

# MITSUBISHI

## MODEL GT15-80SLTT/ GT15-70SLTT/GT15-70VLTT/ GT15-70VLTN BACKLIGHT

### User's Manual

Thank you for purchasing the GOT1000 Series.

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

|                           |             |
|---------------------------|-------------|
| MODEL                     | GT15-70VLTU |
| MODEL CODE                | 1D7M10      |
| IB(NA)-0800304-F(0612)MEE |             |

## GRAPHIC OPERATION TERMINAL GOT1000

### 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.

**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.

### [BACKLIGHT REPLACEMENT PRECAUTIONS]

#### ⚠ DANGER

- Make sure to externally shut off all phases of GOT power supply (when GOT is connected via the bus type connection, make sure to shut off all phases of PLC CPU power supply as well) and remove the GOT from the control panel before backlight replacement. If all phases are not shut off, it may cause an electric shock. If backlight is replaced with the GOT on the control panel, the GOT may drop off, resulting in injuries.

#### ⚠ CAUTION

- Make sure to wear gloves during backlight replacement. Failure to do so may cause injuries.
- Make sure to start the backlight replacement 5 or more minutes after power off of the GOT. Failure to do so may cause burn injuries as the old backlight holds heat for a while.

### [STARTUP AND MAINTENANCE PRECAUTIONS]

#### ⚠ CAUTION

- Before handling the GOT, make sure to touch a grounded metal object to discharge the static electricity from the human body. Failure to do so may cause the GOT to fail or malfunction.

### [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 GT15 User's Manual, as they are precision devices. Failure to do so may cause the unit to fail. Check if the unit operates correctly after transportation.

### Manuals

The following shows manuals relevant to this product.

#### Detailed Manual

| Manual name                 | Manual Number (Type code) |
|-----------------------------|---------------------------|
| GT15 User's Manual (Option) | SH-080528ENG (1D7M23)     |

#### Relevant Manuals

For relevant manuals, refer to the PDF manual stored within the drawing software used.

© 2004 MITSUBISHI ELECTRIC CORPORATION

## 1. Overview

This User's Manual describes Model GT15-80SLTT, GT15-70SLTT and GT15-70VLTN backlight (hereinafter abbreviated as backlight).

| Product name | Model name  | Description   | GOT   |
|--------------|-------------|---|---|
| Backlight    | GT15-80SLTT | For 12.1" TFT (SVGA) of high intensity and wide angle view      | GT1585V-S, GT1585-S   |
|              | GT15-70SLTT | For 10.4" TFT (SVGA) of high intensity and wide angle view      | GT1575-S (Function version B or earlier)                      |
|              | GT15-70VLTN | For 10.4" TFT (SVGA, VGA) of high intensity and wide angle view | GT1575-S (Function version C or later) *, GT1575V-S, GT1575-V |
|              | GT15-70VLTN | For 10.4" TFT (VGA)   | GT1575-VN, GT1572-VN  |

\* GOT function version can be confirmed with the rating plate on the GOT rear face. For the confirmation method of the function version, refer to GT15 User's Manual.

## 2. Specifications

The performance specifications of the backlight are indicated below.

The general specifications of the backlight is equivalent to those of the GOT. For the general specifications of the backlight, refer to GT15 User's Manual.

| Item   | Specifications  |             |             |             |
|--------|---|-------------|-------------|-------------|
|        | GT15-80SLTT   | GT15-70SLTT | GT15-70VLTN | GT15-70VLTN |
| Kind   | Cold cathode tube backlight                           |             |             |             |
| Life   | 40,000h or more (Operating ambient temperature: 25°C) |             |             |             |
| Weight | 23g   | 20g         | 13g         | 9g          |

## 3. Backlight Replacement

The GOT includes the backlight for liquid crystal display panel. Please note that the backlight intensity decreases in time. The backlight needs to be replaced when the display section becomes dark due to the decreased intensity and the picture is unclear. The backlight replacement procedure is described below.

Backlight replacement varies with the hardware version of the applicable GOT.

Before replacement, please confirm the hardware version. The hardware version is indicated on the rating plate of the GOT rear face.

