

## Stand-on Floor Scale

# USER MANUAL **MS2504**



Please keep the instruction manual at hand and follow instruction for use.

## CONTENTS

I. E	xplanation of Text/Symbols on Device Label/Packaging	4
II.	Copyright Notice	6
III.	. Safety Notes	7
	A. General Information	
	EMC Guidance and Manufacturer's Declaration	11
IV.	Installation	15
	A. Standard Parts	15
	B. Attach columns	16
	C. Attach handrail	17
	D. Attach indicator	18
	E. Inserting Batteries	19
	F. Using Adapter	
	G. Attaching Height Stadiometer to Column	
	H. Attaching Thermal Printer	24
V. 1	Indicator	25
	A. Indicator and Key Functions	25
	B. Display layout	26
VI.	Using Device	27
	A. Basic Operation	
	B. Hold	
	C. BMI	28
	D. Tare	29
	E. Pre-Tare	29
	F. Print	34
VII	. Device Setup	35
	A. Setting Time & Date	35
	B. Device Setup	
VII	I. Connecting scale to receiving device	38
	Troubleshooting	
	Product Specifications	
ХT	Declaration of Conformity	44

## I. Explanation of Text/Symbols on Device Label/Packaging

Text/Symbol	Meaning	
$\triangle$	Caution, consult accompanying documents before use	
Ā	Separate collection for waste of electrical and electronic equipment, in accordance with Directive 2002/96/EC. Do not dispose of device with everyday waste	
***	Name and address of device manufacturer, and year/country of manufacture	
	Carefully read user manual before installation and usage, and follow instructions for use.	
<u> </u>	Medical electrical device, Type B applied part	
<b>*</b>	Medical electrical device, Type BF applied part	
REF	Device catalogue number / model number	
EC REP	Name and address of authorized representative in the European Union	
MD	Device is a medical device. Text indicates device category type	
LOT	Manufacturer's batch or lot number for device	
SN	Device's serial number	
UDI	Device's Unique Device Identifier	
е	Verification Scale Interval. Value expressed in units of mass. Used to classification and verification of an instrument.	
<b>C €</b> 2460	Device conforms to (EU) 2017/745 Regulation on Medical Devices. Fourdigit number is identifier for medical device Notified Body	

	Device complies with EC directives (verified models only)
<b>C€</b> <u>M20</u> 0122	<ul> <li>M: Conformity label in compliance with Directive 2014/31/EU for non-automatic weighing instruments</li> <li>20: Year in which conformity verification was performed and the CE label was applied. (ex: 16=2016)</li> <li>0122: Identifier for metrology Notified Body</li> </ul>
	Device is a Class III scale in compliance with Directive 2014/31/EU (verified models only)
	Name and address of entity importing device (if applicable)
<b>A</b> →文	Name and address of entity responsible for translating Information For Use (if applicable)
CON.	Event counter confirming how many times device has been calibrated (if applicable)
	Device conforms to Taiwan National Communications Commission(NCC) approval
FC	Device conforms to U.S. Federal Communications Commission regulations
<b>Ľ</b> န M 20 8506	Device complies with UK non-automatic weighing instruments regulations 2016 (verified models only)  M: Conformity label in compliance with Non-automatic Weighing instruments Regulations 2016  20: Year in which conformity verification was performed and the UKCA label was applied. (ex: 20=2020)  8506:Identifier for metrology approved body
UK	Device complies with all UK applicable product legislation
$\bigcirc - \bigcirc - \bigcirc$	Device's polarity of power.

<sup>&</sup>quot;In case of differences, icon on device itself takes precedence"

## II. Copyright Notice

## **Charder Electronic Co., Ltd.**

No.103, Guozhong Rd., Dali Dist., Taichung City41262Taiwan

Tel: +886-4-2406 3766 Fax: +886-4-2406 5612

Website: www.chardermedical.com E-mail: info\_cec@charder.com.tw

Copyright© Charder Electronic Co., Ltd. All rights reserved. This user manual is protected by international copyright law. All content is licensed, and usage is subject to written authorization from Charder Electronic Co., Ltd. (hereinafter Charder) Charder is not liable for any damage caused by a failure to adhere to requirements stated in this manual. Charder reserves the right to correct misprints in the manual without prior notice, and modify the exterior of the device for quality purposes without customer consent.



Charder Electronic Co., Ltd. No. 103, Guozhong Rd., Dali Dist., Taichung City, 41262 Taiwan

## III. Safety Notes

## A. General Information

Thank you for choosing this Charder Medical device. It is designed to be easy and straightforward to operate, but if you encounter any problems not addressed in this manual, please contact your local Charder service partner.

Before beginning operation of the device, please read this user manual carefully, and keep it in a safe place for reference. It contains important instructions regarding installation, proper usage, and maintenance.

### **Intended Purpose**

This medical device is designed to be used in accordance with national regulations, to measure weight within specifications, for weight-related usage by professionals.

