



MS3850

Wheel Chair Scale

USER MANUAL



Please keep the instruction manual at hand all the time for future reference.

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PREFACE

Thank you for choosing CHARDER MEDICAL product. All features of this product were designed to state of the art and are optimized for simple and straightforward use. If you have any queries or experience any problems not addressed in the operating instructions, please contact your CHARDER MEDICAL service partner, or visit us on the Internet at www.chardermedical.com

GENERAL INFORMATION

We strongly recommend you use the scales on flat and hard surface. Any soft surface, like carpet will cause inaccuracy.

SAFETY INSTRUCTION



Before putting the device into use, please read with care the information given in the Operating Instructions. They contain important instructions for installation, proper use and maintenance of the device.

The manufacturer shall not be liable for damages arising out of failure to heed the following instructions:

- These batteries should be kept away from small children. If swallowed, promptly seek medical assistance.
- Expected Service Life: 5 years
- When using electrical components under increased safety requirements, always comply with the appropriate regulations.
- Improper installation will render the warranty null and void.
- Ensure the voltage marked on the power supply unit matches your main power supply.
- This device is designed for use indoors.
- Observe the permissible ambient temperatures for use
- The device meets the requirements for electromagnetic compatibility. Do not exceed the maximum values specified in the applicable standards.

If you have any question, contact your local CHARDER MEDICAL service partner.

ENVIRONMENTAL

- ♦ All batteries contain toxic compounds; disposal of batteries should be delegated to a competent organisation, complying with the deposit of Poisonous Waste Regulation 1972.
- ♦ Please do not incinerate batteries.
- ♦ The optimum operating temperature for the scale is 5°C to +35°C; although it will operate at higher and lower temperatures the scales battery life will be adversely effected.

CLEANING

- ♦ We would recommend using alcohol based wipes or similar when cleaning the scales.
- ♦ Please do not use large amounts of water when cleaning the scales as this will cause damage to the scales electronics, you should also refrain from using corrosive liquids or high pressure washers.
- ♦ Always disconnect the scales from the mains power supply before cleaning.

MAINTENANCE

- ♦ The scale does not require any routine maintenance. However, we recommend checking the scale's accuracy at regular intervals. The regularity of these checks is dependent on the level of use and the state of the scale. If any inaccuracies occur, please contact your local dealer or CHARDER MEDICAL service partner.

WEIGHING OPERATION

Before reading detailed instructions on how to use all the weighing functions that are built into your scale, please read the following important guidelines:

- ♦ Always be sure that the display shows `Zero` before use, if it does not then please press the ZERO key.
- ♦ The device is designed to detect when a stable weight is achieved, the indicator will `bleep` twice to indicate a stable weight value, your reading should be taken at this point.

WARRANTY-LIABILITY

- ♦ If a fault or defect is present on receipt of the unit which is within CHARDER MEDICAL's scope of responsibility, CHARDER shall have the right to either repair the fault or supply a replacement unit. Replaced parts shall be the property of CHARDER. Should the fault repairs or replacement delivery not be successful, the statutory provisions shall be valid. The period of warranty shall be two years, beginning on the date of purchase. Please retain your receipt as proof of purchase. Should your scale require servicing, please contact your dealer or CHARDER MEDICAL Customer Service.
- ♦ 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, changes or modifications, incorrect or negligent handling, overuse, chemical, electrochemical or electrical interference or humidity, unless this is attributable to negligence on the part of CHARDER MEDICAL.
- ♦ If operating, climatic or any other influences lead to a major change in conditions or material quality, the treaty for perfect unit

functioning shall be rendered null and void. If CHARDER provides and individual warranty, this means that the unit supplied will be free of faults for the length of the warranty period.

DISPOSING OF THE SCALE

- ♦ This product is not to be treated as regular household waste, but should be handed in to an electrical/electronic equipment recycling centre.
- ♦ You can obtain further details from your local council, your municipal waste disposal company or the firm which you purchased the product.

EXPLANATION OF THE GRAPHIC SYMBOLS

Text/Symbol	Meaning
	Caution. Failure to follow instructions may result in adverse events
	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
	Carefully read user manual before installation and usage, and follow instructions for use.
	Medical electrical device, Type B applied part
REF	Device catalogue number
EU REP	Name and address of authorized representative in the European Union (applicable for medical devices only)
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
#	Device's model number
UDI	Device's Unique Device Identifier (01) GTIN (11) Production date (21) Serial number
e	Value in mass units. This is the difference between two consecutive display values, used to classify and verify a scale

	Device conforms to (EU) 2017/745 Regulation on Medical Devices. Four digit number is identifier for medical device Notified Body
	Device claims conformity with essential regulations set by the relevant European Union legislation
	Device complies with EU directives M : Conformity label in compliance with Directive 2014/31/EU for non-automatic weighing instruments 17 : Year in which conformity verification was performed and the CE label was applied. (ex: 17=2017) 0122 : Identifier for metrology Notified Body
	Device is a Class III scale in compliance with Directive 2014/31/EU
	Name and address of entity importing device
	Name and address of entity responsible for translating Information For Use
	Event counter recording how many times protected-mode parameter adjustments relating to metrology-related characteristics (ex: gravity value) have been conducted for device
	Device has received Taiwan NCC approval
	Device conforms to U.S. Federal Communications Commission regulations
	Device complies with all UK applicable product legislation
	Device's polarity of power.

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

EMC GUIDANCE AND MANUFACTURER'S DECLARATION

Guidance and manufacturer's declaration-electromagnetic emissions

The MEDICAL SCALE MS3850 is intended for use in the electromagnetic environment specified below.

The customer or the user of the MEDICAL SCALE MS3850 should assure that it is used in such an environment.

Emission test	Compliance	Electromagnetic environment-guidance
RF emissions CISPR 11	Group 1	The MEDICAL SCALE MS3850 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. The MEDICAL SCALE MS3850 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
RF emissions CISPR 11	Class B	
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 MEDICAL SCALE MS3850 is intended for use in the electromagnetic environment specified below.

