B3 INDICATOR

Version P.31

CE

OIML
CS
Certification System
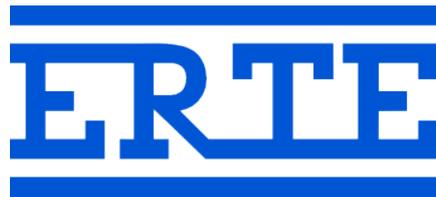
www.erte.com.tr

ERTE® Endustriyel Elektronik Sanayi ve Ticaret Limited Sirketi

Address	IZMIR / TURKEY
Telephone	+90 232 259 7400
Fax	+90 232 259 3960
E-mail	info@erte.com.tr
Web site	www.erte.com.tr

Contents

1. MATTERS TO CONSIDER

- The device must be operated from an earthed socket.

- It should not be connected to the same power line with powerful electrical machines and should not be operated near

- Make sure that the electrical connection is cut before the cover of the device is disassembled.

- Recommended cable thickness for load cell connection is 1 mm². If it is necessary to use thinner cable, it should be thickened by using double (or more) ends for ±supply. This is especially important for long cable connections.

- If the load cell/collection box connection does not have sensing leads (4-way connection) device will give Error 3. In such cases, connect the sensing leads to the supply terminals at the closest point to the load cell. (See wiring diagram.)

- Shielded and twisted-pair cable for load cell and communication connections should be used.

- For the most accurate weighing results, the device should be left in operation for at least half an hour before calibration.

2. INTRODUCTION

Interface
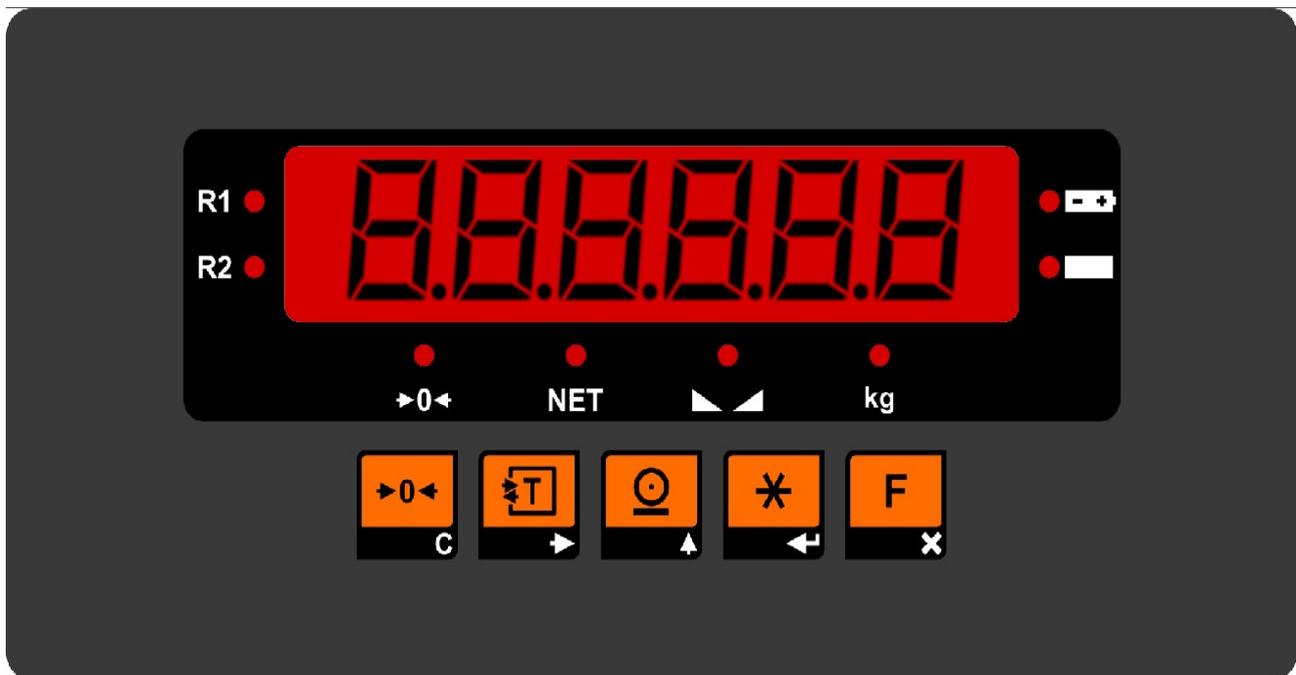
* Display digit height is 25 mm