#### **Clinical Benefit**

Measurement results can be used by professionals to diagnose (and monitor) weight-related issues.

#### Intended medical indications/contraindications

Measurement: patient's body weight. No known contraindications to measurement of body weight.

## Intended patient profile

- (a) Age: no restrictions
- (b) Weight: no restrictions within device weight capacity
- (c) Patient Conditions: require measurement of body weight. Able to stand independently without support.

## Intended user profile

- (a) At least 20 years old
- (b) Minimum knowledge:
  - To be able to read at a high-school level and understand Arabic numerals (e.g. 1, 2, 3, 4...)
  - Basic hygiene knowledge
  - Trained in device's operation
  - Read the instruction manual
- (c) Language
  - Able to read the language of instruction manual and on-screen instructions
- (d) Qualifications
  - No special certifications or qualifications required

#### **Residual Risk Evaluation**

- (a) All foreseeable risks have been evaluated and considered acceptable. Generally speaking, the most likely risk caused by incorrect usage of the device is less accurate measurement (or inability to use device to acquire measurement), which does not pose imminent physical risk to patient or user.
- (b) Benefit-risk ratio is considered acceptable. Stand-on floor scales are an important option for measuring patients. Usage of device is unlikely to result in harm to user or patient.

### **General Handling**

- Device should be placed on stable, flat, solid, non-slippery surface.
- Usage on soft surfaces (ex: carpet) may result in inaccurate results.
- Ensure all parts are properly locked and tightened before operating the device.
- Device is intended to measure one subject at a time.

### **Safety Instructions**

- Batteries should be kept away from children. If swallowed, promptly seek medical assistance.
- The device has an expected service life of 5 years when correctly handled, serviced, and periodically inspected in accordance with manufacturer's instructions.
- Always comply with appropriate regulations when using electrical components under increased safety requirements.
- Ensure voltage marked on power supply matches mains power supply.
- The device is intended for indoor use only.
- Observe permissible ambient temperatures for use

#### **Environmental**

 All batteries contain toxic compounds; batteries should be disposed of via designated competent organizations. Batteries should not be incinerated.

#### Cleaning

- Device surface should be cleaned using alcohol-based wipes.
   Corrosive cleansing liquids should not be used. Pressure-washers should not be used.
- Do not use large amounts of water when cleaning the device, as it may cause damage to the internal electronics.
- Always disconnect device from mains power before cleaning.

#### **Maintenance**

 Please contact your local Charder distributor for regular maintenance and calibration, regular checking of accuracy is recommended; frequency to be determined by level of use and state of device.

### Warranty/Liability

- The period of warranty shall be eighteen (18) months, beginning on the date of purchase. Please retain your receipt as proof of purchase.
- No responsibility shall be accepted for damage caused through any of the following reasons: unsuitable or improper storage or use, incorrect installation or commissioning by the owner or third parties, natural wear and tear, changes or modifications, incorrect or negligent handling, chemical, electrochemical, or electrical interference.
- All maintenance, technical inspections, and repairs should be conducted by an authorized Charder service partner, using original Charder accessories and spare parts. Charder is not liable for any damages arising from improper maintenance or usage.

### Disposal

■ This product is not to be treated as regular household waste, but should be taken to a designated collection points for electronics. Further information should be provided by local waste disposal authorities.



- Only the original adapter should be used with the device. Using an adapter other than the one provided by Charder may cause malfunction.
- Do not touch the power supply with wet hands.
- Do not crimp the power cable, and avoid sharp edges.
- Do not overload extension cables connected to the device.
- Route cables carefully, to avoid tripping.
- Keep device away from liquids.
- Do not remove the plug by yanking on the cable.
- Use only a correctly wired (100-240VAC) outlet, and do not use a multiple outlet extension cable.
- Do not under any circumstances dismantle or alter the device, as this could result in electric shock or injury as well as adversely affect the precision of measurements.
- Do not place the device in direct sunlight, or in close proximity to an intense heat source. Excessively high temperatures may damage the internal electronics.

#### **Incident Reporting**

Any serious incident that has occurred in relation to the device should be reported to the manufacturer, EU representative (if device is used in EU member state), and competent authority of user/subject's member state.

## **EMC Guidance and Manufacturer's Declaration**

#### Guidance and manufacturer's declaration-electromagnetic emissions

The product is intended for use in the electromagnetic environment specified below. The customer or the user of the product should assure that it is used in such an environment.

