# MARSDEN

# Marsden MG-4800 User Manual



Please take time to read these instructions before starting to use the scale.

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# Introduction

Thank you for choosing this Marsden hand grip dynamometer. This device has been designed for simple and straightforward use. Please use this document as guidance for most effective use. If you need help with using the MG-4800 and cannot find the information you need in this document, please call Marsden on 01709 364296 or email <u>sales@marsdengroup.co.uk</u>.

# Specification

Capacity	80kg (blue)/40kg (green)/20kg (red)
Division	0.1kg/0.2lb
LCD Display	0.5 inch 4 digit LCD
Operating Temperature	5°C / 35°C
Unit	Kg / lb
Dimensions (including handles)	212 x 55 x 101mm
Battery	CR-2450 x 1
Auto Off Time	60 sec
Standard Accessory     Carry Case x1 CR-2450 x 1 Spring Set 80kg x 1 Spring Set 40kg x 1 Spring Set 20kg x 1 MG-4800 x 1	

#### **Safety Instructions**

Before putting the device into use, please read with care the information given in this user manual, which contains important instructions for proper installation, use and maintenance of the device.

Marsden and/or the manufacturer shall not be liable for damages arising from failure to heed the following instructions:

- When using electrical components under increased safety requirements, always comply with appropriate regulations.
- Inappropriate installation/use will render the warranty null and void.
- Ensure the voltage marked on the power supply unit matches your mains supply.
- This device is designed for use indoors only.
- 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.
- Batteries should be kept away from small children. If swallowed, promptly seek urgent medical assistance.

If you have any problems with this scale, please contact Marsden/your local dealer/your service partner.

If a serious incident occurs in relation to this device, it should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

#### Cleaning

- We recommend using alcohol-based wipes or similar when cleaning the scale.
- Please do not use corrosive liquids, large amounts of water or high-pressure washers.
- Always disconnect the scale 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. If any inaccuracies occur, please contact your local dealer or service partner.
- If you are in the UK, service contracts are available from Marsden to keep your scale accurate and reliable for longer. Call 01709 364296 for more information.

#### **Disposing of the Scale**

- This product should not 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 from where you purchased the product.
- Alternatively, you can return this product to Marsden we will recycle this free of charge,

#### **Intended Use**

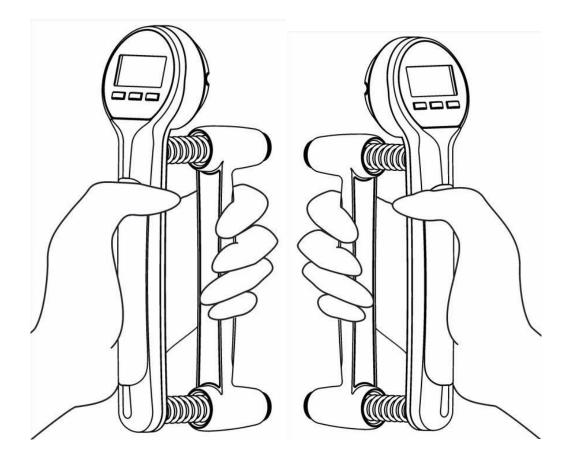
- This scale is intended for use to determine the weight of patients, supported by professional personnel and in rooms intended for carrying out healthcare. The weighing value can be read after a stable weighing value has been obtained. Before use, the scale must be checked by an authorised person to ensure it's in a suitable condition.
- Device is intended to measure one subject at a time.

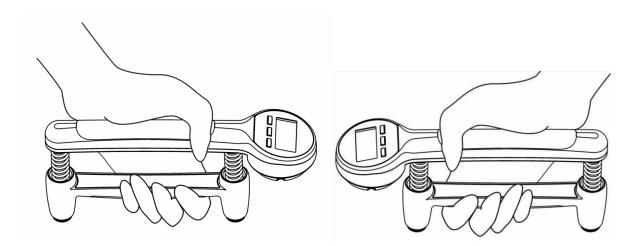
#### Before Use

Before reading the detailed instructions on how to use all the measuring functions that are built into your device, 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 Medical Handgrip Dynamometer is designed to detect when a stable force is achieved, the indicator will emit an audible 'beep' to indicate a stable force value, your reading should be taken at this point.

**Correct Grip Posture** 

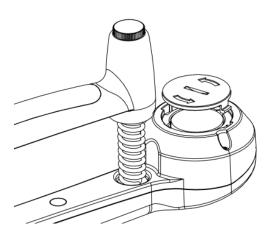




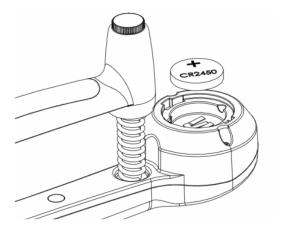
# Instruction for Battery Installation

MG-4800 uses a CR-2450 lithium battery. Please read the following instruction before replacing the battery.

