

[1/31]

[Issue No.] GOT-A-0018-H

[Title] Precautions when Replacing GOTA800, A77GOT, A64GOT Series with GOT1000 Series

[Date of Issue] First Edition: February 2008 (Ver. H: December 2019)

[Relevant Models] GOT800, A77GOT, and A64GOT Series

Thank you for your continued support of Mitsubishi Electric Graphic Operation Terminal (GOT). In TECHNICAL BULLETIN PLC-D-358 issued in July, 1999 and TECHNICAL BULLETIN PLC-D-406 issued in July, 2001, we have already announced discontinuation of the GOT old series, which includes the GOT800, A77GOT, and A64GOT series. For the GOT800, A77GOT, and A64GOT series, the repair acceptance period has already ended. Therefore, we recommend that you replace the old series with the GOT1000 series with excellent functions and performance.

# **Contents**

1.	Red	quests for customers	2
2.	Sele	ection of GOT	2
	2.1	Precautions when replacing A851GOT with GOT1000 series	.4
3.	Con	nmunication units and options	
	3.1	List of replacement models	
	3.2	Units that require new setting method	.6
	3.3	Communication modules and options without replaceable models	.6
	3.4	Replacing the GOT800, A77GOT, or A64GOT series connected to the MELSEC A series PLC in the	
		bus connection with GOT1000 series	.7
	3.4.	1 Settings of the PLC and GOT	.7
	3.4.	2 Communication format	8.
	3.5	Replacing the GOT800, A77GOT, or A64GOT series connected to the MELSECNET(II) or	
		MELSECNET/B network system with the GOT1000 series	12
	3.5.		12
	3.5.		
		change of the network in the entire system	13
	3.6	Replacing the GOT800 or A77GOT series connected to the MELSECNET/10	
		(programmable controller to programmable controller optical loop/coaxial bus) network system	
		with the GOT1000 series	14
4.	Cab	oles1	15
	4.1	Bus connection cables	
	4.1.		15
	4.1.		15
	4.2	RS-232 cable	
	4.3	RS-422 cable	
	4.4	Network cable (MELSECNET/10 and CC-Link)	
	4.5	Other cables	
5.	Μοι	unting intervals1	
	5.1	GOT800 and A77GOT series	
	5.2	A64GOT series	
6.	Cab	ole connection direction and PC (CF) card insertion direction	
	6.1	Cable connection direction and position	
	6.2	CF card insertion direction	
7.		nitor screen data	
	7.1	Using exiting monitor screen data	21

[Issue No.] GOT-A-0018-H

7.1.1	How to convert monitor screen data from GOT800 series to GOT1000 series	22
7.1.2	How to convert monitor screen data from A77GOT series to GOT1000 series	25
7.1.3	How to convert monitor screen data from A64GOT series to GOT1000 series	26
7.1.4	Precautions for data conversion	26
7.1.5	USB serial adapter available for communication between the data transfer tool and the GOT	800
	series	26
7.2 Co	mpatibility of monitor screen data	27
7.2.1	Data compatibility list	27
7.2.3	Monitor screen data compatibility between A77GOT or A64GOT series and GOT1000 series	30
7.3 Fu	nctions that require new settings	30
7.3.1	Printers	31
<b>REVISIONS</b>	) )	31

# 1. Requests for customers

The GOT model selection list (Table 2-1) shows the recommended GOT1000 series models that have no or less restrictions on the specifications when replacing each old series with the GOT1000 series. There may be some other models that you can select depending on their system environment. Therefore, we recommend you to select appropriate models by carefully considering the range of performance in current systems.

#### 2. Selection of GOT

Select a GOT model.

When replacing each old series with the GOT1000 series, the GOTs have different panel cutting dimensions. Therefore, use an attachment. For some GOT models, no compatible attachment is available. The following table shows the recommended GOT1000 series models and the compatibility of the panel cutting dimensions.

Table 2-1 Recommended GOT1000 series models and compatibility of panel cutting dimensions

GOT800, A	GOT1000 series for replacement *7*11 compati		Panel cut compatibility o: Compatible ×: Not compatible	bility atible	
A870GOT	A870GOT-EWS		GT1662-VNBA *10	×	GT15-60ATT-87
			GT1562-VNBA	×	GT15-60ATT-87
	A870GOT-SWS		GT1675-VNBA *10	×	GT15-70ATT-87
			GT1575-VNBA	×	GT15-70ATT-87
	A870GOT-TWS		GT1675M-VTBA	×	GT15-70ATT-87
			GT1575-VTBA	×	GT15-70ATT-87
	A8GT-70GOT-EW,	With A8GT-PWEL	GT1662-VNBA *10	×	GT15-60ATT-87
	A8GT-70GOT-EB		GT1562-VNBA	×	GT15-60ATT-87
		With A8GT-PW24	GT1662-VNBD *10	×	GT15-60ATT-87
			GT1562-VNBD	×	GT15-60ATT-87
	A8GT-70GOT-SW, A8GT-70GOT-SB	With A8GT-PWST With A8GT-PW24	GT1675-VNBA *10	×	GT15-70ATT-87
			GT1575-VNBA	×	GT15-70ATT-87
			GT1675-VNBD *10	×	GT15-70ATT-87
			GT1575-VNBD	×	GT15-70ATT-87
	A8GT-70GOT-TW,	With A8GT-PWTF With A8GT-PW24	GT1675M-VTBA	×	GT15-70ATT-87
	A8GT-70GOT-TB		GT1575-VTBA	×	GT15-70ATT-87
			GT1675M-VTBD	×	GT15-70ATT-87
			GT1575-VTBD	×	GT15-70ATT-87
A810GOT	A810GOT-CS		GT1675M-STBA *1	×	None
			GT1575V-STBA *1	×	None
	A8GT-10GOT-C	GT-10GOT-C With A8GT-PWTF	GT1675M-STBA *1	×	None
			GT1575V-STBA *1	×	None
		With A8GT-PW24	GT1675M-STBD *1	×	None
			GT1575V-STBD *1	×	None

GOT800, A	77GOT and A64GOT ser	ies in use	Recommended GOT1000 series for replacement *7*11	Panel cut compatibility o: Compatible ×: Not compatible	Required attachments	
A850GOT	A850GOT-LWD(-M3), A850GOT-LBD(-M3)	With RS-422 connection	GT1550-QLBD *2	×	GT15-50ATT-85	
	,	With communication module	GT1550-QLBD *9	×	GT15-50ATT-85	
	A850GOT-SWD(-M3), A850GOT-SBD(-M3)	With RS-422 connection	GT1555-QSBD *2	×	GT15-50ATT-85	
	, ,	With communication module	GT1555-QSBD *9	×	GT15-50ATT-85	
A851GOT	A851GOT-LWD(-M3),A851GOT-LBD(-M3) (*8)		GT1550-QLBD *3	×	GT15-50ATT-85	
	A851GOT-SWD(-M3),A (*8)	851GOT-SBD(-M3)	GT1555-QSBD *3	×	GT15-50ATT-85	
A852GOT	A852GOT-LWD(-M3),A	852GOT-LBD(-M3)	GT1550-QLBD *4	×	GT15-50ATT-85	
	A852GOT-SWD(-M3),A852GOT-SBD(-M3)		GT1555-QSBD *4	×	GT15-50ATT-85	
A853GOT	A853GOT-LWD(-M3), A	.853GOT-LBD(-M3)	GT1550-QLBD *5	×	GT15-50ATT-85	
	A853GOT-SWD(-M3), A	A853GOT-SBD(-M3)	GT1555-QSBD *5	×	GT15-50ATT-85	
A77GOT	A77GOT-CL, A77GOT-CL-S3, A77GOT-CL-S5		GT1662-VNBA *10	×	GT15-60ATT-77	
			GT1562-VNBA	×	GT15-60ATT-77	
	A77GOT-EL, A77GOT-I	EL-S3, A77GOT-EL-S5	GT1662-VNBA *10	×	GT15-60ATT-87	
			GT1562-VNBA	×	GT15-60ATT-87	
	A77GOT-L, A77GOT-L-	S3, A77GOT-L-S5	GT1662-VNBA *10	×	GT15-60ATT-77	
			GT1562-VNBA	×	GT15-60ATT-77	
A64GOT	A64GOT-L *2		GT1550-QLBD	×	None	
	A64GOT-LT21B *2*6		GT1550-QLBD	×	None	

The A810GOT is a GOT that is dedicated to output of the CRT display and others.

The GOT1000 series has no GOT that is dedicated to the output of the CRT display and others.

When replacing with GOT1000 series, use the GOT1000 series that supports the video/RGB function, and connect an RGB output unit to the GOT.

GOT1000 Series RGB Output Unit has been discontinued.

GOT1000 series that supports video/RGB function	RGB output unit for GOT1000 series
GT1675M-VTBA	GT16M-ROUT
GT1675M-VTBD	
GT1675M-STBA	
GT1675M-STBD	
GT1575V-STBA	GT15V-75ROUT
GT1575V-STBD	

- When replacing, use an RS-422 serial communication unit (GT15-RS4-9S) depending on the situation.
- \*3 When replacing, use an A bus connection unit (GT15-ABUS (2) or GT15-75ABUS (2)L).
- \*4 When replacing, use a CC-Link communication unit (GT15-J61BT13).
- \*5 When replacing, communicate with RS-232 port of GOT or use RS-232 serial communication unit (GT15-RS2-9P).
- 6 The GOT1000 series does not support the MELSECNET/B network system. Refer to Section 3.4.
- \*7 The front face of all the GOT1000 series models is black. No models with the ivory front face are available.
- \*8 For a replacement model, the GT11 dedicated to the bus connection is also available. For details, refer to Section 2.1.
- \*9 For the A bus connection, use an A bus connection unit (GT15-ABUS(2) or GT15-75ABUS(2)L). For connecting any communication unit for MELSECNET network systems, refer to Section 3.1 and select the communication unit.
- \*10 The drawing software GT Designer2 Version is not supported. Use GT Works3 Version1 (Ver1.15R or later).
- \*11 The GT16 and GT15 models (recommended GOT1000 series models for replacement) have been discontinued.

