

Instruction Manual **USB COMMUNICATION CABLE CMC-001**

No. CMCJE5 2024.09

This manual contains instructions for functions and usage of the USB communication cable (CMC-001). To ensure safe and correct use, thoroughly read and understand this manual before using this cable. To prevent accidents arising from the misuse of this cable, please ensure the operator receives this manual.

Safety Precautions (Be sure to read these precautions before using this cable.)

Caution Indicates procedures which may lead to dangerous conditions and cause superficial to medium injury or physical damage or may degrade or damage the product, if not carried out properly.

- Safety Precautions**
- Do not confuse the direction of the USB plug when connecting this cable to the USB port. If the plug cannot be inserted smoothly, do not force it to enter. This may damage the plug or port.
 - Do not bend or pull forcibly or put any heavy object on the cable.
 - Do not connect or remove this cable during communication. This may cause damage or malfunction.
 - Do not allow the metallic section of this cable to come into contact with external power terminals.
 - Do not handle the cable plug with wet hands. This may result in electric shock.

Precautions

- Caution**
- Ensure the cable is used under the following conditions:
 - A minimum of dust, and an absence of corrosive gases
 - No flammable, explosive gases
 - No mechanical vibrations or shocks
 - No exposure to direct sunlight, an ambient temperature of 0 to 50°C (32 to 122°F) that does not change rapidly, and no icing
 - An ambient non-condensing humidity of 35 to 85%RH
 - No large capacity electromagnetic switches or cables through which large current is flowing
 - No water, oil, chemicals or where the vapors of these substances can come into direct contact with the cable
 - Ambient temperature of this cable must not exceed 50°C (122°F) if mounted within the control panel.
 - It sometimes takes time for the PC to identify the cable when the USB plug of this cable is connected to the PC. However, this is not a malfunction. Be sure to confirm the COM port number before starting communication.
 - Do not extend this cable using an extension cable when connecting to the PC. A malfunction may occur.
 - Use a soft, dry cloth when cleaning this cable. (Alcohol based substances may deface or tarnish the cable.)

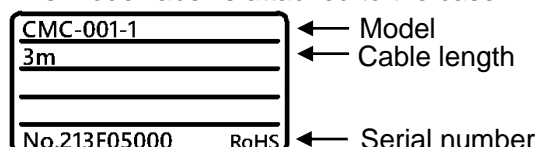
1. Model

1.1 Model

CMC-001	-□	
Controller side connector	1	Y-type terminal
	2	Ferrules
	3	Modular connector RJ-11
	4	Modular connector RJ-45

1.2 How to Read the Model Label

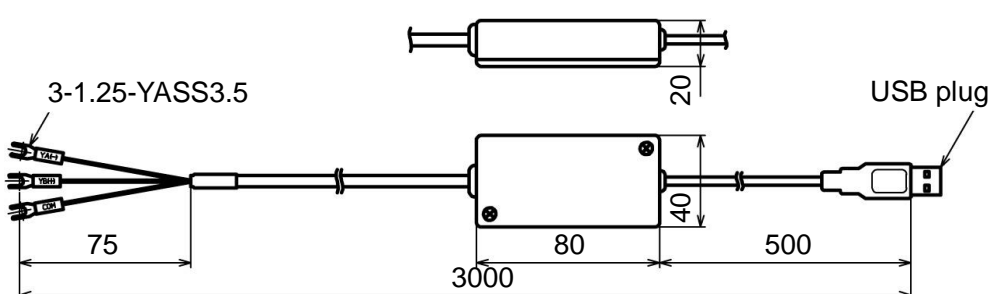
The model label is attached to the case.