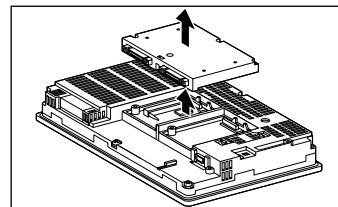
For the confirmation method of the hardware version, refer to GT15 User's Manual.

| Model name   | Hardware version         | Reference |
|--------------|--------------------------|-----------|
| GT1585V-STBA | A (Mar. 2006) or later   | 3.1       |
| GT1585-STBA  | B (Apr. 2005) or earlier | 3.2       |
|              | C (Mar. 2005) or later   | 3.1       |
| GT1585-STBD  | A (Jul. 2005) or later   | 3.1       |

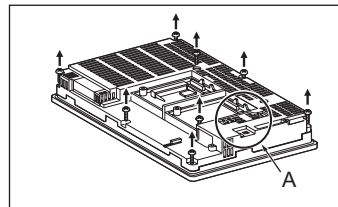
| Model name   | Hardware version         | Reference |
|--------------|--------------------------|-----------|
| GT1575V-STBA | A (Mar. 2006) or later   | 3.1       |
| GT1575-STBA  | B (Apr. 2005) or earlier | 3.2       |
|              | C (Mar. 2005) or later   | 3.1       |
| GT1575-STBD  | A (Jul. 2005) or later   | 3.1       |
| GT1575-VTBA  | D (Apr. 2005) or earlier | 3.2       |
| GT1575-VTBD  | E (Mar. 2005) or later   | 3.1       |
|              | A (Jul. 2005) or later   | 3.1       |
| GT1575-VNBA  | A (Sep. 2005) or later   | 3.1       |
| GT1575-VNBD  | A (Sep. 2005) or later   | 3.1       |
| GT1572-VNBA  | A (Sep. 2005) or later   | 3.1       |
| GT1572-VNBD  | A (Sep. 2005) or later   | 3.1       |

### 3.1 Replacement (1)

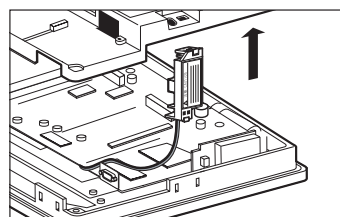
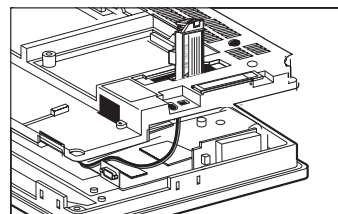
- Power off the GOT.
- Disconnect the power supply cable and communication cable. Remove the GOT from the control panel.
- Remove the expansion unit cover from the right side of the GOT. Remove the expansion unit, e.g. bus connection unit, if it is mounted.



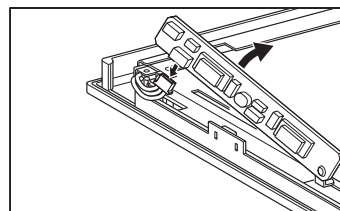
- Remove the GOT rear fixing screws (8 pcs.) with a screwdriver.



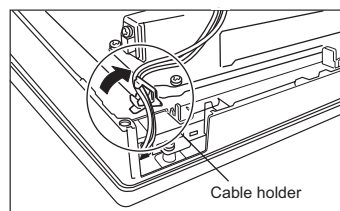
- Remove the case after passing the battery holder through the mounting hole. When removing, take care of not cutting the cable of the battery holder. (Expanded figure of part A in (4))



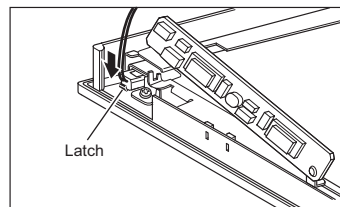
- Pull up the backlight drive board, and disconnect the cable connector of the backlight from the connector of the backlight drive board.