[Issue No.] GOT-A-0018-H

# 2.1 Precautions when replacing A851GOT with GOT1000 series

When replacing the A851GOT with the GOT1000 series, the GOT1000 series dedicated to the bus connection (GT11 dedicated to bus connection (GT1155-Q□BDA or GT1150-Q□BDA) is recommended.

Table 2-2 Recommended replacement models when replacing with GT11 dedicated to bus connection (GT1150-QLBDA and GT1155-QSBDA)

GOTA800 series in use	Recommended GT11 dedicated to bus connection with limited functions shown in Table 2-3 *1	Remarks
A851GOT-LWD	GT1150-QLBDA	5.7"STN monochrome A bus connection
A851GOT-LWD-M3	GT1150-QLBDA	5.7"STN monochrome A bus connection
A851GOT-LBD	GT1150-QLBDA	5.7"STN monochrome A bus connection
A851GOT-LBD-M3	GT1150-QLBDA	5.7"STN monochrome A bus connection
A851GOT-SWD	GT1155-QSBDA	5.7"STN color A bus connection
A851GOT-SWD-M3	GT1155-QSBDA	5.7"STN color A bus connection
A851GOT-SBD	GT1155-QSBDA	5.7"STN color A bus connection
A851GOT-SBD-M3	GT1155-QSBDA	5.7"STN color A bus connection

<sup>\*1</sup> GT11 models dedicated to the bus connection have been discontinued.

Since the GT11 dedicated to the bus connection does not support the following functions, replacing the model with the GT155 (communication unit mounted) is recommended to use the functions.

Table 2-3 Limited functions by GT11 dedicated to bus connection (GT1150-QLBDA and GT1155-QSBDA)

Item	Function	GT11 dedicated to bus connection	Alternative
Station number switching	The function to switch a network module station number of monitor target of the object	Not applicable	Consider replacing with GT155□. *1
Access range for monitoring	The access range that the GOT can monitor	Only the host station (0-FF) can be monitored.	Consider replacing with GT155□. *1
Print related functions	The functions related to report function, comment print, hard copy print and others	Not applicable (A printer cannot be connected.)	Consider replacing with GT155□. *1
External I/O function (Operation panel)	The function to connect external I/O equipment such as operation panel, numeric keypad panel, and push button switch	Not applicable	Consider replacing with GT155□. *1
Kana-kanji conversion function	The function to convert from hiragana to kanji when inputting ASCII characters	Not applicable	Consider replacing with GT155□. *1
Multiple connection	When connecting multiple GOTs	Not applicable	Consider replacing with GT155□. *1

<sup>\*1</sup> GT155 have been discontinued.

[Issue No.] GOT-A-0018-H

# 3. Communication units and options

#### 3.1 List of replacement models

The communication units and options for the old series are not applicable to the GOT1000 series. When replacing with the GOT1000 series, use the units for the GOT1000 series.

Table 3-1 Replacement models for communication units and options

Communication	Unit model for GOTA800	Unit model for	Cable	Remarks
format/option	and A77GOT	GOT1000	compatibility (For	Remarks
Tormavoption	and A77GOT	GOTTOOO		
			details, refer to Chapter 4.)	
A bus sannastian	A7GT-BUSS (Small CON) *1	CT1E 7EADLISL *C		Clim model *2
A bus connection	A/G1-B055 (Small CON) "1	GT15-75ABUSL *6 GT15-ABUS *6	Compatible Compatible	Slim model *3
	A7GT-BUS (Large CON) *1	GT15-75ABUSL *6	Not compatible	Slim model *3
		GT15-75ABUS *6	Not compatible	Silifi filodei 3
	A7GT-BUS2S (Small CON)	GT15-75ABUS2L *6	Compatible	Slim model *3
	*1	GT15-75ABUS2 *6	Compatible	Silli filoder 3
	A7GT-BUS2 (Large CON) *1	GT15-AB032 0	Not compatible	Slim model *3
	A7G1-B032 (Large CON)	GT15-75ABUS2 *6	Not compatible	-
RS-232	A8GT-RS2	GT15-AB032 0	Compatible	<del>-</del>   -
connection	A001-N32	GOT built-in	Compatible	-   -
CONTICCTION		interface *4	Compatible	_
RS-422	A8GT-RS4	GT15-RS4-9S	Not compatible	9-pin connector type
connection	7.001 1.04	GT15-RS2T4-9P *6	Incompatibility	9-pin connector type
comicodon		011011021401	moompatibility	* Applicable by connecting to the GOT built-in interface *4
		GT16-C02R4-9S	Not compatible	9-pin connector type
	1 - 2 - 1 - 1 - 2 - 2 - 1	0745 1741 200 05	0 1111	* Applicable to GT16 only
MELSECNET/10	A7GT-J71LP23 *1	GT15-J71LP23-25	Compatible	Use the MELSECNET/H
connection	A7GT-J71BR13 *1	GT15-J71BR13	Compatible	communication unit with the MELSECNET/10 mode.
MELSECNET(II)	A7GT-J71AP23 *1	GT15-J71LP23-25	Compatible	* Refer to Section 3.4.  The network must be changed.
connection	A7GT-J71AR23 *1	GT15-J71BR13	Compatible	* Refer to Sections 3.3. and 3.4.
MELSECNET/B	A7GT-J71AT23B *1	GT15-J71LP23-25	Not compatible	Refer to Sections 3.3. and 3.4.
connection	A/G1-J/ IA123B 1	GT15-J71BR13	Not compatible	-
CC-Link	A8GT-J61BT13 *1	GT15-37 IBIC13	Compatible	The unit must be changed to the unit
connection	A001-001B110 1	0110-0010110	Compatible	dedicated to the CC-Link ver.2
COMMODITION				network system.
	A8GT-J61BT15 *1	1		The unit must be changed to the unit
				dedicated to the CC-Link ver.2
				network system.
				* Refer to Section 3.3.
External I/O	A8GT-70KBF	GT15-DIO *2	-	-
interface	A8GT-50KBF			
Numeric keypad	A8GT-TK	Not applicable	-	Refer to Section 3.3.
panel	A7GT-TK	Not applicable	-	Refer to Section 3.3.
Printer	A8GT-70PRF	GT15-PRN	Not compatible	PictBridge compatible printer *5
connection		GT15-RS2-9P	Not compatible	Serial printer *5
		GOT built-in	Not compatible	
		interface *4		
	A8GT-50PRF	GT15-PRN	Not compatible	PictBridge compatible printer *5
		GT15-RS2-9P	Not compatible	Serial printer *5
		GOT built-in	Not compatible	
	ļ	interface *4		
Memory card	A7GT-MIF	GOT built-in CF card	-	The CF card interface is built in the
interface	1	interface		GOT as standard equipment. The
Mamanussid	OAMENA	CTOE MENA MAC		memory card (SRAM) cannot be used.
Memory card	Q1MEM-	GT05-MEM-□MC	-	For the GOT1000 series, the SRAM
	64/128/256/512/1M/2MS	GT05-MEM-□GC		card cannot be used. Use a CF card.

<sup>\*1</sup> The communication units for the GOT800 series and A77GOT series have setting switches, including rotary switches. Though the GOT1000 series communication unit does not have rotary switches and others, setting switches is required with software. Therefore, set the switches with the drawing software or the utility. For details, refer to Section 3.2. for an A bus connection unit, Section 3.4.2 (2) for a MELSECNET/10 communication module, and Section 3.4.2 (1) for MELSECNET(II) and MELSECNET/B communication modules.

<sup>\*2</sup> Specifications of external power supply voltage, external connection connector shape and others are changed. For details, refer to the GT15 External I/O Unit (Positive Common Input/Sink Type Output) User's Manual (IB-0800382).

<sup>\*3</sup> When using the units for functions, including the external I/O function, sound output function, printer function, video/RGB display

[Issue No.] GOT-A-0018-H

function, and RGB output function, at the same time, use the following units. The slim model has limitation for combination with other units.

GT15-ABUS (A bus connection 1ch), GT15-ABUS2 (A bus connection 2ch)

\*4 To download monitor screen data and others from a personal computer to the GOT via the GOT built-in RS-232 interface, the cable must be replaced.

When the cable is not replaced, use the GT15-RS4-9S.

However, consider 1) as shown below.

- 1) The thickness of the GOT with the communication unit (E dimension shown in Chapter 5) increases by 13mm.
- \*5 Since the Centronics interface (A8GT-70PRF and A8GT-50PRF) is replaced with the USB interface (GT15-PRN) or the RS-232 interface (GT15-RS2-9P or GOT built-in interface), change the printer model.
  - For the printer models applicable to the GOT1000 series (validated models), refer to the following Technical Bulletin.

The Technical Bulletin can be downloaded from the Mitsubishi Electric FA Global Website.

- → List of Valid Devices Applicable for GOT1000 Series (GOT-A-0010)
- \*6 The production has been discontinued.

# 3.2 Units that require new setting method

The communication units for the GOT800 series and A77GOT series listed below require settings with rotary switches and others on the hardware. However, the communication units for the GOT1000 series do not have rotary switches and others, and settings with the drawing software or the utility are required. For the GOT1000 series, refer to the following table.

