target file:
OPELOG_20090730_0001.G10
Do you want to move the file?




      O K          Cancel
```

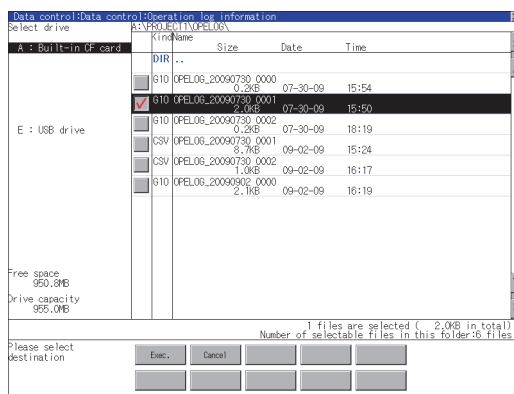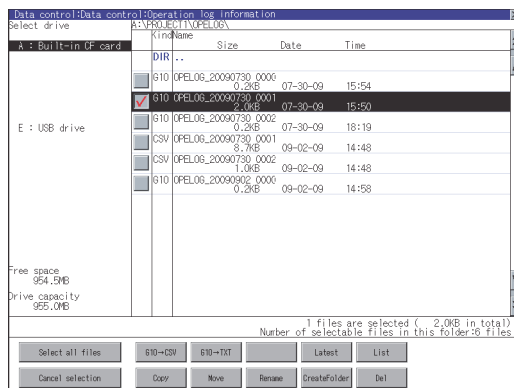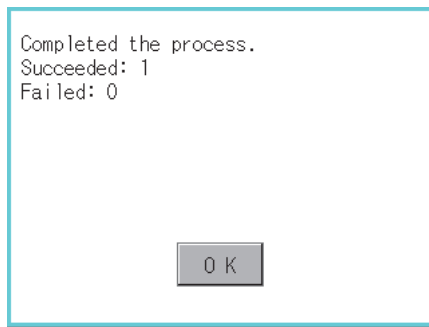4. If touch the [Exec] button, the dialog box mentioned left is displayed.
   Touch the [OK] button.
   (While executing, "Processing..." message appears on the screen.)

```
This folder already contains the file
OPELOG_20090730_0001.G10.
Do you want to replace the existing
file
 Modified: 07-30-09 15:50
with this one?
 Modified: 07-30-09 15:50

      O K          Cancel
```

5. When any file with the same name exists in the destination folder, the dialog box shown left appears without starting the movement.
   Touching the [OK] button overwrites the file.
   If touch the [Cancel] button, cancels moving.

```
Completed the process.
Succeeded: 1
Failed: 0




         O K
```

6. When moving is completed, completion dialog box is displayed.
   To close the dialog box, touch the [OK] button.

6

DATA CONTROL

■ Rename operation

An operation log file is changed.

1. Select the check box of the file to be renamed by touching.

2. Touch the [Rename] button, and then the screen shown left is displayed. Input the file name to be changed.
By touching the following button, input text type is changed.

   [A-Z]: Alphabet capital

   [0-9]: Numeric/Symbol

3. Touch the [Enter] button, and then the dialog box shown left is displayed.

4. Touch the [OK] button, and then renaming the file is started.
(While executing, "Processing..." message appears on the screen.)

5. When renaming the file is completed, a completion dialog box is displayed.
To close the dialog box, touch the [OK] button.

■ Folder create operation

An operation log folder is created.

1. Touch the [Create Folder] button.

2. The input key window shown left appears, then input the file name to be created.
   By touching the following button, input text type is changed.

   [A-Z]: Alphabet capital

   [0-9]: Numeric/Symbol

3. Touch the [Enter] button, and then the dialog box shown left is displayed.

4. If touch the [OK] button, starts creating folder.

5. When creating folder is completed, completion dialog box is displayed.
   To close the dialog box, touch the [OK] button.

■ List display

Displays operation logs in an operation log file in a list.
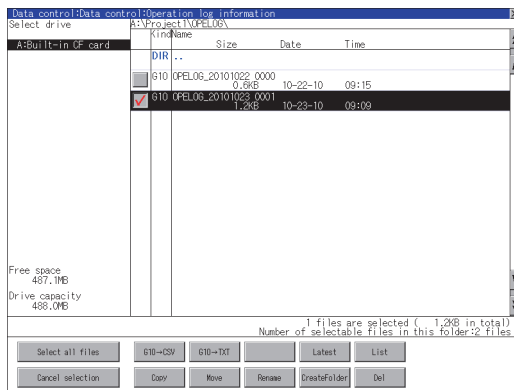
1. Touch the check box of the file to display the list to select the file.
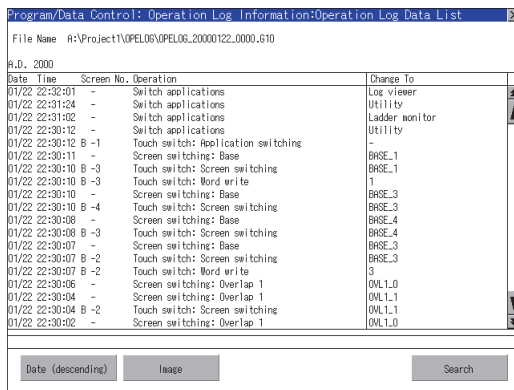
2. Touching the [List] button displays the list. In the list, the following contents can be checked.
Display items: Date
          Time
          Screen No.
          Operation type
          Value after change
For operation of operating switches, refer to the following.
Date (ascending/descending)...... ➠ (1) Display order switching operation
Image......... ➠ (2) Display operation of screen image

Search........ ➠ (3) Search operation
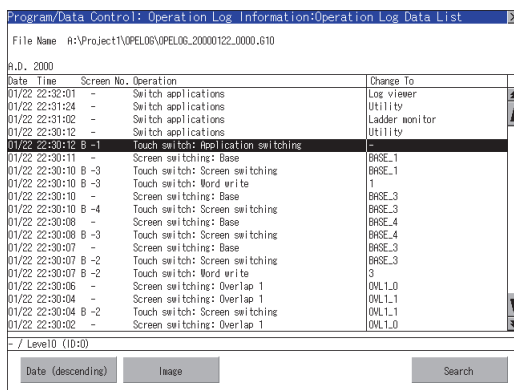
3. To display the details of an operation log, touch the row for that operation log to select it. The color of the row is inverted (white black).
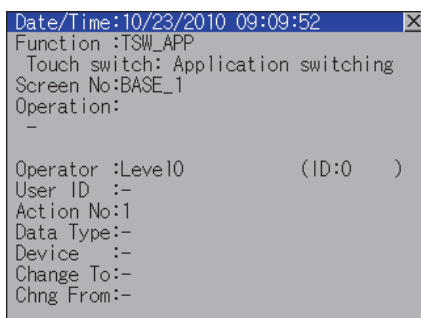
4. Touching the selected row again displays the detailed information for the operation log. Touch the [×] button to close the dialog box.

(1)   Display order switching operation
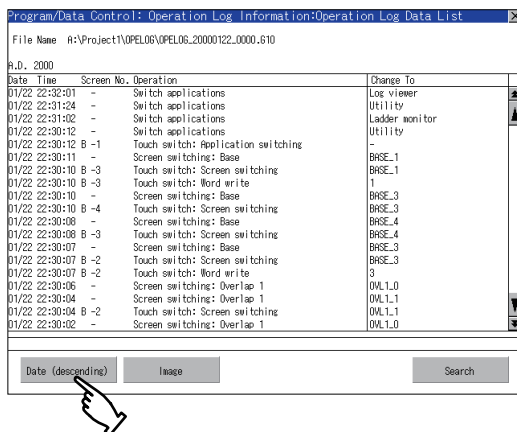
1. Touch [Date (ascending)]/[Date (descending)] in the list to switch the display order of operation logs.
[Date (ascending)] and [Date (descending)] are switched every time the button is touched.
The buttons show the current display order.
- [Date (ascending)]: Data is displayed in chronological order as collected.
- [Date (descending)]: Data is displayed in reverse chronological order as collected.

POINT

(1)   Selected line position after switching the display order
After the display order is switched while lines are selected, the lines still remain selected.
Depending on which line is selected, the selected line may not be displayed on the screen after switching the display order.

(2)   Display order of operation logs in non-chronological order
When the display order of operation logs are switched, the logs are displayed in order as collected, not in order as the date they are collected.
In case that the displayed operation logs are not lined up in time order due to the time change of GOT clock, the displayed logs may not be lined up in order of the log dates even though the operation logs are switched.

(2)   Display operation of screen image
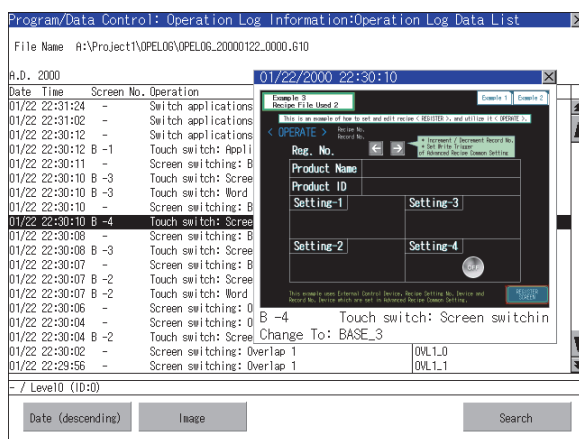
1. Touch the [Image] button in the list to switch displaying/hiding the window of the screen image corresponding to the operation log in the selected row.
Touch the title bar to move the window of the screen image.
The window of the screen image is displayed until the display of the list is closed.
Touch the button to close the window of the screen image.

POINT

(1)   When the row in the operation log is not selected, or when the row in the operation log , which indicates an error such as data damaged, is selected
The window color of the screen image is a gray.

(2)   Whether to display the screen image or not
Whether the screen image is displayed or not depends on the object type or the operation type.

(3)   Precautions for displaying the screen image

The screen image to be displayed is an object or a shape based on the object data. Therefore, if the numerical display, the lamp display, and others exist on the screen, the numeric value and the status of the lamp in the actual operation are not displayed.

If the project data when the operation log is collected is different from that currently in operation, the screen image might not be dislayed properly.

(3) Search operation
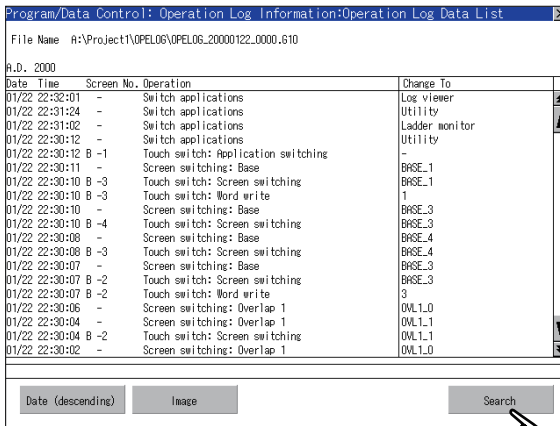
1. Touching [Search] in the list enables searching of a log using the following items.
   Item: Date
   Time
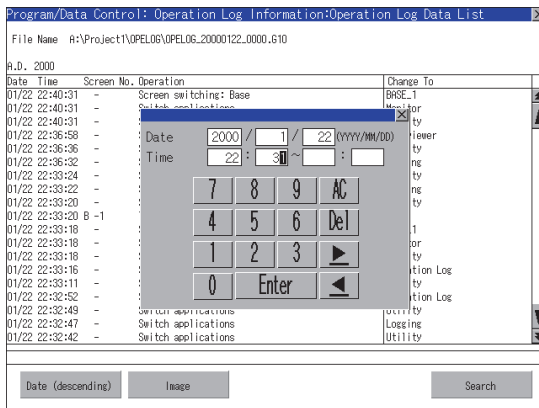
2. Input the date or time to be searched.
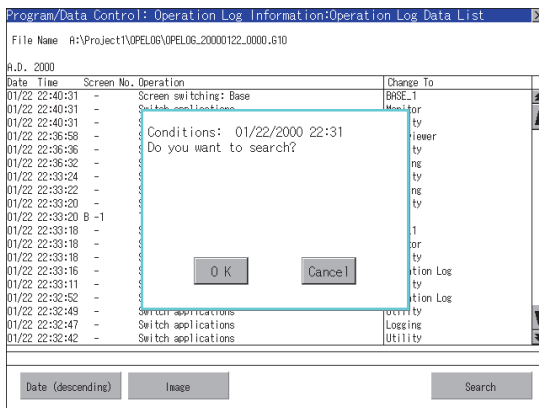
3. Touch the [Enter] button, and then the dialog box shown left is displayed.
   Touch the [OK] button.
   (When processing is being executed, the "Processing" message is displayed on the screen.)
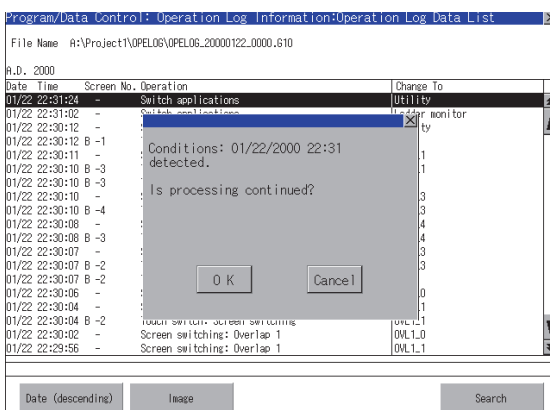
4. The results found are displayed and the dialog box on the left is displayed.
   To continue a search, touch the [OK] button.
   To stop a search, touch the [Cancel] button.

(Continued to next page)
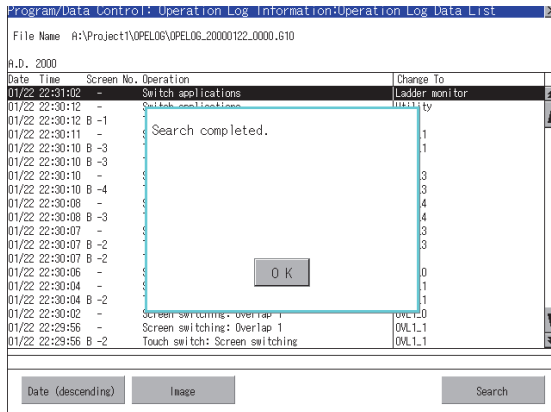
5. When searching is completed, a completion message is displayed in the dialog box.
To close the dialog box, touch the [OK] button.

■ Latest display

The latest operation log files are selected and displayed in a list.
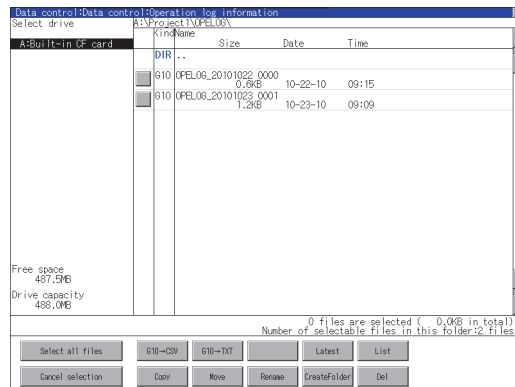
1. If touch the [Latest] button, the latest one in the operation log files is displayed in a list.
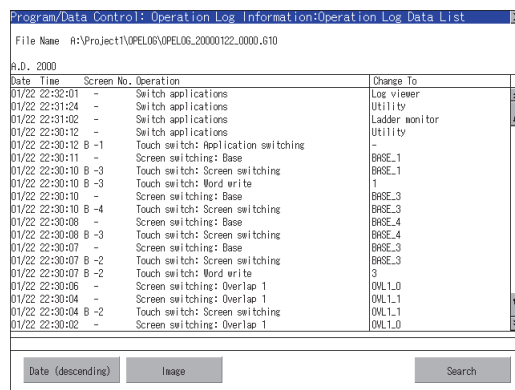
2. In the list, the following contents can be checked.
Display items: Date
Time
Screen No.
Operation type
Value after change
For operation of operating switches, refer to the following.
Date (ascending/descending) ⇒ (1) Display order switching operation

Image......... ⇒ (2) Display operation of screen image

Search........ ⇒ (3) Search operation

