Wheel chair scale

USER MANUAL

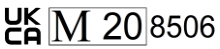
MS3830

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

CONTENTS

I.Explanation of Graphic Symbols on Label/Packaging

Text/Symbol	Meaning
	Caution, consult accompanying documents before use
	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.
	Medical electrical device, Type B applied part
	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
e	Verification Scale Interval. Value expressed in units of mass. Used to classification and verification of an instrument.
CE 2460	Device conforms to (EU) 2017/745 Regulation on Medical Devices. Fourdigit number is identifier for medical device Notified Body
CE M 20 0122	Device complies with EC directives (verified models only) **M**: Conformity label in compliance with Directive

	2014/31/EU for non-automatic weighing instruments **20**: Year in which conformity verification was performed and the CE label was applied. (ex: 16=2016) **0122**: Identifier for metrology Notified Body
	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)
	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
	Device conforms to U.S. Federal Communications Commission regulations
	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
	Device complies with all UK applicable product legislation
	Device's polarity of power.

"In case of differences, icon on device itself takes precedence"

II. Copyright Notice

Copyright Notice
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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.

Patient sitting on wheelchair is pushed onto measurement platform containing digital scale. Device measures weight of wheelchair plus patient using digital scale. By deducting weight of wheelchair from total, weight of patient can be measured.

Clinical Benefit

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

Intended medical indications/contraindications

Measurement: subject'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 (Patient's weight limit is dependent upon wheelchair weight. If wheelchair weighs 20 kg, patients up to 280 kg can be weighed if total capacity of device is 300 kg.)
(c) Patient Conditions: require measurement of body weight.

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
- Able to push wheelchair onto measurement platform.

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. Wheel chair 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.
- Expected service life: 5 years.
- 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.

Warning

- 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.

B. EMC Guidanceand Manufacturer's Declaration

Guidance and manufacturer's declaration-electromagnetic emissions		
The product isintended 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-guidance**
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 electronicequipment.
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 power supply network which supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
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.

Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment-guidance**
Electrostatic discharge(ESD) IEC 61000-4-2	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%
Electrical fast transient/burst IEC 61000-4-4	± 2kV for power supply lines	± 2kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1kV line(s) to line(s) ± 2kV line(s) to earth	± 1kV line(s) to line(s) ± 2kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage Dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% UT for 0,5 cycle 0% UT for 1 cycle 70% UT(30% dip in UT) for 25cycles 0% UT for 5 s	0% UT for 0,5 cycle 0% UT for 1 cycle 70% UT(30% dip in UT) for 25cycles 0% UT for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the product requires continued operation during power mains interruptions, it is recommended that the product be powered from anuninterruptible power supply or a battery.
Power frequency(50, 60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	The product power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospitalenvironment.

NOTE 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 RF IEC 61000-4-6	3 Vrms 150 KHz to 80 MHz 6 V in ISM bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz	3 Vrms 150 KHz to 80 MHz 6 V in ISM bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz	Portable and mobile RF communications equipment should be used no closer to any part of the product including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance:**
Radiated RF IEC 61000-4-3	3 V/m 80MHz to 2,7 GHz	3 V/m 80MHz to 2,7 GHz	$d = 1,2 \sqrt{P}$ $d = 1,2 \sqrt{P}$ 80MHz to 800 MHz $d = 2,3 \sqrt{P}$ 800MHz to 2,7GHz Where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and *d* is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, [a] should be less than the compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol: 
NOTE1 At 80 MHz and 800 MHz, the higher frequency rangeapplies. NOTE2 Theseguidelinesmaynotapplyinallsituations.Electromagneticpropagationisaffectedbyabsorptionand reflection from structures, objects andpeople.			

a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios,amateurradio,AMandFMradiobroadcastandTVbroadcastcannotbepredictedtheoretically with accuracy. 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 exceeds the applicable 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.

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b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3V/m.

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 output power of transmitter W	**Separation distance according to frequency of transmitter m**		
	150 kHz to 80 MHz $d = 1,2\sqrt{P}$	**80 MHz to 800 MHz** $d = 1,2\sqrt{P}$	**800 MHz to 2,7 GHz** $d = 2,3\sqrt{P}$
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

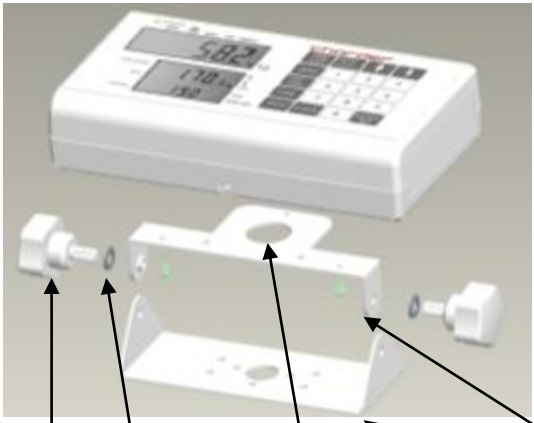
For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where p is the maximum output power rating of the transmitter in watts (W) according to the transmitter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

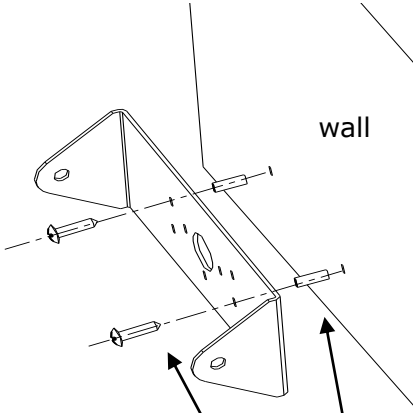
NOTE1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