Table 3-2Units that require new setting method and new setting method after change

GOT800 series and A	77GOT series comm	nunication module	GOT1000 communication unit	
Item	Model	Settings on hardware	Model	Setting method
Bus connection interface module	A7GT-BUS A7GT-BUS2 A7GT-BUSS A7GT-BUS2S	(1) I/O slot setting switch (2) Extension number setting switch	GT15-75ABUS(2)L GT15-ABUS(2)	Set with the drawing software (GT Designer2 and others) or utility of
CC-Link communication module	A/G1-B0323 A8GT-J61BT13 A8GT-J61BT15	(1) Mode setting switch:    (A8GT-J61BT13 only)Online/Offline (2) Station number setting switch:    tens place, ones place (3) Transmission baudrate setting switch (4) Condition setting switch:    Input data status of data link faulty station (A8GT-J61BT13 only), number of occupied stations	GT15-J61BT13	the GOT.

#### 3.3 Communication modules and options without replaceable models

The communication modules and options for the GOT800 series and A77GOT series shown in the following list have no alternative GOT1000 series models. If you have difficulty to replace the modules and options with the GOT1000 series, keep enough spares.

Table 3-3 Communication modules and options without replaceable models and alternative plans

Category	Item	Model	Alternative plan
Communication	Bus connection unit	A7GT-BUS	Replacing with other communication format
module		A7GT-BUS2	
		A7GT-BUSS	
		A7GT-BUS2S	
	Data link unit for MELSECNET	A7GT-J71AP23	Replacing with the MELSECNET/H network system
	(II) network system	A7GT-J71AR23	(GOT1000 series communication unit model: GT15-
	Data link unit for MELSECNET/B network system	A7GT-J71AT23B	J71BR13 or GT15-J71LP23-25) is recommended. (Section 3.5)
	CC-Link communication module (remote device station)	A8GT-J61BT15	Replacing with the CC-Link (intelligent device station) communication unit (GOT1000 series communication unit model: GT15-J61BT13) is recommended. *1
Option	Numeric keypad panel	A8GT-TK A7GT-TK	No alternative models *2

<sup>\*1 -</sup> The number of used stations differs. (Remote device station: using two stations out of four stations, intelligent device station: using one station out of four stations) Changing parameter in the CC-Link station setting (remote device station -> intelligent device station) and others on the programmable controller are required.

<sup>-</sup> Maximum number of connected units is reduced from 32 to 26. When connecting more than 26 units, consider adding a master station to support the system.

<sup>-</sup> Remote dedicated commands (initial setting command, continuous read command, random read command, continuous write command, random write command, monitor register command, monitor request command, always write register command, and always

write register command) are not supported. Please consult Mitsubishi representative for questions regarding to the remote dedicated command.

\*2 Contact Mitsubishi Electric System & Service Co., Ltd about a cable (GT15-C03HTB) to use the A8GT-TK with the GOT1000 series.

# 3.4 Replacing the GOT800, A77GOT, or A64GOT series connected to the MELSEC A series PLC in the bus connection with GOT1000 series

For all A bus connection unit models for GOT1000 series, order taking was closed on December 31, 2014, and the production was discontinued on January 31, 2015.

If GOT800 or A77GOT series is connected in the A bus connection, the communication format must be changed.

Refer to the following.

- → 3.4.1 Settings of the PLC and GOT
  - 3.4.2 Communication format

#### Target PLC CPU

PLC series	Model
MELSEC-A series	A0J2HCPU, A0J2HCPUP21, A0J2HCPUR21, A0J2HCPU-DC24, A2CCPU, A2CCPUP21, A2CCPUR21, A2CCPUC24, A2CCPUC24-PRF, A2CJCPU-S3, A1FXCPU
	A2UCPU, A2UCPU-S1, A3UCPU, A4UCPU, A2A, A2ACPUP21, A2ACPUR21, A2ACPU-S1, A2ACPUP21-S1, A2ACPUR21-S1, A3ACPU, A3ACPUP21, A3ACPUR21, A1NCPU, A1NCPUP21.
	A1NCPUR21, A2NCPU, A2NCPUP21, A2NCPUR21, A2NCPU-S1, A2NCPUP21-S1, A2NCPUR21-S1,
	A3NCPU, A3NCPUP21, A3NCPUR21 A2USCPU, A2USCPU-S1, A2USHCPU-S1, A1SCPU, A1SCPUC24-R2, A1SHCPU, A2SCPU,
	A2SHCPU, A1SJCPU, A1SJCPU-S3, A1SJHCPU
MELSEC-QnA series	Q2ACPU, Q2ACPU-S1, Q3ACPU, Q4ACPU, Q4ARCPU
	Q2ASCPU, Q2ASCPU-S1, Q2ASHCPU, Q2ASHCPU-S1

#### 3.4.1 Settings of the PLC and GOT

Correct the PLC and GOT settings when changing the communication format.

# (1) PLC side

New settings may be required in the PLC when a bus-connected GOT is removed or a communication module is added to the PLC.

Correct the parameter settings (such as the I/O assignment), I/O number in the sequence program, and other settings according to the configuration of the PLC.

# (2) GOT side

Change the controller setting. \*1

When changing the interface to a network connection (other than the Ethernet connection), set the network No. and station No. for the device number of each object. \*2

\*1 Controller setting example

Connecting to MELSEC-A series using the direct CPU connection (RS-422 connection)



\*2 Network No., station No. settings Monitoring D0 of the CPU with network No. 1, station No. 2

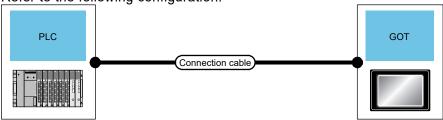


# 3.4.2 Communication format

# (1) Replacing with serial connection

# (a) Direct CPU connection

Refer to the following configuration.



1) When connecting to MELSEC-A or MELSEC-QnA

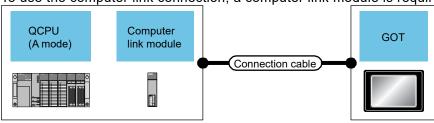
PLC	Connection cable *1		GOT		
CPU module Communica tion format			Option	Product	
MELSEC-A *2 MELSEC-QnA	RS-422	GT01-C30R4-25P(3 m) GT01-C100R4-25P(10 m) GT01-C200R4-25P(20 m)	GT16-C02R4-9S GT15-RS2T4-9P *3*4	GT16 GT16, GT15	
		GT01-C300R4-25P(30 m)	GT15-RS4-9S (Built in the GOT)	GT14	

- \*1 If the connection distance exceeds 30 m, consider a network connection.
- \*2 When monitoring AnNCPU, A0J2HCPU, or A2CCPU, data can be written to the CPUs with software versions as shown below.
  - AnNCPU(S1) (with link): Version L or later, AnNCPU(S1) (without link): Version H or later
  - A0J2HCPU (with/without link): Version E or later
  - A2CCPU: Version H or later
- \*3 Connect it to the RS-232 interface built in the GOT. GT1655 and GT155□ cannot be used.
- \*4 The production has been discontinued.

# (b) Computer link connection

Refer to the following configuration.

To use the computer link connection, a computer link module is required on the PLC side.



[Issue No.] GOT-A-0018-H

1) When connecting to MELSEC-A or MELSEC-QnA

PLC		Connection cable *2*3	GOT		
Computer link module	Communica tion format		Option	Product	
AJ71UC24 *5*6 A1SJ71UC24-R2 *5	RS-232	GT09-C30R2-25P (3 m) User-created cable (15 m max.)	(Built in the GOT)	GT16, GT15, GT14	
A1SJ71C24-R2 *5 AJ71QC24-R2 *5 A1SJ71QC24 *5 A1SJ71QC24-R2 *5 A1SJ71UC24-R2 *5*6 A1SJ71C24-R2 *5*6			GT15-RS2-9P	GT16, GT15	
AJ71UC24 *5*6	RS-422	User-created cable (500 m max.) *7*8*9	(Built in the GOT)	GT16	
A1SJ71UC24-R4 *5		GT09-C30R4-6C (3 m)	GT16-C02R4-9S	GT16	
AJ71QC24-R4 *5 A1SJ71QC24 *5		GT09-C100R4-6C (10 m)	GT15-RS2T4-9P *4*5	GT16, GT15	
A1SJ71UC24-R4 *5*6		GT09-C200R4-6C (20 m) GT09-C300R4-6C (30 m)	GT15-RS4-9S		
		User-created cable (500 m max.) *7*9	(Built in the GOT)	GT14	
AJ71QC24-R4 *5	1	GT01-C30R4-25P (3 m)	GT16-C02R4-9S	GT16	
GT01-C200R4-2	GT01-C100R4-25P (10 m)	GT15-RS2T4-9P *4*5	GT16, GT15		
		GT01-C200R4-25P (20 m) GT01-C300R4-25P (30 m)	GT15-RS4-9S		
	2.5. 2555((1.25)	(Built in the GOT)	GT14		

<sup>\*1</sup> To connect A2SCPU-S1, A2SHCPU-S1, A1SHCPU, A1SJHCPU, or A0J2HCPU in the computer link connection, use a computer link module with software version U or later.

A0J2-C214-S1 (computer link module dedicated to A0J2HCPU) cannot be used.

- \*2 For user-created cables, refer to the following.
  - → GOT1000 Series Connection Manual (Mitsubishi Electric Products) for GT Works3 (SH-080868ENG)
- \*3 If the connection distance exceeds 30 m, consider replacing with connection using a user-created cable or network connection.
- \*4 Connect it to the RS-232 interface built in the GOT. GT1655 and GT155 cannot be used.
- \*5 The production has been discontinued.
- \*6 The range of usable device numbers is the range of devices of AnACPU.
- <sup>\*</sup>7 1200 m max. when AJ71QC24-R4 is used
- \*8 1200 m max. when AJ71UC24 is used
- \*9 1200 m max. when A1SJ71QC24 is used

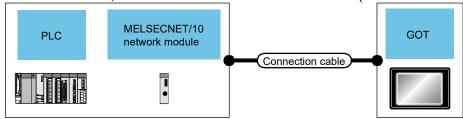
#### (2) Network connection

# (a) MELSECNET/10 connection

Refer to the following configuration.