The customer or the user of the MEDICAL SCALE MS3850 should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
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Electrostatic discharge(ESD) IEC 61000-4-2	± 8 kV contact ± 2 kV, ± 4 kV, ± 8 kV, ± 15 kV air	± 6 kV contact ± 8 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	± 2 kV for power supply lines + 1kV for input/output lines	± 2 kV for power supply lines Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	± 1 kV differential mode Not applicable	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 25 cycles 0% UT for 5 s	<5% UT(>95% dip in UT) for 0,5 cycle 40% UT(60% dip in UT) for 5 cycles 70% UT(30% dip in UT) for 25 cycles <5% UT(>95% dip in UT) for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the MEDICAL SCALE MS3850 requires continued operation during power mains interruptions, it is recommended that the MEDICAL SCALE MS3850 be powered from an uninterruptible power supply or a battery.
Power frequency(50/60 Hz) magnetic field IEC 61000-4-8	30 A/m	3 A/m	The MEDICAL SCALE MS3850 power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE UT is the a.c. mains voltage prior to application of the test level.			

Guidance and manufacturer's declaration-electromagnetic immunity

The MEDICAL SCALE MS3850 is intended for use in the electromagnetic environment specified below.

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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	Portable and mobile RF communications equipment should be used no closer to any part of the MEDICAL SCALE MS3850 including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance: $d = 1,2 \sqrt{P}$ $d = 1,2 \sqrt{P}$ 80MHz to 800 MHz $d = 2,3 \sqrt{P}$ 800MHz to 2,7 GHz 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 meters (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:

Radiated RF IEC 61000-4-3	3 V/m 80MHz to 2,7 GHz	3 V/m	
NOTE1 At 80 MHz and 800 MHz, 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.			
a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically 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 MEDICAL SCALE MS3850 is used exceeds the applicable RF compliance level above, the MEDICAL SCALE MS3850 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the MEDICAL SCALE MS3850. b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.			

Recommended separation distance between portable and mobile RF communications equipment and the MEDICAL SCALE

The MEDICAL SCALE MS3850 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the MEDICAL SCALE MS3850 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the MEDICAL SCALE MS3850 as recommended below, according to the maximum output 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 meters (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.

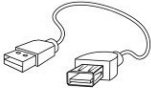
NOTE1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

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

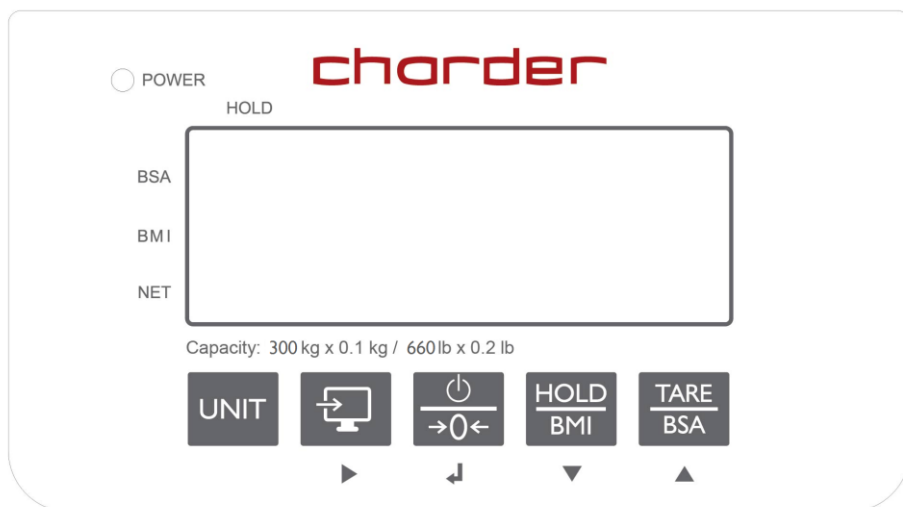
SPECIFICATION

Model	MS3850
Capacity	300kg x 0.1kg
Accuracy	±0.2kg
Weight Unit	Kg, lb
LCD Display	1.4 inch LCD display with 5 digits
Dimension	1150(L) x 800(W) x 66(H) mm
Operation Environment	+5°C ~ +35°C 15% ~ 85% RH 700 hPa ~ 1060 hPa
Transport / Storage Temp, and Humidity	- 20°C ... + 60°C 10% - 95% RH
Key Functions	UNIT ,  SEND, ON/OFF/ZERO, HOLD/BMI, TARE/BSA
Power Supply	➤ 6-AA size batteries ➤ 12V AC Adaptor
Standard Accessories	Adjustable Feet x 2 ; spacer x 2; Fixed plate (top) x 1.;Fixed plate (bottom) x 1;Tapping Screw x 3; User manual x 1; USB cable x 1; 12V Adaptor x 1; Plastic anchor x 2, Screw x 2
Options	SM2711 indicator stand
	Foldable handrail set SM-00001
	Handrail set right side SM-3461
	Handrail set left side SM-3462
	Cross bar set SS-8444

Standard Accessories

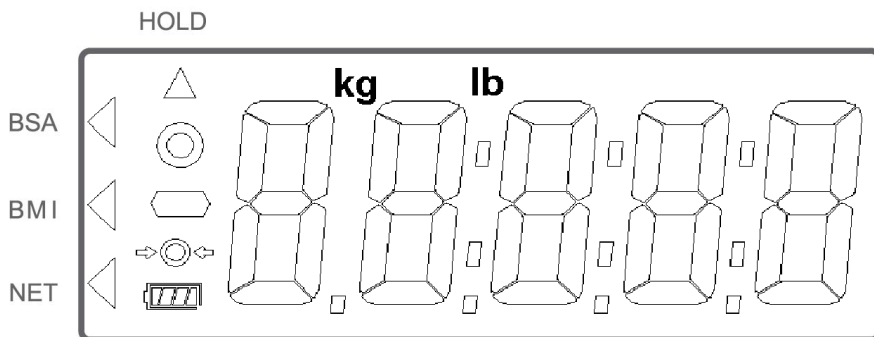
No.	Accessories	Item	Spec.	Qty.
1		Adjustable feet	M6*15	2
2		Spacer	§ 6.6* § 13	2
3		Fixed plate (top)	SS-4961	1
4		Fixed plate (bottom)	SS-4971	1
5		Tapping screw	M3*10	3
6		User manual	CD-IN-00052	1
7		USB cable		1
8		12V Adaptor		1
9		Plastic anchor	1"(white)	2
10		Screw	4*20	2

PANEL



Operation keys	Functions
UNIT 	Change unit key. Press to switch measuring unit from kg and lb
SEND 	Send data key. Press to send measuring data to PC
ON/OFF/ZERO 	Switch on and off. Press button to turn it on. To turn it off, press and hold the button for 1 second Press once to set the scale to zero when scale is on
HOLD/BMI 	Enable HOLD and BMI function Press once to enable weight lock function Press button and hold 3 secs to enable BMI mode
TARE/BSA 	Press once to enable TARE function When BMI is activated. Press TARE/BSA button to display BSA[body surface area]

LCD SYMBOL DESCRIPTION



Definitions

Stable symbol: To indicate that the weight is stable.

