

AD-8920 REMOTE DISPLAY INSTRUCTION MANUAL

(日本語の取扱説明書は反対面をご覧ください。)

1. Introduction

The AD-8920 is a remote display that uses vacuum fluorescent display technology. It displays the weighing data transmitted by an A&D manufactured weighing instrument using RS-232C or current loop. Applicable weighing instruments (electronic balances/platform scales) are listed below. When the output connector of the weighing instrument is of the DIN type, an optional DIN conversion cable is required.

■ What the package contains

- AD-8920 main unit
- Communication cable (Approx. 1 m)
- AC adapter



Please confirm that the AC adapter type is correct for your local voltage and receptacle type.

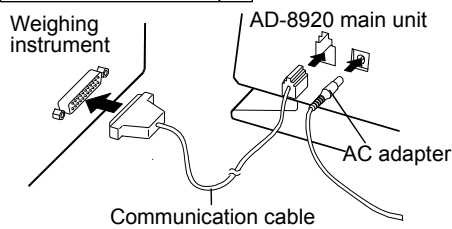
- Instruction manual (this leaflet)

■ Options (Sold separately)

- OP-01 DIN conversion cable (Approx. 25 cm)

■ Connection diagram

D-SUB9/D-SUB25 output



DIN output

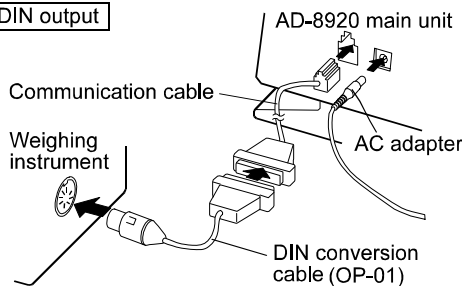


Table 1 Applicable instruments and required options (As of August, 2007)

Weighing instrument	Using RS-232C		Using current loop	
	On instrument	OnAD-8920	On instrument	OnAD-8920
AD-4212A/B	None (D-SUB25)	None	Not applicable	
EK-G,EW-G	OP-03(D-SUB25)	None	OP-05(DIN7)	OP-01
EK-H	OP-03H(D-SUB25)	None	OP-05H(DIN7)	OP-01
EK-i,EW-i	None (D-SUB9)	None	Not applicable	
ET-W	OP-03W(D-SUB25)	None	OP-05W(DIN7)	OP-01
FC-i	None (D-SUB9)	None	Not applicable	
FG	OP-03(DIN7)	OP-01	OP-05(DIN7)	OP-01
FG-M/L	OP-23(DIN8)	OP-01	Not applicable	
FP	OP-03(D-SUB25)	None	OP-03 or OP-04(DIN7)	OP-01
FS	OP-03(DIN7)	OP-01	Not applicable	
FX-i	None (D-SUB9)	None	Not applicable	
GH,HR-i	None (D-SUB9)	None	Not applicable	
GR	None (D-SUB25)	None	Not applicable	
GX,GF, GP, GX-K	None (D-SUB25)	None	OP-04 or OP-06(DIN7)	OP-01
HA-M	OP-03(D-SUB25)	None	OP-03(DIN7)	OP-01
HA-A	OP-03(D-SUB25)	None	OP-03 or OP-04(DIN7)	OP-01
HC-i	OP-03(DIN8)	OP-01	Not applicable	
HF,HM	OP-03(D-SUB25)	None	OP-03 or OP-05(DIN7)	OP-01
HP	OP-03(D-SUB25)	None	Either one of OP-03,OP-04, OP-05,OP-06, (DIN7)	OP-01
HR	OP-03(D-SUB25)	None	OP-03 or OP-05(DIN7)	OP-01
HV-G HW-G	None (DIN8)	OP-01	Not applicable	
HX	None (D-SUB25)	None	OP-04 or OP-05(DIN7)	OP-01

2. Preparation

2-1. Setting the weighing instrument

Table 2 List of instrument settings

Item	Setting	Description
Data output mode	Stream mode	Outputs the weighing data continuously.
Baud rate	2400bps or 600bps	AD-8920 recognizes the baud rate automatically.
Length, Parity bit	7 bits-even, 7 bits-odd, or 8 bits-none	AD-8920 functions correctly with any one of those listed.
Stop bits	1 bit or 2 bits	AD-8920 functions correctly with either one.
Terminator	<CR> or <CR><LF>	AD-8920 functions correctly with either one.
Data format	A&D standard format	
CTS control	No control of CTS, RTS	
Output (hardware)	RS-232C or current loop	AD-8920 recognizes the output mode automatically.

Note) The available items depend on the weighing instrument. (An item is not available when the setting is fixed.)

