# **MITSUBISHI**

# A7GT-BUS2S Multidrop Bus Connection Interface Module

# Mitsubishi General Purpose PC User's Manual

Thank you for choosing the Mitsubishi General Purpose PC Graphic Operation Terminal 800 series. To ensure correct use of this equipment, please read this manual carefully before operating it.



MODEL	A7GT-BUS2S-U-E		
MODEL CODE	13JL08		

IB-NA-66761-A (9704) MEE

# ●SAFETY PRECAUTIONS●

#### (Read these precautions before using.)

When using Mitsubishi equipment, thoroughly read this manual and the associated manuals introduced in this manual. Also pay careful attention to safety and handle the module properly.

These precautions apply only to Mitsubishi equipment. Refer to the CPU module user's manual for a description of the PC system safety precautions.

These ●SAFETY PRECAUTIONS● classify the safety precautions into two categories: "DANGER" and "CAUTION".

# **DANGER**

Procedures which may lead to a dangerous condition and cause death or serious injury if not carried out properly.

# **CAUTION**

Procedures which may lead to a dangerous condition and cause superficial to medium injury, or physical damage only, if not carried out properly.

Depending on circumstances, procedures indicated by **ACAUTION** may also be linked to serious results.

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

Store this manual in a safe place so that you can take it out and read it whenever necessary. Always forward it to the end user.

## [DESIGN PRECAUTIONS]

## **↑** CAUTION

 Do not bunch the bus connection cables with the main circuit or power wires, or install them close to each other. They should be installed 100 mm (3.9 inch) or more from each other. Failure to do so may result in noise that would cause malfunctioning.

## [INSTALLATION PRECAUTIONS]

#### **DANGER**

- When installing and removing this module from the GOT main module be sure to shut off the power at all external switches. If all the switches are not turned off, the module could be damaged or malfunction.
- When connecting the bus connection cable to this module be sure to turn off the switch to all external power switches to the GOT and PC CPU. If all the switches are not turned off, it may cause malfunction.

## **↑** CAUTION

- Use this module in an environment that is within the general specifications
  written in the GOT User's Manual. If the power supply is used in an
  environment that is outside of the general specifications then electric
  shock, fire, malfunction, or product damage or degradation could occur.
- For a correct installation, insert the bus connection cable to this module, A7GT-BUSS/ A7GT-BUS2S, bus connector conversion module, and base unit connector until you hear it click.

A bad connection could cause erroneous input or output.

 When installing this module in the GOT main module, install it in the GOT installation area and be sure it is fastened with a module fastening screw that is tightened within the specified torque range.

If the module fixing screws are loosen, it may cause malfunction, damage or falling of the module.

If the module fixing screws are too tight, the GOT main module or the screws could break.

## [STARTING AND MAINTENANCE PRECAUTIONS]

## **<b>DANGER**

- Do not change the switch setting while power is on.
- Switch all phases of the GOT external power supply off before cleaning.
   Not doing so could result in electric shock.

#### **↑** CAUTION

- Never disassemble or modify the module. This may cause breakdowns, malfunctioning, injury, and/or fire.
- Do not directly touch the conducted area and electric parts of this module.
   It may cause damage and malfunctioning of the module.
- This module is made of resinous materials, and should be protected from strong shock or impact. It may cause breakdown.

#### [DISPOSAL PRECAUTIONS]

## **<u>∧</u>CAUTION**

• When disposing of this product, treat it as industrial waste.

#### Revisions

\* The manual number is noted at the lower left of the back cover.

Print Date	*Manual Number	Revision		
Apr. 1997	IB (NA)-66761-A	First printing		
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## **About This Manual**

The following product manuals are available. Please use this table as a reference to request the appropriate manual as necessary.

#### Detailed Manual

Manual Name	Manual No. (Type Code)
A77GOT-S5 Graphic Operation Terminal User's Manual (Packaged with the A77GOT-S5)	B-66548 (13JE88)
A870GOT Graphic Operation Terminal User's Manual (Packaged with the A870GOT)	IB-66628 (13J830)
A850GOT Graphic Operation Terminal User's Manual (Packaged with the A850GOT)	IB66669 (13J847)
Additional Explanation for A810GOT Graphic Operation Terminal (Packaged with the A810GOT)	IB-66766 (13JL14)
A7GT-BUSS Bus Connection Module User's Manual (Packaged with the A7GT-BUSS)	IB-66760 (13JL07)

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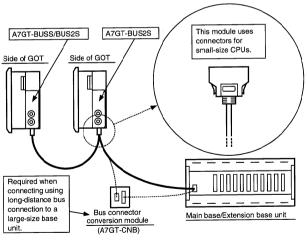
## 1 Overview

This User's Manual describes the specification, name and setting of each part, and the installation method of A7GT-BUS2S multidrop bus connection interface module (abbreviated as A7GT-BUS2S hereafter).