Emission test	Compliance	Electromagnetic environment-guid ance
RF emissions CISPR 11	Group 1	The product uses RFenergy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class A	The product is suitable for use in all establishments other than domesticand those directly connected to a low voltage
Harmonic emissions IEC 61000-3-2	Class A	power supply network which supplies buildings used for domestic purposes.
Voltage fluctuations /flicker emissions IEC 61000-3-3	Compliance	

## Guidance and manufacturer's declaration-electromagnetic immunity

The product is intended for use in the electromagnetic environment specified below. The customer or the user of the product should assure that it is used in such an environment.

	customer or the user of the product should assure that it is used in such an environment.				
Immunity test	IEC 60601	Compliance level	Electromag		
	test level		netic		
			environmen		
			t-guidance		
Electrostatic	±8 kV contact	±8 kV contact	Floors should be		
discharge(ES	±2 kV, ±4 kV, ±8	±2 kV, ±4 kV, ±8	wood, concrete or		
D) IEC		kV, ±15 kV air	ceramic tile. If floors		
61000-4-2	KV, <u>210 KV dii</u>	<u> </u>	are covered with		
			synthetic material, the		
			relative humidity		
			should be		
			at least 30%		
Electrical	+ 2kV for	+ 2kV for	Mains power		
fast	power supply	power supply	quality should be		
transient/bu	lines	lines	that of a typical		
rst IEC	iiiles	iiiles	commercial or		
61000-4-4			hospital		
			environment.		
Surge IEC	+ 1kV line(s) to line(s)		Mains power		
61000-4-5	+ 2kV line(s) to earth	+ 2kV line(s) to earth	quality should be		
			that of a typical		
			commercial or		
			hospital environment.		
Voltage Dips, short	0% UT for 0,5	0% UT for 0,5 cycle	Mains power quality		
interruptions and	cycle	0% UT for 1 cycle	should be that of a		
voltage variations on	0% UT for 1 cycle	-	typical commercial		
power supply input		70% UT(30% dip in	or hospital		
lines IEC	70% UT(30% dip	UT) for 25cycles	environment. If the		
61000-4-11	in UT) for 25cycles	<u>0.7.0.20070.00</u>	user of the product		
01000 1 11	111 0 1 / 101 200 y 0100	0% UT for 5 s	requires continued		
	0% UT for 5 s	070 01 101 0 3	operation during		
	0/8/01/10/03		power mains		
			interruptions, it is		
			recommended that		
			the product be		
			powered from		
			anuninterruptible		
			power supply or a		
			battery.		
Power	30 A/m	30 A/m	The product		
frequency(50, 60			power		
Hz) magnetic			frequency		
field IEC			magnetic		
61000-4-8			fields should		
			be at levels		
			characteristic		
			of a typical		
			location in a		
			typical		
			commercial or		
			hospitalenviro		
1			nment.		

UT is the a.c. mains voltage prior to application of the testlevel.

## Guidance and manufacturer's declaration-electromagnetic immunity

Theproduct is intended for use in the electromagnetic environment specified below.

The customer or the user of the product should assure that is used in such and environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
Conducted	3 Vrms	3 Vrms	Portable and mobile RF
RF IEC	150 KHz to 80	150 KHz to 80	communications equipment
61000-4-6	MHz	MHz	should be used no closer to any
	6 V in ISM bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz	6 V in ISM bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz	part of the product including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
		<u></u>	Recommended separation
Radiated	3 V/m	3 V/m	distance:
RF IEC	80MHz to 2,7	80MHz to 2,7	$d = 1.2 \sqrt{P}$
61000-4-3	GHz	GHz	d = 1,2 $\sqrt{P}$ 80MHz to 800 MHz d = 2,3 $\sqrt{P}$ 800MHz to 2,7GHz Where <i>P</i> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and <i>d</i> is the recommended separation distance in metres (m).
			transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range.
			Interference may occur in the vicinity of equipment marked with the following symbol:
			$((\bullet))$

NOTE1 At 80 MHz and 800 MHz, the higher frequency rangeapplies.

NOTE2

Theseguidelinesmaynotapplyinallsituations. Electromagnetic propagation is af fected by absorption and reflection from structures, objects and people.

- a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios,amateurradio,AMandFMradiobroadcastandTVbroadcastcannotbepredictedtheore ticallywithaccuracy.To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the product is used exceedstheapplicable RF compliance level above, the product should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the product.
  - Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3V/m.

b

## Recommended separation distance between portable and mobile RF communications equipment and the product

The product is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the product can help preventelectromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the product as recommended below, according to the maximumoutput power of the communications equipment.

Rated maximum	Separation distance according to frequency of transmitter m			
output power of transmitter	150 kHz to 80 MHz	80 MHz to 800 MHz d =1,2 $\sqrt{P}$	800 MHz to 2,7 GHz	
W	d =1,2√ <i>P</i>	G = 1,2 17	d =2,3√ <i>P</i>	
0,01	0,12	0,12	0,23	
0,1	0,38	0,38	0,73	
1	1,2	1,2	2,3	
10	3,8	3,8	7,3	
100	12	12	23	

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where p is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