(Fig. 1.2-1)

2. Plug Types and Dimensions (Scale: mm)

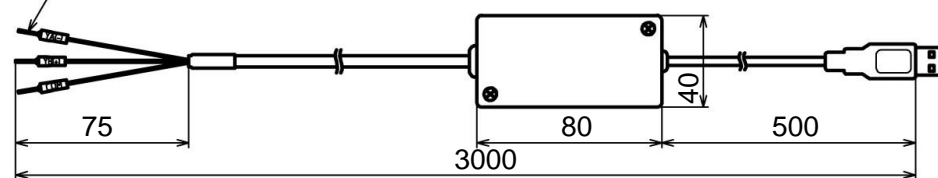
CMC-001-1



(Fig. 2-1)

CMC-001-2

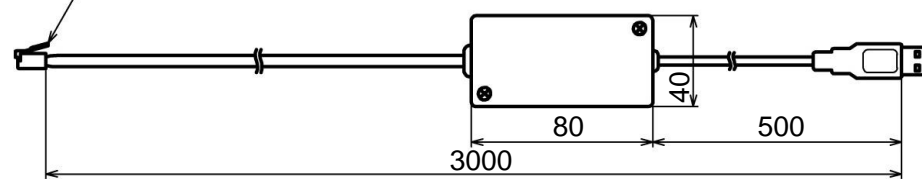
3-A10.25-8YE



(Fig. 2-2)

CMC-001-3

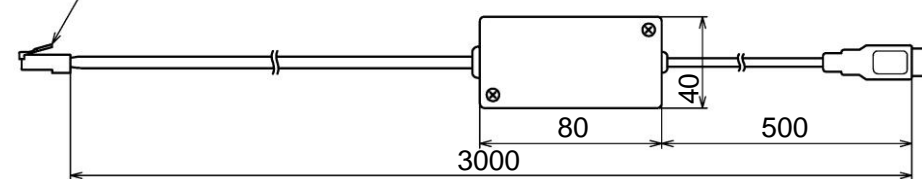
Modular connector TM20P-66P



(Fig. 2-3)

CMC-001-4

Modular connector RJ-45



(Fig. 2-4)

3. Pin Arrangement

CMC-001-3



Pin No.	
1	COM
2	-
3	YB(+)
4	YA(-)
5	-
6	COM

CMC-001-4



Pin No.	
1	-
2	COM
3	-
4	YA(-)
5	YB(+)
6	-
7	COM
8	-

4. Usage

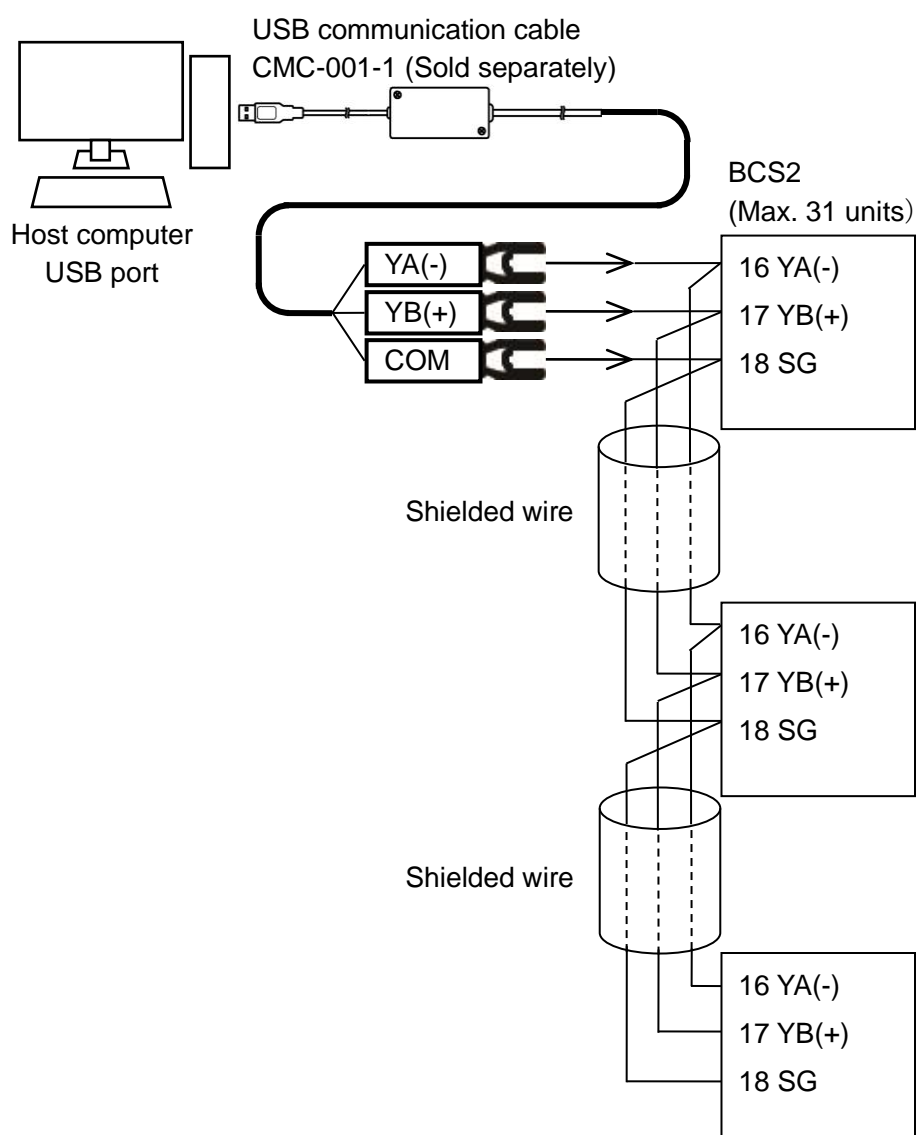
(1) Turn the power supply to the PC ON, and start Windows.

