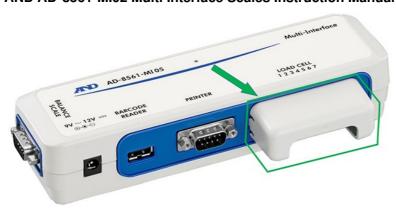


# **AND AD-8561-MI02 Multi Interface Scales Instruction Manual**

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## AND AD-8561-MI02 Multi Interface Scales Instruction Manual



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## **Safety Precautions**

To prevent accidents due to inappropriate handling, this manual contains the following warning signs and marks. The meanings of these warning signs and marks are as follows.

## Warning

A po tentially hazardous situation that could result in death or serious injury, if not avoided.

## Caution

A potentially hazardous situation which, if not avoided, may result in personal injury or property damage.

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#### Caution

- Do not disassemble the interface. It may cause damage or malfunction, which is not included in the warranty.
- · Immediately stop using the interface if an abnormality occurs

## Introduction

This manual describes how to handle the Multi-Interface AD8561. Read the instruction manual thoroughly before use. For the information on the AD-8561 and its related products, please refer to the A&D website ( <a href="https://www.aandd.co.jp/">https://www.aandd.co.jp/</a>).

## About the AD-8561

#### **Features**

The following operations are enabled when the AD8561 is connected to the RS-232C output on the GC-series (hereinafter called 'counting scale').

- Transmitting and receiving data from D-sub 9 pin (between the counting scale and a connected device such as a printer)
  - Transmitting and receiving data from USB micro B: AD-8561-MI02 only (between the counting scale and a connected device such as PC)
- Comparator output: AD-8561-MI04 only (from the counting scale to a connected device such as a comparator lamp)
- Sending texts to the counting scale from USB Type-A with a barcode reader or keyboard (from a barcode reader/keyboard to the counting scale)

Each color of the LED lights shown below indicates different status.

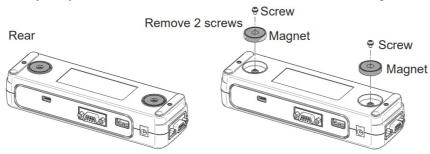
LED color	AD-8561 status		
Blue	Activating	Communication available	
White	A barcode reader or keyboard is connected (HID setting: key mode)	Communication available	
Yellow	A barcode reader or keyboard is connected(HID setting: command mode)	Communicationavailable	
Yellow (blinking)	An input that exceeds 64 digits is received from a keyboard(Command mode/Refer to '5-2. USBConnector')	Restart the device.	
Red (blinking)	Not-supported devices connected to USB Type-A	Immediately remove the USB drive	
Red	Error	Restart the device.	

(For how to restart the device, refer to '4-1. Connection to Power Supply')

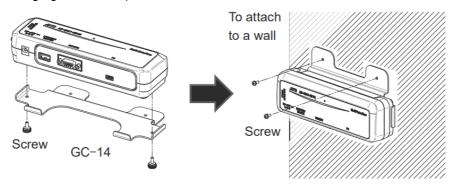
#### **Precautions for Use%**

• The power for the AD-8561 can be supplied from the counting scale with an accessory cable. When another cable is used, an AC adapter for power supply may be required. (Refer to '4-1. Connection to Power Supply')

- Make sure to check the rating of the AC adapter before attaching it.
  Inappropriate power supply may cause malfunction or damage to the internal circuitry.
- Magnets are used for simple fixation. \*When there is any magnetically sensitive device such as a balance nearby, they can affect the device. In this case, remove the magnets from the AD-8561

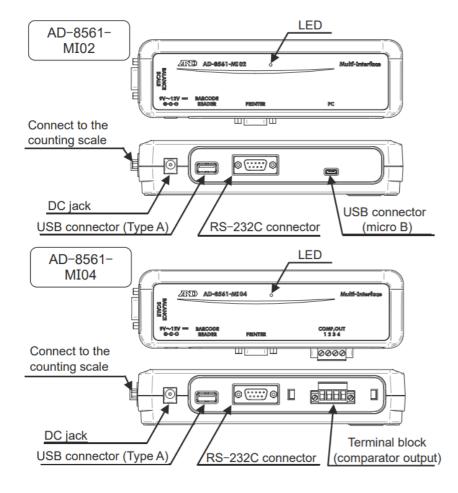


• Magnets are not strong enough to secure the interface to a wall. To attach to a wall, first attach the AD-8561 to a GC-14, an option for the counting scale, with screws, and then attach the GC14 to a wall (with screws or by hanging it on a wall). For the details, refer to the instruction manual for the GC-14.