```
Program/Data Control: Operation Log Information:Operation Log Data List       [X]

 File Name  A:\Project1\OPELOG\OPELOG_20000122_0000.G1O

 A.D. 2000
Date  Time       Screen No. Operation                              Change To
01/22 22:32:01     -        Switch applications                    Log viewer        [≛]
01/22 22:31:24     -        Switch applications                    Utility           [▲]
01/22 22:31:02     -        Switch applications                    Ladder monitor
01/22 22:30:12     -        Switch applications                    Utility
01/22 22:30:12 B -1         Touch switch: Application switching     -
01/22 22:30:11     -        Screen switching: Base                 BASE_1
01/22 22:30:10 B -3         Touch switch: Screen switching         BASE_1
01/22 22:30:10 B -3         Touch switch: Word write               1
01/22 22:30:10     -        Screen switching: Base                 BASE_3
01/22 22:30:10 B -4         Touch switch: Screen switching         BASE_3
01/22 22:30:08     -        Screen switching: Base                 BASE_4
01/22 22:30:08 B -3         Touch switch: Screen switching         BASE_4
01/22 22:30:07     -        Screen switching: Base                 BASE_3
01/22 22:30:07 B -2         Touch switch: Screen switching         BASE_3
01/22 22:30:07 B -2         Touch switch: Word write               3
01/22 22:30:06     -        Screen switching: Overlap 1            OVL1_0
01/22 22:30:04     -        Screen switching: Overlap 1            OVL1_1         [▼]
01/22 22:30:04 B -2         Touch switch: Screen switching         OVL1_1
01/22 22:30:02     -        Screen switching: Overlap 1            OVL1_0         [≡]
- / Level0 (ID:0)

