



PIZA + SERIES

Wireless Washdown Scale



PIZA+ 15 / PIZA+ 30 / PIZA+ 60 / PIZA+ 150

Operating Manual

Professional Weighing Equipment

NOTE: THIS PRODUCT HAS BEEN FACTORY CALIBRATED. PLEASE
REFER TO THE MANUAL BEFORE RE-CALIBRATING PRODUCT!



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Declaration of Conformity

Declaration of conformity for apparatus with CE mark

We hereby declare that the product to which this declaration refers conforms to the following standards.

Electronic scale: **PIZA+** Food Safe Washdown Scale

Available models

- PIZA+ 15**
- PIZA+ 30**
- PIZA+ 60**
- PIZA+ 150**

Mark Applied	EU Directive	Standards
	2004/108/EC	EN 61326-1: 2006

Signature:



Boon Lim, R & D Manager

Date: 2. 01. 2025

LW Measurements, LLC, 620 Carlson Court, Rohnert Park, CA 94928

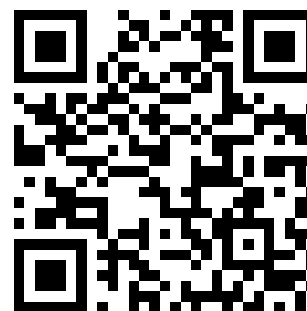
Customer Service

USA

LW Measurements LLC,
620 Carlson Court
Rohnert Park, CA94928

USA
Tel: (707) 542-2185

<http://www.lwmeasurements.com>



Scan to Contact



Certificate Number: 25-014



Certificate Number: CO338167-01

Introduction

What you should know about this Operation Manual:

Tree® Professional Weighing Equipment products are simple to operate. Nevertheless, you should read through these operating instructions in their entirety, so that you can make optimum use of the full potential of the weighing scale in your daily work activities.

These operating instructions contain guidance in the form of pictograms and keyboard diagrams, which should help in finding the required information:

For the labeling of potential hazards, please refer to the safety proportion of this operation manual.

Safety

Representations & Symbols

Note: Important instructions which involve safety are highlighted with the appropriate mark:



Safety Recommendations

When using the weighing equipment in surroundings with increased safety requirements, the corresponding regulations must be observed.

The weighing scale may only be used with the power adapter supplied.

Before connecting the power adapter to the scale, the user must ensure that the operating voltage stated on the power adapter is compliant with the mains voltage. If not, please contact Customer Service at the address above.

If the power adapter or its cable is damaged, the weighing scale must immediately be disconnected from the electricity supply (unplug the power adapter).

If there should be any reason to believe that it is no longer safe to operate the scale, it should be immediately unplugged from the electricity supply (unplug power adapter) and secured against inadvertent operation.

When performing maintenance work, it is essential to follow the recommendations set out in maintenance and servicing.

The weighing scale must not be operated in an area subject to explosion risks.

Care must be taken when weighing liquids to ensure that no liquid is spilled inside the scale, into connections on the rear of the equipment, or the power adapter. If liquid is spilled on the scale, it must immediately be unplugged from the main electricity supply (unplug power adapter).

The weighing scale may be operated after it has first been inspected by a service technician.

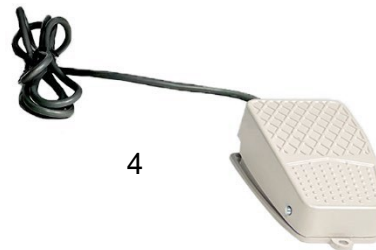
These operating instructions must be read by each user and should always be easily accessible at the workplace.

Weight Scale

Construction & Functions

The weighing scale consists of the following parts.

1. Indicator
2. Scale Base
3. Indicator Stand
4. Plug-in Tare Foot Pedal Switch
5. AC Adapter & Splitter
6. Operating Manual



Functions

The PIZA + Series are high-quality electronic food safe washdown scales with the following specifications.

