

T-Scale

Operation Manual

AW20

Weighing Scale

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1. PRECAUTIONS

	 WARNING
	DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, CLEANING, OR SERVICING. FAILURE TO DO SO COULD RESULT IN BODILY HARM OR DAMAGE THE UNIT.

 CAUTION
• Permit only qualified persons to service the instrument • Before connecting or disconnecting any components, remove the power. • Failure to observe these precautions bodily harm or damage to or destruction of the equipment.

	SAFTEY INSTRUCTION
	The weighing scale is a precision electronic instrument, handle it carefully. The device must only be operated by personnel trained in the operation of this equipment. The operating personnel must read and understand the safety instructions in these operating instructions. To prevent any accident, only qualified service personnel is authorized to open this device! Verify the local voltage and receptacle type are correct for the scale. Only use original adaptor, other could cause damage to the scale. Pluggable equipment must be installed near an easily accessible socket outlet. To prevent load cell ,Avoid load the weight exceed the maximum capacity on the platform To prevent the keys, Do not scratch the keypad with a sharp object Avoid unstable power sources. Do not use near large users of electricity such as welding equipment or large motors. Avoid sudden temperature changes, vibration, wind and water. Avoid heavy RF noise. Do not install the scale in direct sunlight.

2. PRODUCT DESCRIPTION

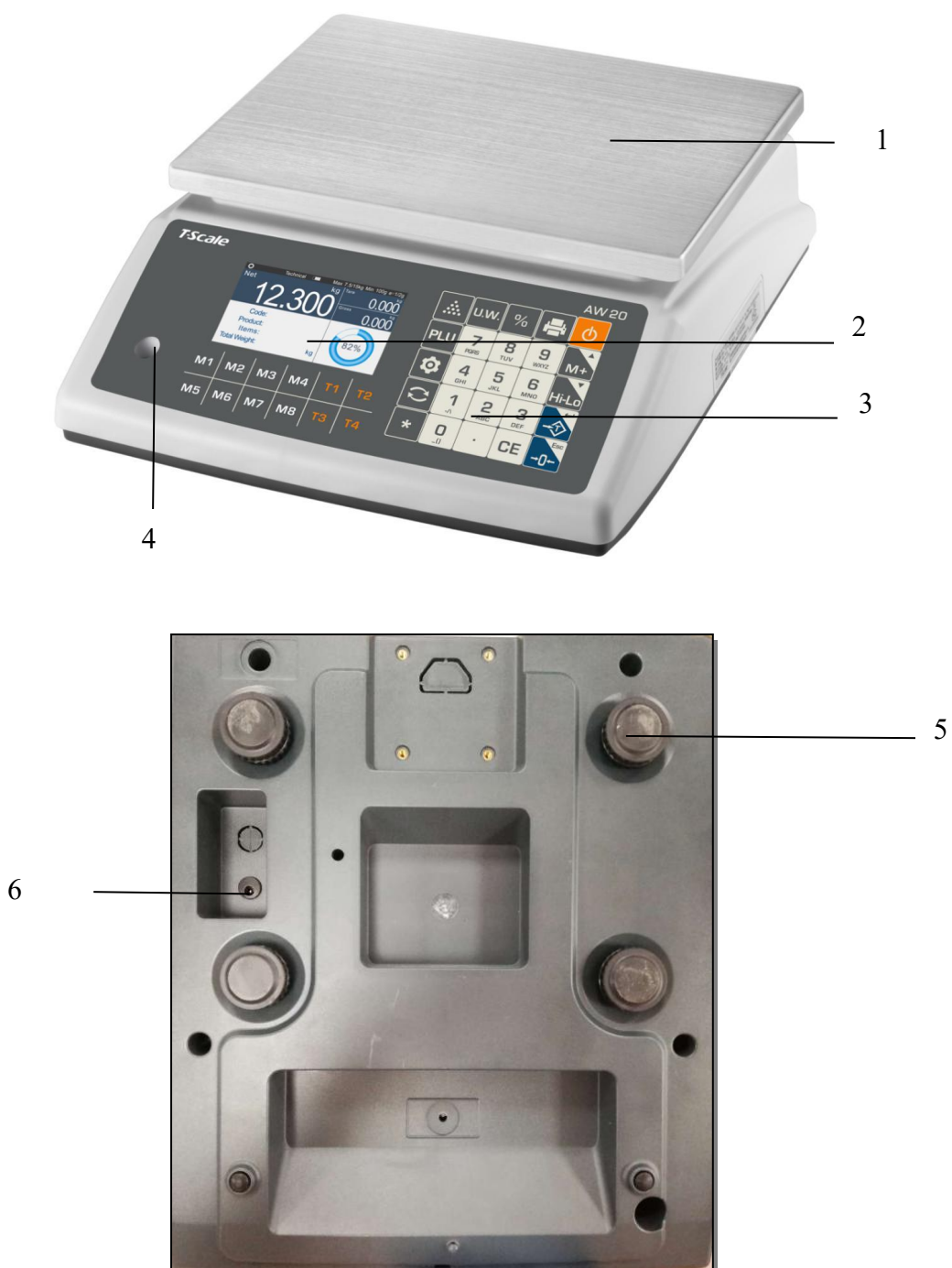
2.1 General

The AW20 Series weighing scale include full-fledged features, interfaces, it can be developed to meet the Industrial applications.

Major Features

- 4.3" color display with graphic interface
- Multi-user permission management
- Weighing units conversion (kg/g/lb/oz/tj/hj/t)
- 37 membrane keyboard
- Counting by sampling or entering unit weight; percentage weighing; tolerance checking
- Accumulation mode with manual accumulation, auto load accumulation and auto unload accumulation
- Up to 300 PLUs capacity ,8 direct PLUs ,supported to display alphanumeric PLU information
- Reports Management: Daily, weekly, Monthly, Product reports.
- Multiple language selection
- Different methods of communications: RS232 , Ethernet, Wi-Fi, Bluetooth, USB2.0 Host for Scanner interface
- Data management with backup and restore
- Back office management software could update to the indicator with networking
- All options are controlled from menu. No spec list provided and easy to operate.

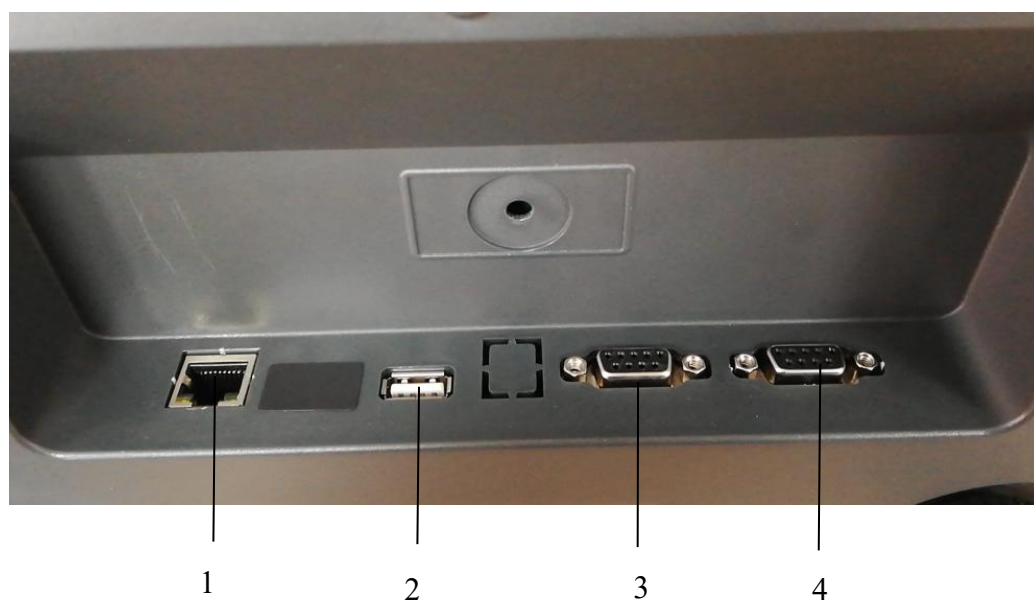
2.2 Over View



1. Stainless steel
2. 4.3" LCD display
3. Keyboard
4. Level bubble
5. Adjustable leveling feet
6. AC adapter jack

2.3 Interfaces

AW20 Series is equipped with 1xRJ45, 1xUSB2.0,and 1 x RS232 interface



No	Interface	Description
1	RJ45	Support 10M/100M Ethernet
2	USB2.0	For USB disk/ scanner /data transfer,don't use for charging other device
3	RS232	For connecting computer / printer/alarm light/ Remote display/Second platform
4	RS485	For connecting computer

3. INSTALLATION

3.1 Unpacking

When you receive the scale, inspect it to make sure that it is not damaged and that all parts are included:

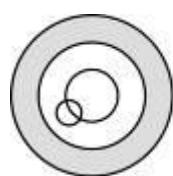
- Remove the scale from the carton.
- Remove the protective covering. Store the packaging and to use if you need to transport the scale later.
- Inspect the scale for damage.
- Make sure all components are included.
 1. Scale
 2. Adaptor
 3. Manual
 4. Stainless steel pan

3.2 Installation

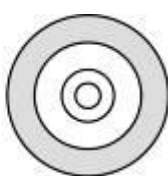
- Remove transport lock from bottom of the scale base
- Place the scale on a level surface
- Install the stainless steel pan on top of the housing

3.3 Leveling

- The scale is equipped with a level indicator located left side of keyboard
- Use the adjustable leveling feet located on the bottom of the scale until the bubble appears in the center of the indicator.



Not Level



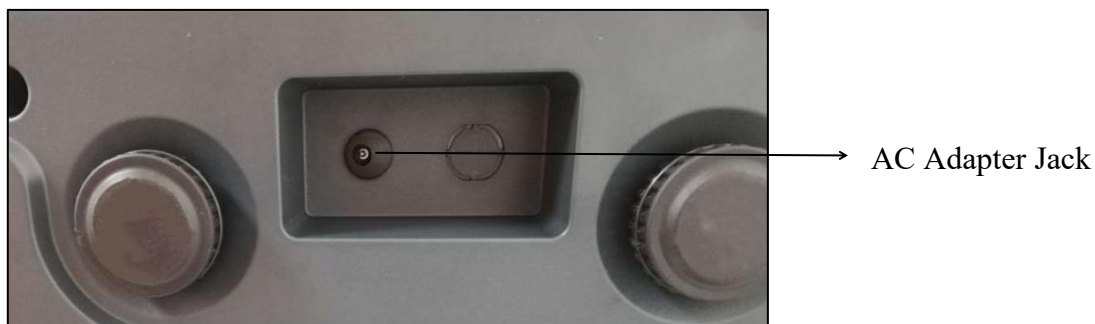
Level



Level bubble

3.4 Power Connection

- Connect the adaptor pin in to the indicator adaptor jack.
- Adaptor jack is locating bottom of the scale.