  [ Date (descending) ]      [ Image ]                              [ Search ]
```

3. For the method for displaying the detail of each operation log, refer to the following.

➠ n List display

6

DATA CONTROL

6.6.5　Precautions

■ When creating or deleting folders or files

(1) Number of characters set for a folder or file name when creating a folder or file
GOT recognizes file location according to path explained below.
Specify folder or file name, and total characters of path cannot exceed 78 characters.
Users only can rename folder or file name.
(Other than folder/file name is automatically printed.)

Example: CSV file path in a data storage

HINT

If folder is assigned the hierarchy.
The \ mark is displayed between a folder name and folder name, a folder name and file name. The \ mark is also counted as one character.

---

(2) Character strings that cannot be set to folder/file
The following character strings cannot be used as a folder name or a file name. Even small characters of those cannot be used.

• COM1 to COM9　　　• LPT1 to LPT9　　　• AUX　　　　　　　• CON
• NUL　　　　　　　　• PRN　　　　　　　• CLOCK$
In addition, the folder/file name showed below cannot be used.
　• The folder name which begins with G2
　• Folder name and file name which begins with . (period)
　• Folder name and file name which ends with . (period)
　• Folder name and file name which has only . (one period) or ..(two periods)

(3) For deleting the folder
The folder in which the file exists cannot be deleted.
Delete the folder after having deleted the files.
In addition, on the operation log information screen, the file other than that for operation log is not displayed on GOT.
When the folder, in which there is no file displayed on the screen, cannot be deleted, confirm whether there is other file in the data storage by using a personal computer, etc.

■ Precautions for operation

(1) Precautions during folder/file operation (Create/Delete/Copy/File output, etc)
Even if the cover of the SD card interface is opened while the GOT is processing folders and files, the processing continues to be executed. (Example: Even if the cover of the SD card interface is opened while the GOT is creating a folder, the folder is created.)
Therefore, do not pull out the SD card while the "Processing..." message is on the screen after the cover of the SD card interface is opened.

6.7 Package Data Management

6.7.1　Function of package data management

The package data held by each drive (A: Standard SD card, B: USB drive, C: built-in flash memory, E: USB drive, F: USB drive, G: USB drive) is displayed.
Package data can be installed, uninstalled, or checked for its contents.

Function	Description	Reference
Install	All package data written in drive A (Standard SD card), drive B (USB drive), drive E (USB drive), drive F (USB drive), and drive G (USB drive) can be installed in drive C (Built-in flash memory).	■Installation operation
Upload	All package data written in drive C (Built-in flash memory) can be uploaded to drive A (Standard SD card), drive B (USB drive), drive E (USB drive), drive F (USB drive), and drive G (USB drive).	■Upload operation
Data check	The contents of package data can be checked.	■Data check operation

6.7.2　Display operation of package data management
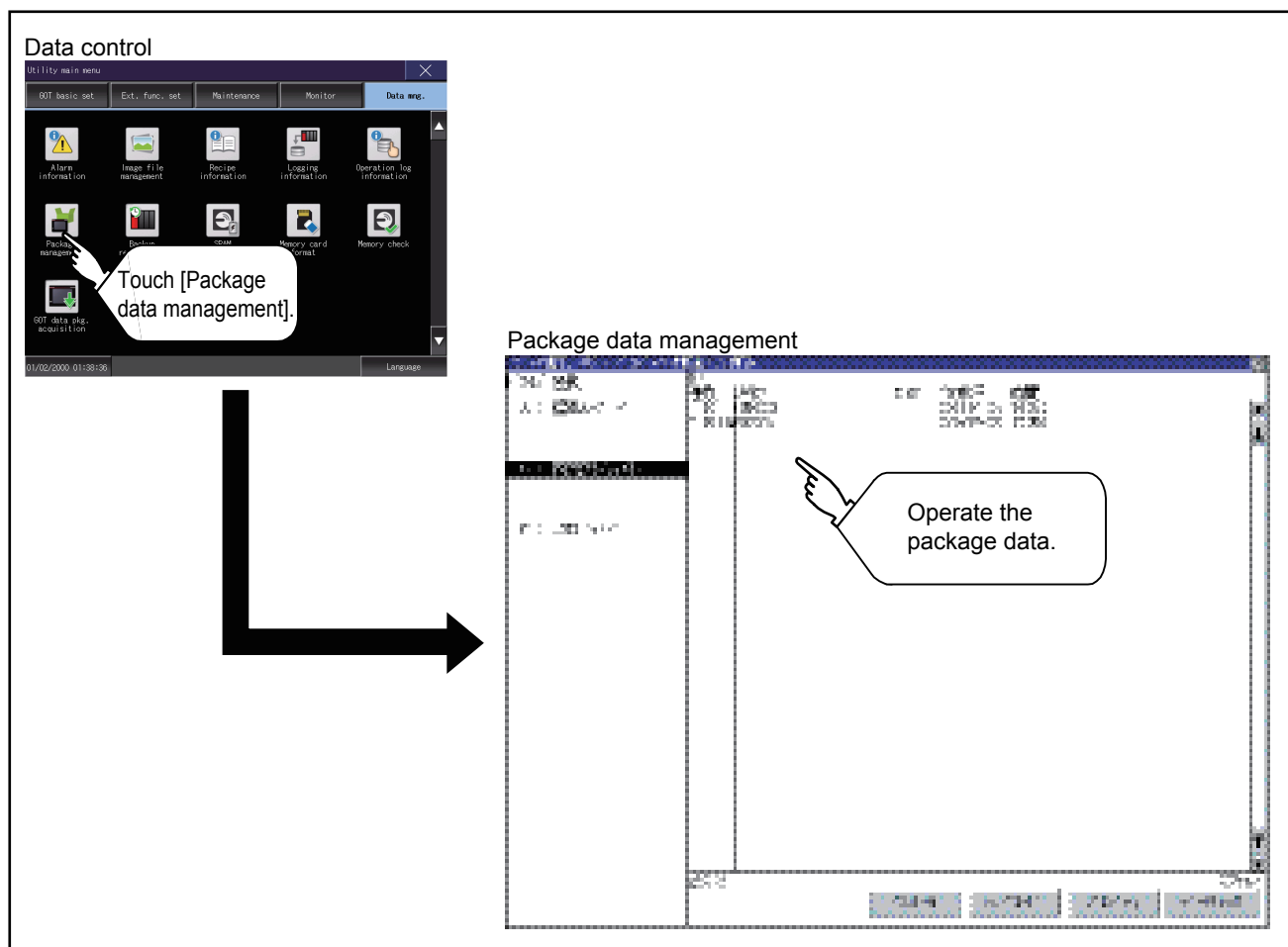
6.7.3 Display example of package data management

Number	Item	Description
(1)	Select drive	The drive which displays file or folder can be selected. When an SD card is not installed, [A: SD????] is not displayed. When a USB memory is not installed, [B: USB????], [E: USB????], [F: USB????], and [G: USB????] are not displayed.
(2)	Kind	Indicates whether the displayed name is file or folder. Displays the extension for a file and "DIR" for a folder.
(3)	Name	The file name or folder name which is stored in the selected drive or folder is displayed. When the file name or folder name exceeds 20 characters, the exceeding characters (the 21th character or after) are not displayed.
(4)	Path name	Displays the path name of drive /folder which is currently displayed.
(5)	Size	Displays the size of the file displayed in Name.
(6)	Date and time	Displays the creation date and time of each file.
(7)	The size of drive	Displays the size in use and the entire size of the drive which is selected by drive selection. (Only the size in use is displayed when selecting the C drive.)
(8)	Operation switch	Execution switch of each function.
(9)	Number of folders and files	Displays the total number of the displayed files and folders.

6.7.4   Operation of package data management

■ Display operation of package data
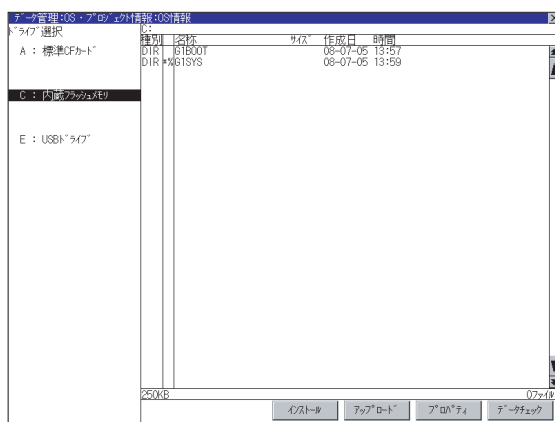
1. If touch a drive in [Select drive], the information of the first folder of the touched drive is displayed.

2. If touch a folder name, the information of the touched folder is displayed.

3. If touch a folder of ". .", the information of the folder of the one upper hierarchy is displayed.

4. If touch the ▲ ▼ button of the scrollbar, the screen scrolls up/down by one line.
   ⬆ ⬇ If touch the ### button, the screen scrolls up/down by one screen.

5. If touch a file name, the touched file name is selected and inverted.

6. Refer to the following for operation of installation, upload, and data check.
   Installation........   ⮕ ■Installation operation
   Upload..............   ⮕ ■Upload operation
   Data check.......   ⮕ ■Data check operation

7. If touch the [×] button, the screen is closed.

■ Installation operation

BootOS and OS which are written in drive A (Standard SD card), drive B (USB drive), drive E (USB drive), drive F (USB drive), and drive G (USB drive) can be installed in GOT.
(This item explains using the A drive.)
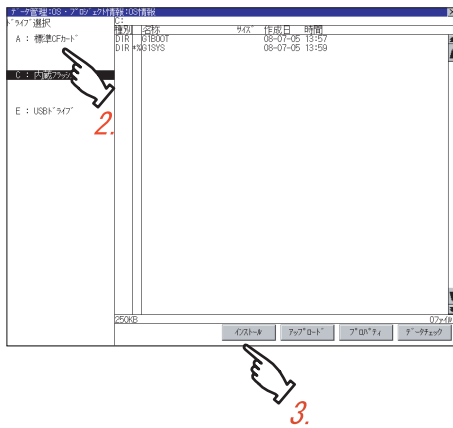
1. Install the data storage to which package data to be installed is written to the GOT.
For installation/removal procedure of data storages, refer to the following.

    ➠ GOT2000 Series User's Manual (Hardware)

2. Touch [A: SD????] in Select drive.

3. Touching the [Install] button starts the install.
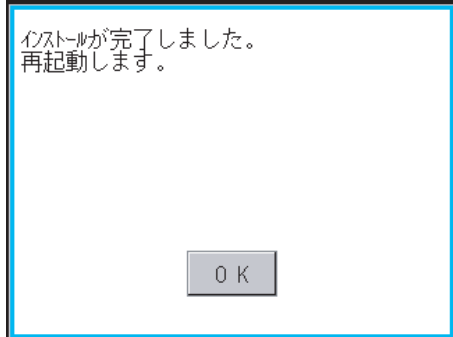
4. When the installation is completed, the dialog box shown left is displayed.
The GOT restarts if touch the [OK] button.

■ Upload operation

Package data written in drive C (Built-in flash memory) can be uploaded to drive A (Standard SD card), drive B (USB drive), drive E (USB drive), drive F (USB drive), and drive G (USB drive).

The data storage after uploading can be used for installing the package data on another GOT.

⫸ 7. INSTALLATION OF BOOTOS AND BASIC SYSTEM APPLICATION

(This item explains using the A drive.)

1. Install the data storage used as the uploading destination to the GOT.
For installation/removal procedure of data storages, refer to the following.

⫸ GOT2000 Series User's Manual (Hardware)

2. Touch [A: SD????] in Select drive.

3. Touching [Upload] starts the uploading.
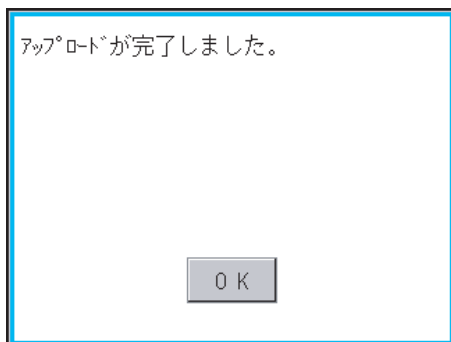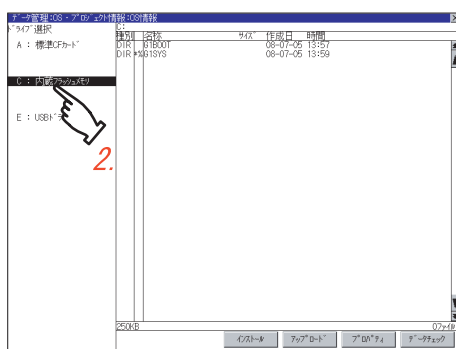
4. When the upload is completed, the dialog box shown left is displayed.
Touching [OK] closes the dialog box.

■ Data check operation

The contents of the selected package data are checked.

Dialog at data check normal

```
データは正常です




                    ┌─────────┐
                    │  O K    │
                    └─────────┘
```

Dialog at data check abnormal

```
データは異常です




                    ┌─────────┐
                    │  O K    │
                    └─────────┘
```
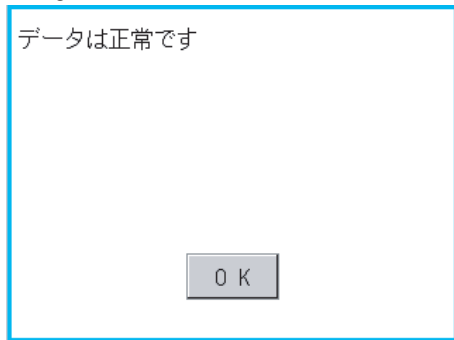
1. Touch the [Data check] button after selecting the package data for data check.
The data check is executed and the result is displayed by the dialog box shown left.

2. To close the dialog box, touch the [OK] button.
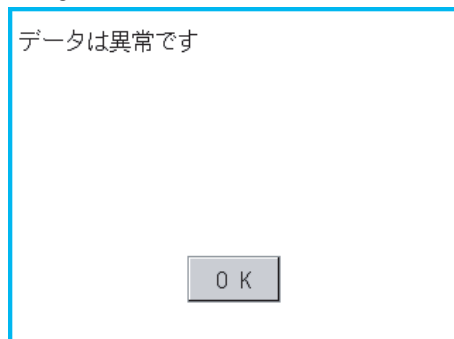
6.8 Backup/Restore Function

6.8.1 Backup/restore function

Executing backups, executing restorations, and deleting backup data are possible.
For the details of the backup/restoration function, refer to the following.

➡ GOT2000 Series User's Manual (Monitor)

6.8.2 Display operation of backup/restoration
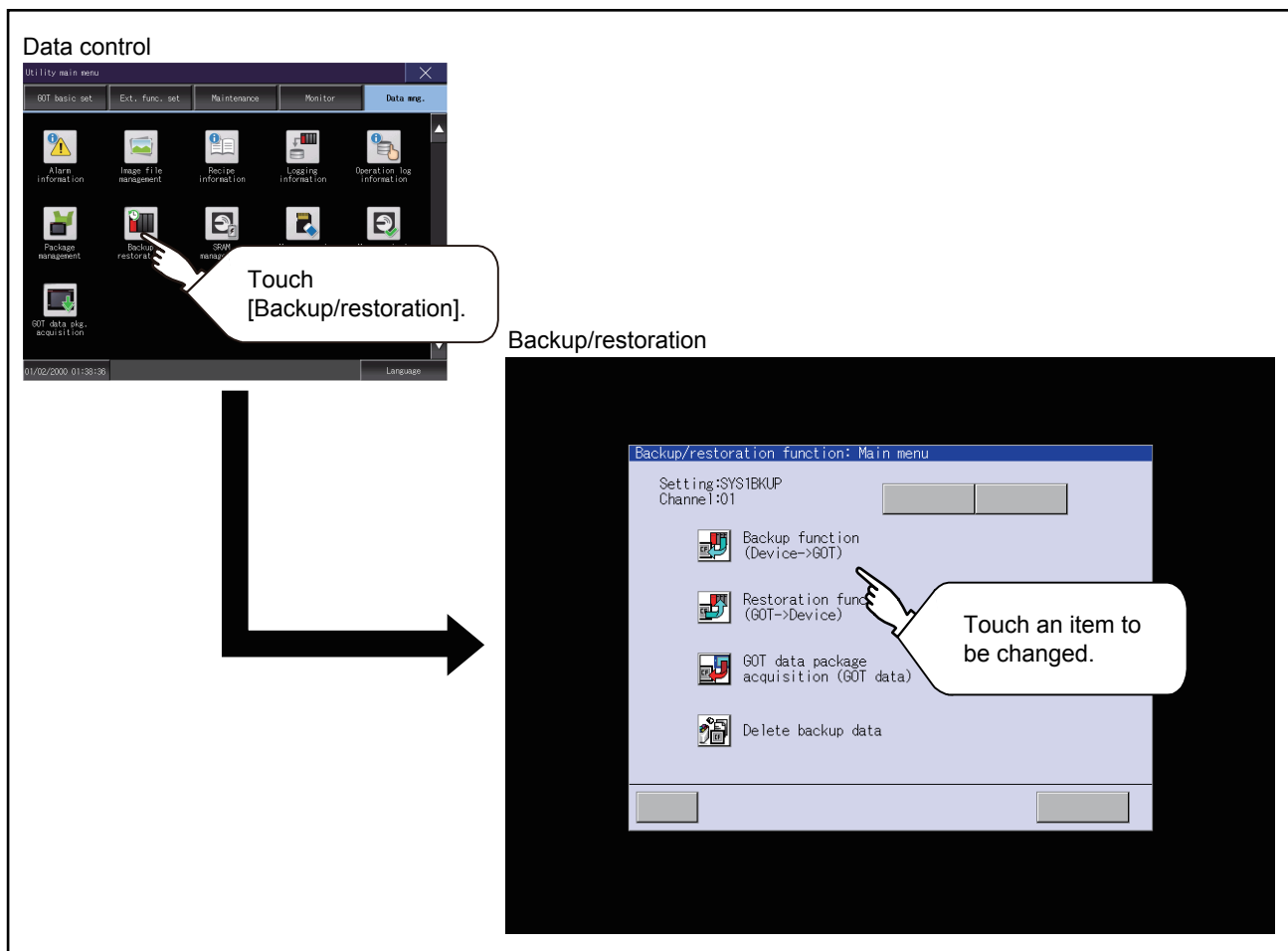
6.8.3 Operation of backup/restoration

Backup/restore data from the controller to GOT, or erase backup data with the backup/restoration.
GOT data package acquisition is also possible.
For the details of the backup/restoration function, refer to the following.

➡ GOT2000 Series User's Manual (Monitor)

6.9 SRAM Control

6.9.1 Function of SRAM control

The SRAM user area usage can be confirmed, data in the SRAM user area can be backed up or restored, and the SRAM user area is initialiized.
For the available functions in the SRAM user area, refer to the following.

➡ GT Designer3 (GOT2000) Help

6.9.2 Display operation of SRAM control

6.9.3 Display example of SRAM control

Number	Item	Description
(1)	Check box	Touch the check box to select or clear the item.
(2)	Function name	Displays the used functions in the order of the advanced system alarm, advanced user alarm, and logging function.
(3)	Setting ID	Displays the setting IDs. The setting IDs of the advanced system alarm are not displayed.
(4)	Size	Displays the data size.
(5)	Setting name	Displays the setting name. For the setting name, only characters within the display range are displayed.
(6)	Date and time	Displays the creation date and time of each data.
(7)	n item(s) has/have been selected.	Displays the information of the items currently selected.
(8)	SRAM Free space	Displays the current free space size or total space size of the SRAM user area.
(9)	Free space	Displays the current free space size or total space size of the drive selected for [Select drive].
(10)	Initialize all	Initializes all areas of the SRAM user area.
(11)	Initialize selected area	Select each area of the SRAM user area to initialize multiple areas of the SRAM user area.
(12)	Select drive	Switches drives to be used for the data backup or restoration in the SRAM user area. The following drives can be switched only when an SD card or USB memory is installed. • SD card: [A: SD????] • USB memory: [B: USB????], [E: USB????], [F: USB????], and [G: USB????]
(13)	Restoration	Saves data in the selected drive to the SRAM user area.
(14)	Backup all area	Saves data in the SRAM user area to the selected drive.

6.9.4 SRAM control operation

■ **Operation to initialize all or selected areas of the SRAM user area**

1. Perform any of the following operations.

   •To initialize all areas of the SRAM user area, touch the [Initialize all] button.

   •To initialize selected areas of the SRAM user area, select the check box of the area to be initialized, and then touch the [Initialize selected area] button.

(Example: Dialog box if the [Initialize all] button is touched)

