MITSUBISHI

GT16 Multimedia Unit

User's Manual

GT16M-MMR

Thank you for purchasing the GOT1000 Series.

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



●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 "DANGER" and "CAUTION"

- _ _ _ _ _ _ _ _ _ _ _ _ _ _ . DANGER Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.
- Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.
- _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
- Note that the riangle CAUTION level may lead to a serious accident according to the Always follow the precautions of both levels because they are important to per-
- sonal safety
- Please save this manual to make it accessible when required and always forward it to the end use

[DESIGN 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]			
[ISTALLATION PRECAUTIONS]		
[]]	ISTALLATION PRECAUTIONS]		
•			

- 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.

- 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. Underrightening can cause a drop, failure or malfunction. Overlightening can cause a drop, failure or malfunction due to screw or unit damage.

WIRING PRECAUTIONS1

OANGER 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]

- **DANGER**
- 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 draut or malfunction. Overtightening can cause a short circuit or malfunction due to the damage of the screws or unit.
- Do not disassemble or modify the unit and the CF card. Doing so can cause a failure, malfunction, injury 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 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.

- When installing a CF card into this unit, insert it into the card slot of this unit until the CF card elect button poos out.
- Failure to do so may cause a malfunction due to poor contact Before inserting or removing a CF card into/from this unit, turn the CF card access
- switch off. Failure to do so may corrupt data on the CF card.
- When removing a CF card from the GOT, support it by hand, as it may pop out. Failure to do so may cause the CF card to drop from the unit, resulting in a damage or failure

IDISPOSAL PRECAUTIONS

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.

<u>Manuals</u>

The following shows manuals relevant to this product.

Detailed Manual

Manual name	Manual number (Model code)
GT16 User's Manual (Hardware)	SH-080928ENG
(Sold separately)	(1D7MD3)
GT16 User's Manual (Basic Utility)	SH-080929ENG
(Sold separately)	(1D7MD4)
GOT1000 Series Connection Manual (Microcomputer, MODBUS Products, Peripherals) for GT Works3 (Sold separately)	SH-080871ENG (1D7MC5)
GT Designer3 Version1 Screen Design Manual	SH-080867ENG
(Functions) (Sold separately)	(1D7MC1)

Relevant Manuals

For relevant manuals, refer to the PDF manuals stored in the CD-ROM for the

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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 Radio Waves Act (South Korea)

This product complies with the Radio Waves Act (South Korea) Note the following when using the product in South Korea.

이 기기는 업무용 (A급) 전자파직합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으 로 합니다. (The product is for business use (Class A) and meets the electromagnetic compatibility requirements compatibility requirements The seller and the user must note the above point, and use the product in a place

except for home.)

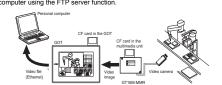
Packing List

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

Model	Product	Quantity
	Multimedia unit	1
GT16M-MMR	Mounting screw set (4 screws, 4 stickers)	1
	Extension interface relay board	1
	Cable clamp (for sound I/O)	1

1. OVERVIEW

- This user's manual describes GT16 multimedia unit (hereinafter referred to as the multimedia unit). The following functions are available by mounting the multimedia unit on the GT16 \square M.
- The GOT displays a video image taken by a video camera, or the GOT stores the video image as a video file in a CF card and plays the file. When an error occurs, a video image taken 120 seconds before and after the control of the second s
- error (up to 240 seconds) can be stored as a video file in a CF card. With the Ethernet connection, the GOT sends a video file to the personal computer using the FTP server function.



*1: To store video files in the personal computer, the FTP server function of the GOT and the multimedia interaction tool are required.
*2: Power on the GOT simultaneously with the video camera.
*3: Depending on the video camera iyee, noise from the power supply cable of the video camera may cause malfunction of the GOT or a programmable controller. In this case, attach the following line filter to the power supply inc of the video camera.
Recommended line filter: TDK ZHC2203-11 (or equivalent products)
To use the multimedia unit, set the communication settings.
For the settings and system configurations, refer to GOT1000 Series Connection Manual (Microcomputer, MODBUS Products, Peripherals) for GT Works3.
For the multimedia function, refer to GT Designer3 Version1 Screen Design Manual (Function). Manual (Functions).