Model Number	Capacity	Graduation	Platter Size
PIZA + 15	15 lb.	0.005 lb.	12.4 x 12.7 in.
PIZA + 30	30 lb.	0.01 lb.	12.4 x 12.7 in.
PIZA + 60	60 lb.	0.02 lb.	12.4 x 12.7 in.
PIZA + 150	150 lb.	0.05 lb.	12.4 x 12.7 in.
Package (Standard Carton)	1 unit per box 20 x 15 x 6 in		
Net/Gross Weight	6.8kg (15lbs.)		
Package (Master Carton)	4 units per box 24 x 22 x 16 in		
Net/Gross Weight	28.7kg (63.3lbs.)		
Operating Temp.	0-40°C (32-104°F)		
Power Source	AC/DC Adapter 12V / 1000mA Or Lithium 7.4v / 1300mA		

Features

1. Bluetooth connected indicator and scale base
2. IR tare sensor
3. Optional tare foot pedal
4. Auto shut off (selectable)
5. Auto zero tracking
6. Large LCD
7. AC power
8. Auto backlight (selectable)
9. Error message indication

Application & Conformity

The following are instructions on how to correctly use the scale:

The scale may only be used for the weighing of solid materials and of liquids contained in secure containers.

The maximum capacity load of the weighing scale must be correctly entered in the scale program, otherwise the weighing scale may be damaged.

When using the scale in combination with other devices, including those produced by other manufacturers, the appropriate regulations for the safe use of the relevant attachments and their application in accordance with instructions must be observed.

The scale has been manufactured and tested in accordance with the standards and recommendations set out in the declaration of conformity.

The power adapter supplied for the scale complies with the appropriate electrical protection class.

The following applies to the PIZA+ series.

Power supply:

Input: 110V AC 50Hz to 60Hz

Output: 12v 1000mAh

Allowable ambient conditions:

Temperature: 32°F - 104°F / 5°C. 40°C

Relative humidity:

25% - 85%, non-condensing

******NOTE: If you have any questions on the technical data or require detailed technical information on your balance, please contact your technical representative.******

Getting Started

The scale is packaged in an environmentally friendly carton, which provides optimum protection for the scale during transportation.

We suggest that you keep the original packaging to avoid damage if you are shipping or transporting the scale to a different location. It is also the best way to keep it in the best condition if it is not used for an extended period.

To avoid damage, please follow the instructions provided below, when unpacking the scale:

1. Unpack the scale carefully.
2. When outside temperatures are very low, the indicator should be stored for a couple hours in its box in a dry room at normal temperature. This prevents condensation from settling on the unit when opening the box.
3. Check the scale immediately after unpacking for any external visual damage. If there is any damage to the scale, contact customer service immediately.
4. If the scale is not to be used immediately after purchase, it should be stored in a dry place where fluctuations in temperature are low. (reference pg.18).
5. Read through these operating instructions before you work with the unit and pay attention to the safety recommendations (reference Safety pg. 5).

Delivery

Inspect delivery for completeness immediately upon unpacking all components.

Checklist for complete delivery

Component	Present Yes / No
Scale Base	
Indicator Unit	
Power Adapter	
Foot Pedal Switch	
Operating manual	

Assembly & Installation

The indicator is delivered in a partly dismantled condition. Assemble the individual components in the following sequence:

- Mount your machine on a clean and dry surface to where you can get the best visibility of your readings.

Connecting the AC Adapter

The following safety recommendations must be observed when connecting the balance:



The scale should only be connected to the mains voltage socket with the power adapter supplied. Before connecting the power adapter to the mains socket, check that the operating voltage stated on the power adapter complies with the local mains voltage.