To use the MELSECNET/10 connection, a MELSECNET/10 module is required on the PLC side.

On the GOT side, a MELSECNET/H communication unit (to be used in the MNET/10 mode) is required.



When connecting to MELSEC-A or MELSEC-QnA (optical loop system)

PLC		Connection cable	GOT		
MELSECNET/10 communication unit	Communicatio n format		Option	Product	
AJ71LP21 *4 A1SJ71LP21 *4 AJ71QLP21 *4	MELSECNET/1 0	Fiber-optic cable	GT15-J71LP23-25 *2 GT15-75J71LP23-Z *3*4	GT16, GT15 GT15	
AJ71QLP21S *4 A1SJ71QLP21 *4 A1SJ71QLP21S *4					

- \*1 A2UCPU, A2UCPU-S1, A3UCPU, A4UCPU, A2USCPU, A2USCPU-S1, or A2USHCPU-S1 can be connected.
- \*2 Specify MNET/10 mode in the controller setting.
- \*3 It cannot be used with GT155 ...
- \*4 The production has been discontinued.

2) When connecting to MELSEC-A or MELSEC-QnA (coaxial bus system)

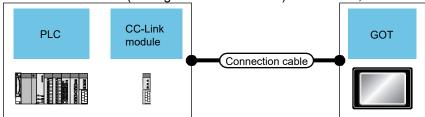
PLC		Connection cable	GOT		
MELSECNET/10 Communication communication unit format			Option	Product	
AJ71BR11 *4 A1SJ71BR11 *4 AJ71QBR11 *4 A1SJ71QBR11 *4	MELSECNET/10	Coaxial cable	GT15-J71BR13 *2 GT15-75J71BR13-Z *3*4	GT16, GT15 GT15	

- \*1 A2UCPU, A2UCPU-S1, A3UCPU, A4UCPU, A2USCPU, A2USCPU-S1, or A2USHCPU-S1 can be connected.
- \*2 Specify MNET/10 mode in the controller setting.
- \*3 It cannot be used with GT155 ...
- \*4 The production has been discontinued.

# (b) CC-Link connection (Intelligent device station)

Refer to the following configuration.

To use the CC-Link (intelligent device station) connection, a CC-Link module is required on the PLC side.



1) When connecting to MELSEC-A or MELSEC-QnA

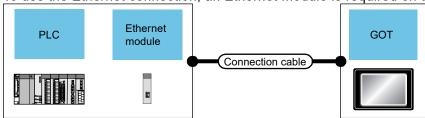
The tries series and to meet the end of the					
PLC		Connection cable	GOT		
CC-Link module Communicati on format			Option	Product	
AJ61BT11 *4	CC-Link(Ver.1)	CC-Link dedicated cable	GT15-J61BT13 *2	GT16, GT15	
A1SJ61BT11 AJ61QBT11 *4 A1SJ61QBT11			GT15-75J61BT13-Z *3*4	GT15	

- \*1 A0J2HCPU, A0J2HCPUP21, A0J2HCPUR21, or A0J2HCPU-DC24 can be connected.
- \*2 Specify Ver.1 for the mode setting in the controller setting.
- \*3 It cannot be used with GT155□.
- \*4 The production has been discontinued.

# (c) Ethernet connection

Refer to the following configuration.

To use the Ethernet connection, an Ethernet module is required on the PLC side.



1) When connecting to MELSEC-A or MELSEC-QnA

PLC		Connection cable	GOT	GOT		
Ethernet module	Communication format		Option	Product		
AJ71E71N3-T *3 AJ71E71N-B5 *3	Ethernet	Twisted pair cable - 10BASE-T	(Built in the GOT)	GT16 *1 GT14 *2		
AJ71E71N-B2 *3 AJ71E71N-T *3		- 100BASE-TX	GT15-J71E71-100 *3	GT15		
AJ71E71N-B5T *3						
AJ71E71-S3 *3 A1SJ71E71N3-T *3						
A1SJ71E71N-B5 *3						
A1SJ71E71N-B2 *3 A1SJ71E71N-T *3						
A1SJ71E71N-B5T *3 A1SJ71E71-B5-S3 *3						
A1SJ71E71-B3-S3 *3						
AJ71QE71N3-T *3 AJ71QE71N-B5 *3						
AJ71QE71N-B2 *3						
AJ71QE71N-T *3 AJ71QE71N-B5T *3						
AJ71QE71 *3						
AJ71QE71-B5 *3 A1SJ71QE71N3-T *3						
A1SJ71QE71N-B5 *3						
A1SJ71QE71N-B2 *3 A1SJ71QE71N-T *3						
A1SJ71QE71N-B5T *3						
A1SJ71QE71-B5 *3 A1SJ71QE71-B2 *3						

<sup>\*1</sup> To connect a GT16 model with function version A to 10BASE(-T/2/5) compliant equipment, use a switching hub so that pieces of equipment with transmission speed 10 Mbps and 100 Mbps can be mixed on the network.

To check the function version, refer to the following.

- \*2 GT1455-QTBDE and GT1450-QMBDE only are the GT14 models that support the Ethernet connection.
- \*3 The production has been discontinued.

# (3) Replacing multiple GOTs

When multiple GOTs are connected, consider replacing the connection type to the following.

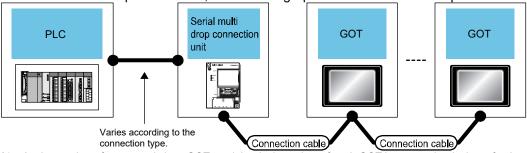
- Network connection
  - → 3.4.2 (2) Network connection
- Multi-drop connection
  - → (a) Multi-drop connection

<sup>→</sup> GT16 User's Manual (Hardware) (SH-080928ENG)

#### (a) Multi-drop connection \*1

Refer to the following configuration.

To use the multi-drop connection, the following option and cables are required.



\*1 As the number of connected slave GOTs and the device points of each GOT increase, the device refresh cycle on the screen may become slow. In such a case, decreasing the device points of each GOT is recommended. (Consider 250 points for one GOT and a total of 750 points for reference.) If there is a timeout error, specify a longer timeout time in the controller setting of the slave GOT.

# 1) When connecting to MELSEC-A \*1 or MELSEC-QnA \*2

For the system configuration between the serial multi-drop connection unit and the PLC, refer to the section of each connection type in the manual.

Multi-drop connection unit		Connection cable *3	GOT		
Serial multi-drop connection unit	Communication format		Option	Product	
GT01-RS4-M	RS-485	User-created cable (500 m max. *6)	FA-LTBGTR4CBL05(0.5 m) FA-LTBGTR4CBL10(1 m) FA-LTBGTR4CBL20(2 m)	GT16	
			GT15-RS4-9S	GT16, GT15	
			GT15-RS4-TE	GT16, GT15	
			GT10-9PT5S *4	GT14	
			(Built in the GOT)		
			GT14-RS2T4-9P *5		

<sup>\*1</sup> It cannot be connected when the PLC and the serial multi-drop connection unit are connected in the computer link connection.

# 3.5 Replacing the GOT800, A77GOT, or A64GOT series connected to the MELSECNET(II) or MELSECNET/B network system with the GOT1000 series

When the GOT800, A77GOT, or A64GOT series is used in the MELSECNET( $\mathrm{II}$ ) or MELSECNET/B network system, consider the replacement with any of the following method.

- Change the MELSECNET(  $\rm II$  ) or MELSECNET/B network system in the entire system to the MELSECNET/H network system, and replace the GOT800, A77GOT, or A64GOT series with the GOT1000 series.
- Without the change of the MELSECNET(II) or MELSECNET/B network system in the entire system, change the connection type between the programmable controller and the GOT, and replace the GOT800, A77GOT, or A64GOT series with the GOT1000 series.

#### 3.5.1 Replacing the network in the entire system with the MELSECNET/H network system

Use the following MELSECNET/H communication unit for the GOT1000 series

Model	Specifications
GT15-J71LP23-25	Optical loop unit
GT15-J71BR13	Coaxial bus unit

For details of changing to MELSECNET/H system, refer to Transition from MELSEC-A/QnA (Large Type) Series to Q Series Handbook (Network Modules: L(NA)-08048ENG).

<sup>\*2</sup> Q4ARCPU cannot be connected.

<sup>\*3</sup> For user-created cables, refer to the following.

<sup>→</sup> GOT1000 Series Connection Manual (Mitsubishi Electric Products) for GT Works3 (SH-080868ENG)

<sup>\*4</sup> Connect it to the RS-422/485 interface built in the GOT.

<sup>\*5</sup> Connect it to the RS-232 interface built in the GOT.

<sup>\*6</sup> The maximum distance from the PLC and the terminal GOT

# 3.5.2 Changing the connection type between the programmable controller and the GOT without change of the network in the entire system

# (1) When the existing programmable controller has an empty slot

Add a communication module (for other than the MELSECNET(II), MELSECNET/B, and MELSECNET/10 network systems) to the programmable controller, and change the connection type between the programmable controller and the GOT.

Example of accessing the network via the programmable controller by changing the connection type of the GOT

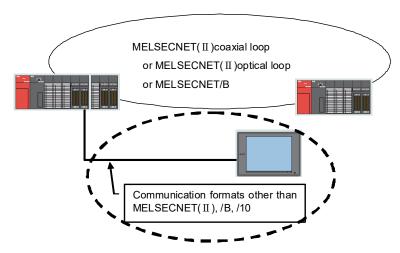


Figure 3-1 Example of replacement configuration when adding a communication module to the programmable controller with an empty slot and connecting the programmable controller to the GOT

The following two restrictions are applied for the replacement.

