In any case, it is important to follow the directions for usage. GT11 installation follows.

2. Outline Procedure

The precautions given in this manual are concerned with this product. It is the user's responsibility to verify the safety precautions as outlined in this manual and manuals of relevant products fully to acquire proficiency in handling and operating the product, before ever touching the product, to ensure all the product information, safety instructions, and advice are followed. Please refer to the local Mitsubishi Electric instructions for more details.

The name of the product is expressed in red, and the name of the user's manual is in black. The name of the instruction image is in a black frame.

The section heads are indicated in bold characters.

Caution: Indicates that incorrect handling may cause hazardous conditions, including death or severe injury.

Warning: Indicates that incorrect handling may cause injuries or damage to property.

Remark: Indicates that the information is a remark or hint.

2.1 Precautions


PRECAUTIONS

2.1 Precautions

1. System Configuration

2.1.1 System Configuration

3. Associated Manuals

3.1 Associated Manuals

4. Bundled Items

4.1 Bundled Items

5. Troubleshooting

5.1 Troubleshooting

6. Appendix

6.1 Appendix
**Remark**

In any case, it is important to follow the directions for usage.

**Description**

The outline procedure is shown below.

## 2. Outline Procedure

- (For GOT)

  - For GT Designer3
    - For multi-drop connection module
      - Data drawing
      - Communication diagram
    - Communication Interface Description
  - For GT Designer2
    - For multi-drop connection module

<Image 18x375 to 149x511>

### Compliance with EC directive (CE Marking)

This site does not guarantee that on-site equipment/machine produced in accordance with the site criteria of this site will comply with all the following standards. It is recommended that the user consult with the local Mitsubishi Electric sales office for details. For more details please contact the local Mitsubishi Electric sales office.

**Attention**

This product is designed for industrial applications.

**Bundled Items**

- GOT series
  - GOT1000 Series Connection Manual
- GOT Designer Basic Operation/Data Transfer Manual
- GT Works3 Version 1
- GT Designer3 Version 1
- GT Designer2 Version 2
- GT Designer2 Version 1
- GT Designer3 Version 1

### Associated Manuals

The following manuals are relevant to this product. When these loose manuals are required, please consult with our local distributor.

**Manual Name**

**Manual Number (Multi-Copy)**

**Description**

- GOT1000 Series Connection Manual
  - SH-080868ENG
    - For GT Designer3
    - For GT Designer2
  - SH-080868ENG
    - For GT Designer3
    - For GT Designer2
- GT Designer Basic Operation/Data Transfer Manual
  - SH-080868ENG
    - For GT Designer3
    - For GT Designer2
- GT Works3 Version 1
  - SH-080868ENG
    - For GT Designer3
    - For GT Designer2
- GT Designer3 Version 1
  - SH-080868ENG
    - For GT Designer3
    - For GT Designer2
- GT Designer2 Version 1
  - SH-080868ENG
    - For GT Designer3
    - For GT Designer2
- GT Designer2 Version 2
  - SH-080868ENG
    - For GT Designer3
    - For GT Designer2

### Requirement for Compliance with EMC directive

The following products have shown compliance through direct testing to the following standards and design analysis (forming a technical construction file) to the following standards. For more details please contact the local Mitsubishi Electric sales office.

**Standard**

**Requirement for Compliance with EMC directive**

- COM 20013: 1992 directive
  - For GT Designer2 Version 1
  - For GT Designer2 Version 2
  - For GT Designer3
- COM 20042: 1992 directive
  - For GT Designer2 Version 1
  - For GT Designer2 Version 2
  - For GT Designer3

### For more details please consult the local Mitsubishi Electric sales office.
3. Specifications

3.1 General Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating ambient temperature</td>
<td>-10 to 50°C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-20 to 70°C</td>
</tr>
<tr>
<td>Operating humidity</td>
<td>85% or less (non-condensing)</td>
</tr>
<tr>
<td>Ambient temperature (for conduction)</td>
<td>85% or less (non-condensing)</td>
</tr>
<tr>
<td>Dielectric withstand voltage</td>
<td>500VAC for 1 minute (across power supply terminals and earth)</td>
</tr>
<tr>
<td>Input power supply voltage</td>
<td>24VDC (+10%, -15%)</td>
</tr>
<tr>
<td>Connector</td>
<td>D-sub 9-pin (female)</td>
</tr>
<tr>
<td>Transmission method</td>
<td>Full duplex</td>
</tr>
<tr>
<td>Transmission distance</td>
<td>80m (max.)</td>
</tr>
<tr>
<td>Transmission speed</td>
<td>12Mbps</td>
</tr>
<tr>
<td>Communication method</td>
<td>Mini-B (Can be selected depending on the wiring)</td>
</tr>
</tbody>
</table>

