

SCE-02 USB Interface Instruction Manual

1. Features

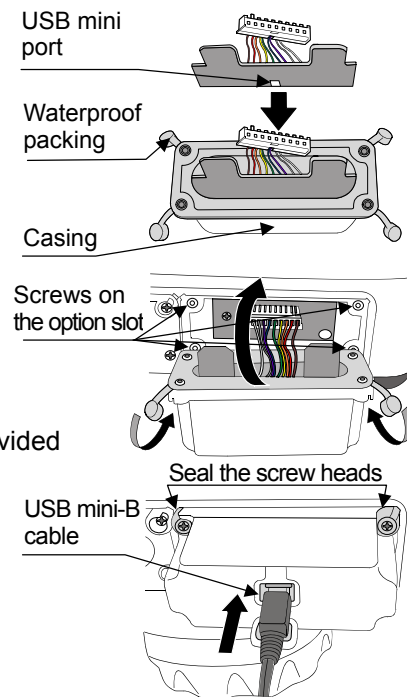
- Connects a scale to a personal computer and used to transmit the scale weight data to the personal computer via USB. Applicable OS is Windows 98SE or later.
- As a standard Windows driver is used, complicated installation of a dedicated driver is not necessary. Once a connection between the scale and the personal computer is made, the weight data can be transmitted.
- Transmits the scale weight data to any application such as Excel, Word or memo pad for Windows.

- Notes:**
- **Only the weight data can be transmitted. Headers and units can not be transmitted.**
 - **Data transmission from the personal computer to the scale is not available. If it is necessary to control the scale by a command, connect the scale and the personal computer using the SCE-03 RS-232C serial interface.**
 - **SCE-02 and SCE-03 can not be installed at the same time.**
 - **Turn off the screen saver or suspend mode of the personal computer.**
 - **Windows, Word and Excel are the registered trademarks of the Microsoft Corporation.**

2. Installation Procedure

Note: Before installing the SCE-02 board, be sure to remove the batteries from the scale.

- Step 1 Hold the board in such a way that its USB mini port will match the hole on the casing. Insert the board into the casing by sliding it into the casing groove.
- Step 2 Place the waterproof packing on the casing, aligning its holes with the casing screw holes.
- Step 3 Remove the four screws on the option slot panel located on the bottom of the display.
- Step 4 Insert the board into the option slot.
- Step 5 Secure the casing to the display, using the four screws provided with the casing.
- Step 6 Seal the screw heads with the tabs attached to the waterproof packing.
- Step 7 Insert the USB mini-B cable (sold separately), into the port at the rear of the casing.



3. How to use

- Step 1 Turn the personal computer on to start up Windows. And then, insert the batteries into the scale and turn the scale power on.
 - Step 2 Connect the scale to the personal computer, using the USB cable.
- Note:** When connecting the USB cable, be sure that the scale data output mode is set to a mode other than stream mode.
- Step 3 For the first installation, the driver will be installed. For details, refer to "4. Installation of the Standard Windows Driver". For the second installation or after, this step is not required.
 - Step 4 Start up the application (such as Excel) into which the scale weight data is transmitted. Place the cursor in the position to enter the scale weight data.
 - Step 5 Press the scale **PRINT** key. The weight data is input at the cursor position.
 - Step 6 To finish the operation, disconnect the USB cable.

4. Installation of the Standard Windows Driver

- Windows 2000 / Me / XP
Once connected, an automatic driver installation will start. Wait for the installation to complete.

- Windows 98
Step 1 The "Add New Hardware Wizard" window appears. Click on "Next".



- Step 2 Check "Search for the best driver for your device (Recommended)." and click on "Next".



- Step 3 Uncheck all the items and click on "Next".



- Step 4 Make sure that "USB Human Interface Device" is displayed and click on "Next".



- Step 5 Driver installation has started. When completed, the window shown to the right appears. Click on "Finish".



- Note:** During installation, a message requesting to insert the Windows 98 CD-ROM may appear. In this case, insert the Windows 98 CD-ROM and click on "OK".

