

## Professional Weighing Equipment

# Physician Scale User Manual 2.0



## **Operation Manual**

Manufactured by Lucky Star / Distributed by LW Measurements, LLC

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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: Physician Scale

USA model Physician Scale UK (Europe) model

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

Signature:

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Date: 04. 06. 2014

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## **Customer Service**

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## **Introduction**

What you should know about these Operating Instructions:

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 and the diverse possibilities of the weighing scale in your daily work.

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

For the labeling of potential hazards and advice, please see Safety below.

## **Safety**

#### Representations and symbols

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

#### **DANGER**

#### 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 (pull out 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 (pull out power adapter) and secured against inadvertent operation.

In carrying out 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 into the inside of the scale or 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 (pull out power adapter).

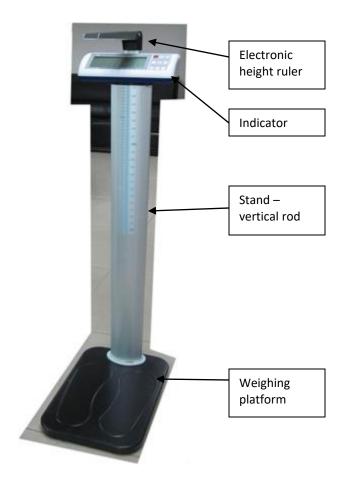
The weighing scale may be operated after it has first been inspected by a service technician.

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

## Weight Scale

## Construction & Functions

The weighing scale consists of the following parts



## **Functions**

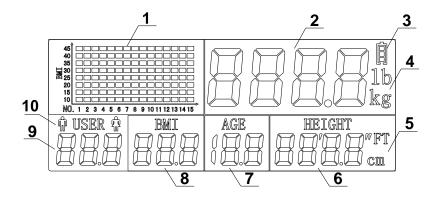
The Physician Scales are high-quality electronic precision weighing scales with counting function and the following specifications

Model number	Capacity	Graduation	Weighing pan Size
Physician Scale	0-200kg 0-400lb	0.1 kg 0.2lb	13 in x 19 in 330mm x 480 mm
	200 cm	0.5cm	
	7 ft 1 in0	0.5in	
Net/Gross weight Platform & Indicator Height Rod		12.5 kg / 27.6 lb 4.8 kg / 10.6 lb	37 X 15 X 68 cm / 14.6 X 5.9 X 26.8 in 22 X 15 X 14.2 cm / 8.7 X 5.9 X 55.9 in
	Two carton boxes per set		
Package		50x9x7 in (box 1)	27x16x6 (box2)
(Standard carton)			
Package			
(Master carton)			
Operating Temp.	<85%RH		
Storing Temp.	32-104 F		
·	20mA	4 x D dry cell and/or 5V from USB	
Continuous Running Time	300 hours	Based on 6A/h battery	

## **Features**

- 1) BMI bar graph display
- 2) Weight display
- 3) Battery level
- 4) Weight unit
- 5) Height unit
- 6) Height display
- 7) Age display
- 8) BMI display
- 9) User number
- 10) Symbol for sex

Figure: Details of your weighing scale



Keyboard



## **Application & Conformity**

The Following are instructions of how to correctly use the weight scale:

The weighing scale may only be used for the weighing of solid-materials and of liquids filled into secure containers.

The maximum capacity load of the weighing scale must never be exceeded, otherwise the weighing scale may be damaged.

In using the weighing scale in combination with other devices as well as with devices 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 weighing 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 weighing scale complies with the appropriate electrical protection class.

The following applies to the Physician Scale

#### Power supply:

- 1. Four pieces of D type cell battery and/or 5V form USB can be used.
- 2. When USB is connected, the scale will use 5V form USB only. (Although it can be used for either power from battery or USB but it needs the battery to maintain the date and time setting after switching off.)

Allowable ambient conditions

Temperature: 5°C - 40°C

Relative humidity: 25% - 85%, non-condensing

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 balance during transportation.

We suggest that you keep the original packaging in order 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 conditions if it will not be used for an extended period of time.

In order to avoid damage, please follow the instructions provided below, when unpacking the scale:

- Unpack the scale carefully.
- When outside temperatures are very low, the scale should be stored for a couple hours and kept in its box in a dry room at normal temperature, so that no condensation settles on the unit when opening the box.
- Check the scale immediately after unpacking for any external visual damage. If there is any damage on scale, contact customer service immediately.
- 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.23).
- Read through these operating instruction, before you work with the unit and pay attention to the Safety recommendations (reference Safety pg. 6).

## <u>Delivery</u>

Inspect delivery for completeness immediately on unpacking all components.