2. SPECIFICATIONS

The following shows the performance specifications of the multimedia unit. The general specifications of the multimedia 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

Item			Specifications	
	Input	Color	NTSC format, PAL format (interlaced format)	
	format	Monochrome	EIA format, CCIR format (interlaced format)	
	Number of	channels	1 channel	
Video input	Video input signal		IVp-p, 75 Ω, composite signal	
section	Display size (dot)		640x480 768x576 ^{*1}	
	Connector for external connection		BNC connector	
	Applicable	wire size	75 Ω shielded coaxial cable al shield cable	
	Number of channels		1 channel	
Sound input	Sound input	ut signal	1 Vrms	
section	Connector for external connection		ϕ 3.5 stereo mini jack, straight type	
	Number of channels		1 channel	
Sound output	Sound out	out signal	1 Vrms (Rated load 10k Ω)	
section	Connector for external connection		ϕ 3.5 stereo mini jack, straight type	
CF Card I/F	F Card I/F Slot		Compact flash Slot (TYPE1) 1 channel	
section	Mode		True-IDE mode	
	Number of channels		1 channel	
Ethernet I/F section	Connector for external connection		RJ-45 jack	
	Data transf		10BASE-T/100BASE-TX	
	File format		3GP, MP4	
Video file	format	ng/decoding	MPEG-4 Part.2 SP@LV4	
	Resolution frame rate	/maximum	VGA/15fps, QVGA/30fps	
Internal current o	oneumotion	3.3VDC	0.51A	
Internal current consumption 5.0VDC		5.0VDC	0.27A	
Weight			0.28kg (0.61lb)	

0.28kg (0.61lb) *1:Compatible with PAL and CCIR formats only

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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

Mitsubishi Electric Europe B.V. German Branch Gothaer Strasse 8 D-40880 Ratingen, GERMANY Tel : +49-2102-486-0

Mitsubishi Electric Europe B.V. Spanish Branch Carretera de Rubi 76-80,

Itel: . T+9-2102-480-0 Mitsubishi Electric Europe B.V. UK Branch Travellers Lane, Hatfield, Hertfordshire., AL10 8XB, U.K. Tel: +44-1707-276100

Tel: +44-170/-276100 Mitsubishi Electric Europe B.V. Italian Branch Centro Dir. Colleoni, Pal. Perseo-Ingr.2 Via Paracelso 12, I-20041 Agrate Brianza., Milano, Italy

Mtsubishi Electric Automation Inc. 500 Corporate Woods Parkway Vernon Hills, IL 60061, U.S.A. Tel : +1-847-478-2100 MELCO-TEC Rep. Com e Assessoria Tecnica Ltda. Rua Correia Dias, 184, Edificio Paraiso Trade Center-8 andar Paraiso, Sao Paulo, SP Brazil Tel : +55-11-5908-8331

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3. PART NAMES AND EXTERNAL DIMENSIONS

3.1 Multimedia Unit

nput

Interface connector

Extension connector

CF card interface

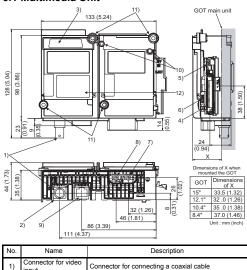
CF card access

2)

3)

4)

5)



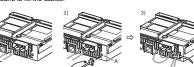
4. INSTALLATION PROCEDURE

4.1 Cable Connection

1) Connect the cables of the sound I/O devices to the multimedia unit. Attach the cable clamp to the unit.
 Position the cable clamp band outside, and insert the cable clamp to section A

shown in the following figure until it clicks. For the band inserting direction, refer to the arrow (The cable clamp is the RST-1NB manufactured by TAKEUCHI INDUSTRY CO.,

LTD.) 3) Put the cables of the sound I/O devices through the looped cable clamp band, and pull the band to fix the cables



Cable of the

4.2 Unit Installation

The installation procedure for the multimedia unit is explained using the GT1685. 1) Turn off the GOT.



Connect the extension interface relay board to the extend I/F-2 on the GOT. Remove the connector cover from the board.
 Fit the multimedia unit in the GOT case.



Point

Precautions for connecting sound I/O devices
Do not connect or disconnect the cables of the sound I/O sections during
sound input or output.
Do not connect devices other than sound I/O devices to the sound I/O
sections of the multimedia unit.

Removing multimedia unit

Remove the board fixing screws, and then remove the multimedia u tilting \triangle PULL so that the connector is not damaged. (Refer to 6).) Cable clamp

dia unit by

(1) Removing cable clamp band

(arrow A). X.

The cable clamp band can be removed after the cables are fixed. Press the tab of the cable clamp upward using a screwdriver and others, and pull out the band

5. CF CARD INSTALLATION/REMOVAL

1) Open the CF card cover, and turn off the CF card access switch of the unit.

