ANYLOAD®

EC110
Counting Scale



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www.anyload.com

V1.0.0

OPERATION MANUAL

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Revision History:

Record with brief description of all revisions made to product or manual

Version	Date	Description
1.0.0	December 5, 2025	First public release version.

The most current version of this document, along with any software, firmware, and other product updates, can be found on our website:

www.anyload.com

Table of Contents

1. Introduction....4
   1.1 Safety....4
   1.2 Features....5
2. Keyboard....6
3. Operation....7
   3.1 Basic Operation....7
      3.1.1 Zero....7
      3.1.2 Tare....7
      3.1.3 Fore-deducting Weight Function....7
      3.1.4 Overload Warning....8
   3.2 Counting Operations....8
      3.2.1 Setting Quantity....8
      3.2.2 Single Weight Setting....8
      3.2.3 Single Weight Automatic Correction....8
      3.2.4 Quantity Warning....8
      3.2.5 Canceling Quantity Warning....8
   3.3 Accumulation....9
      3.3.1 Attentions before Accumulating....9
      3.3.2 Accumulating Operation....9
      3.3.3 Accumulation Display....9
      3.3.4 Clearing Accumulation....9
      3.3.5 Automatic Accumulating....9
   3.4 Backlight....9
4. Printing and Communication....10
   4.1 Connection....10
   4.2 Printing....10
      4.2.1 Automatic Printing....10
      4.2.2 Manual Printing....10
   4.3 Description of Serial Communication....10
5. Specifications....11
   5.1 Model Specification....11

5.2 General Specification 11
5.3 Dimensions 12
6. Appendix 13
6.1 Trouble Shooting 13
6.2 Error Codes 13
6.3 Print Sample 14
6.3.1 Normal List 14
6.3.2 Accumulation Form 14

1. Introduction

This manual provides information on operation of the EC110 Counting Scale.

For questions regarding this manual or the operation of ANYLOAD products, please contact your authorized ANYLOAD distributor or visit our website at www.anyload.com for support resources and service information.

1.1 Safety

READ this manual BEFORE operating or servicing this equipment or systems with this equipment incorporated.

FOLLOW these instructions carefully.

DO NOT allow untrained personnel to operate, clean, inspect, maintain, service, or modify this equipment.

SAVE and distribute this manual for future reference.

Failure to follow the instructions or heed the warnings could result in injury or death. Contact any ANYLOAD dealer or distributor for replacement manuals.

Indicative Markings:

Symbol	Significance
⚠ WARNING ⚠	Warns of a potentially dangerous situation which can result in serious physical injury or death
⚠ CAUTION	Warns of a potentially dangerous situation which can result in slight or moderate physical injury
Notice	Failure to comply to information with this marking may lead to damage to property
⚑ Important	Important information about the product
ⓘ Tip	Application tips and other information that may be helpful
For emphasis (Italics)	Italics are used to emphasize key information

General Safety:

⚠ WARNING ⚠

ONLY qualified professionals approved should carry out intrinsically safe installations. This work involves extensive knowledge of the product, specific safety standards, and the potentially hazardous environment in which it will

- Do not allow minors or inexperienced individuals to operate this unit.
- Ensure the unit is fully assembled before operation.
- Keep hands and fingers away from slots, openings, or any potential pinch points.
- Do not use this product if any component appears cracked or damaged.
- Avoid making alterations or modifications to the unit.

- Do not remove or obscure any warning labels.
- Do not submerge the unit in water.
- Before opening the unit, ensure the power cord is disconnected from the power source. Disconnect all power sources before servicing, as multiple power sources may be present. Failure to do so may result in property damage, personal injury, or death.
- For permanently connected equipment, incorporate a readily accessible disconnect device in the building's installation wiring.
- Pluggable units must be installed near an easily accessible socket/outlet.
- Use only copper or copper-clad aluminum conductors when wiring.

