

**TECHNICAL BULLETIN**

**[ 1 / 47 ]**

[Issue No.] GOT-A-0064-Q

[Title] List of Valid Devices Applicable for GOT2000 Series

[Date of Issue] September 2013 (Ver. Q: April 2019)

[Relevant Models] GOT2000 Series

Thank you for your continued support of Mitsubishi Electric Graphic Operation Terminal (GOT).  
The peripheral devices listed in this bulletin have been concluded by Mitsubishi Electric to be applicable for the GOT2000 series.

For how to use each product, refer to the respective product's manual.

Regarding the production status of each product, confirm with the manufacturer.

<b>Recommended Product</b>
Products that are compliant with Mitsubishi Electric standards. Use Recommended Products according to their specifications.
<b>Compatible Product</b>
Products that are connectable to Mitsubishi Electric products. (Note that compatibility is not verified by Mitsubishi Electric.) Use Compatible Products according to their specifications. Some Compatible Products may not be connected because their specifications have changed depending on the date of manufacture. Verify Compatible Products, and determine whether or not to use the products.
<b>Discontinued Product</b>
Recommended Products or Compatible Products that have been mentioned in the bulletin before, but may be difficult to procure because they have been discontinued.
<b>Incompatible Product</b>
Products that are not connectable to Mitsubishi Electric products. Use Compatible Products.

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**1. Memory Card (CF card and SD card)**

Supported memory card	GOT	
	GOT2000	GT27-MMR-Z
CF card (MITSUBISHI GT05-MEM-□C)	Not Supported	Supported
SD card (MITSUBISHI L1MEM-□GBSD)	Supported	Not Supported

For the applicable non-Mitsubishi Electric memory cards (CF cards and SD cards), refer to the following Technical Bulletins.

- Non-Mitsubishi Electric CF card: No. GOT-A-0025 "Operation Check Results of Third Party CF Cards on GOT1000 Series Units"
- Non-Mitsubishi Electric SD card: No. GOT-A-0065 "Operation Check Results of Non-Mitsubishi SD Cards on GOT2000 Series Units"

**2. USB Memory**

Item	Specification
USB memory	USB hub compliant with USB2.0 (including forward-compatible with USB3.0 and others) <sup>*1*2*3</sup>

- \*1 For the GOT2000 Series, the USB memory has a capacity of 32GB.
- \*2 A USB memory with a particular function and others may not be available depending on the USB memory type.  
Particular function examples:
  - A composite device (including a hub function and a card reader function)
  - A USB memory with an authentication function, an encryption function, or a security function including an anti-virus function and others
  - A USB memory whose functions are added by dedicated driver software.
- \*3 USB memory that has been formatted in FAT or FAT32 is available.
  - FAT: Up to 2GB
  - FAT32: Up to 32GB

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**3. Barcode Reader**

**3.1 Compatible Products**

**3.1.1 RS-232 connection**

Manufacturer	Model	Operation validation		Refer to
		GOT2000	GT SoftGOT2000	
AIMEX Corporation	BR-530RS-B1	Supported	Supported	3.2.1
	BW-880RS-B1 *1	Supported	Supported	
IDEC AUTO-ID SOLUTIONS Corporation	DS2200-1100	Supported	Supported	3.2.1
	DS2100-1114 *3	Supported	Supported	
	GRYPHON D100 *3	Supported	Supported	
	GRYPHON D130 *3	Supported	Supported	
	DS2100N-□□□□	Supported	Supported	3.2.6
	DS2400N-□□□□	Supported	Supported	
	DS4800-1□00	Supported	Supported	3.2.4
	QD2130-□□ *3	Supported	Supported	
	QD2131-□□	Supported	Supported	
	QD4130-□□	Supported	Supported	
	GBT4130-BK-BT	Supported	Supported	3.2.5
	MG1100i-1D	Supported	Supported	3.2.4
PD7130-YB-PTR	Supported	Supported		
NEC Platforms, Ltd.	BCH5542-STA	Supported	Supported	3.2.1
	BCR5342H-STZ	Supported	Supported	
OMRON Corporation	V520-RH21-6	Supported	Supported	3.2.2
OPTOELECTRONICS CO.,LTD.	OPT-5125-RS232C(H)	Supported	Supported	3.2.1
	OPL-6735-RS232C(X04)	Supported	Supported	
	NFT-7175-RS-1	Supported	Supported	3.2.4
	OPL-6845R-RS232	Supported	Supported	
KEYENCE CORPORATION	BL-210R	Supported	Supported	3.2.1
	BL-210RK *2	Supported	Not Supported	
	BL-601	Supported	Supported	
	BL-N70R	Supported	Supported	
	SR-510	Supported	Supported	
DENSO WAVE Incorporated	HR-50R	Supported	Supported	3.2.4
	GT10B-SB	Supported	Supported	3.2.7
MARS TOHKEN SOLUTION CO.,LTD	TLMS-3500RV	Supported	Supported	3.2.1
	THLS-6712	Supported	Supported	
	THLS-6800	Supported	Supported	
Nippon Systems Development Co.,Ltd.	AC-812-000-D1	Supported	Supported	3.2.3
	PDC-812-400-00+PDC-812-300-D1	Supported	Supported	
Motorola Solutions, Inc.	LS2208	Supported	Supported	3.2.2
	LI4278	Supported	Supported	3.2.1
Honeywell International Inc.	3800G-04E	Supported	Supported	3.2.4

\*1 For the GOT2000 Series, turn on the barcode reader after any of the following conditions.

- More than two seconds have elapsed since the GOT is turned on.
- The logo [GOT2000] is displayed on the screen after the GOT is turned on.

\*2 GT27 model and GT25 model are available only. (Configure the settings in the utility of the GOT to supply 5VDC.)

\*3 This is a discontinued product.

**3.1.2 RS-422/485 connection**

Manufacturer	Model	Operation validation		Refer to
		GOT2000	GT SoftGOT2000	
IDEC AUTO-ID SOLUTIONS Corporation	DS2100N-1214	Supported	Not Supported	3.2.8

**3.1.3 USB connection**

Manufacturer	Model	Operation validation		Refer to
		GOT2000	GT SoftGOT2000	
IDEC AUTO-ID SOLUTIONS Corporation Aug, Inc.	QD2131-□□	Supported	Not Supported	3.2.9
	GD4130-□□	Supported	Not Supported	
OPTOELECTRONICS CO.,LTD.	AUG-500SDW-USB(HID)	Supported	Supported	3.2.9
	OPL-6845V	Supported	Supported	
KEYENCE CORPORATION	L-46R-V-WHT-USB	Supported	Supported	3.2.9
	HR-100	Supported	Supported	
DENSO WAVE INCORPORATED	HC56TU	Supported	Supported	3.2.9
MARS TOHKEN SOLUTION CO.LTD.	THLS-7800U	Supported	Supported	3.2.9
	FFTA21BU	Supported	Supported	
NICHIEI INTEC CO., LTD.	FFTA10AUSB	Supported	Supported	3.2.9
	MS840BT	Supported	Not Supported	
Unitech Electronics Co., LTD.	LS2208	Supported	Not Supported	3.2.9
Zebra Technologies, Inc.	IDM240-100H *1	Supported	Not Supported	3.2.9
SICK Inc.	Xenon 1900GSR-1	Supported	Supported	3.2.9
Honeywell International Inc.				

\*1 GT27 / GT25-W / GT2505-V are supported with CoreOS version V or later and GT 23 with CoreOS version N or later. GT 21 is not supported yet.

When you use the above models, the USB keyboard function is available. (The input value is processed as the ASCII code. )

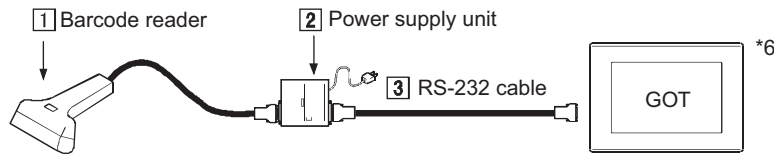
For the usage instructions, refer to the following.

- ➔ GT Designer3 (GOT2000) Screen Design Manual (SH-081220ENG)

**3.2 System equipment of barcode readers**

The following shows the equipment to configure with different types of barcode readers.

**3.2.1 System equipment (1)**



Manufacturer	1 Barcode reader	2 Power supply unit	3 RS-232 cable
AIMEX Corporation	BR-530RS-B1	Included with a barcode reader (An adapter (BB-60) must be purchased separately.)	Included with a barcode reader
	BW-880RS-B1	Included with a barcode reader	Included with a barcode reader
IDEC AUTO-ID SOLUTIONS Corporation	DS2200-1100	DSPW-2102	GT01-C30R2-25P *1
	DS2100-1114 *7	DSPW-2102	GT01-C30R2-25P *1
	GRYPHON D100	PG5 MAIN POWER BLOCK	Included with a barcode reader
	GRYPHON D130	11-0387 or UL310-0515 *7	Sold separately: CAB-327/CAB-350/CAB-362
NEC Platforms, Ltd.	BCH5542-STA	BCV5070 or CA1071	GT01-C30R2-9S *1
	BCR5342H-STZ	BCV5070 or BCA1071	GT01-C30R2-9S *1
OPTOELECTRONICS CO.,LTD.	OPT-5125-RS232C(H)	Not necessary	Included with a barcode reader *2
	OPL-6735-RS232C(X04)	DC-5300T	Included with a barcode reader
	NFT-7175-RS-1	GT27, GT25: Not necessary GT21: DC-5300T	GT27,GT25: Included with a barcode reader GT21: Power supply jack with cable is necessary
KEYENCE CORPORATION	BL-210R	Included with a barcode reader	Included with a barcode reader
	BL-210RK	Not necessary	Produced by the user Refer to 1) below. (5VDC is required.)
	BL-601	BL-U1	Produced by the user Refer to 2) below. *3
		BL-U2	Produced by the user Refer to 3) below. *4
	BL-N70R	R3W005-025J	Included with a barcode reader
SR-510	BL-U2	GT01-C30R2-9S	
MARS TOHKEN SOLUTION CO.,LTD	TLMS-3500RV	Not necessary *5	GT01-C30R2-25P *1
	THLS-6712	AD-6712	Included with a barcode reader
	THLS-6800	An adapter must be purchased separately.	Included with a barcode reader
Motorola Solutions, Inc.	LI4278	Cradle: STB4278-C0001WR Power supply: 50-14000-010	CBA-R01-S07PAR

\*1 This is a Mitsubishi Electric product. Please contact your local Mitsubishi Electric or representative for purchasing the cable.  
 \*2 When purchasing OPT-5125-RS232C(H), select one with the same connector shape as OPL-6735-RS232C(X04).  
 \*3 The OP-22149(1.5m) and the OP-25057 (conversion connector) manufactured by KEYENCE CORPORATION are available.  
 \*4 The OP-27937(2m) manufactured by KEYENCE CORPORATION is available.  
 \*5 It is necessary to supply 24 V DC to the barcode reader separately. For details of the power supply specifications, refer to the manual of the barcode reader to be used.  
 \*6 When using a barcode reader, follow one of the procedures below to turn on it.  
 · Turn on the GOT, wait 2 seconds or more, and turn on the barcode reader.  
 · Turn on the GOT, wait for the startup logo to appear, and turn on the barcode reader.  
 If you use any procedure other than the above and the barcode reader becomes inoperable, restart the barcode reader.  
 \*7 This is a discontinued product.

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1) Cable connection diagram for a barcode reader manufactured by KEYENCE CORPORATION (BL-210RK)  
 The following shows connection cables that must be produced by the user.  
 Maximum cable length: confirm with the barcode reader manufacturer.

Barcode reader		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
SG	1		1	CD
RD(RXD)	2		2	RD(RXD)
SD(TXD)	3		3	SD(TXD)
ER(DTR)	4		4	ER(DTR)
SG	5		5	SG
DR(DSR)	6		6	DR(DSR)
RS(RTS)	7		7	RS(RTS)
CS(CTS)	8		8	CS(CTS)
5V	9		9	5V

2) RS-232 cable connection diagram for a barcode reader manufactured by KEYENCE CORPORATION (BL-601, BL-U1)

The following shows connection cables that must be produced by the user.  
 Maximum cable length: confirm with the barcode reader manufacturer.

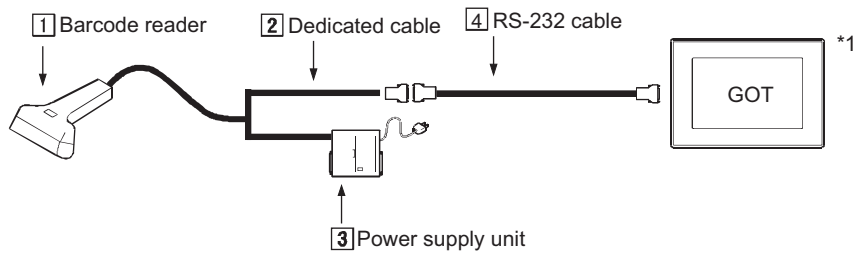
Barcode reader		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
FG	1			Connector case
SD	2		2	RD(RXD)
RD	3		3	SD(TXD)
RS	4		4	ER(DTR)
CS	5		5	SG
DR	6		6	DR(DSR)
SG	7		7	RS(RTS)
	8		8	CS(CTS)
ER	20		9	—

3) Cable connection diagram for a barcode reader manufactured by KEYENCE CORPORATION (BL-601, BL-U2)

The following shows connection cables that must be produced by the user.  
 Maximum cable length: confirm with the barcode reader manufacturer.

Barcode reader		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
Connector case				Connector case
RD	2		2	RD(RXD)
SD	3		3	SD(TXD)
ER	4		4	ER(DTR)
SG	5		5	SG
DR	6		6	DR(DSR)
RS	7		7	RS(RTS)
CS	8		8	CS(CTS)
—	9		9	—

**3.2.2 System equipment (2)**



Manufacturer	1 Barcode reader	2 Dedicated cable	3 Power supply unit	4 RS-232 cable
OMRON Corporation	V520-RH21-6 (With dedicated cable)	V509-W012	S8VS-03005(A 100VAC plug cable must be purchased separately.)	Produced by the user Refer to 1) below.
Motorola Solutions, Inc.	LS2208	CBA-R01-S07PAR	symbol 50-14000-101R	Not necessary

- \*1 When using a barcode reader, follow one of the procedures below to turn on it.
- Turn on the GOT, wait 2 seconds or more, and turn on the barcode reader.
  - Turn on the GOT, wait for the startup logo to appear, and turn on the barcode reader.
- If you use any procedure other than the above and the barcode reader becomes inoperable, restart the barcode reader.