- (a) Station number settings need to be changed depending on the station that the GOT is connected to.
- When connecting to the master station, change all station numbers of objects to the host station (0-FF).
- When connecting to local stations, station numbers do not need to be changed.

# (b) When using the cyclic device with host station write, the write area of the GOT is unable to use. Therefore, changing the write device and corresponding ladder is required.

Table 3-4 Communication format between a programmable controller and a replacement GOT, a representative communication unit model and a connected programmable controller

Replacement communication	Representative GOT communication unit	Connected programmable controller
format	model	
A bus connection	GT15-ABUS *1, GT15-75ABUSL *1	AnS series MELSEC-QnA series
RS-232 connection	RS-232 port of GOT, GT15-RS2-9P	Q series AnS series MELSEC-QnA series
RS-422 connection	GT15-RS4-9S, GT15-RS2T4-9P *1	Q series AnS series MELSEC-QnA series

<sup>\*1</sup> The production has been discontinued.

# (2) When the existing programmable controller has no empty slot

Add a programmable controller to the network. Add a communication module (for other than the MELSECNET(II), MELSECNET/B, and MELSECNET/10 network systems) to the programmable controller, and change the connection type between the programmable controller and the GOT.

Example of accessing the network by adding a programmable controller to the network

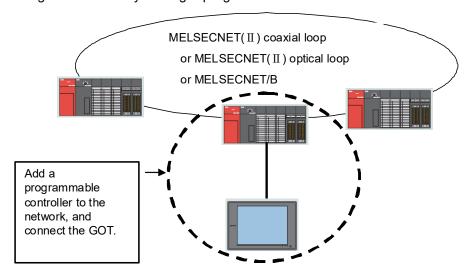


Figure 3-2 Example of replacement configuration when adding a programmable controller to the network and connecting the programmable controller to the GOT

# 3.6 Replacing the GOT800 or A77GOT series connected to the MELSECNET/10 (programmable controller to programmable controller optical loop/coaxial bus) network system with the GOT1000 series

Use the MELSECNET/H communication unit listed in Section 3.5.1, set the MELSECNET/H communication unit to the MELSECNET/10 mode, and connect the GOT to the MELSECNET/10 network system.

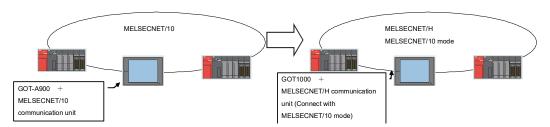


Figure 3-3 Example of replacement configuration when changing networks

#### 4. Cables

#### 4.1 Bus connection cables

# 4.1.1 Utilization of cables in present use

The following GOT800 series and A77GOT series bus connection cables can be used for the GOT1000 series by adding dedicated ferrite cores (\*) to the both ends of the cables.

Table 4-1 Available existing GOT800 series and A77GOT series cables

A bus connection cable	Cable model	Cable length	Ferrite core model (*)	Sales launch
Large-size CPU extension cable	A8GT-C□NB	1.2 to 5m	GT15-AFC	Now on sale
	A370C□B-S1	1.2, 2.5m		
Small-size CPU extension cable GOT-to-GOT connection cable	A1SC□(N)B	0.5 to 5m		
Small-size CPU long-distance extension cable	A8GT-C□EXSS(-1)	10.6 to 30.6m		
GOT-to-GOT long-distance connection cable	A8GT-C□BS	10 to 30m		
A0J2HCPU connection cable	A9GT-J2C□B	1m		

<sup>\*</sup> Purchase the ferrite cores from Mitsubishi Electric System & Service Co., Ltd. (The GT15-AFC includes two ferrite cores for a cable.)

The following GOT800 series and A77GOT series cables are not available for the GOT1000 series. Replace the cables with the bus connection cables for the GOT1000 series as shown below.

Table 4-2 Unavailable existing GOT800 series and A77GOT series cables

A bus connection cable		Cable model (combination)	Cable length	Alternative cable model *1	Remarks
		40.5	0.01 5		
A bus	Large-size	AC□B	0.6 to 5m	GT15-C□NB	-
connection cable	CPU extension cable	AC□B+A7GT-CNB-BUS-1	0.6 to 5m + 0.3m	GT15-C□NB	-
		AC□B +A7GT-CNB +A8GT-C□EXSS-1/-C□EXSS	0.6 to 5m +10 to 30.6m	GT15-AC□B +A7GT-CNB +GT15-C□EXSS-1	-
		AC□B-R	1.2 to 5m	GT15-C□NB	The old series cable is a right angle cable. The corresponding cable is not available for the GOT1000 series. Replace the cable with the alternative cable.
		AC□B-R +A7GT-CNB-BUS-1	1.2 to 5m + 0.3m	GT15-C□NB	Same as above
		AC□B-R +A7GT-CNB +A8GT-C□EXSS-1/-C□EXSS	1.2 to 5m +10 to 30.6m	GT15-AC□B +A7GT-CNB +GT15-C□EXSS-1	-
		A7GT-C□EXS(-1)	10 to 30m	GT15-C□EXSS-1	-
		A7GT-C□B	10 to 30m	GT15-C□BS	-
		A370C□B	1.2 to 2.5m	GT15-A370C□B	-
		A370C□B +A7GT-CNB-BUS-1	1.2 to 2.5m + 0.3m	GT15-A370C□B-S1	-
	Small-size CPU extension cable	A1SC□NB +A7GT-CNB-BUS-1	0.5 to 5m + 0.3m	GT15-A1SC□B	-
	A0J2HCPU connection cable	A0J2C04B	0.4m	GT15-J2C10B	The corresponding cable of the 0.4m cable is not available for the GOT1000 series. Replace the cable with the 1m cable.

<sup>\*1</sup> The production has been discontinued.

# 4.1.2 Replacing GOT when using multiple units of bus connection

When multiple GOTs of GOT800 series are connected via the bus connection, one of the GOTs cannot be replaced with the GOT1000 series. All the connected GOTs must be replaced with the GOT1000 series.

#### 4.2 RS-232 cable

The connectors for the GOT800 series serial communication module (RS-232) and for the GOT1000 series serial communication port (RS-232) are the same type (9-pin D-sub (male), with inch screws). The pin locations are also the same.

Use the Mitsubishi GOT1000 series cables (including user-created cables described in GOT1000 Series Connection Manual) to connect to the GOT1000 series.

# 4.3 RS-422 cable

For the Mitsubishi GOT800 series cables in use (AC $\square$ R4 and A7GT-AC $\square$ R4), the connector for the GOT800 series cables differ from the connector for the GOT1000 series cables. Replace the cable with the GOT1000 series cable.

Use the Mitsubishi GOT1000 series cables (including user-created cables described in the GOT1000 Series Connection Manual) to connect to the GOT1000 series.

# 4.4 Network cable (MELSECNET/10 and CC-Link)

The network cables for the old series are available for the GOT1000 series.

#### 4.5 Other cables

Table 4-3 Treatment for other existing cables

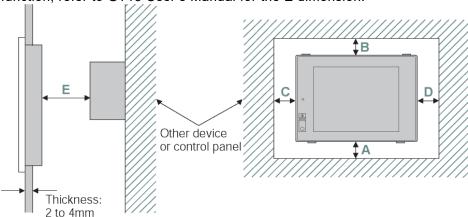
Cable type	Treatment
Printer cable	The GOT800 series cables are not available for the GOT1000 series since the interfaces differ between the GOT1000 series and the GOT800 series (GOT1000 series: USB or RS-232 interface, GOT800 series: Centronics interface).
CRT connection cable	The cables for each old series (model: AC□VG) are available for the GOT1000 series.

# 5. Mounting intervals

When replacing the GOT800, A77GOT, or A64GOT series with the GOT1000 series, some models and connection types require larger mounting intervals than the GOT800, A77GOT, and A64GOT series. The following describes the precautions.

For intervals required for each product, please refer to the product installation interval section in the GOT1000 catalog.

In addition, when installing a communication unit or option unit on the GOT to use the multi-channel function, refer to GT15 User's Manual for the E dimension.



#### 5.1 GOT800 and A77GOT series

Among the mounting intervals (A to F dimensions in the above figure), the F dimension for the GOT1000 series is larger than the F dimension for the A851GOT with the bus connection or the A852GOT with the CC-Link connection. The following table shows the dimension.

When using the multi-channel function, consider the thickness of the communication unit to be mounted. For details, refer to the chapter regarding the multi-channel function in the GOT1000 Series Connection Manual.

Table 5-1 Depth dimension (F dimension) with bus connection or CC-Link connection

(Unit: mm)

GOTA800 series in present use				Alternative model		
GOT model		Connection type	F dimension	GOT model	Communication unit model	F dimension
A851GOT	A851GOT-LWD(-M3), A851GOT-LBD(-M3)	A bus connection	62	GT1550-QLBD	GT15-ABUS(2) GT15-75ABUS(2)L	77
	A851GOT-SWD(-M3), A851GOT-SBD(-M3)			GT1555-QSBD		
A852GOT	A852GOT-LWD(-M3), A852GOT-LBD(-M3)	CC-Link connection	69	GT1550-QLBD	GT15-J61BT13	77
	A852GOT-SWD(-M3), A852GOT-SBD(-M3)			GT1555-QSBD		

#### 5.2 A64GOT series

Table 5-2 shows the comparison of mounting dimensions.

For the A64GOT series, some dimensions are not defined. The E and F dimensions for the GOT1000 series are larger than those for the A64GOT series. Check the dimensions when replacing the unit with the GOT1000 series.