Minor weight: Weight under zero.

Zero symbols: Weight is at zero point.

Low battery: Battery need to charge or replaced.

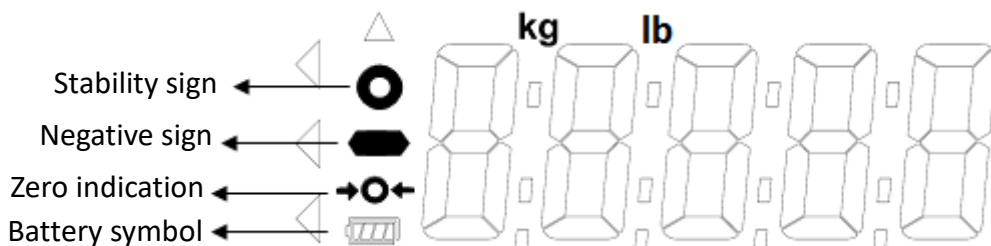
BSA : Body surface area is activated

BMI : Body Mass Index is activated

NET : Net weight appears after press tare button

HOLD : Weight lock function is activated

SYMBOLS Information



Symbol	Information	Remark
	Stability sign	Mark appears when weight is stable
	Negative sign	When weight value is negative
	Zero indication	When scale is set to zero
	Battery symbol	Indicate 5 level of battery power.

Operation

1 Switching on/off

Switching on

Press  to switch scale on

For a few seconds the devices shows a start-up screen with the full segmental LCD display, software version and then 0.0 kg

Switching off

Press  and hold for 3 seconds to switch scale off

Zero the scale

Press  while scale is on to zeroing the scale

2 Straight weighing

1. Place weighing object/person on the scale
2. Wait until the stability sign appears
3. Read the weighing result

3 Weighing with hold

This device is provided with the integrated hold function (determination of average value). It enables people to be weighed accurately although they are not still on the scale plate. Once the HOLD key is pressed, the weight reading will remain on the display after the item has been removed from the scale so the reading can easily be read.

Note

- Determination of average value is not possible when a person moves too much.
- HOLD function won't work if the weight is under 2 kg.

1. Switch on the scale. The diagnostic self-checks is performed. The scale is ready for weighing when the „0.0 kg“ displays on the screen.
2. Place object/person on the scale.
3. Press  key. When the triangle is flashing on the display, the scale records the fluctuating weight values and then calculates average weight and displays the result on the screen.
4. Remove object/person from the scale. The weight reading will remain on the display.
5. Press  key again to return the scale to the normal weighing mode.
6. HOLD function can be activated before or after place the weight on the SCALE.

4 Weighing with tare

Tare function allows the user to deduct the excess weight of a single tare object value (additional loads or clothes) from the display reading, thus calculate the actual net weight of the object/ person.

4.1.1 Taring

Place tare object (additional loads or clothes) on scale and press  to tare the weight of object.

- ◆ The zero display and the symbol NET appear.
- ◆ The tare weight remains stored until it is cleared.

4.1.2 Clear the tare

Press  to clear tare weight

- ◆ The symbol NET disappear
- ◆ The gross weight appears in the display.

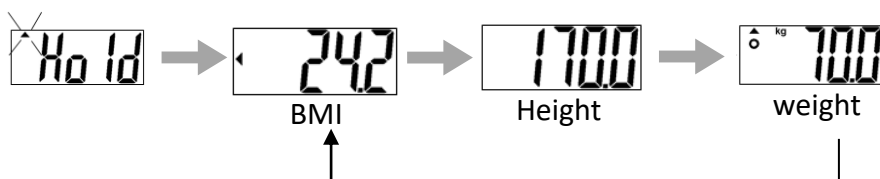
5 Weighing with BMI

For BMI calculation, height is needed, therefore it is recommended to measure the height of subject before starting weighing procedure.

1. Switch on the scale.
2. Place object/person on the scale.
3. Press  key and hold for 3 seconds. First, display will show “HOLD” and lock weight then display show “height value”.



4. Adjust height value by using  (↓) and  (↑) keys.
5. Switch between digits by using  (→) key.
6. Press  to confirm height value.
7. Display will show “HOLD” and lock weight to calculate BMI.



Body Mass Index Categories

Classification of weight for adults over 18 years on the basis of Body Mass Index according to WHO, 2000 EK IV and WHO 2004 (WHO - World Health Organization).

Category	BMI (kg/m ²)	Risk of diseases accompanying overweight
Underweight	< 18.5	low
Normal weight	18.5 – 24.9	average
Overweight	≥ 25.0	
Preobesity	25.0 – 29.9	slightly increased
I degree of obesity	30.0 – 34.9	increased
II degree of obesity	35.0 – 39.9	high
III degree of obesity	≥ 40	very high

6 Weighing with BSA

- Values for Body surface area (BSA) is the measured or calculated surface area of a human body. For many clinical purposes BSA is a better indicator of metabolic mass than body weight because it is less affected by abnormal adipose mass. BSA are commonly used in medicine, particularly to calculate doses of chemotherapeutic agents and index cardiac output.

Average BSA for children of various ages, for men, and for women, are taken to be:

Age	BSA
Neonate (newborn)	0.25 m ²
Child of 2 years	0.5 m ²
9 years	1.07 m ²
10 years	1.14 m ²
12-13 years	1.33 m ²
Women	1.6 m ²
Men	1.9 m ²

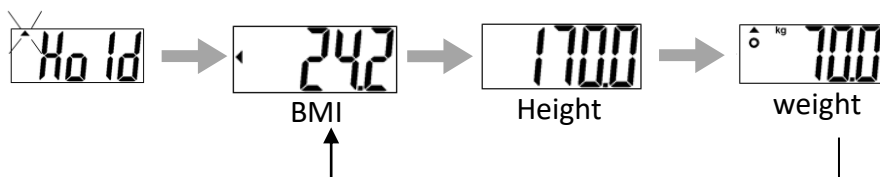
There was an average BSA of 1.73 m² for 3,000 cancer patients from 1990 to 1998 in a European Organization for Research and Treatment of Cancer (EORTC) database.