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. Bracket Assembly

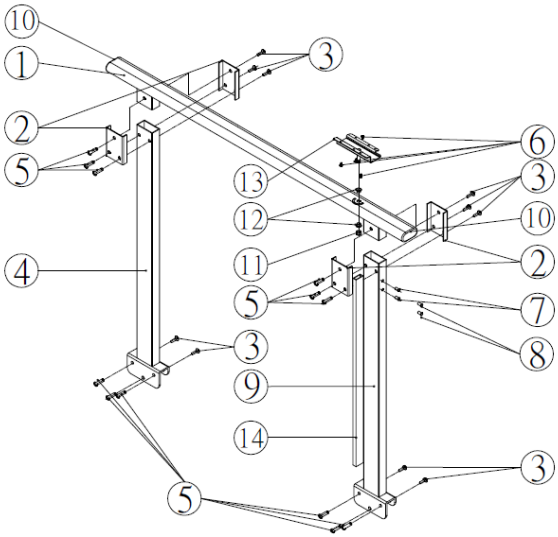




						
Knob	Spacer	Fixed plate (top)	Fixed plate (bottom)	Tapping Screw	Screw	Plastic anchor
2	2	1	1	2	2	2

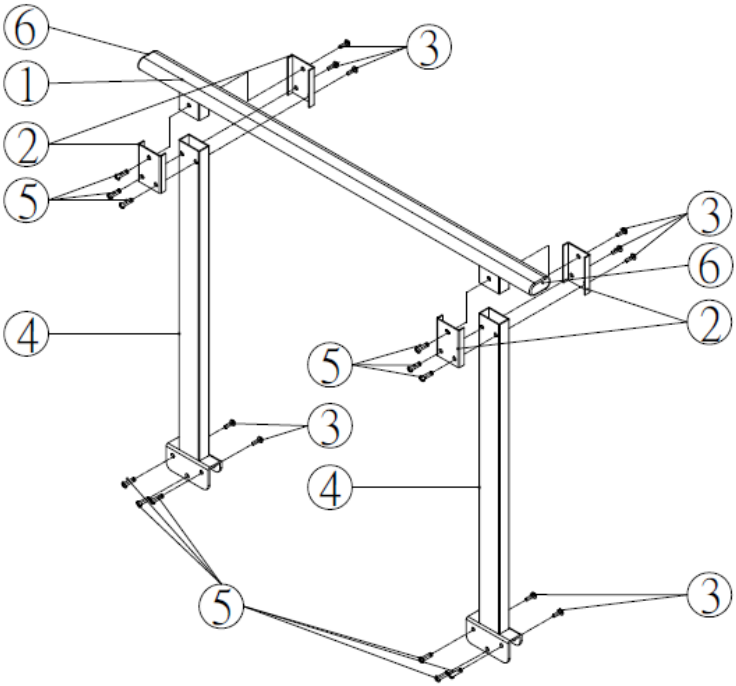
B. Handrail Parts

Parts List - Right Handrail (SM-3461)



NO.	Item	Drawing	Qty.
1.	handrail bar	SS-8300B	1
2.	fixing plate	SS-8311	4
3.	socket button head cap screw	M6-21	10
4.	pole	AM-8173	1
5.	socket button head cap screw nut	ø8-M6*33	12
6.	screw for display set	M4*8	4
7.	screw nut for printer bracket (installed already)	M5-0.8-JB	2
8.	plastic screw (installed already)	M5-0.8*8	2
9.	pole with wiring duct	AM-8173A	1
10.	rubber end cap	SW-8068	2
11.	locking nut	M8*1.25*8	1
12.	bearing	SF-1F-08075	2
13.	bracket	SS-8303	1
14.	wiring duct	TC-2WE 100cm	1
	socket key		2

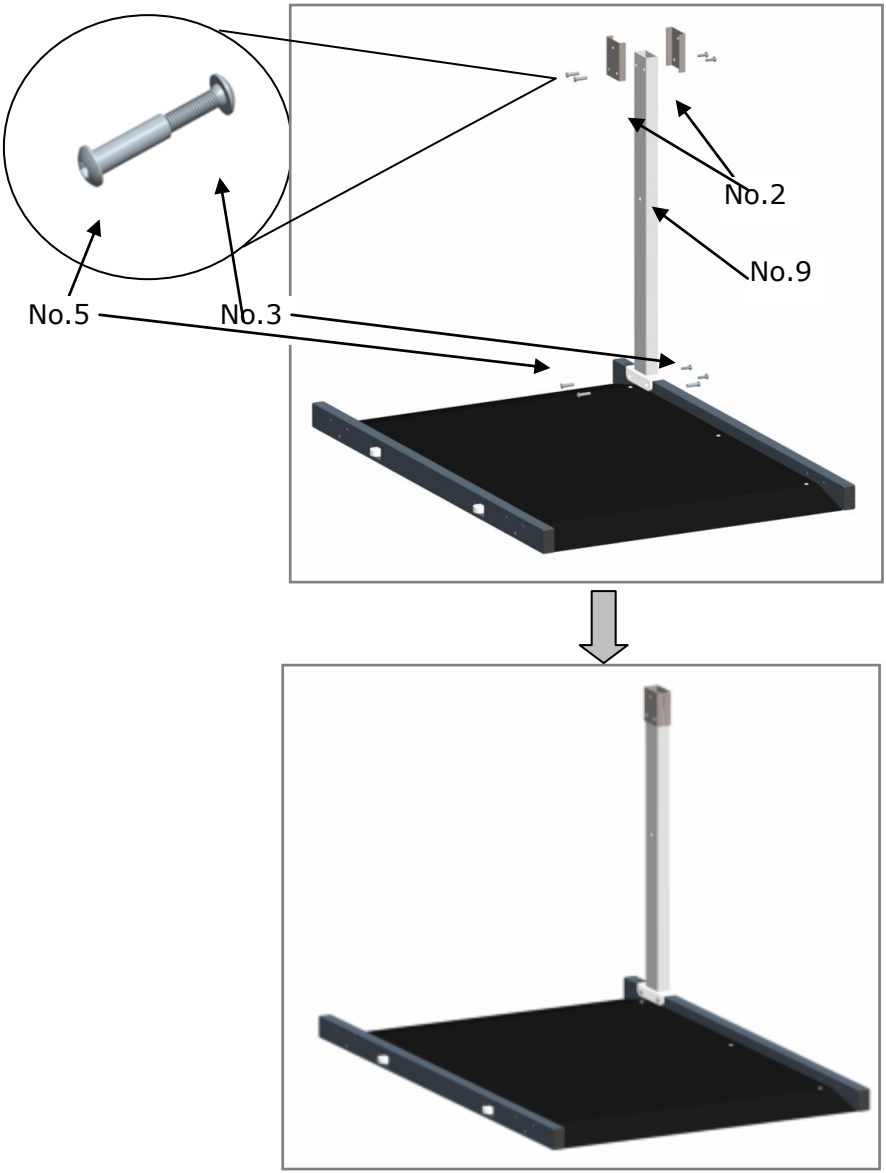
Parts List - Left Handrail (SM-3462)