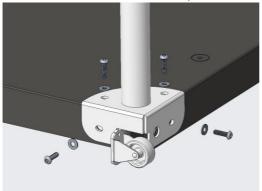
## IV. Installation

## A. Standard Parts

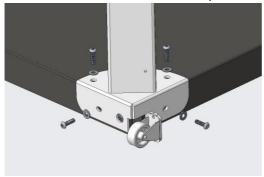
No.	Accessories	Item	Spec.	Qty.
1		Adjustable feet	SW-8080B	4
2		Round head hex socket screws (for columns)	M5*0.8*18	12
3		Washer head screws (for handrail)	M5*0.8*38	3
4		Locknut (for handrail)	M5(T=6.2)	3
5		screws (for indicator)	M4*0.7*8	3
6		washer (for handrail)	M5x12x1	15
7		Rubber washer for handrail screws and nut	SW-8074	3
8		User Manual	IN-00145	1
9		12V 2A Adapter		1
10		USB transfer cable	B-type	1

## B. Attach columns

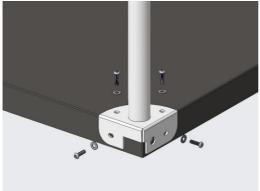
1. Attach first handrail column to platform



2. Attach second handrail column to platform



3. Attach third handrail column to platform



## C. Attach handrail

1. Attach handrail columns to platform

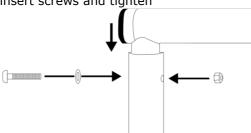


2. Place handrail in position and push down

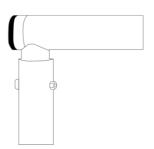


#### 3. Attach handrail to column with screws

Push handrail down into column and insert screws and tighten



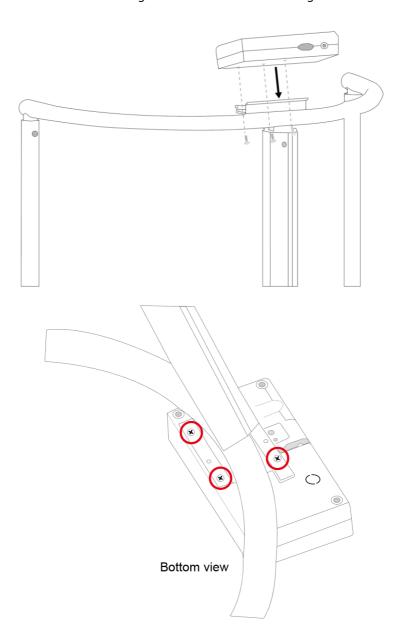
The installation is complete



NOTE: Ensure that screws are securely tightened for patient safety

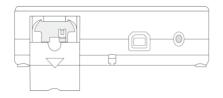
## D. Attach indicator

1. Ensure screws securing indicator to handrail are tight

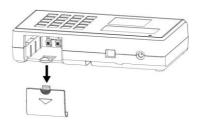


## **E. Inserting Batteries**

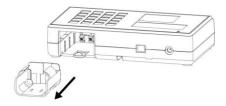
1. Open battery housing cover



2. Push down tab securing battery housing



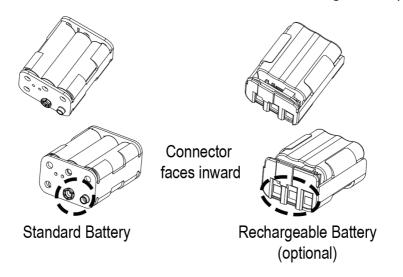
3. Remove battery housing



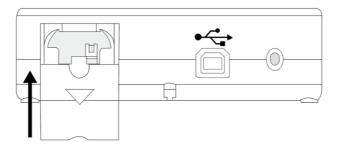
4. Insert battery pack



**NOTE**: Ensure that batteries are installed into housing correctly

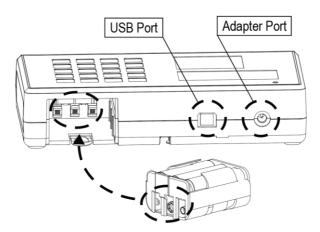


5. Slide battery housing cover back in place. Turn on power to confirm that battery is correctly installed.



## F. Using Adapter

- 1. Connect adapter to indicator before connecting to mains power supply
- 2. Disconnect adapter from mains power supply before unplugging adapter pin from indicator.



## **Using Rechargeable Battery (optional)**

To charge the rechargeable battery, plug in the device's power adapter.

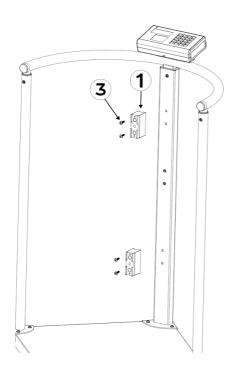
The rechargeable battery should be recharged at least once every 3 months, regardless of if the device has been used.

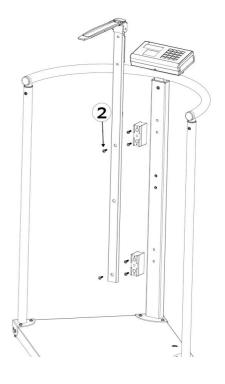
After a long period in storage (e.g. >3 months), the battery should run a full cycle (charge/discharge) to allow it to restore full capacity.