Recommendations for Proper Use:

- Keep the instrument away from heat sources and direct sunlight.
- Protect the instrument from rain unless it is a special IP-rated version.
- Do not clean with water jets unless specified for IP-rated models.
- Avoid dipping the instrument in water or spilling liquids on it.
- Use a soft, dry cloth for cleaning; do not use solvents or abrasive materials.
- Do not install the unit in areas with explosion hazards unless with specially rated models.
- If the working environment reaches the unit's temperature limits, ensure proper airflow around the instrument to prevent malfunctions such as sudden shutdowns or disconnections.

Disposal Guidelines:



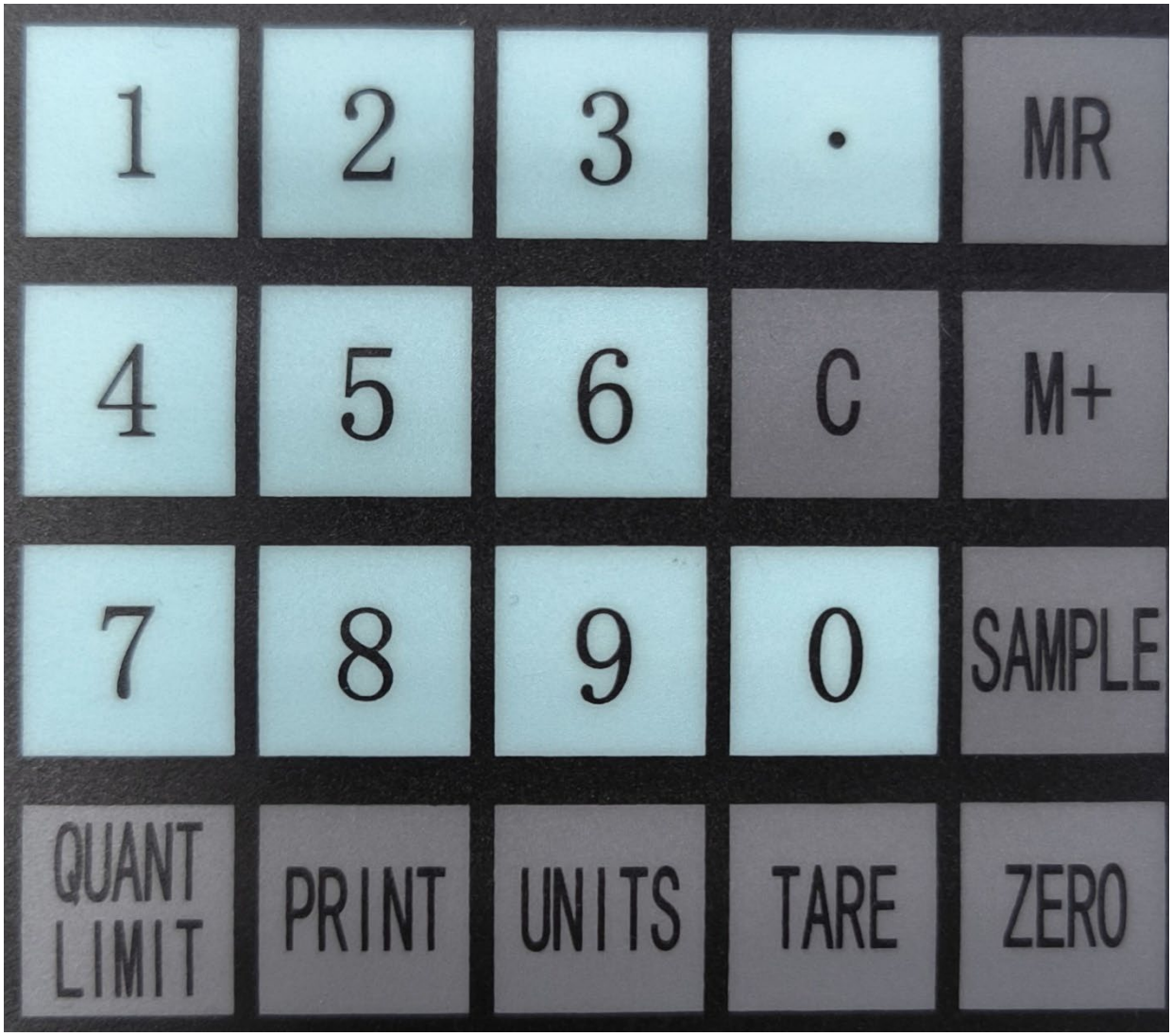
Product Disposal: Dispose of this product at authorized waste collection centers at the end of its life cycle. Proper disposal prevents environmental and health risks and supports recycling. Illegal disposal may result in legal penalties.

