

AE ADAM

Adam Equipment

MCW-250L
DIGITAL CHAIR-WEIGHER
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1.0 INTRODUCTION

- The MCW-250L scale is a Digital Physician Chair Scale which allows the patients to be weighed while seated.
- The scale has a capacity of 250 kg (550 lb) and readability of 0.1 kg (0.2 lb). It is fast, accurate and simple to use.
- Main features of the scale are:
 - Large, clear backlit LCD display
 - Sealed keypad
 - Very simple to use
 - Weighing in Kg and lb
 - Swivel wheels to allow easy movement with foot brake
 - Swivel foot and arm-rests
 - Push-button tare
 - Runs from an internal rechargeable battery or using an external power supply adapter
 - **HOLD** function to lock the display till the operator releases it
 - Automatic turn off to maximise battery life
 - Filters optimised for weighing people



2.0 TECHNICAL SPECIFICATIONS

Model	MCW-250L
Maximum Capacity	250 kg / 550 lb.
Readability	0.1 kg / 0.2 lb.
Repeatability	0.2 kg / 0.4 lb.
Linearity	0.2 kg / 0.4 lb.
Units of measure	kg, lb
Display	LCD with 29mm/ 1.1" digits
Overall dimension (w x d x h)	650 x 880 x 970 mm / 25.6" x 34.6" x 38.2"
Environment for use	Temperature: 5°C to 40°C, 41°F to 104° F Humidity : <85% RH
Power	Through AC Adapter
Battery	Internal re-chargeable
Gross weight	37.8 kg/ 83.3 lb.
Net weight	27.1 kg/ 59.7 lb.

3.0 DISPLAY AND KEY DESCRIPTIONS



KEYS	FUNCTIONS
[On/Off]	To turn the scale on or off.
[Hold]	To lock the reading even if the person to be weighed is moving.
[Tare/Zero]	To zero the scale if the display drifts from zero. To tare the scale, if necessary
[Func]	To set up the parameters. Also used to switch on the backlight.
[kg/ lb]	To toggle the weighing unit between kg and lb.

DISPLAY	DESCRIPTIONS
Zero	The arrow above Zero will be displayed when the scale reaches zero.
Stab	To indicate that the weighing result is stable
Tare	To indicate the scale is tared
Hold	This indicates the Hold function is enabled
lb	To indicate the reading is in lb
kg	To indicate the reading is in kg
▼	The arrow indicator will point at kg, lb, Hold, Tare, Stab or/and Zero marked below the LCD panel, as on when they are chosen.
● AC	When the adapter is connected to recharge the battery, it will show a red indicator.

4.0 SETTING UP THE SCALE

The MCW-250L comes with a chair fitted on the scale platform. There is no assembly necessary, attach the indicator to the bracket, simply plug in the power supply and it is ready for use.

The indicator could be removed from the chair for mounting to the wall or used on a table top. Brackets are available for wall mounting the indicator.

POWER SUPPLY

The scale uses an internal re-chargeable battery. If the external power supply is to be used, plug it into the jack on the indicator.

When the battery is low, a low battery symbol will be displayed in the left of the display. Connect the adapter to recharge the battery.

5.0 WEIGHING

- Place the Scale on an even floor and press the **[On/Off]** key.
- The instrument performs a self-test after which it is ready for operation. The display will show “**0.0**” with an arrow symbol, above **kg** or **lb**, indicating the last chosen unit.
- The arrow above **Stab** will be on when the reading is stable.
- Press the **[On/Off]** key to switch off the scale. If the scale is not to be used for a long time, the main power switch should be turned off to save the battery life.
- To start weighing, press **[On/Off]**, the scale will show “**0.0**”.

- If the scale is still displaying a small weight when there is no load on the platform, it needs to be zeroed. Press the **[Tare/Zero]** key to zero the display. The arrow above **Zero** will be on. If the zero display is not achieved then the scale may need to be re-calibrated.
- If the weighing value is to be tared to obtain the net value, press **[Tare/Zero]** again. The arrow above **Tare** will be on.
- The person to be weighed can step on to the platform now. The weight will be displayed in Kg or lb depending on the units chosen by the user.
- **Units:** Press the **[kg/lb]** key for changing the weighing unit to kg or lb. An arrow will indicate towards the chosen unit.
- **Backlight:** The scale has an automatic back-light which is switched on whenever time the scale is in use.
- **Overload display:** When “0F” appears on the display, it shows that the load on the platform is over the maximum capacity. It is necessary to reduce the load otherwise the sensor or the platform may be damaged.
- **Hold Function:** To lock the weighing result, press the **[Hold]** key. The arrow indicator will point towards **Hold** and it will show a steady reading even if the person on the platform is moving or goes away from the scale and will not allow the next weighing. To release the function, press **[Hold]** again.
- Do not press the **[On/Off]** key if you do not want to weigh as pressing the **[On/Off]** key will switch the scale to **ON**.

6.0 USER PARAMETERS

6.1 AUTO POWER OFF

Press **[Func]** and **[Tare/Zero]** keys at the same time and display will show “t x”.

t (time)

x (digit 0-9, total 10 settings)

Press the **[Func]** key. x will change from 0 to 9.