## **Part Names and Accessories**

**Main Unit** 



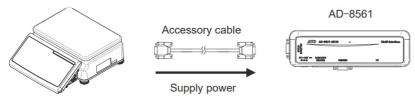
#### **Accessories**

- Instruction manual (This manual)
- Cable (1m, D-sub 9 pin, female-female, for connecting to the counting scale

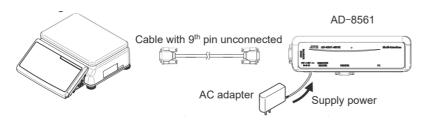
## **Connection to Other Devices**

## **Connection to Power Supply**

 Supply power from the counting scale by connecting an accessory cable to the connector on AD-8561 (use a D-sub 9 pin).

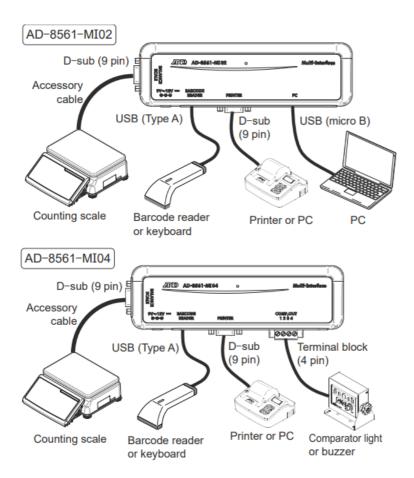


- When the accessory cable is not used, an AC adapter should be used to supply power from the DC jack.
  - When using a commercially available cable to which the 9th pin of the connector is not connected
  - When communicating between the counting scale and AD-8561 at a distance longer than 1m \*A cable longer than 1m, which is optionally available, is not connected to the 9th pin of the connector and therefore requires power supply from an AC adapter. (Refer to (3) in '8-3. Optional Devices')



- Make sure to check the specifications when using an AC adapter. An AC adapter with a center negative plug that outputs DC 9 to 12V is usable.
- The main unit is activated when it is connected to the counting scale or when an AC adapter is inserted into the DC jack. Once it is activated, a blue LED light is turned on.
- To restart the interface, remove the cable or AC adapter and confirm that the LED light is turned off. Then, reconnect it to turn the power on.

#### **Connected Devices**



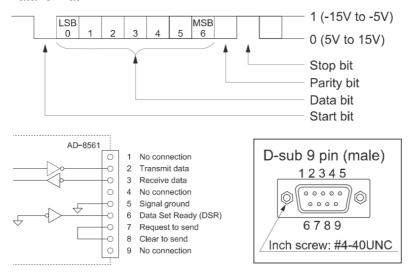
## **Communication Specifications**

## RS-232C Connector (D-sub 9 pin): PRINTER



- Communication between the counting scale and a printer (or PC) is operable with an RS-232C interface.
  - Transmission system: EIA RS-232C
  - Transmission form: Asynchronous, bidirectional, half-duplex

#### · Data format:

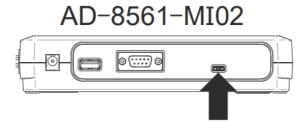


#### **USB Connector (Type A): BARCODE READER**



- Attach a barcode reader or keyboard to send entered text to the counting scale.
  - Transmission system: USB 2.0
  - Connector : Type ADevice class : HID
- Once the device is connected, the color of the LED light changes from blue to white or yellow.
- The color does not change if the AD8561 cannot recognize the connected device. In this case, restart the AD-8561 and reconnect the device.
- Red LED light blinks when a device of not supported device class is connected. Note that data may be broken if a USB memory is mistakenly attached