3.2 Communication Specifications

- Applicable DIN rail: DIN46277 (width: 35mm)
- Power Supply connector: 24VDC power supply connector insertion point (A dedicated cable is included.)
- Protective cover: Protect unused D-sub connector, USB port and switches.
- Multi-drop connection module: For multi-drop connection, PC communication type) Mini-B extension length of the system -- extension length of the system) --

3.3 Power Supply Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>Approx. 0.3kg</td>
</tr>
<tr>
<td>Ambient humidity</td>
<td>10 to 90% RH, non-condensing (The wet bulb temperature is 39°C or less)</td>
</tr>
<tr>
<td>Operating/Storage temperature</td>
<td>-20 to 60°C</td>
</tr>
<tr>
<td>Operating altitude</td>
<td>2000m (6562 ft) max.*1</td>
</tr>
<tr>
<td>Cooling method</td>
<td>Self-cooling</td>
</tr>
<tr>
<td>Dielectric withstand voltage</td>
<td>500VAC for 1 minute (across power supply terminals and earth)</td>
</tr>
<tr>
<td>Input power supply voltage</td>
<td>24VDC (+10%, -15%)</td>
</tr>
</tbody>
</table>

3.4 LED Light Specifications

LED Name | Status | Description |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td>Lit in green when the power is properly supplied</td>
<td></td>
</tr>
<tr>
<td>RECV</td>
<td>Lit in red when the data is receiving from PLC</td>
<td></td>
</tr>
<tr>
<td>SEND</td>
<td>Lit in red when the data is sending to PLC</td>
<td></td>
</tr>
<tr>
<td>BUSY</td>
<td>Blinking in red when the system is busy</td>
<td></td>
</tr>
</tbody>
</table>

4. Installation

4.1 Installed with DIN Rail

Install the multi-drop connection module to the panel using DIN rail (2 pieces)

4.2 Directly Installed to Panel

Install the multi-drop connection module to the panel using DIN rail (2 pieces)

4.3 Caution for compliance with EMC Directive

Programmed logic controllers can open high devices that must be installed and used within conductive control boxes. Please use the MultiDrop Connection Unit while keeping these details under consideration. For GT10, GT11, Class D Grounding (100 resistors), to be connected to the panel for grounding, it is necessary to use a Class D Grounding (100 resistors)

5. Wiring

5.1 Terminating Resistor Setting

- For GT15 or GT16, external wiring is required. Set the terminating resistor of the GOT that is not at the end of the line to "OPEN".
- Make sure to set the terminating resistor to both ends of the line.

5.2 Terminating Resistor Setting

- The terminating resistor (100Ω) is built in Multi-Drop Connection Module and GT10 (GT10-01/07/07).
- Make sure to set the terminating resistor to both ends of the line.

6. Troubleshooting

6.1 Power Supply Wiring

Connect the power supply cable with connectors (included) and the 24VDC terminal of the external power supply.

6.2 Wiring and Terminating Resistor Setting

6.2.1 For 1 wire wiring

Make sure to install a grounded pair cable by applying Class D Grounding (100Ω or less).

6.2.2 For 2 wire wiring

Make sure to install a grounded pair cable by applying Class D Grounding (100Ω or less).

Note: This symbol mark is for China only.

- This product has been manufactured under strict quality control. However, Mitsubishi Electric cannot be held liable for any accidents, and compensation for damages to products.

For details of corrective actions, refer to Chapter 7 Troubleshooting.

Reference Standards: GB7258, GB14474.
3. Specifications
3.1 General Specifications

<table>
<thead>
<tr>
<th>Name</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Ambient</td>
<td>5 to 40°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>10 to 80% RH</td>
</tr>
<tr>
<td>Vibration</td>
<td>Conform to JIS 6801-2-6 (37Hz, 0.6mm, 5% attendance)</td>
</tr>
<tr>
<td>Shock resistance</td>
<td>Conforms to EN 60068-2-6 (717Nm, ±11 mm, 3 times each in X, Y and Z directions)</td>
</tr>
</tbody>
</table>

3.2 Communication Specifications

- **I/F3 (RS-485)**
  - **Frequency**: 9.6 kbps
  - **Protocol**: Multi-drop
  - **Error checking**: Parity check