Battery Disposal: Dispose of batteries at designated centers as per local laws. Batteries may contain harmful substances (e.g., Cd, Li, Hg, Pb) and must not be discarded with household waste. Improper disposal may result in legal penalties.

1.2 Features

- Precision counting function
- Unit of measure: g/kg, lb
- Large, easy-to-read LCD display with blue backlight (options for backlight status)
- Dust and damp-proof keyboard
- AC/DC power source (large capacity battery ensures long-term use without A/C power)
- Calibration functions: calibration locking (anti-tampering, avoids parameter modification), external calibration
- Single weight automatic correction, linearity correction
- Sampling functions: single weight setting, quantity setting
- Quantity functions: quantity warning, accumulating function
- Upper and lower limit alarm function
- Standard RS-232 interface

2. Keyboard



Numeric keys 0-9 and decimal point: Input single weight and quantity

M+: accumulating key, accumulating quantities

MR: displays accumulation result

C: Clear/Cancel, clears present data and cancels present operation

QUANT LIMIT: sets quantity setting warning

UNIT: unit conversion between kg(g) and lb

ZERO: zero function

TARE: tare function

SAMPLE: setting quantities, use in counting procession for unknown single weight

PRINT: print weighing or counting results (additional printing component required)

3. Operation

Notice

1. Please read this manual carefully before operating.
2. The storage batteries in the scale must be well recharged before its first use.
3. When " " appears, it indicates low battery. The backlight flashes and reminds you to plug the power outlet and charge the battery promptly. Providing the backlight is set in the status of "automatic" or "always on". If you continue using the scale instead of charging, the backlight will automatically shutdown to save energy. Meanwhile, the scale displays "Bat L0" every one minute to remind you, then automatically cut off the power in 5 minutes to protect the battery from being overused. Charging is essential for future use.
4. The charging light (Charge) shows red colour when the battery is being charged and gradually turns orange then green indicating that it is fully charged.
5. To prolong service life of the battery, do not short circuit the battery.
6. Charge the battery continuously for more than 12 hours before the first use of the scale.
7. If the scale is not used for a long term, please charge the battery once in every three months.
8. In case that the battery is damaged or short circuited, and the voltage of the battery is lower than 5.7V, please push the switch at the bottom of the scale to the location of "OFF" before turning on the scale with 220V AC power. Otherwise, replace the battery.

3.1 Basic Operation

3.1.1 Zero

In case that the scale displays numerals instead of zero when there is no load on the scale, press "ZERO" key to make it return to zero, and the "ZERO" indicator will also appear. This zero function will be invalid if the load on the scale exceeds 20% of full load specified.

3.1.2 Tare

Place a pack onto the weighing pan, then wait until the indication of stability (kg) lights up. Press "TARE" key to deduct the weight of the pack, and the "N.W" indicator will appear. If the tare value is no longer required, take the pack off the weighing pan and clear it by pressing "TARE" key again.

3.1.3 Fore-deducting Weight Function

This applies when the weight of the pack to be deducted is known. Input the fore-deducting weight with the numeric keys 0-9 and the decimal point, then press the "TARE" key. "N.W"

indicator will appear, then put the object to be weighed onto the weighing pan with the pack, then the net weight of the object weighed will be displayed.