- Adaptor connects into your AC power socket. Plugable equipment must be installed near an easily accessible socket outlet with a protective ground/ earth contact.

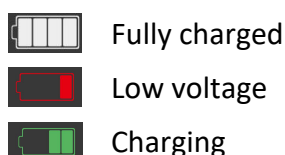
3.5 Rechargeable battery (optional)

Note: Please charge the battery before using the scale for the first time.

- The low voltage battery symbol on the weight display indicates that the battery is getting low. It's time to charge the battery with the AC power. If scale goes on being used without proper charging, <BAT-LOW> words will flicker on the display.
- Approximately 30 minutes of instrument usage are left; afterwards it will shut off automatically.
- Please use the supplied battery charger for charging the battery immediately, or scale cannot be used.

3.5.1 Charging the battery

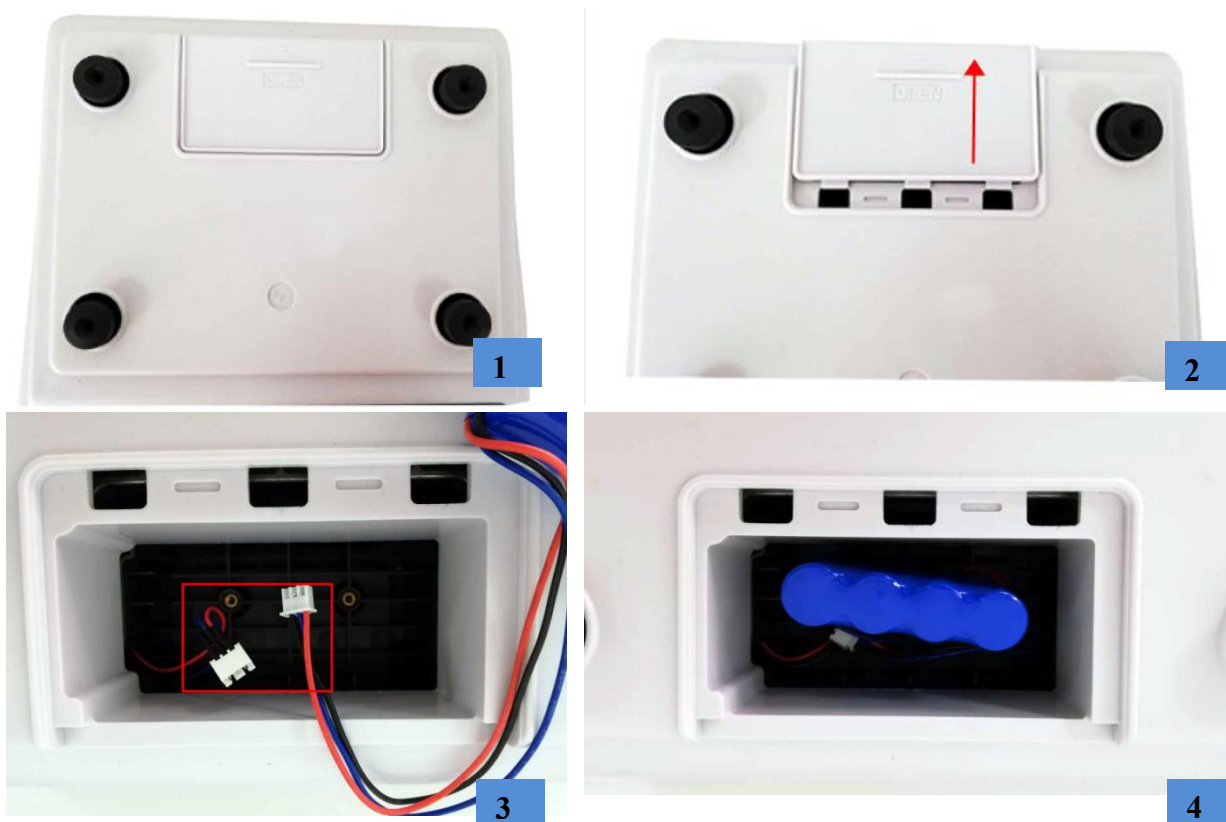
- Before the first use, the battery should be charged by connecting it to the mains power supply for at least 5 hours.
- When the scale is plugged into the mains power the internal battery will be recharged.
- Verify that the AC power socket outlet is properly protected.
- There is an battery symbol at the upper side of display to indicate the status of battery charging.



3.5.2 Battery replacement

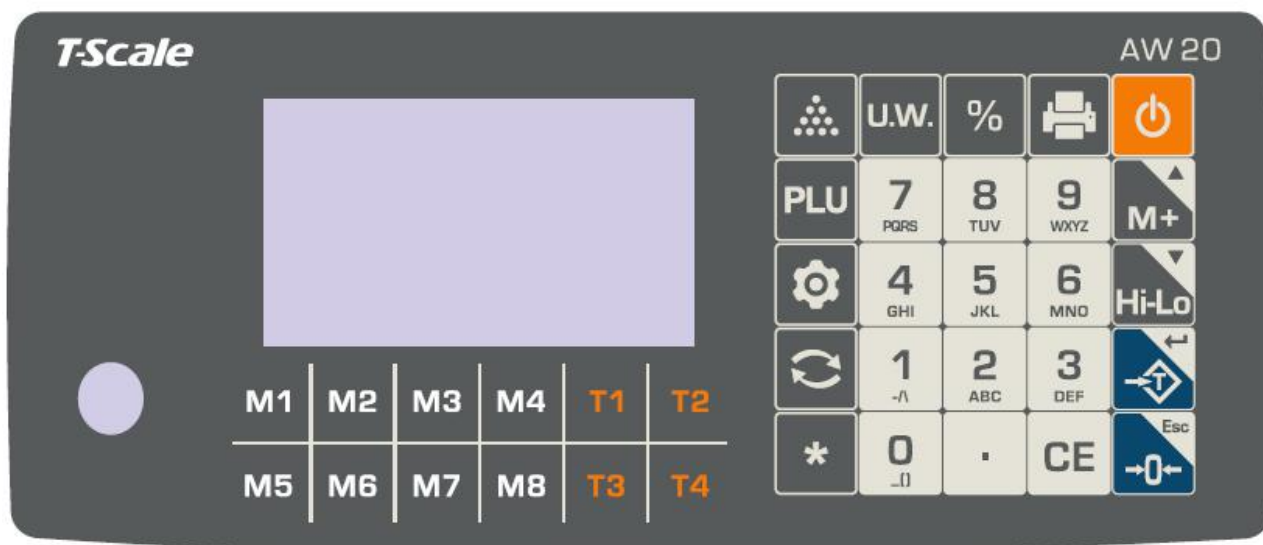
- 1 Place the indicator display down on horizontal desktop (1).
- 2 Open the battery cover along the arrow direction (2).
- 3 Take out the foam next to the battery (3).

- 4 Disconnect the lithium battery connector (4).
- 5 Replace the new lithium battery and connect the battery connector.
- 6 Put the foam next to the battery and close the battery cover



4. DISPLAY&KEYS FUNTION

4.1 Key Board



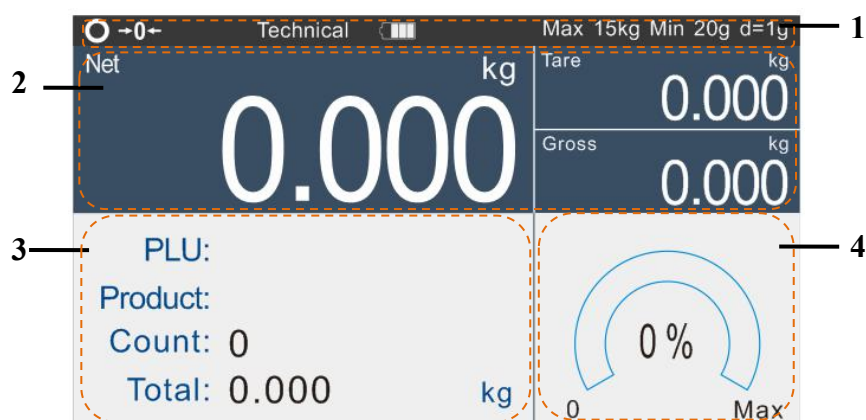
Icon	Name	Description
	On/OFF key	- Press the key to turn the scale on - Long press to turn the scale off
	Print key	- Used to print weighing data in normal weighing mode - Used to print reports when in report mode
	Percentage key	Used to enter percentage mode in normal weighing mode
	Unit Weight key	- Used to store the known average piece weight of item - Long press to change the average piece weight value of item
	Sampling key	Used to enter the counting operation
	Product key	- Used to recall product information - Long press to search product information from list
	Menu key	- Used to enter parameter setting - Long press to check the set parameter information
	Local/Remote key	- Used to change weighing units - Shift to capital letter / small letter when entering characters - Long press to switch local scale to remote scale
	Reserved key	(Reserved function)

	Numeric and alphabetic keys	- Input number in weighing mode - Input numeric and alphabet in parameters and PLU setting
	Decimal point key	Used to input decimal point
	Clear key	- Used to clear selected products and numeric keys - When entering characters, short press to clear one bit, long press to clear all
	Zero key	- Used to zero the scale. - Long press to exit other modes (counting or percentage mode) and back to weighing mode
	Tare key	Used to perform a tare function, Subtracts weights.
	Limit key	- Used to enter check weighing mode - Long press to set HI and Low limits
	Accumulation key	- Used to store the accumulation weights in memory - Used to recall accumulation records
M1 to M8	Direct PLU	- To recall direct PLU - Long press to store direct PLU
T1 to T4	Pre-tare key	- To recall the pre-tare value - Long press to store pre-tare value

Keys in the parameter settings

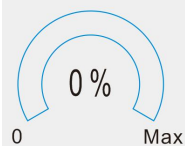
	Used as confirm key ,to enter into the function and parameter settings
	Scroll up to enter different item page
	Scroll down to enter different item page
	Escape from the parameter settings and return to the normal weighing mode

4.2 Indication Description



- 1 Measurement information
- 2 Weight display
- 3 Product Information display
- 4 Range Circle Display Bar