(2) Connect the cable.

Check that the power supply to the instrument is turned OFF.

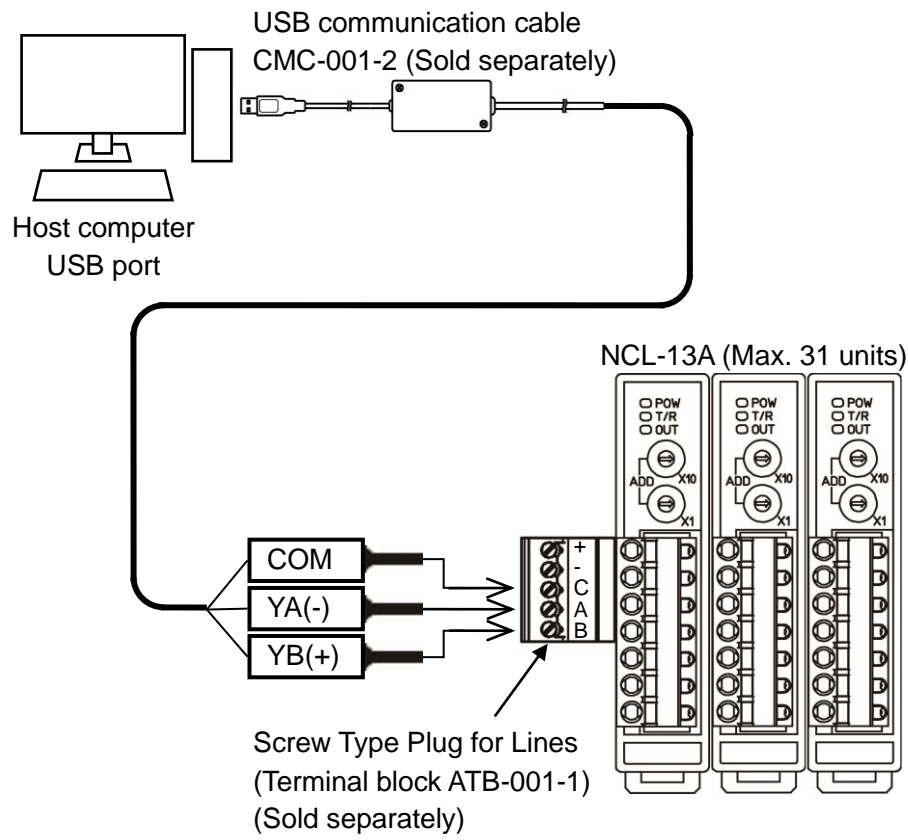
Connect the USB port of the PC to the instrument, using this cable.