During 2005 there was an average BSA of 1.79 m² for 3,613 adult cancer patients in the UK. Among them the average BSA for men was 1.91 m² and for women was 1.71 m².

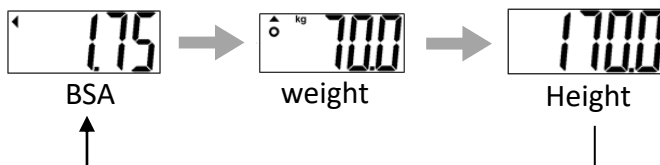
However, there is some evidence that BSA values are less accurate at extremes of height and weight, where Body Mass Index may be a better estimate.

6.1.1 Enable BSA in BMI mode

1. Starting with BMI process
2. When BMI, weight and height is playing rotationally.



3. Press  to play BSA value.



4. Press  to return to BMI mode.

5. Press  to return to normal mode.

SETTING-UP MS3850

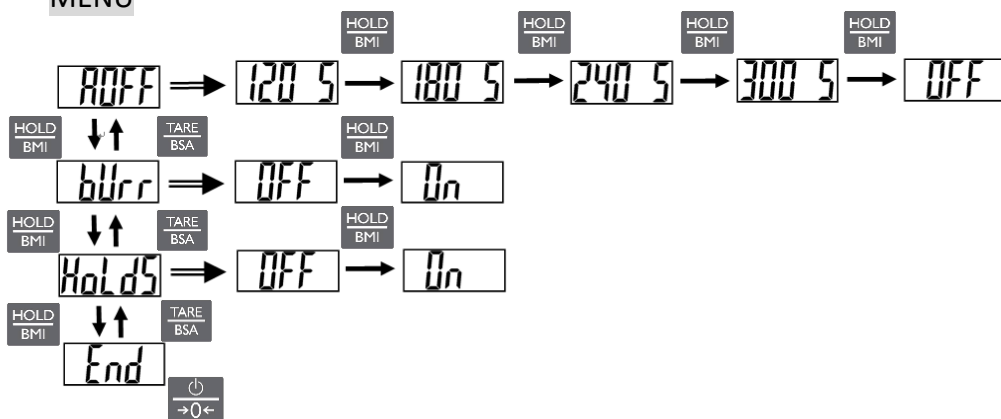
1. Switch on the scale.
2. Press **TARE**/**BSA** key and hold for 6 seconds to enable setting mode.
3. LCD shows "SETUP" first and then "A.OFF" appears.

HOLD/**BMI** ↓ Switch between modes and menu

TARE/**BSA** ↑ Reverse switch between modes and menu

Power/**→0←** → Confirm setting.

MENU



A.OFF Set auto-off timer between 120/180/240/300/off

bUrr Set buzzer on and off

HoLdS Set HOLD function release after unload weight ON and OFF.

Note

Confirm **End** in the menu to save all settings.

PRINT function and data transmission

The Weighing, BMI and Height results can be keep in PC for records using USB interface cable, which is connected to the USB plug at the back terminal.

After complete BMI and BSA process, simply press  key to transfer the results to PC.

HOW TO SETUP USB CONNECTIONS ON PC

1. Make sure the PC hardware device has USB port version 2.0 or above compatibility. Users may need to consult with local computer accessories dealer to select the proper USB cable length that is most suitable to work environment for best performance, then connect the cable first between the PC and CHARDER Scale model.
2. Run HyperTerminal program under Windows OS computer and input printer port parameter settings, please refer to the next Section in <Step 7> on how to setup HyperTerminal program in user's computer for printer port parameters.
3. Once the HyperTerminal setting is ready, make sure the USB cable is connected properly between the user PC's USB port and the CHARDER Scale Model again. Press PRINT button on the Scale Display Panel for printout of weight & BMI data from thermal printer.

Hyper Terminal setting in PC for printout

Hyper Terminal is a freeware on PC Windows XP SP3 or lower to setup the PC printer com-port with USB cable connector transmission.

For use on Windows Vista or higher please download hyper terminal software program from Charder website:

<http://www.chardermedical.com/download/dlist-4.htm>

4. Start Hyper Terminal

After taking the weight and BMI, run Hyper Terminal program from the PC's Windows OS with the following steps:

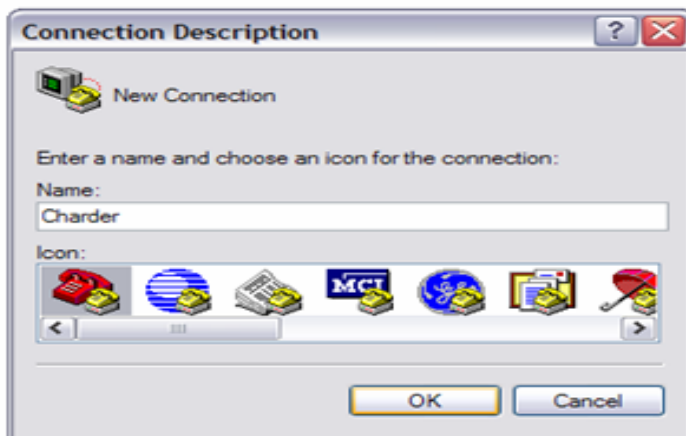
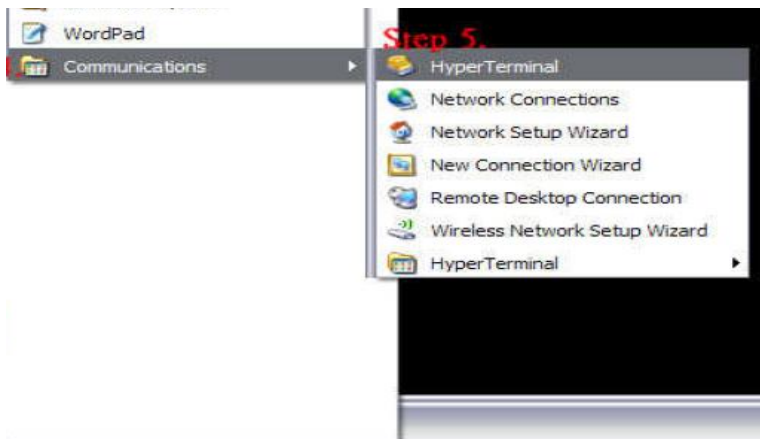
Step.1- Click on Start Button.

