LP Series Electronic Price Computing Scale

User Manual

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Changzhou Lilang Electronic Co., Ltd.

CONTENT

I. Main Parameters

1. Model: LP Series Electronic Price Computing Scale
2. Accuracy: Class III, n=3000
3. A/D Conversion Speed：10-20 times/sec.
4. Sensor Sensitivity Range: 1.5～3mV / V
5. Division Value：1/2/5 is optional
6. Display：LCD/ LED Display

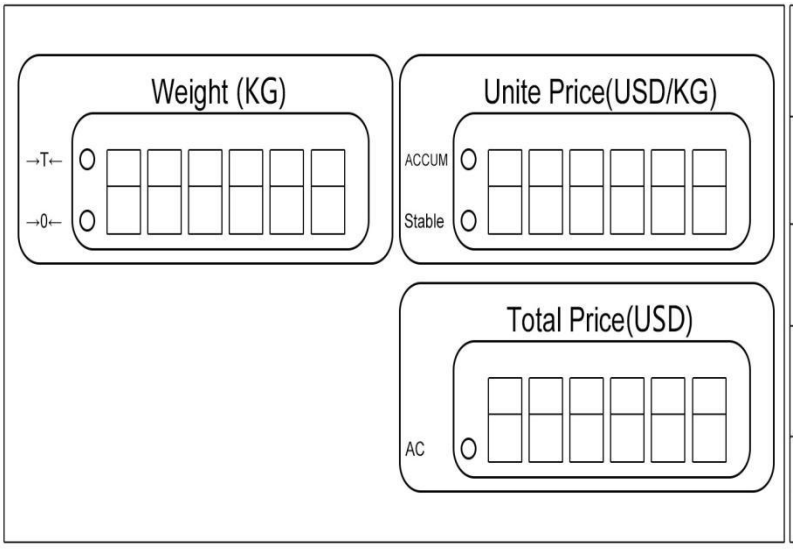
   LCD: Weight Shows 6 Digits; Unite Price Shows 6 Digits
   Amount Shows 6 Digits

   LED: Weight Shows 5 Digits; Unite Price Shows 5 Digits
   Amount Shows 5 Digits
7. Keyboard：Use 25 Pieces Mechanical Keys
8. Power Supply：AC220V/50HZ
9. Temperature Support: 0～40℃
10. Humidity Support： ≤85%RH
11. Transportation Temperature Range: -25～55℃