A&D Company, Limited

3-23-14 Higashi-Ikebukuro, Toshima-ku, Tokyo 170-0013 JAPAN
Telephone: [81] (3) 5391-6132 Fax: [81] (3) 5391-6148

SCE-03 RS-232C Serial Interface and Comparator Relay Output Instruction Manual.

1WMPD4002182

1. Features

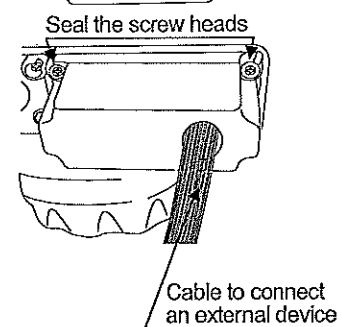
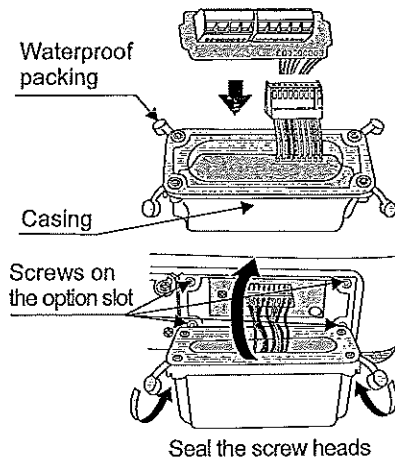
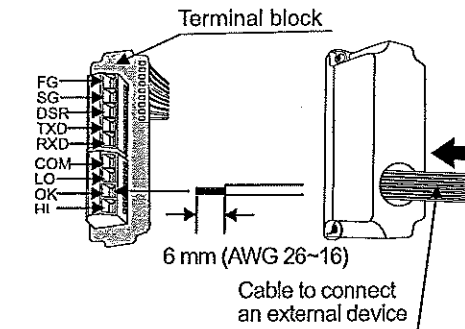
- This interface allows the scale to be connected to a printer or a personal computer.
- It also allows outputting the comparison results of **HI**, **OK** or **LO** obtained using the comparator function as a relay signal.

Note: SCE-02 and SCE-03 can not be installed at the same time.

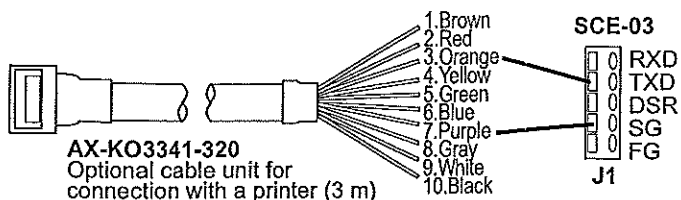
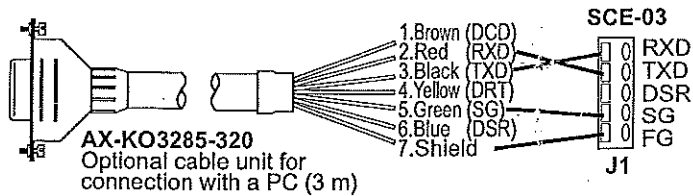
2. Installation Procedure

Note: Before installing the SCE-03 board, be sure to remove the batteries from the scale.

- Step 1 Pass the cable to connect an external device through the hole on the casing and connect it to the terminal block on the interface board.
- Step 2 Insert the interface board into the casing.
- Step 3 Place the waterproof packing on the casing, aligning its holes with the casing screw holes.
- Step 4 Remove the four screws on the option slot panel located on the bottom of the display.
- Step 5 Insert the interface board into the option slot.
- Step 6 Secure the casing to the display, using the four screws provided with the casing.
- Step 7 Seal the screw heads with the tabs attached to the waterproof packing.