Table 5-2 Comparison of mounting dimensions between A64GOT and GT1550-QLBD

(Unit: mm)

Model	A dimension	B dimension	C dimension	D dimension	E dimension	F dimension
A64GOT-L/-LT21B	Not defined	Not defined	Not defined	Not defined	51.5	73.5
GT1550-QLBD (With MELSECNET/H communication unit)	65	80	50	50	100	77

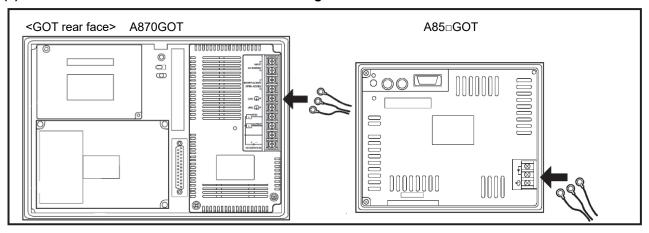
# 6. Cable connection direction and PC (CF) card insertion direction

The cable connection direction or position and the PC (CF) card insertion direction differ between the GOT800, A77GOT, or A64GOT series and the GOT1000 series.

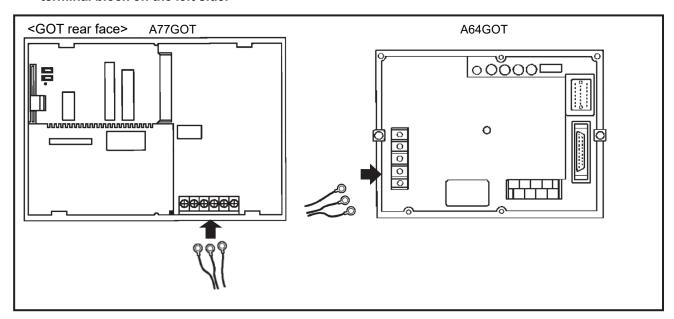
The following shows the difference between the old series and the GOT1000 series. To mount the GOT on the control panel, perform wiring and others by referring to the following.

# 6.1 Cable connection direction and position

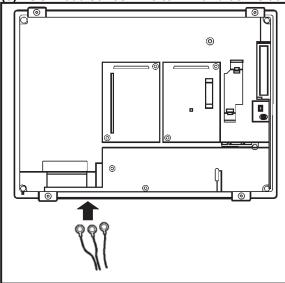
(1) GOT800 series: The terminal block is on the right side of the GOT.



(2) A77GOT and A64GOT series: The A77GOT has the terminal block at the bottom. The A64GOT has the terminal block on the left side.

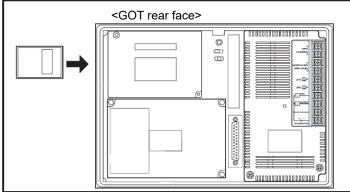


(3) GOT1000 series: The terminal block is at the bottom of the GOT.

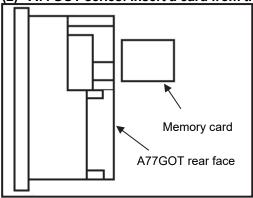


# 6.2 CF card insertion direction

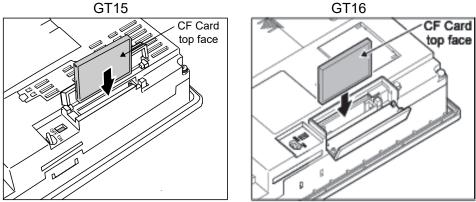
(1) GOT800 series: Insert a card from the left side of the GOT.



(2) A77GOT series: Insert a card from the GOT rear face.

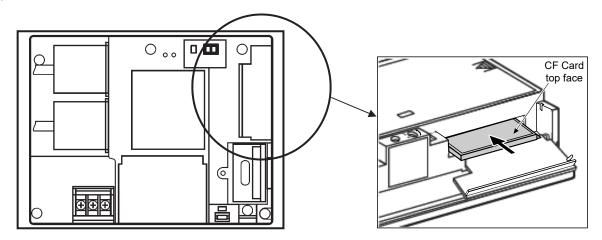


# (3) GOT1000 series (excluding GT155 $\square$ and GT115 $\square$ ): Insert a card from the GOT rear face.



When mounting the GOT, more than 100 mm of mounting depth is required in order to insert/remove the CF card.

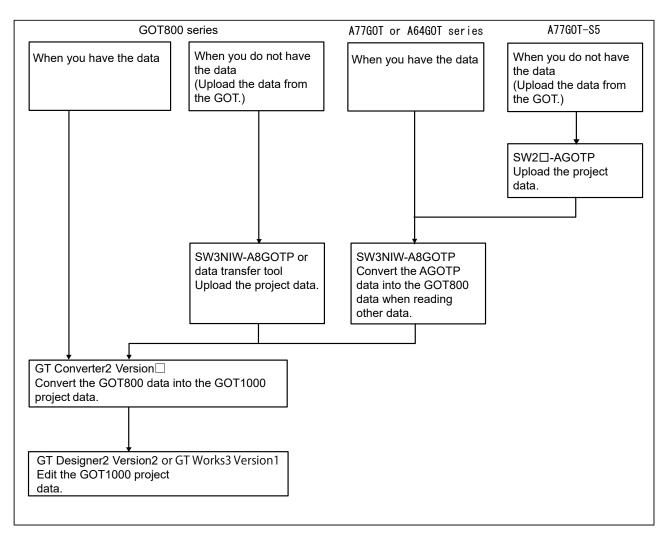
# (4) GT155 and GT115: Insert a card from the side of the GOT.



#### 7. Monitor screen data

# 7.1 Using exiting monitor screen data

Flow of using existing monitor screen data of GOT800 series, A77GOT or A64GOT series, or A77GOT-S5 data



# 7.1.1 How to convert monitor screen data from GOT800 series to GOT1000 series

By converting the monitor screen data for the GOT800 series into the GOT1000 series data with the data conversion software (GT Converter2 Version2 or GT Converter2 Version3), the monitor screen data for the GOT800 series can be used for the GOT1000 series.

The data conversion software is included with the following drawing software for the GOT1000 series.

- 1) GT Converter2 Version2
- GT Works2 Version2(SW2D5C-GTWK2)
- GT Designer2 Version2(SW2D5C-GTD2)
- 2) GT Converter2 Version3
- GT Works3 (SW1DNC-GTWK3, SW1DND-GTWK3)

# (1) When you have the monitor screen data for the GOT800 series

Convert the GOT800 series data into the GOT1000 series data by using GT Converter2 Version. To edit the file after the conversion, open and edit the file with GT Designer2 Version or GT Works3.

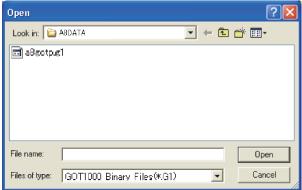
# < Operation of GT Converter2 Version =>

- 1) Start GT Converter2 Version ...
- 2) Select the monitor screen data to be converted, and start conversion.
- 3) After the conversion is completed, name and save the file.
- \* The file format after conversion is "\*.G1"instead of "\*.GTE".
- \* For the operation of GT Converter2 Version, refer to the following manual.
- 1) GT Converter2 Version2
- GT Converter2 Version2 Operating Manual (SH-080533ENG)
- 2) GT Converter2 Version3
- GT Converter2 Version3 Operating Manual for GT Works3 (SH-080862ENG)

# < Editing with GT Designer2 >

# (a) GT Designer2 Version□

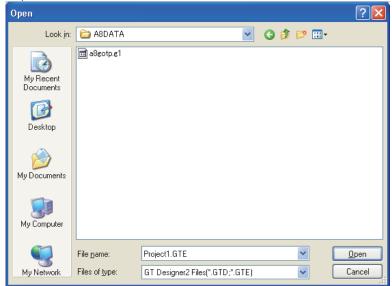
- 1) Start GT Designer2 Version ...
- 2) Select [Project] [Open] from the menu.
- Select [GOT1000 Binary Files(\*.G1)] for [Files of type] in the [Open] dialog box.
- 4) Select the file to be edited, and then click the [Open] button.
- 5) Edit the file, and then save the file as a new file to create the monitor screen data (GTE file) for the GOT1000 series.



\* For details, refer to the GT Designer2 Version2 Screen Design Manual(SH-080530ENG).

# (b) GT Designer3

- 1) Start GT Designer3.
- 2) Select [Open] in the [Select Project] dialog box.
- 3) Click the [Open GT Designer2/G1 format file] button for another format in the [Open Project] dialog box.
- 4) Select [GOT1000 Binary Files(\*G1)] for [Files of type] in the [Open] dialog box.
- 5) Select the file to be edited, and then click the [Open] button.
- 6) Edit the file, and then save the file as a new file to create the monitor screen data for the GOT1000 series.



<sup>\*</sup> For details, refer to the GT Designer3 Version1 Screen Design Manual (Fundamentals) (SH-080866ENG).

[Issue No.] GOT-A-0018-H

# (2) When you do not have the monitor screen data for the GOT800 series

After the data is uploaded from the GOT800 series, execute the conversion as shown in above (1). The data can be uploaded from the GOT by using the GOT800 series drawing software SW3NIW-A8GOTP or the data transfer tool.

- \* The GOT800 series drawing software SW3NIW-A8GOTP supports the operating systems of Windows3.1 and Windows95.
- \* The following shows the OSs that support the data transfer tool.
- Windows 2000 Professional
- Windows XP Professional/Home Edition
- Windows Vista Ultimate/Enterprise/Business/Home Premium/Home Basic
- Windows7 Ultimate/Enterprise/Professonal/Home Premium/Starter
- \* To obtain SW3NIW-A8GOTP, contact your local sales office.

The data transfer tool is included with GT Works2 Version2 and GT Works3 Version1, or obtain it from your local sales office.