Step.2- Go to All Programs.

Step.3- Select Accessories.

Step.4- Find Communications.

Step.5- In Communications section click on HyperTerminal.



5. New Connection Description

Name the connection and click OK Button

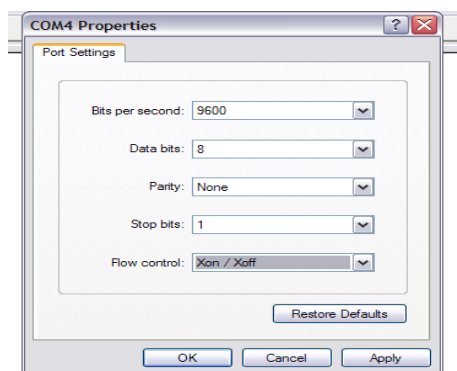
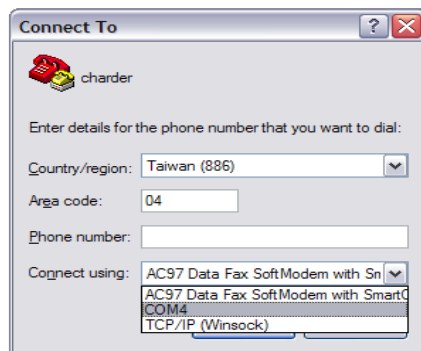
6. Select COM Port on User PC

Click Connect to select COM port on the computer. Then click OK.

7. Port Settings for Printout

Set up as below:

- ◆ Baud rate: 9600 bps
- ◆ Parity check: None
- ◆ Data length: 8 bits
- ◆ Stop bit: 1 bit
- ◆ Handshake: RTS/CTS
- ◆ Data code: ASCII



USB Driver Install

The scale confirms to the USB PL2303

Make sure the computer software has a USB scale interface.

PL2303 driver download:

<http://www.prolific.com.tw/US/ShowProduct.aspx?pcid=41&showlevel=0>
017-0037-0041

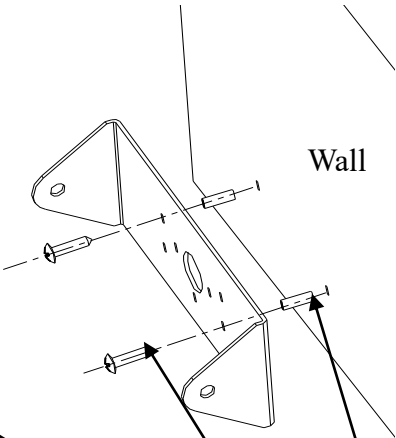
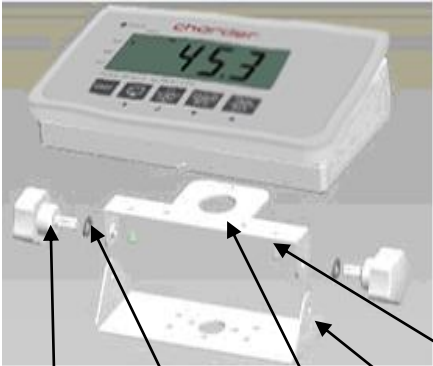
8. Printout Data Through USB cable connector

Click OK button to complete the setting. The PC will retrieve the weighing & BMI data from the CHARDER scale and display on the HyperTerminal program similar to the layout below.

While the Hyper Terminal program is running, type "P" KEY on the PC keyboard to transmit a print command to printout from the thermal printer on the CHARDER scale for hard copy of weighing data & BMI. Or, press the [PRINT] button on the display panel of the CHARDER scale, the printout presented below is the standard format print layout as well as shown on the HyperTerminal computer screen.

GROSS WEIGHT	70.00kg
TARE WEIGHT	0.00kg
NET WEIGHT	0.00kg
USER HEIGHT	170.0cm
USER B.M.I.	24.2
01/01/2013 10:00	

ASSEMBLY OF BRACKET

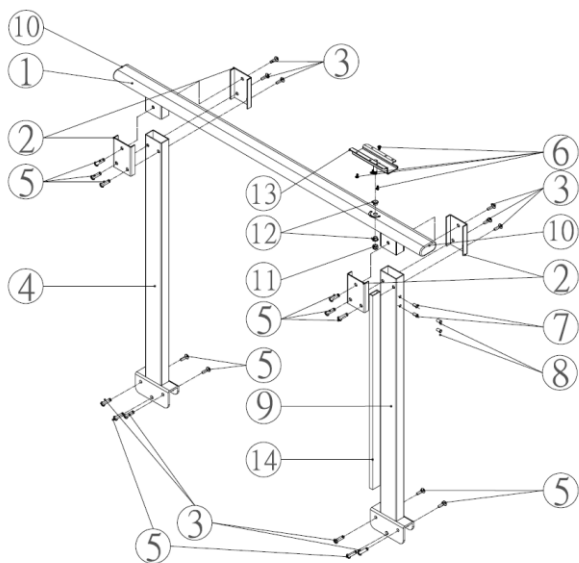


						
Adjustable feet	Spacer	Fixed plate (top)	Fixed plate (bottom)	Tapping Screw	Screw	Plastic anchor
2	2	1	1	2	2	2

PARTS LIST OF SM-00001 SM-3461(R) & SM-3462(L)