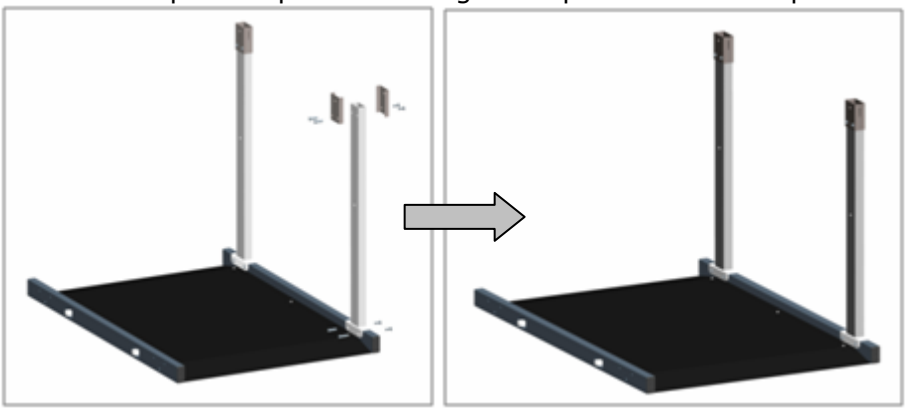
NO.	Item	Drawing	Qty.
1.	handrail bar without screw hole	SS-8300A	1
2.	fixing plate	SS-8311	4
3.	socket button head cap screw	M6-21 	10
4.	pole	AM-8173	2
5.	socket button head cap screw nut	ø8-M6*33 	12
6.	rubber end cap	SW-8068	2
	socket key		2

C. Handrail Assembly

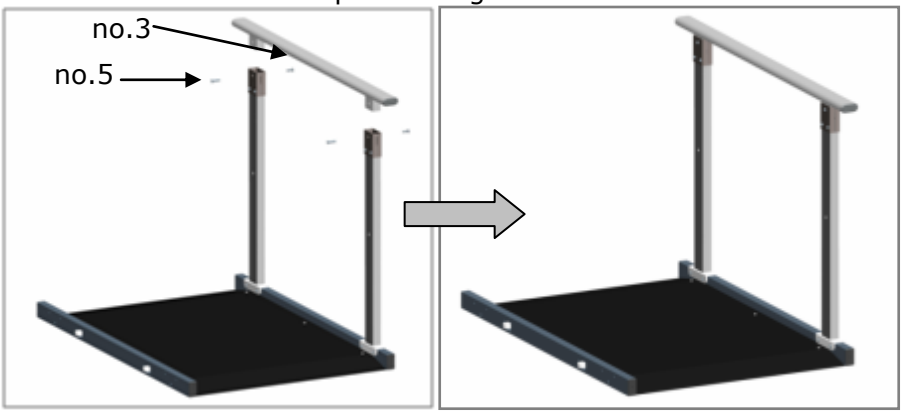
1. Attach No.2 (fixing plate) to No.9 (pole with wiring duct) using No.3 (socket screw) and No.5 (screw nut). Attach No.9 (pole with wiring duct) to platform using No.3 (socket screw) and No.5 (screw nut).



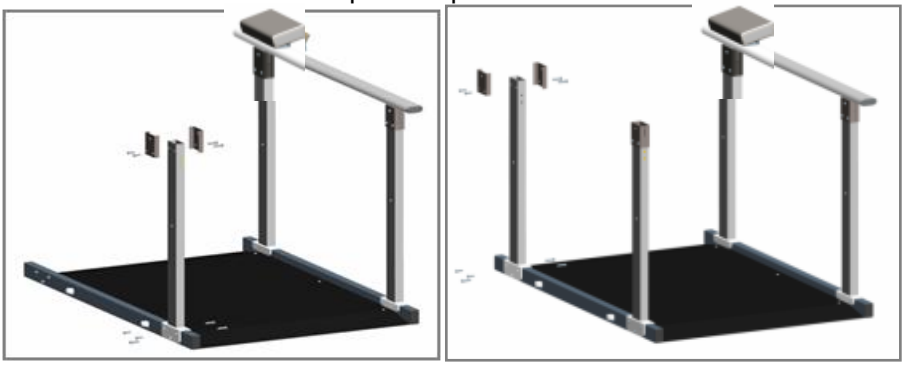
2. Assemble pole on platform using same procedure as Step 1.



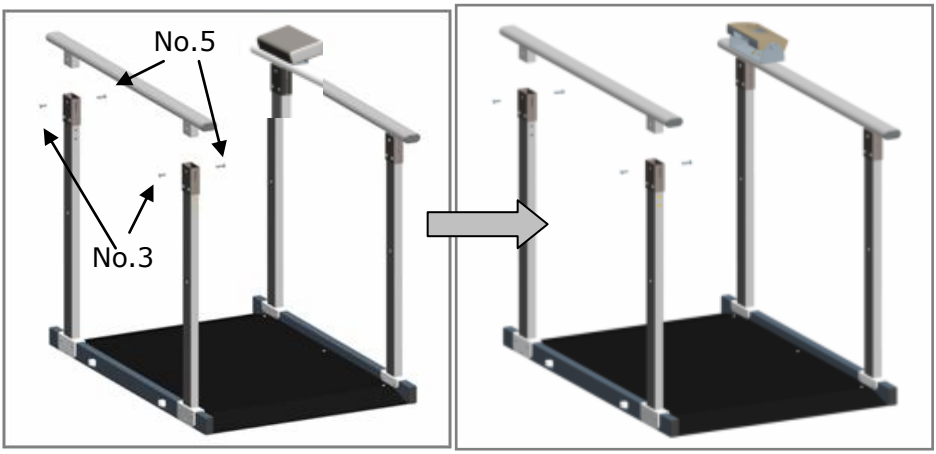
3. Attach handrail bar to poles using No. 5 and No. 3 screws.



