

Always follow the precautions of both levels because they are import-ant to personal safety.

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

IDESIGN PRECAUTIONS

- 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.

- 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. Undertightening can cause a drop, failure or malfunction

Overtightening can cause a drop, failure or malfunction due to screw or unit damage.

[WIRING PRECAUTIONS]

 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.

- 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]

- 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.

- 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 o 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]

	A CAUTION
•	Dispose of this product as industrial waste.

[TRANSPORTATION PRECAUTIONS]

- 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.

Manual

The following shows manuals relevant to this product.

Detailed Manual

Manual name	Manual number (Model code)
GT16 User's Manual (Hardware) (Sold separately)	SH-080928ENG (1D7MD3)
GOT1000 Series Connection Manual (Microcomputer, MODBUS Products, Peripherals) for GT Works3 (Sold separately)	SH-080871ENG (1D7MC5)
GT Designer3 Version1 Screen Design Manual (Functions) (Sold separately)	SH-080867ENG (1D7MC1)

Relevant Manuals

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

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.

Compliance with the new China RoHS directive GOT 相关的基于" 电器电子产品有害物质限制使用管理办法" 要求的表示方法



Note: This symbol mark is for China only.

有有害 6 物质的名称、含有量、含有部件 产品中所含有的有害 6 物质的名称、含有量、含有部件如下表所示。 产品中有害物质的名称及含量

	有害物质					
部件名称	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
电路板组件	×	0	0	0	0	0
树脂壳体、电缆、膜材	0	0	0	0	0	0
钣金部件、螺丝等金属部件	0	0	0	0	0	0

- 〇:表示该有害物质在该部件所有均质材料中的含量均在 GB/T26572 规定的限量要
- 本以下。 : 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T26572 规定的 限量要求。

Referenced Standard: GB/T15969.2 (Requirement of Chinese standardized law)

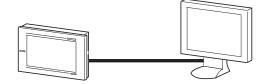
Packing List

After unpacking the box, check that the following products are

ncluded.		
Model	Product	Quantity
	RGB output unit	1
GT16M-ROUT	Mounting screw set (4 screws, 4 stickers)	1
GT IOW-ROUT	Extension interface relay board	1
	GT16 RGB Output Unit User's Manual (This manual)	1

1. OVERVIEW

This User's Manual describes the GT16M-ROUT RGB output unit This occi is main describe the GB output unit. (hereinafter referred to as the RGB output unit). When mounting RGB output unit with $GT16 \square \square$ M the RGB output unit can external display screens on GOT.



GOT+GT16M-ROUT External display To use the RGB output unit set the communication settings For the settings and system configurations, refer to GOT1000 Series Connection Manual. For RGB output functions, refer to GT Designer2 Version Design Manual

2. SPECIFICATIONS

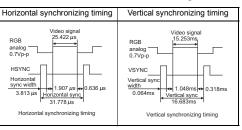
The following shows the performance specifications of the the RGB output unit.

The general specifications of the RGB output unit are the same as those of the GOT.

For the general specifications of the GOT, refer to the User's Manual for the GOT used.

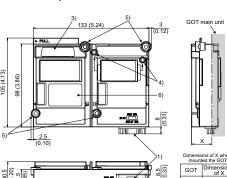
2.1 RGB output unit						
Item			Specifications			
			GT1695M-X	GT1685M-S GT1675M-S GT1665M-S	GT1675M-S GT1665M-S	
	RGB of format	utput	Analog RGB			
	Display size (dot)		XGA; 1024×768	SVGA; 800×600	VGA; 640×480	
	Number of RGB output channels		1 channel			
RGB	Dot clock		65.000 MHz	40.000 MHz	25.175 MHz	
output sectio n	Horizontal scanning frequency		48.4 kHz	37.9 kHz	31.5 kHz	
	Vertical scanning frequency			60 Hz		
	Timing chart		Refer to 2.2.	Refer to 2.3.	Refer to 2.4.	
	Connector for external connection		D-Sub15 pin: female			
Interna	-	3.3VDC		0.13A		
current	5 0) (D 0		0 11 A			

2.4 GT1675M-V and GT1665M-V Timing Chart



3. PART NAMES AND EXTERNAL DIMENSIONS

3.1 RGB Output Unit



4. INSTALLATION PROCEDURE

The installation procedure for the RGB output unit is explained using the GT1675.

1) Turn off the GOT.



3) Connect the extension interface relay board to the extend I/F-2 on the GOT. Remove the connector cover from the board.

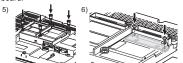
4) Fit the RGB output unit in the GOT case.

ove the connector cover



5)Tighten four mounting screws with a torque of 0.36 to 0.48 N•m to fix the unit.

6) Tighten two board fixing screws with a torque of 0.36 to 0.48 N·m to fix the board.



Warranty

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

Country/Region Sales office/Tel

UK

Czech

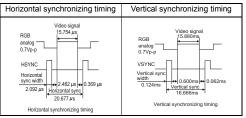
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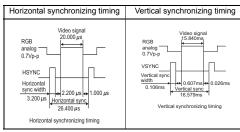
Valreteria de Rubin voca reperior fel: 344-935-65-3131 Mitsubishi Electric Europe B.V. French Branch 55, Boulevard des Bouvets, 92741 Nanterre Cedex, France

consumption	 -
Weight	0.17 kg (0.37 lb)

2.2 GT1695M-X Timing Chart



2.3 GT1685M-S, GT1675M-S, and GT1665M-S Timing Chart

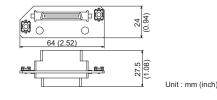


- I - I - I - I - I - I - I - I - I - I		15"	19.5 (0.77)
└─ └──────────────────────────────────		12.1"	18 (0.71)
	19	10.4"	21 (0.83)
2)	(0.75) Unit mm (inch)	8.4"	23 (0.91)

.91)

No.	Name	Description
1)	Connector for RGB output	Connector for connecting a 9-core combined cable
2)	Interface connector	Connector connected to the GOT
3)	Extension connector	Connector for connecting an extension unit
4)	Board fixing screw	Screw for fixing the extension interface relay board
5)	Mounting screw	Screw for fixing the RGB output unit
6)	Rating plate	-

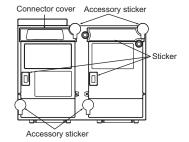
3.2 Extension Interface Relay Board



7) For mounting any extension unit on the RGB output unit, remove the connector cover and the stickers.

For mounting no extension unit on the RGB output unit, cover over four mounting screws with the accessory stickers to avoid static electricity.

Keep the connector cover fixed. Keep all the stickers fixed.



Point

Remove the screws that fixes the extension interface relay board before removing the unit.(Above 6))

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Specifications subject to change without notice Printed in Japan, June 2018.