For a detailed description of the settings, refer to the instruction manual of each weighing instrument.

2-2. Connecting the AD-8920

1. Confirm that the AC adapter is of the correct type. 2. Refer to the Table 1 shown above to connect the communication cable correctly. Use the OP-01 DIN conversion cable when the output connector on the weighing instrument is of the DIN type. 3. Refer to the connecting diagram shown above to connect the AD-8920 to the weighing instrument by the communication cable.

3. Display

3-1. When the power is turned on, using the AC adapter, all the display segments illuminate, and then the weighing data transmitted from the weighing instrument appears. The status of the data is indicated by a triangle (▼).

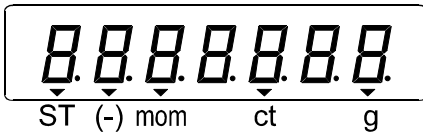


Table 3 Symbols and data status

Symbol	Status of weighing data
ST	The weighing data is stable.
(-)	The weighing data is negative. This symbol appears for a 7-digit negative value. Usually the minus sign is placed before a numeric value.
mom	The weighing unit is momme.
ct	The weighing unit is carat.
g	The weighing unit is gram.

Note) The unit indicating ▼ does not illuminate for weighing units other than described above.

3-2. If the weighing data is in overload, **E** or **-E** appears.

3-3. If the data receiving procedure is interrupted, the display becomes blank.

3-4. If the power is turned on without a weighing instrument connected, all the display segments will remain illuminated.

4. Maintenance / Troubleshooting

4-1. Cleaning

For cleaning, wipe the AD-8920 with a soft cloth. Do not use solvents such as thinner.

4-2. If the display brightness is not even:

Turn the AD-8920 on with the weighing instrument disconnected. All of the display segments will illuminate. Leave the AD-8920 this way for a few hours.

4-3. If the AD-8920 does not function properly: (Before asking for repair, check the following.)

- Is the AC adapter type correct?
- Is the cable connected firmly?
- Are the weighing instrument settings correct?
(Particularly, has the data output mode been set to stream mode?)
- Is data other than the weighing data, such as time or ID number, being output?

5. Specifications

Table 5-1 Specifications

Power consumption	Approx. 5VA supplied to the AC adapter (Approx. 8VDC, approx. 0.2ADC supplied to the AD-8920)
Display	7-digit VFD, Character height 13mm
Signal	RS-232C / Current loop (ACTIVE)
Baud rate	600bps / 2400bps
Length, Parity bit	7 bits-even, 7 bits-odd, 8 bits-none
Stop bits	1 bit or 2 bits
Terminator	<CR> or <CR><LF>
Display refresh rate	Approx. 10 times/second (when baud rate is 2400bps) *1
Input connector	Modular jack
Communication cable	Approx. 1 m *2
Dimensions	120(W)×90(H)×76(D) Unit: mm:
Net weight	Approx. 220g *3

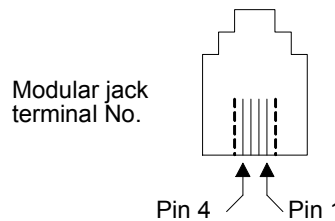


Table 5-2 Pin assignment

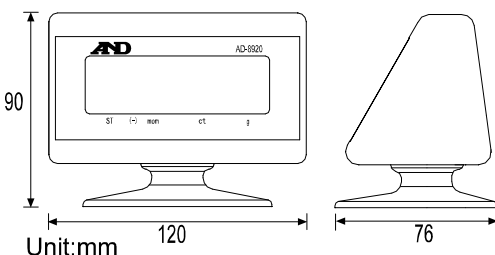
Pin No.	RS-232C	Current loop
2	RXD (Connects to the TXD output of the weighing instrument)	Current loop (+)
3	SG (Connects to SG)	Current loop (-)
1, 4	Used internally	

*1 With the condition that the weighing instrument transmits data 10 times per second.

*2 A special communication cable of approx. 5 m is available.

*3 AC adapter and communication cable are not included.

6. External dimensions



CE Compliance with EMC directive
This device features radio interference suppression in compliance with valid EC Regulation 89/336/EEC.

Compliance with FCC rules
Please note that this equipment generates, uses and can radiate radio frequency energy. This equipment has been tested and has been found to comply with the limits of Class A computing device pursuant to Subpart J of Part 15 of FCC rules. These rules are designed to provide reasonable protection against interference when the equipment is operated in a commercial environment. If this unit is operated in a residential area, it may cause some interference and under these circumstances the user would be required to take, at his own expenses, whatever measures are necessary to eliminate the interference. (FCC=Federal Communications Commission in the U.S.A.)