3.1.4 Overload Warning

Do not try to load objects heavier than the full load specified for the scale. When the scale displays "---OL---" and the buzzer sounds at the same time, please remove the object immediately to avoid damage to the loadcell.

3.2 Counting Operations

3.2.1 Setting Quantity

Load the object to be weighed, then wait until the stability indicator (kg) appears. Input the quantity of the object weighed and press the key "SAMPLE". Please press the numeric keys to set the quantity as you desire. The quantity window displays the quantity you have just inputted, and the single weight window shows the weight of the object loaded at the same time.

If the "Sample" indicator lights, please load more samples onto the weighing pan, and then re-sample.

3.2.2 Single Weight Setting

Load the object to be weighed, then wait until the stability indicator (kg) appears. Input the single weight of the object in "kg" or "lb" with the numeric keys. Inputted numeral will flash for about three seconds, and the quantity window displays the quantity of the present object loaded. When the single weight window shows the single weight you have just inputted, quantity setting is finished.

3.2.3 Single Weight Automatic Correction

After finishing sampling, the scale is capable of automatically correcting the single weight during object counting. For example, if the quantity added every time during object counting is less than or equal to that on the pan, then the single weight can be automatically corrected.

3.2.4 Quantity Warning

Used in fixed quantity packing process. Input the upper limit with the numeric keys and press "QUANT LIMIT". The buzzer makes a warning sound if the parts quantity exceeds the set value.

3.2.5 Canceling Quantity Warning

Sets the quantity warning value to 0.

3.3 Accumulation

3.3.1 Attentions before Accumulating

Please make sure that the scale is completely unloaded, then check the zero and stability indicator light up.

3.3.2 Accumulating Operation

Load the object to be weighed, wait until the stability indicator lights up. Press the key “M+” to see that the single weight window displays “≡XX≡”, where XX is the number of accumulation.

3.3.3 Accumulation Display

Press “MR” to see the weight window displaying total weight and the single weight window “≡XX≡”, where XX is the number of accumulation. Also, the quantity window shows “YYYYY”, indicating the quantity accumulated.

3.3.4 Clearing Accumulation

Press “MR” to set the scale to accumulating state, then press “C”. “≡0≡” will display and clear the accumulation memory.

3.3.5 Automatic Accumulating

When using the automatic accumulating function, load the object to be weighed onto the pan and unload the object when stability indicator lights up. Wait until the scale returns to zero and start auto-accumulating.

3.4 Backlight

Three options: automatic, always on, and always off. To shift among the options, hold “QUANT LIMIT” continuously for 3 seconds, and the display will show “EL XX”, where XX stands for the status of the backlight. Press numeric keys 1,2, or 3 to set backlight state (AU: automatic, oFF: always off, on: always on). To confirm, press “TARE”.

4. Printing and Communication

Printing and communication for the EC110 series need additional components. To use these functions, you must purchase the optional components for these functions in addition.

4.1 Connection

Serial communication with 9-pin socket output

- Connecting to PC/printer, big screen display: 2 – TXD, 3 – RXD, 7 – GND
- Connecting to 9-pin PC: pin 2 = pin 2, pin 3 = pin 3, pin 5 = pin 7
- Connecting to a 25-pin PC serial interface: pin 2 = pin 2, pin 3 = pin 3, pin 7 = pin 7

If a bigger screen display is to be connected, set the communication condition as CONT.

4.2 Printing

4.2.1 Automatic Printing

Always make sure that the scale is in the state of zero and the zero & stability indicator lights up before this operation. Load an object to wait until the stability indicator lights up and then unload. Automatic printing will begin after scale returns to zero.