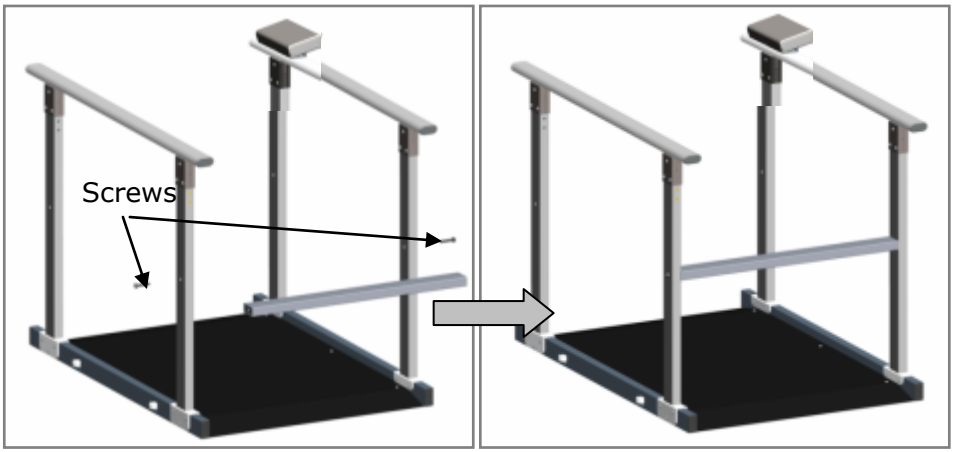
4. Attach third and fourth pole to platform.



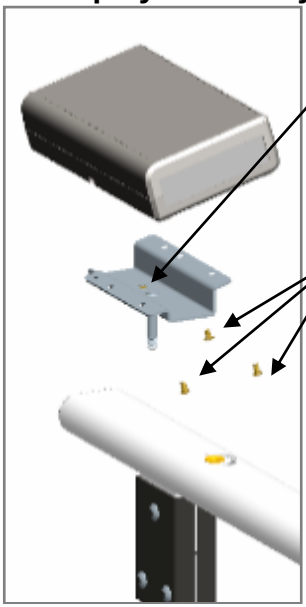
5. Assemble handrail bar



6. Attach cross bar (SS-8444) using No.11 screws (M8-1.25P*45).

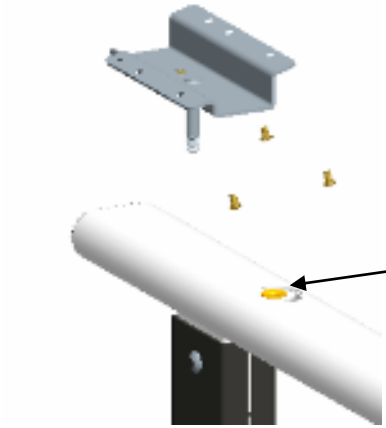


D. Display Assembly

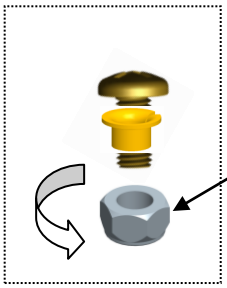


1. Secure a M4*8 screw in the center of bracket.

2. Attach display to bracket using 3 more M4*8 screws.

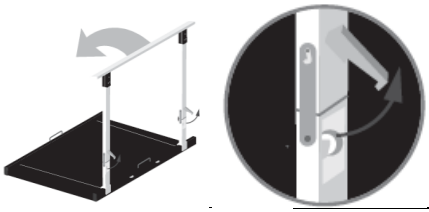
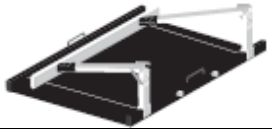
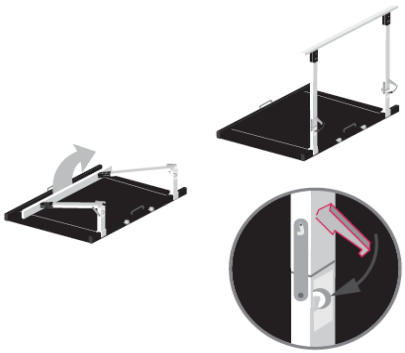


3.Place bearings in the handrail.



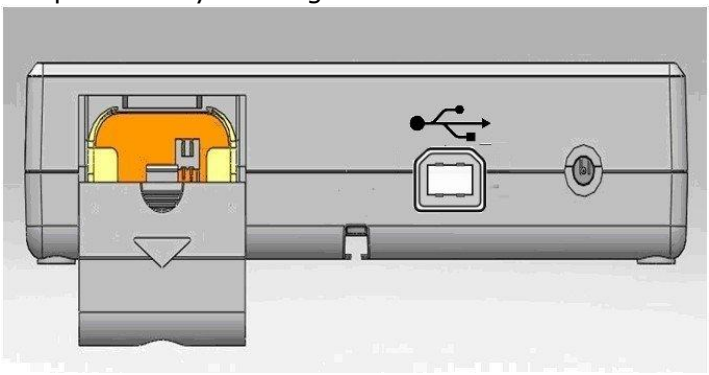
4. Tighten the nut with M4*8 screws
The display now can swivel freely.

E. Foldable Handrail Assembly (SM-0001)

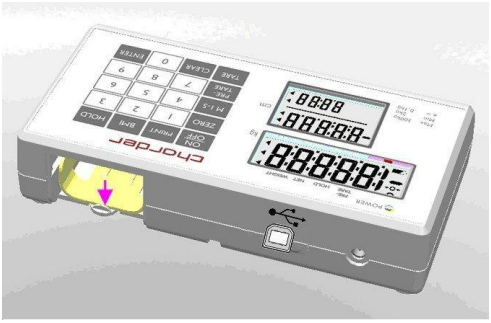
To fold the handrail down, release the locking hook and carefully fold the handrail down.	
The hinge will lock in place, ready for transportation.	
Before raising handrail, place scale on solid, non-slippery, level surface.	
Raise the handrail until it is in upright position. Fix the locking hooks on the hinge back in place, and ensure the handrail is firmly secured.	