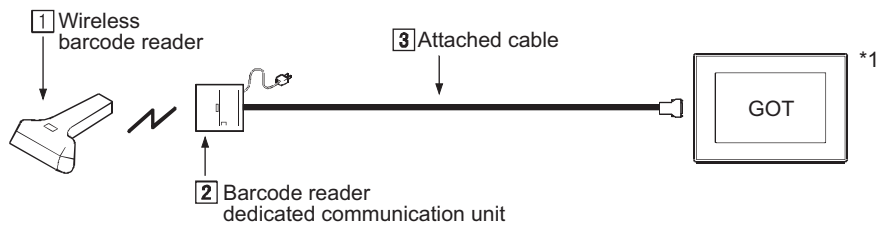
1) Cable connection diagram for a barcode reader manufactured by OMRON Corporation  
 The following shows connection cables that must be produced by the user.  
 Maximum cable length: confirm with the barcode reader manufacturer.

Barcode reader			Cable connection and signal direction	GOT	
Signal direction	Signal name	Pin No.		Pin No.	Signal name
Internal connection	FG	1		1	CD
	SD(TXD) *1	2		2	RD(RXD)
	RD(RXD) *1	3		3	SD(TXD)
	RS(RTS)	4		4	ER(DTR)
	CS(CTS)	5		5	SG
	—	6		6	DR(DSR)
	—	7		7	RS(RTS)
	—	8		8	CS(CTS)
	SG	9		9	—

\*1 A dedicated cable, V509-W012 (cross cable), is used between the barcode reader and the cables mentioned above. Even if the signal name for cable connection is SD-SD or RD-RD, the communication can be performed with no problem.



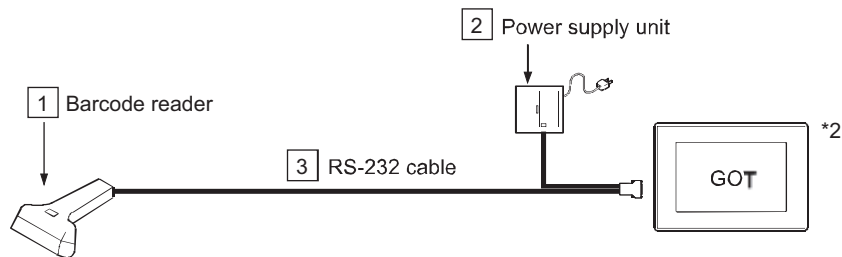
**3.2.3 System equipment (3)**



Manufacturer	1 Wireless barcode reader	2 Barcode reader dedicated communication unit	3 Attached cable
Nippon Systems Development Co.,Ltd.	AC-812-000-D1 PDC-812-400-00+PDC-812-300-D1	Included with a barcode reader	Included with a barcode reader

- \*1 When using a barcode reader, follow one of the procedures below to turn on it.
- Turn on the GOT, wait 2 seconds or more, and turn on the barcode reader.
  - Turn on the GOT, wait for the startup logo to appear, and turn on the barcode reader.
- If you use any procedure other than the above and the barcode reader becomes inoperable, restart the barcode reader.

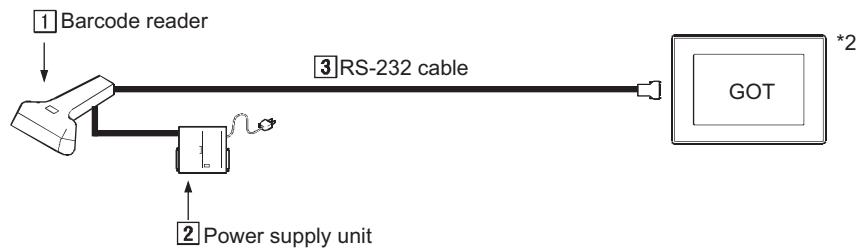
**3.2.4 System equipment (4)**



Manufacturer	1 Barcode reader	2 Power supply unit	3 RS-232 cable
IDEC AUTO-ID SOLUTIONS Corporation	QD2130-□□ *3	11-0387 or UL310-0515 *3	CAB-350 *1
	QD2131-□□		
	QD4130-□□	11-0387	8-0736-80 *1
	MG1100i-1D		
OPTOELECTRONICS CO.,LTD.	OPL-6845R-RS232	SET8-0935	CAB-433 *1
KEYENCE CORPORATION	HR-50R	Included with a barcode reader	Included with a barcode reader *1
Honeywell International Inc	3800G-04E	An adapter must be purchased separately.	Included with a barcode reader

- \*1 To connect the barcode reader to GT SoftGOT2000, connect the following USB/RS-232 conversion cables to a USB port on the personal computer.  
For the USB/RS-232 conversion cables, refer to Technical Bulletin FA-D-0036.  
- DIFC-U2 (Diatrend Corporation)  
- DAC01R2VD (Diatrend Corporation)  
<Connection example>  
[Barcode reader (RS-232)] + [3] RS-232 cable + [DAC01R2VD] + [DIFC-U2] + [Personal computer (USB)]
- \*2 When using a barcode reader, follow one of the procedures below to turn on it.
- Turn on the GOT, wait 2 seconds or more, and turn on the barcode reader.
  - Turn on the GOT, wait for the startup logo to appear, and turn on the barcode reader.
- If you use any procedure other than the above and the barcode reader becomes inoperable, restart the barcode reader.
- \*3 This is a discontinued product.

**3.2.5 System equipment (5)**



Manufacturer	1 Barcode reader	2 Power supply unit	3 RS-232 cable
IDEC AUTO-ID SOLUTIONS Corporation	GBT4130-BK-BT	SET8-0935 or PSAA18U-120	CAB-350 *1

\*1 To connect the barcode reader to GT SoftGOT2000, connect the following USB/RS-232 conversion cables to a USB port on the personal computer.

For the USB/RS-232 conversion cables, refer to Technical Bulletin FA-D-0036.

- DIFC-U2 (Diatrend Corporation)
- DAC01R2VD (Diatrend Corporation)

<Connection example>

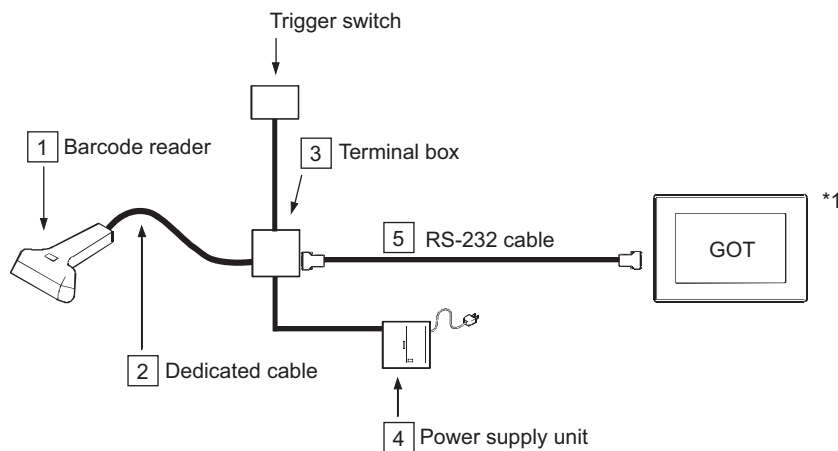
[Barcode reader (RS-232)] + [3 RS-232 cable] + [DAC01R2VD] + [DIFC-U2] + [Personal computer (USB)]

\*2 When using a barcode reader, follow one of the procedures below to turn on it.

- Turn on the GOT, wait 2 seconds or more, and turn on the barcode reader.
- Turn on the GOT, wait for the startup logo to appear, and turn on the barcode reader.

If you use any procedure other than the above and the barcode reader becomes inoperable, restart the barcode reader.

**3.2.6 System equipment (6)**



Manufacturer	1 Barcode reader	2 Dedicated cable	3 Terminal box	4 Power supply unit	5 RS-232 cable
IDEC AUTO-ID SOLUTIONS Corporation	DS2100N-□□□□	Included with a barcode reader	CBX100	PS5R-B24	Produced by the user Refer to 1) below.
	DS2400N-□□□□				
	DS4800-1□00				

\*1 When using a barcode reader, follow one of the procedures below to turn on it.

- Turn on the GOT, wait 2 seconds or more, and turn on the barcode reader.
- Turn on the GOT, wait for the startup logo to appear, and turn on the barcode reader.

If you use any procedure other than the above and the barcode reader becomes inoperable, restart the barcode reader.

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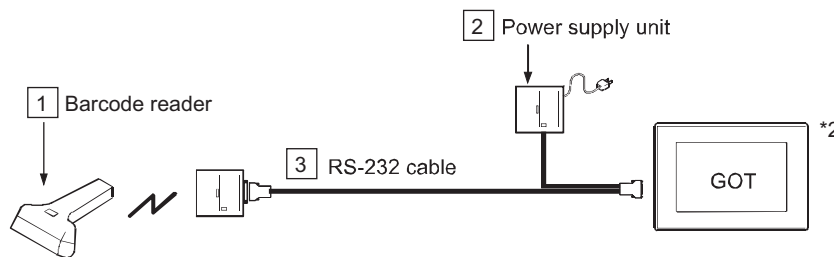
1) RS-232 cable connection diagram for a barcode reader manufactured by IDEC AUTO-ID SOLUTIONS Corporation.

The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the barcode reader manufacturer.

Barcode reader		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
SGND	—		1	CD
TX	—		2	RD(RXD)
RTS	—		3	SD(TXD)
RX	—		4	ER(DTR)
CTS	—		5	SG
—	—		6	DR(DSR)
—	—		7	RS(RTS)
—	—		8	CS(CTS)
—	—		9	NC

**3.2.7 System equipment (7)**



Manufacturer	1 Barcode reader	2 Power supply unit	3 RS-232 cable
DENSO WAVE INCORPORATED	GT10B-SB	Included with a barcode reader (A Bluetooth adapter (BA-10RKU) must be purchased separately.)	CBBA-RS2000/9 *1

\*1 To connect the barcode reader to GT SoftGOT2000, connect the following USB/RS-232 conversion cables to a USB port on the personal computer.

For the USB/RS-232 conversion cables, refer to Technical Bulletin FA-D-0036.

- DIFC-U2 (Diatrend Corporation)
- DAC01R2VD (Diatrend Corporation)

<Connection example>

[Barcode reader (RS-232)] + [3 RS-232 cable] + [DAC01R2VD] + [DIFC-U2] + [Personal computer (USB)]

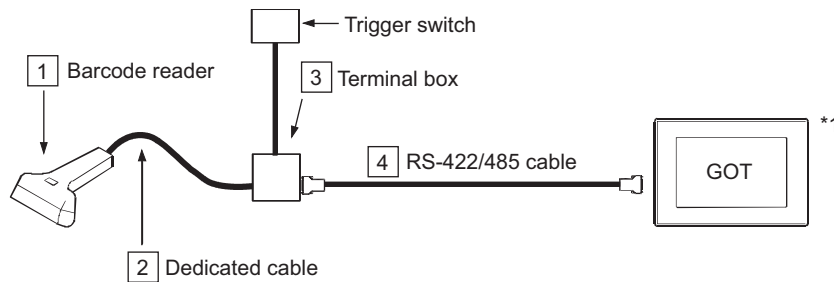
\*2 When using a barcode reader, follow one of the procedures below to turn on it.

- Turn on the GOT, wait 2 seconds or more, and turn on the barcode reader.
- Turn on the GOT, wait for the startup logo to appear, and turn on the barcode reader.

If you use any procedure other than the above and the barcode reader becomes inoperable, restart the barcode reader.

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**3.2.8 System equipment (8)**



Manufacturer	1 Barcode reader	2 Dedicated cable	3 Terminal box	4 RS-422/485 cable
IDEC AUTO-ID SOLUTIONS Corporation	DS2100N-1214	Included with a barcode reader	CBX100	Produced by the user Refer to 1) below.

\*1 When using a barcode reader, follow one of the procedures below to turn on it.

- Turn on the GOT, wait 2 seconds or more, and turn on the barcode reader.
- Turn on the GOT, wait for the startup logo to appear, and turn on the barcode reader.

If you use any procedure other than the above and the barcode reader becomes inoperable, restart the barcode reader.

1) RS-422/485 cable connection diagram for a barcode reader manufactured by IDEC AUTO-ID SOLUTIONS Corporation.

a) For connection using the RS-422/485 interface of the GOT or GT15-RS4-9S

The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the barcode reader manufacturer.

Barcode reader		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
—	—		1	SDA
TX(+)	2	→	2	RDA
RX(+)	3	←	3	RSA
TX(-)	4	→	4	CSA
RX(-)	5	←	5	SG
—	—		6	SDB
SGND	7	→	7	RDB
—	—		8	RSB
—	—		9	CSB

b) For connection using GT15-RS4-TE

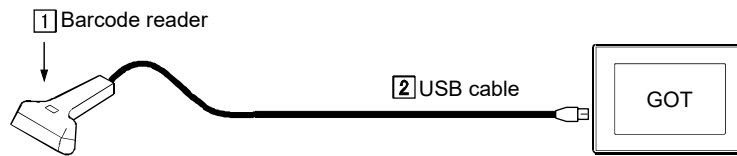
The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the barcode reader manufacturer.

Barcode reader		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
—	—		1	SDA1
TX(+)	2	→	2	SDB1
RX(+)	3	←	3	RDA1
TX(-)	4	→	4	RDB1
RX(-)	5	←	5	SDA2
—	—		6	SDB2
SGND	7	→	7	RDA2
—	—		8	RDB2
—	—		9	SG
—	—		10	FG

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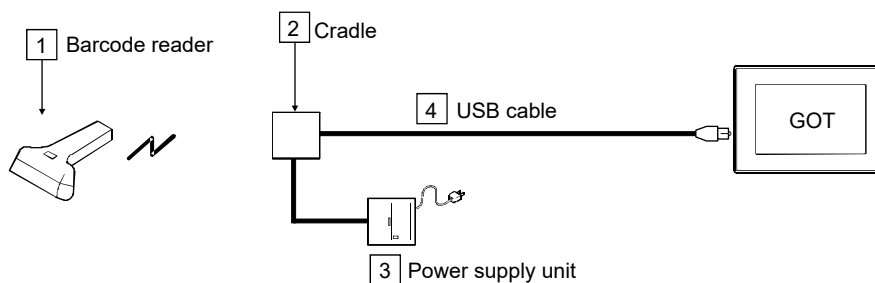
**3.2.9 System equipment (9)**



Manufacturer	1 Barcode reader	2 USB cable
IDEC AUTO-ID SOLUTIONS Corporation	QD2131	·90A052065 (2 m) ·90A052095 (4 m)
	GD4130-WH	·CAB-412 (with an adapter jack) and 11-0387 (AC adapter) ·CAB-426E (without an adapter jack)
Aug, Inc.	AUG-500SDW-USB(HID)	Included with a barcode reader
OPTOELECTRONICS CO.,LTD.	OPL-6845V	Included with a barcode reader
	L-46R-V-WHT-USB	
KEYENCE CORPORATION	HR-100	·HR-1C3UN (3 m) ·HR-1C3UC (3 m, curl type) ·HR-1C5UC (5 m, curl type)
DENSO WAVE INCORPORATED	HC56TU	Included with a barcode reader
MARS TOHKEN SOLUTION CO.LTD.	THLS-7800U	Included with a barcode reader
NICHIEI INTEC CO., LTD.	FFTA21BU	Included with a barcode reader
	FFTA10AUSB	
Zebra Technologies, Inc.	LS2208	Included with a barcode reader
SICK Inc.	IDM240-100H *1	Included with a barcode reader
Honeywell International Inc.	Xenon 1900GSR-1	Included with a barcode reader

\*1 GT27 / GT25-W / GT2505-V are supported with CoreOS version V or later and GT 23 with CoreOS version N or later. GT 21 is not supported yet.