II. Keyboard Directions

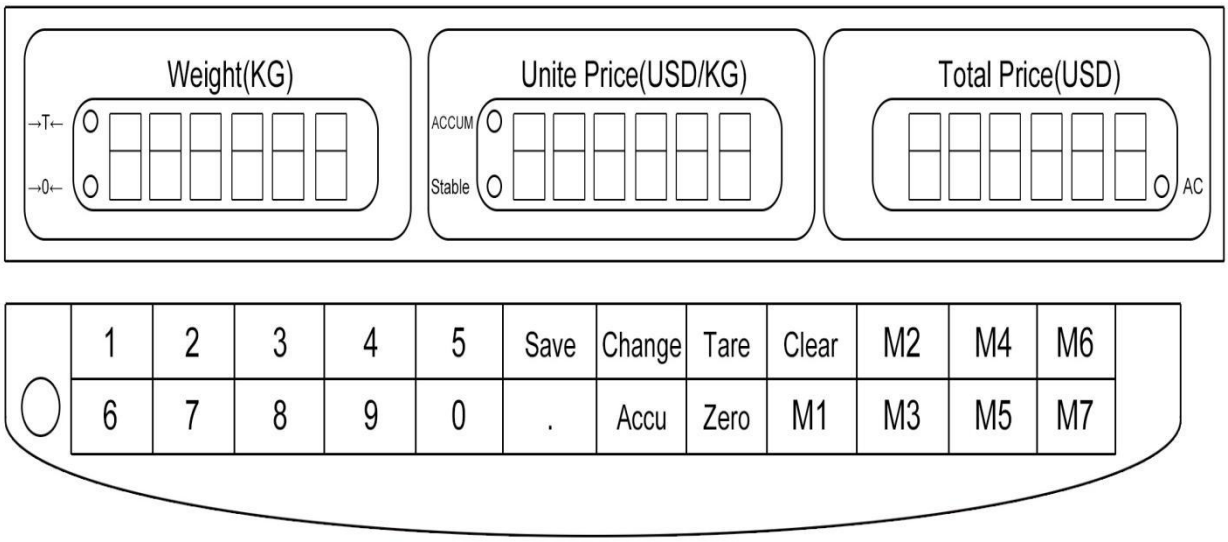
1. Panel Description

The Panel of LPS11 Electronic Price Computing Scale



7	8	9	M1	M2
4	5	6	M3	M4
1	2	3	M5	M6
0	.	Accu	M7	M8
Change	Store	Clear	Tare	Zero

The Panel of LP258 Electronic Price Computing Scale



2. Keyboard Function

Key Name	Function
【0-9】	Numeric Key
【 . 】	Press this key will input digits behind the decimal point
【Change】	When the amount is not zero, press this key to enter the change function
【Save】	Save the unit price
【ACCU】	This key has three functions: 1. It shows the previous total price when at zero point. 2. It adds up current price when there's weight. 3.In set-up mode, it's the enter key for the system parameters.
【Clear】	This key have two functions: 1. Clear the input value and accumulated value 2. In set-up mode, it's the exit key.
【Tare】	In the normal operating mode , press this key to remove the tare weight
【Zero】	In the normal operating mode , press this key to start zeroing
【M1-M8】	In the normal operating mode , press this key to extract the saved unit price
【Save+0】	Combination key, in the normal operating mode, press this combination key to view the internal code of the electronic scale.
【Save+Tare】	Combination key, in the normal operating mode, press this combination key to enter presetting tare weight.

III. Operation and Instruction

1. Zero Operation

When the gross weight is within the zeroing range , press [Zero] key could display zero on the electronic scale, thus “Zero” light is on. Zero operation could not be started when it has tare weight.

2. Tare Operation

2.1 Remove Tare Directly

When the weight is stable, non-negative and not at the zero position, press [Tare] key to remove the tare weight, thus “Tare” light is on. If the electronic scale itself already has tare weight and is less than or equal to zero position, press [Tare] key to exit the status of displaying net weight, and tare weight is cleared, thus “Tare” light is off.

2.2 Preset Tare

In the normal operating mode, press the combination key [Save+Tare] to enter the status of presetting the tare weight, then it shows [PrEP][ ][00.000]. Input the tare weight, press [Total] key to confirm.Thus “Tare” light is on. If the electronic scale has already removed the tare weight and the tare weight has been preset to zero, it will exit the taring. Thus “Tare” light is off.

3. Pricing Operation

During the pricing process,please input the unit price by pressing number key, thus the amount displaying area will show the calculated sum based on the current unit price.When the weight is negative, no matter what the unit price is, the sum always shows zero. And in the stable condition, the cumulative amount is available.

When inputting the unit price,you could press[Clear] key to clear the original price or the wrong price. And if you try to input the new unit price again after three seconds, the price computing scale will clear the previous data automatically. Don’ t need to press any button to confirm after finishing inputting the unit price. The fixed decimal of unit price and amount is two digits. The maximum unit price and amount display 9999.99.And if the amount is more than 9999.99, the scale will show [oUEr].

4. Accumulate

When the amount is more than zero, please press [ACCU] key to accumulate the current amount, and this is one time accumulation in the system. Now the "ACCUM" light is on, and 3 seconds later it will be back to weighing mode. At this time, the next time’ s accumulation operation will start only after the weight

returns zero. When the amount is zero, please press [ACCU] key to display the amount.

Note: In the case of the cumulative times do not overflow , the maximum accumulative sum is 999,999 (excluding the decimal point); and the maximum accumulative times are 255; However, when the accumulative times overflow, the system will not start to accumulate any more.

5. Eliminate

In the condition of showing sum (display [ACCU]), you could delete the accumulative amount by pressing [Clear] key. Then "ACCUM" light is off. In the non-cumulative status, press [Clear] key to clear the current unit price.

6. Save

6.1 Save Unit Price

In the weighing mode , press [Save] key to enter the storage of unit price. When the display shows [StorE] [Unit Price] [Sequence Number], please press any key among【M1-M8】to save the current unit price to the corresponding sequence number. Then press [Save] key again to exit.

6.2 Obtain Unit Price

In the normal operating mode, press any key of 【M1-M8】 to get the stored unit price which is corresponding to sequence number.