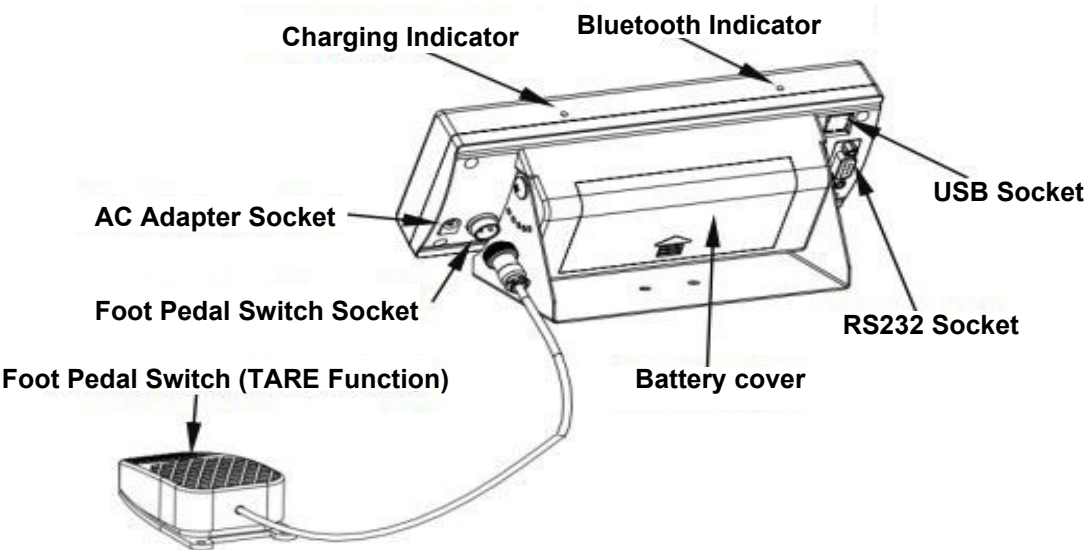
If the operating voltage is not the same as the mains voltage, the power adapter must not be connected to the mains socket and contact customer service.

Placement of Scale

The location in which the scale is placed is very important for the scale to work to its full potential. Certain conditions can affect the capabilities of the scale, such as presence of air flow, variations in temperature, and direct sunlight. Please follow the recommendations given below when choosing a location to place your scale.

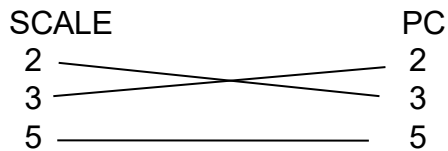
- Place the indicator on a solid, firm, and preferably vibration-proof surface.
- Make sure that the indicator cannot be shaken or knocked over.
- Protect from direct solar radiation.
- Avoid drafts and excessive temperature fluctuations.
- Avoid placing the indicator near or on any magnetic surfaces.

Details of your weighing scale



RS232 Data interface

1. Connector: DB9



2. Transmissions Settings

Mode: Simplex Asynchronous Serial
 Data Bit: 8
 Stop Bit: 1
 Baud Rate: 9600
 Parity Bit: None
 Data Format: ASCII

3. Transmission Information Format : 20 Byte , blank=20H

1~2	3	4~13	14~18	19	20
'W: '	P	DATA	UNIT	CR	LF

W: Start of Data Transmission=57H+3AH

P: Polarity '+' = 2BH = Positive '-' = 2DH =Negative DATA:

'12.345'= 20H+20H+20H+20H+31H+32H+2EH+33H+34H+35H UNIT:

'lb' =6CH+62H+20H+20H+20H

'Kg' =6BH+67H+20H+20H+20H

CR: = 0DH

LF: = 0AH

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

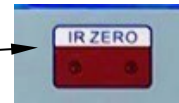
Unit formation

Exempla: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

Key Functions

- **ON/OFF** key is to turn the balance On or Off
- **TARE** key activates the “Tare” function between 4% to 50% of full capacity.
- **Zero** key sets display to zero
- **UNIT** key is to toggle between different units of measurement.
- **Print** key is for sending a print command to a printer or computer
- **IR ZERO** switch: With the same functions as ZERO key.



Function Settings

Auto Shutoff

- Press and hold **TARE** key then press **ON/OFF** key to turn on the scale, the display will show **A-ON** or **A-OFF**, press **Zero** key to select (**A-ON** means auto power off function activate, **A-OFF** means auto power off function inactivate). Press the **TARE** key to continue to the backlight setting.

Backlight

- Press **UNIT** key, the display will show **L-ON**, **L-OFF** or **L-Au**, press **Zero** key to select (**L-ON** means auto backlight function is **active**, **L-OFF** means auto backlight function is **inactive**, **L-Au** means backlight under **auto** mode). Press the **TARE** key to continue to the **Infrared Induction** setting.

Infrared Induction

The infrared induction settings allow you to turn the **IR** switch for **TARE** on or off.