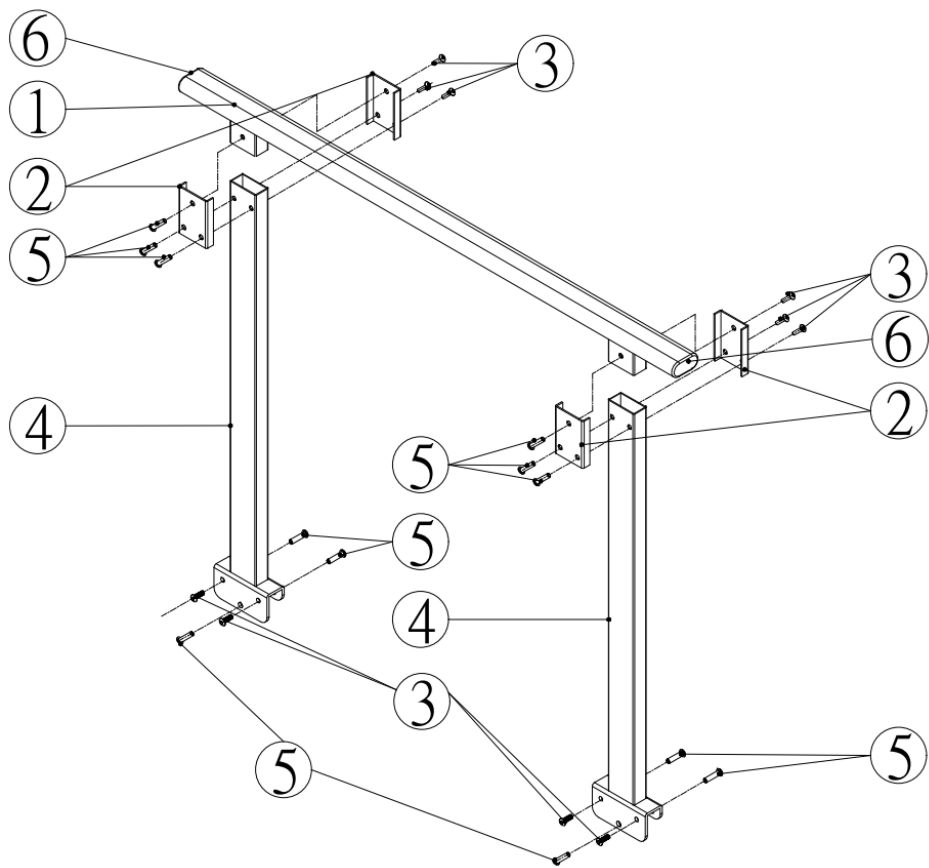
SM-3461 (R)

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



SM-3462 (L)

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

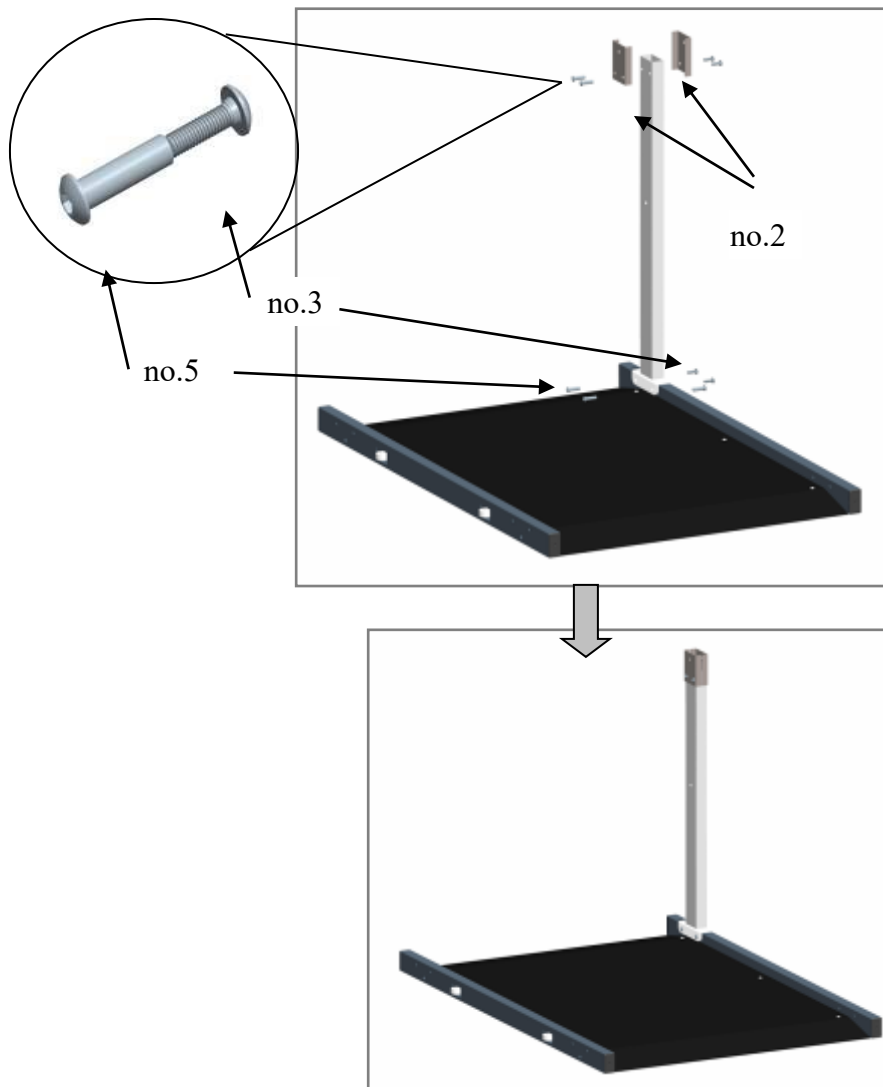


ASSEMBLY INSTRUCTION OF HANDRAILS

Step 1.

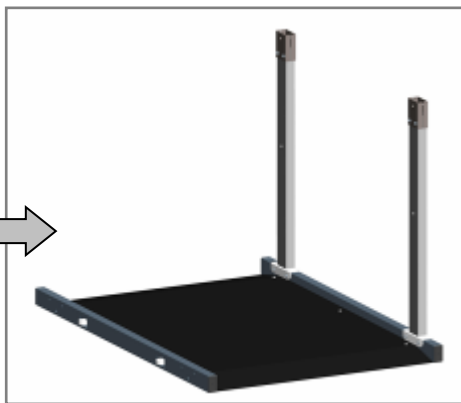
Fix no.2 (fixing plate) on the pole with wiring duct with no.3 (socket screw) and no.5 (screw nut).

Fix pole with wiring duct on platform by using no.3 and no.5.