Icon	Name	Description
	Stable indicator	Indicates the scale weight is stable.
	Zero indicator	Indicates the scale is at zero.
	Tare indicator	Indicates the scale is in tare operation
	Battery symbol	Current remaining power
	Battery shortage	Indicates the battery gets low
	Battery charging	Indicates the battery is charging
Technical	User name	Indicates current operator account
Net	Net weight	Indicates scale is displaying the net weight.
Tare	Tare weight	Indicates scale is displaying the tare weight.
Gross	Gross weight	Indicates scale is displaying the gross weight.
	Lack of unit weight	Indicates piece below minimum weight of piece
	Lack of sample	Indicates number of parts placed on balance too small
Animal	Animal indicator	Indicates in animal weighing mode
Peak	Peak hold indicator	Indicates in peak hold weighing mode
PLU	PLU number	Indicates scale is displaying the PLU number.
Product	Product name	Displays product name
Count	Count	Displays accumulated counts

Total	Total	Displays accumulated total weight
	Range Display Bar	Displays the range of capacity

5. OPERATION

5.1 Power On/Off

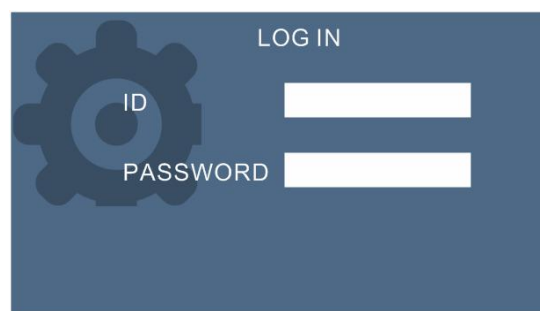
Press  key to switch power-up, it will be heard “beep” sound ,the scale show company logo, and come to normal weighing mode.

Hold  key 1.5 seconds to switch off the scale.

5.2 Log in

It allows multiple users to operate the same indicator

1 When power is on ,it may be asked to input the account and password to log in.

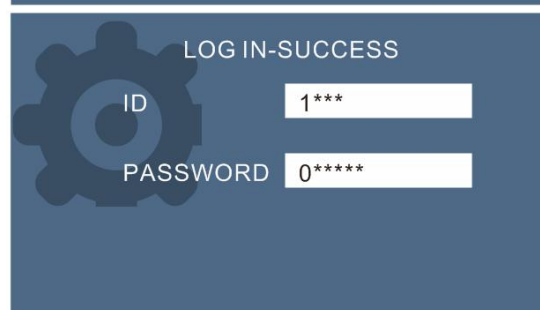


2 Input the account by using numeric keys ,

press  key to confirm.

3 Input the password by using numeric keys ,

press  key to confirm.



4 Display show log in success and come to normal weighing mode.

Note:

1. To enable Login function, see parameters 1.System settings >4. Require login > Yes.
2. Account and password need to be set on the scale in advance, the scale needs to restart after setting up to enter the login .
3. Technician account number is 1000, password is 000000.

5.3 Zero Setting



Zero setting allows to do by pressing  key, only it's possible when the load receptor is not in motion.

5.4 Tare

5.4.1 Semi-automatic tare

The indicator is provided with a semi-automatic subtractive tare.



The weight of any container can be tared by pressing  button so that with subsequent weighing the net weight of the object being weighed is always displayed.

Tare Operation:

- 1 Load weight on the platform.



- 2 Press  key. Zero is displayed, and tare is subtracted.

- 3 Remove weight on the platform. Tared weight is displayed. It can set only one tare value. It will be shown with a minus value.



- 4 This Tare value can be cleared by pressing  key, when there is no load on the platter.

This tare entry cannot take place, if the platter is in motion.

5.4.2 Automatic tare

The weight of any container can be tared automatically ,to enable automatic tare function, see parameters 2.ADVANCED SETTINGS >3. TARE SETTINGS > 1.AUTO TARE >ON.

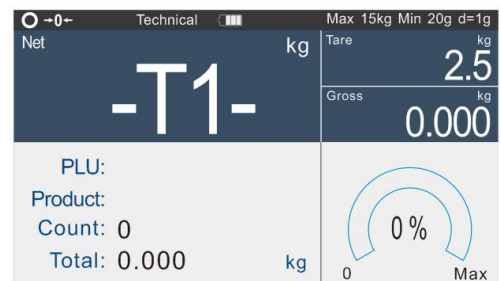
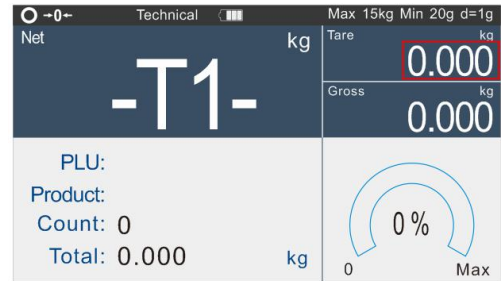
- 1 Load a container on the platform, it will be heard a “beep” sound.
- 2 ZERO indicator and TARE indicator appears.
- 3 Zero is displayed in NET window,the subtracted value appears in the tare window.
- 4 Load the weight in the container,the NET window shows net value with a “beep” sound.
- 5 Remove weight from the platform. Tared weight is displayed. It can set only one tare value.
- 6 Remove the container from the platform,display show zero with a “beep” sound.

5.4.3 Pre-set tare

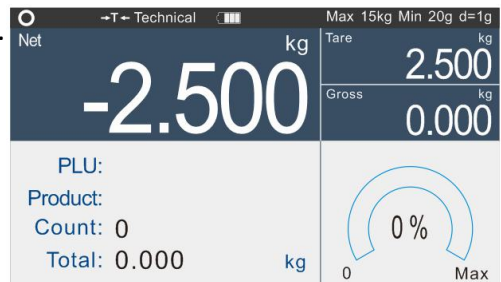
5.4.3.1 Store Pre-set Tare

Direct pre-set tare:

- 1 Hold T key (**T1** to **T4**) 2 seconds in normal Weighing mode,the digits in Tare window will be active.
- 2 Using numeric keys to input the tare value.



- 3 Press  key to confirm,the preset tare value appears.



Indirect pre-set tare:

The scale has a pre-set tare function,it can be combined with PLU information,the pre-set tare value can be dedicated to the products in the PLU individually ,using numeric keys see parameters

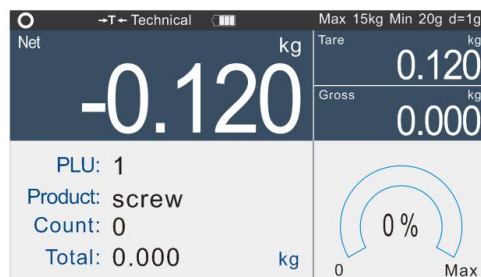
3.PRODUCT INFO > 2. ADD/EDIT PRODUCT > 3.TARE

PLU	1	1/2
PRODUCT		
1.NAME		
2.CODE		
3.TARE	0.000 kg	
4.TYPE	WEIGH	
5.MIN.WEIGHT	0.000 kg	
6.MAX.WEIGHT	0.000 kg	

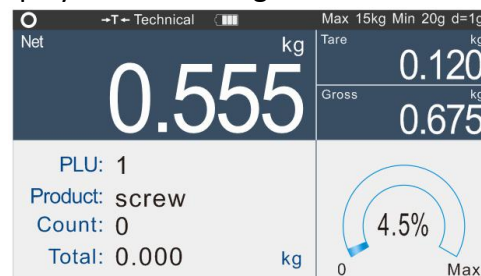
5.4.3.2 Recall Pre-set Tare

Recall indirect pre-tare

- 1 Select a Weight PLU configured with pre-tare value from Indirect PLU list .
- 2 Display will be show selected product name & number & pre-tare value .



- 3 Place the item on the pan and wait to get weight stable, display show net weight.



- 4 Remove item from the pan ,the net window show negative value.



- 5 Press  key to clear tare value.

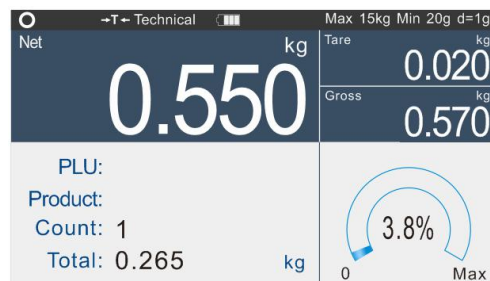


Recall direct pre-tare

- 1 Press T key (selected from **T1** to **T4**) to recall pre-tare value .
- 2 Display shows pre-tare value .



- 3 Place the item on the pan and wait to get weight stable, display show net weight.



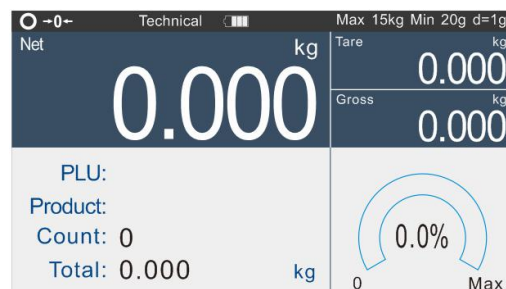
- 4 Remove item from the pan, the net window show negative value.

- 5 Press  key to clear tare value.

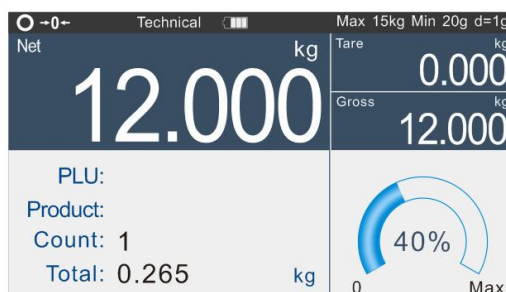


5.5 Weighing Operation

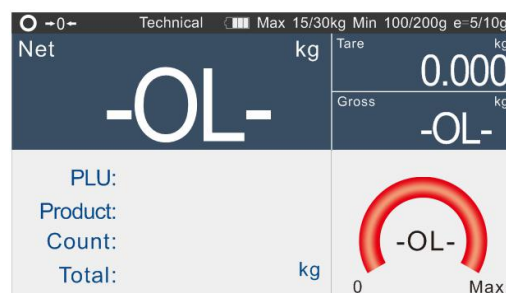
Switch on the scale, display show normal weighing mode.



Load the weight on the pan, display shows weight.



To avoid damaging the load cell, please do not add the weight over the full capacity, otherwise display shows -OL-.