#### **Checklist for complete delivery**

	Component delivered present yes / no
Electronic ruler	
Indicator/Rod	
Weighing Platform	
Operating manual	

## **Assembly & Installation**

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

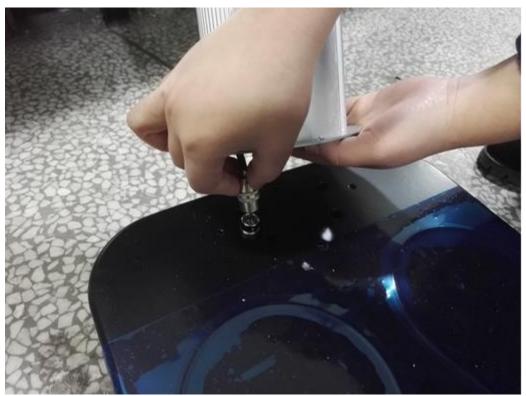
1. Find the carton with same number mark. Open it, check the number on the height rod, indicator and platform, if they are same, then you can start install.



2. Use Allen key to take out the four pieces fixed screws



3. Connect the load cell plug. (attention: connect in right direction, with proper force)



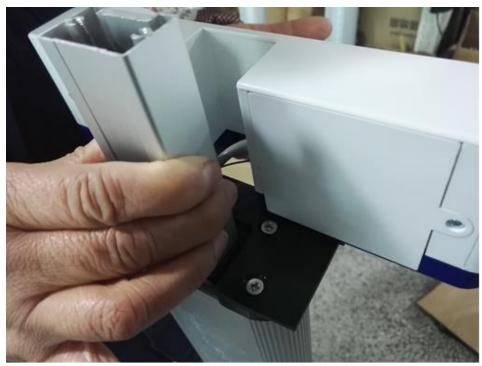
4. Use the Allen key to fix the screws which have been taken out before. Then use the white plastic oval cover to cover the screws.



5. Make sure the no. on the indicator and platform is same, connect the plugs between indicator and height rod.,(Attention: make sure they are in right direction, with proper force.)



6. Install the indicator according to below picture, insert the extra wire inside the rod., then push down the indicator until you hear clicking sounds, means you have finished the installation for the indicator.



7. Use the Philips screwdriver to take off this two screws on the slide rod



8. Put the top lever into the height rod. Make sure the direction is right.



9. Use the Philips screwdriver to fix the screws which have been taken offer before.



10. Start using it after you finish the installation.



The following Safety recommendations must be observed when connecting the scale:

#### **DANGER**

The Scale should only be connected to the mains voltage socket with the power adapter supplied. Check before connecting the power adapter to the mains socket, 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

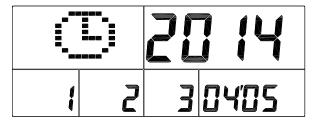
The location in which the scale is placed is very important in order for the scale to work to its full potential. Certain conditions can affect the capabilities of the scale, conditions like: the presence of air flow, variations in temperature, and direct sunlight. Please follow the recommendations given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

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

#### **OPERATION**

6.1) turn on after making sure the batteries and/or USB is in normal working condition, remove if anything on the weighing platform, press "On/Off" to turn on the physician scale, after indicator is on it will display current date and time for about 2 seconds, then it will get in to operation mode, for example, if date & time is 2 Jan 2014 & 3 o'clock 4 minutes 5 seconds AM, the display will show as below.

The scale has auto zero function to reset zero when power on, but only if the weight on platform is below 10kg.



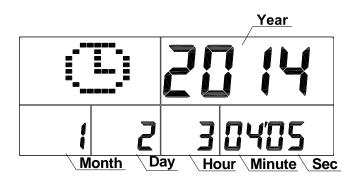
#### 6.2) turn off

During operation mode, press On/Off to turn off the scale, or it will turn off automatically if the scale is not in use for about 5 minutes, before the display goes off, it will show as below:



#### 6.3) check or set date & time

If checking, press "Date/time" it will display current date & time for about 2 seconds, for example, if date & time is 2 Jan 2014 & 3 o'clock 4 minutes, 5 seconds AM, display will show as below:



For setting, during checking mode, press and hold "Date/time" until beeper sounds then release, year digits flash, press "Date/time" to confirm, month digits flash, press "Date/time" to confirm, hour digits flash, press "Date/time" to confirm, minutes digits flash, press "Date/time" to confirm, second digits flash, press "Date/time" to confirm, second digits flash, press "Date/time" to confirm, then setting is finished, press "A/Up or V/Down" to change digits while it is flashing.

#### 6.4) selecting user number

Press "▲/Up or ▼/Down" to select user number during operation mode. (user number start from 0 to 99, total 100 numbers, each user number contents 15 records, except number 0, there is no hold & save function.)

#### 6.5) Setting sex and/or age

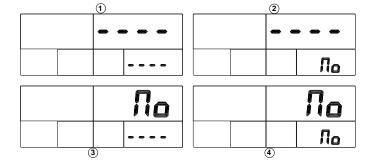
During operation mode, press User then symbol of sex flash, press "▲/Up or ▼/Down" to select, "I" for male "T" for female, press "user" to confirm, then age digits flash, press "▲/Up or ▼/Down" to set age, press User to confirm.

#### 6.6) Zero the weight & height

During operation mode, remove everything on weighing platform and pull down height ruler to bottom, press "Zero" which will reset the reading to zero for weight, to minimum for height, only if the scale is within 50kg of zero range & 5cm of minimum range reading.

After setting zero it will show one of the following four displays:

- 1) means setting of weight & height both pass.
- 2) means setting of weight pass but height fail.
- 3) means setting of weight fail but height pass.
- 4) means setting of weight & height both fail.