4.2.2 Manual Printing

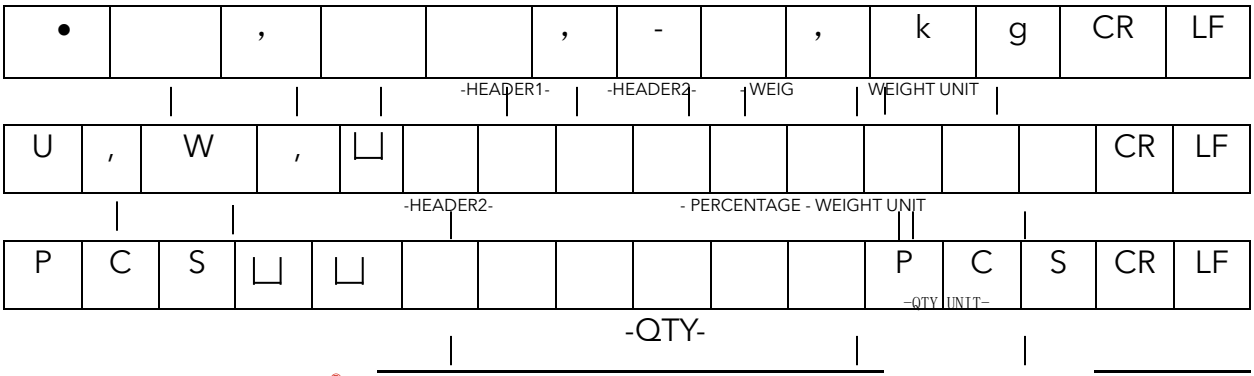
Load the object to be weighed and wait. When stability indicator lights up, press “PRINT” to print.

4.3 Description of Serial Communication

Communication features:

- RS232 communication interface
- all segments belong to ASC II
- Baud rate: 9600
- 8-bit data, no check.

Communication protocols:



HEADER1: ST=STABLE， US=UNSTABLE

HEADER2: NT=NET， GS=GROSS

5. Specifications

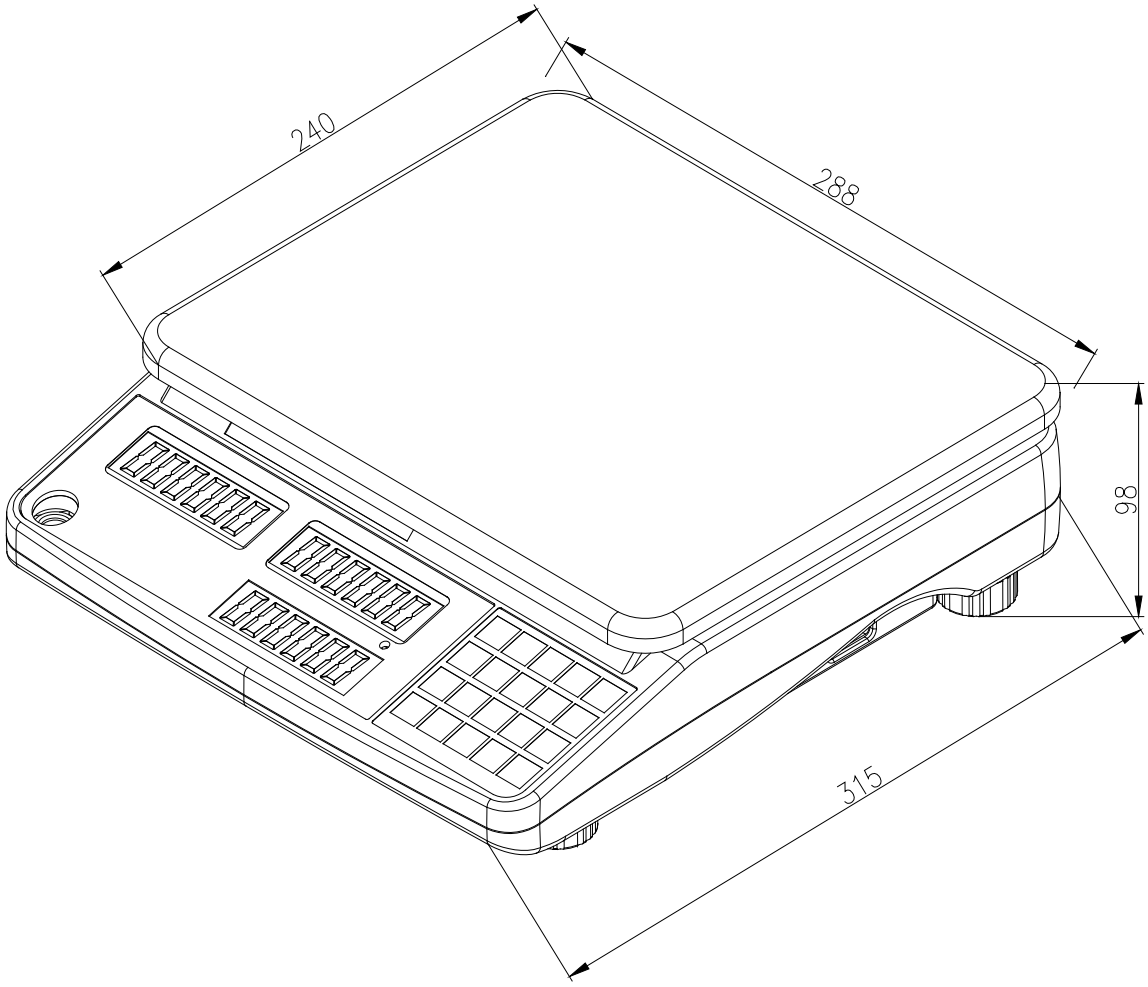
5.1 Model Specification

Part #	EC110-15kg	EC110-30kg
Capacity	15kg	30kg
Division	0.5g	1g
Display Size	3 Separate 2.81" 6-digit displays with High-Contrast Blue Backlight	
Platform Size	9.37 x 11.26 in / 238 x 286 mm	
Scale Dimensions	12.20 x 11.22 x 3.94 in / 310 x 285 x 100 mm	
Platform Material	Stainless Steel	
Enclosure	ABS	
Self Weight	8.82 lb / 4.0 kg	
Power Source	Built-in Rechargeable Battery / AC Adaptor 12V 500mA (Included)	
Operating Temp.	32˚F to 104 ˚F / 0˚C to 40˚C	
Shipping Weight (approx.)	10.8 lb / 4.9 kg	

5.2 General Specification

Non linearity	≤0.01%F.S. (Before correction）
A/D conversion	Δ∑
A/D Analyticity	240,000
A/D converting speed	15times/s
Precision grade	OIML III
Operating temperature	0~+40℃
Operating humidity	0~80%

5.3 Dimensions



6. Appendix

6.1 Trouble Shooting

Please refer to the following table before you contact our service technicians:

NO:	Phenomena	Remedy
1	NO display	Low battery results in automatic power-off. Recharge. Check A/C input voltage in compliance with specified.
2	Data displayed are unsteady	Sample on the pan is lighter than the threshold. Interference of vibration or airflow. Check if there is any foreign material touches the weighing pan.
3	Bad linearity	Check if the protective set (a safe bolt beneath the loadcell) for overload touches the loadcell.
4	Invalid accumulating	Make sure that the scale returns zero before accumulating operation
5	Can not print	Check communication connection and power supply on the printer

6.2 Error Codes

Error codes	Probable cause
ERR 1	Weights loaded exceeds the taring range
ERR 2	Keyboard error
ERR 0	Loadcell is disconnected or damaged

6.3 Print Sample

6.3.1 Normal List

GS 1.234 Kg GS： Gross weight, NT： Net weight

U.W. 123 g Single weight

PCS 10 pcs Quantity

<lf>

<lf>

6.3.2 Accumulation Form

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<lf>

TOTAL

No. 5

Wgt 1.234 Kg.

PCS 10 pcs

<lf>

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Please **Contact Our Authorized Dealer** for Technical Assistance:

Notes:

ISO 9001:2015 ISO 14001:2015 ISO 45001:2018

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