If prompt displays on the LCD, please charge battery promptly to avoid battery damage.

## G. Attaching Height Stadiometer to Column

No.	Image	Part	Qty.
1	0	Fixing block (WH-8026)	2
2	Hamili	Flat head screw (M5*0.8*10)	2
3		Flat head screw (M5*30)	4





1. Attach two fixing blocks to column using M5\*30 flat-head screws

2. Attach HM200D to blocks using M5\*0.8\*10 flat-head screws

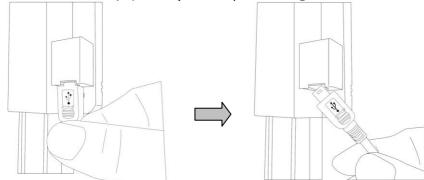
## **Connecting Digital Height Stadiometer to indicator**

Some digital height stadiometers can transfer results directly to indicator.

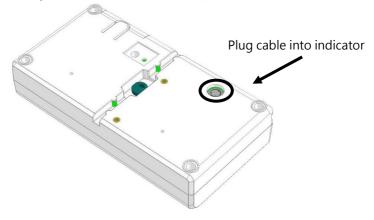
1. Locate USB port on back of height stadiometer



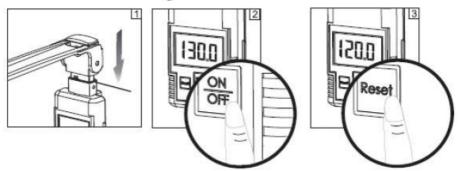
2. Connect USB cable (9 pin DIN) to USB port on height rod.



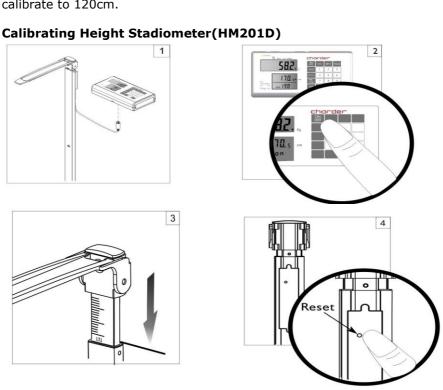
3. Locate 9 pin DIN port on bottom of indicator, and connect USB cable.



### Calibrating Height Stadiometer(HM200D)

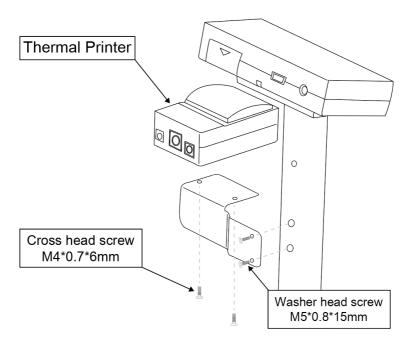


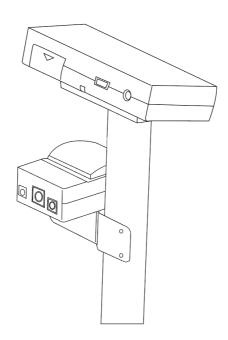
Slide measurement rod down completely. Turn on HM200D using [ON/OFF] key. If height display is not at "120cm", press [Reset] key to calibrate to 120cm.



Slide measurement rod down completely. Turn on device using [ON/OFF] key on indicator. If height display is not at "120cm", press [Reset] key on HM201D to calibrate to 120cm.

## **H. Attaching Thermal Printer**





## V. Indicator

## A. Indicator and Key Functions

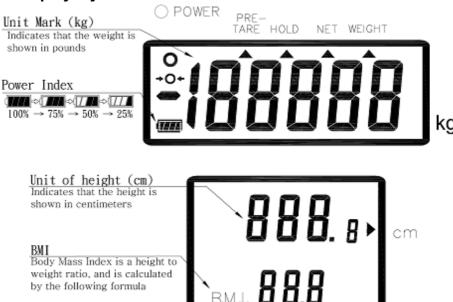


(300kg model) (350kg model) (Wireless functionality optional)

#### **Key Function**

- 1.  $\frac{ON}{OFF}$  ON/OFF: Power on or power off.
- 2. ZERO: Reset display to 0.0 kg display. Press and hold for 3 seconds to enter device settings.
- 3. M1-5: Saving pre-tare values (up to 5)
- 4. PRE-TARE: Pre-tare the known weight of an object (ex: chair) before beginning measurement.
- 5. TARE: Allows user to deduct weight from reading after measurement
- 6. PRINT: When printer or PC is connected to the scale, press this key to print results
- 7. BMI: Calculation of Body Mass Index
- 8. HOLD: Determine stable weighing value used when weight is unstable. Press and hold for 3 seconds to enter time setting.
- 9. 0-9: For entering digits.
- 10. CLEAR: Clear incorrect data input.
- 11. ENTER: Confirm input