7. System Settings

System parameters include power saving mode setting, fixed value alarm mode setting. Please see operating methods in the following table:

No.	Operation	Display	Notes:
1	In normal operation mode, press combination key 【SAVE+5】to enter the system parameters' setting mode	[bL] [*] [ ]	Enter the system parameters' setting mode.
3	Power saving mode setting: press 【1】 key, then press 【 ACCU 】 key to confirm.	[bL] [*] [ ]	Power saving mode setting: the available input parameter range is from 0 to 2. 0 : do not use the power saving function 1 : when gross weight is zero, the display will turn off after 10 seconds 2 : when net weight is zero, the display will turn off after 10 seconds. For example: 1

4	Fixed value alarm mode setting: press 【0】【1】【1】keys, then press 【ACCU】 to confirm.	[Lt] [XYZ] [ ]	Fixed value alarm mode setting: X means do you need buzzer rings or not when alarm? Y means do you need judge fixed value when it's stable Z means alarm method (note 1) For example : 011
6	Return to normal operation mode		Now electronic scale will work according to the above parameter setting.

Note 1:

X: 0 means it allows buzzer to ring when fixed value alarming

1 means it forbids buzzer to ring when fixed value alarming

Y: 0 means it has nothing to do with whether the data is stable or not when judging the fixed value alarm.

1 means judging the fixed value alarm could be only started after the data is stable.

Z:

0	1	2	3
Alarm when it is lower than the lower limit	Alarm when it is between the upper and lower limit	Alarm when it is higher than the upper limit	Alarm when it is lower than the lower limit or higher than the upper limit

8. View Internal Code

In the normal operating mode, press combination key [Save+0] to view the internal code of electronic scales. And once again press combination key [Save+0] to return to the normal operating mode. (Note: The internal code belongs to non-unit data, and it's only used for the observation and analysis of measurement deviation.)

IV、Error and Elimination

Error	Reason	Solution
[Err 1] [ ] [ ]	Small AD value happens when full measuring range calibrating	The loaded internal code is too small or choose the load cell of big measuring range
[Err 2] [ ] [ ]	When starting zero calibration, zero point is beyond the allowed range	Please set up zero among the allowed range
[Err 3] [ ] [ ]	Zero position is beyond the settled range when turning on the device	Remove the heavy goods on the weighing platform, then turn on the device, thus it will be back to

		zero position
[**Err 5**] [ ] [ ]	When full measuring range calibrating, in the calibration status, input zero for the weight number	Please input the correct calibration value
[**Err 7**] [ ] [ ]	Sensor's connection error, AD code is negative when calibration	The sensor's signal lines are connected incorrectly, please connect signal lines properly.
[**Err 8**] [ ] [ ]	When weighing, the sensor is not stable	Please check whether the scale is in contact with other objects or sensor is broken.
[**Err 9**] [ ] [ ]	Input wrong parameter or input the value out of range	Input the allowed value or parameter which has been settled

V. Battery Usage

1. When the power line is connected to the AC 220V, that is to charge the battery.

2. When the electronic scale's under-voltage light blinks, it means low battery and please charge the device in time.

3. When the electronic scale displays Lob, it means the battery's electric quantity is critically low. Now the weighing function will stop. Please turn off the device immediately and charge the battery.

4. When the electronic scale is used at the first time, please charge the battery at first, and the charging time is better over 24 hours to ensure the battery to supply the safe, stable working condition.

5. It is recommended to charge the battery immediately in the low battery condition under the normal operation, in order to avoid damage for the battery and shortening battery's service life in the under-voltage working condition. It's better to charge the battery over 12 hours each time. If the scale does not be used for a long time, you should charge the battery every 2 months and each charging time need to be more than 20 or 24 hours. Thus it will make up for battery's electric quantity loss, to prevent the damage for the battery and extend battery's service life.

▲! The battery's connecting thread must not be reversed (red thread is + and black thread is -), otherwise it will damage the device. When the first time built-in battery is used, it must be fully charged before use!

▲! Please use AC 220V to charge all the above batteries.If AC is lower than 220V, battery's charging time needs to be extended.

VI. Maintenance and Attentions

1. When using this electronic scale, please avoid direct sunlight and put on the flat surface in order to ensure its clarity and service life.