**3.2.10 System equipment (10)**



Manufacturer	1 Barcode reader	2 Cradle	3 Power supply unit	4 USB cable
Unitech Electronics Co., LTD.	MS840BT	5000-900007G	1010-900008G	1550-900040G

**3.3 Compatible barcode types**

The following barcode reader communication settings are supported by the GOT.

○: Can be read in the GOT, △: Partly restricted, ×: Unreadable in GOT

Manufacturer	Barcode reader	Barcode type									
		UPC) WPC (JAN, EAN,	CODE-39	CODE-93	CODE-128	(CODABAR) NW-7	2of5 (Industrial)	ITF (2of5Interleaved)	MSI/Plessey	IATA 2of5	
AIMEX Corporation	BR-530RS-B1	○	○	○	○	○	○	×	○	×	×
	BW-880RS-B1	○	○	○	○	○	○	○	○	○	×
IDEC AUTO-ID SOLUTIONS Corporation	DS2200-1100	○	○	○	○	○	○	×	○	×	×
	DS2100-1114 *2	○	○	○	○	○	○	×	○	×	×
	GRYPHON D100 *2	○	○	○	○	○	○	○	○	○	×
	GRYPHON D130 *2	○	○	○	○	○	○	○	○	×	×
	DS2100N-□□□□	○	○	○	○	○	○	×	○	×	×
	DS2400N-□□□□	○	○	○	○	○	○	○	○	○	○
	DS4800-1□00	○	○	○	○	○	○	○	○	○	○
	QD2130-□□	○	○	○	○	○	○	○	○	○	○
	DQ4130-□□	○	○	○	○	○	○	○	○	○	○
	GBT4130-BK-BT	○	○	○	○	○	○	○	○	○	○
	MG1100i-1D	○	○	○	○	○	○	○	○	○	○
	PD7130-YB-PTR	○	○	○	○	○	○	○	○	○	○
	QD-2131	○	○	○	○	○	○	×	○	×	×
GD4130	○	○	○	○	○	○	×	○	×	×	
NEC Platforms, Ltd.	BCH5542-STA	○	○	○	○	○	○	○	○	×	×
	BCR5342H-STZ	○	○	○	○	○	○	○	○	×	×
OMRON Corporation	V520-RH21-6	○	○	○	○	○	○	×	○	×	×
Aug, Inc.	AUG-500SDW-USB(HID)	○	○	○	○	○	○	○	○	○	×
	OPT-5125-RS232C(H)	○	○	○	○	○	○	○	○	○	×
OPTOELECTRONICS CO.,LTD.	OPL-6735-RS232C(X04)	○	○	○	○	○	○	○	○	○	×
	NFT-7175-RS-1	○	○	○	○	○	○	○	×	○	×
	OPL-6845R-RS232	○	○	○	○	○	○	○	×	×	○
	OPL-6845V	○	○	○	○	○	○	○	○	○	○
	L-46R-V-WHT-USB	○	○	○	○	○	○	○	○	○	○
KEYENCE CORPORATION	BL-210R	○	○	○	○	○	○	○	○	×	×
	BL-210RK	○	○	○	○	○	○	×	×	×	×
	BL-601	○	○	○	○	○	○	○	○	×	×
	BL-N70R	○	○	○	○	○	○	×	○	○	×
	SR-510	○	○	○	○	○	○	○	○	×	×
	HR-50R	○	○	○	○	○	○	○	○	×	×
DENSO WAVE INCORPORATED	HR-100	○	○	○	○	○	○	○	○	○	○
	GT10B-SB	○	○	○	○	○	○	○	○	○	×
MARS TOHKEN SOLUTION CO.LTD.	HC56TU	○	○	○	○	○	○	○	○	×	×
	TLMS-3500RV	△ 1	○	×	○	○	○	×	○	×	×
	THLS-6712	○	○	○	○	○	○	×	○	×	×
	THLS-6800	○	○	○	○	○	○	×	○	×	×
	THLS-7800U	○	○	○	○	○	○	○	○	○	×
NICHIEI INTEC CO., LTD.	FFTA21BU	○	○	○	○	○	○	○	○	○	×
	FFTA10AUSB	○	○	○	○	○	○	○	○	×	×
Nippon Systems Development Co.,Ltd.	AC-812-000-D1	○	○	×	○	○	○	○	○	×	×
Motorola Solutions, Inc.	LS2208	○	○	○	○	○	○	×	○	×	×
	LI4278	○	○	○	○	○	○	○	○	○	○
Unitech Electronics Co., LTD.	MS840BT	○	○	○	○	○	○	×	○	○	×
Honeywell International Inc.	3800G-04E	○	○	○	○	○	○	×	○	×	○
Zebra Technologies, Inc.	LS2208	○	○	○	○	○	○	×	○	○	○

\*1 Only JAN is supported.

\*2 This is a discontinued product.

**3.4 How to read data by a barcode reader**

Please refer to the followings for the data transfer format (header/terminator settings and others) that can be used in the GOT or the setting method to read data by a barcode reader.

- Data transfer format (header/terminator settings and others) that can be used in the GOT.
- Setting to connect a barcode reader to the GOT. ([Peripheral Setting] on GT Designer3(GOT2000))
- Setting to write the data, read by a barcode reader, to the PLC CPU. ([Detail Setting] in the [Bar Code] dialog box on GT Designer3(GOT2000))

Refer to the following.

⇒ GT Designer3 (GOT2000) Screen Design Manual (SH-081220ENG)

- Setting procedure from connecting a barcode reader to the GOT until reading a barcode.

Refer to the following.

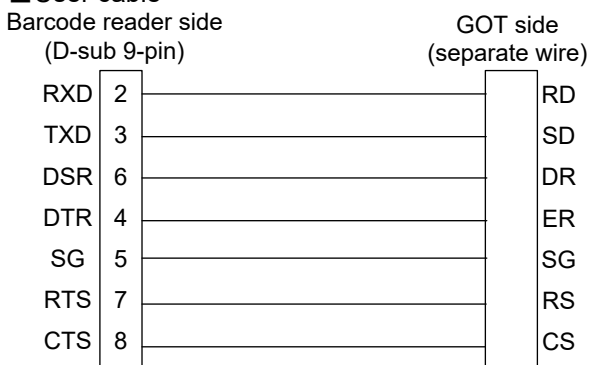
⇒ GOT2000 Series Connection Manual (Microcomputers, MODBUS/Fieldbus Products, Peripherals) For GT Works3 Version1 (SH-081200ENG)

**3.5 When using the GT21 model**

To connect the barcode reader with the built-in RS-232 port (on the back side) of GT2103-PMBDS or GT2103-PMBDS2, use the cable GT10-C02H-6PT9P.

To use GT2104-R, refer to the following and fabricate a cable for connecting the GOT.

■ User cable



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**4. 2D Code Reader**

**4.1 Compatible Products**

**4.1.1 RS-232 connection**

Manufacturer	Model	Operation validation		Reference
		GOT2000	GT SoftGOT2000	
AIMEX Corporation	IT4600SR-RS	Supported	Supported	4.2.1
	MATRIX210-21□-□□□	Supported	Supported	4.2.4
	MATRIX300-□□□-□□□	Supported	Supported	
	MATRIX410-□□□-0□0	Supported	Supported	
MATRIX210N-21□-□□□	Supported	Supported		
IDEC AUTO-ID SOLUTIONS Corporation	GD4430-□□	Supported	Supported	4.2.3
	GD4430-□□-HD	Supported	Supported	
	GBT4430-□□	Supported	Supported	
	MG1100i-2D	Supported	Supported	
	M3200i Series	Supported	Supported	
	QD2430-□□	Supported	Supported	
	GFS4450-9	Supported	Supported	
OMRON Corporation	V400-F250	Supported	Supported	4.2.1
OPTOELECTRONICS CO.,LTD.	OPD-7435	Supported	Supported	4.2.1
	NFD1267 *1	Supported	Not Supported	
	OPI-3601-V	Supported	Supported	
KEYENCE CORPORATION	TL-30	Supported	Supported	4.2.5
	TL-40	Supported	Supported	4.2.1
	SR-510	Supported	Supported	
	HR-100	Supported	Supported	
DENSO WAVE INCORPORATED	GT10Q-SB	Supported	Supported	
	GT10Q-SR	Supported	Supported	4.2.1
	GT11Q-SR	Supported	Supported	
	QB20K *1	Supported	Not Supported	
	QD20	Supported	Supported	
	AT10Q-SM	Supported	Supported	
	AT20Q-SM	Supported	Supported	
	AT21Q-SM	Supported	Supported	
	AT25Q-SM	Supported	Supported	
	AT26Q-SM	Supported	Supported	
MARS TOHKEN SOLUTION CO.LTD.	AT27Q-SB	Supported	Supported	4.2.2
	THIR-3000N	Supported	Supported	4.2.1
	THIR-6000	Supported	Supported	
	TFIR-31	Supported	Supported	
	THIR-6200DDM	Supported	Supported	
THIR-6780R	Supported	Supported		
Cognex K.K.	DataMan 100	Supported	Supported	4.2.1
	DataMan 7500/7500LR	Supported	Supported	
	DataMan 7550/7550LR	Supported	Supported	
	DataMan 750/750S	Supported	Supported	4.2.3
	DataMan 8100/8500	Supported	Supported	4.2.6
Motorola Solutions, Inc.	DS6608-RS-DOS/V	Supported	Supported	4.2.1
Honeywell International Inc.	1900GSR-2	Supported	Supported	4.2.3

\*1 GT27 model and GT25 model are available only. (5VDC is required.)

\*2 Configure the communication settings of the DataMan 200 and the GOT as shown below.

Setting item	Set value
Baud rate	115200 bps
Data length	8 bits or 7 bits
Stop bit	None, Even number or odd number
Parity	1 bit or 2 bits

**4.1.2 RS-422/485 connection**

Manufacturer	Model	Operation validation		Reference
		GOT2000	GT SoftGOT2000	
IDEC AUTO-ID SOLUTIONS Corporation	MATRIX210N-21□-□□□	Supported	Not Supported	4.2.7



**4.1.3 USB connection**

Manufacturer	Model	Operation validation		Reference
		GOT2000	GT SoftGOT2000	
IDEC AUTO-ID SOLUTIONS Corporation	QD2430-□□	Supported	Not Supported	4.2.8
	GD4430-□□	Supported	Not Supported	
	Magellan1100i-2D	Supported	Not Supported	
	Magellan3200i	Supported	Not Supported	
DENSO WAVE INCORPORATED	AT20Q-SM	Supported	Supported	4.2.8
	AT30Q-SM	Supported	Not Supported	
	AT31Q-SM	Supported	Not Supported	
	GT20Q-SM	Supported	Not Supported	4.2.9
	GT20Q-SB	Supported	Not Supported	
Cognex K.K.	DataMan 70S	Supported	Supported	4.2.8
Zebra Technologies, Inc.	DS6707-HD	Supported	Not Supported	4.2.8
SICK Inc.	IDM240-100H *1	Supported	Not Supported	4.2.8
Honeywell International Inc.	Xenon 1900GSR-1	Supported	Supported	4.2.8

\*1 GT27 / GT25-W / GT2505-V are supported with CoreOS version V or later and GT 23 with CoreOS version N or later. GT 21 is not supported yet.

When you use the above models, the USB keyboard function is available. (The input value is processed as the ASCII code. )

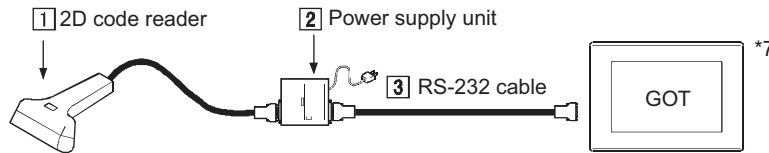
For the usage instructions, refer to the following.

- ➔ GT Designer3 (GOT2000) Screen Design Manual (SH-081220ENG)

**4.2 System equipment of 2D code reader**

The following shows the equipment to configure with different types of 2D code readers.

**4.2.1 System equipment (1)**



Manufacturer	1 2D code reader	2 Power supply unit	3 RS-232 cable
AIMEX Corporation	IT4600SR-RS	Included with a 2D code reader	Included with a 2D code reader
OMRON Corporation	V400-F250	Not necessary **2	Purchased by the user (V400-W24) Including a 24VDC power cable
OPTOELECTRONICS CO.,LTD.	OPD-7435	Included with a 2D code reader	Included with a 2D code reader
	NFD1267	Not necessary *3	Produced by the user Refer to 1) below. (5VDC is required.)
	OPI-3601-V	Included with a 2D code reader	Included with a 2D code reader
KEYENCE CORPORATION	TL-30	TL-U1	For GT27 and GT25, refer to 2) below. GT21 when used, use the cable to the 2D code reader is shipped
	TL-40	TL-U1	Included with a 2D code reader
	SR-510	BL-U2	GT01-C30R2-9S *4
	HR-100	OP-87530	HR-1C3RC
DENSO WAVE INCORPORATED	GT10Q-SR	AD1005/3600	GT27, GT25, GT21: ·CBG1-RS2000/9 ·CBG1-RS5000/9-1 ·GT10Q RS232C/2m Curl SoftGOT2000: *5
	GT11Q-SR	AD1005/3600	CBG11-RS2000/9
	QB20/20-HD	2000639	496800-0040
	QB20K	Included with a 2D code reader	Included with a 2D code reader
	QD20	Not necessary **2	Produced by the user Refer to 3) below.
MARS TOHKEN SOLUTION CO.LTD.	THIR-3000N	S-8440	Included with a 2D code reader *5 *6
	TFIR-3102	Not necessary *1	Produced by the user Refer to 4) below.
	THIR-6000	Included with a 2D code reader	Included with a 2D code reader
	TFIR-31	Included with a 2D code reader	Included with a 2D code reader
	THIR-6200DDM	Included with a 2D code reader	Included with a 2D code reader
	THIR-6780R	Included with a 2D code reader	Included with a 2D code reader
Cognex K.K.	DataMan 100	DM100-RWR-000	DM100-RS232-000
	DataMan 7500	Included with a 2D code reader	DM42206139-04
	DataMan 7550	Included with a 2D code reader	DM42203758-03S
Motorola Solutions, Inc.	DS6608-RS-DOS/V	Included with a 2D code reader	Included with a 2D code reader *5

\*1 It is necessary to supply 24VDC to the 2D code reader separately. For details, please refer to the manual of the 2D code reader to be used.