## **B.** Display layout



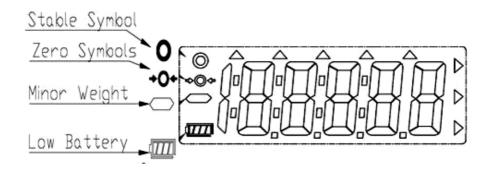
#### **Definitions**

**Stable symbol**: Indicate that weight is stable.

Zero symbol: Weight is at zero

**Negative weight**: Weight under zero.

**Low battery**: Battery needs to be charged or replaced.



## VI. Using Device

## A. Basic Operation

Switch on the device using key. The device will automatically perform self-calibration, displaying software version.

Once "0.00 kg" appears on indicator, device is ready for measurement.

**Note**: If "0.00 kg" does not display on indicator, press key to zero the device.

Guide subject to stand upon the measurement platform. After the weight has stabilized, the "stable" symbol will appear on indicator.

**Note**: If subject's weight exceeds scale capacity, indicator will display "Err" prompt due to overload.

#### B. Hold

The hold function determines average weight, designed to be used if subject's weight will not stabilize (ex: an active child).

**Note:** if fluctuation is too severe, average weight determination will be difficult and hold may not function correctly

- 1. Switch on the device normally.
- 2. Press the key. "HOLD" will be displayed on the indicator.
- 3. Guide subject to stand on measurement platform.
- 4. After a few seconds, the average weight will be displayed on the indicator. This weight will be locked at this point, subject can step off from device.
- 5. To release the locked weight, press the key again to return to the device to normal mode.

**Note**: Hold function can be activated before or after subject stands on measurement platform. However, if subject finds it difficult to stand still, we recommend activating Hold after subject stands on platform.

#### C. BMI

- 1. In normal mode, press the key to enter BMI mode.
- 2. Display will show last recorded height. Left-most digit will flash.
- 3. Enter height using numeral keys (ex: 170 cm). Input will automatically

move to next digit. Press key to re-input. Press key to manually move to next digit.

- 4. After inputting height, press to confirm.
- 5. Proceed to weigh subject as usual. Indicator will display weight, height, and BMI.

**NOTE**: Hold function can be used at this time if weight is unstable

6. Press key to return to normal mode.

#### BMI (w/HM200D or HM201D)

- 1. Ensure HM200D/HM201D is plugged into indicator.
- 2. In normal mode, press the key to enter BMI mode.
- 3. Proceed to weigh subject as usual. Indicator will display weight, height, and BMI.
- 4. Lower stopper on HM200D/HM201D until it touches top of subject's head. Device will automatically calculate BMI based on change in height and weight.

NOTE: Hold function can be used at this time if weight is unstable

5. Press key to return to normal mode.

Category	BMI (kg/m²)	Risk of obesity-related disease
Under	< 18.5	Low
Normal	18.5-24.9	Average
Over	24.9-29.9	Slightly Increased
Obese I	30.0-34.9	Increased
Obese II	35.0-39.9	High
Obese III	> 40	Very High

(World Health Organization adult BMI standards)

#### D. Tare

The tare function allows the user to deduct the weight of objects from the device's measurement result.

- 1. Place object that needs to be tared onto measurement platform.
- 2. Press key after stable symbol appears on indicator. Display will indicate "0.00 kg".
- 3. Guide subject (plus tared object) to be weighed upon measurement platform. Conduct measurement.
- 4. To clear tare value, remove all objects from measurement platform, and press key.

#### E. Pre-Tare

The Pre-Tare function is used to subtract the known weight of a substance prior to weighing. The device can store 5 sets of pre-tare values.

Pre-tare values can be stored using two different methods: "Load Weight", or "Input Manually".

After pre-tare weights have been stored, they can be recalled by holding the key for 3 seconds.

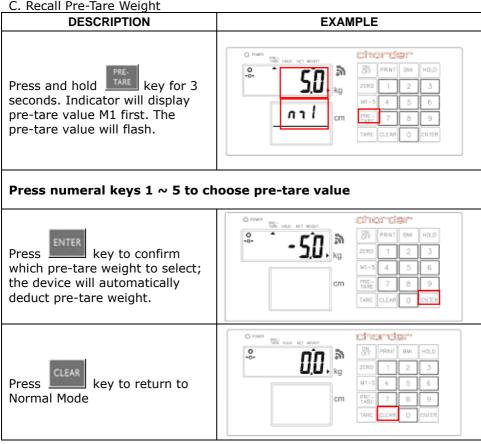
## A. Load Weight

A. Load Weight			
DESCRIPTION	EXAMPLE		
Press key after loading weight on the platform; the indicator will display blinking "m" symbol.	C   PRINT   SM   HOLD		
Press numeral key 1 $\sim$ 5 to assign this number with the current pre-tare weight.	PRINT DM HOLD  28		
Press key to store pre-tare weight; the indicator will make a beep sound.	O PRIOR WE MAD MI MOUD  ST PRINT BUI MOUD  ZERO 1 2 3  MI - 5 4 5 6  CM PRE- 7 8 9  TARE CLEAR 0 ENTER		