5.6 Weighing Units Conversion

By pressing  key in turn in normal weighing mode, it can convert the weighing units (kg/g/lb/oz/tj/hj), the relative units symbol will turn on in the display.

To enable the weighing units, please see parameter 2.ADVANCED SETTINGS >1.DISPLAY UNIT

1 Press  key to enter setup menu.

2 Press  key to select 2.ADVANCED SETTINGS

And confirm by pressing  key.

3 Press  key to enter DISPLAY UNIT.

4 Press  key to enter the option.

5 Press  key to select on/off.

6 Press  key 3 times to back to normal weighing mode.

1/1	
MAIN	
1.SYSTEM SETTINGS	
2.ADVANCED SETTINGS	
3.PRODUCT INFO	
4.PRINT,REPORTS&DATA	
5.INTERFACE	
6.SERVICE	

1/2	
ADVANCED SETTINGS	
1.DISPLAY UNIT	
2.ZERO SETTINGS	
3.TARE SETTINGS	
4.WEIGHING MODE	SLOW
5.ANIMAL WEIGH	NORMAL
6.BEEP MODE	BEYOND LIMITS

1/2	
DISPLAY UNIT	
1.g	ON
2.kg	ON
3.lb	ON
4.oz	ON
5.t	OFF
6.tj	OFF

5.7 PLU Information Store and Recall

It allows for searching Product names by pressing Direct PLU M1~M8 or by using  key.

5.7.1 Store Indirect PLU information

please refer to setup menu > 2.PRODUCT INFO > 2.ADD/EDIT PRODUCT

Operation:

- 1 Press  key to enter setup menu.
- 2 Press  key 2 times to select 2.PRODUCT INFO.
- 3 Press  key to enter
- 4 Press  key to select 2.ADD/EDIT PRODUCT.
- 5 Press  key to enter product information
- 6 Please input PLU number by using numeric keys
And confirm by pressing  key .
- 7 Now you can start to edit product information.
- 8 Press  key 3 times to back to normal weighing mode.

	1/1
MAIN	
1.SYSTEM SETTINGS	
2.ADVANCED SETTINGS	
3.PRODUCT INFO	
4.PRINT,REPORTS&DATA	
5.INTERFACE	
6.SERVICE	

	1/1
PRODUCT INFO	
1.SEARCH	
2.ADD/EDIT PRODUCT	
3.DELETE PRODUCT	
4.CHANGE PLU NUMBER	

	1/1
PRODUCT INFO	
1.SEARCH	
2.ADD/EDIT PRODUCT	
3.DELETE PRODUCT	
4.CHANGE PLU NUMBER	
PLU NUMBER	1

PLU	1	1/2
PRODUCT		
1.NAME		
2.CODE		
3.TARE	0.000 kg	
4.TYPE	WEIGH	
5.MIN.WEIGHT	0.000 kg	
6.MAX.WEIGHT	0.000 kg	

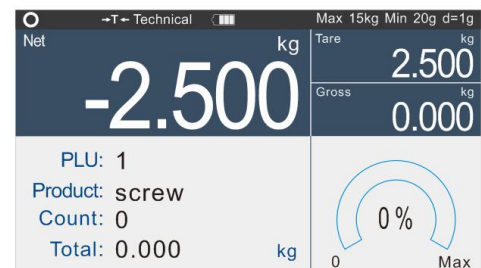
5.7.2 Recall indirect PLU

- 1 Press  key to recall the indirect PLU information in normal weighing mode.
- 2 It will be asked to input PLU number



- 3 Using numeric number keys on the keypad to input PLU number to select products.

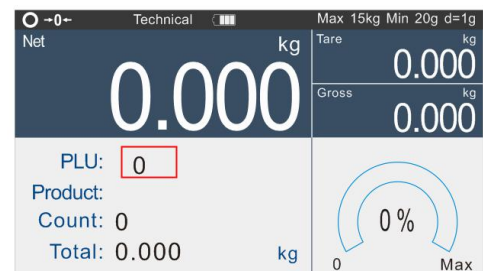
- 4 Press  key to confirm.
- 5 Display will be show selected product name & number .



Note: By pressing  key allows clearing the current product number & name, or by selecting a new PLU key will be clear existing PLU number & name automatically.

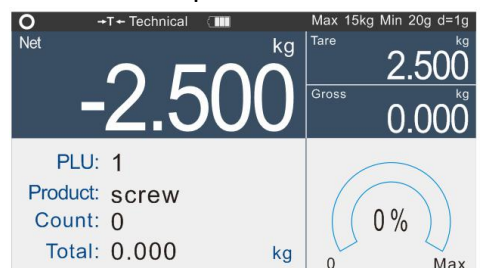
5.7.3 Store Direct PLU information

- 1 Press  key to recall the indirect PLU information in normal weighing mode.
- 2 It will be asked to input PLU number



- 3 Using numeric number keys on the keypad to input PLU number to select products.

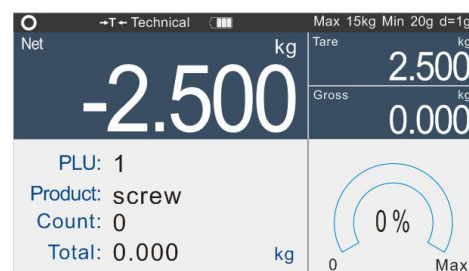
- 4 Press  key to confirm.
- 5 Display will be show selected product name & number .



- 6 Hold M keys (selected one of direct PLU from **M1** to **M8**) for storing product information.
- 7 The PLU information will be stored in the direct PLU with a “beep” sound.

5.7.4 Recall direct PLU

In normal weighing mode, press M key (selected from **M1** to **M8**) to recall direct PLU.



5.8 Parts Counting

Weigh a sample to calculate the unit weight to determine the average weight of items to count, put a known number of pieces on the scale. The balance of the total weight divided by the number of samples and displays the unit weight.

Note: Before operation scale should be stable and return to zero, sampling available only when weight more than 20d.

5.8.1 Manual Sampling for counting procedure

5.8.1.1 Simple Sampling

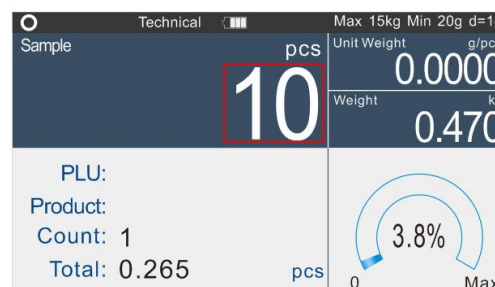
- Make sure platter empty and display return to zero.



- Put a container on platter and press  key if necessary.
- Place a unknown amount of pieces on the scale.



- Press  key to confirm when scale stable.
- The digits in the sample window will be active.



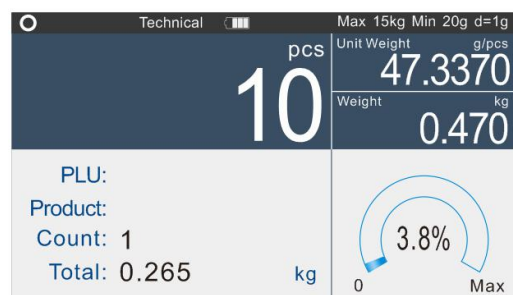
- If necessary press  key to change the parts quantity (10/20/50/100).



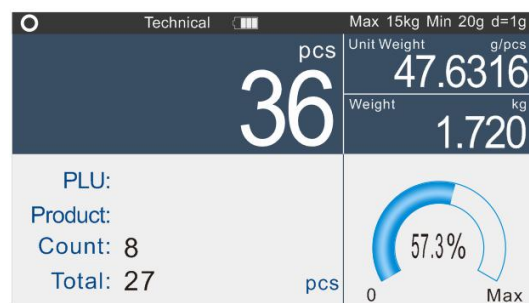
- Press  key to confirm, display show dotted line.



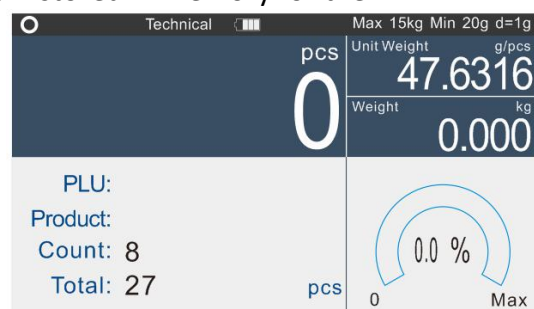
- The average piece weight of item will be calculated and then the number of items displayed in count window.



- Add the rest of items on the platter, weight and number of items will be increased.



- Remove the items, the average piece weight will remain stored in memory for the next counting of similar pieces.

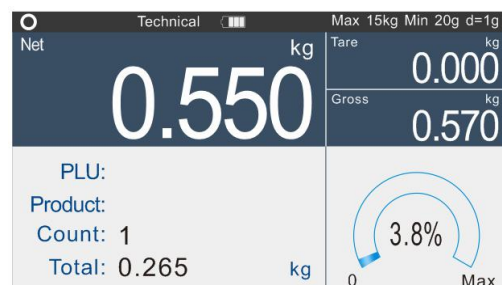


- Press and hold  key to back to normal weighing mode.

5.8.1.2 Enter Counting Number

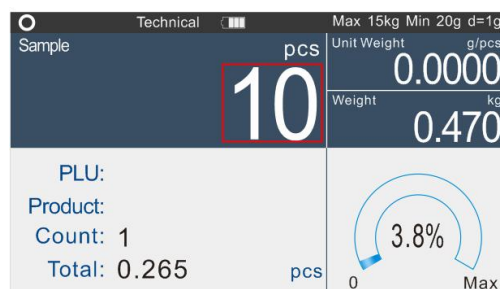
- Make sure platter empty and display return to zero.

- Put a container on platter and press  key if necessary.
- Place a unknown amount of pieces on the scale.





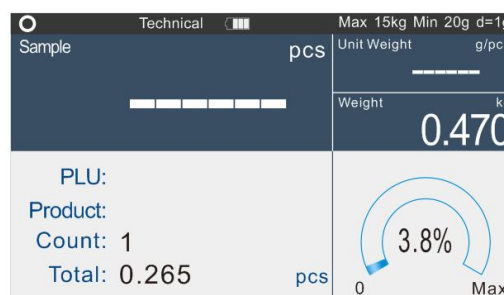
- Press and hold  key to confirm when scale stable.
- The digits in the sample window will be active.