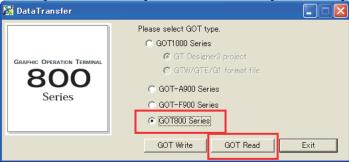
# < How to upload data with A8GOTP >

Refer to SW3NIW-A8GOTP Graphic Settings Software Package Operating Manual (Data Transmission/Debugging/Document Creation Manual).

#### < How to upload data with data transfer tool >

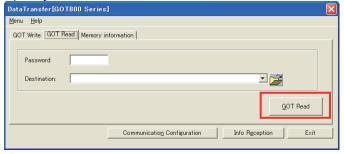
1) Data transfer tool startup screen

Select [GOT800 Series], and then click the [GOT Read] button.



# 2) GOT read screen

Specify a location where data is read, and then click the [GOT Read] button to read the data.



3) After the upload, convert the data into the GOT1000 series data by using GT Converter2. → Refer to Section 7.1.1 (1).

#### 7.1.2 How to convert monitor screen data from A77GOT series to GOT1000 series

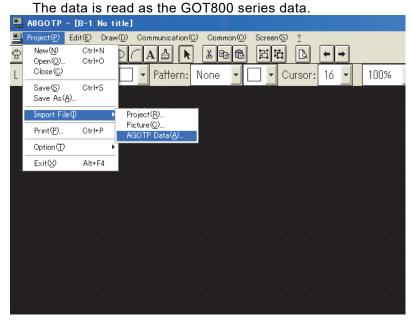
The monitor screen data for the A77GOT series can be converted into GOT800 series data by using the GOT800 series drawing software SW3NIW-A8GOTP. Then, the GOT800 series data can be converted into GOT1000 series data by using the data conversion software (GT Converter2 Version ...).

#### (1) When you have the monitor screen data for the A77GOT series

After the monitor screen data for the A77GOT series is converted into GOT800 series data by using the GOT800 series drawing software SW3NIW-A8GOTP, convert the data into GOT1000 series data by using GT Converter2 Version.

- 1) Prepare the GOT screen data.
- 2) By using the W3NIW-A8GOTP, convert the data into GOT800 series data.

  Select [Project] [Import File] [AGOTP Data] from the menu on the A8GOTP.



- 3) Save the data by selecting [Project] [Save As] from the menu.
- 4) Convert the data into GOT1000 series data by using GT Converter2 Version ...
  - → Refer to Section 7.1.1 (1).

#### (2) When you do not have the monitor screen data for the A77GOT series

Upload the monitor screen data from the A77GOT, and then convert the data.

Note that uploading is available when the following conditions are satisfied.

- The GOT is the A77GOT-S5.
- The GOT type is set to [A77GOT-S5] in the data.

Uploading is not available with the models other than the A77GOT-S5. Use data stored in the personal computer or floppy disk, or create screen data for the GOT1000 series.

To upload the monitor screen data from the A77GOT, the A77GOT drawing software (SW2SRX-AGOTP/SW2IVD-AGOTP/SW2NX-AGOTP) is required.

- 1) Upload the monitor screen data from the A77GOT-S5, and save the data.
- 2) After the data is converted into GOT800 series data by using the SW3NIW-A8GOTP, convert the data into GOT1000 series data by using GT Converter2 Version → Refer to Section 7.1.2 (1).

#### 7.1.3 How to convert monitor screen data from A64GOT series to GOT1000 series

The monitor screen data for the A64GOT can be converted into GOT1000 series data with the same procedures as converting the A77GOT series data.

# (1) When you have the monitor screen data for the A64GOT series

Convert the data with the same procedures as converting the A77GOT series data.

→ Refer to Section 7.1.2 (1).

# (2) When you do not have the monitor screen data for the A64GOT series

Uploading is not available with the A64GOT. Use data stored in the personal computer or floppy disk, or create screen data for the GOT1000 series.

#### 7.1.4 Precautions for data conversion

To use the A77GOT or A64GOT series data for the GOT1000 series, if the parts data is not stored in the condition where the data is stored by using the SW\_\_\_\_-AGOTP (if the parts file is stored in a different drive or the directory of the parts file is changed), the parts data cannot be read.

When the parts file is stored in a different drive or the directory of the parts file is changed, perform the following operations by using the SWpp-AGOTP.

- 1) Read the existing old series data to be opened with the drawing software.
- 2) Read the parts file.
- 3) Save the file.

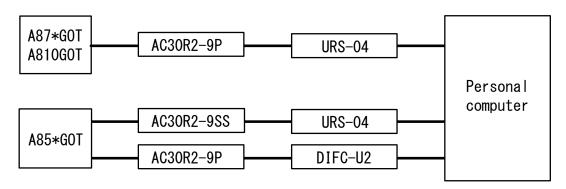
Specify the saved file as shown in the above 3) for conversion.

# 7.1.5 USB serial adapter available for communication between the data transfer tool and the GOT800 series

By using the data transfer tool, the screen data and others can be downloaded/uploaded from/to the GOT800 series.

(Compatible Product)

Man	ufacturer	Model
Diatr	end Corporation	DIFC-U2 (USB/RS-232C converter)
PLA	NEX COMMUNICATIONS INC.	URS-04 (USB/serial adapter)



Cable model	Cable pin
AC30R2-9SS	9-pin (female)-9-pin (female), for AGOT
AC30R2-9P	9-pin (female)-25-pin (male), for AGOT

The operation of the USB serial adapter is checked with the following personal computer.

- Apricot CX
- \* Windows Vista or Windows7 is not supported. For Windows Vista or Windows7, use the RS-232 cable.

[Issue No.] GOT-A-0018-H

# 7.2 Compatibility of monitor screen data

# 7.2.1 Data compatibility list

To convert GOT800, A77GOT, or A64GOT series drawing data into GOT1000 series drawing data, some functions have restrictions or cannot be converted. For the A77GOT or A64GOT series data, convert the data into the GOT800 series monitor screen data by using the GOT800 series drawing software (SW3NIW-A8GOTP9). Then, convert the data into the GOT1000 series drawing data by using GT Converter2 Version.

For whether the data can be converted into the GOT1000 series drawing data, refer to the following table.

Table7-1 Availability of functions on GOT1000 series after conversion

②: Available, o: Available (The partial setting change may be required.),

Function			Whether the function is available for GOT1000 series after conversion			Remarks (Precautions)		
			GOT		A64 GOT			
Data	Numeri	cal display	0	∘*1	0	Quarter characters are converted into quad characters. Therefore,		
display function		ASCII display		∘*1	0	set the character display size to quarter size.  *1: When this object is overlapped with the other objects (example: trend graph), set the layer for the object to [Front].		
	String of	lisplay	-	○*1	©	The function is converted into the ASCII display.  *1: When this object is overlapped with the other objects (example: trend graph), set the layer for the object to [Front].		
	Comme	ent display	0	-	-	-		
	Clock d		0	o*1	0	*1: When this object is overlapped with the other objects (example: trend graph), set the layer for the object to [Front].		
		st display	0	○*1	-	*1: When this object is overlapped with the other objects (example: trend graph), set the layer for the object to [Front].		
		istory display	0	-	-	-		
	Level display		0	0	0	-		
	Lamp d		0	-	-	-		
		Panel meter		-	-	-		
	Parts display		0	0	0	Part display setting alone to which the part number is not changed cannot be used. (substantially impossible setting)		
		ent (Parts movement)	0	0	0	-		
		Parts movement)	0	0	0	-		
	Error warning display		-	<>	<>	Configure the new setting for the alarm list display function.		
	Block Numerical value data ASCII		-	0	0	The function is converted into multiple numerical displays and ASCII displays.Quarter characters are converted into quad characters.		
	display Data list display		0	-	-	Therefore, set the character display size to quarter size.		
Graph display	Trend graph	Scroll	0	0	0	Up to eight lines (data) are converted per graph. For a graph with 9 to 16 lines (data), configure the new graph setting		
function	grapii	Batch	0	<>	<>	Configure the new setting for the trigger of the line graph function.		
		Overwrite	-	×	-	The GOT1000 series does not support this function. *		
	Line gra		0	0	0	-		
	Bar	Normality	0	0	0	-		
	graph	Accumulation	-	×	-	The GOT1000 series does not support this function.		
	Band gi	raph	-	-	<>	Configure the new setting for the statistics graph.		
		Pie graph		<>	-	Configure the new setting for the statistics graph.		
-	Scatter graph		-	<>	<>	The GOT800 series does not support this function. Therefore, when replacing the A77GOT or A64GOT series data, configure the new setting with GT Designer2.		
	Spline graph		-	×	-	The GOT1000 series does not support this function.		
Data		cal input	0	∘*1	0	*1: When this object is overlapped with the other objects (example:		
input function	ASCII input		0	o <b>*1</b>	0	trend graph), set the layer for the object to [Front].		
Touch	SET/RS	ST	∘*2	0	0	*2: When operation is set more than once, it is necessary to set it		
switch	Reversing		∘*2	0	0	again.		
function	Switch		∘*2	0	0	1		