- Press  key, the display shows the current “**Ir- xxx**” settings.
- Use the  key to choose between on or off.

Ir- ON means infrared induction switch for ZERO function enable.

Ir- OFF means infrared induction switch for Z function disable.

Communication Settings (Print Key Function)

The PIZA+ can be configured to send scale data to a printer or to a remote display. This menu option allows you to configure the RS-232 port to send data as needed. The factory default is set to send data when the  key is pressed.

- Press  key, the display will show **P-XXX**.
- Press  key to select OFF, key, con and Stb. **P-OFF** means RS232 function inactivates.

P-KEY means that output the data by pressing  key. **P-Stb** means that output the data when reading is stable.

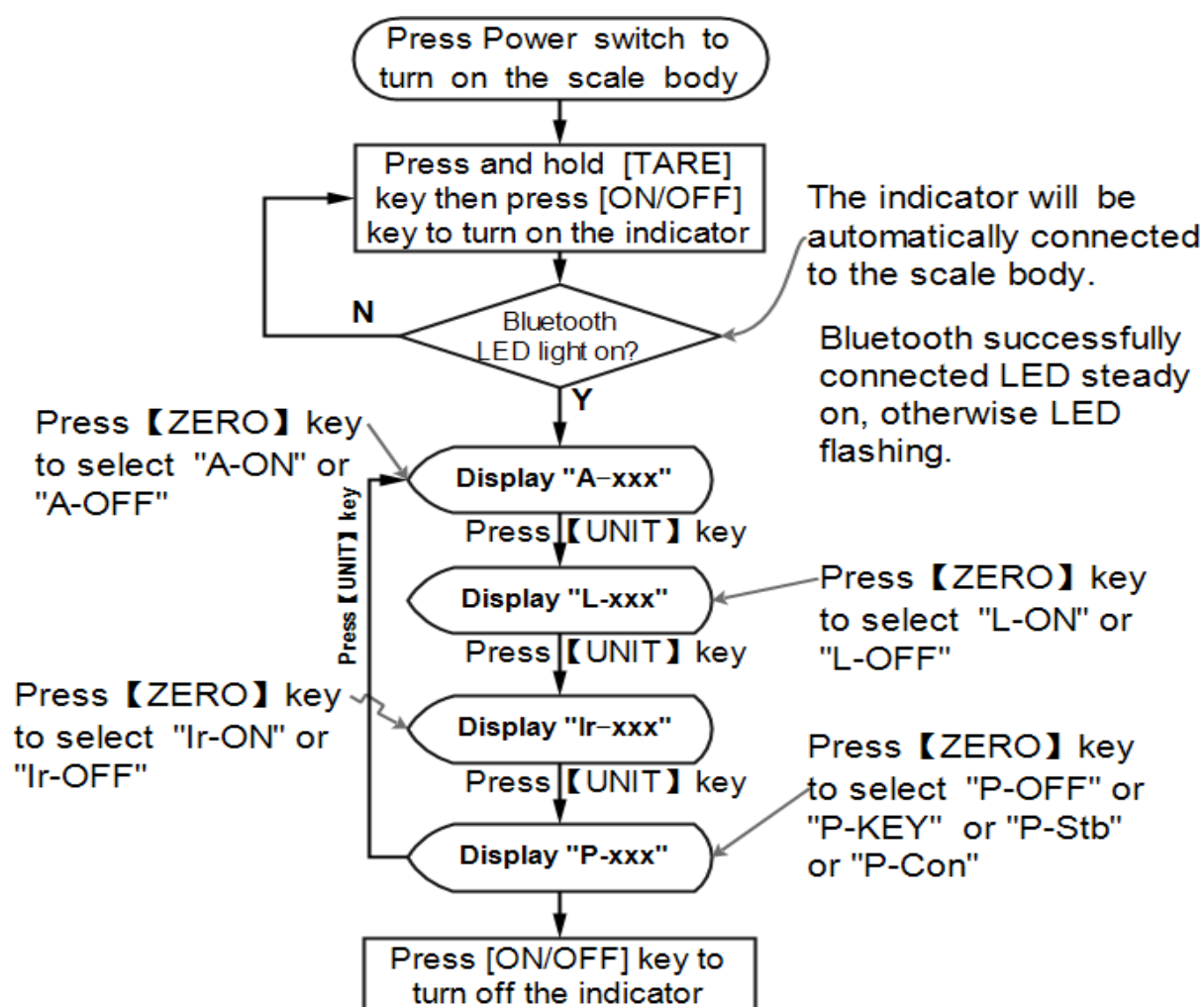
P-Con means that output the data continually.