Keys and Functions

KEY	EXPLANATION	APPLICATION FUNCTION	MENU FUNCTION	NUMERIC INPUT FUNCTION	SELECT FROM LIST FUNCTION
→0← C	Zero Key	Zero weight	Exit Menu	Reset value	Select 0 if it is in the list
T	Tare Key (Scroll)	Tare in/out	Show Previous Menu	Go to the next digit	Show previous
◎	Print Key (Increase)	Print, save to alibi memory	Show Next Menu	Increase value	Show next
✳	Star Key (Enter)	Enter Menu	Enter Menu	Approve value	Select
F	Function Key (Exit)	Differs by application	Exit Menu	Cancel	Cancel

Signs and Meanings

R1, R2	**Range indicator**: If configured as a multi range instrument, indicates the current weighing range.
→0←	**Center-of-zero indicator**: Indicates the deviation from zero is not more than ±0.25 e.
NET	**Net indicator**: Indicates that a tare device is in operation and the displayed weight value is a net weight.
◣◢	**Stability (No-motion) indicator**: Indicates that stability of equilibrium has been reached.
kg	**Unit of weight**: Indicates the unit of the weight, if a weight value is displayed.
🔋	**Battery :** Indicates the battery level in devices with battery option. When it starts to flash, the device should be charged as soon as possible.

Connection Diagram

	On/Off Switch
Power	85 – 264 VAC, 47 - 63 Hz, 0.25 A **Note:** Make sure to connect the device to a grounded socket
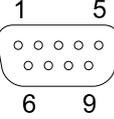
Load Cell 1 5 6 9	Pin	Explanation
	1	- Signal
	2	+ Signal
	3	- Sense (Note: Connect to - Excitaion if load cell sense not available)
	4	+ Sense (Note: Connect to + Excitaion if load cell sense not available)
	5	Chassis
	6	+ Excitation
	7	- Excitation
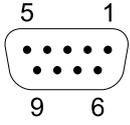
Remote Display 5 1 9 6	Pin	Value	ERTE Remote Display Connection
	1, 2, 3	Not connected	Not connected
	4, 5, 6, 7, 8, 9	4	4
		5	5
		6	6
		7	7
		8	8
		9	9

RS-232 1 13 14 25	Pin	Value	PC Connection
	2	Tx	2
	3	Rx	3
	7	Gnd	5

USB 	USB PC Connection **Note**: USB driver must be downloaded and installed from www.erte.com.tr before the cable is connected.