## B. Input Manually DESCRIPTION **EXAMPLE** chardar Press TARE key. Left-most digit PRINT BMI HOLD will begin blinking. w1~5 6 If no further action is taken within 6 PREseconds, indicator will return to TARE normal mode While digit is blinking: Enter pre-tare weight using 0~9 charder keys. TARE HOLD ART MEDI-PRINT BMI HOLD Ex: to pre-tare 5.0 kg of weight, press 0-0-5-0. M1-5 Ex: to pre-tare 13.5 kg of weight, press 0-1-3-5. ENTER Press key to confirm the pre-tare weight. chonder Indicator will display minus sign to M1-8 6 the left of pre-tare weight value. TARE CLEAR shorear To save this pre-tare weight value in memory: 6 Press key; the blinking "m" symbol will appear on the display. ENTER

charder SA: PRINT BM HOLD Press numeral key  $1 \sim 5$  to assign this number with the current Mil-กา2 pre-tare weight. cm TARE chondan Press key to store pre-tare M1-5 weight; the indicator will make a PRE-TWRE cm beep sound. TARE CLEAR

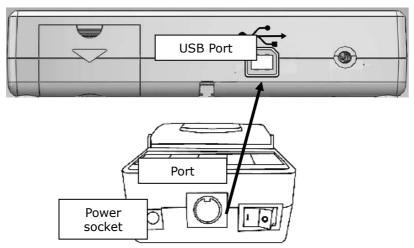
C. Recall Pre-Tare Weight



NOTE: Pre-tare weight must be under max capacity, otherwise screen will key is pressed, and the operator will have to show 0.00 after re-input pre-tare settings.

## F. Print

If thermal printer is connected to indicator, results can be printed by pressing key.



NOTE: Thermal printer needs to be powered by adapter

## VII. Device Setup

## A. Setting Time & Date

Press and hold keyfor 3 seconds to enter Time Setting mode.

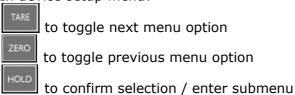
Example: Inputting2008, Dec 25, 8:00am

	Year Setting
סחחכ	Enter year using numeral keys 0-9.
[UU0	Press key once completed to
	proceed to month & date setting.
	Month & Day Setting.
	Enter month, followed by day using
	numeral keys 0-9.
12.25	Ex: December 25th is "12.25". Input 1-2-2-5.
	Press key once completed to
	proceed to time setting.
	Time Setting
	Enter time (24hr format) using
	numeral keys 0-9.
NR:NN	Ex: 08:00am is input by pressing 0-8-0-0.
	Press key once completed to confirm time settings and proceed to confirmation.
	Device will display new time and date
	settings, cycling between year, month & day, and time.
2008 ⇔ 12.25 ⇔ 0800	YYYY→MM.DD→:HH:MM
	Press key to return to normal weighing mode.

## **B.** Device Setup

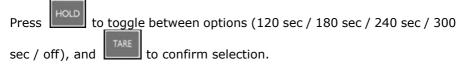
When the device is switched on, press and hold the key for about 3 seconds, until the display shows the "SETUP", followed by "A.OFF" (first option in setting menu).

## In device setup menu:





**Auto Power-Off**: Instruct device to shut off automatically after a certain period of time.





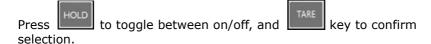
## Buzzer/Beep:

When function is turned on, beeping noise will be made when: indicator is turned on, keys are pressed, and weight is stable.





**Hold Stop**: When Hold Stop is "on", Hold will deactivate after subject leaves measurement platform.





Language: Set thermal printer language

Press HOLD

to toggle between English, Italian and Polish.

Press

key to confirm selection.



Font size: Set thermal printer font size.

Press HOLD

to toggle between normal and double (larger).

Press TARE

key to confirm selection.



**BT / Wifi (optional)**: If device has BT or Wifi module installed,the function can be turned OFF/BT/Wifi.

Press **[HOLD]** to toggle between OFF/BT/Wifi, and **[TARE]** to confirm selection.



**Print Set (optional)**: If device has Wi-Fi module installed, this option will appear.

Press HOLD

to toggle between "Auto" and "PKEY".

**Press** 

to confirm selection.

If "Auto" is selected, weight measurement will be automatically sent to connected printer or device. If "PKEY" is selected, transfer will occur

manually only after



key is pressed.

### **Save Changes**

After completing changes, press until "END" is displayed on screen.

Press HOLD to save.

## VIII. Connecting scale to receiving device

The device can transfer results to receiving device. Please consult instruction manual for receiving device.

