ES 200

INSTRUCTION MANUAL
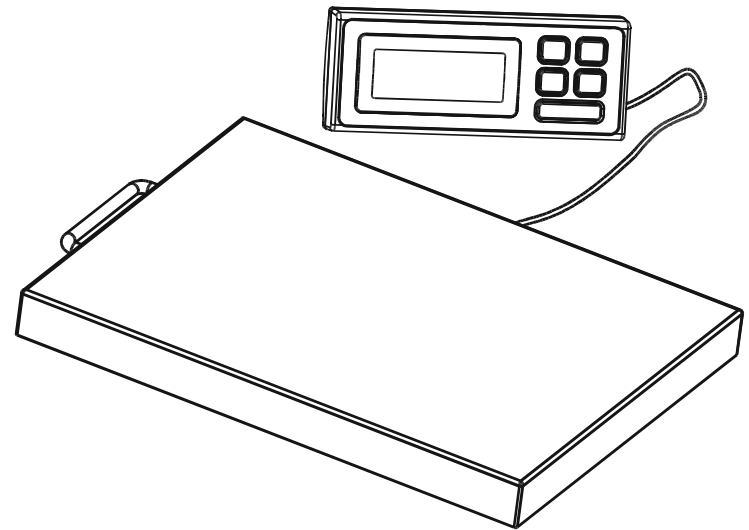
KEY DESCRIPTIONS：

ON/OFF	**HOLD**
UNIT	**ZERO**
PRINT	

1. **ON/OFF:**
   Turns the scale   power on/off.

2. **HOLD:**
   A. Press this key to store weight value.

3. **UNITS：**
   A. Select weigh units：kg or lb .

4. **ZERO：**
   This key is "Zero" feature if load is below 4% of full capacity or a negative value. between 4% and 50% is tare function

5. **PRINT:**
   Press once and send weight information once.

Work mode setting of the indicator:

1. press and hold UNIT key and HOLD key, then press ON/OFF key to turn on the scale, the display will show Ani.Sw, press UNIT key press UNIT key to select ON or OFF (ON means animal mode, OFF means normal weighing mode),press HOLD key to confirm the selection.

2. press HOLD key again to enter into next menu, the display will show Ani.Kd, press UNIT key to select animal scale anti-shock range among 50, 100, 200, 400,

3. press HOLD key to confirm the selection. press HOLD key again to enter into next menu, the display will show Ani.fd, press UNIT key to select animal scale fliter range among 0.5, 3, 5, 8,

4. press HOLD key to confirm the selection. press HOLD key again to enter into next menu, the display will show Ani.Ft, press UNIT key to select animal scale flister time among 1,2,3,4,press HOLD key to confirm the selection

FUNCTION SETTINGS

press and hold HOLD key then press ON/OFF key to turn on the sclae, the display will show A-ON or A-OFF, press ZERO key to select on or off (ON means activate auto power off function , off means inactivate auto power off function). press UNIT key, the display will show L-ON or L-OFF, press ZERO key to select on or off (ON means activate backlight , OFF means inactivate backlight).

Features :

1. Compact Dimensions：950mm x 500mm x 50mm

2. Material：Aluminum Housing / SUS 304 Base Cover

3. Display options：5 digital LCD

4. Power：recharge / AC adapter 9V 150mA

5. Auto back light (option)

6. Auto off (optional)

7. Operating Temperature：5～35℃

8. Operating Humidity：25％～95％RH

9. 5Keys：   ON/OFF, ZERO, UNITS, HOLD, PRINT

   ZERO   This key is "Zero" feature if load is below 4% of full capacity or a negative value

   UNITS   Toggle among KG or LB unit

   ON/OFF   Turns the scale power on/off

   HOLD   Press this key to store weight value

   PRINT   Press once and send weigh information once.

10. Zero Range (4% to full capacity)

11. Tare Range (50% to full capacity)

12. Error Message indication：

    Err-0   Ovrload

    Err-2   Exceed zero track range when power on

    Err-5   Unstable when power on

    Err-c   Calibration code is not enough or operation error.

    🔋   Low battery indication

13. Two calibration weight units : kg , lb.
14. Open calibration capacity
15. Power on zero-setting range: ± 10%
16. Zero range: ± 4% of full capacity
17. Three modes : Normal mode / Setting mode /Internal Auto Calibration mode
19. RS232 function

When to calibrate

Calibration may be required when it is initially installed, if the scale/balance is moved to a substantial distance.

This is necessary because the weight of a mass in one location is not necessarily the same in another location. Also, with time and use, mechanical deviations may occur.

Calibration Weight

press and hold [ZERO] key then press [ON/OFF] key, the display will show CAPU=, press [UNIT] key to select full capacity unit kg or lb, press [HOLD] key to confirm the selection. press [HOLD] key again to enter into next menu, the display will show CAP, press [UNIT] key to set full capacity, press [UNIT] key to move the flash digit to right, press [ZERO] key to increase the flash digit, press [HOLD] key to confirm the selection. Press [HOLD] key again to enter into next menu, the display will show CALU=, press [UNIT] key to select calibration unit kg or lb, press [HOLD] key to confirm the selection. press [HOLD] key again to enter into next menu, the display will show CAL, press [UNIT] key to set calibration weight ,press [UNIT] key to move the flash digit to right, press [ZERO] key to increase the flash digit, press [HOLD] key to confirm the selection (the calibration weight should be more than 2/3 of full capacity. press [HOLD] key again to enter into next menu, the display will show DIV, press [UNIT] key to select division, press [HOLD] key to confirm the selection. press [HOLD] key again to enter into next menu, the display will show ADC, press [UNIT] key to select 18,press [HOLD] key to confirm.

press [PRINT] key, the display will show CAL AD value, press [UNIT] key when the stable indicator lights. the display will show flash calibration weight, place the shown weight, press [UNIT] key when the stable indicator lights, the display will show xxxx AD value. Turn off the scale now, calibration finished.

Turn on the scale, place test weight to check whether it is correct, if not, please repeat above segments.

interface：

1：signal interface：（microphone socket）
        Pin 1（red）------->E+（positive source）
        Pin 2（blue）------->S+（positive signal）
        Pin 3（black）------->E-（negative source）
        Pin 4 (white)------->S-（negative signal）
        Pin 5（no）
        no sign   ------->GND
2：Rechargeable battery socket：
        AC/DC 9V————————external positive, inner negative
3：RS232 interface：DB9

RS232 TRANSMIT FUNCTION

1. RS232 Transmission Agreement：
- Mode：Simplex Asynchronous Serial
- Baud rate：9600
- Data Bit：8
- Parity Bit：NONE
- Stop Bit：1
- Data Format：ASCII
2. Transmission Information Format：20 Byte，blank=20H

M= overload mode
W= normal weighing mode
:. = weight information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
W/M	:	±																CR	LF

Weight information (positions 4–12)   Unit formation (positions 13–18)

Exampla：50kg

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
W	:	+							5	0	.	0	k	g				CR	LF