Connection example of CMC-001-1



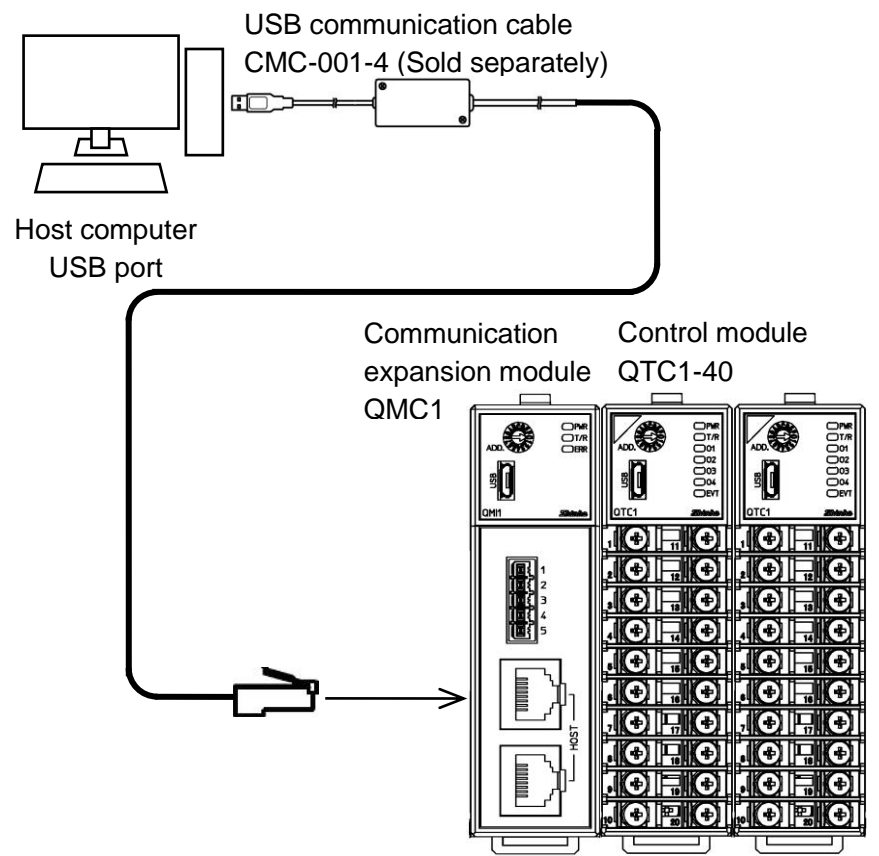
(Fig. 3-1)

Connection example of CMC-001-2



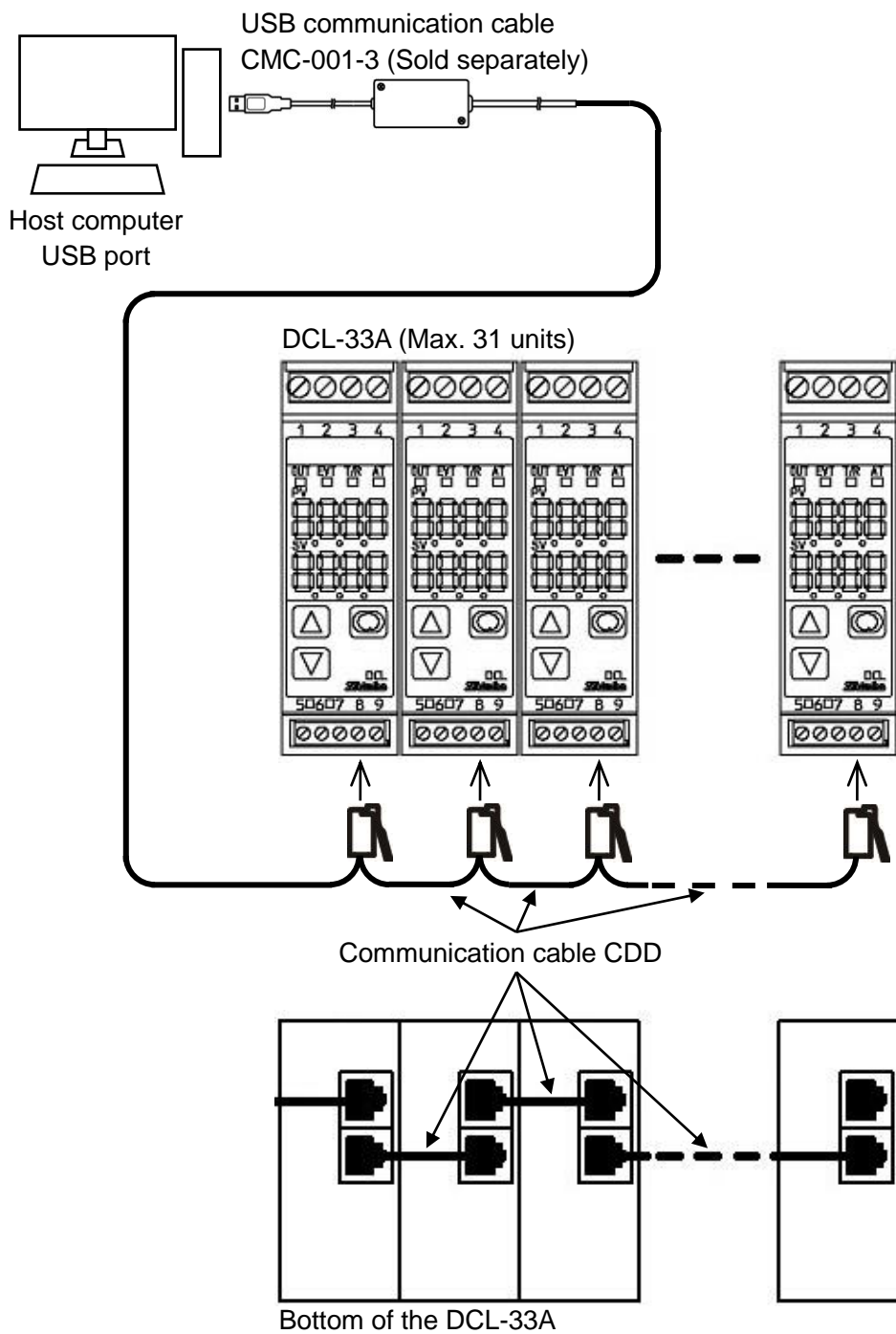
(Fig. 4-2)