- Using numeric keys to input the count number, eg: 10



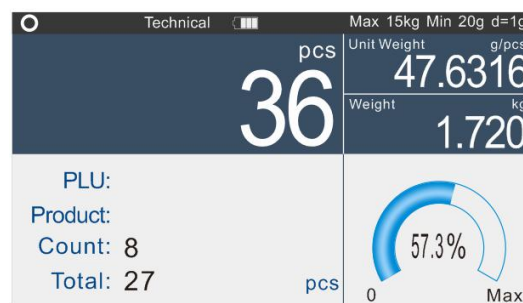
- Press  key to confirm, display show dotted line.



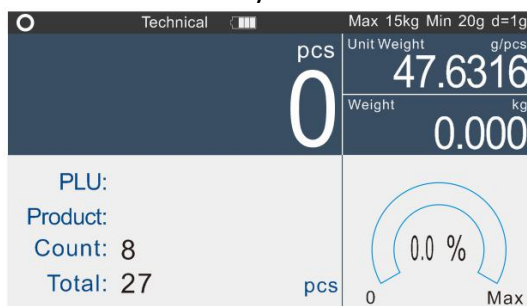
- The average piece weight of item will be calculated and then the number of items displayed in count window.



- Add the rest of items on the platter, weight and number of items will be increased.



- Remove the items, the average piece weight will remain stored in memory for the next counting of similar pieces.



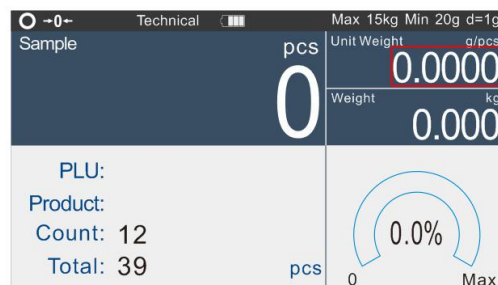
- To execute a new reference operation repeat the operations as described .

- Press and hold  key to back to normal weighing mode.

Note: The weighing may be amended on the basis of greater numbers of samples improves the accuracy of counting large quantities

5.8.2 To input the known average piece weight of item

- Make sure platter empty and display return to zero.
- Press  key, the digits in unit weight window will be active.

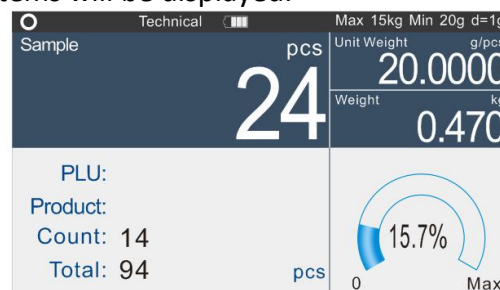


- Input the average piece weight of item with numeric keys.

- Press  key to confirm.



- Add new items on the platter, weight and number of items will be displayed.



- To execute a new reference operation repeat the operations as described .

- Press and hold  key to back to normal weighing mode.
- Press  key to display the last set unit weight.
- Press and hold  key to update the average piece weight of item, and confirmed by pressing  key.

5.8.3 Automatic Part Weight Updates

- To optimize the calculated average piece weight automatically, add further parts whose number is smaller than that of the first reference determination.

For each reference optimization the average piece weight is newly calculated.

As the additional pieces increase the base for the calculation, the reference also becomes more exact.

- Automatic reference optimization will be deactivated as soon as the number of added parts exceeds the saved reference quantity.

5.9 Percentage Weighing

The scale can set a sample weight to be shown as 100%. Then any other weights place on the scale, it will be displayed as a percentage of the original sample.

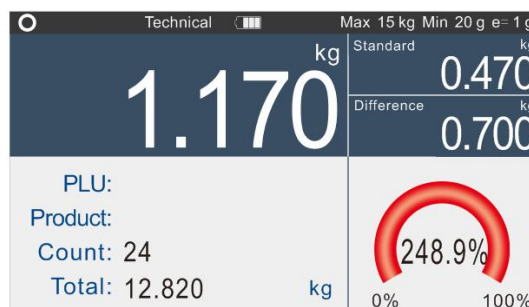
- 0.47 kg weight place on the scale and follow by press the  key is pressed the display will show 100.00%.



- Remove the weight, and ensure display is zero.



- Place 1.17kg weight on the platform, display will be show 248.9 % as per the percentage of 0.47kg (100%).

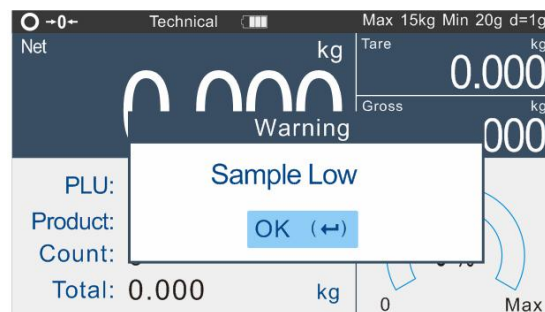


- Place 0.210kg weight on the platform, display will be show 44.7 % as per the percentage of 0.470kg (100%).



- Press and hold  key to back to normal weighing mode.
- The weighing may be amended on the basis of greater numbers of samples, improves the accuracy of percentage large quantities.

Note: If the weight is less than 20d, it will pop up a prompt “sample low”



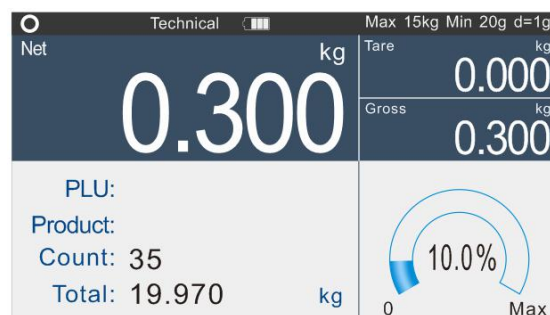
5.10 Accumulation

The scale can be set to accumulate manually by pressing  key. Only the total counts will be saved in memory.

Before operation scale should be stable and return to zero, accumulation available only when weight more than 20d

5.10.1 Manual Accumulation

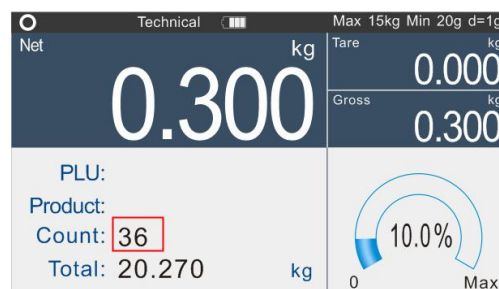
- 1 Place the load on the platform, the weight display will be show the net weight.



- 2 Press  key, when STABLE indicator on.
- 3 Total counts and weight will be displayed with beep sound .

- 4 Remove the weight from the pan.
- 5 When display get zero and stable then place the second weight.

- 6 Press  key, when STABLE indicator on.



- 7 It can continue until the memory gets fully .

5.10.2 Auto Load Accumulation

To enable the auto-load accumulation ,please refer to parameters 2. ADVANCED

SETTINGS >7.ACCUMULATION MODE > AUTO-LOAD

1/2	
ACCUMULATION	
1.TYPE	AUTO-LOAD
2.ALLOW ALL PRODUCTS	NO
3.PRINT EVERY RECORD	YES
4.MIN.LOAD	20D

- 1 Place the load on the platform,the weight display will be show the net weight.
- 2 When stable indicator on ,a "beep" sound will be heard,display shows the count and total weight.
- 3 Remove the item and the scale will return to zero;
- 4 When display get zero and stable then place the second weight.
- 5 It can continue until the memory gets fully .

5.10.3 Auto Unload Accumulation

To enable the auto-unload accumulation ,please refer to parameters 2. ADVANCED

SETTINGS >7.ACCUMULATION >1.ACCUMULATION MODE > AUTO-UNLOAD

1/2	
ACCUMULATION	
1.TYPE	AUTO-UNLOAD
2.ALLOW ALL PRODUCTS	NO
3.PRINT EVERY RECORD	YES
4.MIN.LOAD	20D

- 1 Place the load on the platform,the weight display will be show the net weight.
- 2 When stable indicator on ,a "beep" sound will be heard.
- 3 Remove the item and the scale will return to zero.
- 4 Display shows the count and total weight, a beep sound will be heard.
- 5 When display get zero and stable then place the second weight.
- 6 It can continue until the memory gets fully .

5.10.4 Accumulation Recall

1 In the normal weighing mode,when the load weight is less than 20d.

2 Press  key ,the accumulation records will be show.

11/25/20

1/3

ACC RECORDS			
NO.	TIME	PRODUCT	NET
001	22:54	Screw	5.545kg
002	22:54	Screw	5.545kg
003	22:54	Screw	5.545kg
004	22:54	Screw	5.545kg
005	22:54	Screw	5.545kg
006	22:55	Screw	5.545kg
TOTAL	14		70.570kg

3 Press  key or  key to scroll up or scroll down to view the records.

4 If connected with printer, press  key to print out the accumulation records.

Welcome			
11/25/20		22:54	
OPERATOR		Ada	
No.	Net	Counts	Result
1. Screw	6.130 kg	0.000 kg	NONE
2. Screw	6.410 kg	0.000 kg	HIGH
3. Screw	6.110 kg	0.000 kg	HIGH
4. Screw	6.070 kg	0.000 kg	HIGH
5. Screw	6.060 kg	20 pcs	OK
6. Screw	6.110 kg	20 pcs	OK
7. Screw	6.170 kg	21 pcs	HIGH
8. Screw	1.080 kg	4 pcs	LOW
9. Screw	0.980 kg	3 pcs	LOW
10.Screw	0.960 kg	0.000 kg	NONE
11.Screw	6.090 kg	40.4 %	NONE
12.Screw	6.110 kg	40.5 %	NONE
13.Screw	6.130 kg	40.6 %	NONE
14.Screw	6.160 kg	40.8 %	NONE
Total Items		14	
T.Net		70.570 kg	
T.Counts		68 pcs	
T.Over		4	
T.OK		2	
T.Under		2	

5 Press  key to back to normal weighing mode.

5.10.5 Accumulation Clear

1 In the normal weighing mode,press  key to recall accumulation records.

2 Press and hold  key to clear the accumulation memory.

5.10.6 Accumulation and Printing

If connected with printer, the data will be print out in accumulation mode, see parameters 2.