[Issue No.] GOT-A-0018-H

Function		Whether the function is available for GOT1000 series after conversion			Remarks (Precautions)	
		GOT 800	A77 GOT	A64 GOT		
Report fu	nction	0	<>	-	When this function is set with the A77GOT, configure the new setting	
System in	nformation	0	0	-	-	
Operation	n panel function	0	<>*3	<>*3	*3: Configure the new setting.	
Announce	ement function	-	<>	-	This function is available with the new setting for the alarm history display function.	
Status ob	servation function	0	-	-	-	
Time acti	on function	-	<>	-	The GOT800 series does not support this function. Therefore, when replacing the A77GOT or A64GOT series data, configure the new setting with GT Designer2.	
Snapshot	function, hard copy function	0	<>*4	-	*4: Displaying and printing the memory card data on the personal computer are available. (Not available on the GOT.)	
Password	=	0	0	-	-	
Figure data	Straight line, Continuous straight line, Rectangle, Polygon, Circle, Circular arc	0	0	0	-	
	Rectangle of rubbing into, Rubbing into	0	0	0	Pattern 2 of rubbing into is converted into pattern 1.	
	Oval	0	0	0	An ellipse of 23 dots or less is converted into a 32-dot ellipse. Change the size with the GOT1000 series drawing software.	
Charact er data	Graphic	0	0	0	When the character data is overlapped with the other objects (example: trend graph), the character data is positioned under the objects.	
	Text	0	0	-	The characters are converted into graphic characters because the GOT1000 series supports the fast character display.  However, it is necessary to draw to the background in the rectangle of rubbing into because the data of the reversing attribute is converted into the normal rotation and to change the character attribute to the black.	
	Foreign character	-	<>	<>	This function is available with the symbol parts.	
Commen	t data	0	0	0	Comment number 0 moves to another number and is used.	
Parts data	a	0	0	0	-	
Special k	·	0	<>*5	<>*5	*5: Configure the new setting.	
Screen sv		0	0	0	-	
Printer model specification		0	0	-	This function supports a PictBridge compatible printer and a serial printer.(The printers manufactured by NEC Corporation (PC-PR printers) are not available.)	
Backlight OFF time setting		0	0	-	This setting is available with the GOT1000 series main unit.	
GOT switch function	Function key, Arrow key (cursor key), Return key, System protecting switch, Emergency stop button	-	×	×	This function is available by creating a touch switch on the GOT screen or creating a switch with the external I/O unit.	

#### 7.2.2 Monitor screen data compatibility between GOT800 series and GOT1000 series

# (1) Precautions for compatibility

When converting GOT800 series data into GOT1000 series data, the compatibility is basically upward. However, some functions require changes of sequence programs or drawing data.

The following shows the functions that require changes of sequence programs or drawing data.

Ta	able 7-2 Functions	that requi	re chai		ence programs and drawing data				
Item	Description				G	Procedures for replacing GOT800 series with GOT1000 series			
Parts display	group superimposed figures are displayed as follows: GOT800 series : The grouped figures are displayed at once by using the XOR display. GOT1000 series: Each in the grouped figures is displayed individually in order of the superimposed figures by using the XOR display. When [Display Mode] is set to [XOR] with the GOT800 series, if the same color is set for the line color and the pattern color with the pattern type 8 (fill), the outside of the part is displayed in one-dot smaller size with the GOT1000 series.					configure the auxil o that the groupe ne XOR display.	d figures are	e displayed	at once by using
	When [Display Mode] series (16-color mode displayed with the GC the superimposed sed displayed with a dark adjusted to that of the models.)	el), if the cont T1000 seriention of a figu- color. (The color.	verted des (16-co ure and a display c	ata is olor model), a part is olor setting is	u V s (E a	No change in the setting is required when the dark color is used for the superimposed section.  When the dark color is not used for the superimposed section, set the part to dark color.  (Either the part color or the superimposed section color is always set to dark color.) <got1000 colors="" corresponding="" left<="" p="" series="" the="" to=""></got1000>			
	<example></example>	Figure color	Part color	Superim posed section color		xample>	Figure color	Part color	Superim posed section color
	GOT800 series (16 colors) GOT1000 series (16 colors) GOT1000 series	Blue Blue	White White White	Yellow  Dark yellow Yellow		GOT1000 series (16 colors)	Blue	Dark white	Yellow
Parts movement	When [Indirect] is set movement function of value is a negative va the parts are displaye GOT800 series: The pGOT1000 series: The	the GOT800 lue or is outs d as follows: parts are not parts are di	0 series, side the : t displaye splayed.	if the device display range, ed.	fu [I] b u d P b o (F	arts" "0". )	ny contents I is and the Go edisplay cor 300 series a value is a neart number re numerica nge" and se layed by ma	nave no diff DT1000 sentents have nd the GO egative valu "0" when th I value, and et outside "I aking the nu	erence between ries. Even if no difference f1000 series le or outside the ne device value d it becomes Display range". Imber of "Display
Touch switch	switch is set more tha GOT used. GOT800 series: Word	n once is dif $I \rightarrow Bit$	The priority level when the movement of the touch switch is set more than once is different according to GOT used. GOT800 series: Word SET → Bit SET GOT1000 series: Bit SET → Word SET					switch ope	rations.

[Issue No.] GOT-A-0018-H

Item	Description	Procedures for replacing GOT800 series with GOT1000 series
System information [Before/after change]	When a minus value is input by a numeric input of BIN with 16 bit sign, it is different according to GOT that the value and the value of the value after it changes use before changing system information.  Example: Last quotation that inputs numerical value:"-1" Numeric input value:"-2" <system got800="" information="" of="" series=""> Value before it changes "0X0000FFFF"  Value after it changes "0X0000FFFF"  Value before it changes "0XFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF</system>	When a negative value with the 16-bit singed BIN is not input, the values have no difference between GOT800 series and GOT1000 series.  When the sequence program refers to Value before it changes of the system information in 16-bit unit, the values have no difference between GOT800 series and GOT1000 series.  When the sequence program refers to Value before it changes of the system information in 32-bit unit, make the program refer to the lower 16 bits.
System information [Automatic Screen Saver Disable Signal (b0), Forced Screen Saver Enable Signal (b1)]	For the GOT1000 series, the operation of b1 (Forced screen saver enable signal) takes precedence of the operation of b0 (Automatic screen saver disable signal). Therefore, the operation of the GOT varies depending on the series when b0 and b1 are turned on. <when and="" are="" b0="" b1="" on="" turned=""> GOT800 series The display and the backlight are turned off by the screen saver. GOT1000 series The display and the backlight remain on.</when>	To turn on or off the backlight by using the forced screen saver enable signal (b1) and the automatic screen saver disable signal (b0), change the sequence program and others.

**7.2.3** Monitor screen data compatibility between A77GOT or A64GOT series and GOT1000 series When converting A77GOT or A64GOT series data into GOT1000 series data, convert the data into GOT800 series data, and then convert the 800 series data into GOT1000 series data with GT Converter2 Version.

Because A77GOT or A64GOT series data is converted into GOT800 series data once, the compatibility of the A77GOT or A64GOT series data conforms to the GOT800 series compatibility.

# 7.3 Functions that require new settings

Table 7-3 Functions that require new settings

Item	Function	User settings	·			
Common settings	Communication settings	To communicate with FA equipment, new settings for interface channel No., driver, communication baud rate are required.  For details of how to make the settings, refer to the following manuals.  - "3.7 Communication Interface Setting (Communication Settings)" in the GT Designer2 Version2 Screen Design Manual (SH-080530ENG)  - GOT1000 Series Connection Manual for GT Works3 (SH-080868ENG to SH-080871ENG)				
Printer Printer function		PictBridge compatible printer	The drawing software GT Works3 Version2 (Ver2.25B or later) or GT Works3 Version1 (Ver1.00A or later) is required. The printer unit (GT15-PRN) is required separately. The extended function OS [Printer] or [Printer(PictBridge)] must be installed on the GOT.			
		Serial printer	The drawing software GT Works3 Version1 (Ver1.15R or later) is required. The extended function OS [Printer(Serial)] must be installed on the GOT.			
Object	Report function		To use the report function, the user settings for the printer described above is required, and the extended function OS [Report] must be installed on the GOT.			
Sound	Sound output function	To use the sound output function, the sound output unit (GT15-SOUT) is required separately. The extended function OS [Sound Output] must be installed on the GOT.				

[Issue No.] GOT-A-0018-H

#### 7.3.1 Printers

When a printer is used with the GOT800 series or A77GOT series, be aware of the following points.

# (1) Type of printer

The GOT800 series and A77GOT series support parallel printers only. The GOT1000 series supports PictBridge compatible printers and serial printers. Therefore, when you replace the GOT800 series or A77GOT series with the GOT1000 series, the printer must be replaced. For the applicable printer models (validated models), refer to the following Technical Bulletin. The Technical Bulletin can be downloaded from the Mitsubishi Electric FA Global Website.

→ List of Valid Devices Applicable for GOT1000 Series (GOT-A-0010)

# (2) Required units

# (a) For PictBridge compatible printers

The printer unit (GT15-PRN) is required separately.

#### (b) For serial printers

No option unit is required. A serial printer is connected to the RS-232 interface of the GOT.

# (3) Report function

With a PictBridge compatible printer, the GOT1000 series supports the GOT800 series or A77GOT series project data with the report style setting [Log/Page] only.

With a serial printer, the GOT1000 series supports the GOT800 series or A77GOT series project data with the report style setting [Real/Cont].

#### **REVISIONS**

Version	Print Date	Revision
Α	February 2008	- First edition
В	August 2008	- The descriptions are added and corrected.
С	November 2008	- The descriptions are corrected.
D	August 2009	- The descriptions of GT16 are added.
E	February 2010	- The descriptions are corrected.
F	October 2010	<ul> <li>The descriptions of "2. Selection of GOT" are corrected.</li> <li>The descriptions of the serial printer are added to the printer item of "3. Communication units and options".</li> <li>The descriptions of "4.1.2 Replacing GOT when using multiple units of bus connection" are revised.</li> <li>The descriptions of "7. Monitor screen data" are corrected.</li> </ul>
G	September 2011	- The descriptions of "4.1.1 Utilization of cables in present use" are corrected.
Н	December 2019	<ul> <li>Descriptions of replacing the A bus connection with other communication format have been added.</li> <li>Writing errors have been corrected.</li> </ul>