CONNECTION DIAGRAM
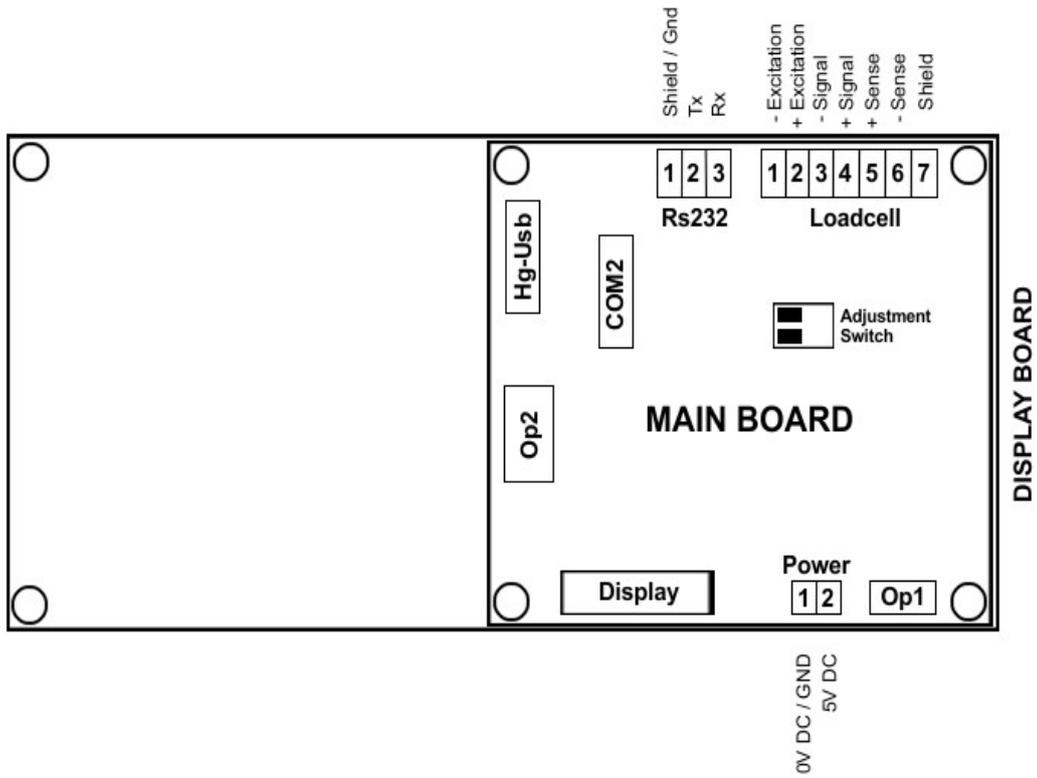
Notes

- **ON [1 2]** In this position the calibration is OFF / LOCKED

- **ON [1 2]** In this position the calibration is ON / UNLOCKED.

- 3. Optional RS-232 output must be connected from Op1

- Relay option must be connected from Op2

Dimensions

187 mm

217 mm

127 mm
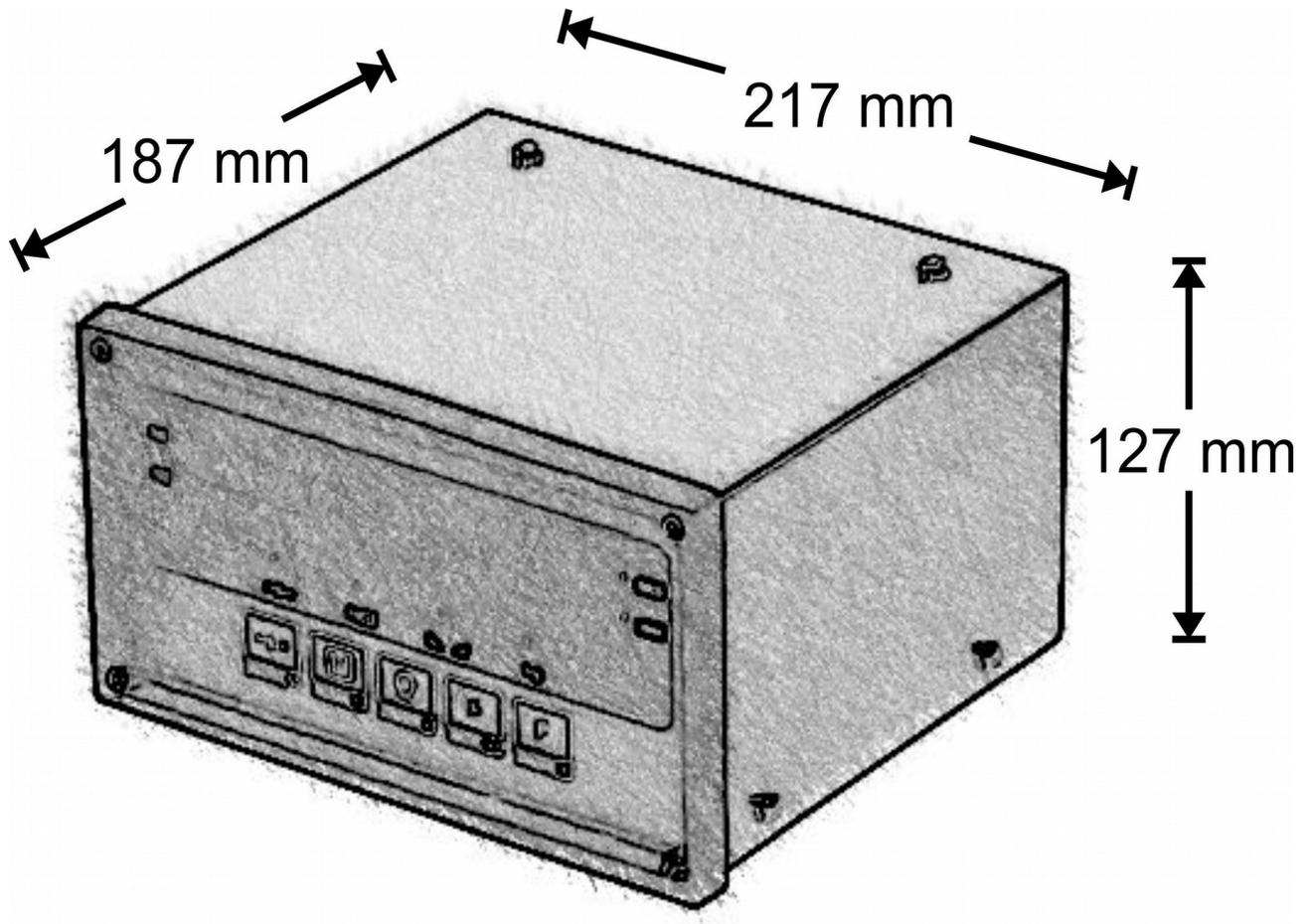
3. WEIGHING PARAMETERS AND ADJUSTMENT