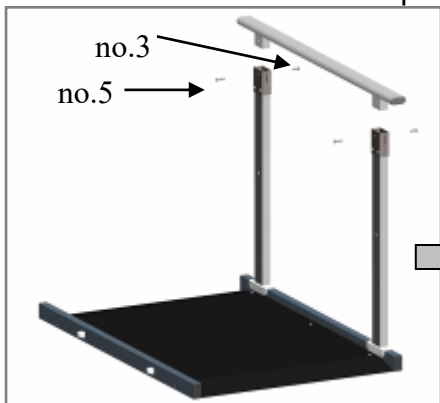
Step 2.

Assemble pole on platform. Same as step1.



Step 3.

Assemble handrail bar with poles.



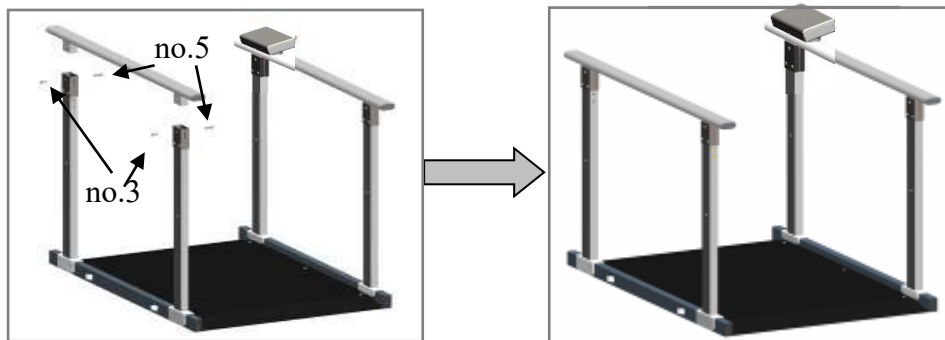
Step 4.

Assemble third pole and fourth pole on platform.



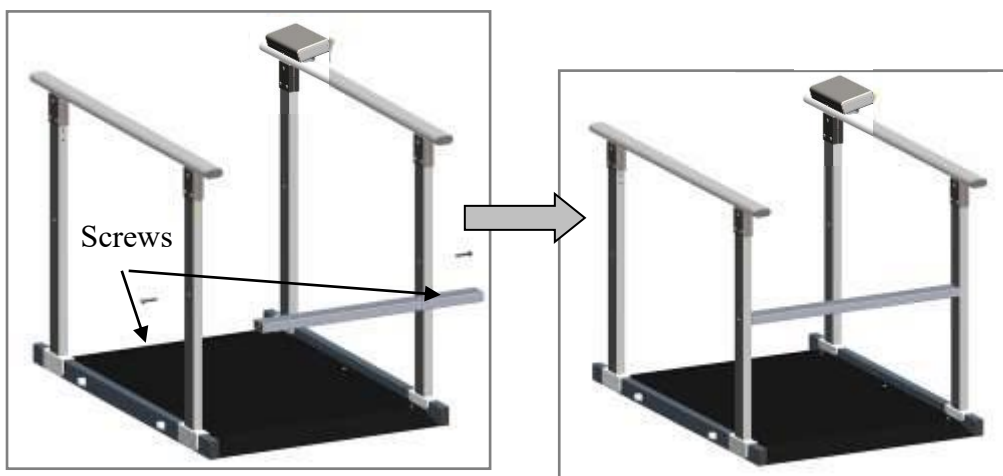
Step 5.

Assemble handrail bar.

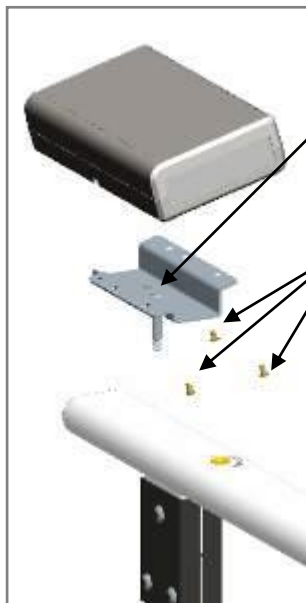


Step 6.

Assemble cross bar(SS-8444) with two screws (M8-1.25P*45)



ASSEMBLY OF DISPLAY



Step 1.

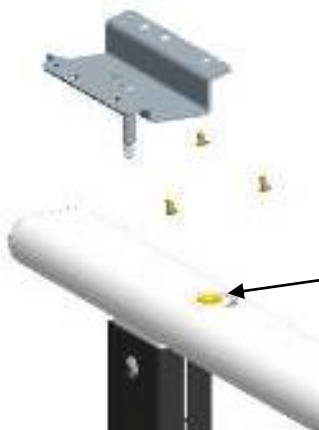
Place a M4*8 screw in the center of bracket

Step 2.

Fix display on the bracket with other 3pcs M4*8 screws



M4*8 screw

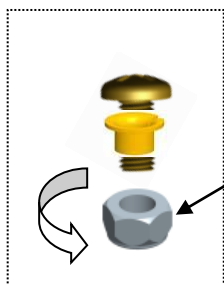


Step 3.

Place bearing in the handrail.



bearing



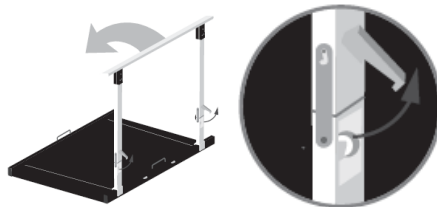
Step 4.

Tighten the nut with M4*8 screws

The display now can be swivel freely.

USING FOLDING FUNCTION

To fold the handrail down, release the locking hook and carefully fold down the handrail until it abuts completely.



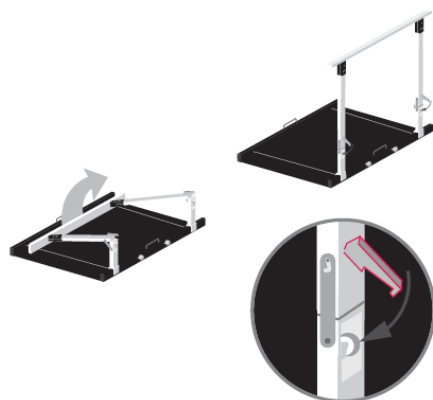
The hinge will lock in place ready for transportation.



To set the scale back up, place it on a solid, level surface.



