



OPERATION MANUAL

Model : DI-28 series

Edition

	Month	Year
1st	September	1998

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Introduction

DI-28 has many features for a wide range of easy to use weighing applications with up to 4 load cells, battery operation (factory option), RS-232C & Setpoint Interface (factory option) and other unique features for special applications. Optional mount bracket also makes it useful for a wide range of working conditions and locations.

Features

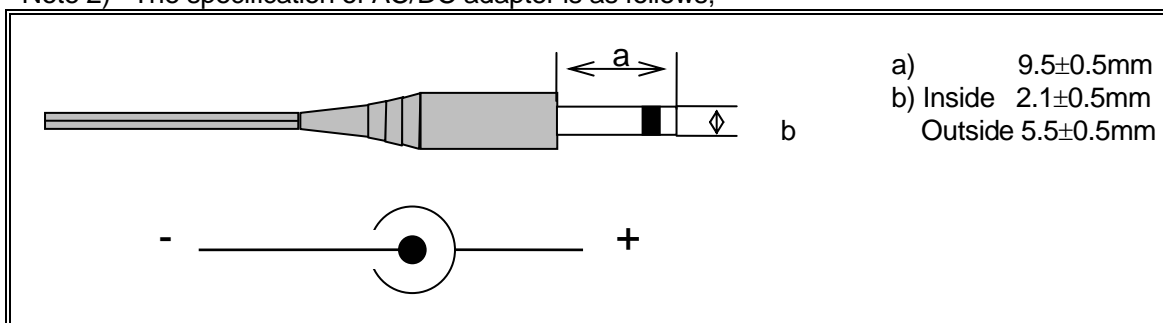
- INTERNAL RESOLUTION: 1/60,000
- DISPLAY RESOLUTION: 1/1,000 to 1/10,000
- HIGH CONTRAST DISPLAY: Six digits 23.3mm high Liquid Crystal Display
- LOAD CELL CONNECTION: Up to 4 x 350Ω load cells in parallel configuration
- SCALE INTERFACE: Amphenol 14 pin connector
- EXCITATION VOLTAGE: 5VDC (MODEL DI-28B and DI-28BR)
10VDC (MODEL DI-28R)
- ZERO POINT RECALL: Zero point can be memorized and recalled even after power failure.
- DETECTION FOR LOW VOL.: When power becomes low, the low voltage indicator lights to alert operator that the battery needs to be changed/recharged. When power becomes too low to compute weight accurately, weight display shuts off completely.
- AUTO POWER OFF: The main power is shut off automatically after the scale is not in use for a set time interval.
- THREE DIFFERENT FILTER: 3 filter level can be selected by specification setting.
- RS-232C INTERFACE: Serial interface available to connect computers. (MODEL DI-28R and DI-28BR)
- SETPOINT INTERFACE: Setpoint interface available to output 4 setpoint signals (MODEL DI-28R and DI-28BR)
- BATTERY OPERATION: AC/DC adapter or battery drive can be selected. In battery operation, dry cell battery or rechargeable battery drive can be selected. (MODEL DI-28B and DI-

28BR)

	Model	Remarks
AC/DC Adapter (Refer to Note 2)	DI-28B	Applied Voltage: 6-12VDC Max 100mA
	DI-28BR	Applied Voltage: 6-12VDC Max 100mA
	DI-28R	Applied Voltage: 14-20VDC Max 100mA
Dry Cell Battery (6 x 1.5V C size)	DI-28B	Operation Hours: Approx. 130hrs.
	DI-28BR	Operation Hours: Approx. 65hrs.
Rechargeable Battery (6 x Cylindrical Ni-Cd VARTA 1.2V/1.8Ah)	DI-28B	Operation Hours: Approx. 80hrs.
	DI-28BR	Operation Hours: Approx. 40hrs.

Note 1) The operation hours are based on the test result of continuous use with one load cell.

Note 2) The specification of AC/DC adapter is as follows;



1. Control Panels



1.1 Lamps

Indicators	Name	Functions
	ZERO LAMP	On when weight is stable at zero point.
	NET LAMP	On when tare is subtracted.
	BATTERY LAMP	On when battery becomes too weak and needs to be replaced/ recharged.

1.2 Keys

Key	Name	Functions
	ON/OFF	Turn power on or off.
	ZERO RESET	Reset the weight to zero.
	TARE	Enter or clear tare value.
	DIGIT SELECT	Select the digits to set tare or setpoint value.
	INCREASE	Increase the value of tare or setpoint weight on selected digit when setting data.



2. Operation Procedure

2.1 Power On

PROCEDURE	KEY OPERATION	DISPLAY	REMARKS
Connect DI-28 to power supply.			
1. Make sure nothing is on the load receptor, and press [ON/OFF] key.		Ver0.01	Show Software Version
		000000	Segment check starts.
		888888	
		0,000	Ready for weighing







2.2 Tare Subtraction

2.2a One touch tare

PROCEDURE	KEY OPERATION	DISPLAY	INDICATOR		
				→0←	NET
Stand-by status		0.000		◆	
1. Place tare weight on the load receptor.	e.g. 0.010 kg	0.010			
2. Press [TARE] key.		0.000			◆
3. Remove the tare weight.		-0.010		◆	◆

Note 1) To clear the tare weight, remove tare from the load receptor then, press [TARE] key.

2.2b Digital tare entry (When the tare weight is known)







PROCEDURE	KEY OPERATION	DISPLAY	INDICATOR		
				→0←	NET
Stand-by status		0.000		◆	
1. Move cursor to the left two digits.	 , 	t00.0"0"0			
2. Set tare value by increasing the value.	 , 	t00.0"2"0			
3. Enter the tare value.		-0.020		◆	◆

Note 1) To clear the tare weight, press [TARE] key.

Note 2) "0" and "2" means that the cursor is blinking.

























2.3 Battery Life Check

The battery life can be checked

PROCEDURE	KEY OPERATION	DISPLAY	INDICATOR		
				→0←	NET
Stand-by status		0.000		◆	
1. Press [TARE], [←], [TARE] key while pressing [RE-ZERO] key.	 +  ,  	□□□□□□			
2. Press [TARE] key to be back to weighing mode.		0.000		◆	

The number of box in the display indicates the battery power. When batteries are fully charged, 6 boxes appears. As the battery is running out of the power, the number of boxes will decrease gradually.

4.2 Setpoint Value Entry

PROCEDURE	KEY OPERATION	DISPLAY	INDICATOR		
				→0←	NET
Stand-by status		0.000		→0←	NET
1. Enter the setpoint entry mode by pressing [↑] three times while pressing [RE-ZERO] key.	 +  ,  	00.000 ▼		◆	
2. Enter Setpoint 1 value by using [↑] and [←] keys.	 , 	01.000 ▼			
3. Store the data.		┌ 00.000 ▼			
4. Enter Setpoint 2 value by using [↑] and [←] keys.	 ,  , 	┌ 02.000 ▼			
5. Store the data.		┌ 00.000 ▼			
6. Enter Setpoint 3 value by using [↑] and [←] keys.	 ,  ,  	┌ 03.000 ▼			
7. Store the data.		┐ 00.000 ▼			
8. Enter Setpoint 4 value by using [↑] and [←] keys.	 ,  ,   , 	┐ 04.000 ▼			
9. Store the data. 10.		0.000		◆	

Note:) To exit from setpoint entry mode without storing the data, press [TARE] key instead of [RE-ZERO] key.