```
This folder already contains the file
ARP00001.CSV.
Do you want to replace the existing
file
 Modified: 07-04-08 14:32
with this one?
 Modified: 07-04-08 14:21


      [ O K ]        [ Cancel ]
```
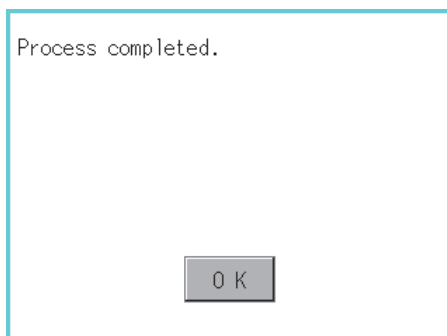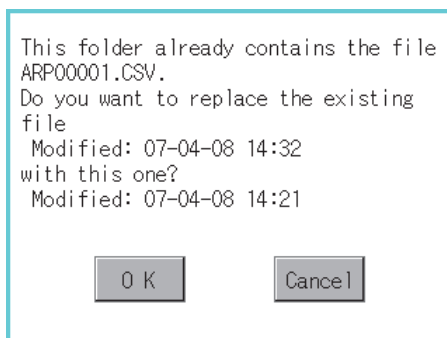
2. The dialog box shown left appears.
   Check the description of the dialog box. To initialize the SRAM user area, touch the [OK] button.
   To cancel the initialization, touch the [Cancel] button.

```
Process completed.




             [ O K ]
```

3. When touching the [OK] button in step2, the dialog box shown left appears for recheck.
   To start the initialization, touch the [OK] button.
   To cancel the initialization, touch the [Cancel] button.

4. The completion dialog box appears when the initialization is completed.

   To close the dialog box and restart the GOT, touch the [OK] button.

■ **Operation to restore data**

```
A:
Created date  05-31-10 16:14
The above data will be restored.
After completion of restoration, GOT
will be rebooted.

Do you want to execute restoration?
will be rebooted.

    [ O K ]      [ Cancel ]
```

```
Process completed.




        [ O K ]
```
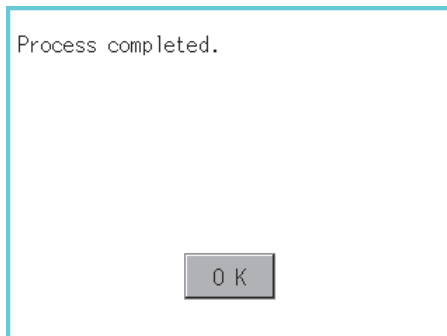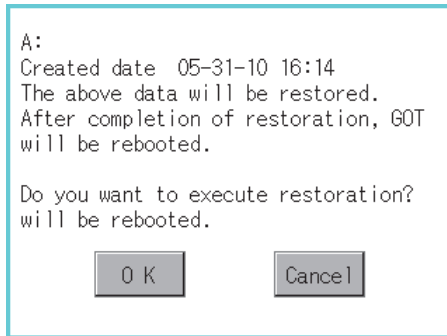
1. To restore data in the SRAM user area to a drive
Select the drive where the data is stored, and then touch the [Restoration] button.

2. The dialog box shown left appears.
Check the description of the dialog box. To restore all data in the SRAM user area, touch the [OK] button.
To cancel the restoration, touch the [Cancel] button.

3. When touching the [OK] button in step2, the dialog box shown left appears for recheck.
To start the restoration, touch the [OK] button.
To cancel the restoration, touch the [Cancel] button.

4. The completion dialog box appears when the restoration is completed.

To close the dialog box and restart the GOT, touch the [OK] button.

6

DATA CONTROL

■ Operation to back up all data in the SRAM user area
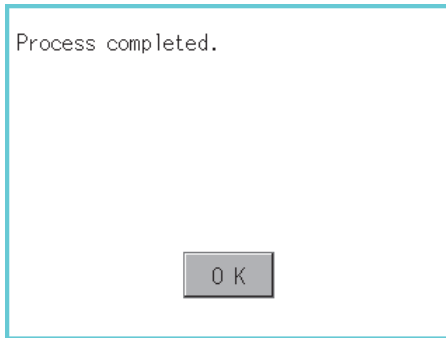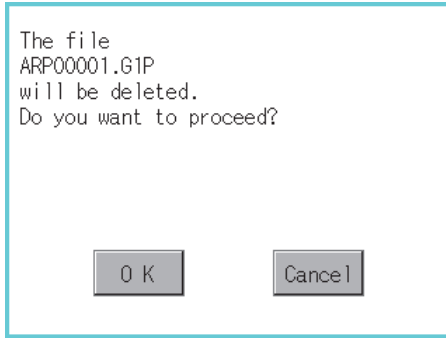
1. To back up data in the SRAM user area to a drive
Select the drive where the data is stored, and then touch the [Backup all area] button.

```
The file
ARP00001.G1P
will be deleted.
Do you want to proceed?



        O K        Cancel
```

2. The dialog box shown left appears.
Check the description of the dialog box. To back up all data in the SRAM user area, touch the [OK] button.
To cancel the backup, touch the [Cancel] button.

```
Process completed.






             O K
```

3. When touching the [OK] button in step 2, the dialog box shown left appears for recheck.
To start the backup, touch the [OK] button.
To cancel the backup, touch the [Cancel] button.

```
Deletion has been completed.






             O K
```

4. When the file, whose name is the same, exists in the destination folder, the dialog box shown left appears without starting the backup.
To overwrite the file, touch the [OK] button.
To cancel the backup, touch the [Cancel] button.

5. The completion dialog box appears when the backup is completed.
To close the dialog box, touch the [OK] button.

6.10 Memory Card Format

The data storage is formatted.

6.10.1 Display operation of memory card format

Data control

Touch [Memory card format].

Memory card format

DATA CONTROL

6
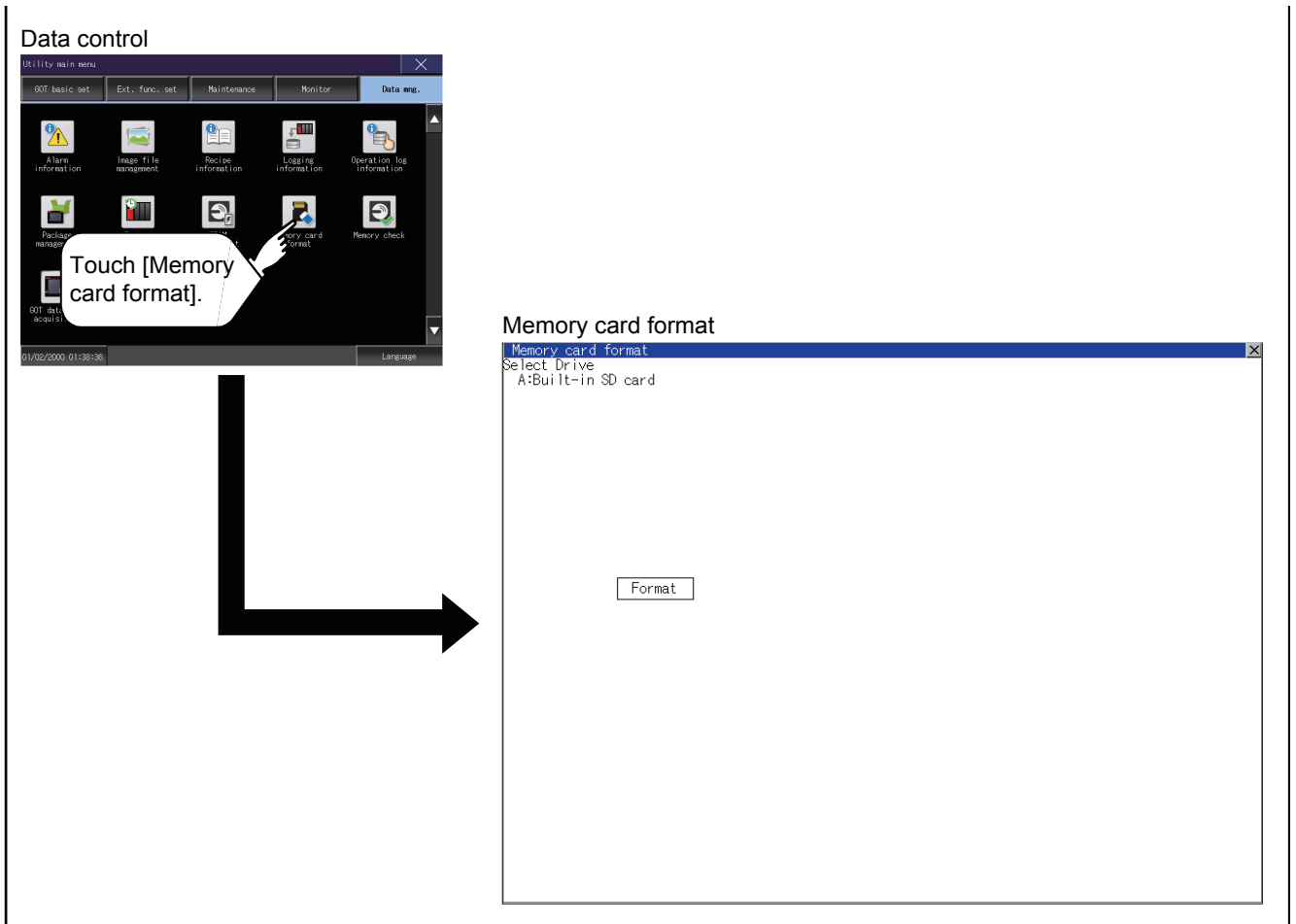
6.10.2　Operating the memory card format

! Caution
If execute format operation, all data
on the CF card will be initialized.
Please do not remove CF card
while formatting.
Format the CF card ?

O K　　Cancel

Format now ?

O K　　Cancel
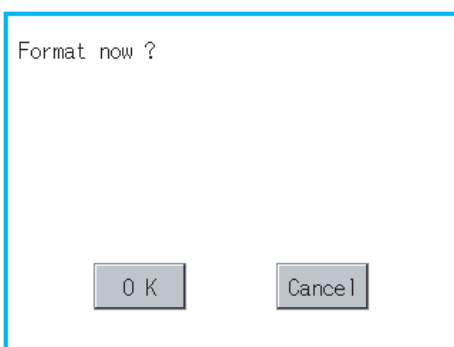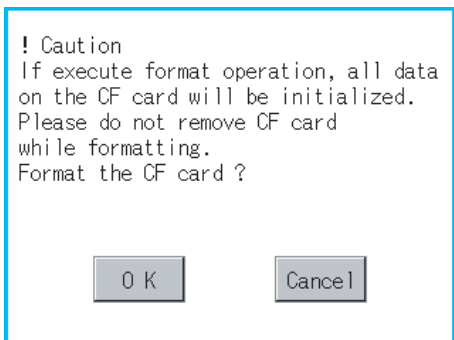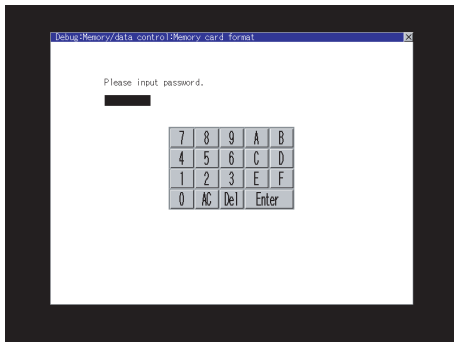
1. Install a data storage to the GOT.
For installation/removal procedure of data
storages, refer to the following.
➡ GOT2000 Series User's Manual
(Hardware)

2. Touch and select the drive to format by drive
selection.

3. If touch the [Format] button, the password input
screen is displayed.

4. Type [1] [1] [1] [1] and touch the [Enter] key. The
dialog box shown on the left will appear. (The
password is fixed to 1111.)
Confirm the contents of the dialog box, and
touch the [OK] button to format of the data
storage.
To cancel the format of the data storage, touch
the [Cancel] button.

5. If touch the [OK] button by step4, the dialog
mentioned left is displayed for reconfirm.

6. Reconfirm whether to format the data storage.
Touch the [OK] button to start the format.
Touch the [Cancel] button to cancel the format
of the data storage.