ADVANCED SETTINGS >7.ACCUMULATION >3. PRINT EVERY RECORD >YES

MANUAL	Load the weight ,after stable indicator on,press  key ,the count and total appears ,the data will be printed out
AUTO-LOAD	Load the weight ,after stable indicator on,the count and total appears ,the data will be printed out
AUTO-UNLOAD	Load the weight ,after stable indicator on,the count and total appears ,remove the weight ,data will be printed out

5.10.7 Accumulation and No Printing

If connected with printer, the data will be print out in accumulation mode, see parameters 2.

ADVANCED SETTINGS >7.ACCUMULATION >3. PRINT EVERY RECORD >NO

MANUAL	Load the weight ,after stable indicator on,press  key ,the count and total appears ,the data will not be printed out
AUTO-LOAD	Load the weight ,after stable indicator on,the count and total appears ,the data will not be printed out
AUTO-UNLOAD	Load the weight ,after stable indicator on,the count and total appears ,remove the weight ,data will not be printed out

5.10.8 Accumulation for Same Product

see parameters 2. ADVANCED SETTINGS >7.ACCUMULATION >2.ALLOW ALL PRODUCTS > NO

1/2	
ACCUMULATION	
1.TYPE	AUTO-UNLOAD
2.ALLOW ALL PRODUCTS	NO
3.PRINT EVERY RECORD	YES
4.MIN.LOAD	20D

- 1 Select a PLU from the direct PLU list or Indirect PLU list.
- 2 The same product could be accumulated in weighing mode 、 counting mode and percentage mode.

- 3 When switching between products, the total is automatically cleared.

- 4 Press  key to view the records, only show the same product accumulation records in different operation mode.

5.10.9 Accumulation for Different Product

see parameters 2. ADVANCED SETTINGS > 7. ACCUMULATION > 2. ALLOW ALL PRODUCTS > YES

1/2	
ACCUMULATION	
1. TYPE	AUTO-UNLOAD
2. ALLOW ALL PRODUCTS	YES
3. PRINT EVERY RECORD	YES
4. MIN. LOAD	20D

- 1 Select a PLU from the direct PLU list or Indirect PLU list.
- 2 The different product could be accumulated in weighing mode and percentage mode.
- 3 Press  key to view the records, the different product accumulation records appears.

NOTE: When switching between products with counting modes, there will be warning window to clear the total. The user has to clear the total by pressing long CE from the ACC report.

5.11 Printing

5.11.1 Label Printing

It allows for printing the weighing result to label printer. To enable the function, please refer to setup menu

2. ADVANCED SETTINGS > 7. ACCUMULATION > 1. ACCUMULATION MODE > MANUAL

5. INTERFACE > 1. SERIAL > 1. TYPE > RS232

5. INTERFACE > 1. SERIAL > 2. MODE > PRINTER

5. INTERFACE > 1. SERIAL > 4. EXTERNAL PRINTER > 2. OS2130D or 4. RP80VI

5. INTERFACE > 1. SERIAL > 6. BAUD RATE > 115200

5. INTERFACE > 1. SERIAL > 7. DATA BITS > 8

5. INTERFACE > 1. SERIAL > 8. STOP BITS > 1

5. INTERFACE > 1. SERIAL > 9. PARITY > NONE

The printer option should be selected as per connected printer model

- Load the weight on the platform.

- Press  key to print out the data.

5.11.2 Receipt Printing

It allows for printing the weighing records to receipt printer. To enable the function, please refer to setup menu

2.ADVANCED SETTINGS > 7.ACCUMULATION >1. ACCUMULATION MODE >MANUAL

5.INTERFACE >1.SERIAL >1.TYPE >RS232

5.INTERFACE >1.SERIAL >2.MODE >PRINTER

5.INTERFACE >1.SERIAL >4.EXTERNAL PRINTER > TPuP

5.INTERFACE >1.SERIAL >6.BAUD RATE > 115200

5.INTERFACE >1.SERIAL >7.DATA BITS > 8

5.INTERFACE >1.SERIAL >8.STOP BITS > 1

5.INTERFACE >1.SERIAL >9.PARITY > NONE

- Load the weight on the platform.
- Press  key to print out the data.

NOTE:The baud rate of scale should be consistent with printer.

5.12 Tolerance checking

The weighing scales allow weighing goods according to a target quantity or target weight or target percentage within specified tolerances. With this function one can also check if the weighing good is within a defined tolerance range. Reaching target quantity is indicated by an audio sound (if enabled in menu) and a visual color bar.

Note: Check weighing or counting available only when weight more than 20d

5.12.1 Beep Mode

The beep sound depends on the settings made in menu block

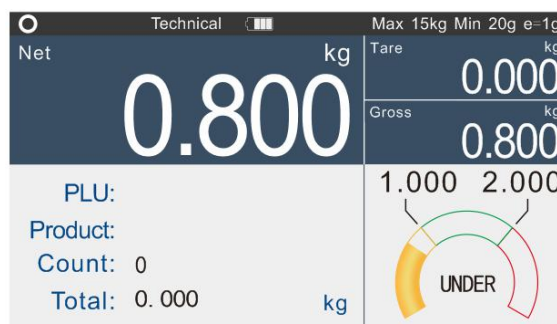
Options:

6.Beep mode	1.OFF	Beep sound turned off
	2.BEYOND LIMITS	Beep sound will ring out when load is beyond tolerance range
	3.WITHIN LIMITS	Beep sound will ring out when load is within tolerance range
	4.BELOW MIN.LIMIT	Beep sound will ring out when load is below low limit
	5.ABOVE MAX.LIMIT	Beep sound will ring out when load is exceed high limit

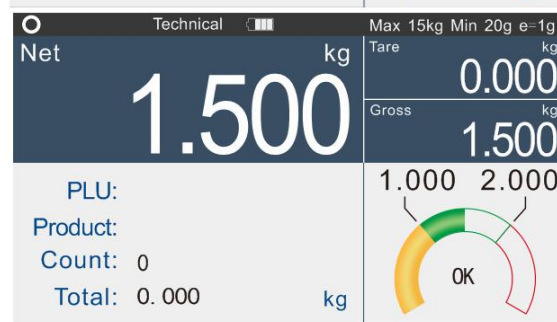
Optical signal:

The curve bar in the display shows whether the goods to be weighed are within the two tolerance limits.

Target quantity/target weight/target percentage
below minimum tolerance limit



Target quantity/target weight/target percentage
within tolerance range



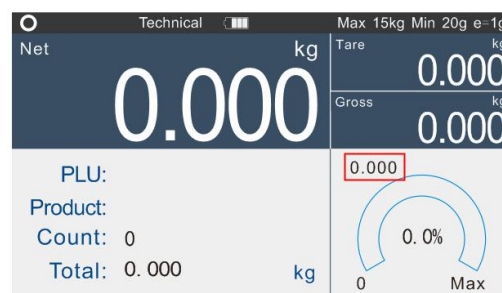
Target quantity/target weight/target percentage
exceeds maximum tolerance limit



5.12.2 Limits setting for target weight

1 Press and hold  key to enter limits setting in Normal weighing mode.

2 The lower limit value in the display will be active.

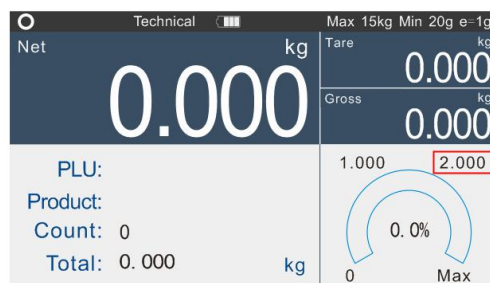


3 Press  key to confirm when entered the lower limits with numeric keys.



4 The upper limit value in the display will be active.

- 5 Press  key to confirm when entered the upper limits with numeric keys.



- 6 Limits setting completed, Load the weight on platter, the check weighing control will start.



- 7 To disable the check weighing function, enter zero in both limits.

5.12.3 Limits setting for target quantity

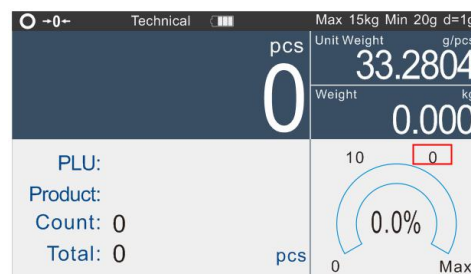
- 1 To enter counting mode by sampling or inputting the known unit weight of item.

- 2 Press and hold  key to enter limits setting.

- 3 The lower limit value in the display will be active.

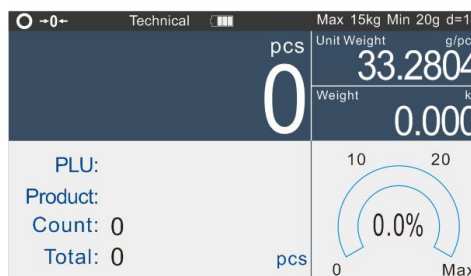


- 4 Press  key to confirm when entered the lower limits with numeric keys.

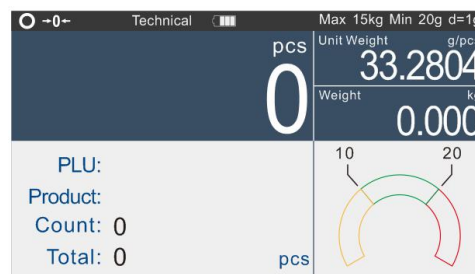


- 5 The upper limit value in the display will be active.

- 6 Press  key to confirm when entered the upper limits with numeric keys.



- 7 Limits setting completed, Load the weight on platter, the check counting control will start.

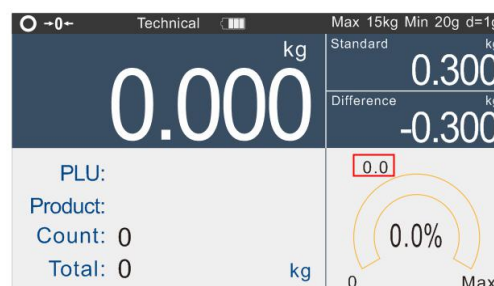


- 8 To disable the check counting function, enter zero in both limits.

5.12.4 Limits setting for target percentage

- 1 Press  key to enter percentage weighing in normal weighing mode.

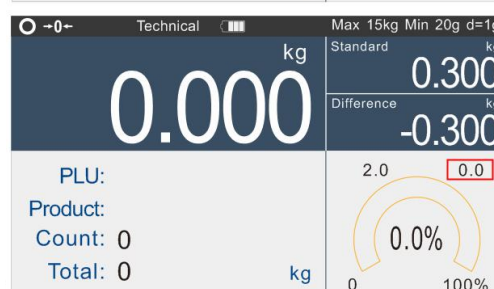
- 2 Press  key to enter limits setting.