In order to setup weighing properties, follow these steps:

- Switch off the device and disconnect the power cable.
- Dismount the front panel and put the adjustment switch in UNLOCKED position.
- Mount the front panel and switch on the device.
- Perform weighing setup.
- When the weighing setup is done, switch off the device and disconnect the power cable.
- Dismount the front panel and put the adjustment switch in LOCKED position.
- Mount the front panel and switch on the device.

Note: Device is shipped with the switch in UNLOCKED position.

While the device is powered with UNLOCKED adjustment switch, functions of the keys are as following:

✳	Press this key to enter menu. When pressed, first menu item is displayed. Press 🔘 key to display next item, press ▸0◂ or F to exit menu. *pAr*　　Weighing parameters *AdJuSt*　Calibration
F	When this key is pressed, the weight value is displayed in increased resolution (increment/10). In this position, the weight unit sign (kg) goes out. When the calibration switch is in the off position, it automatically returns to the normal display after 5 seconds.

Weighing Parameters

With *pAr* on display press ⌨️✱ key. Weighing parameters are edited one at a time. After that each press of the ⌨️✱ key moves to the next parameter. Edit the values using the ⌨️ and ⌨️ keys.

Capacity 1 (Max 1)	### cAP_1 In single range instruments, this is the maximum capacity. In multi (two) range instruments, this is the maximum capacity of the first range (smaller range).
Capacity 2 (Max 2)	### cAP_2 In single range instruments, this value have to be entered as 0 (zero) In multi (two) range instruments, this is the maximum capacity of the second range (greater range).
Scale interval (e)	### E 2 This value is the difference between two consecutive indicated values (e). In multi range instruments, this is the interval of the smaller range (e1). The device selects e2 automatically. Accepted values: 1,2,5,10,20,50
Decimal point	### . 3 This value determines the place of the decimal point while indicating weight values. Accepted values: 0,1,2,3
Stability range	### Stb_r 1 The range for displayed weight values, for determination of the stability. Accepted values: 0 .. 5 intervals (Note: A value of zero means 0.5 interval)
Stability delay	### Stb_d 1 The time period for displayed weight values, for determination of the stability. Accepted values: 1 .. 5 seconds
Filter	### FɪL 3 This value determines the interpretation of the changes in weight. A lower value causes fast reactions to weight changes and is suitable in relatively stable conditions. A higher value causes slow reactions but the vibrational flickers are eliminated. Accepted values: 1 (most sensitive, fast reaction) .. 5 (most coarse, slow reaction)
Zero at power-on	### ZP 1 This setting determines if the indication is set to zero automatically at power on. (initial zero setting) Accepted values: 0 (off) , 1 (on)

Adjustment

Press [*] key while *AdJuSt* is displayed. There are 3 options for adjustment:

Dead load adjustment	This option may be used when only dead load (zero point) adjustment is needed. ### *Zr_cAL* While this message is displayed, unload the platform and press [*] key. The display will become blank until the device calculates and saves the adjustment data. After that, the device exits the menu and returns to the weight display.
Span adjustment	This option may be used when a dead load adjustment is not needed, but a span adjustment is needed. ### *Zr_cAL* While this message is displayed, press [F] key. The dead load adjustment is skipped. ### *010000* Enter (edit) the value of the weight which will be used for adjustment and press [*] key. ### *10000* The value you entered will be displayed constantly. Load the platform with the adjustment weight you entered and press [*] key when there is no motion. The display will become blank until the device calculates and saves the adjustment data. After that, the device exits the menu and returns to the weight display.
Full adjustment	This option is performing the dead load adjustment and the span adjustment consecutively. ### *Zr_cAL* While this message is displayed, unload the platform and press [→0←] key when there is no motion. ### *010000* Enter (edit) the value of the weight which will be used for adjustment and press [*] key. ### *10000* The value you entered will be displayed constantly. Load the platform with the adjustment weight you entered and press [*] key when there is no motion. The display will become blank until the device calculates and saves the adjustment data. After that, the device exits the menu and returns to the weight display.

4. SER MENU (SER2, SER3)

To change the RS-232 related parameters, use the *SEr* menu; Use the *SEr2* menu to change the USB related parameters . See b3-serial_communication.pdf for detailed information .

Press ⁎ key to enter the *SEr* menu. (also applies to *SEr2* and *SEr3*)

F   0

Select the serial port function and press ⁎ key.

0	Continuous output
1	Send by key or command

tYPE 0

Choose the data format and press ⁎ key.

bAud
9600

Select the baud rate and press ⁎ key.

Prot.
8-n-1

Select the protocol and press ⁎ key.

8-n-1	8 bits, No Parity, 1 stop bit
8-E-1	8 bits, Even parity, 1 stop bit
8-o-1	8 bits, Odd parity, 1 stop bit

rtS 0

Select hardware flow control and press ⁎ key.

0	Hardware flow control off
1	Hardware flow control on

SPd 0

Select the data transmission rate and press ⁎ key.

0	Indicator rate (6.25/second by default)
1	1/second
... *5*	5/second

5. ALIBI MENU

Use this menu to view alibi memory records on the device.

Alibi memory capacity is 9999. When the memory is full, the oldest recording is deleted while a new recording is made. It is not possible to delete records from Alibi memory.

Press ![*] to enter the *ALıbı* menu.

ı. 0001

Enter the number of the alibi memory record you want to view. If there is a record with this number, its information will be displayed. Press ![*] key.

nEt
10000
GroSS
10000
tArE
0
P.tArE
0

Press ![F] key to exit the menu.

6. LANGUAGE AND INFORMATION MENUS

Language Menu

Use this menu to change the language setting of the device.

Press [*] key to enter *LAnG* menu. Select the language using the keys [↹] and [○].

tr   Turkish

En   English

Press [*] key to select the language.

Information Menu

Use this menu for information about firmware.

Press [*] key to enter *inFo* menu. Press [*] key to move on to the next information.

ErtE   Manufacturer

b3   Model

1.00   Software version

trAd. 1   Compatibility mode (1:OIML, 0:Industrial)

P.30   Build information

After the last information is displayed, the menu is exited.

7. ERROR AND WARNING MESSAGES

Message	Meaning	Solution
Err 1	No adjustment found	Make adjustment
Err 2	Fault in the measuring circuit	Call service
Err 3	The load cell is not connected or the connection is faulty	Check load cell connection
Err 4	Failed to zero at power-on	If the platform is full, empty it, turn the device off and on again
Err 7	Low load, no load or platform not in place	Place the platform properly
Err 8	Overload, there is a load on the platform that exceeds its capacity	Reduce the load
Err 10	Processor failure	Call service
Err 11	Memory failure	Call service
Err 13	RTC failure	Call service
Err 14	RAM failure	Call service
Err 20	Printer failure	If there is no paper, insert it, check if the paper is jammed
Err 21	Printer template not found	Call service
Err 30	Maximum capacity of total memory reached	Finish your total weighing
Err 35	Parameter entered is not accepted	Reduce capacity
Err 55	Failed to zero	Empty the platform
Err 56	Failed to tare in	Load the platform
Err 57	Failed to tare out	
Err 40	Load cell supply failure	Call service
Err 88	Adjustment failed	Increase adjustment weight
Err 90	Adjustment failed	Call service
Err 99	(This message appears during adjustment) Weight is too small for the load cell capacity.	