#### 6.7) Saving data

During operation mode and not in user number 0, BMI reading >10.0, after weight & height reading both stable, "Hold" will display, press

Save to save data, "Save" will display, it means data is saved, once user leave the platform, it returns back to operation mode.

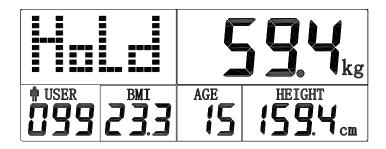
#### 6.8) change the units of weight & height

During operation mode, press Weight to switch kg or lb.

Press Height to switch cm or FT.

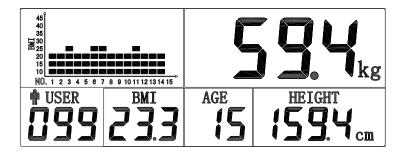
#### 6.9) getting data of weight, height & BMI

Zero the weight & height, input user number, age & sex, push up ruler to more than user's height, stand straight in middle of platform, pull down ruler to tough use's head, when kg or lb and cm or FT stop flashing, "Hold" will display, press" Save to save data, if not the "Hold" will be reset after user left platform. Following is the data display of a user: male, user number 99, BMI 23.3, age 15, height 159.4cm & weight 59.4kg.



#### 6.10) check records of specific user

Use "▲/Up or ▼/Down" to select user number, press and hold "Save until BMI bar graph goes off then release, one of the bar will flash, use "▲/Up or ▼/Down" to search specific record, press "Zero" to delete record of the flashing bar, press "Date/Time" to read the date & time of flashing bar, press "save" to return back operation mode. As shown below:



#### 6.11) delete last record of specific user

During operation mode, use "▲/Up or ▼/Down" to choose user number, press and hold "Zero" until "dEL LASt"displayed, the last record of the chosen user is deleted.

#### 6.12) Delete all records of specific user

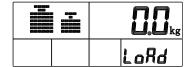
During operation mode, use "▲/Up or ▼/Down" to choose user number, press and hold "User" until "dEL ALL" displayed, all records of the chosen user is deleted, including sex & age data.

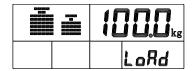
#### 6.13) Weight calibration

During operation mode, press and hold Weight until display show "Load 0.0kg", means it is in calibration mode of weight and is now calibrating 0.0kg, make sure there is not thing on platform, press "Weight" to confirm, "0.0kg" will keep on flashing for few seconds, then "Load 100.0kg" will display, means is now calibrating 100.0kg, load 100.0kg of standard test weights on the middle of platform, press "Weight" to confirm, "100.0kg" will keep on flashing for few seconds, the weight data will be saved automatically then return back to operation mode.

Note 1) after pressed "Weight" and display shows "no" that may be wrong amount of test weights added, load cell or ADC chip damaged

Note 2) if there are not 100.0kg of test weights available, use "Up" or "Down" to change the amount and use a known weight close to 100.0kg for calibration.





## **Trouble Shooting**

problem	Possible cause	solution
Not start	Bad battery	Change battery or use USB
Loose date/time	Weak battery	Change battery
flashing	Weak battery	Change battery
Inaccurate weight		1)set zero before use 2)recalibrate with standard test weights
Inaccurate height	1)not zero before use	1)pull down ruler to bottom and reset zero 2)recalibrate the height
Display ErrH	Out of weighing or height range	Stop using

#### Packing list

items	description	QTY.
1	platform	One pc.
2	indicator	One pc.
3	Stand/ruler	One set
4	manual	One set
5	certificate	One pc.

## Maintenance & Service

The weighing scale is a precision instrument, it must be treated carefully and cleaned regularly

#### DANGER

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 perform maintenance to 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

#### **A** CAUTION

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.

## **Transport & Storage**

Your weighing machine is a precision instrument, treat it carefully. Avoid shaking, severe impacts and vibration during the transportation. Make sure that there are no marked temperature fluctuations during the 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 place which meets the following conditions:

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

## **Warranty**

The products are under warranty against factory defects for a period of two (2) years from the date of shipment.

For Customers within the lower 48 states of the continental United States. LW Measurements will pay for fright both ways for the first 30 days after purchase. After 30 days expire the customer is responsible for shipping the product back to us. After the product is received we will inspect it and as necessary we will repair or replace and will ship the product back to the customer at our expense.

Any new scales returned for warranty must be properly packaged in the original box. If they are not properly packed an in the original box, the customer pays for shipping cost. If we determine there is a factory defect, we will pay for the shipping back. If we determine that it is not a factory defect, the customer will pay shipping.

For Customers outside the lower 48 States, including Mexico, Canada, Puerto Rico, Hawaii, Alaska and all other countries, customers must pay for shipping.

Our warranty does not cover misuse or neglect including but not limited to battery or water damage, overloading, and chewed or cut wires. If the product is found to have been misused or damaged by the customer, LW measurements is not responsible for the cost of return.

For warranty claims please go online to lwmeasurements.com and fill out the warranty submission form or call your customer service representative.