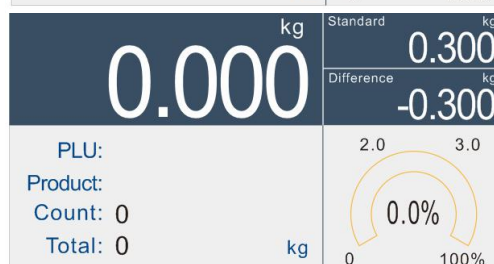
- 3 The lower limit value in the display will be active.

- 4 Press  key to confirm when entered the lower limits with numeric keys.

- 5 The upper limit value in the display will be active.



- 6 Press  key to confirm when entered the upper limits with numeric keys.



- 7 Limits setting completed, Load the weight on platter, the check percentage weighing control will start .



- 8 To disable the check percentage weighing function, enter zero in both limits.

Notes

- Check weighing available only when weight more than 20d
- The function is not valid when one enters a lower limit greater than the upper limit.
- When lower limits are the same with upper limits, display only shows one set value

5.12.5 Tolerance Checking Mode

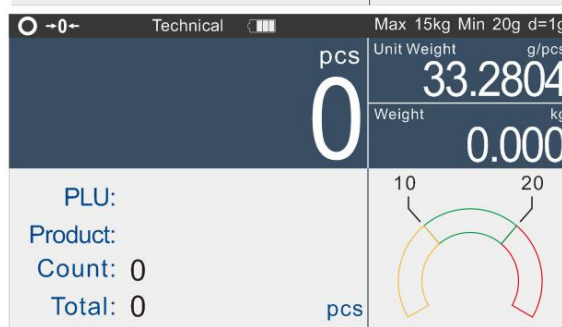
Target weight checking

In normal weighing mode, press  key to enter check weighing mode



Target quantity checking

In counting mode, press  key to enter check counting mode



Target percentage checking

In percentage mode, press  key to enter check percentage mode



5.13 Backlight Setting

It allows for setting backlight for the scale, To enable the function, please refer to setup menu.

Operation:

1 Press  key to enter setup menu.

2 Press  key to enter to system settings.

3 Press  key until to select the backlight.

4 Press  key to enter the menu.

5 Press  key to change the setting.

- LOW--Backlight turn to be low light
- NORMAL--Backlight turn to be medium light
- BRIGHT--Backlight turn to be high light

6 Press  key to confirm.

7 Press  key two times to exit the setup menu and back to normal weighing mode.

1/1	
MAIN	
1.SYSTEM SETTINGS	
2.ADVANCED SETTINGS	
3.PRODUCT INFO	
4.PRINT,REPORTS&DATA	
5.INTERFACE	
6.SERVICE	

1/2	
SYSTEM SETTINGS	
1.TERMINAL INFO	
2.DATE/TIME	
3.LANGUAGE	ENGLISH
4.REQUIRE LOGIN	NO
5.BACKLIGHT	NORMAL
6.POWER&SLEEP	OFF

Note:If the battery is getting low,the backlight function will not be available.

5.14 Auto Power Off

When the auto power-off time is enabled, the scale will automatically turn off when there has been no load on the platform and the scale is stable at zero position for a specified period of time in minutes.

Operation:

1 Press  key to enter setup menu.

2 Press  key to enter to system settings.

3 Press  key until to select the power&sleep.

4 Press  key to enter the menu.

5 Press  key to change the setting.

- OFF--Auto power-off is off.
- 0.5 HOUR--Auto power-off at 30 minutes.
- 5 HOURS--Auto power-off at 5 hours.
- 10 HOURS--Auto power-off at 10 hours.

6 Press  key to confirm.

7 Press  key two times to exit the setup menu and back to normal weighing mode.

1/1	
MAIN	
1.SYSTEM SETTINGS	
2.ADVANCED SETTINGS	
3.PRODUCT INFO	
4.PRINT,REPORTS&DATA	
5.INTERFACE	
6.SERVICE	

1/2	
SYSTEM SETTINGS	
1.TERMINAL INFO	
2.DATE/TIME	
3.LANGUAGE	ENGLISH
4.LOGIN	NO
5.BACKLIGHT	NORMAL
6.AUTO POWER OFF	OFF

5.15 Animal Weighing

Use this mode to weigh moving items.

Operation:

- Press  key to enter setup menu.

1/1	
MAIN	
1.SYSTEM SETTINGS	
2.ADVANCED SETTINGS	
3.PRODUCT INFO	
4.PRINT,REPORTS&DATA	
5.INTERFACE	
6.SERVICE	

- Press  key to select ADVANCED SETTINGS.

- Press  key to enter settings.

- Press  key until select 4. WEIGHING MODE sub menu.

- Press  key to enter settings.

1/2	
ADVANCED SETTINGS	
1.DISPLAY UNIT	
2.ZERO SETTINGS	
3.TARE SETTINGS	
4.WEIGHING MODE	ANIMAL WEIGH
5.ANIMAL WEIGH	NORMAL
6.BEEP MODE	BEYOND LIMITS

- Press  key to change the settings until display show ANIMAL WEIGH.

- Once selected the animal weighing mode,it could enter 5. ANIMAL WEIGH sub menu to set the relative range settings for animal weighing.

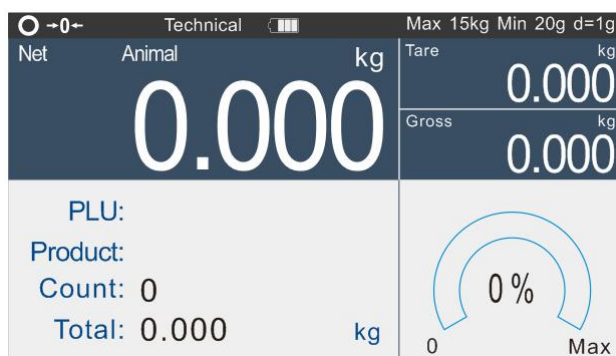
- FLOATING RANGE:1D/2D/5D/10D/20D/50D
- STABLE TIME: 5 SEC/10 SEC/ 20 SEC/ 30 SEC/ 40 SEC/50 SEC
- JUMP RANGE:1D/2D/5D/10D/20D/50D

1/1	
ANIMAL WEIGH	
1.FLOATING RANGE	1D
2.STABLE TIME	5 SEC
3.JUMP RANGE	1D

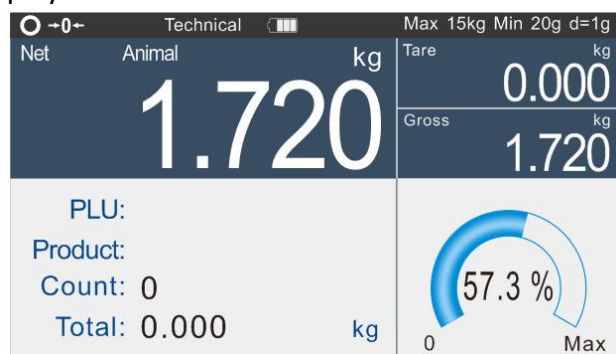
- Press  key to confirm you desired.

- Press  key three times to exit the setup menu and enter animal weighing mode.

10 The Animal indicator will appear in the upper side of the weight display.



11 Place item to be weighed on the scale platform. Once the stable indicator appears with a beep sound, the final weight will be shown on the display.



The weight will be update when the load weight exceed the floating range and jump range.

To disable the animal weighing function, it's required to enter set up menu to change 4.WEIGHING MODE to NORMAL setting .

5.16 Peak Hold

Operation:

1 Press  key to enter setup menu.

1/1	
MAIN	
1.SYSTEM SETTINGS	
2.ADVANCED SETTINGS	
3.PRODUCT INFO	
4.PRINT,REPORTS&DATA	
5.INTERFACE	
6.SERVICE	

2 Press  key to select ADVANCED SETTINGS.

3 Press  key to enter settings.

4 Press  key until select 4. WEIGHING MODE sub menu.

5 Press  key to enter settings.

6 Press  key to change the settings until display show PEAK HOLD.

7 Press  key to confirm.

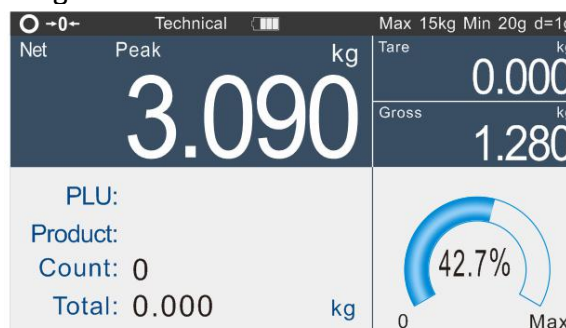
8 Press  key two times to exit the setup menu and back to peak hold weighing mode.