Connection example of CMC-001-4



(Fig. 4-4)

Connection example of CMC-001-3



(Fig. 4-3)

(3) Confirm the COM port number.

- ① Right-click "Start" - Click "Device Manager" from menu.
- ② Click [Ports (COM & LPT)].
If [USB Serial Port (COM3)] appears, COM port has been allotted No.3.



(Fig. 4-5)

- ③ Close the [Device Manager] displays.

(4) Turn the power supply to the instrument ON.

(5) Confirm communication between PC and the instrument.

Simplified versions of communication software and various monitoring software are available. Monitoring software can be downloaded from our website. (<https://shinko-technos.co.jp/e/>)
Select the COM port number confirmed at step (3), and start communication.

5. Specifications

Rating

USB I/F standard	Corresponds to USB Specification 2.0.
DTE (PC side) speed	9600 bps [For instruments with Serial communication (C5 option), 9600/19200/38400 bps, Selectable]
Connector spec	PC side: USB plug (Type A) Instrument side: RS-485 (Y-type terminal, Ferrules, Modular connector)

Operating Environment

Operating system	Windows 10/11 (Japanese/English)
Personal computer	OS certified PC (Intel Core processor or compatible microprocessor), USB port
USB driver	USB driver suitable for PC [download from our website (https://shinko-technos.co.jp/download/d_software_download.html)]

General Structure

Case (Material, Color)	ABS, Black
Cable (Length, Color)	3 m (can be extended by 1 m fixed length units), Black

Other

Power source	Bus power (Supplied from PC via USB.)
Supply voltage	5 V DC
Current consumption	150 mA Max.
Ambient temperature	0 to 50°C (32 to 122°F) (No icing)
Ambient humidity	35 to 85 %RH (Non-condensing)
Weight	Approx. 130 g
Environmental spec	Conforms to RoHS directive.
Accessories	Instruction manual: 1 copy

SHINKO TECHNOS CO., LTD. OVERSEAS DIVISION

Head Office: 2-5-1, Senbahigashi, Minoo, Osaka, 562-0035, Japan
 URL: <https://shinko-technos.co.jp/e/> TEL: +81-72-727-6100
 E-mail: overseas@shinko-technos.co.jp FAX: +81-72-727-7006