F. Inserting Batteries

1. Open battery housing cover

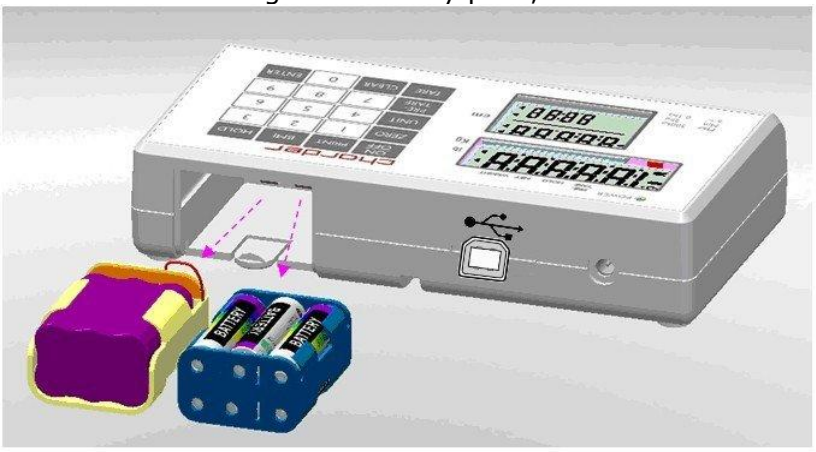


2. Accessing batteries

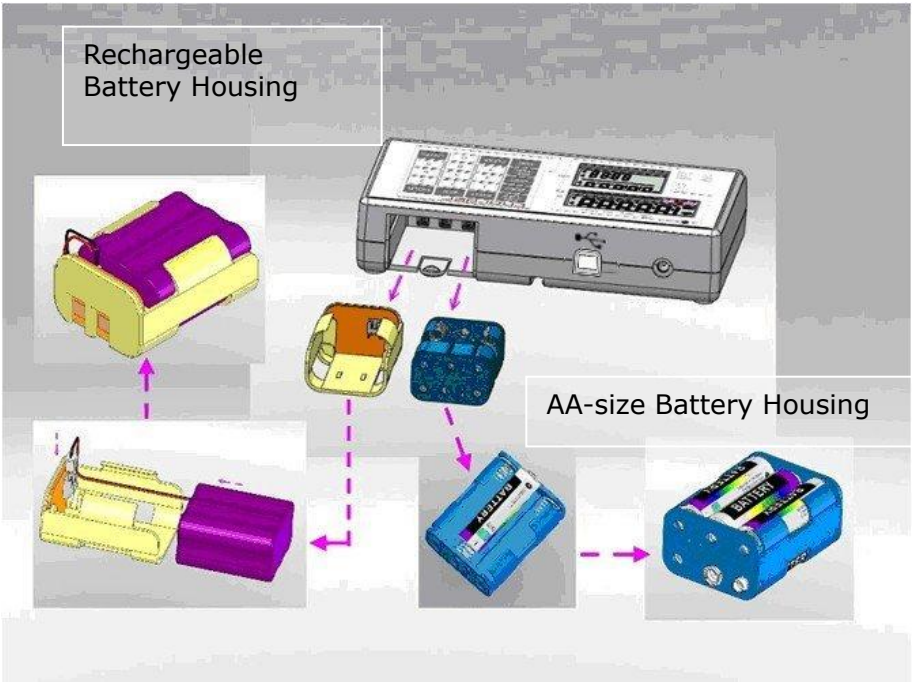


Take out the battery housing

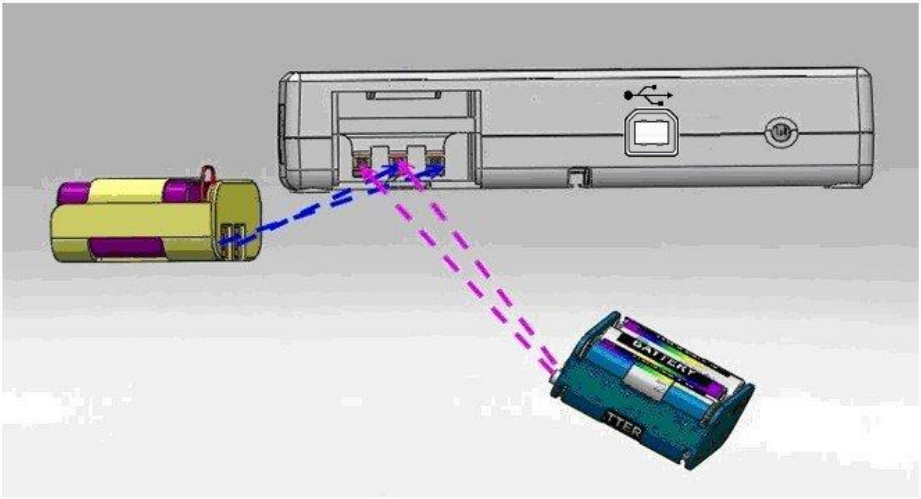
3. Use either rechargeable battery pack, or AA batteries



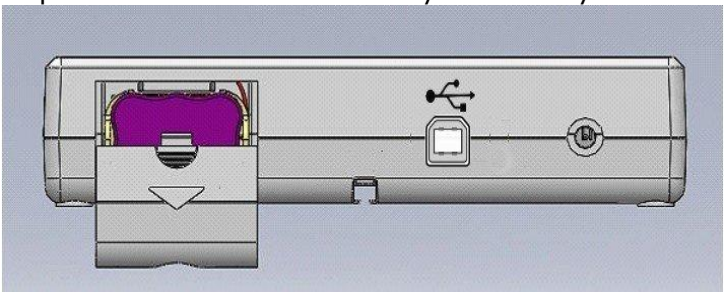
4. Ensure batteries are installed into the housing correctly



5. Install the battery housing into the compartment, and make sure the right side of housing pin is facing towards inside of the connecting position



6. Slide back the cover to close the battery housing compartment. Turn on power to confirm that battery is correctly installed.

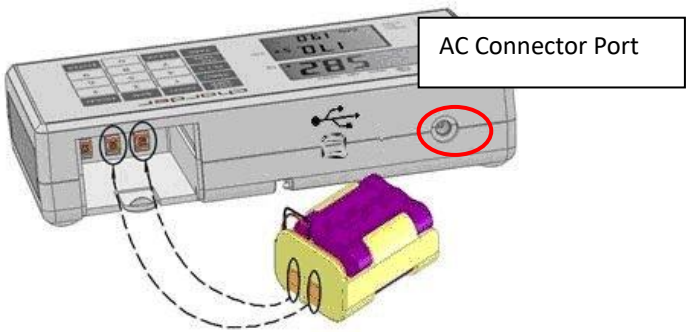


Using Rechargeable Battery (optional)

The rechargeable battery should be recharged at least once every 3 months, regardless of if the device has been used. Battery can be charged by plugging device's exclusive adapter into AC Connector Port.