\*2 For adjusting settings of the 2D code reader by using the monitor, please refer to the manual of the 2D code reader to be used.

\*3 It is necessary to supply 5VDC to the 2D code reader separately. For details, please refer to the manual of the 2D code reader to be used.

\*4 This is a Mitsubishi Electric product. Please contact your local Mitsubishi Electric or representative for purchasing the cable.

\*5 To connect the 2D code reader to GT SoftGOT2000, connect the following USB/RS-232 conversion cables to a USB port on the personal computer.

For the USB/RS-232 conversion cables, refer to Technical Bulletin FA-D-0036.

- DIFC-U2 (Diatrend Corporation)

- DAC01R2VD (Diatrend Corporation)

<Connection example>

[2D code reader (RS-232)] + [3 RS-232 cable] + [DAC01R2VD] + [DIFC-U2] + [Personal computer (USB)]

\*6 With the USB/RS-232 conversion cables (DIFC-U2 and DAC01R2VD), configure the 2D code reader setting so that the RS/CS control is not performed.

\*7 When using a 2D code reader, follow one of the procedures below to turn on it.

· Turn on the GOT, wait 2 seconds or more, and turn on the 2D code reader.

· Turn on the GOT, wait for the startup logo to appear, and turn on the 2D code reader.

If you use any procedure other than the above and the 2D code reader becomes inoperable, restart the 2D code reader.

1) RS-232 cable connection diagram for a 2D code reader manufactured by OPTOELECTRONICS CO., LTD.  
 The following shows connection cables that must be produced by the user.  
 Maximum cable length: confirm with the 2D code reader manufacturer.

2D code reader		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
Trigger	Green		1	CD
OK-	Yellow		2	RD(RXD)
NG	Blue		3	SD(TXD)
SD	Purple		4	DTR(ER)
RD	Orange		5	SG
RS	Brown		6	DSR(DR)
CS	Gray		7	RS(RTS)
+5V	Red		8	CS(CTS)
GND	White		9	5V

2) RS-232 cable connection diagram for a 2D code reader manufactured by KEYENCE CORPORATION  
 The following shows connection cables that must be produced by the user.  
 Maximum cable length: confirm with the 2D code reader manufacturer.

2D code reader		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
N.C	1		1	CD
SD(TXD)	2		2	RD(RXD)
RD(RXD)	3		3	SD(TXD)
N.C	4		4	DTR(ER)
SG	5		5	SG
N.C	6		6	DSR(DR)
CS(CTS)	7		7	RS(RTS)
RS(RTS)	8		8	CS(CTS)
N.C	9		9	—

3) RS-232 cable connection diagram for a 2D code reader manufactured by DENSO WAVE INCORPORATED  
 The following shows connection cables that must be produced by the user.  
 Maximum cable length: confirm with the 2D code reader manufacturer.

2D code reader		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
—	—		1	CD
/TXD	2		2	RD(RXD)
/RXD	3		3	SD(TXD)
—	—		4	DTR(ER)
GND	5		5	SG
—	—		6	DSR(DR)
CTS	7		7	RS(RTS)
RTS	8		8	CS(CTS)
—	—		9	NC

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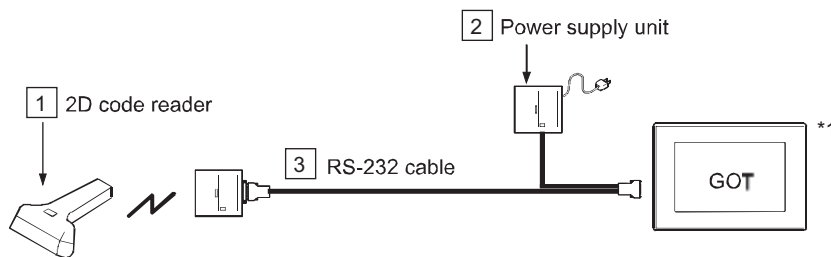
4) RS-232 cable connection diagram for a 2D code reader manufactured by MARS TOHKEN SOLUTION CO.LTD.

The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the 2D code reader manufacturer.

2D code reader		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
—	—		1	CD *1
RXD /RD-	2		2	RD(RXD)
TXD /TD+	3		3	SD(TXD)
—	—		4	DTR(ER)
GND	5		5	SG
—	—		6	DSR(DR)
—	—		7	RS(RTS)
RTS	11		8	CS(CTS)
CTS	12		9	—

**4.2.2 System equipment (2)**



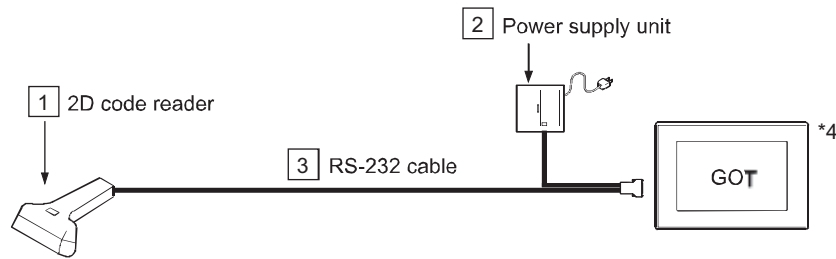
Manufacturer	1 2D code reader	2 Power supply unit	3 RS-232 cable
DENSO WAVE INCORPORATED	GT10Q-SB	Included with a 2D code reader (A Bluetooth adapter (BA10-RKU) must be purchased separately.)	CBBA-RS2000/9
	AT27Q-SB	Included with a 2D code reader (A Bluetooth adapter (BA20-RU) must be purchased separately.)	Included with a 2D code reader

\*1 When using a 2D code reader, follow one of the procedures below to turn on it.

- Turn on the GOT, wait 2 seconds or more, and turn on the 2D code reader.
- Turn on the GOT, wait for the startup logo to appear, and turn on the 2D code reader.

If you use any procedure other than the above and the 2D code reader becomes inoperable, restart the 2D code reader.

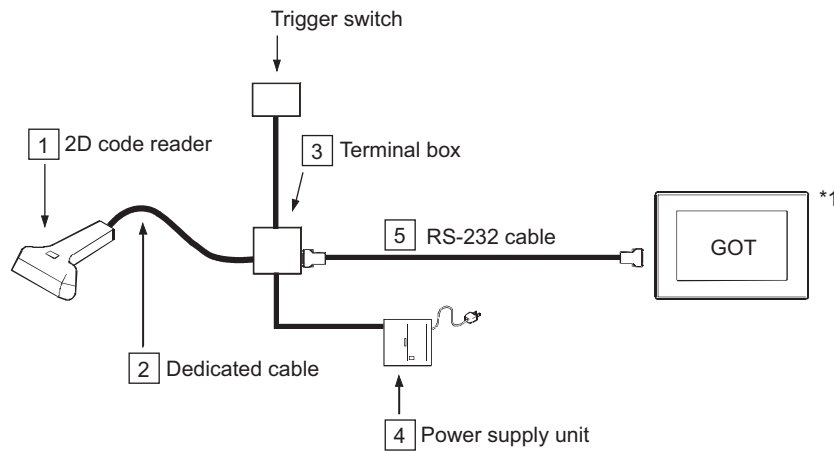
**4.2.3 System equipment (3)**



Manufacturer	1 2D code reader	2 Power supply unit	3 RS-232 cable		
IDEC AUTO-ID SOLUTIONS Corporation	GD4430-□□	11-0387, UL310-0515 *5, or 5V power supply from the GOT standard interface *2	CAB-350 *3		
	GD4430-□□-HD				
	GBT4430-□□				
	MG1100i-2D				
	M3200i Series			Included with a 2D code reader	8-0736-80 *3
	QD2430-□□			11-0387	8-0730-54 *3
DENSO WAVE INCORPORATED	GFS4450-9	11-0387	Included with a 2D code reader		
	AT10Q-SM	Included with a 2D code reader	Included with a 2D code reader		
	AT20Q-SM				
	AT21Q-SM				
	AT25Q-SM				
AT26Q-SM					
Cognex K.K.	DataMan 750	DMA-24KIT-00, DM100-PWR-000	DM700-RS232-00		
	DataMan 750S				
	DataMan 8100 *1	DM100-PWR-00	DM8000-RS232-00		
	DataMan 8500 *1				
Honeywell International Inc.	1900GSR-2	Included with a 2D code reader	Included with a 2D code reader		

\*1 DataMan 8100/8500 requires the communication module DMCM-SERIALM-00.  
 \*2 It is necessary to supply 5VDC to the 2D code reader separately. For details, please refer to the manual of the 2D code reader to be used.  
 \*3 To connect the 2D code reader to GT SoftGOT2000, connect the following USB/RS-232 conversion cables to a USB port on the personal computer.  
 For the USB/RS-232 conversion cables, refer to Technical Bulletin FA-D-0036.  
 - DIFC-U2 (Diatrend Corporation)  
 - DAC01R2VD (Diatrend Corporation)  
 <Connection example>  
 [2D code reader (RS-232)] + [3 RS-232 cable] + [DAC01R2VD] + [DIFC-U2] + [Personal computer (USB)]  
 \*4 When using a 2D code reader, follow one of the procedures below to turn on it.  
 · Turn on the GOT, wait 2 seconds or more, and turn on the 2D code reader.  
 · Turn on the GOT, wait for the startup logo to appear, and turn on the 2D code reader.  
 If you use any procedure other than the above and the 2D code reader becomes inoperable, restart the 2D code reader.  
 \*5 This is a discontinued product.

**4.2.4 System equipment (4)**



Manufacturer	1 2D code reader	2 Dedicated cable	3 Terminal box	4 Power supply unit	5 RS-232 cable
IDEC AUTO-ID SOLUTIONS Corporation	MATRIX210-21□-□□□	Included with a 2D code reader	CBX100	PS5R-B24	Produced by the user Refer to 1) below.
	MATRIX300-□□□-□□□	CAB-DS0□-S			
	MATRIX410-□□□-0□□	CAB-MS01			
	MATRIX210N-21□-□□□	Included with a 2D code reader			

\*1 When using a 2D code reader, follow one of the procedures below to turn on it.

- Turn on the GOT, wait 2 seconds or more, and turn on the 2D code reader.
- Turn on the GOT, wait for the startup logo to appear, and turn on the 2D code reader.

If you use any procedure other than the above and the 2D code reader becomes inoperable, restart the 2D code reader.

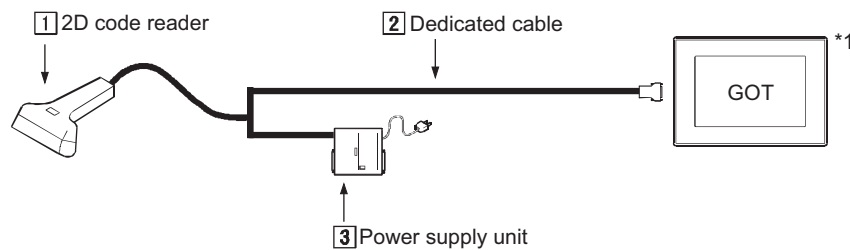
1) RS-232 cable connection diagram for a 2D code reader manufactured by IDEC AUTO-ID SOLUTIONS Corporation.

The following shows connection cables that must be produced by the user.  
Maximum cable length: confirm with the barcode reader manufacturer.

Barcode reader		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
SGND	—	←	1	CD
TX	—	→	2	RD(RXD)
RTS	—	→	3	SD(TXD)
RX	—	←	4	ER(DTR)
CTS	—	→	5	SG
—	—		6	DR(DSR)
—	—		7	RS(RTS)
—	—		8	CTS
—	—		9	NC

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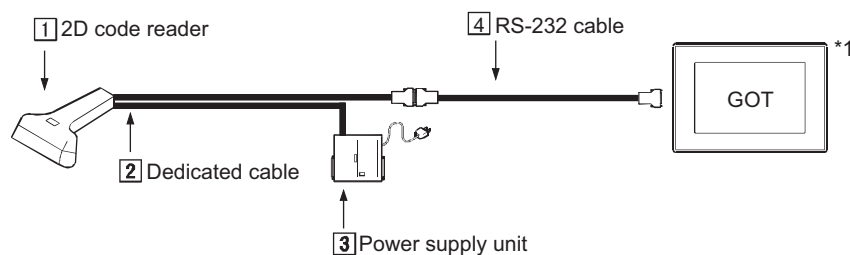
**4.2.5 System equipment (5)**



Manufacturer	1 2D code reader	2 Dedicated cable	3 Power supply unit
KEYENCE CORPORATION	TL-30	Included with a 2D code reader	TL-U1

- \*1 When using a 2D code reader, follow one of the procedures below to turn on it.
- Turn on the GOT, wait 2 seconds or more, and turn on the 2D code reader.
  - Turn on the GOT, wait for the startup logo to appear, and turn on the 2D code reader.
- If you use any procedure other than the above and the 2D code reader becomes inoperable, restart the 2D code reader.

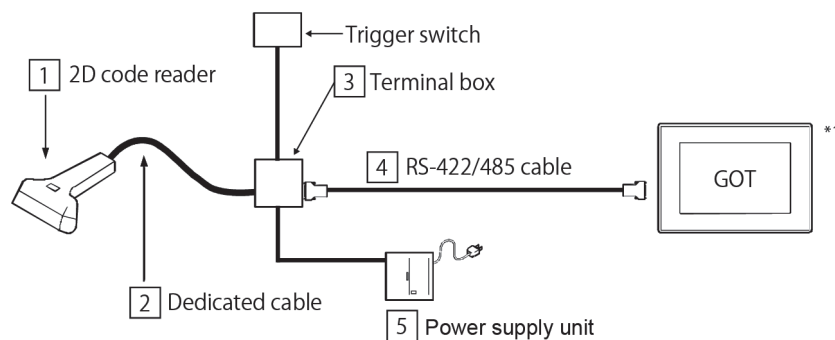
**4.2.6 System equipment (6)**



Manufacturer	1 2D code reader	2 Dedicated cable	3 Power supply unit	4 RS-232 cable
Cognex K.K.	DataMan 200	CCB-84901-1003-△△	CPS-AC-POE1A-△△	CCB-M8X4-△△

- \*1 When using a 2D code reader, follow one of the procedures below to turn on it.
- Turn on the GOT, wait 2 seconds or more, and turn on the 2D code reader.
  - Turn on the GOT, wait for the startup logo to appear, and turn on the 2D code reader.
- If you use any procedure other than the above and the 2D code reader becomes inoperable, restart the 2D code reader.