The A7GT-BUS2S module is used when connecting multiple A77GOT-S5/A870GOT/A850GOT/A810GOT Graphic Operation Terminals (abbreviated as GOT hereafter) to one PC CPU using the bus connection.

This module can also be used to connect only one GOT. (It is recommended to use this module if connection of multiple GOTs is planned in the future.)

Because the module has a structure where the bus connection cable is attached at the bottom, it does not require a space for the depth of the connector for the bus connection cable or of the cable bending dimension even when installed to a control box, etc.



Note: The A7GT-BUS2S cannot be used with A7GT-BUS/BUS2 at the same time.

# 2 Components Including in the Package

After opening the container, check that the following products are present.

Description	Quantity		
Bus connection module main module	1		
This manual	1		

## 3 Specifications

#### 3.1 Performance Specifications

The A7GT-BUS2S performance specifications are shown below.

Item	Specifications	
I/O assignment	Special 32 points	
Weight	180 g	
External dimensions mm [inch]	99 [3.90] (H) x 149 [5.87] (D) x 34 [1.34] (W)	

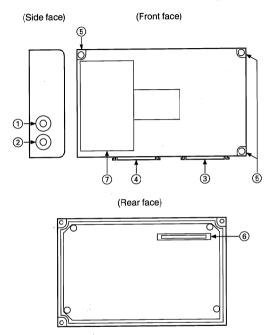
For the general specification, refer to the User's Manual of the GOT in use.

## 3.2 Applicable Bus Connection Cables

Bus connection cables applicable for the use with A7GT-BUS2S are listed below:

Connecting destination	Model name	Cable length
**	A8GT-C12NB	1.2m (3.94ft.)
Large-sized base unit	A8GT-C30NB	3m (9.84ft.)
	A8GT-C50NB	5m (16.41ft.)
	A1SC07B	0.7m (2.30ft.)
	A1SC12B	1.2m (3.94ft.)
i i	A1SC30B	3m (9.84ft.)
0 11 11	A1SC50B	5m (16.41ft.)
Small-sized base unit	A1SC60B	6m (19.69ft.)
	A8GT-C100EXSS	10m (32.81ft.)
	A8GT-C200EXSS	20m (65.62ft.)
	A8GT-C300EXSS	30m (98.43ft.)
	A1SC07B	0.7m (2.30ft.)
	A1SC12B	1.2m (3.94ft.)
	A1SC30B	3m (9.84ft.)
GOT (when multiple modules are connected)	A1SC50B	5m (16.41ft.)
	A1SC60B	6m (19.69ft.)
	A8GT-C100BS	10m (32.81ft.)
	A8GT-C200BS	20m (65.62ft.)
	A8GT-C300BS	30m (98.43ft.)
	A8GT-C100EXSS	10m (32.81ft.)
A7GT-CNB bus connector	A8GT-C200EXSS	20m (65.62ft.)
conversion box	A8GT-C300EXSS	30m (98.43ft.)

# 4 Name of Each Part and Setting



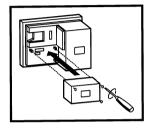
No.	Name	Description
1	Extension stage number setting switch	Set a number of extension stage to be assigned for GOT. (Factory setting: 0) <setting range=""> 1 to 7: Number of extension stage 8, 9, 0: Unusable</setting>
2	I/O slot setting switch	Set an I/O slot number to be assigned for GOT. (Factory setting: 0) <setting range=""> 0 to 7: I/O slot No. 8, 9: Unusable</setting>
3	Interface for bus connection cable	Interface to connect the bus connection cable (IN)
4	Interface for bus connection cable	Interface to connect the bus connection cable (OUT)
<b>⑤</b>	Module fixing screw	Fixing screw to the GOT
6	Connector	Connector to the GOT
7	Rated name plate	

For details of setting methods of the module setting switch and I/O slot setting switch, refer to the User's Manual of the GOT in use.

## 5 Installation Method

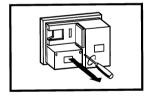
The installation and removal methods of the memory cassette to and from the GOT are described below:

#### (1) Installation



- ① Insert the interface module to the GOT installation area along the guide in the screw section.
- ② Install the module securely by tightening the module fixing screws (three pieces) with the specified torque (39 to 59N-cm (4 to 6 kg-cm)).

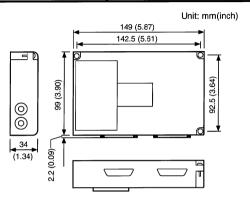
#### (2) Removal



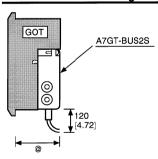
- Remove the module fixing screws (three pieces) and pull out the module horizontally.
- ② Keep the removed interface module in a safe place.

# 6 External Dimensions Diagram

#### 6.1 External Dimensions Diagram



## 6.2 Rear Dimension Diagram When Extension Cable is Connected



The dimension @ varies depending on the GOT model used.

GOT	@
A870GOT	83
A850GOT	90
A77GOT-S5	90



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