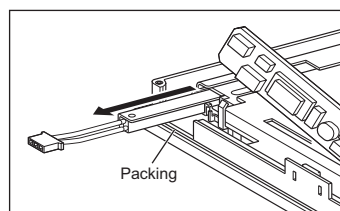
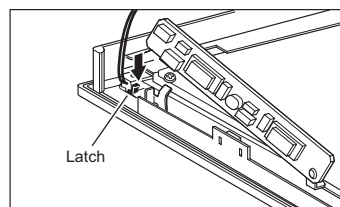
When replacing GT15-80SLTT, remove the cable from the cable holder. (When replacing GT15-80SLTT)



- Press the backlight fixing latch (black) with your finger, and pull out the backlight to the left. When pulling the backlight, press the packing with your finger so that the backlight will not be hit with the packing. (When replacing GT15-80SLTT)



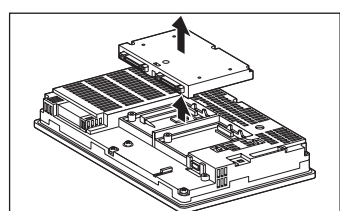
(When replacing GT15-70SLTT, GT15-70VLTT or GT15-70VLTN)



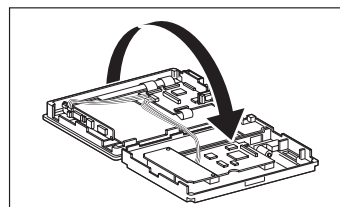
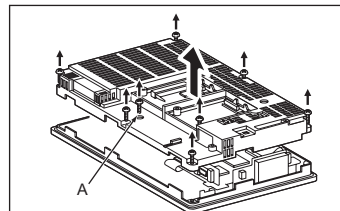
- Mount a new backlight in the reverse procedure of removal. Also assemble the case in the reverse procedure of disassembly. (Tighten the GOT rear fixing screws within the torque range of 0.36 to 0.48 N·m). When mounting the case, take care of not biting the cables between the case and the GOT.

### 3.2 Replacement (2)

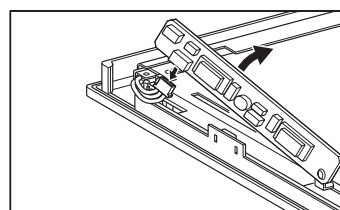
- Power off the GOT.
- Disconnect the power supply cable and communication cable. Remove the GOT from the control panel.
- Remove the expansion unit cover from the right side of the GOT. Remove the expansion unit, e.g. bus connection unit, if it is mounted.



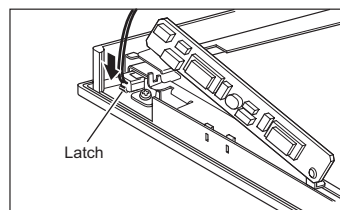
- Remove the GOT rear fixing screws (8 pcs.) with a screwdriver, and remove the case. Screw A must be tightened in the torque range of 0.186 to 0.245 N·m, as it is made of plastic.



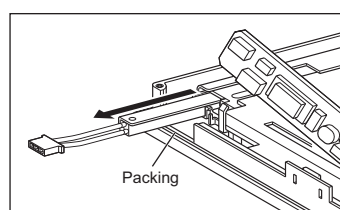
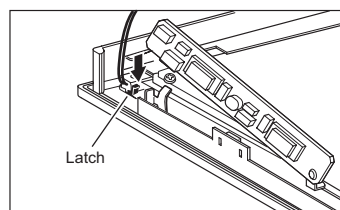
- Pull up the backlight drive board, and disconnect the cable connector of the backlight from the connector of the backlight drive board.



- Press the backlight fixing latch (black) with your finger, and pull out the backlight to the left. When pulling the backlight, press the packing with your finger so that the backlight will not be hit with the packing. (When replacing GT15-80SLTT)



(When replacing GT15-70SLTT or GT15-70VLTT)



- Mount a new backlight in the reverse procedure of removal. Also assemble the case in the reverse procedure of disassembly. (Tighten the GOT rear fixing screws within the following torque range: Screw A: 0.186 to 0.245 N·m Other screws: 0.36 to 0.48 N·m). When mounting the case, take care of not biting the cables between the case and the GOT.