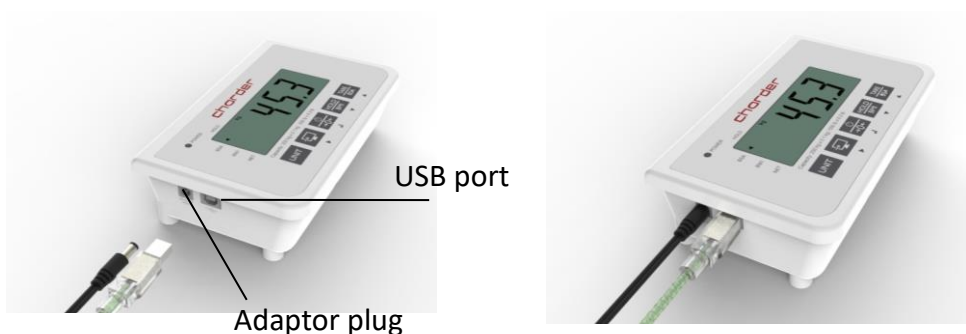
Raise the handrail until it is in an upright position. Fix the locking hooks on the hinge back in place, and ensure the handrail is firmly in place.



INSTRUCTION FOR CHARGING AND CONNECTING

If **Lo** prompt displays on the LCD, please charge the scale with MS3850 exclusive adaptor or replace the batteries. Locate adaptor plug-in at the left side of indicator.

USB socket above USB symbol and you can connect USB cable to transfer data.



CAUTION:

- Always connect the AC adaptor with the indicator before connecting to the mains power supply.
- Please disconnect the adaptor from main power supply before taking out the AC adaptor pin from indicator.

INSTRUCTION FOR REPLACING BATTERIES

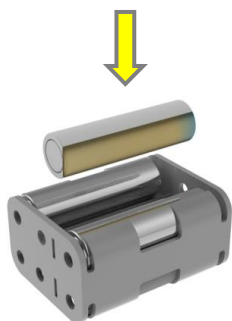
1. Removing the battery cover.



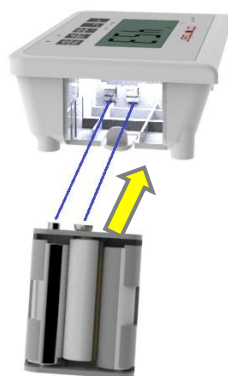
2. Take out the battery housing.



3. Replacing new batteries.



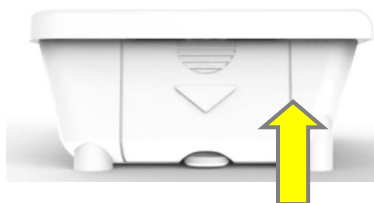
4. Batteries are well installed.



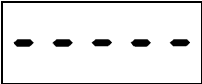
5. Installing the battery housing.



6. Reinstalling the battery cover.



ERROR MESSAGE

Low Battery 1. Check battery voltage ($>6.4V$) and if needed replace new battery for operation. 2. If the problem still persists inspect soldering of controller PCB or replace the controller PCB.	
Overload This indicates that the scale's load sensor(s) have been overloaded. Reduce the loading and retry.	
Counting Error 1. The signal from the load cells is too high or too low. Please remove any weight from the scale and try to power on again. If the scale continues to show the error message, it indicates a fault with the electronics or wiring.	
High/Low Zero Count 1. The scale is above its zero range. Please remove any weight from the scale and power on again. If the scale continues to show the error message, it indicates a fault with the electronics. 2. The scale is below its zero range. Check there is nothing jammed underneath the scale and power on again. If the scale continues to show the error message, it indicates a fault with the electronics.	 
AD Error This indicates there is a fault with the scale's software and is normally caused by a fault with the PC board. Contact your local service representative.	
Negative weighing When weight below $-2kg$, the display will shows "-----". Press ZERO to return to the normal mode.	

TROUBLESHOOTING

Troubleshooting for defective modes:

Original purchaser can enjoy the benefits under the effective Warranty against functional defects in material and workmanship subject to the terms and conditions listed in the yearly Warranty Program & Return Policy.

Our warranty service program includes the following:

1. Technician repair service under warranty or at a service maintenance charge depending on the workmanship for the defective functionality or cause of damage covered by the warranty.
2. Parts replacement from the manufacturing factory under the warranty or at a certain cost for the replaced parts plus the workmanship charge if not covered under the warranty.

Before you contact our Authorized Dealer in your country for technician repair service, please read through the following section carefully:

Self-checking Tips:

Some functional defects can be identified and maintained by users as listed below:

1. Power-on failure

- Check if the main power adaptor has not plugged onto the scale properly
- Check if the battery power is running low - Replace with new batteries

2. Indicator showing “0000” ZERO SPAN out of range

- Incorrect weighing result - Avoid damages by external environment force such as free-drop to the ground, collision by external objects, etc.
- Proper re-calibration procedure required to correct the setting of weighing accuracy.
- Interference due to RF disturbance, ground vibration···etc.
- Unstable platform feet adjustments according to bubble level indication
- Incorrect position or other external objects within weighing area
- The weighing-scale is not put in a solid & firm ground area, such as carpet floor or lawn.

3. Connection failure for data transmission to PC or printer

- Wrong connection wires or faulty wires for transmission between the digital indicator & load cells.
- Wrong indicator models
- Wrong internal wiring or wire broken

In case of the following defective mode occurs, it is suggested to contact your nearest Authorized Dealer for further technician service & repair:

1. POWER switch-on failure :

- Push-button faulty
- Short circuit wires - Wire broken
- Safety fuse burnt out
- Wire connection problem
- Main power adaptor faulty – Parts Replacement

2. LCD display faulty

- Possible hardware defects include: Uneven brightness in the LCD display screen & texts color blurred, smeared rainbow screen, incorrect decimal display
- LCD PIN broken or short circuit
- PCB cooper foil broken & loosed welding
- Unable to save or read data – IC or transistor faulty, internal parts broken.
- LCD showing “ERRL” after switch on - Load cell damaged
- Overload may cause the weigh to malfunction.
- Software system crash
- Resonator faulty
- Load cells with faulty grinding standard.
- Key buttons failure - Front key panel damaged or disconnected

3. Buzzer malfunction

- Wrong welding of PVC wire
- Key buttons & control panel damaged or disconnected.

NOTE

NOTE



Manufacturer's Declaration of Conformity

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

Electromagnetic Compatibility Directive 2014/30/EU

Low Voltage Directive 2014/35/EU

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

Manufactured by:



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