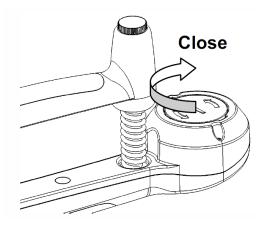
2)



1) Remove the battery cover by turning anticlockwise.

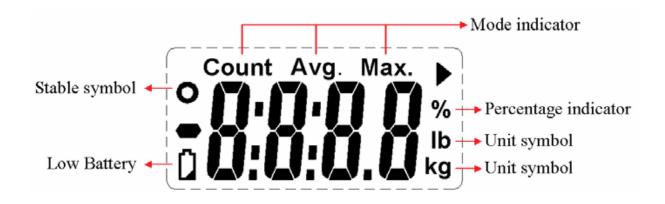


Install the new CR-2450 lithium battery.



3)Lock the battery cover by turning clockwise.

# **LCD Display**



**Key Functions** 

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(		

U/ZERO : Power on / Power Off / Zero Press to Power On, hold for 3 seconds to Power Off.

OPress to ZERO the value.

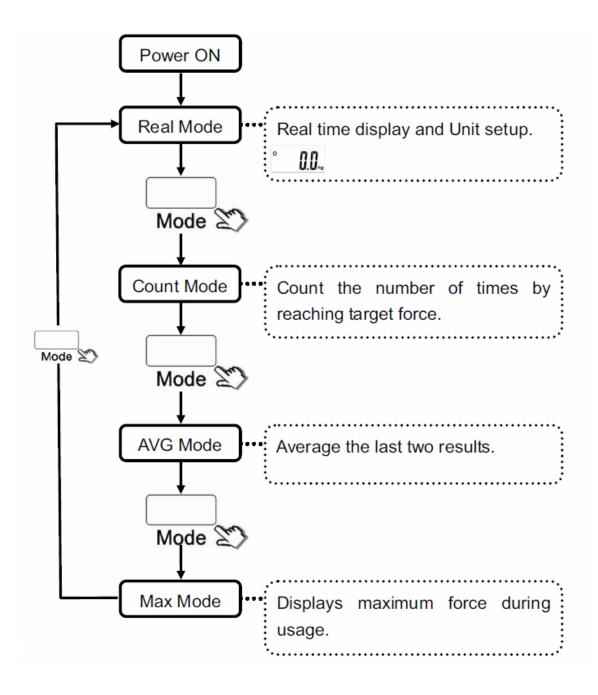
Mode: Mode selection.

**Set** : Real Mode: Unit switches. Other modes: digit adjusts.

Please release the device before zeroing the value.

# **Mode Switching**

- The following procedure gives you a specific idea of how to use the Medical Handgrip Dynamometer.
- Please note that Real Mode is the default mode. If the device is powered off in any other modes. Next time it will start with the last mode selected prior to being powered off.



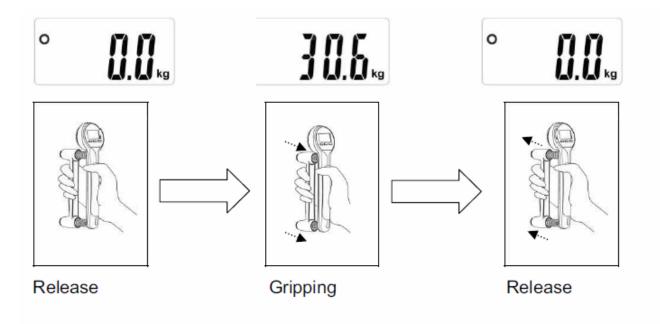
# **Mode Description**

#### Real Mode

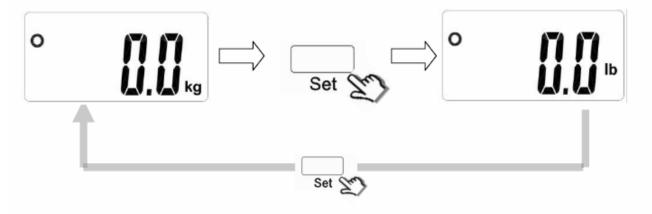
The Real Mode is a dynamic mode. The force value fluctuates according to the gripping force during usage.

#### Real Time Display:

Following is an operation process.



kg & Ib SETUP :



### **Count Mode**

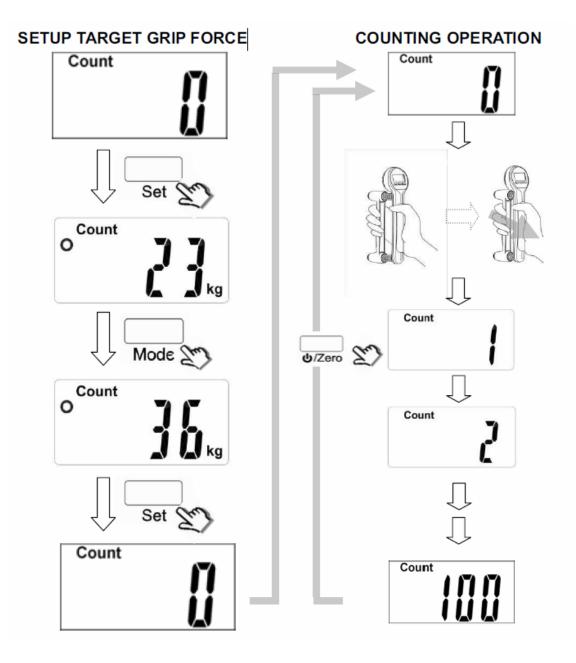
The **Count Mode** is for physician to set up a rehabilitation program for a patient to do rehabilitation exercise with exact force measurement.