```
Format is complete.




        ┌─────────┐
        │  O K    │
        └─────────┘
```
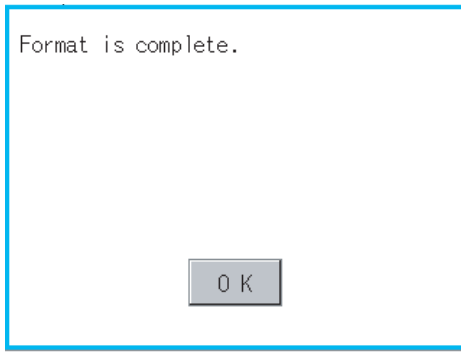
7. When the formatting is completed, the completion dialog mentioned left is displayed.

8. To close the dialog box, touch the [OK] button.

HINT

Restrictions on formatting
- When using an unformatted data storage in the GOT, format it by a personal computer. The GOT cannot format the unformatted data storage.
- The format of the GOT does not change the file system (Example: FAT16) of the data storage and inherits the file system before the format.

6.11 Memory Check

6.11.1 Memory check function

Memory check function carries out the write/read check of drive A (Standard SD card), drive B (USB drive), C (Built-in flash memory), drive E (USB drive), drive F (USB drive), and drive G (USB drive).

Function	Description
A drive memory check	Checks whether the memory (Standard SD card) of the A drive can be read/written normally.
B drive memory check	Checks whether the memory (USB drive) of the B drive can be read/written normally.
C drive memory check	Checks whether the memory (Built-in flash memory) of the C drive can be read/written normally.
E drive memory check	Checks whether the memory (USB drive) of the E drive can be read/written normally.
F drive memory check	Checks whether the memory (USB drive) of the F drive can be read/written normally.
G drive memory check	Checks whether the memory (USB drive) of the G drive can be read/written normally.

6.11.2 Display operation of memory check
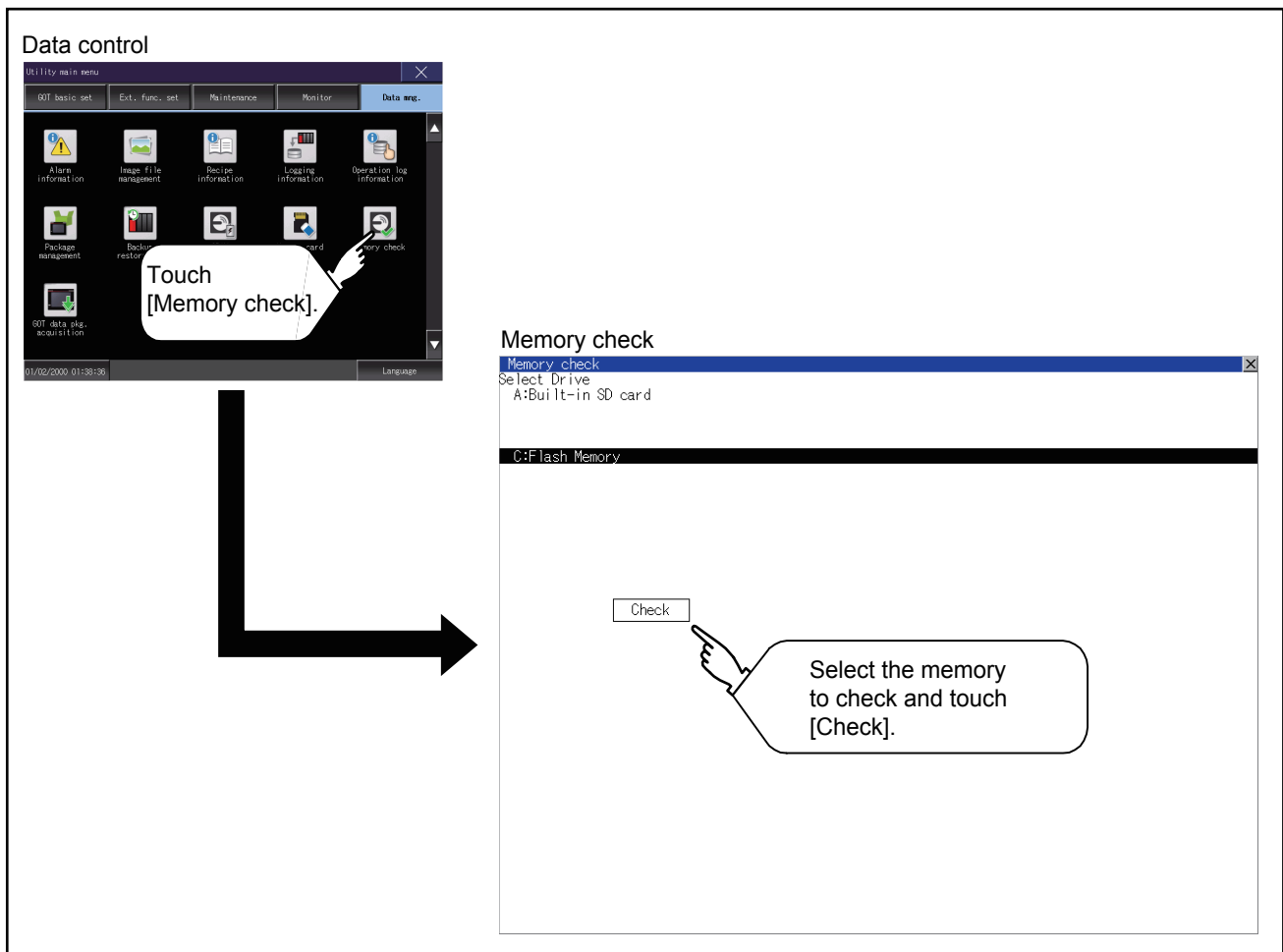
6.11.3　Memory check operation

Carries out write/read check of memory.

> **POINT**
>
> **When drive is not displayed**
> When the drive (memory) to check is not displayed, confirm the mounting procedure or memory type with reference to the following.
>
> ➡ GOT2000 Series User's Manual (Hardware)
>
> When no faults are found in mounting, etc, a memory failure may be arosen.
> Replace the data storage or built-in flash memory (C drive).
> For details of built-in flash memory, contact your local Mitsubishi (Electric System) Service.

The following example explains about Memory Check using built-in flash memory (C drive).
For the standard SD card (A drive) memory check, install the SD card before carrying out the same key operations as those for the built-in flash memory check. For the USB drive (B drive, E drive, F drive, or G drive) memory check, install the USB memory before carrying out the check operations.

1. Select [Flash Memory] in the Memory check setting screen. If select the [OK] button, the numeric keyboard window is displayed.

If select [Cancel] button, returns to the initial menu.

```
Internal Flush memory area
 write/read check

Execute now?



    O K          Cancel
```
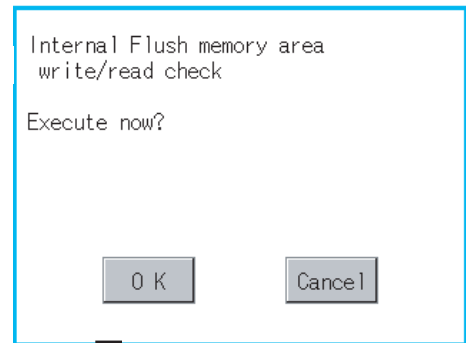
2. Touch to input password ([5] [9] [2] [0]) and touch the [Enter] key.
If touch the [Enter] key,executes read/write check for the built-in flash memory, which is completed in around 10 seconds.

```
Please input password.



   7  8  9  A  B
   4  5  6  C  D
   1  2  3  E  F
   0  AC Del Enter
```
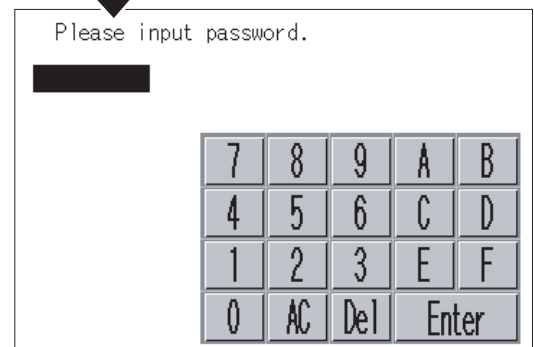
Password chang

The password cannot be changed.
When input password error, the cancel dialog box is displayed.
If touch the [OK], returns to the Memory check screen.

```
Internal Flush memory area
 write/read check
Password error.




            O K
```

```
Internal Flush memory area
 write/read check

Executing now...
```

```
Internal Flush memory area
 write/read check

Normaly completed.




            O K
```
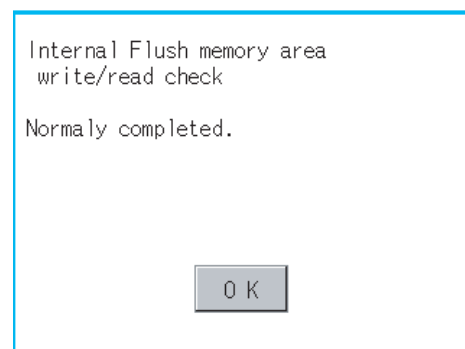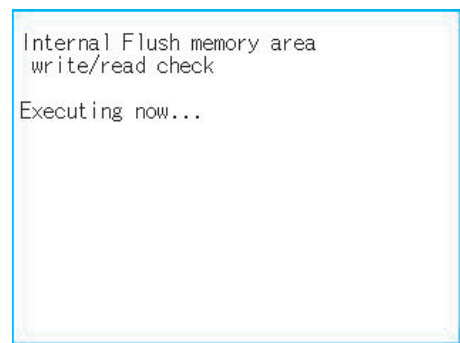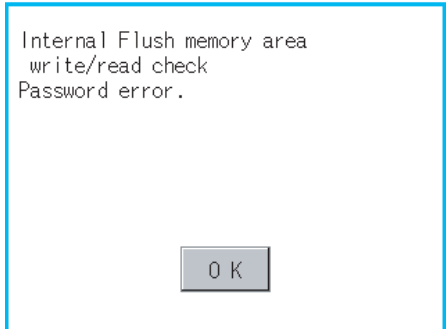
POINT

When error is found in memory

When error is found by memory check, the dialog box indicating
the area in which the error occurred is displayed.
In case of error, contact your local Mitsubishi (Electric System)
Service.
If touch the [OK], returns to the Memory check screen.

```
Internal Flush memory area
 write/read check

write/read error.




            O K
```
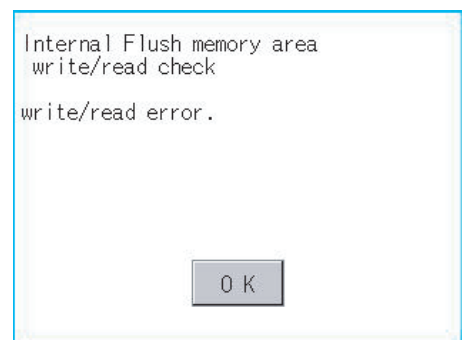
6.12 GOT Data Package Acquisition

6.12.1 GOT data package acquisition function

The GOT data package acquisition function copies the following the system applications installed in the GOT and data in the GOT to a data storage.
- System application
  ?(BootOS, basic system application, communication driver, and advanced system application)
- Special data
- Project data

The copied data can be utilized for backup or creating the same GOT system by installing the data.
For installation function of the GOT, refer to the following.

6.12.2 Display operation of GOT data package acquisition
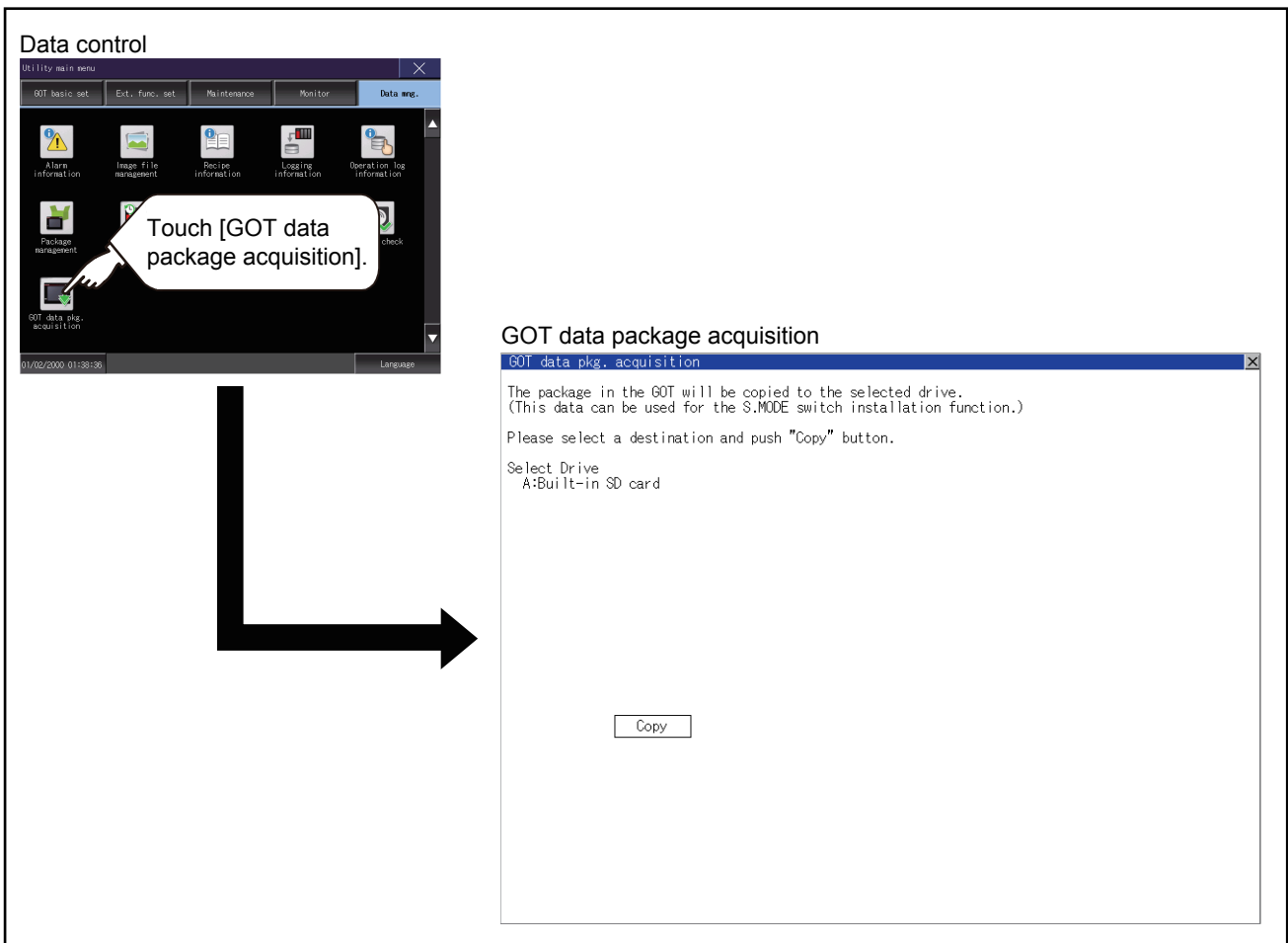
6.12.3 Display example of GOT data package acquisition
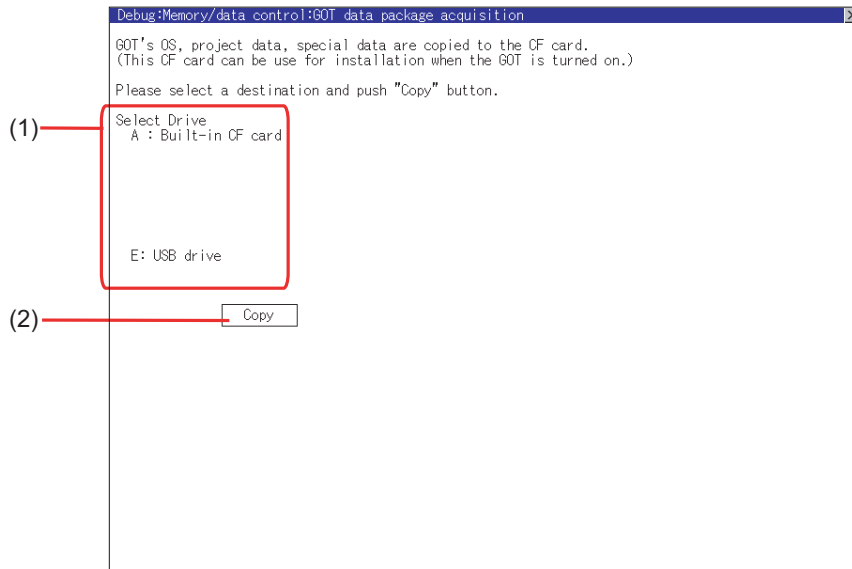
Number	Item	Description
(1)	Select drive	Displays the drive where OS and data can be copied. When an SD card is not installed, [A: SD????] is not displayed. Even when a USB memory is not installed, [B: USB????], [E: USB????], [F: USB????], and [G: USB????] are displayed.
(2)	Copy	Touching the button starts copying.

6.12.4 GOT data package acquisition operation

■ Display operation of GOT data package acquisition

The GOT data package acquisition function copies the system applications installed in the GOT and data in the GOT to a data storage.
(This item explains using the A drive.)
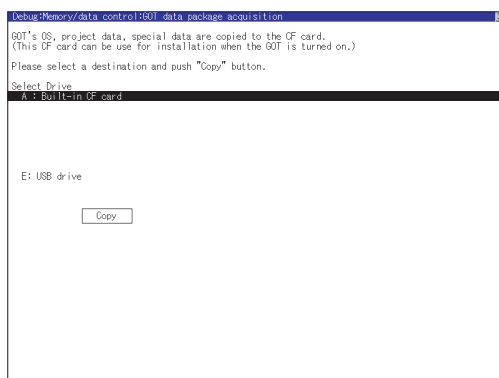
1. Touching the drive name below [Select Drive] inverts the touched drive name.
Touching the [Copy] button starts copying.

(Example: Dialog box after touching the [Copy] button)

```
Copy destination:
 A:
Because of the copy destination is
Boot drive(Project data) and setup
condition, can't copy.
After execute disable setup,
please execute copy operation.

          [ O K ]
```
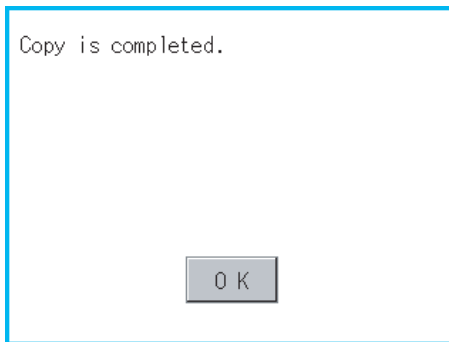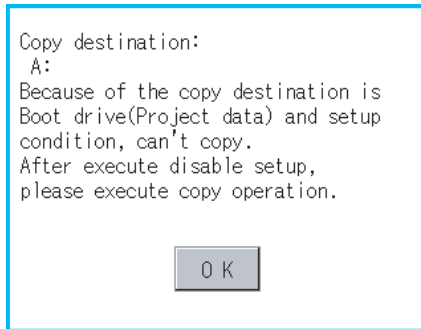
*2.* The display depends on the status of copy destination and setup.
Operate following the displayed dialog box.

```
Copy is completed.