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.

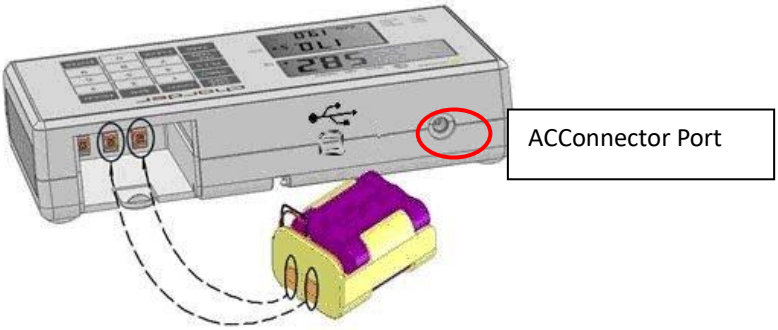
Ensure rechargeable battery housing is installed and inserted properly into the compartment.



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

G. 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.



V. Indicator

A. Indicator and Key Functions

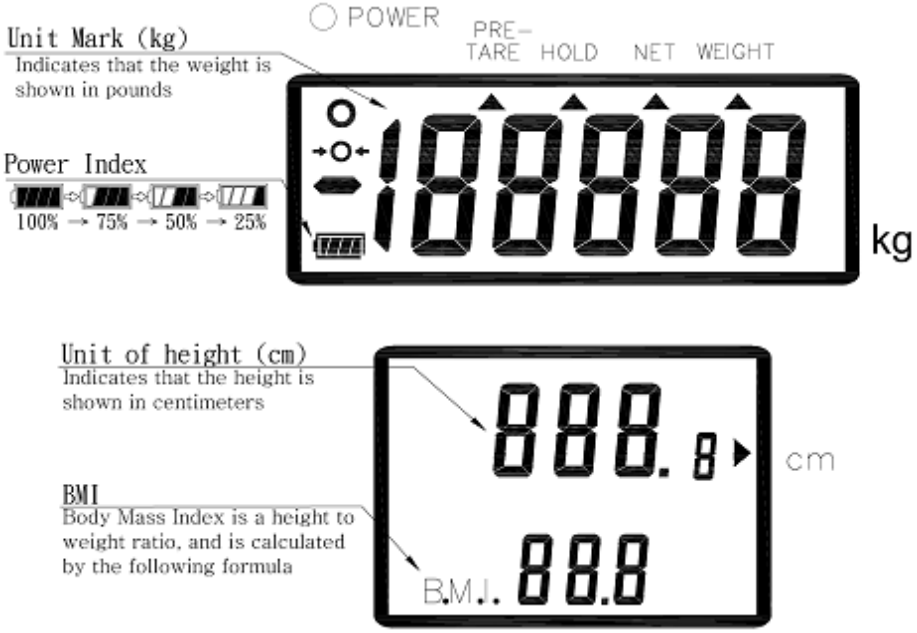
(Wireless functionality optional)

Key Function

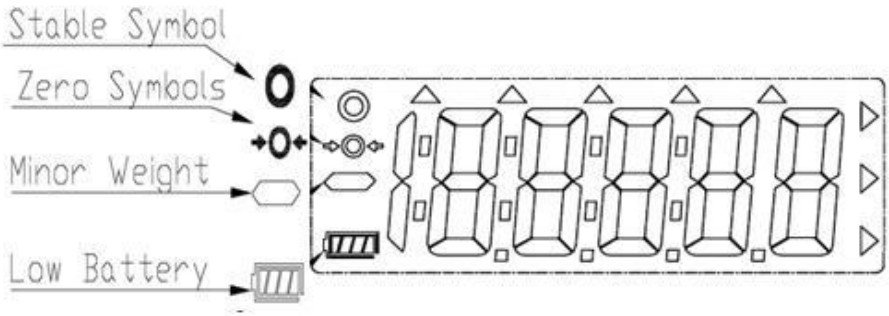
1. ON OFF ON/OFF: Power on or power off.
2. ZERO ZERO: Reset display to 0.0 kg display. Press and hold for 3 seconds to enter device settings.
3. M 1-5 M1-5: Saving pre-tare values (up to 5)
4. PRE-TARE PRE-TARE: Pre-tare the known weight of an object (ex: chair) before beginning measurement.
5. TARE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

Push wheelchair (with seated subject) onto measurement platform. After weight has stabilized, the "stable" symbol will appear on indicator.

Note: If total weight (subject + wheelchair) exceeds scale capacity (including tare), 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 HOLD key. "HOLD" will be displayed on the indicator.
3. Push wheelchair (with seated subject) onto 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 HOLD key again to return to the device to normal mode.

Note: Hold function can be activated before or after pushing wheelchair onto 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 BMI 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 CLEAR key to re-input. Press TARE key to manually move to next digit.

4. After inputting height, press ZERO 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 BMI key to return to normal mode.

Category	**BMI (kg/m^2)**	**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 TARE 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 TARE 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. (ex: 5 different wheelchair weights)

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 PRE-TARE key for 3 seconds.

A. Load Weight

DESCRIPTION	EXAMPLE
Press M1-5 key after loading weight on the platform; the indicator will display blinking "m" symbol.	
Press numeral key 1 ~ 5 to assign this number with the current pre-tare weight.	
Press ENTER key to store pre-tare weight; the indicator will make a beep sound.	

B. Input Manually

DESCRIPTION	EXAMPLE
Press PRE-TARE key. Left-most digit will begin blinking. If no further action is taken within 6 seconds, indicator will return to normal mode	

While digit is blinking: Enter pre-tare weight using 0~9 keys. Ex: to pre-tare 5.0 kg of weight, press 0-0-5-0. Press ENTER key to confirm the pre-tare weight.	
Indicator will display minus sign to the left of pre-tare weight value.	
To save this pre-tare weight value in memory: Press M1-5 key; the blinking "m" symbol will appear on the display.	
Press numeral key 1 ~ 5 to assign this number with the current pre-tare weight.	
Press ENTER key to store pre-tare weight; the indicator will make a beep sound.	