Return to Weighing Mode

- Return to weighing mode. Press  to turn the power off. Press  again, to turn on the power and the scale will return to the weighing mode.

Function Settings Description and Flow Chart:

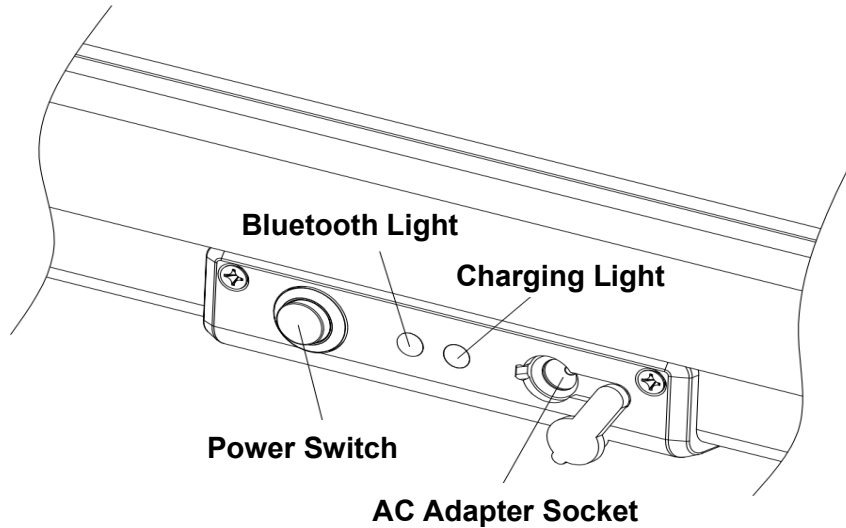
Item	Menu	Description
Auto Shut off	A-OFF	Auto shut off is turned off
	A-ON	Auto shut off is turned on
Backlight	L-ON	Auto backlight is turned on
	L-OFF	Auto backlight is turned off
Infrared Induction	Ir-ON	Infrared tare switch is turned on
	Ir-OFF	Infrared tare switch is turned off
Communication Settings	To set print mode	
	P-Con	Print continuously
	P-OFF	Serial data output disabled
	P-Key	Print when print key is pressed
	P-stb	Automatically print when weight is stable



Bluetooth

When reconnecting, ensure that only the intended device within 5 meters is turned on, and all other Bluetooth devices are turned off.

1. Press the power switch on the scale body to turn on the scale.



2. Press and hold the  key and then press the  key to turn on the indicator, the display will show “. CLEAR”

3. Press the  key, and the display will display "-----". “CLEAR”, wait for 3~5 seconds, and the Bluetooth red LED on the indicator and the scale changes from flashing to constant light, indicating that the indicator and the scale are successfully connected by Bluetooth.

4. If you don't replace the meter head or scale body, just reconnect it with Bluetooth, and restart it to use it. If the meter head or scale body is replaced, calibration is required.