3.3 Power Supply Specifications

- **Supply voltage**: 24VDC
- **Insulation resistance**: 500VDC across power supply terminals and earth
- **Vibration resistance**: Conforms to JIS C60068-2-6
- **Cooling method**: Natural convection

3.4 LED Light Specifications

<table>
<thead>
<tr>
<th>LED Name</th>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED1</td>
<td>Lit in red</td>
<td>Multi-drop communication error</td>
</tr>
<tr>
<td>LED2</td>
<td>Not lit</td>
<td>No error</td>
</tr>
<tr>
<td>LED3</td>
<td>Blinking in red</td>
<td>Multi-drop communication error</td>
</tr>
<tr>
<td>LED4</td>
<td>Lit in green</td>
<td>Data being sent to PLC</td>
</tr>
<tr>
<td>LED5</td>
<td>Not lit</td>
<td>No error</td>
</tr>
<tr>
<td>LED6</td>
<td>Lit</td>
<td>Receiving the data from PLC</td>
</tr>
<tr>
<td>LED7</td>
<td>Not lit</td>
<td>No error</td>
</tr>
<tr>
<td>LED8</td>
<td>Lit</td>
<td>Sending the data to PLC</td>
</tr>
<tr>
<td>LED9</td>
<td>Not lit</td>
<td>No error</td>
</tr>
</tbody>
</table>

4. Installation

5.1 **Installed with DIN Rail**

5.2 **Installed directly to panel**

5.3 **Caution for compliance with EMC Directive**

6. Wiring

6.1 **Power Supply Wiring**

- **Contact the power supply side with conductor (included) and the 24VDC terminal of the external power supply.**

6.2 **Wiring and Terminating Resistor Setting**

6.2.1 **For 1 pair wiring**

6.2.2 **For 2 pair wiring**

7. Troubleshooting

---

**Note**: This symbol mark is for China only. The product is compatible with China. Contents of the optional accessory included with the product are the following:

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G0T15</td>
<td>GOT15</td>
</tr>
</tbody>
</table>

---

**For safety use**: This product was manufactured as a general-purpose product for general purposes, and has not been designed or manufactured to be incorporated in machinery or equipment. This product is intended for use in a normal electrical installation, and not for use in hazard class I, or in two-way communication systems within safety-related systems. This product is not intended for use in medical equipment, safety-related systems, or other tasks.
In any case, it is important to follow the directions for usage. The outline procedure is shown below.

2. Outline Procedure

For details on how to download the project data, refer to the GT Designer2 Version2 Basic Operation/Data Transfer Manual or GT Designer3 Version1 Screen Design Manual.

For GOT Designers (for multi-drop connection module)

For GOT Designers (for multi-drop connection module)

- For GOT Designers (for multi-drop connection module)

- For GT Designer3 (for multi-drop connection module)

- For GT Designer2 (for multi-drop connection module)

- For GT Designer2 (for multi-drop connection module)

- For GT Designer2 (for multi-drop connection module)

- For GT Designer2 (for multi-drop connection module)

- For GT Designer2 (for multi-drop connection module)

2. Outline Procedure

The outline procedure is shown below.

1. System Configuration

1.1 System Configuration

For PLCs compatible with the GOT multi-drop connection, refer to the GT1000 Series Communication Manual.

1.2 Compatible PLC

For PLCs compatible with the GOT multi-drop connection, refer to the GT1000 Series Communication Manual.

1.3 Compatible GOT

For the confirmation method of the hardware version, refer to the User’s Manual of each GOT.

1.4 Compatible drawing software version

For details on how to download the project data, refer to the GT Designer2 Version1 Basic Operation/Data Transfer Manual or GT Designer3 Version1 Screen Design Manual.
3. Specifications

3.1 General Specifications

<table>
<thead>
<tr>
<th>Name</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>Width: 100 mm x Height: 92 mm x Depth: 100 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>1.2 kg</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>-20°C to 60°C</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-10°C to 50°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>90% RH (non-condensing)</td>
</tr>
<tr>
<td>Vibration resistance</td>
<td>Conforms to JIS GB 6587-2</td>
</tr>
<tr>
<td>Shock resistance</td>
<td>Conforms to GB/T 21011-2007</td>
</tr>
<tr>
<td>Emission interference</td>
<td>Conforms to GB/T 21011-2007</td>
</tr>
<tr>
<td>INSULATION</td>
<td></td>
</tr>
</tbody>
</table>