### 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.

| Country/Region | Sales office/Tel  |
|----------------|---|
| U.S.A.         | Mitsubishi Electric Automation Inc.<br>500 Corporate Woods Parkway Vernon Hills, IL 60061, U.S.A.<br>Tel : +1-847-478-2100  |
| Brazil         | MELCO-TEC Rep. Com. e Assessoria Tecnica Ltda.<br>Rua Correia Dias, 184, Edificio Paraiso Trade Center-8 andar<br>Paraiso, Sao Paulo, SP Brazil<br>Tel : +55-11-5908-8331                                     |
| Germany        | Mitsubishi Electric Europe B.V. German Branch<br>Goltzhaer Strasse 9 D-40880 Ratingen, GERMANY<br>Tel : +49-2102-486-0  |
| U.K.           | Mitsubishi Electric Europe B.V. UK Branch<br>Travellers Lane, Hatfield, Hertfordshire, AL10 8XB, U.K.<br>Tel : +44-1707-276100  |
| Italy          | Mitsubishi Electric Europe B.V. Italian Branch<br>Centro Dir. Colleoni, Pal. Perseo-Ing.2<br>Via Paracelso 12, I-20041 Agrate Brianza, Milano, Italy<br>Tel : +39-039-60531                                   |
| Spain          | Mitsubishi Electric Europe B.V. Spanish Branch<br>Carretera de Rubi 76-80,<br>E-08190 Sant Cugat del Valles, Barcelona, Spain<br>Tel : +34-93-565-3131  |
| France         | Mitsubishi Electric Europe B.V. French Branch<br>25, Boulevard des Bouvets, F-92741 Nanterre Cedex, France<br>TEL : +33-1-5568-5568   |
| South Africa   | Circuit Breaker Industries Ltd.<br>Private Bag 2016, ZA-1600 Isando, South Africa<br>Tel : +27-11-828-2000  |
| Hong Kong      | Mitsubishi Electric Automation (Hong Kong) Ltd.<br>10th Floor, Manulife Tower, 169 Electric Road, North Point, Hong Kong<br>Tel : +852-2887-8870  |
| China          | Mitsubishi Electric Automation (Shanghai) Ltd.<br>4/F Zhi Fu Plaza, No. 80 Xin Chang Road,<br>Shanghai 200003, China<br>Tel : +86-21-6120-0808  |
| Taiwan         | Setsuyo Enterprise Co., Ltd.<br>6F No. 105 Wu-Kung 3rd Rd, Wu-Ku Hsiang,<br>Taipei Hsine, Taiwan<br>Tel : +886-2-2299-2499  |
| Korea          | Mitsubishi Electric Automation Korea Co., Ltd.<br>1480-6, Gayang-dong, Gangseo-ku Seoul<br>157-200, Korea<br>Tel : +82-2-3660-9552  |
| Singapore      | Mitsubishi Electric Asia Pte. Ltd.<br>307 Alexandra Road #05-01/02,<br>Mitsubishi Electric Building, Singapore 159943<br>Tel : +65-6470-2460  |
| Thailand       | Mitsubishi Electric Automation (Thailand) Co., Ltd.<br>Bang-Chan Industrial Estate No.111 Moo 4, Serithai Rd,<br>T.Kannayao, A.Kannayao, Bangkok 10230 Thailand<br>Tel : +66-2-517-1328                       |
| Indonesia      | P.T. Autoteknindo Sumber Makmur<br>Muara Karang Selatan, Blok A/Utara<br>No.1 Kav. No.11 Kawasan Industri Pergudangan<br>Jakarta - Utara 14440, P.O.Box 5045 Jakarta, 11050 Indonesia<br>Tel : +62-21-6830833 |
| India          | Messung Systems Pvt. Ltd.<br>Electronic Sadan NO-III Unit No15, M.I.D.C Bhosari,<br>Pune-411026, India<br>Tel : +91-20-2712-3130  |
| Australia      | Mitsubishi Electric Australia Pty. Ltd.<br>348 Victoria Road, Rydalmere, N.S.W 2116, Australia<br>Tel : +61-2-9684-7777   |

MITSUBISHI ELECTRIC CORPORATION  
HEAD OFFICE: TOKYO BUILDING, 2-7-3 MARUNOUCHI, CHYODA-KU, TOKYO 100-8310, JAPAN  
NAGOYA WORKS: 1-14, YADA-MINAMI 5-CHOME, HIGASHI-KU, NAGOYA, JAPAN

When exported from Japan, this manual does not require application to the Ministry of Economy, Trade and Industry for service transaction permission.

Specifications subject to change without notice.  
Printed in Japan on recycled paper.