X=0.....no automatically power off function
X=1.....auto power off after 2 minutes
X=2.....auto power off after 4 minutes
.....
X=9.....auto power off after 18 minutes
(X is increased by 2 minutes with each change)

When the desired time is displayed, press **[Hold]** key to confirm. If you wish to set the next parameter, press the **[Hold]** key and enter the Zero setting. If you don't wish to continue with the setting, press the **[Func]** key to return to the weighing function.

6.2 CALIBRATION

6.2.1 ZERO SETTING

Press the **[Hold]** key to confirm and enter the zero setting mode.

When “000000” is displayed, press the **[Hold]** key to confirm.

6.2.2 CAPACITY SETTING

Press the **[Hold]** key to enter the calibration. Simply place the calibration mass to set up. Suggested value of the calibration mass is 50kg. However for higher accuracy the calibration mass should be as high as possible, maximum being 250kg. Press the **[Func]** key to enter the same figures as the calibration mass used. The display will show "000000" when the calibration is complete. Press the **[Hold]** key to return to weighing function.

While setting use the keys as follows-

- [kg/lb]** key : Triangular cursor moves left
- [Tare/Zero]** key : Triangular cursor moves right
- [Func]** key : for figures setting (1-9)
- [Hold]** key : to confirm

7.0 TECHNICAL PARAMETERS

The technical parameters are accessed by opening the scale and hence should be used only by the authorised technicians.

Move the jumper on the main PCB to "KB1" position and turn on the scale when there is no load on the platform. Display will show:

<u>n 2000</u>	"n" means: division 3 settings: "2000", "2500" & "3000" to choose from. Press [Hold] to confirm.
<u>d 1</u>	"d" means: division value 3 settings: "d=1", "d=2" & "d=5" to choose from. Press [Hold] to confirm
<u>dp 1</u>	"dp" means: decimal point 4 settings for choose from: "0", "1", "2" & "3" Press [Hold] to confirm and enter to weight setting (all decimal points are lighted up, set the Zero (the platform should be empty).
<u>000000</u>	All decimal points are grey, small cursors are on, make the maximum capacity setting. Put the mass on the platform and then press the [Hold] key and wait for "END" to be displayed.
<u>END</u>	Lastly, switch the jumper to the original location.

8.0 ERROR MESSAGES

Err 1

A/D value is too low when full range is calibrated

-OF-

Overload (remove the excess load to avoid damaging the scale)

0-H

The zero point at the zero calibration is out of range (check whether there is something on the platform)

0-L

The zero range is out of range (keep the platform empty when power is on)

P-L

The battery is in low voltage (change the battery)

9.0 WARNING

- Do not jump while sitting on the chair. This may damage the sensor inside.
- Do not move the weighing machine violently and abruptly. Move and put down the weighing chair gently.
- Wipe the stains with soft cloth soaked with detergent and to dry with soft cloth. Do not use organic solutions and hot water to wipe any stains.
- Keep the weighing chair in a dry and clean environment. Do not expose it to the outdoors or use it in locations near fire, under direct sunshine or with high temperature.
- The **[On/Off]** key on the screen board only switches off the screen power instead of the entire power to the weighing machine. Therefore, it is necessary to switch off the main power supply when the weighing machine is not in use for a long time. Otherwise the battery may be damaged as a result of being over-discharged.



Manufacturer's Declaration of Conformity

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

Electro Magnetic Compatibility Directive 89/336/EEC

Low Voltage Directive 73/23/EEC

Adam Equipment Co. Ltd.
Bond Avenue, Denbigh East
Milton Keynes, MK1 1SW
United Kingdom

FCC COMPLIANCE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. The equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Shielded interconnect cables must be employed with this equipment to insure compliance with the pertinent RF emission limits governing this device.

Changes or modifications not expressly approved by Adam Equipment could void the user's authority to operate the equipment.

WEEE COMPLIANCE



**Sealed Lead Acid
Battery
Must be recycled
Properly**

Any Electrical or Electronic Equipment (EEE) component or assembly of parts intended to be incorporated into EEE devices as defined by European Directive 2002/95/EEC must be recycled or disposed using techniques that do not introduce hazardous substances harmful to our health or the environment as listed in Directive 2002/95/EC or amending legislation. Battery disposal in Landfill Sites is more regulated since July 2002 by regulation 9 of the Landfill (England and Wales) Regulations 2002 and Hazardous Waste Regulations 2005. Battery recycling has become topical and the Waste Electrical and Electronic Equipment (WEEE) Regulations are set to impose targets for recycling.

ADAM EQUIPMENT is an ISO 9001:2000 certified global company with more than 35 years experience in the production and sale of electronic weighing equipment.

Adam products are predominantly designed for the Laboratory, Educational, Medical, retail and Industrial Segments. The product range can be described as follows:

- Analytical and Precision Balances
- Compact and Portable Balances
- High Capacity Balances
- Moisture analysers / balances
- Mechanical Scales
- Counting Scales
- Digital Weighing/Check-weighing Scales
- High performance Platform Scales
- Crane scales
- Medical Scales
- Retail Scales for Price computing

For a complete listing of all Adam products visit our website at
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