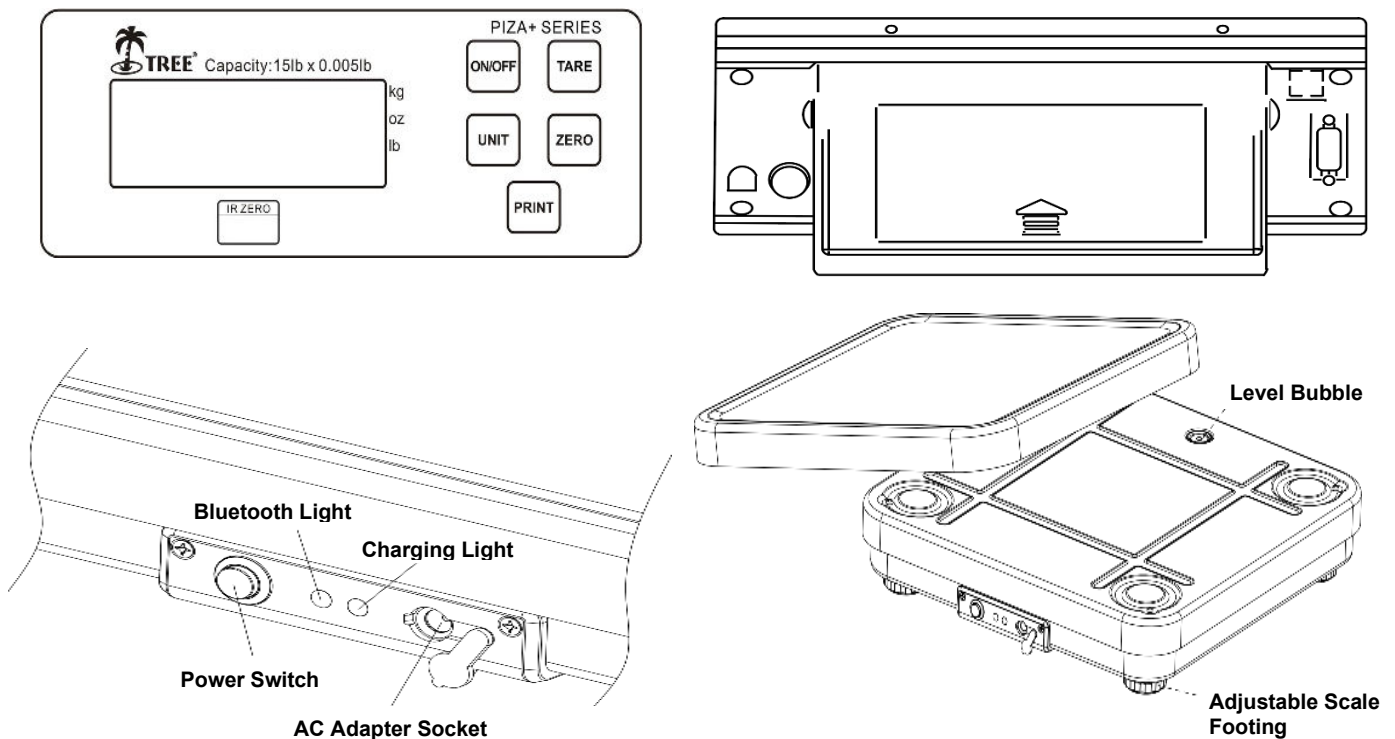
Work Mode

1. Press the power switch of the scale body to turn on the scale.
2. Press  key on the indicator to turn on the indicator. The Bluetooth LEDs on the indicator and the scale body both change from flashing to bright, indicating that the indicator and the scale body are connected successfully. The indicator will display a string of self-checking characters from '99999' to "11111" for a few seconds and " " then 0.00, now the scale enters the WEIGH mode.

Cautions

If you press  key on the indicator to turn on the indicator, the Bluetooth LED on the indicator is flashing all the time, and the indicator will display a string of self-checking characters from '99999' to "11111" for a few seconds and "no-s" " ",. After 1 minute, the indicator will automatically shut down.

The reason for this phenomenon may be that the power switch of the scale body isn't turned on. Another possibility is that the battery of the scale body is too low, please charge in time.



Calibration

Calibration is done in the factory. Don't recalibrate the machine unless it is not accurate. Calibration may be required when the weighing scale is initially installed or if the scale is moved a substantial distance from the original location. The weighing machine should be allowed to warm up for 10 minutes before calibration.

Before you Begin

Before you calibrate your scale, you need to release the seal and short the CAL jumper.

1. Make sure that appropriate calibration masses are available before beginning calibration.
2. Make sure that the scale is level and stable during the entire calibration process.
3. Allow the scale to warm up for more than thirty (30) minutes after stabilizing to room temperature.