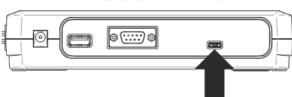
## USB Connector (micro B): PC (\* AD-8561-MI02 only)



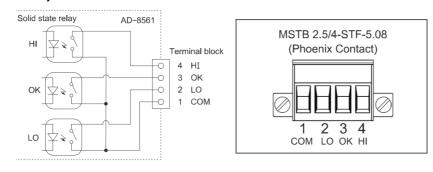
- Supported OS is Windows 7 or later. For the older OS than Windows 10, a USB driver needs to be installed.
- Install a communication tool such as the WinCT in a PC to connect. (Refer to '8-2. Related Software')

Comparator (Terminal Block): COMPARATOR ( AD-8561-MI04 only)

# AD-8561-MI02



- Relay outputs the comparator result of the counting scale.
  Maximum rating of the relay output Maximum voltage: 50V DC Maximum current: 100mA DC Maximum on-resistance: 8 ö
- The upper/lower limit values cannot be set with the AD8561. They should be set with the counting scale.
- Set the function F-06-10 for the counting scale to '1.'
- Pin layout



## Connector for the Counting Scale (D-sub 9 pin): BALANCE / SCALE



- · Performs communication with the counting scale via RS232C interface
  - Transmission system and transmission form are same as those mentioned in '5-1. RS-232C Connector (D-sub 9 pin): PRINTER.'
  - · Data format:
- · Pin layout
- Use the accessory cable (D-sub 9 pin, 1m) to connect it to the counting scale.
- Supply power to AD-8561 from the 9th pin of this connector. (Refer to '4-1. Connection to Power Supply')
- When operating the function setting for AD-8561 with this connector, supply power with an AC adapter by connecting to a PC instead of the counting scale with a crossover cable.

## **Functions**

#### **Function list**

Applicable connectors	Setting details		Commands
	Baud rate	2400 bps ◆	@MI024
		4800 bps	@MI048
		9600 bps	@MI096
		14400 bps	@MI144
[PRINTER]RS–232C connecto		19200 bps	@MI192
r (D-sub 9 pin)		28800 bps	@MI288
		38400 bps	@MI384
	Datalength par ity	7 bit, EVEN ◆	@MI7EV
		7 bit, ODD	@MI7OD
		8 bit, no parity	@MI8NO
[BARCODE READER]USB co	HID mode	Key mode ◆ (when searching and registeringID/items with the counting sc ale)	@МІСКМ
Timector (Type A)		Command mode(when sending comma nds to the counting scale)	@МІССМ

## Troubleshooting

Phenomenon	Possible cause	Action to take
LED does not light blue wh en power is supplied.	Poor connection of pow er source	Turn on the power to the counting scale. If the problem persists, switch to an AC adapter forpower supply.
cii powei is supplied.		Check the output rating of AC adapter.
Red LED lights	Internal circuitry error	Restart the device.
LED does not lightwhite or yellow.	Connection error	Check the specifications of the USB device.
When a barcode reader is connected, the device does not work.	Insufficient power suppl y	Switch to AC adapter for power supply.
	Connection Error	Check the wiring of connector.
Communication fails.	Communicationsettings	Reconfirm communication settings are differentfor each channel.
The comparator cannot be	Connection error	Check the wiring.
input.		The counting scale is not set to comparator output.

### **Related Software**

The following software can be downloaded from the A&D website ( <a href="https://www.aandd.co.jp/">https://www.aandd.co.jp/</a>)

- 1. WinCT (data processing software for balances and scales) Support > Software > WinCT.
- 2. USB driver for AD-8561-MI02 USB Function From the products page on the A&D website.

## **Optional Devices**

- 1. AC adapter Check for the latest adapter in the products page on the A&D website.
- 2. D-sub 9 pin cable for connecting the counting scale

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## **Documents / Resources**



AND AD-8561-MI02 Multi Interface Scales [pdf] Instruction Manual AD-8561-MI02 Multi Interface Scales, AD-8561-MI02, Multi Interface Scales, Interface Scales, S cales

## References

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Manuals+,