(2) Removing cables from multimedia unit The cables of the sound I/O devices can be removed from the unit even if the cables are fixed with the cable clamp. Remove the cables by pressing the cable clamp from both directions

PROCEDURE

5.1 Installation

,	switch	OFF: CF card not accessed
6)	CF card access LED	LED lamp lit when the CF card is accessed
7)	Sound input terminal	Terminal for connecting the cable of the sound input device
8)	Sound output terminal	Terminal for connecting the cable of the sound output device
9)	Ethernet interface	Connector for Ethernet communication
10)	Board fixing screw	Screw for fixing the extension interface relay board
11)	Mounting screw	Screw for fixing the multimedia unit
12)	Rating plate	-

ON: CF card accessed

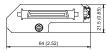
Connector connected to the GOT

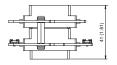
Interface for inserting a CF card

Connector for connecting an extension unit

Switch for enabling or disabling access to the CF card

3.2 Extension Interface Relay Board

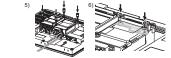




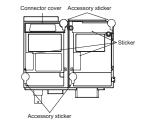
Unit · mm (inc

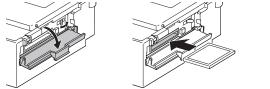


5) Tighten four mounting screws with a torque of 0.36 to 0.48 N·m to fix the unit. 6) Tighten two board fixing screws with a torque of 0.36 to 0.48 N·m to fix the board



For mounting any extension unit on the multimedia unit, remove the connector cover and the stickers. For mounting no extension unit on the multimedia unit, cover over four mounting screws with the accessory stickers to avoid static electricity. Keep the connector cover fixed. Keep all the stickers fixed. 7) For mo





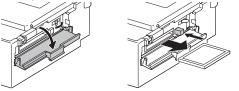
Insert a CF card into the CF card interface with the front side facing up.
 Turn on the CF card access switch.

5.2 Removal

1) Open the CF card cover

Turn off the CF card access switch, and check that the CF card access LED turns off.

(When the CF card access LED is off, the CF card can be removed even while the GOT power is on



2) Press the CF card eject button to pop out the CF card, and ren nove the card

Spain	Mitsubishi Electric Europe B.V. Spanish Branch
	Carretera de Rubi 76-80,
	E-08190 Sant Cugat del Valles, Barcelona, Spain
	Tel : +34-93-565-3131
France	Mitsubishi Electric Europe B.V. French Branch
	25. Boulevard des Bouvets, F-92741 Nanterre Cedex, France
	Tel : +33-1-5568-5568
South Africa	Circuit Breaker Industries Ltd.
oodan7anoa	Private Bag 2016, ZA-1600 Isando, South Africa
	Tel : +27-11-928-2000
lleee Keen	
Hong Kong	Mitsubishi Electric Automation (Hong Kong) Ltd.
	10th Floor, Manulife Tower, 169 Electric
	Road, North Point, Hong Kong
	Tel : +852-2887-8870
China	Mitsubishi Electric Automation (China) Ltd.
	4/F Zhi Fu Plazz, No.80 Xin Chang Road,
	Shanghai 200003, China
	Tel : +86-21-6120-0808
Taiwan	Setsuyo Enterprise Co., Ltd.
rannan	6F No.105 Wu-Kung 3rd.Rd, Wu-Ku Hsiang,
	Taipei Hsine. Taiwan
	Tel : +886-2-2299-2499
Korea	Mitsubishi Electric Automation Korea Co., Ltd.
Kulea	
	1480-6, Gayang-dong, Gangseo-ku Seoul
	157-200, Korea
	Tel : +82-2-3660-9552
Singapore	Mitsubishi Electric Asia Pte, Ltd.
	307 Alexandra Road #05-01/02,
	Mitsubishi Electric Building, Singapore 159943
	Tel : +65-6470-2460
Thailand	Mitsubishi Electric Automation (Thailand) Co., Ltd.
	Bang-Chan Industrial Estate No.111 Moo 4, Serithai Rd,
	T.Kannayao, A.Kannayao, Bangkok 10230 Thailand
	Tel : +66-2-517-1326
Indonesia	P.T. Autoteknindo Sumber Makmur
Indonesia	Muara Karang Selatan, Block A/Utara
	No.1 Kav. No.11 Kawasan Industri Pergudangan
	Jakarta - Utara 14440, P.O.Box 5045 Jakarta, 11050 Indonesia
1.11	Tel : +62-21-6630833
India	Messung Systems Pvt, Ltd.
	Electronic Sadan NO:III Unit No15, M.I.D.C Bhosari,
	Pune-411026, India
	Tel : +91-20-2712-3130
Australia	Mitsubishi Electric Australia Pty. Ltd.
	348 Victoria Road, Rydalmere, N.S.W 2116, Australia
	Tel : +61-2-9684-7777

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DFFICE : TOKYO BUILDING, 2-7-3 MARUNOUCHI, CHIYODA-KU, TOKYO 100-83′ YA WORKS : 1-14, YADA-MINAMI 5-CHOME, HIGASHI-KU, NAGOYA

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Specifications subject to change without Printed in Japan, June 2011.