C. Recall Pre-Tare Weight

DESCRIPTION	EXAMPLE
Press and hold PRE-TARE key for 3 seconds. Indicator will display pre-tare value M1 first. The pre-tare value will flash.	
Press numeral keys 1 ~ 5 to choose pre-tare value	
Press ENTER key to confirm which pre-tare weight to select; the device will automatically deduct pre-tare weight.	
Press CLEAR key to return to Normal Mode	

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

F. Print

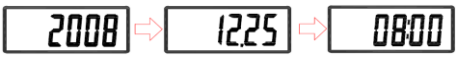
If thermal printer is connected to indicator, results can be printed by pressing PRINT key.

VII. Device Setup

A. Setting Time & Date

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

Example: Inputting2008, Dec 25, 8:00am

	**Year Setting** Enter year using numeral keys 0-9. Press HOLD key once completed to proceed to month & date setting.
	**Month & Day Setting**. Enter month, followed by day using numeral keys 0-9. Ex: December 25th is "12.25". Input 1-2-2-5. Press HOLD key once completed to proceed to time setting.
	**Time Setting** Enter time (24hr format) using numeral keys 0-9. Ex: 08:00am is input by pressing 0-8-0-0. Press HOLD 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. YYYY→MM.DD→:HH:MM Press HOLD key to return to normal weighing mode.

B. Device Setup

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

In device setup menu:

TARE to toggle next menu option

ZERO to toggle previous menu option

HOLD to confirm selection / enter submenu

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

Press HOLD to toggle between options (120 sec / 180 sec / 240 sec / 300 sec / off), and TARE to confirm selection.

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

Press HOLD to toggle between on/off, and TARE key to confirm selection.

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

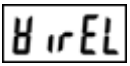
Press HOLD to toggle between on/off, and TARE key to confirm selection.

Language: Set thermal printer language

Press HOLD to toggle between English, Italian and Polish. Press TARE key to confirm selection.

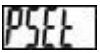
Font size: Set thermal printer font size.

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 TARE 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 PRINT key is pressed.

VIII. Setup USB Connection to PC

For successful connection, PC hardware connected to device must be compatible with USB 2.0 or above. Operators should select a USB cable length that is most suitable to the operating environment.

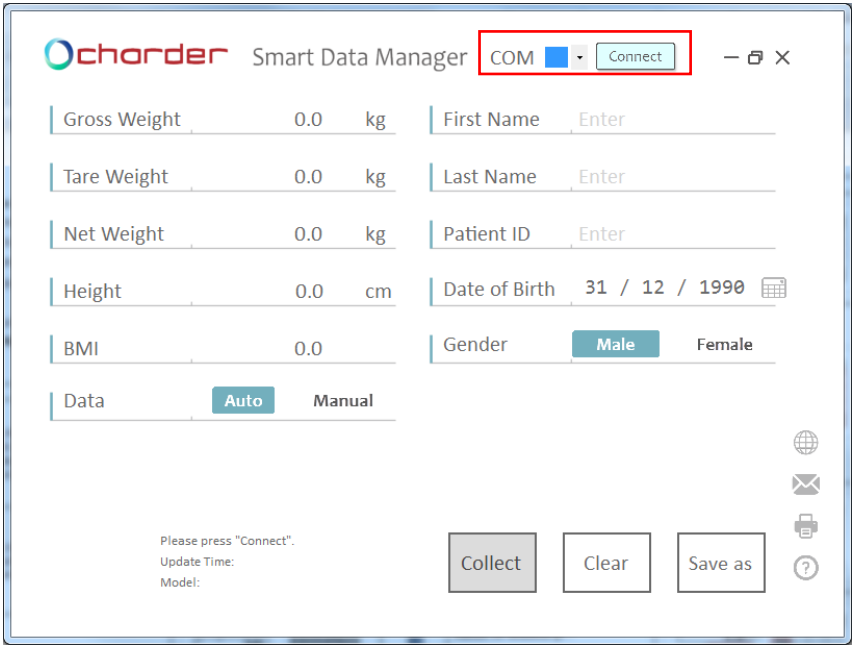
1. Charder Smart Data Manager can be used to connect the device to a PC. The software program can be downloaded from the Charder website:

[LINK URL]https://www.chardermedical.com/download.htm

2. Connect USB cable to device indicator and PC. Follow installation instructions.

Program Setup

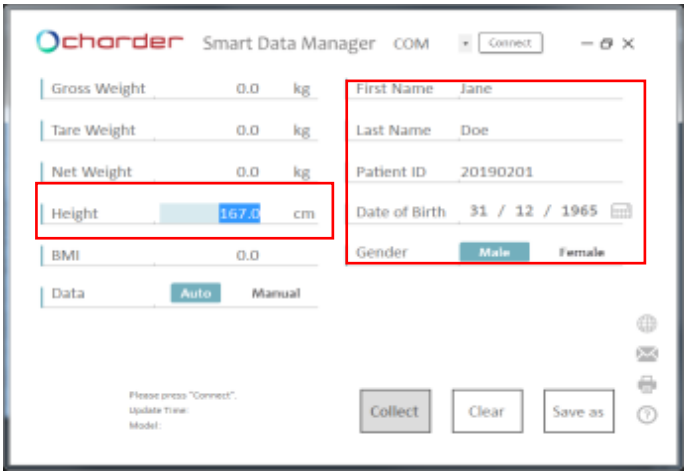
1. After installation of Charder Smart Data Manager is complete, software will automatically search for COM port. Press [**Connect**]. Once connected, **[Connect]** button will change to **[Disconnect**].