**4.2.7 System equipment (7)**



Manufacturer	1 2D code reader	2 Dedicated cable	3 Terminal box	4 RS-422/485 cable	5 Power supply unit
IDEC AUTO-ID SOLUTIONS Corporation	MATRIX210N-21□-□□□	Included with a 2D code reader	CBX100	Produced by the user Refer to 1) below.	PS5R-VB24

- \*1 When using a 2D code reader, follow one of the procedures below to turn on it.
- Turn on the GOT, wait 2 seconds or more, and turn on the 2D code reader.
  - Turn on the GOT, wait for the startup logo to appear, and turn on the 2D code reader.
- If you use any procedure other than the above and the 2D code reader becomes inoperable, restart the 2D code reader.

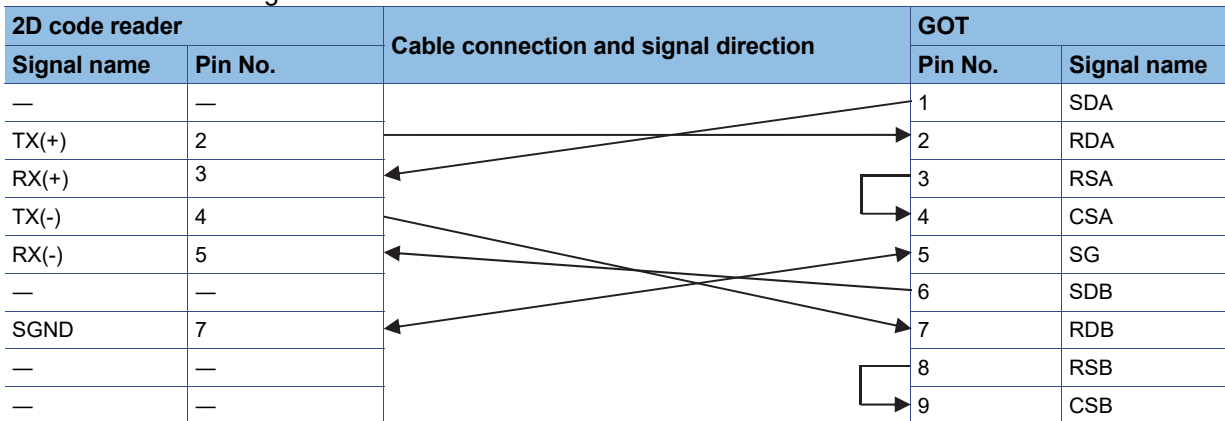
[Issue No.] GOT-A-0064-Q

1) RS-422/485 cable connection diagram for a 2D code reader manufactured by IDEC AUTO-ID SOLUTIONS Corporation.

a) For connection using the RS-422/485 interface of the GOT or GT15-RS4-9S

The following shows connection cables that must be produced by the user.

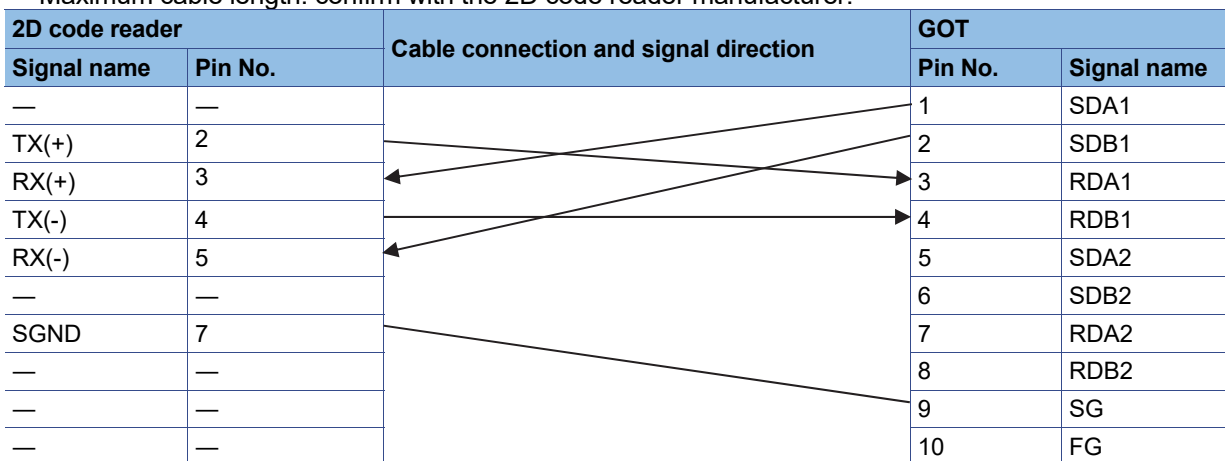
Maximum cable length: confirm with the 2D code reader manufacturer.



b) For connection using GT15-RS4-TE

The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the 2D code reader manufacturer.





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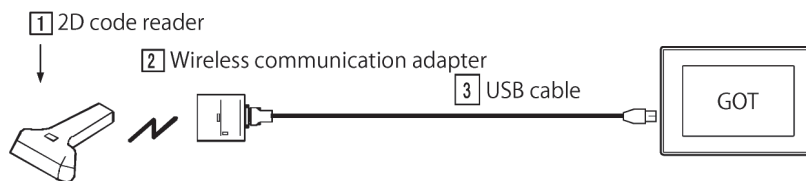
**4.2.8 System equipment (8)**



Manufacturer	1 2D code reader	2 USB cable
IDEC AUTO-ID SOLUTIONS Corporation	QD2430-□□	·90A052065 (2 m) ·90A052095 (4 m)
	GD4430-□□	90A052065 (2 m)
	Magellan1100i-2D	Included with a barcode reader
	Magellan3200i	8-0938-01 (2 m)
DENSO WAVE INCORPORATED	AT20Q-SM	Included with a barcode reader
	AT30Q-SM	Included with a barcode reader
	AT31Q-SM	Included with a barcode reader
	GT20Q-SM	Included with a barcode reader
Cognex K.K.	DataMan 70S	DMA-SRTCBLELOCK-25(2.5m) DMA-SRTCBLELOCK-35(3.5m) DMA-RHTCBLELOCK-25(2.5m) DMA-RHTCBLELOCK-35(3.5m)
Zebra Technologies, Inc.	DS6707-HD	Included with a barcode reader
SICK Inc.	IDM240-100H *1	Included with a barcode reader
Honeywell International Inc.	Xenon 1900GSR-1	Included with a barcode reader

\*1 GT27 / GT25-W / GT2505-V are supported with CoreOS version V or later and GT 23 with CoreOS version N or later. GT 21 is not supported yet.

**4.2.9 System equipment (9)**



Manufacturer	1 2D code reader	2 USB cable	3 USB cable
DENSO WAVE INCORPORATED	GT20Q-SB	BA20-RU (Must be purchased separately)	CBBA-US2000/4 (Must be purchased separately)

**4.3 Compatible 2D code type**

Only "QR code" is supported by the GOT.

**4.4 How to read data by a 2D code reader**

Please refer to the followings for the data transfer format (header/terminator settings and others) that can be used in the GOT or the setting method to read data by a 2D code reader.

- Data transfer format (header/terminator settings and others) that can be used in the GOT.
  - Setting to connect a 2D code reader to the GOT. ([Peripheral Setting] on GT Designer3(GOT2000))
  - Setting to write the data, read by a 2D code reader, to the PLC CPU. ([Detail Setting] in the [Bar Code] dialog box on GT Designer3(GOT2000))
- Refer to the following.
- GT Designer3 (GOT2000) Screen Design Manual (SH-081220ENG)
- Setting the procedure from connecting a 2D code reader to the GOT until reading 2D code data.
- Refer to the following.
- GOT2000 Series Connection Manual (Microcomputers, MODBUS/Fieldbus Products, Peripherals) For GT Works3 Version1 (SH-081200ENG)

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**4.5 When using the GT21 model**

To connect the barcode reader with the built-in RS-232 port (on the back side) of GT2103-PMBDS or GT2103-PMBDS2, use the cable GT10-C02H-6PT9P.

To use GT2104-R, refer to the following and fabricate a cable for connecting the GOT.

■User cable

2D barcode reader side  
(D-sub 9pin)

GOT side  
(separate wire)



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**5. Hubs for Ethernet Connection and Gateway Function**

(Compatible Product)

Manufacturer	Model
Allied Telesis K.K.	CentreCOM FS708XL, CentreCOM MR815TL, CentreCOM RH505EL, CentreCOM FS705TX, CentreCOM FS705TX V2
I-O DATA DEVICE, INC.	ETX-ESH5, ETX-SH5
KEYENCE CORPORATION	NE-V08
PHOENIX CONTACT	FL SWITCH SF 8TX, FL SWITCH 5TX (Hardware version 13 or later)
Mitsubishi Electric Corporation	NZ2EHG-T8
Mitsubishi Cable Industries, Ltd.	ET10618, ST12904-AC
Mitsubishi Electric System & Service Co., Ltd.	DT125TX-B

(Discontinued Product \*1)

Manufacturer	Model
Allied Telesis K.K.	CentreCOM MR820TR, CentreCOM 3012TR V2
Mitsubishi Cable Industries, Ltd.	ST12608

\*1 Discontinued Products are not checked with GOT2000 Series.

(Incompatible Product \*1)

Manufacturer	Model
BUFFALO INC.	LSW-TX-5EP

\*1 Incompatible Products are not checked with GOT2000 Series.

**6. Video Camera**

**Precautions**

Some video cameras may require a separate power supply unit.

Regarding a required power supply unit for a video camera, confirm with the manufacturer.

(Compatible Product)

Manufacturer	Model
Sony Corporation	XC-ST70 *1, XC-ST50 *1, XC-ST51 *1, XC-ES50 *1, XC-ES50L *1, XC-ES51 *1, XC-ES30 *1, XC-EI50 *1, XC-EI30 *1, XC-ST70CE *2, XC-ST30CE *2, XC-ES30CE *2
TOSHIBA TELI CORPORATION	CS8630i *1, CS8550i-51 *1*3, CS8311Bi *2, CS8310Bi *1
SENSOR TECHNOLOGY CO.,LTD (SENTECH)	STC-620BJ2 *3

\*1 EIA format (Monochrome) Set NTSC for the video input signal of the communication settings.

\*2 CCIR format (Monochrome) Set PAL for the video input signal of the communication settings.

\*3 Set the 1/60s interlace mode for the video output mode (VIDEO) of the dipswitch on the camera rear panel.

(Discontinued Product)

Manufacturer	Model
Mitsubishi Electric Corporation	CIT-9510M *1*2, CIT-8800M *1*2, CIT-8510M *1*2, CIT-8000 *1*2, C-4010 *1*2, C-2915 *1*2, C-2670 *1*2, C-2600 *1*2

\*1 NTSC format (Color)

\*2 Some video cameras may require a separate power supply unit or the equipment for converting the specifications to Mitsubishi Electric specifications. For details, check the manual of the video camera to be used.

**7. Display**

(Discontinued Product)

Manufacturer	Model
Mitsubishi Electric Corporation	RDT1713LM, RDT198LM, RDT223WLM, RDT234WLM, RDT234WX, RDT234WX-3D, RDT235WLM, RDT235WX, RDT241WEX, RDT242WH

**8. Speaker**

◎: Recommended product, ○: Operation validated, ×: Operation not checked

Manufacturer	Model	Operation validation
ELECOM CO.,LTD.	MS-P06ABD, MS-130SV	○
Logicool.	Z220WH	○
SANWA SUPPLY INC.	MM-SPL6BK, MM-SPL2N2	○
Audio-Technica Corporation	AT-SP93, AT-SP121	○
TOA Corporation	A-1806 *1	○
NOBORU ELECTRIC Co., Ltd.	FA-202 *1	○

\*1 This is a power amplifier.

Select a speaker according to the specifications of the power amplifier.

When power is supplied to a speaker from the USB interface (Host) of the GOT, up to 500 mA at 5V DC is available.

Some speakers may need more power depending on their specifications and use environment.

Check the specifications of the speaker prior to use.

**8.1 When using the sound output unit mounted on the GOT**

Use a speaker with a built-in amplifier.

Use a speaker compatible with the following specifications.

Item	Specification
Sound output terminal	For connecting external L/R speakers, 1 channel for each speaker (2 Vp-p)
Applicable jack	Φ3.5 stereo mini jack
Playable file	<ul style="list-style-type: none"> <li>·When GT Designer3 Ver1.175H or earlier is used WAV format (8.000 kHz, 16 bits, mono), maximum playback time: 8 seconds</li> <li>·When GT Designer3 Ver1.175H or later is used WAV format (8.000 kHz or 16.000 kHz, 16 bits, mono), maximum playback time: 30 seconds</li> </ul>

**8.2 When using the sound output interface of the GT25 wide model**

Use a speaker with a built-in amplifier.

Use a speaker compatible with the following specifications.

Item	Specification
Sound output terminal	For connecting external L/R speakers, 1 channel for each speaker (2.1 Vms)
Applicable jack	Φ3.5 stereo mini jack (3 poles)
Playable file	WAV format (8.000 kHz or 16.000 kHz, 16 bits, mono), maximum playback time: 30 seconds

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**9. RFID Controller****9.1 Compatible Products****9.1.1 RS-232 connection**

Manufacturer	Model	Operation validation	
		GOT2000	GT SoftGOT2000
LS Industrial Systems Co., Ltd.	LSRF-C	Supported	Supported
OMRON Corporation	V600/V620	Supported	Supported
MARS TOHKEN SOLUTION CO.LTD..	ICU-60S	Supported	Supported
	ICU-215	Supported	Not Supported
PONGEE INDUSTRIES CO., LTD	PUA-310	Supported	Supported
	PUA-310V1-0/M0R2H05	Supported	Supported
	PUA-310V1-0/M0R2H05-CH	Supported	Supported
	PUA-310V1-0/M0R2D04	Supported	Supported
HID Global Corporation	Serial ProxPro Reader 5352A	Supported	Supported

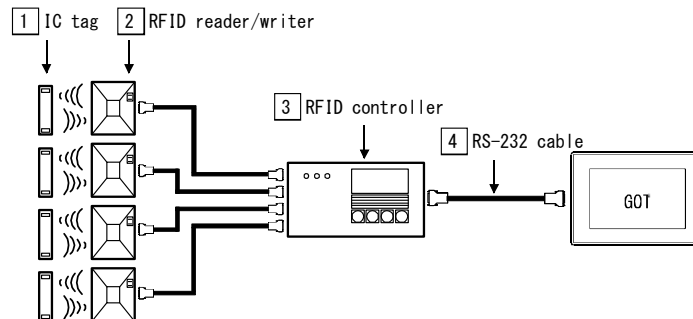
**9.1.2 RS-422/485 connection**

Manufacturer	Model	Operation validation	
		GOT2000	GT SoftGOT2000
OMRON Corporation	V600	Supported	Not Supported
	V680	Supported	Not Supported
HID Global Corporation	Serial ProxPro Reader 5352A	Supported	Not Supported

**9.2 System equipment of RFID controllers**

**9.2.1 When using the RS-232 connection**

The following shows the equipment to configure with different types of RFID controllers.