2. It should not be placed in the dusty or seriously vibratory environment, or avoid being used in the wet environment.

3. Do not use strong solvent (such as: benzene and nitro oil) to clean the crust.

4. Do not inject liquid or other conductive granule into the electronic scale to prevent damage and get the electric shock.

5. The built-in battery of electronic scale is consumable, and it does not belong to the warranty scope.

6. Within one year from the date of sale, under the condition of the normal use, unartificial breakdown belongs to the warranty scope. The user should send the product together with warranty card (which is corresponding to serial number) to maintenance point or suppliers. Manufacturer supply the life-long maintenance for the device. Please don't open the electronic scale, otherwise no warranty.

Pricing Computing Scale

Calibration Instructions

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In the normal operating mode, please press combination key [Save + .] to enter the calibration function, then follow the steps in the table below to complete calibration.

Step	Operation	Display	Note
1	Press combination key 【Save + . 】 to enter the calibration function	[PASS] [ ] [000000]	Enter the calibration state, the user is prompted to enter the password for calibration.
2	Press numeric keys to enter the calibration code, and press the [ACCU] key to confirm	[PASS] [ ] [319015]	Enter the calibration password:319015
3	Press【2】key, Press [ACCU] key to confirm	[E] [ ] [002]	Set division value : the indicator shows the original division value, the user is prompted to enter a new division value; 1,2,5 are optional parameters which could be inputted. If do not need modify, just press [ACCU] key to enter the next step, the same as below For example: 2
4	Press【3】key, press [ACCU] key to confirm	[POS] [ ] [3]	Set the decimal point’s position of the weight: the indicator shows the original decimal point, the user is prompted to enter a new decimal point; optionally enter parameters: 0,1,2,3, which corresponds with 0 to 3 decimals For example: 3
5		[2Ero] [ ] [WXYZ]	Set Zero point parameter (Note 1): W: speed of zero point tracking X: range of Zero point tracking Y: range of manual zeroing Z:range of zeroing when starting up
6	Press【1】【2】【4】key, press [ACCU] key to confirm	[2Ero] [ ] [0124]	For example:0 1 2 4
7		indicator displays [FLT] [ ] [XYZ]	Set the intensity of digital filtering (Note 2) X: selection of anti-vibration Y: judge stability range Z: filter strength, the larger the number, the stronger the filtering strength, the more stable it shows, but the reaction is slower This parameter is proposed to select 012
8	Press【0】【1】【2】 key, press [ACCU] key to confirm	indicator displays [FLT] [ ] [012]	For example:0 1 2

9	Press【6】【0】【0】【0】key , press [ACCU] key to confirm	[FULL] [ ] [006000]	Enter the value of full measuring range: For example:6000
10	Once stable , press [ACCU] key to confirm	[noLoA] [Internal Code] [SurE]	Zero point calibration: make sure the indicator is connected with empty scales , wait for showing【SurE】
11	After being stable for 5 to 10 seconds after the stable , Press 【6】【0】【0】【0】 key, press[ACCU] key to confirm	[noLoA] [Internal Code] [006000]	Linear calibration: get some load, the closer to full measuring range, the better. Input the actual weight of the weights which have been placed on the weighing platform, press 【ACCU】key to confirm. For example:6000
12	Calibration has been completed, return to work status		(Note 3)

Note1:Meaning of zero parameters

W: Speed of Zero Point Tracking

0	1	2	3
0.4 s	0.3 s	0.2 s	0.1 s

X: Range of Zero Point Tracking

0	1	2	3	4	5	6	7	8	9
No tracking	0.5e	1.0e	1.5e	2.0e	2.5e	3.0e	3.5e	4.0e	4.5e

Y: Range of zeroing when press [zero] key

1	2	3	4	5
2%F.S	4%F.S	10%F.S	20%F.S	100%F.S

Z: Range of zeroing when starting up

1	2	3	4	5
2%F.S	4%F.S	10%F.S	20%F.S	100%F.S

Note2:

X: anti-vibration’s options: 0 is off, 1 is open (the stability of the indicator response slowly)

Y: judge stability range’s options: parameter’s range is from 0 to 3, respectively sentenced to stabilize in the range of 0.5d, 1.0d, 1.5d, 2.0d.

Z: filter strength, the larger the number, the stronger the filter strength, the more stable it shows, but the reaction is slower.

Note 3: In the step 1-8 operation, you could press the [Clear] key to exit calibration. If you make a mistake when inputting, press [0] key continuously to clear it.