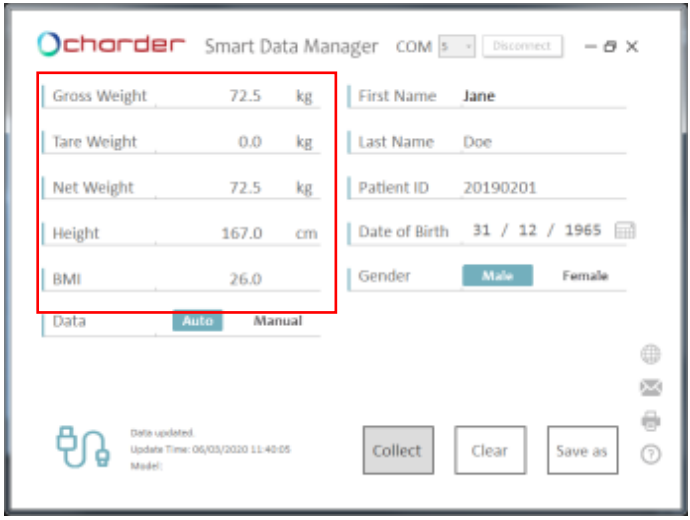
Conducting Measurement

1. Input subject's first name, last name, patient ID, date of birth (DD/MM/YYYY), gender, and height (for BMI calculation) into software if needed. Press **[Clear]** to clear all input.

NOTE: information can also be input after weight measurement.

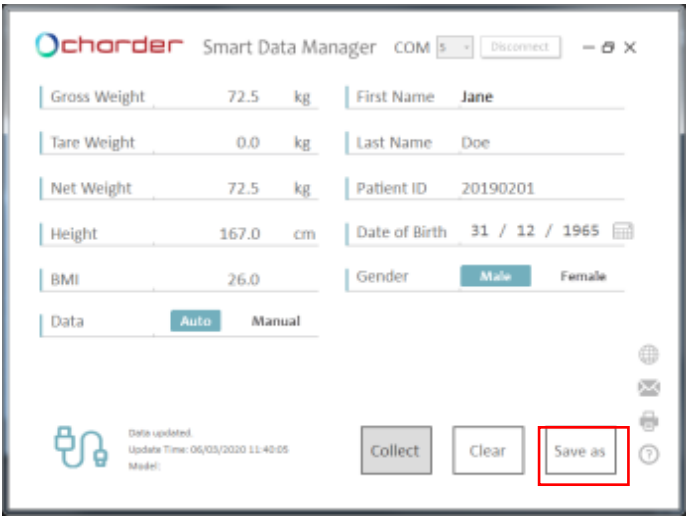


2. Conduct measurement. If **[Auto]** is selected, results will be transmitted from device to software automatically and displayed on the left of screen. If **[Manual]** is selected, user must press "Collect".



Saving & Printing Results

1. Press **[Save as]** to save measurement results as .csv file on PC. Default file name is same as user ID. (ex: 20190201.csv) To track changes and multiple measurements for the same subject, we recommend not changing the default file name.



2. Result example:

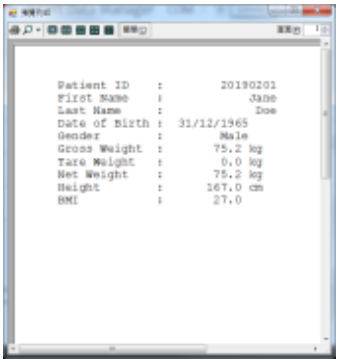
	A	B	C	D	E	F	G	H	I	J
1	Patient ID	First Name	Last Name	Date of Bi	Gender	Gross Weig	Tare Weigh	Net Weight	Height	BMI
2	20190201	Jane	Doe	31/12/1965	Male	72.4 kg	0.0 kg	72.4 kg	167.0 cm	26
3										
4										
5										

If previous results were saved in "20190201.csv", new results also need to be saved as "20190201.csv" (overwriting old file) in order to save multiple results for the same subject.

	A	B	C	D	E	F	G	H	I	J
1	Patient ID	First Name	Last Name	Date of Bi	Gender	Gross Weig	Tare Weigh	Net Weight	Height	BMI
2	20190201	Jane	Doe	31/12/1965	Male	72.4 kg	0.0 kg	72.4 kg	167.0 cm	26
3	20190201	Jane	Doe	31/12/1965	Male	75.2 kg	0.0 kg	75.2 kg	167.0 cm	27
4										

Results will be saved in chronological order of measurement.

3. Press the printer icon to print out result using a printer connected to the PC.



IX. Wireless Connection

If the device has wireless module installed, the indicator can transmit measurement results wirelessly. Please see Charder wireless software instructions for details.

X. 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 AC power adapter is plugged into the device properly. Check if power adapter is plugged into mains properly

2. Indicator showing "0000" 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 level according to bubble level indicator 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 AC 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

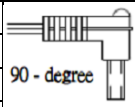
Error Message	Reason	Action
	**Low battery warning** Voltage of battery is too low to operate device	Replace batteries, or plug in AC adapter
	**Overload** Total load exceeds device's maximum capacity	Reduce weight on measurement platform and try again
	**Counting Error (too high)** Signal from loadcells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

XI. Product Specifications

Model		MS3830
Display		DP3710
Weight Measurement	**Capacity**	300 kg x 0.1 kg
	Accuracy	±1.5e
	OIML	Class III
	LCD Screen	1.0-inch LCD screen (5 1/2 digits)
Dimensions	**Overall**	1150(W) x 800(D) x 66(H) mm
	Platform	900(W) x 740(D) mm
Device Weight		28.6 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 (optional) or 6 AA batteries / Power adapter
Operation Environment		0℃~+40℃ 15% / 85% RH 700 hPa ~1060 hPa
Standard Accessories		(see accessory list)
Optional Accessories		Thermal Printer, Handrail Set, Indicator Stand

Warning

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

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

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Standard Accessories

No.	Accessories	Item	Spec.	Qty.
1		Adjustable feet	M6*15	2
2		Spacer	§ 6.6* § 13	2
3		Fixed plate (top)	SS-4961	1
4		Fixed plate (bottom)	SS-4971	1
5		Tapping Screw	M3*10	2
6		User manual		1
7		USB cable		1
8		12V 2A Adapter		1
9		Plastic anchor	1”(white)	2
10		Screw	4*20	2

Notes

Notes

Notes

XII. Declaration of Conformity

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

CE 2460	(EU) 2017/745 Regulation on Medical Devices
CE 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:

EC REP

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B-1030 Brussels
Belgium

Manufactured by:
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Taichung City 41262 ,Taiwan

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