• Cable connection using optional cables (sold separately)



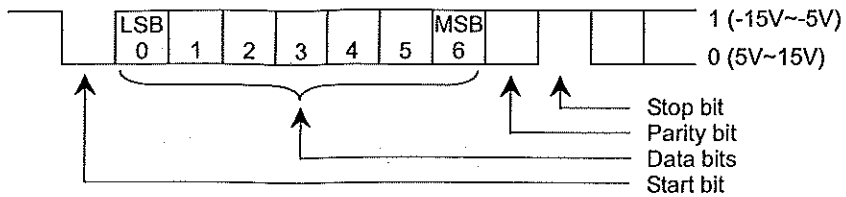
3. SCE-03 RS-232C Serial Interface

- The RS-232C serial interface has four output modes; Stream mode, Command mode, Print switch mode and Auto-print mode.
For details, refer to "3.3. Data output mode".
- Set the parameters of the functions "bPS", "PrL" and "RCL" as necessary.

3.1. Interface specifications

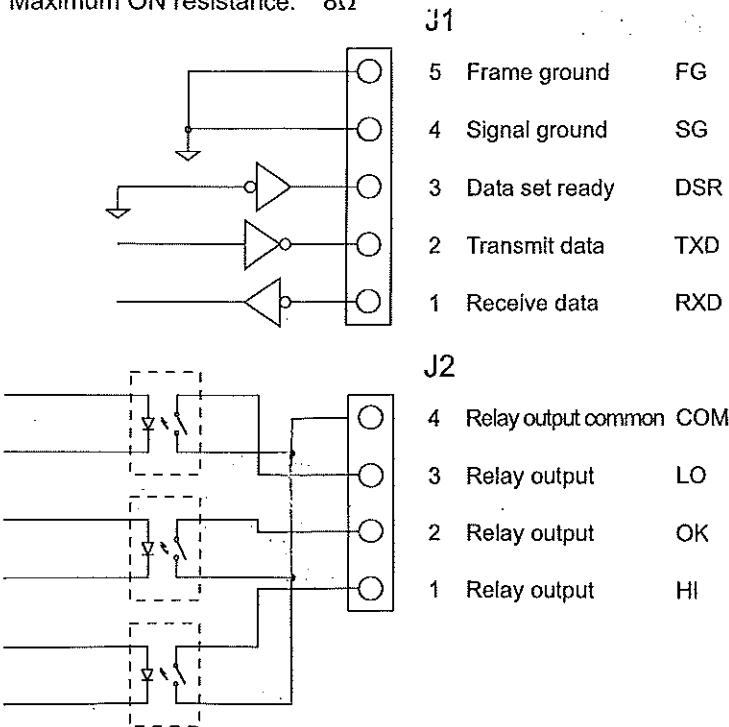
- Data format

Baud rate:	2400, 4800, 9600 bps
Data bits:	7 bits + parity 1 bit (even)
Start bit:	1 bit
Stop bit:	1 bit
Code:	ASCII
Terminator:	C _R L _F (C _R : 0Dh, L _F : 0Ah)



- Relay output maximum rating

Maximum voltage:	50V DC
Maximum current:	100mA DC
Maximum ON resistance:	8Ω



3.4. Command mode

In the command mode, the scale is controlled by commands that come from the external device such as a personal computer.

Command list

- "Q" command Command to request the current weight value.

Command

Q	C _R	L _F
---	----------------	----------------

Reply

S	T	,	+	0	0	1	2	3	.	4	5	_	k	g	C _R	L _F
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----------------	----------------

- "Z" command Same operation as the

ZERO

 switch.

Command

Z	C _R	L _F
---	----------------	----------------

- "T" command Same operation as the

TARE

 switch.

Command

T	C _R	L _F
---	----------------	----------------

Reply to the command

- When the command cannot be executed, for example, because the scale is unstable, "I" will be sent.

Reply

I	C _R	L _F
---	----------------	----------------

- If the received command is not for the SC/SE series scale, the scale will send "?".

Reply

?	C _R	L _F
---	----------------	----------------

- When "ACE 0" is selected, there is no reply except the "Q" command.

A&D Company, Limited

3-23-14 Higashi-Ikebukuro, Toshima-ku, Tokyo 170-0013 JAPAN
Telephone: [81] (3) 5391-6132 Fax: [81] (3) 5391-6148