#### For Example:

Set up target grip force before use.

NOTE: Only if the force reaches the target is counted one times.

Setup Target Grip Force:



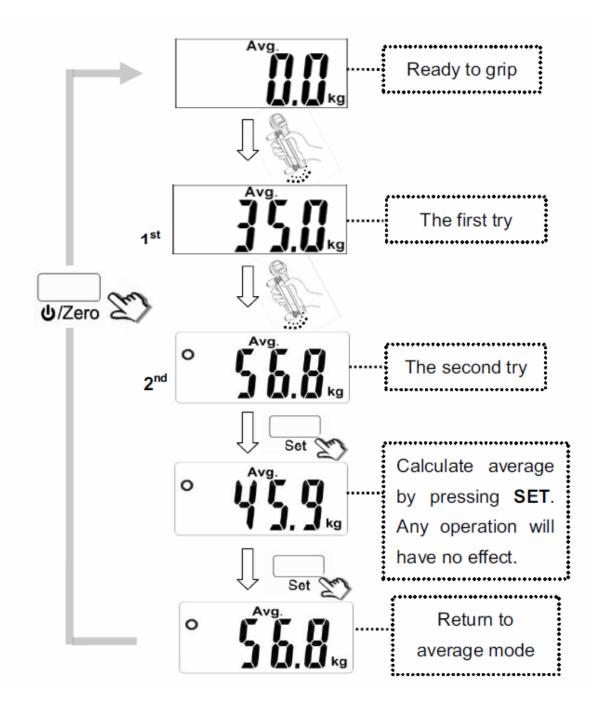
# AVG Mode

The AVG Mode is for physician to evaluate the average of both hand's force.

#### For example:

Grip once individually with right and left hand, then press SET to calculate average value of last two grips.

NOTE: The force must be greater than 2kg

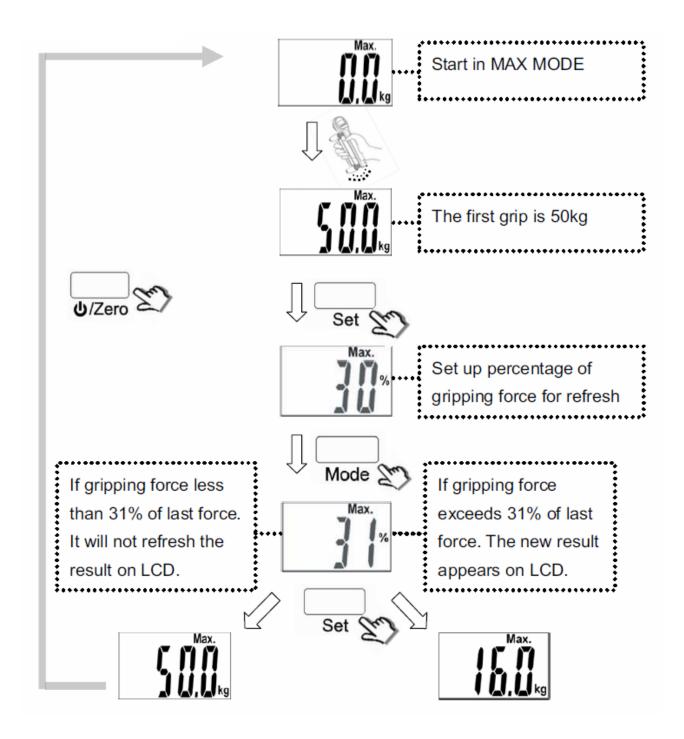


#### Max Mode

The MAX Mode presents the maximum force of an impaired hand.

Medical professions can evaluate the condition of patient's impaired hand through the results.

#### For example:



# **Error Messages**

Low Battery Indication This warning will show that the voltage of the battery is too low for operation, please replace the battery.	<b>L O</b>
Force Under Zero The force is under zero when power on; press the ZERO key and try again.	• • • •
<b>Force Over Zero or Counting Error</b> The force is over limit when power on, please reduce the force and power on again. If the problem still exists, please contact Marsden.	Err
<b>Counting Error (Too Low)</b> The force is lower than the limit when power on, please increase the force and power on again. If the problem still exists, please contact Marsden.	Errl
<b>EEPROM Error</b> The device has encountered internal error; please contact Marsden.	{rr{

EU Authorized Representative:	EC REP Bd Général Wahis, 53 B-1030 Brussels Belgium	
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