9 The Peak indicator will appear in the upper side of the weight display.

1/2	
ADVANCED SETTINGS	
1.DISPLAY UNIT	
2.ZERO SETTINGS	
3.TARE SETTINGS	
4.WEIGHING MODE	PEAK HOLD
5.ANIMAL WEIGH	
6.BEEP MODE	BEYOND LIMITS



10 Load the weight on the platform,the maximum reading will be hold.



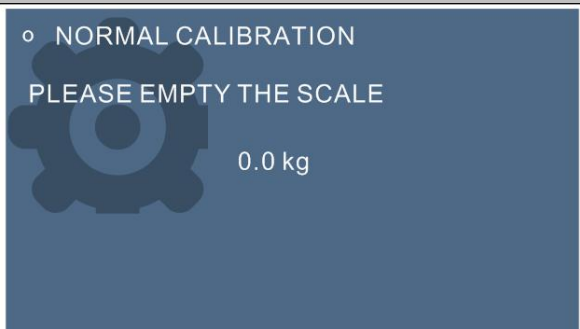
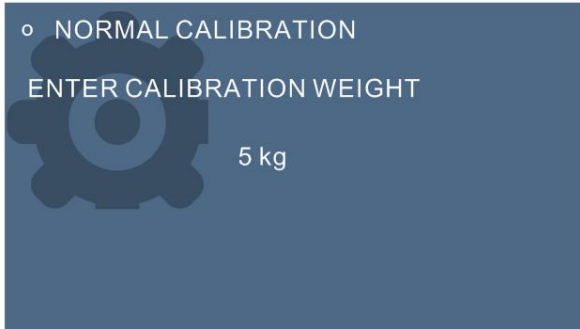
6. CALIBRATION

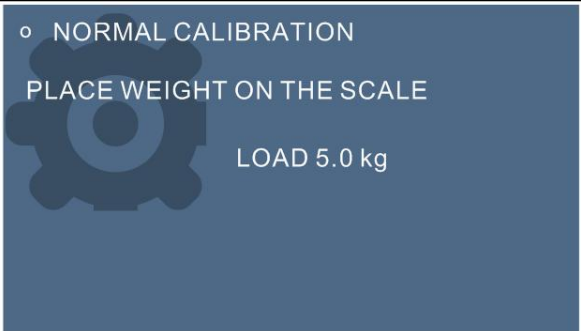
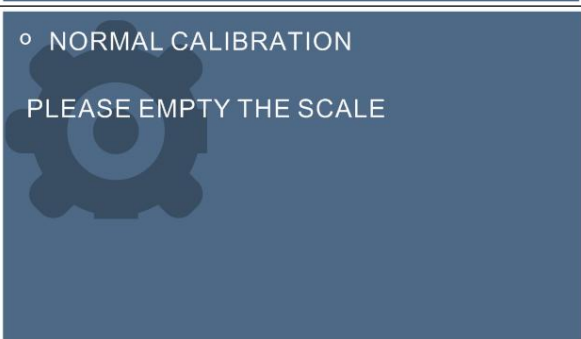
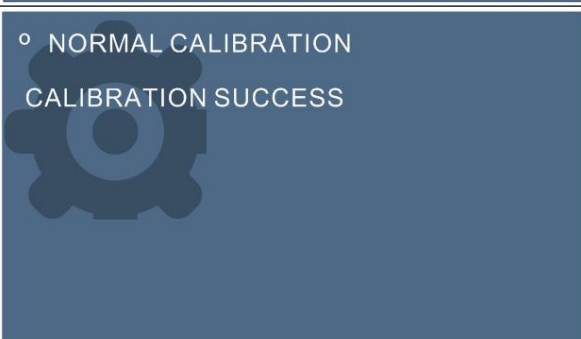
6.1 Normal Calibration

- Press  key to enter setup menu.
- Using numeric keys    ,
 to enter calibration.
6. Service> 3.calibration parameters >
4.SCALE1 > 2.Calibration> 1.Normal Calibration

1/1	
CALIBRATION	
1.NORMAL CALIBRATION	
2.LINEAR CALIBRATION	
3.ZERO CALIBRATION	

- Before access to the parameter,it need to press calibration switch,locating back side of indicator in approval version.

Steps	Remark
1 Press  Key to enter. The display will be show “Please empty the scale” 2 Remove goods from the platter.	
3 Press  key to confirm. The display will be show “Enter calibration weight by using numeric keys ”.	

4 Press  key to confirm. 5 Place the test weight on the platter. Better to use minimum 1/3 of the scale capacity)	
6 Press  key to confirm. The display will be show “Please empty the scale”. 7 Remove the test weight from the scale.	
8 Press  key to confirm The display will be show “Calibration success ” (Calibration Completed and back to the normal weighing mode)	

7. TECHNICAL DATA

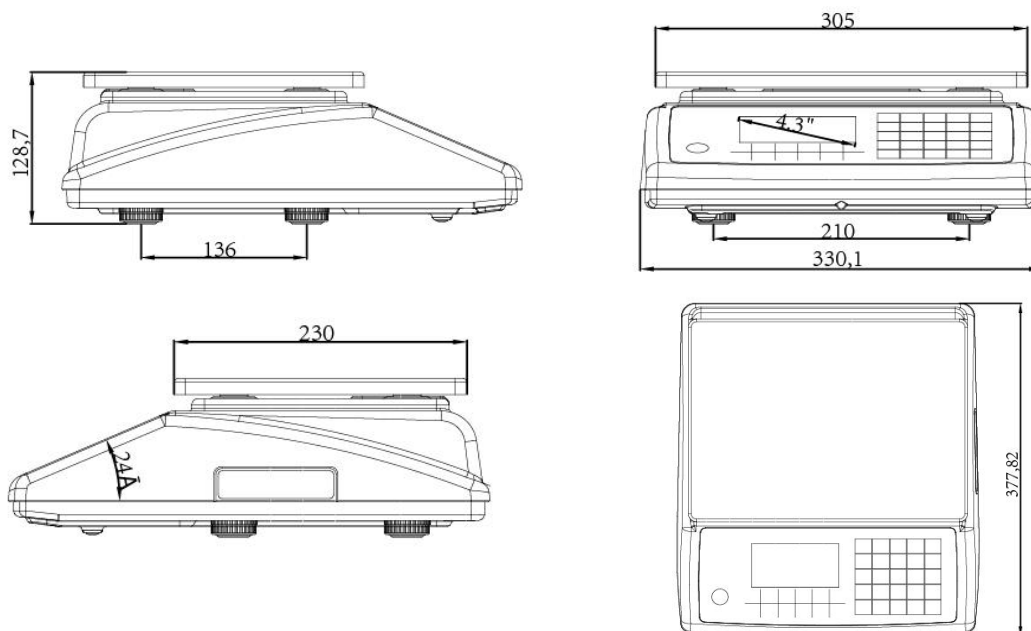
7.1 General Specification

MODEL	AW20-6	AW20-15	AW20-30
Maximum Capacity	6 kg	15 kg	30 kg
Minimum Capacity	4 g	10 g	20 g
Readability	0.2 g	0.5 g	1 g
Max. Divisions	30000d		
Tare range	-6 kg	-10 kg	-30 kg
Linearity $\pm$	0.4g	1 g	2 g
Weighing Units	kg		
Display	4.3" LCD color display		
Platter size (mm)	230 x 305		
Housing	ABS Plastic housing and Stainless Steel pan		
Interface	RS232 ;RJ45; USB2.0		
Optional	RS485; WIFI; Bluetooth ; analog output; second platform		
Operation Temperature	-10°C - + 40°C / 14°F - 104°F		
Power	AC Adaptor 12V/2500mA Optional Rechargeable Lithium Battery 7.4V/5.2Ah		
Battery life	Approx.30 Hours		
Keypad	37 membrane keys		
Dimensions (W x D x H) mm	330 x 377.8 x 128.7		
Net weight	3.7 kg		
Gross weight	4.2 kg		

MODEL	AW20-6	AW20-15	AW20-30
Maximum Capacity	6 kg	15 kg	30 kg
Minimum Capacity	2 g	4 g	10 g
Readability	0.1 g	0.2 g	0.5 g
Max. Divisions	60000d		
Tare range	-6 kg	-10 kg	-30 kg
Linearity $\pm$	0.2 g	0.4 g	1 g
Weighing Units	kg		

Display	4.3" LCD color display
Platter size (mm)	230 x 305
Housing	ABS Plastic housing and Stainless Steel pan
Interface	RS232 ;RJ45; USB2.0
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Net weight	3.7 kg
Gross weight	4.2 kg

7.2 Overall Dimension



8. ERROR CODES

Error Message	Description	Solution
ERROR 4	Zero setting error	Zero setting range exceeded due to switching on.(4%max) Make sure platform empty.
ERROR 5	Key board error	Check the keys and connector.
ERROR 6	A/D value out of range	Make sure platform empty and check the pan is installed proper. Check the load cell connectors.
Sample low	Percentage Error	Please check input data, must be > 1% of full capacity
	Lack of unit weight	Check unit weight entry data, must be >0.1d
	Lack of sample	Check counting samples entry, must be >20d
ERROR 19	Initialize zero error	Calibration the scale.
ERROR 20	Wireless communication failure	Check wireless settings or change Com settings from the wireless
--UL--	Under load	Minus weight, check the platform and restart or calibrate.
--OL--	Over range	Remove the load. Re calibrate
BAT LOW	Low battery indicator	Please charge the battery

9.MAINTENANCE

9.1 Preventive Maintenance

- 1 Switch off and unplug the device from the mains before cleaning.
- 2 Do not open the device during cleaning.
- 3 Make sure that no fluids get inside the device.
- 4 Do not use organic acid, alkaline solutions, scouring powders or plastic dissolving cleaning agents for cleaning.
- 5 Do not spray directly on the device.
- 6 Avoid strong pressure or scratching the surface with hard, sharp or pointed objects.

9.2 Cleaning housing

- 1 To clean device housing ,using a soft, clean cloth dampened with a mild cleaner or detergent and water.
- 2 After cleaning, plug the scale back into the mains and turn it on.

10.TROUBLE SHOOTING

Problem	Possible cause	Common solutions
Cannot turn on power	Mains power is turned off Power supply is not plugged in Power supply faulty Internal battery is not charged Display is turned off	Check power switch is turned on, and power LED is working. Verify the voltage going to the scale matches the power supply labels on the power module or scale.
Display is unstable	Air variation Pan is in contact Sample is moving (animal weighing) Vibrations from table Dramatic Temperature changed Power supply / battery faulty	Verify the scale is in an acceptable location and on a good table / surface. Verify the power supply is correct for the scale.
Weight value incorrect	Calibration error, Re calibrate Linearity error, Linearity calibrated with inaccurate weights Balance not leveled some materials between the sample and cover Wrong weighing unit displayed	Calibrate again, pay attention to the test weight used, the stability of the scale, and the required weighing unit. If it's required do the linear calibration. Check pan is installed correctly. Verify installed in an acceptable location.
Cannot use Full Capacity	Overload Stopper touching pan support or bottom of the load cell Transportation lock not removed, A/D circuit problem, Parameters set incorrectly, Load Cell or mechanics Damaged	Verify any objects under the pan or load cell, transporting lock, and verify pan installation. Check the weighing units used.
Not Linear	Overload stopper touching, Load cell or mechanics damaged A/D damaged	Verify any objects under the pan or load cell, transporting lock, and verify pan installation. Re calibrate and linear calibrate with ideal standard weights
Off Center Loading error	Adjust mechanism. Overload Stops not correct. Load Cell damaged	Verify any objects under the pan or load cell, transporting lock, and verify pan installation. Ensure load cell fixed correctly.
Battery will not charge	Mains voltage not present or too low Charging circuit failure Battery Failure	Check power supply voltage is correct. Verify the batteries are rechargeable types and charging voltage getting proper..
Disconnect AC adapter will turn off power	Battery low	Verify the batteries are rechargeable types and charging voltage getting proper. Plug AC adapter to charge battery. Replace battery



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