Manufacturer	1 IC tag	2 RFID reader/writer	3 RFID controller	4 RS-232 cable
LS Industrial Systems Co., Ltd.	LSRT125	LSRF-L	LSRF-C	Produced by the user Refer to (1) below *1
OMRON Corporation	V600-D□	V600-H□	V600-CA5D□	Produced by the user Refer to (2) below *1
	V620-D8KR01	V620-H□	V620-CA1A	Produced by the user Refer to (3) below *1
MARS TOHKEN SOLUTION CO.LTD..	Mifare(ISO14443 TypeA) card	ICU-60S (built-in a controller)		Produced by the user Refer to (4) below *1
		ICU-215 (built-in a controller)		Produced by the user Refer to (5) below *1
PONGEE INDUSTRIES CO., LTD	PUA-310-compatible tag	PUA-310 (built-in a controller)		Produced by the user Refer to (6) below *1
	Mifare(ISO14443 TypeA) card	PUA-310V1-0/M0R2H05 (built-in a controller)		
		PUA-310V1-0/M0R2H05-CH (built-in a controller)		
		PUA-310V1-0/M0R2D04 (built-in a controller)		
HID Global Corporation	125 kHz Prox	Serial ProxPro Reader 5352A (built-in a controller)		Produced by the user Refer to (7) below *1

\*1 To connect the RFID controller to GT SoftGOT2000, connect the following USB/RS-232 conversion cables to a USB port on the personal computer.

For the USB/RS-232 conversion cables, refer to Technical Bulletin FA-D-0036.

- DIFC-U2 (Diatrend Corporation)
- DAC01R2VD (Diatrend Corporation)

<Connection example>

[RFID controller (RS-232)] + [3] RS-232 cable] + [DAC01R2VD] + [DIFC-U2] + [Personal computer (USB)]

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(1) RS-232 cable connection diagram for an RFID controller manufactured by LS Industrial Systems Co., Ltd.  
The following shows connection cables that must be produced by the user.  
Maximum cable length: confirm with the RFID controller manufacturer.

RFID controller		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
NC	1		1	CD
RD(RXD)	2	←	2	RD(RXD)
SD(TXD)	3	→	3	SD(TXD)
NC	4	←	4	DTR(ER)
SG	5	→	5	SG
NC	6	←	6	DSR(DR)
NC	7	←	7	RS(RTS)
NC	8	←	8	CS(CTS)
NC	9		9	NC

\* For the cables between [2] and [3], refer to the manual created by LS Industrial Systems Co., Ltd.

(2) RS-232 cable connection diagram for a V600 RFID controller manufactured by OMRON Corporation  
The following shows connection cables that must be produced by the user.  
Maximum cable length: confirm with the RFID controller manufacturer.

RFID controller		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
—	1		1	CD
SD	2	→	2	RD(RXD)
RD	3	←	3	SD(TXD)
RS	4	←	4	DTR(ER)
CS	5	←	5	SG
—	6		6	DSR(DR)
—	7		7	RS(RTS)
—	8		8	CS(CTS)
SG	9	→	9	—

\* For the cables between [2] and [3], refer to the manual created by OMRON Corporation

(3) RS-232 cable connection diagram for a V620 RFID controller manufactured by OMRON Corporation  
The following shows connection cables that must be produced by the user.  
Maximum cable length: confirm with the RFID controller manufacturer.

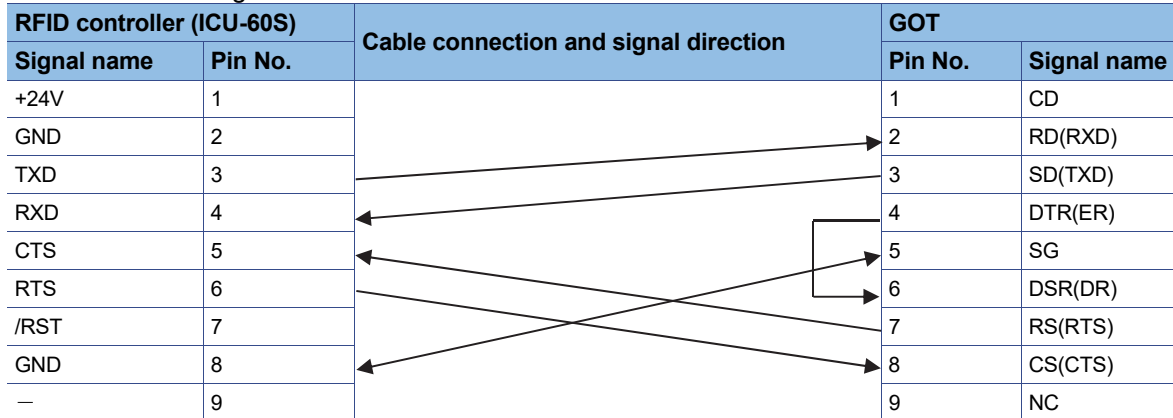
RFID controller		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
FG	1		1	CD
SD	2	→	2	RD(RXD)
RD	3	←	3	SD(TXD)
RS	4	←	4	DTR(ER)
CS	5	←	5	SG
—	6		6	DSR(DR)
SG	7	→	7	RS(RTS)
—	8		8	CS(CTS)
ER	20		9	NC

\* For the cables between [2] and [3], refer to the manual created by OMRON Corporation

[Issue No.] GOT-A-0064-Q

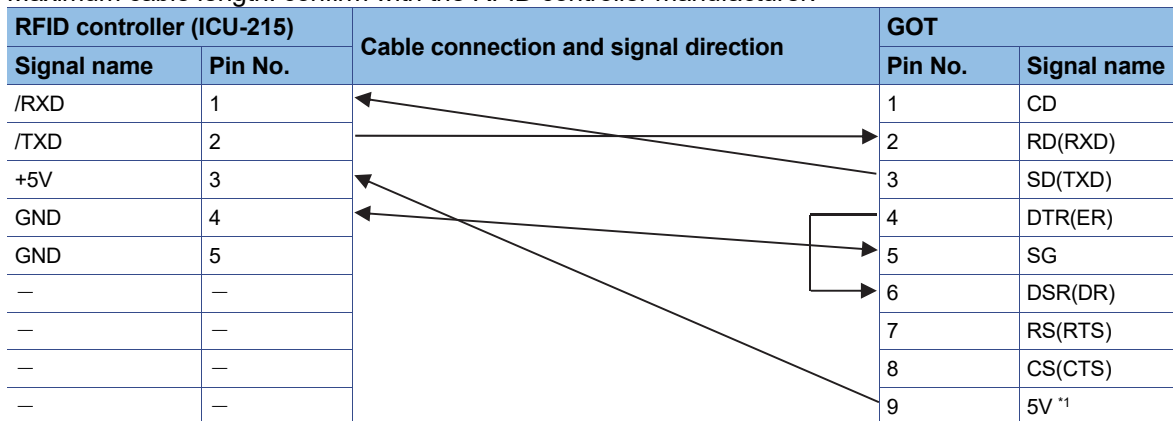
(4) RS-232 cable connection diagram for an ICU-60S RFID controller manufactured by MARS TOHKEN SOLUTION CO.LTD.

The following shows connection cables that must be produced by the user.  
Maximum cable length: confirm with the RFID controller manufacturer.



(5) RS-232 cable connection diagram for an ICU-215 RFID controller manufactured by MARS TOHKEN SOLUTION CO.LTD.

The following shows connection cables that must be produced by the user.  
Maximum cable length: confirm with the RFID controller manufacturer.



\*1 Supply 5VDC to the RFID controller.



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(6) RS-232 cable connection diagram for an ICU-215 RFID controller manufactured by PONGEE INDUSTRIES CO., LTD.

The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the RFID controller manufacturer.

RFID controller		Cable connection and signal direction	GOT	
Signal name	Color		Pin No.	Signal name
+12VDC	Red		1	CD
Ground	Black		2	RD(RXD)
TX+	White		3	SD(TXD)
Shield/Ground	Yellow		4	DTR(ER)
—	—		5	SG
—	—		6	DSR(DR)
—	—		7	RS(RTS)
—	—		8	CS(CTS)
—	—		9	—

(7) RS-232 cable connection diagram for an RFID controller manufactured by HID Global Corporation

The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the RFID controller manufacturer.

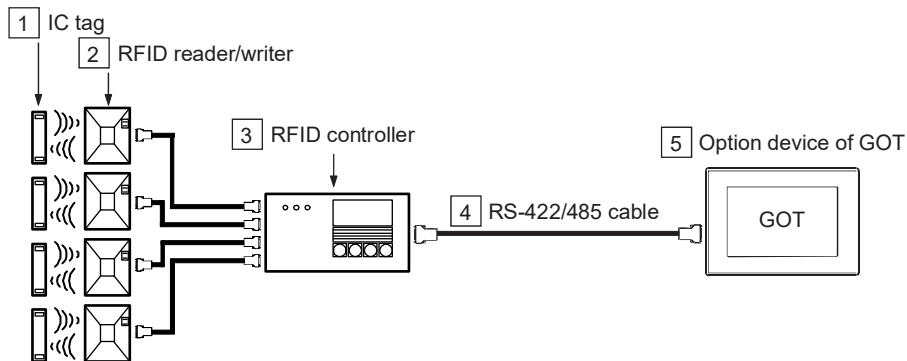
RFID controller		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
DC+	1		1	CD
GROUND	2		2	RD(RXD)
SIG GND	3		3	SD(TXD)
TX+/485+	4		4	DTR(ER)
TX-/485-	5		5	SG
RX+/TD	6		6	DSR(DR)
RX-/RD	7		7	RS(RTS)
DTR	8		8	CS(CTS)
DSR	9		9	NC
TAMPER	10		-	-
TAMPER SELECT	11		-	-

DIP switch setting on the controller

Dip1		Dip2	
SW1-1	OFF	SW2-1	ON
SW1-2	OFF	SW2-2	ON
SW1-3	OFF	SW2-3	ON
SW1-4	ON	SW2-4	OFF
SW1-5	ON	SW2-5	OFF
SW1-6	OFF	SW2-6	OFF
SW1-7	OFF	SW2-7	OFF
SW1-8	OFF	SW2-8	OFF

**9.2.2 When using the RS-422/485 connection**

The following shows the equipment to configure with different types of RFID controllers.



Manufacturer	1 IC tag	2 RFID reader/writer	3 RFID controller	4 RS-232 cable	5 Option device of GOT
OMRON Corporation	V600-D□	V600-H□	V600-CA5D□	Produced by the user Refer to (1) below	- (Built into GOT) GT15-RS4-9S
				Produced by the user Refer to (2) below	GT15-RS4-TE
	V680-D□	V680-H□	V680-CA5D□	Produced by the user Refer to (1) below	- (Built into GOT) GT15-RS4-9S
				Produced by the user Refer to (2) below	GT15-RS4-TE
HID Global Corporation	125 kHz Prox	Serial ProxPro Reader 5352A (built-in a controller)	Produced by the user Refer to (3) below	- (Built into GOT) GT15-RS4-9S	
			Produced by the user Refer to (4) below	GT15-RS4-TE	

(1) RS-422/485 cable (D-sub, 9 pins) connection diagram for an RFID controller (V600/V680) manufactured by OMRON Corporation

(a) For the RS-422 connection

The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the RFID controller manufacturer.

RFID controller		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
RDA(-)	1		1	SDA
RDB(+)	2		2	RDA
SDA(-)	3		3	RSA
SDB(+)	4		4	CSA
SG	5		5	SG
—	—		6	SDB
—	—		7	RDB
—	—		8	RSB
—	—		9	CSB
—	—	—	FG	

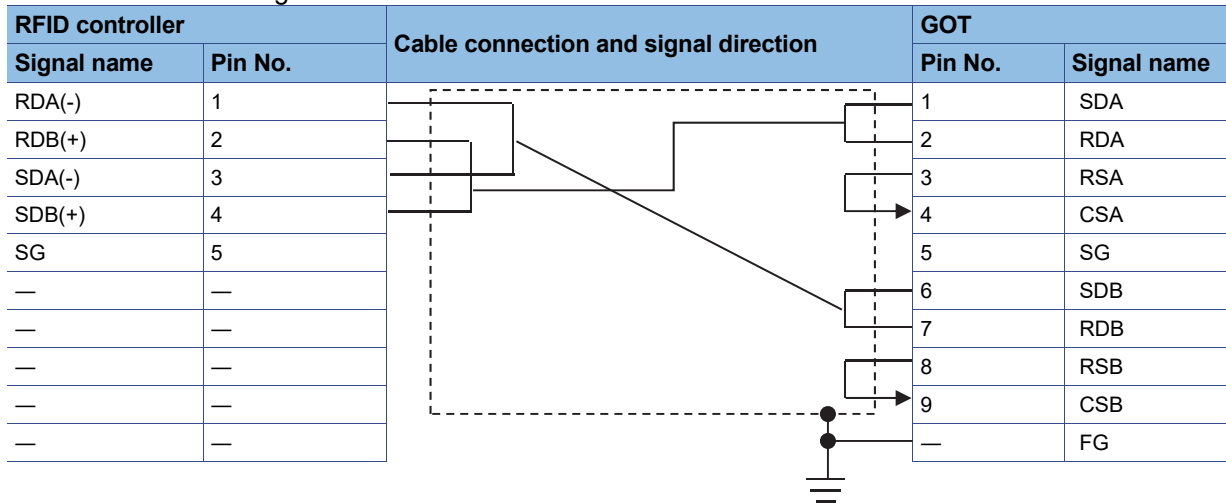
\* For the cables between 2 and 3, refer to the manual created by OMRON Corporation

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(b) For the RS-485 connection

The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the RFID controller manufacturer.