Connection directly to Electronic Medical System should be conducted by qualified distributors/administrators only.

**NOTE**: Wireless transfer is only available on wireless model.

## IX. Troubleshooting

Before contacting your local Charder distributor for repair service, we recommend considering the following troubleshooting procedures:

#### Self-inspection

#### 1. Device will not power on

- If battery power is depleted, replace with new batteries
- If batteries are not used, check if the power adapter is plugged into the device properly. Check if power adapter is plugged into mains properly

### 2. Indicator showing "00000" ZERO SPAN out of range

- Interference due to factors such as RF disturbance or ground vibration. Relocate device to location without interference and try again
- Unstable platform feet adjust platform feet according to bubble level indication (clockwise to retract, counter-clockwise to extend) and try again
- External objects interfering with measurement platform. Clear platform of objects and try again
- Device may not function properly on soft surfaces such as carpets or lawns. Relocate device to location with solid, stable floor
- If the steps above cannot resolve the problem, re-calibration may be required to correct weighing accuracy

#### 3. Connection failure for data transmission to PC or printer

- Ensure wires are connected correctly between indicator and PC or printer
- Ensure printer is supplied with power. Ensure PC software is set up properly as indicated in this manual

### **Distributor support required**

If the following errors occur, we recommend contacting your local Charder distributor for repair or replacement services:

#### 1. Device will not power on

- Faulty on/off key
- Broken or damaged wires causing short circuit or faulty connection
- Safety fuse burnout
- Faulty adapter

#### 2. Indicator damage

- Possible hardware defects include: uneven brightness in LCD screen, blurred text, smeared rainbow screen, incorrect decimal display
- Unable to save or read data
- Indicator shows "ERRL" after device is switched on
- Keys not responding
- Buzzer malfunction

**Error Messages** 

Error Message	Reason	Action
Lo	Low battery warning Voltage of battery is too low to operate device	Replace batteries, or plug in adapter
Err	Overload Total load exceeds device's maximum capacity	Reduce weight on measurement platform and try again
Err.H	Counting Error (too high) Signal from loadcells too high	Error normally caused by faulty loadcell or wiring. Please contact distributor
Err.L	Counting Error (too low) Signal from loadcells too low	Error normally caused by faulty loadcell or wiring. Please contact distributor
00000	Zero count over calibration zero range +10% while power on	Re-calibration required. Please contact distributor
00000	Zero count under calibration zero range -10% while power on	Re-calibration required. Please contact distributor
Err.P	Program Error Fault with device software	Error normally caused by faulty loadcell or wiring. Please contact distributor

## X. Product Specifications

Model		MS2504		
Disp	Display		710	
	Capacity	300 kg x 0.1 kg 350 kg x 0.1 kg		
Weight	Accuracy	±2.0e	±1.5e	
Measurement	OIML	non-OIML approved model	Class III	
	LCD Screen	1.0-inch LCD screen (5 1/2 digits)		
Dimensions	Overall	550(W) x 550(D)	50(D) x 1090(H) mm	
Platform 550(W) x 550(E		50(D) mm		
Device '	Weight	20.8	kg	
Key Functions		On/Off, Zero, Print, BMI, Hold, Pre-Tare, Tare, Clear, Enter, 0~9, M1-5		
Data Transmission		USB, Wireless Module (optional)  NOTE: Device should be connected to network by qualified distributors only.		
Power	Supply	Rechargeable battery pack (optiona or 6 AA batteries / adapter		
Operation Environment		0°C∼+40°C 15% / 85% RH 700 hPa ∼1060 hPa		
Standard Accessories		(see accessory list)		
Optional Accessories		Thermal Printer, Height Meter		

## **△**Warning

The device is only compatible with the power adapters specified below.

AMP VOLTAGE	DRAWING NO.	CE APPROVED TYPE NO. / MODEL NO.	TYPE	Adapter plug
	CD-AD-00041	UES24LCP-120200SPA	US	
12)/ 24	CD-AD-00041	UES24LCP-120200SPA	EU	90 - degree
12V 2A	CD-AD-00041	UES24LCP-120200SPA	UK	of action
	CD-AD-00041	UES24LCP-120200SPA	AU	

41

Notes	

Notes	

## XI. Declaration of Conformity

This product has been manufactured in accordance with the harmonized European standards, following the provisions of the below stated directives:

<b>C €</b> 2460	(EU) 2017/745 Regulation on Medical Devices
<b>C</b> € M year	2014/31/EU Non-automatic Weighing Instruments Directive (OIML models only)

## RoHS Directive 2011/65/EU and Delegated Directive (EU) 2015/863

#### Radio Equipment Directive 2014/53/EU

(applicable if wireless module is used)

#### **Part 15 of the Federal Communications Statement Rules**

This device may not cause harmful interference.

This device must accept any interference received, including interference that may cause undesired operation.

Please see separate document showing on sticker of device for above markings.

Authorized EU Representative:



## Manufactured by:

