MITSUBISHI ELECTRIC

GOT2000 Series RGB Input Unit

User's Manual

GT27-R2

Thank you for purchasing the GOT2000 Series.

Prior to use, please read both this manual and detailed manual thoroughly to fully understand the product.

MODEL	GT27-R2-U-JE
MODEL CODE	1D7MP9
IB(NA)-0800547-A(1504)MEE	

GRAPHIC OPERATION TERMINAL GOT2000

●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	Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.

Note that the ⚠ CAUTION level may lead to a serious accident according to the circumstances.
Always follow the precautions 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]

⚠ CAUTION

- Do not bunch the control wires or communication cables with the main circuit or power wires, or lay them close to each other.
  As a guide, separate the lines by a distance of at least 100mm (3.94 inches) otherwise malfunctions may occur due to noise.

[INSTALLATION PRECAUTIONS]

⚠WARNING

- Be sure to shut off all phases of the external power supply used by the system before mounting or removing this unit to/from the GOT. Not doing so can cause a unit failure or malfunction.
- Before connecting the Bus connection cable to this unit, always shut off GOT power and PLC CPU power externally in all phases.Not doing so can cause a malfunction.

⚠ CAUTION

- Use this unit in the environment that satisfies the general specifications described in the User's Manual for the GOT used. Not doing so can cause an electric shock, fire, malfunction or product damage or deterioration.
- Do not drop the unit or subject it to string shock.
  A unit damage may result.
- When installing this 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.
  Undertightening can cause a drop, failure or malfunction. Overtightening can cause a drop, failure or malfunction due to screw or unit damage.

[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

- Exercise care to avoid foreign matter such as chips and wire offcuts entering the unit.
  Not doing so can cause a fire, failure or malfunction.
- Make sure to securely connect the cable to the connector of unit.
  Incorrect connection may cause malfunctions.

[STARTUP AND MAINTENANCE PRECAUTIONS]

⚠WARNING

- Before starting cleaning, always shut off GOT power externally in all phases.
  Not doing so can cause a unit failure or malfunction. Undertightening can cause the GOT to drop, short circuit or malfunction.
  Overtightening can cause a short circuit or malfunction due to the damage of the screws or unit.
- Do not disassemble or modify any unit.
  This will cause failure, malfunction, injuries, or fire.
- Do not touch the conductive areas and electronic parts of this unit directly.
  Doing so can cause a unit malfunction or failure.

⚠ CAUTION

- Always secure the cables connected to the unit, e.g. run them in conduits or clamp them. Not doing so can cause unit or cable damage due to dangling, moved or accidentally pulled cables or can cause a malfunction due to a cable contact fault.
- Do not hold the cable part when unplugging any cable connected to the unit. Doing so can cause unit or cable damage or a malfunction due to a cable contact fault.
- Always make sure to touch the grounded metal to discharge the electricity charged in the body, etc., before touching the unit. Failure to do so may cause a failure or malfunctions of the unit.

[DISPOSAL PRECAUTIONS]

⚠ CAUTION

- Dispose of this product as industrial waste.

[TRANSPORTATION PRECAUTIONS]

⚠ CAUTION

- 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 the User's Manual for the GOT used, as they are precision devices.
  Failure to do so may cause the unit to fail.
  Check if the unit operates correctly after transportation.

[TRANSPORTATION PRECAUTIONS]

⚠ CAUTION

- 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.

Manuals

The following shows manuals relevant to this product.

Detailed Manual

Manual name	Manual number (Model code)
GOT2000 Series User's Manual (Hardware) (Sold separately)	SH-081194ENG (1D7MJ5)
GOT2000 Series Connection Manual (Microcomputers, MODBUS/Fieldbus Products, Peripherals) For GT Works3 Version1	SH-081200ENG

For detailed manuals, refer to the PDF manuals stored in the DVD-ROM for the drawing software used.

Relevant Manuals

For relevant manuals, refer to the Help or the :PDF manuals stored in the DVD-ROM for the drawing software used.

The latest manuals are also available from MITSUBISHI ELECTRIC FA Global Website (http://www.MitsubishiElectric.co.jp/fa/).

Compliance with the EMC and Low Voltage Directives

To configure a system meeting the requirements of the EMC and Low Voltage Directives when incorporating the Mitsubishi GOT (EMC and Low Voltage Directives compliant) into other machinery or equipment, refer to "EMC AND LOW VOLTAGE DIRECTIVES" of the General Description included with the GOT used. The CE mark, indicating compliance with the EMC and Low Voltage Directives, is printed on the rating plate of the GOT.

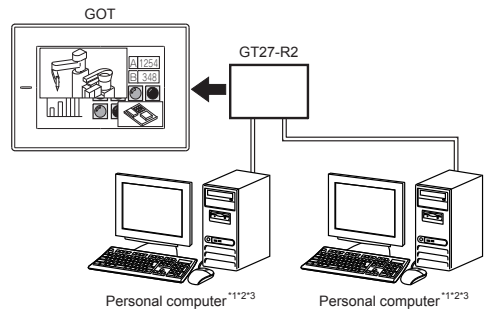
Packing List

After unpacking the box, check that the following products are included.

Model	Product	Quantity
GT27-R2	GT27 RGB input unit GT27-R2	1
	Mounting screw set (2 screws (26 mm), 2 stickers)	2
	GOT2000 Series RGB Input Unit User's Manual (This manual)	1

1. OVERVIEW

This user's manual describes the GT27 RGB input unit GT27-R2 (hereinafter referred to as the RGB input unit).
Mounting the RGB input unit on a GT27 model enables the GOT to display up to two RGB screens simultaneously.



*1:Depending on the peripheral device connected, noise coming from power cables may cause the GOT or a PLC to malfunction.
In this case, install the following line filter to the power lines of the device.
Recommended line filter: TDK Lambda RSHN-2003 (or equivalent products)
*2:If the flickering of the screen occurs due to the noise from the RGB cable, attach the following ferrite core to the RGB input section.
Recommended ferrite core: TDK-Lambda ZCAT3035-1330 (or equivalent products)
*3:When connecting the GOT with a personal computer, ground the ground cable of the personal computer.

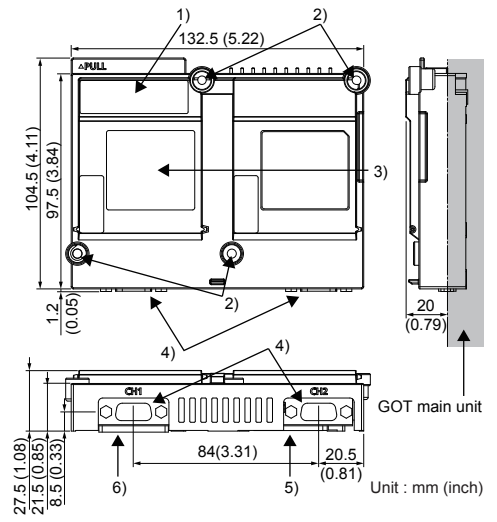
To use the RGB input unit, configure the communication settings.
For the settings and system configurations, refer to GOT2000 Series Connection Manual (Microcomputer, MODBUS Products, Peripherals) for GT Works3 Version 1.
For the RGB input function, refer to GT Designer3 (GOT2000) Help.

2. SPECIFICATIONS

The following shows the performance specifications of the RGB input unit.
The general specifications of the RGB input unit are the same as those of the GOT.
Refer to the User's Manual for the GOT used for the general specifications of the GOT.

Item		Specifications
RGB input section	Input method	Analog RGB(XGA:1024× 768 dot, SVGA: 800× 600 dot, VGA:640× 480 dot)
	Number of channels	2 channels
	Input image signal	1Vp-p, 75Ω
	Synchronizing signal	TTL, 1kΩ
	Display size	1024× 768 dot (refresh rate 60 Hz) 800× 600 dot (refresh rate 60, 72, 75 Hz) 640× 480 dot (refresh rate 60, 72, 75, 85 Hz)
	Connector for external connection	D-Sub15 pin: female
Internal current consumption	5.0 VDC	0.71 A
Weight		0.22 kg

3. PART NAMES AND EXTERNAL DIMENSIONS



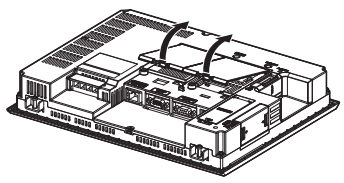
No.	Name	Description
1)	Extension connector	Connector for connecting an extension unit
2)	Mounting screw	Screw for fixing the GOT
3)	Rating plate	-
4)	Connector for RGB input	Connector for connecting RGB cables
5)	Auxiliary extension connector	Auxiliary extension connector connected to the GOT
6)	Interface connector	Extension connector connected to the GOT

4. INSTALLATION AND REMOVAL PROCEDURE

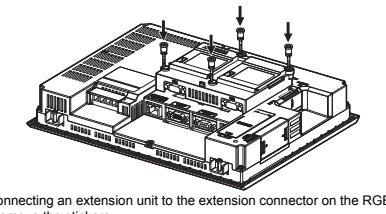
4.1 Unit Installation

The installation procedure for the RGB input unit is explained using the GT2712.

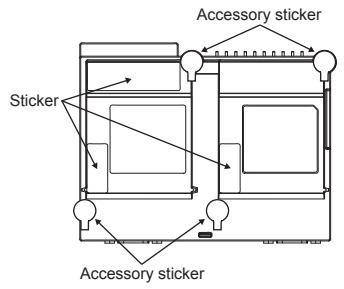
1) Turn off the GOT.
2) Pull up the two hooks in the extension unit cover (two covers) of the GOT to remove the cover toward the opposite side of the hoots of the cover as a fulcrum.



3) Connect the RGB input unit to the auxiliary extension interface and the extension interface on the GOT. Then, tighten 4 mounting screws (26 mm) with a torque of 0.36 N•m to 0.48 N•m to fix the unit.



4) For connecting an extension unit to the extension connector on the RGB input unit, remove the stickers.
For connecting no extension unit to the extension connector, to avoid static electricity, cover over 4 mounting screws with the accessory stickers for the RGB input unit. Leave the stickers in place.



4.2 Unit Removal

Remove the RGB input unit in the reverse procedure to the installation.

Warranty

Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; machine damage or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

⚠For safe use

- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi.
- This product has been manufactured under strict quality control. However, when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

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Specifications subject to change without notice.
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