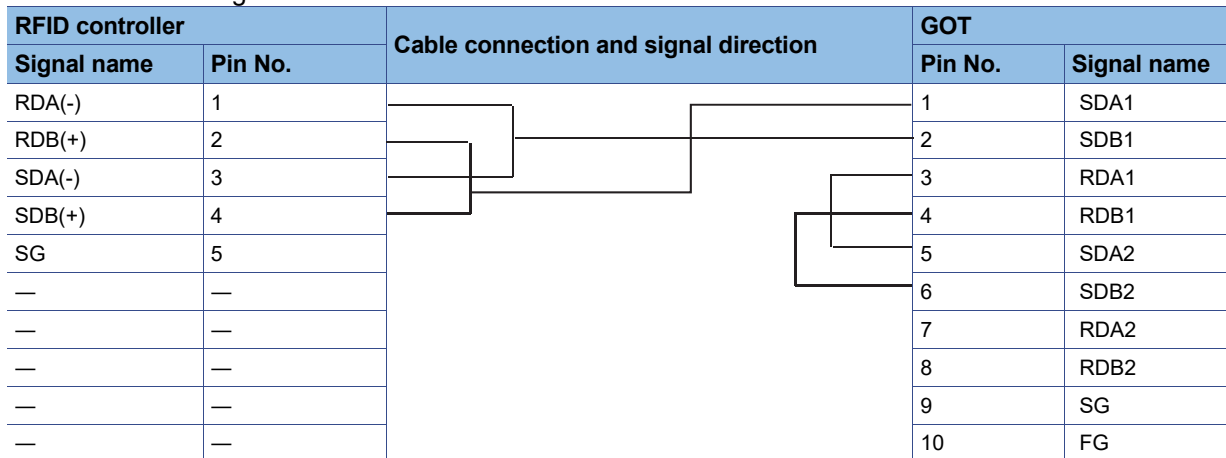


\* For the cables between [2] and [3], refer to the manual created by OMRON Corporation

(2) RS-422/485 cable (terminal block) connection diagram for an RFID controller (V600/V680) manufactured by OMRON Corporation

The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the RFID controller manufacturer.



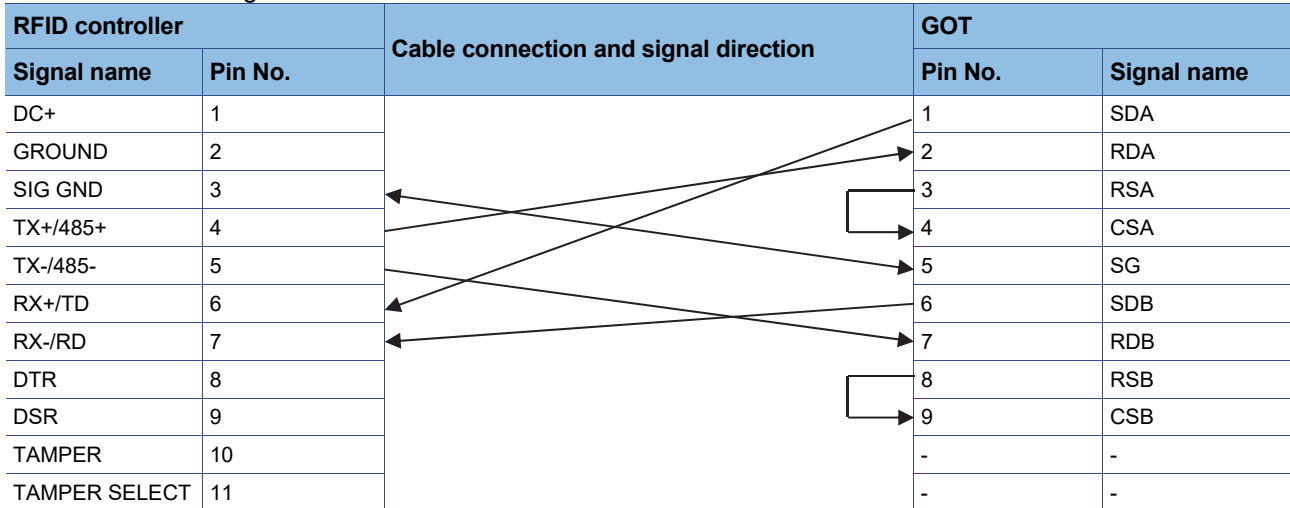
\* For the cables between [2] and [3], refer to the manual created by OMRON Corporation

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(3) RS-422 cable (D-sub, 9 pins) connection diagram for an RFID controller manufactured by HID Global Corporation

The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the RFID controller manufacturer.



DIP switch setting on the controller

Dip1		Dip2	
SW1-1	OFF	SW2-1	ON
SW1-2	OFF	SW2-2	ON
SW1-3	OFF	SW2-3	OFF
SW1-4	ON	SW2-4	OFF
SW1-5	ON	SW2-5	OFF
SW1-6	OFF	SW2-6	OFF
SW1-7	OFF	SW2-7	OFF
SW1-8	OFF	SW2-8	OFF

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(4) RS-485 cable (terminal block) connection diagram for an RFID controller manufactured by HID Global Corporation

The following shows connection cables that must be produced by the user.

Maximum cable length: confirm with the RFID controller manufacturer.

RFID controller		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
DC+	1		1	SDA1
GROUND	2		2	SDB1
SIG GND	3		3	RDA1
TX+/485+	4		4	RDB1
TX-/485-	5		5	SDA2
RX+/TD	6		6	SDB2
RX-/RD	7		7	RDA2
DTR	8		8	RDB2
DSR	9		9	SG
TAMPER	10		10	FG
TAMPER SELECT	11		-	-

DIP switch setting on the controller

Dip1		Dip2	
SW1-1	OFF	SW2-1	ON
SW1-2	OFF	SW2-2	OFF
SW1-3	OFF	SW2-3	OFF
SW1-4	ON	SW2-4	OFF
SW1-5	ON	SW2-5	OFF
SW1-6	OFF	SW2-6	OFF
SW1-7	ON	SW2-7	OFF
SW1-8	ON	SW2-8	OFF

**9.3 How to read data by an RFID controller**

Please refer to the followings for the data transfer format (header/terminator settings and others) that can be used in the GOT or the setting method to read data by an RFID controller.

- Data transfer format (header/terminator settings and others) that can be used in the GOT.
- Setting to connect an RFID controller to the GOT. ([Peripheral Setting] on GT Designer3(GOT2000))
- Setting to write the data, read by an RFID controller, to the PLC CPU. ([Detail Setting] in the [Bar Code] dialog box on GT Designer3(GOT2000))  
Refer to the following.  
→ GT Designer3 (GOT2000) Screen Design Manual (SH-081220ENG)
- Setting procedure from connecting an RFID controller to the GOT until reading IC tag data.  
Refer to the following.  
→ GOT2000 Series Connection Manual (Microcomputers, MODBUS/Fieldbus Products, Peripherals) For GT Works3 Version1 (SH-081200ENG)
- The send data and receive data for an RFID controller manufactured by MARS TOHKEN SOLUTION CO.LTD.
  - 1) ICU-60S  
Send data: Set the data except STX and ETX to LF.  
Receive data: The data except STX and ETX to LF are stored.
  - 2) ICU-215  
Send data: Set the data except STX and BCC to ETX.  
Receive data: The data except STX and BCC to ETX are stored.

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**9.4 RFID Controllers Available for the External Authentication**

The following RFID controllers are available for the external authentication.

Manufacturer	Model
LS Industrial Systems Co., Ltd.	LSRF-C
OMRON Corporation	V600/V620
PONGEE INDUSTRIES CO., LTD	PUA-310
	PUA-310V1-0/M0R2H05
	PUA-310V1-0/M0R2H05-CH
	PUA-310V1-0/M0R2D04
HID Global Corporation	Serial ProxPro Reader 5352A

**10. USB Mouse Function**

Item	Specification
USB mouse	Two-button USB mouse which is compliant with USB2.0 <sup>**1*2*3</sup>

- \*1 A wheeled mouse and a mouse with more than three buttons can be used as a two-button mouse.
- \*2 A particular USB mouse and others may not be available depending on the USB mouse type.  
Particular function examples:  
A composite device (a device with a USB hub function, a card reader, a numeric keypad, or others), a 4-button mouse, and a mouse whose functions are added by dedicated driver software
- \*3 The USB2.0 compliance includes forward compatibility with USB3.0 and others, as well as backward compatibility with USB1.1 and others.

**11. USB Keyboard Function**

**11.1 USB Keyboard**

Item	Specification
USB keyboard	Japanese 106 keyboard, English 101 keyboard, and forward-compatible keyboards (Japanese 109 keyboard and others), which are compliant with USB2.0 and OADG <sup>**1*2*3</sup>

- \*1 Only keys compatible with Japanese 106 keyboards and English 101 keyboards are available. (Keys other than on Japanese 106 keyboards or on an English 101 keyboards are invalid.)
- \*2 A keyboard with a particular function and others may not be available depending on the keyboard type.
- \*3 The USB2.0 compliance includes forward compatibility with USB3.0 and others, as well as backward compatibility with USB1.1 and others.

**11.2 USB Barcode Reader**

When connected by USB, the barcode reader can send key codes to input objects (such as text input or numerical input) by using the USB keyboard function. (The input value is processed as the ASCII code.) To use a USB barcode reader with GT SoftGOT2000, install GT SoftGOT2000 version 1.144A or later. For the compatible products, refer to the following.

- 3.1.3 USB connection
- 4.1.3 USB connection

**11.3 USB RFID Controller**

When connected by USB, the RFID controller can send key codes to input objects (such as text input or numerical input) by using the USB keyboard function. (The input value is processed as the ASCII code.) When connected by USB, the RFID controller cannot be used for the RFID function. To use the RFID function, use the device that can connect to the RS-232 or RS-422/485 interface.

○: Operation validated, ×: Operation not checked

Item	Manufacturer	Model	Operation validation
			GT27, GT25
USB RFID Controller	Topre Corporation	TRF-100U+	○

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**11.4 Other device**

When connected by USB, the following device can send key codes to input objects (such as text input or numerical input) by using the USB keyboard function.

○: Operation validated, ×: Operation not checked

Item	Manufacturer	Model	Option device	Connection cable	Operation validation
					GT27, GT25
Digital caliper	Mitutoyo Corporation	CD-15AX	IT-012U	959149 (1m)	○
			USB-ITN-C	-	×

**12. USB Hub**

To use a USB hub, connect the USB hub to the GOT, and then power on the GOT.

Item	Specification
USB hub	USB hub compliant with USB2.0 **2

- \*1 A particular hub and others may not be available depending on the USB hub type.  
Particular function examples:  
A hub with 5 or more ports, a hub with multiple hubs, and a composite device with functions other than a hub function
- \*2 The USB2.0 compliance includes forward compatibility with USB3.0 and others, as well as backward compatibility with USB1.1 and others.

**13. USB Cable**

⊙: Recommended product, ○: Operation validated, ×: Operation not checked

Item	Manufacturer	Model	Operation validation GOT2000	Remarks
USB cable	Mitsubishi Electric System & Service Co., Ltd.	GT09-C30USB-5P	⊙	· Cable length : 3m · USB-A ↔ USB Mini-B
	Mitsubishi Electric Corporation	MR-J3USBCBL3M	○	· Cable length : 3m · USB-A ↔ USB Mini-B

**14. Wireless LAN Access Point**

**Precautions**

The country in which the wireless LAN communication unit (GT25-WLAN) is usable varies depending on the hardware version of the unit.

The product with hardware version A can be used only in Japan.

The product with hardware version B or later can be used in Japan, the United States, the EU member states, Switzerland, Norway, Iceland, and Liechtenstein.

The product with hardware version D or later can be used in Japan, the United States, the EU member states, Switzerland, Norway, Iceland, Liechtenstein, China (excluding Hong Kong, Macao, and Taiwan), and South Korea.

When the wireless LAN communication unit (GT25-WLAN) operates in station mode, a wireless LAN access point is required separately.

Use a wireless LAN access point compliant with the following specifications.

Item	Specification
Wireless LAN access point	Wireless LAN access point compatible with IEEE802.11 b/g/n **2*3

- \*1 The following shows the supported security authentication method.  
64bit/128bit WEP, WPA-PSK (TKIP, AES), WPA2-PSK (TKIP, AES)
- \*2 IEEE802.11n only supports 2.4-GHz-bandwidth.  
To use IEEE802.11n communication, perform the security authentication by the WPA-PSK (AES) or WPA2-PSK (AES) method.  
When you select the WEP or TKIP method, IEEE802.11n communication cannot be used.
- \*3 According to the GT25-WLAN specifications, the maximum data rate is 72.2 Mbps.

**15. Printer**

The following printers can be used with the GOT2000 series.

GOT	Available printer	Available software	Reference
GT27, GT25	PictBridge compatible printer	GT Works3 version 1.105K or later	15.1
GT27, GT25, GT21	Serial printer	GT Works3 version 1.105K or later	15.2
GT27, GT25	Ethernet printer (ESC/P-R)	GT Works3 version 1.200J or later *1	15.3
GT27, GT25, GT21	Ethernet printer (PCL5)	GT Works3 version 1.215Z or later	

\*1 Install BootOS version AJ or later on the GOT.

**15.1 PictBridge compatible printer**

To connect a PictBridge compatible printer to the GOT, the GT15-PRN printer unit is required.

The GT15-PRN printer unit only supports the connection to PictBridge compatible printers.

Connect such a printer to the applicable USB interface of the printer unit. Serial printers are not supported.

(When using the connection cable GT09-C30USB-5P, connect its type A connector to the printer.)

To use a PictBridge compatible printer, write the package data to the GOT using the screen design software of **GT Works3 version 1.105K or later**.

**Precautions**

PictBridge compatible printers are available by mounting the GT15-PRN printer unit on the GOT. However, the paper size, printable area, error handling, and others differ according to the printer models. For the details, follow the printer manual.

(1) Paper size

Regardless of the paper size set on the GOT, an image on the GOT may be printed at the size set on the printer. When the paper size of the hard copy is specified other than the A4 size, an error may occur and the hard copy cannot be printed. Set the paper size to A4.

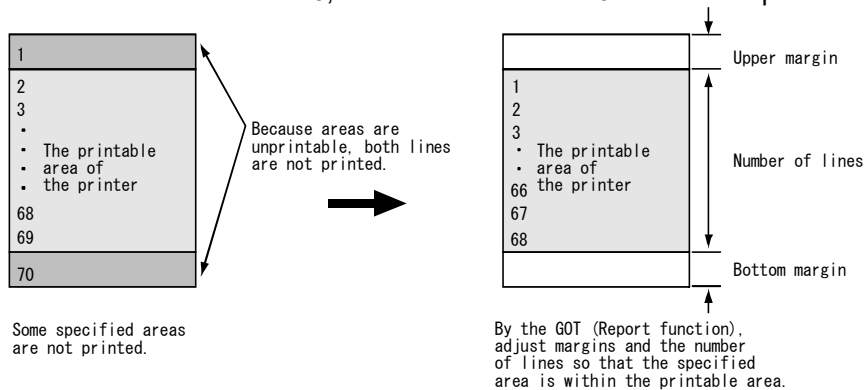
(2) Printable area

When using the report function of the GOT, the printable area varies according to the printer.