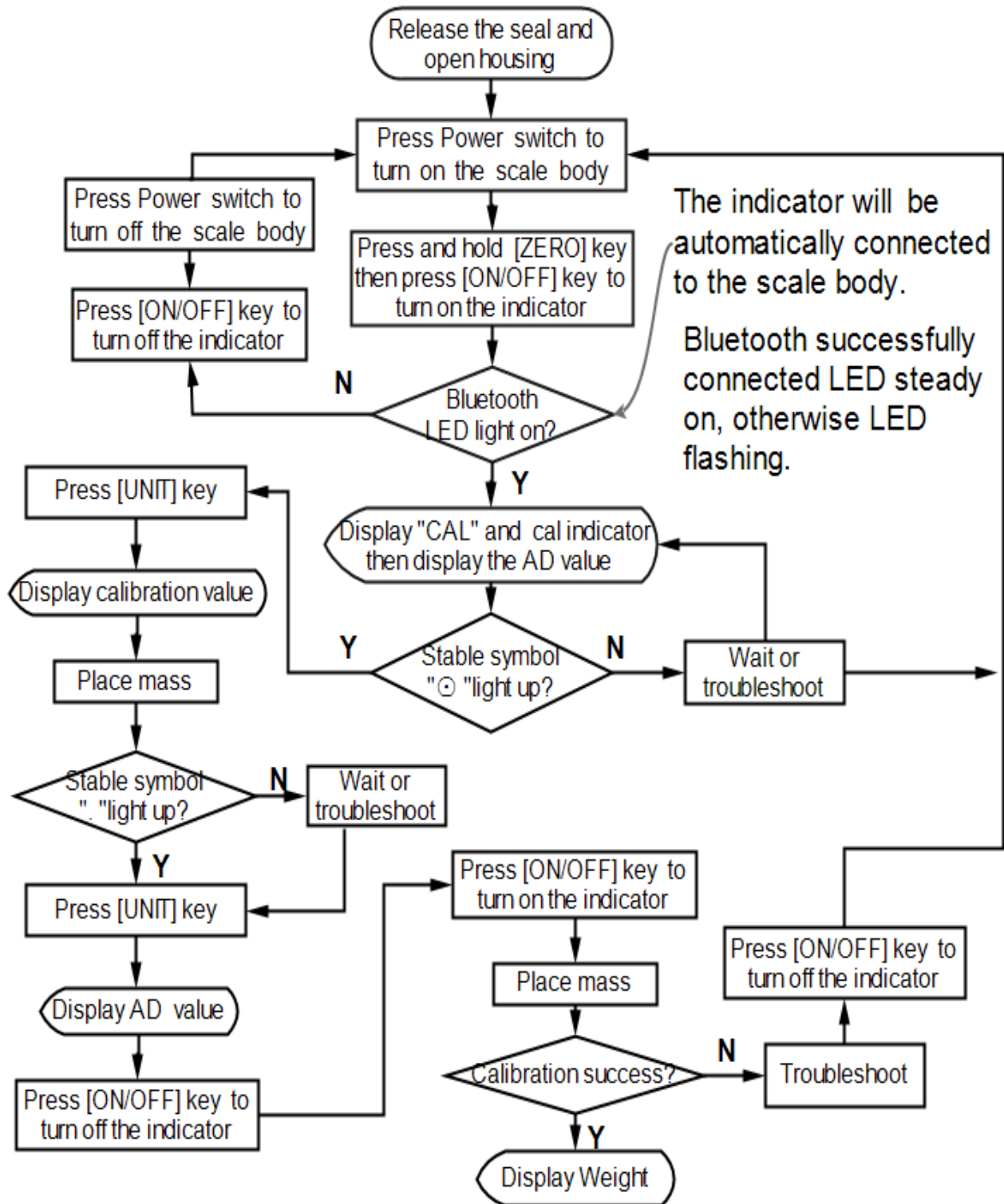
When to calibrate

Follow the steps below to calibrate the scale:

1. Open the indicator housing. Short the CAL jumper of J7 on the main PC board. See

J7		
1	2	3
CAL		NOR
2. Press the power switch of the scale body to turn on the scale body.
3. Press and hold the **Zero** key then press **ON/OFF** key to turn on the indicator. The indicator will be automatically connected to the scale body. The display will show "CAL" and the Cal indicator icon and then will show the AD value.
4. **Important:** The calibration operation requires that the indicator is successfully connected to the scale body.
5. Press **UNIT** key, the display will show the flash calibration weight.
6. Place the shown weight on the platform, press **UNIT** key when the stable indicator  brightens up, the display will show "-----", then the AD value.
7. Restart the scale and calibration is done.
8. Turn on the scale, place tested weight to check whether it is correct, if not, please repeat above steps.