          [ O K ]
```

3. After copying the system application and data, the dialog box for notifying the completion appears.
Touching the [OK] button closes the dialog box.

HINT

Estimation of processing time
The time required for the processing depends on conditions such as system application, data capacity, and file structure.
(Reference value)
  • When the capacity is 4 Mbytes: Around 6 seconds
  • When the capacity is 12 Mbytes: Around 18 seconds

■ **Precautions for operation**

(1) Copying project data
If the Boot source drive and copy destination drive for project data is the same, the project data cannot be copied.
If the drives are the same, cancel the setup.

(2) When project data are copied to the GOT
If the system application or project data is copied to the GOT using the data storage created with the GOT data package acquisition, the utility setting is also copied.
Check each utility setting after copying to the GOT and change the setting according to need.

(3) Data storage to be used
When performing the GOT data package acquisition, do not store other data to the data storage.
If doing so, the previous data will be unavailable.

MEMO

7. INSTALLATION OF BOOTOS AND BASIC SYSTEM APPLICATION

To execute the GOT utility, install the BootOS and system applications on the C drive (built-in flash memory) of the GOT, or set the boot drive of the system application to [A: 標準SDカード] and insert an SD card with system applications into the GOT.
(BootOS is installed in the GOT at factory shipment. It is not necessary to install BootOS when upgrading of it is unnecessary.)
This chapter explains the installation using GOT.

GT Designer3 → Data storage → GOT
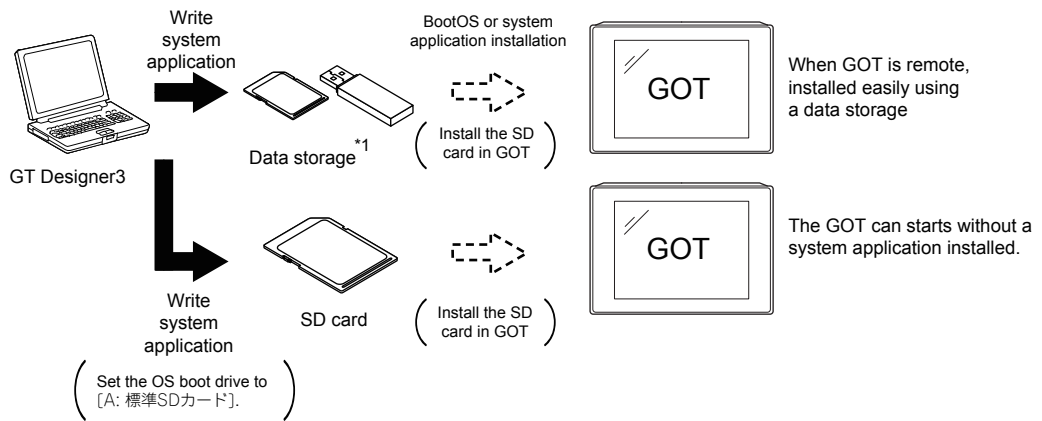
GOT → Data storage → GOT
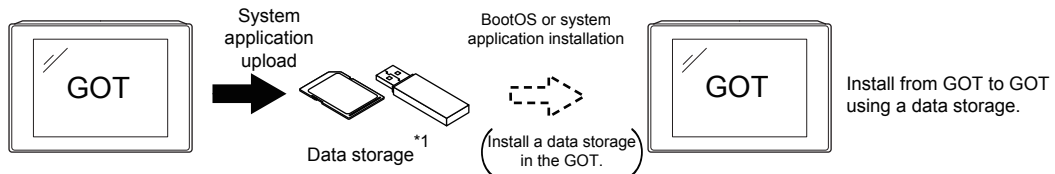
*1   When execute installation with a USB memory, the system applications have to be installed in GOT in advance.

Refer to the following for the installation which uses GT Designer3.

➟   GT Designer3 (GOT2000) Help

7.1 BootOS and Basic System Application to be Installed

Under-mentioned BootOS and basic system application are necessary to execute utility.

System application name	Function overview
BootOS	Required for the control of GOT and the communication between PC and GOT. Installed at factory shipment. (BootOS can be installed from GT Designer3, or the SD card. When the installation has completed, the GOT is initialized to be the factory shipment status. Also, the basic system applications must be pre-installed in the GOT when the BootOS is installed again.)
System application	Required for the GOT operation as the monitoring function of GOT, installation and deletion of the system application or project data, touch key control or display function of the screen and guidance. Required for display and operation of the user-created screen and utility screen. Not installed in GOT at factory shipment. Install it from GT Designer3 or the data storage.

7.2 Prior Preparations for Installing BootOS and System Application

For the installation using GOT, the data storage that is storing BootOS or the system application is required.
There are the following three methods for the installation of BootOS and system application.

(1) [To Memory Card] from GT Designer3

➡ GT Designer3 (GOT2000) Help

(2) Uploading from other GOT (BootOS or system application has been installed)

➡ 6. DATA CONTROL

(3) Using an SD card that stores data with OS boot drive set to A drive

➡ GT Designer3 (GOT2000) Help

POINT

Precautions on writing BootOS, system applications in a data storage

When writing BootOS, system applications or others into the data storage, be sure to execute by the utility of other GOT or GT Designer3.
The installation is not executed properly with the storage to which uploaded from the utility of GOT or copied by software other than GT Designer3.
Note the available capacity of the data storage.
The available capacity of BootOS and system applications can be confirmed by [To Memory Card] or [書込オプション] of GT Designer3.

[To Memory Card] dialog
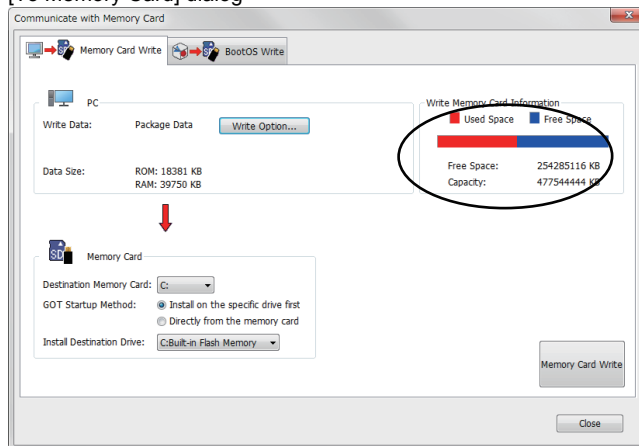
Available space of the data

[書込みオプション] dialog
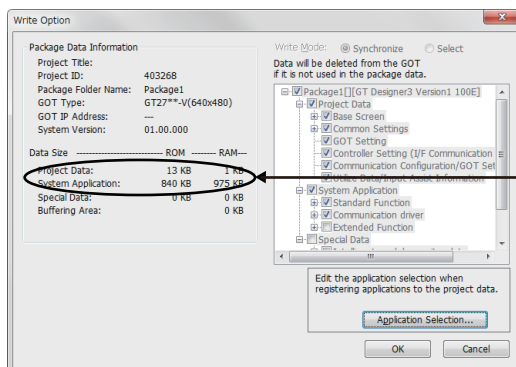
Available space of the system application

INSTALLATION OF BOOTOS AND BASIC SYSTEM APPLICATION

7.3 BootOS and System Application Installation Using Data Storage

There are the following two types for the installation of BootOS and system applications using a data storage.

(1) Installing when starting the GOT

➡ 7.3.1 Installing when starting the GOT

All the system applications and project data stored in the data storage are transferred to the GOT when powering on the GOT. This installing method is effective in the following cases.
 • The GOT utility cannot be displayed.
 • The system application is not installed.

(2) Installing using the data control function (Utility)

➡ 7.3.2 Installing using the data control function (Utility)

By operating the utility, select the system application or project data stored in the data storage and transfer them to the GOT.

POINT

Precautions on installing BootOS, system applications

(1) Installing both BootOS and system applications
After completing BootOS installation, install system applications. When installing BootOS, the built-in flash memory in the GOT is initialized and goes to the status at factory shipment. (All system applications and project data are erased.)

<u>BootOS is installed in the GOT at factory shipment. It is not necessary to install BootOS when not upgrading it.</u>

(2) Copying project data using a data storage
After installing BootOS and system applications, download the project data.
At this time, match the version of the system application in the GOT with the version of the system application with which the project data was created.

(3) When system applications and project data are in the data storage (when using GT Designer3)
For S.MODE switch-pressing installation, after the system application installation has completed, the project data is downloaded.
When installing with the utility, install the system application and download the project data from their respective operation screens.

(4) Installation cannot be interrupted.
Do not perform any of the following during a BootOS or system application installation.
Failure to do so may result in installation failure, causing the GOT malfunction.
 • Powering off the GOT
 • Pressing the reset button of the GOT
 • Opening the cover of the SD card interface
 • Removing the data storage

If the installation failure and the GOT malfunction occur, take the following action.
 • If BootOS installation failed:
   Touch the screen according to the displayed dialog to restart the GOT.
   After restarting the GOT, the GOT is initialized to be the factory shipment status.
 • If the basic system application installation failed:
   Install BootOS.

➡ 7.3.1 Installing when starting the GOT

7.3.1 Installing when starting the GOT

The displayed message is different depending on the installation condition of the basic system application in the GOT. When the screen requesting operation is displayed, operate the GOT according to the instructions on the screen.

POINT

S.MODE switch-pressing installation function

When the data storage that stores data with the OS boot drive set to the A drive is used, the S.MODE switch-pressing installation function is not available.

■ Operation procedure

The S.MODE switch is on the back of the GOT, as shown below.

Installation switch (S.MODE)
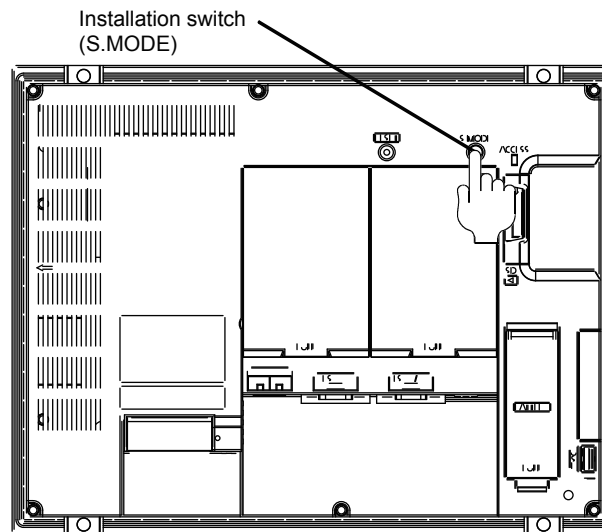
(1) When installing with an SD card

1. Power OFF the GOT, and install the SD card where the BootOS, system application or project data is stored in the SD card interface of the GOT.

2. Close the cover of the SD card interface of the GOT.

3. Power on the GOT.
Power on the GOT while pressing the install switch (S.MODE switch) on the back of the GOT. (1-point press installation function)

4. The BootOS or system application is installed in the built-in flash memory.
The SD card access LED is lit during the install execution.
Do not pull out the SD card or power OFF the GOT while the SD card access LED is lit.

```
Now installing BootOS.
```

5. The GOT restarts automatically after the installation is completed.
(When the system application is already installed, the GOT restarts by touching the $\boxed{OK}$ button)

```
Reboot.
```

6. After confirming normal restart, confirm that the SD card access LED is not lit, and remove the SD card from the SD card interface of the GOT.

(2) When installing with USB memory

1. Power off the GOT, and install the USB memory where the BootOS, system application or project data is stored in the USB interface of the GOT.
The BootOS cannot be stored in the USB memory where the system application or project data is stored.

2. Power on the GOT.
Power on the GOT while pressing the install switch (S.MODE switch) on the back of the GOT. (1-point press installation function)

3. The BootOS or system application is installed in the built-in flash memory.
The USB memory access LED is lit during the installation execution.
Do not pull out the USB memory or power off the GOT while the USB memory access LED is lit.

```
Now installing BootOS.
```

4. The GOT restarts automatically after the installation is completed.
(When the system application is already installed, the GOT restarts by touching the $\boxed{OK}$ button)

```
Reboot.
```

5. After confirming normal restart, confirm that the USB memory access LED is not lit, and remove the USB memory from the USB interface of the GOT.
For removing methods of the USB memory, refer to the following.

➠ 4.2.3 USB device status display operation

7.3.2　Installing using the data control function (Utility)

For details of data control function, refer to the following.

        ➡️　6. DATA CONTROL

POINT

Precautions on executing data control function

When execute data control function, system application has to be installed in GOT in advance. Thus, this function cannot be used for the initial installation of BootOS, system application after purchasing GOT.
Install system application by the following two methods.

(1)　GT Designer3

(2)　Installing when starting the GOT

■ Operation procedure

(1)　When installing with an SD card

1. Install the SD card where the BootOS, system application or project data is stored in the SD card interface of the GOT.

2. Close the cover of the SD card interface of the GOT.

3. Display the data control function screen (Utility) on the GOT, and install BootOS, system application from the SD card to GOT.

Touch [Install]
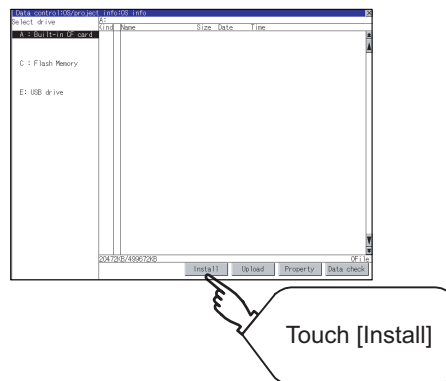
4. The SD card access LED is lit during the install execution.
Do not pull out the SD card or open the SD card interface while the SD card access card is lit.

Now installing BootOS.
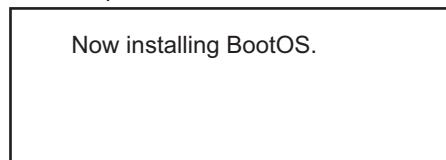
5. GOT restarts automatically after installation is completed.
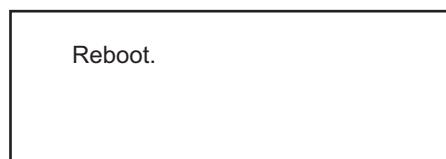
Reboot.

6. After confirming normal restart, confirm that the SD card access LED is not lit, and remove the SD card from the SD card interface of the GOT.

(2) When installing with USB memory

1. Install the USB memory where the BootOS, system application or project data is stored in the USB interface of the GOT.

2. Display the data control function screen (Utility) on the GOT, and install basic system application from the USB drive to GOT.

Touch [Install]

3. The USB memory access LED is lit during install execution.
    Do not pull out the USB memory or power OFF the GOT while the USB memory access LED is lit.

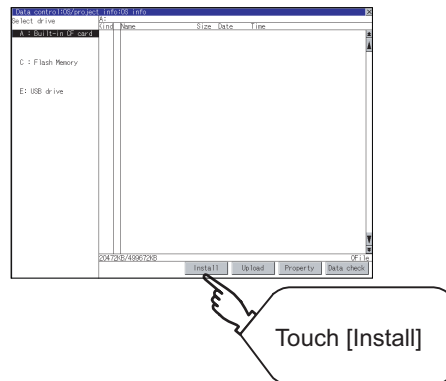Now installing BootOS.

4. The GOT restarts automatically after the installation is completed.

Reboot.
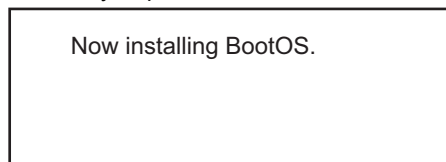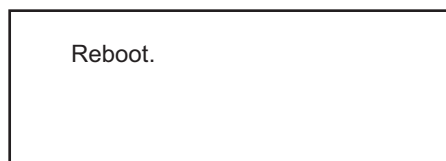
5. After confirming normal restart, confirm that the USB memory access LED is not lit.
    Display the USB device status screen and remove the USB memory from the USB interface of GOT.

    ➡ 4.2.3 USB device status display operation

7.4 When Installing the Different Version of BootOS, Basic System Application

(1) BootOS installation

When installing BootOS, GOT compares the version of the BootOS to be installed with the version of BootOS which is already installed.

If the major version of BootOS to be installed is old, execute the following operations to prevent it from being rewritten.

(When installing from GT Designer3, a message is displayed on the personal computer screen. Follow the instructions in that message.)

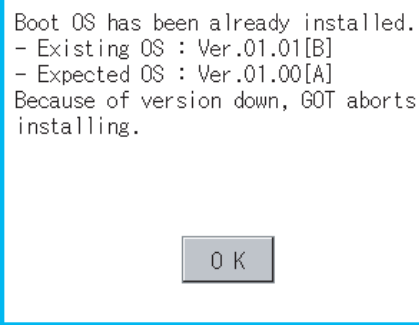(a) When only BootOS is stored in the data storage
The message indicating disabled installation is displayed.