By the printer specifications, the trimming process is performed and some specified lines may not be printed. (The trimming process adjusts image dimensions to a full printable area specified for the paper size, and does not print the unprintable areas.)

When some areas are not printed, adjust margins and lines by using the report function of the GOT in accordance with the printer specifications. (Refer to the figure below.)

Example) When the number of lines is set to 70, and the first line and 70th line are unprintable



When some of lines are not printed for the report function of the GOT, configure the printer setting with no trimming. Doing so may print the lines correctly.



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(3) Paper jam

For the paper jam, remove the paper, and then execute the printing process again by using the GOT.

When the printing process does not start after the above actions, execute any of the following methods.

- Press the cancel button on the printer to stop the printing process, and then execute the printing process again by using the GOT.
- Disconnect and connect the cable of the printer, and then turn on the printer again. (The printing process starts again automatically.)
- Press the OK button on the printer to stop the printing process. Then execute the printing process again by using the GOT.
- Press the cancel button on the printer. (The printing process starts again automatically.)

(4) Others

For some printers, the print enable/disable status notification signal (GS258.b3) may turn on before the preparations for printing are not completed.

Check the preparations for printing and then execute the printing process.

**15.2 Serial printer**

You can use a serial printer by connecting the printer to the built-in RS-232 interface, or by mounting the GT15-RS2-9P on the GOT.

To use a serial printer, write the package data to the GOT using the screen design software of **GT Works3 version 1.105K or later**.

The GOT supports printer control code ESC/P24-J84.

⊙: Recommended product, ○: Operation validated

Manufacturer	Model	Operation validation GOT2000	Available hard copy size	Reference
NADA ELECTRONICS, LTD.	TP-642EG *1	○	QVGA, VGA *2	Refer to (1) below.
	TP-1728G *1	○	QVGA, VGA, SVGA, XGA	
SEIKO EPSON CORPORATION	VP-700U	○	QVGA, VGA, SVGA	Refer to (2) below.
	VP-D500	⊙	320x128dots *3, 384x128dots *4, 480x272dots *5, QVGA, VGA, WVGA, SVGA, WXGA, XGA	

\*1 TP-642EG and TP-1728G only support the hard copy function.

\*2 Since the printing width of the data is larger than the paper width, set the printer to "Do not print unprintable area." or "Reduce and print data."

\*3 Operation is confirmed with GT2103-P.

\*4 Operation is confirmed with GT2104-P.

\*5 Operation is confirmed with GT2104-R.

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(1) Cable connection diagram and precautions for a printer manufactured by NADA ELECTRONICS, LTD.

(a) Connection cable diagram

The following shows connection cables that must be produced by the user.

(Maximum cable length: confirm with a printer manufacturer.)

Printer		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
—	—		1	CD
RXD	2		2	RD(RXD)
TXD	3		3	SD(TXD)
—	—		4	DTR(ER)
GND	5		5	SG
—	—		6	DSR(DR)
RTS	7		7	RS(RTS)
CTS	8		8	CS(CTS)
—	—		9	NC

(b) Precautions

- Monochrome printing
- If printing is interrupted due to a turned-off printer, cable disconnection, and others, turn off and then on the printer power, and perform the printing again.
- For printing with the report function, one-byte characters are printed as two-byte characters.
- For printing with the report function, the left margin setting of the print format is disabled.
- Since the printing paper is roll paper, the page break function is disabled.

(2) Cable connection diagram and precautions for a printer manufactured by SEIKO EPSON CORPORATION

(a) Connection cable diagram

The following shows connection cables that must be produced by the user.

(Maximum cable length: confirm with a printer manufacturer.)

Printer		Cable connection and signal direction	GOT	
Signal name	Pin No.		Pin No.	Signal name
—	—		1	CD
TXD	2		2	RD(RXD)
RXD	3		3	SD(TXD)
—	—		4	DTR(ER)
SIGNAL GND	7		5	SG
—	—		6	DSR(DR)
—	—		7	RS(RTS)
DTR	20		8	CS(CTS)
—	—		9	NC

(b) Precautions

- Monochrome printing
- If printing is interrupted due to a turned-off printer, cable disconnection, and others, turn off and then on the printer power, and perform the printing again.
- For printing with the report function, the available left margin setting of the print format ranges from 0 to 67.

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**15.3 Ethernet printer**

Connect the printer to Ethernet through the built-in Ethernet interface, GT25-J71E71-100, or wireless LAN communication unit (GT25-WLAN).

The following Ethernet printers are supported.

- ESC/P-R
- PCL5

The following lists the models that have been validated by Mitsubishi Electric.

**15.3.1 ESC/P-R**

Manufacturer	Model
SEIKO EPSON CORPORATION *1	LX-10000F
	PX-M7070FX
	PX-M840FX
	PX-S860
	PX-M5041F
	PX-M7050FP
	PX-M7110F
	PX-M781F
	EW-M770T
	EW-M5071FT

\*1 Only the models that can print JPEG documents are supported.

**15.3.2 PCL5 \*1**

Manufacturer	Model
HP Inc.	HP OfficeJet Pro 8210
	HP LaserJet Pro Color CP5225dn
	HP LaserJet Enterprise M506dn *2
	HP LaserJet Pro M203dn

\*1 Only grayscale printing is supported.

\*2 When the report function is used on GT21 models, Japanese and Chinese characters are printable.

(1) Paper size

Specify the same size on the GOT as the sheet size in the printer.

For the paper size specified on the GOT, refer to the following.

- When using the report function, set it in the [Report Setting] dialog.
- When using a hard copy, set it in the [Hard Copy] dialog.

For the setting details, refer to the following manual.

→ GT Designer3 (GOT2000) Screen Design Manual (SH081220ENG)

When the specified print size and the sheet size in the printer are different, an error appears on the printer or printing cannot be performed correctly.

(2) Printable area

For the printable area, refer to the following.

→ PictBridge compatible printer (2) Printable area

(3) Troubleshooting

The latest error number occurred in the printer is notified by Ethernet Printer Error Info (GS259) of the GOT special registers.

The following shows the error details and corrective actions (troubleshooting) for each error number.

Error code *1	Error contents *2	Troubleshoot
1	Printer error	<p>Check that there is no jammed paper in the printer. Then turn the power off and on again.</p> <p>For details, see the message on the printer's LCD screen or your documentation.</p>

Error code *1	Error contents *2	Troubleshoot
2	Fatal error	Check that there is no jammed paper in the printer. Then turn the power off and on again. For details, see the message on the printer's LCD screen or your documentation.
3	Interface not selected	Please wait.
4	Cover open	Close the printer cover.
5	Paper jam	Remove any remaining jammed paper by hand.
6	No ink	Epson recommends the use of genuine Epson ink/toner cartridges.
7	No paper	Reload the paper correctly and press the paper button (or maintenance button) on the printer.
8	<ul style="list-style-type: none"> <li>• Paper size or paper type or paper path error</li> <li>• At the time of duplex printing, the specified paper size is different from the paper size actually prepared for the paper feeding device</li> </ul> When printing is continued with this error, the print data of the next page is discarded regarded as the back side on the printer side	Change the settings to match them and start printing.
9	Waste ink overflow	Contact a distributor or repair service center of the printer manufacturer.
10	Paper double feeding error	A page has not been printed, multiple pages have been fed into the printer at once, or the wrong paper size has been fed into the printer. Remove and reload the paper. Press the Start button if necessary.
11	Ink cover open error	If you are replacing ink cartridge, close the ink cover when you have finished replacement.
12	No paper tray error	Install the cassette tray, then press the Start button on the printer.
14	Cartridge built-in waste liquid tank overflow	The printer's ink pads are at the end of their service life. Please contact Epson support.
15	Battery error (voltage abnormality)	See documentation for details.
16	Battery error (temperature abnormality)	Turn off the printer immediately and contact your dealer.
17	Battery empty	Charge the battery.
18	Photopack warranty number reached	Epson recommends the use of genuine Epson ink cartridges.
19	Initial filling failure error	Epson recommends the use of genuine Epson ink cartridges.
20	PhotPack Ink consumption 100%	Epson recommends the use of genuine Epson ink cartridges.
21	Scanner open error	Close the scanner unit.
22	CDR guide open error	Close the CD/DVD guide.
25	In the manual feed tray printing, the tray is closed	Load the single paper in the rear manual feed. See the documentation for details.
28	Manual preparation ready	See the LCD screen on the product and follow the instructions.
29	Manual preparation ready	<ol style="list-style-type: none"> <li>1. Open the paper support. Load a single sheet of paper, printable side up, short edge first. Adjust the edge guides.</li> <li>2. Insert the paper until the leading edge is approximately 5 cm (2 inch) from the notches on the edge guides.</li> <li>3. Press Load button on the printer.</li> </ol>
30	Manual feed error	See the LCD screen on the product and follow the instructions.

Error code *1	Error contents *2	Troubleshoot
31	Manual feed error	<ol style="list-style-type: none"> <li>1. Remove the ejected paper.</li> <li>2. Load a single sheet of paper, printable side up, short edge first. Adjust the edge guides.</li> <li>3. Insert the paper until the leading edge is approximately 5 cm (2 inch) from the notches on the edge guides.</li> <li>4. Press Load button on the printer.</li> </ol>
32	Manual feed too much error	See the LCD screen on the product and follow the instructions.
33	Manual feed too much error	<ol style="list-style-type: none"> <li>1. Load a single sheet of paper, printable side up, short edge first. Adjust the edge guides.</li> <li>2. Insert the paper until the leading edge is approximately 5 cm (2 inch) from the notches on the edge guides.</li> <li>3. Press Load button on the printer.</li> </ol>
36	Ink remaining amount warning	See the LCD screen on the product and follow the instructions.
37	Lack of remaining roll paper	See the LCD screen on the product and follow the instructions.
38	Battery low	Connect the AC adapter.
39	Battery low level	See documentation for details.
40	Charging	Please wait. Connect the AC adapter to continue.
41	Battery abnormally hot	<p>Functions are limited because the battery is too hot.</p> <p>Connect the AC adapter.</p>
42	Battery abnormally low temperature	<p>Cannot use the printer because the battery is too cold.</p> <p>Connect the AC adapter.</p>
47	Maintenance box replacement required	Replace the maintenance box.
48	Maintenance box not installed	Install the maintenance box correctly.
100	<ul style="list-style-type: none"> <li>• Printing is in progress from another interface or memory card</li> <li>• When the printer continues printing operation even after printing is interrupted / terminated</li> </ul>	Please wait.
101	When the ink cartridge is not set in the factory shipment state	Epson recommends the use of genuine Epson ink cartridges.
102	Communication with printer failed	Check the printer cable connection and make sure the printer is on. If you are using a battery, it may be empty. Connect the AC adapter to the printer and plug it in. If the power was turned off during printing, cancel the print job. If the error does not clear, see your printer documentation.
103	Ink cartridge is not set	Epson recommends the use of genuine Epson ink cartridges.
104	The ink cartridge can not be recognized	Epson recommends the use of genuine Epson ink cartridges.
106	CDR Guide Close Error	Load the CD/DVD tray into the front tray, then resume printing.
200	Common error	See the LCD screen on the product and follow the instructions.
1015	Unsupported Printer	Please check the model of the connected printer.
1016	Paper size / color mode not supported	Check the paper size and the number of colors (color / monochrome) settings.
1100	Communication error during printer search	<p>Check the IP address of the printer.</p> <p>Check the connection path with the printer.</p>

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Error code *1	Error contents *2	Troubleshoot
1300	Printer not found	Check the IP address of the printer. Check the connection path with the printer.
1306	Unsupported Printer	Please check the model of the connected printer.
1407	Unsupported Printer	Please check the model of the connected printer.

\*1 When connected to a printer (PCL5), only error code 1300 appears on the GOT.

If an error occurs, check the error notification on the printer.

\*2 For the details of errors, refer to the manual of the printer used.

## 16. Media converter

(Compatible Product)

Manufacturer	Model
Mitsubishi Electric System & Service Co., Ltd.	DMC-1000TS-DC

**REVISIONS**

Version	Print Date	Revision
-	September 2013	- First edition (Japanese only) (Print date indicates the date that the Japanese version was issued.)
A	January 2014	- Models have been added to "3. Barcode Reader". - "13. Wireless LAN Access Point" has been added. - "14. Printer" has been added.
B	December 2014	- Models have been added to "4. 2D Code Reader".
C	February 2015	- Models have been added to "3. Barcode Reader". - Models have been added to "9. RFID Controller". - Models have been added to "11. USB Keyboard Function".
D	July 2015	- Precautions have been added to "3. Barcode Reader" and "4. 2D Code Reader".
E	-	-
F	November 2015	- A model has been added to "11.2 USB Barcode Reader". - Validated models applicable to GT SoftGOT2000 have been added to "11.2 USB Barcode Reader". - Descriptions in "13. Wireless LAN Access Point" have been revised.
G	May 2016	- A model has been added to "9. RFID Controller". - A model has been added to "11.2 USB Barcode Reader".
H	-	-
I	June 2016	- "13. USB Cable" has been added.
J	February 2017	- A model has been added to "4. 2D Code Reader". - A model has been added to "11.2 USB Barcode Reader".
K	May 2017	- A model has been added to "3. Barcode Reader". - A model has been added to "4. 2D Code Reader". - The specifications described in "8. Speaker" have been changed. - A model has been added to "8. Speaker". - Descriptions in "11.2 USB Barcode Reader" have been revised.
L	January 2018	- A model has been added to "4. 2D Code Reader". - A model has been added to "9. RFID Controller".
M	May 2018	- A model and Precautions have been added to "4. 2D Code Reader".
N	August 2018	- A model and Precautions have been added to "4. 2D Code Reader". - A model has been added to "9. RFID Controller". - A model has been added to "15.2 Serial printer". - "15.3 Ethernet printer" has been added.
O	November 2018	- A model has been added to "9. RFID Controller".
P	February 2019	- A model has been added to "3. Barcode Reader" and "4. 2D Code Reader". - A model has been added to "5. Hubs for Ethernet Connection and Gateway Function". - "16 Media converter" has been added.
Q	April 2019	- Models have been added to "3. Barcode Reader" and "15.3 Ethernet printer".

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