Calibration flow chart is as follows:



Maintenance & Service



- For maintenance-work, the balance must be disconnected from the power supply (remove power adapter plug from socket). Also, ensure that the balance cannot be connected to the power supply during the work by a third party.
- Make sure that no liquid spills into the scale while performing maintenance work. If liquid is spilled on the scale, it must be inspected by a service technician.
- **Regularly** maintain the weighing pan and the weighing pan holder by removing any dirt or dust from under the weighing pan and on the weighing scale housing. Use a soft brush or a soft, lint-free cloth moistened with a mild soap solution.
- **Never** use solvents, acids, alkalis, paint thinners, scouring powders, or other aggressive or corrosive chemicals for cleaning; these substances can cause damage to the surfaces of the scale housing.

Transportation & Storage

Your weighing machine is a precision instrument, treat it carefully. Avoid shaking, severe impacts, and vibration during transportation. Make sure that there are no marked temperature fluctuations during transportation and that the weighing machine does not become damp (condensation).

If you would like to take the weighing machine out of service for an extended period, disconnect it from the electricity supply, clean it thoroughly (refer to Maintenance & Service), and store it in a location that meets the following conditions:

- No violent shaking or vibrations
- Minimum temperature fluctuations
- No direct solar radiation
- Minimum moisture

The weighing machine should preferably be dispatched and transported in the original packaging to avoid transportation damage.

CAUTIONS

- Avoid placing the scale in direct sunlight, as this may cause discoloration or malfunction. Do not use scales on a carpeted surface, as it may lead to inaccurate readings and require recalibration.
- Replace all batteries at the same time. Do not replace only a portion of the 6 batteries, as this may cause a malfunction.
- If the scale will not be used for an extended period, remove all batteries from the battery compartment to avoid leakage, which could cause damage to this scale.
- Avoid overloading the scale, as this may cause permanent damage and void your warranty. NEVER exceed the maximum capacity of the scale.
- Keep the scale away from water – this scale is not water resistant. Shock, injury, and electrical damage can occur if used in a wet location!

Troubleshooting

ErrorCode	Issue	Troubleshoot	Solution
ERR-O/0	Overload error	Turn scale off, then back on, and try weighing using weight under the max capacity to verify the loadcell still functions.	If scale still registers accurate weight refrain from continued over loading. If error continues loadcell may be damaged.
ERRZ/2	Exceeded zero tracing range when powered on	Turn scale off and clear weighing platform. Turn scale back on and attempt recalibration.	If scale was recalibrated successfully then error is resolved. If error persists, the scale may need a linearity calibration or has a damaged loadcell.
ERRS/5	Scale not stable when powered on	Make sure scale is stable when powered on. Do not touch, shift, or place anything on the weighing platform until after the countdown.	If error persists scale may need recalibration. If error continues after recalibration, then loadcell may be damaged.
ERRC	Calibration weight was not entered during calibration	Enter calibration weight during calibration process.	If error persists, call support.
ERRP	Counting set error	Place sample before entering counting settings.	If error persists, call support.
ERRL	Calibration weight was not placed during calibration	Be sure to place weight when recalibrating.	If error persists, call support.
ERRE	Software issue	If an error persists, call support.	If error persists, call support.
ERRB/6	Low battery error	Attempt to charge battery.	If error persists, battery will need to be replaced. Make sure to not leave scale with rechargeable battery plugged in constantly.
<u>For any error that is not shown on this list that persists after troubleshooting you will need to contact support.</u>			



Your support enables us to continue creating and providing high- quality products and services. We hope you enjoy your new scale and that it brings you as much satisfaction as it brings us to serve customers like you.

We would love to know what you think of our TREE products and your experience with us. If you have a chance, please visit www.lwmeasurements.com to leave a review.

Thank you for being a part of the LW Measurements family. We look forward to serving you again in the future.

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