```
Boot OS has been already installed.
- Existing OS : Ver.01.01[B]
- Expected OS : Ver.01.00[A]
Because of version down, GOT aborts
installing.

              [ O K ]
```
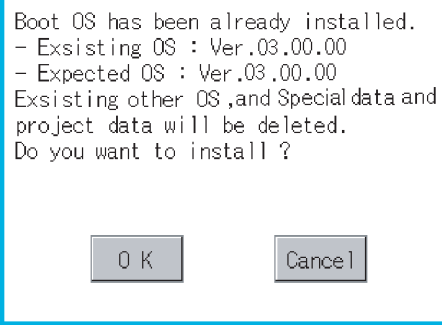
OK Touch the ### button to cancel installation.
After canceling installation, restart the GOT.

(b) When BootOS and system application are stored in the data storage
Skip the BootOS installation and install the system application.
If the system application has already installed in the GOT, the following message is displayed.

```
Boot OS has been already installed.
- Exsisting OS : Ver.03.00.00
- Expected OS : Ver.03.00.00
Exsisting other OS ,and Special data and
project data will be deleted.
Do you want to install ?

     [ O K ]        [ Cancel ]
```

OK Touching the ### button executes installation.

Cancel Touching the ### button cancels installation.
After executing or canceling installation, restart the GOT.

(c) When the version is the same or newer regardless of the data stored in the data storage (conditions (a) and (b) above)
The version information and a dialog for selecting whether or not to continue installation are displayed.

```
Boot OS has been already installed.
- Exsisting OS : Ver.01.01[B]
- Expected OS : Ver.01.01[B]
Exsisting basic OS ,and other OS and
project data will be deleted.
Do you want to install ?


       O K          Cancel
```
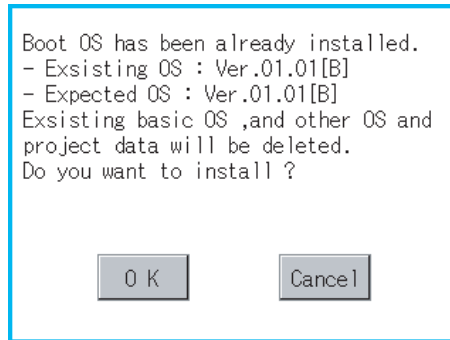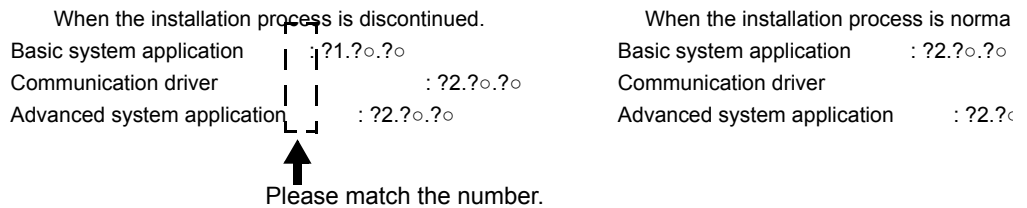
<GOT screen when BootOS is installed from the data storage.>

OK Touching the ### button executes installation.

Cancel Touching the ### button cancels installation.

(2) System application installation
Match the version of each system application when installing system applications.
System applications cannot be installed if the version of each system application does not match.

When the installation process is discontinued.

Basic system application : ?1.?○.?○
Communication driver : ?2.?○.?○
Advanced system application : ?2.?○.?○

↑
Please match the number.

When the installation process is norma

Basic system application : ?2.?○.?○
Communication driver
Advanced system application : ?2.?○

POINT

Checking method of BootOS, system application version

1. Check the version of BootOS or basic system applications version installed in GOT at [システムアプリケーション情報] of the utility.

2. Confirm the version of BootOS installed in the GOT at product shipment by rating plate of GOT rear face.

```
  MITSUBISHI                    (PASSED)
  ELECTRIC
GRAPHIC OPERATION TERMINAL
MODEL   GT2708-VTBA
IN      100-240VAC 50/60Hz
POWER   MAX 100VA
MAC ADD. 123456789012
SERIAL  00013910AA00000-A
DATE    2013-09
                              (A A)
                                └ BootOS version
                                  (In case that the BootOS is two digits, only
MITSUBISHI ELECTRIC CORPORATION
MADE IN JAPAN
```
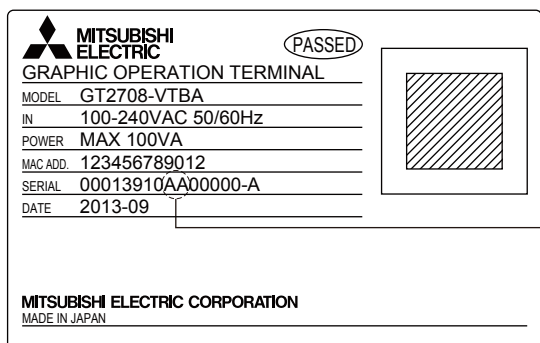
REVISIONS

* The manual number is given on the bottom left of the back cover.

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MEMO

<u>WARRANTY</u>

Please confirm the following product warranty details before using this product.

1. <u>Gratis Warranty Term and Gratis Warranty Range</u>

If any faults or defects (hereinafter "Failure") found to be the responsibility of Mitsubishi occurs during use of the product within the gratis warranty term, the product shall be repaired at no cost via the sales representative or Mitsubishi Service Company. However, if repairs are required onsite at domestic or overseas location, expenses to send an engineer will be solely at the customer's discretion. Mitsubishi shall not be held responsible for any re-commissioning, maintenance, or testing on-site that involves replacement of the failed module.

[Gratis Warranty Term]

The gratis warranty term of the product shall be for thirty-six (36) months after the date of purchase or delivery to a designated place.
Note that after manufacture and shipment from Mitsubishi, the maximum distribution period shall be six (6) months, and the longest gratis warranty term after manufacturing shall be forty-two (42) months. The gratis warranty term of repair parts shall not exceed the gratis warranty term before repairs.

[Gratis Warranty Range]

(1) The customer shall be responsible for the primary failure diagnosis unless otherwise specified.
     If requested by the customer, Mitsubishi Electric Corporation or its representative firm may carry out the primary failure diagnosis at the customer's expence.
    The primary failure diagnosis will, however, be free of charge should the cause of failure be attributable to Mitsubishi Electric Corporation.
(2) The range shall be limited to normal use within the usage state, usage methods and usage environment, etc., which follow the conditions and precautions, etc., given in the instruction manual, user's manual and caution labels on the product.
(3) Even within the gratis warranty term, repairs shall be charged for in the following cases.
    1. Failure occurring from inappropriate storage or handling, carelessness or negligence by the user. Failure caused by the user's hardware or software design.
    2. Failure caused by unapproved modifications, etc., to the product by the user.
    3. When the Mitsubishi product is assembled into a user's device, Failure that could have been avoided if functions or structures, judged as necessary in the legal safety measures the user's device is subject to or as necessary by industry standards, had been provided.
    4. Failure that could have been avoided if consumable parts designated in the instruction manual had been correctly serviced or replaced.
    5. Replacing consumable parts such as the battery, backlight and fuses.
    6. Failure caused by external irresistible forces such as fires or abnormal voltages, and Failure caused by force majeure such as earthquakes, lightning, wind and water damage.
    7. Failure caused by reasons unpredictable by scientific technology standards at time of shipment from Mitsubishi.
    8. Any other failure found not to be the responsibility of Mitsubishi or that admitted not to be so by the user.

2. <u>Onerous repair term after discontinuation of production</u>

(1) Mitsubishi shall accept onerous product repairs for seven (7) years after production of the product is discontinued.
    Discontinuation of production shall be notified with Mitsubishi Technical Bulletins, etc.
(2) Product supply (including repair parts) is not available after production is discontinued.

3. <u>Overseas service</u>

Overseas, repairs shall be accepted by Mitsubishi's local overseas FA Center. Note that the repair conditions at each FA Center may differ.

4. <u>Exclusion of loss in opportunity and secondary loss from warranty liability</u>

Regardless of the gratis warranty term, Mitsubishi shall not be liable for compensation to damages caused by any cause found not to be the responsibility of Mitsubishi, loss in opportunity, lost profits incurred to the user by Failures of Mitsubishi products, special damages and secondary damages whether foreseeable or not, compensation for accidents, and compensation for damages to products other than Mitsubishi products, replacement by the user, maintenance of on-site equipment, start-up test run and other tasks.

5. <u>Changes in product specifications</u>

The specifications given in the catalogs, manuals or technical documents are subject to change without prior notice.

6. <u>Product application</u>

(1) In using the Mitsubishi graphic operation terminal, the usage conditions shall be that the application will not lead to a major accident even if any problem or fault should occur in the graphic operation terminal device, and that backup and fail-safe functions are systematically provided outside of the device for any problem or fault.
(2) The Mitsubishi graphic operation terminal has been designed and manufactured for applications in general industries, etc.
    Thus, applications in which the public could be affected such as in nuclear power plants and other power plants operated by respective power companies, and applications in which a special quality assurance system is required, such as for Railway companies or Public service purposes shall be excluded from the graphic operation terminal applications.
    In addition, applications in which human life or property that could be greatly affected, such as in aircraft, medical applications, incineration and fuel devices, manned transportation equipment for recreation and amusement, and safety devices, shall also be excluded from the graphic operation terminal range of applications.
    However, in certain cases, some applications may be possible, providing the user consults the local Mitsubishi representative outlining the special requirements of the project, and providing that all parties concerned agree to the special circumstances, solely at our discretion.
    In some of three cases, however, Mitsubishi Electric Corporation may consider the possibility of an application, provided that the customer notifies Mitsubishi Electric Corporation of the intention, the application is clearly defined and any special quality is not required.

GOT2000 Series User's Manual (Utility)

MODEL	GOT2000-U-UTILITY-E
MODEL CODE	1D7MJ6

MITSUBISHI ELECTRIC CORPORATION

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