



## USER MANUAL

### Smart Body Analyzer

Model: MO-1501-M



Date: 2016.02  
Version: 2016V1

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[DON'T FORGET TO CHANGE THE MODEL IN THE ABOVE  
PICTURE]

### Smart Body Analyzer

Model: MO-1501-M



 Free App

Date: 2016.02

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Model: [MO-1501-M](#)

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## Introduction

Thank you for purchasing the MO Smart Body Analyzer ([MO-1501-M](#)). You will now be able to effortlessly measure, track and share health and fitness information. This user manual will guide you through the setup process and provide key information about the scale itself. Please read it completely and keep it handy for future reference.

The scale uses the method of Bioelectrical Impedance Analysis (BIA) to estimate body fat, bone mass, water content and muscle mass. It sends a harmless amount of electric current into the body, then estimates, from the measured impedance of the body, the percentage of body fat, bone mass, water content and muscle mass. It is intended for adult use in the home.

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## PRODUCT LIST

Scale ×1

E-INK screen (include Metal patch、Magnet base) ×1

USB charging cable ×1

Reset needle ×1

User manual ×1

Quick start guide ×1

## Warnings

1. Do not use this device if: You are acutely or chronically ill, suffering from a disease or taking medications that affect your water levels. The accuracy of readings for these patients has not been verified.

2. Any information provided by this device is in no way meant to treat, cure or prevent any disease or illness from happening.

3. Specific medical advice should be obtained from a physician.

4. Do not disassemble the scale as incorrect handling may cause injury.

5. Do not step on the scale when your body or feet are wet, especially after bathing or showering to prevent slipping.

- This MO scale is equipped with a data transmission function. It may emit electromagnetic energy so as to perform its intended function. Nearby portable and mobile RF communication equipments can affect the performance of the MO scale. Portable and mobile RF communication equipments can affect the accuracy of this MO scale.

- Warning that the use of accessories, transducers and cables other than those specified by the manufacturer of the MO scale as replacement- parts for internal components, may result in increased EMISSIONS or decreased IMMUNITY of the MO.
- The distance between the scale and the Bluetooth should be reasonably close, between 3 to 30 feet. Please ensure that there are no obstacles between the scale and the Bluetooth so as to obtain a quality connection. To avoid interference, other electronics devices (particularly those with Bluetooth®) should be kept at least 3 feet away from the scale.

### Normal Mode

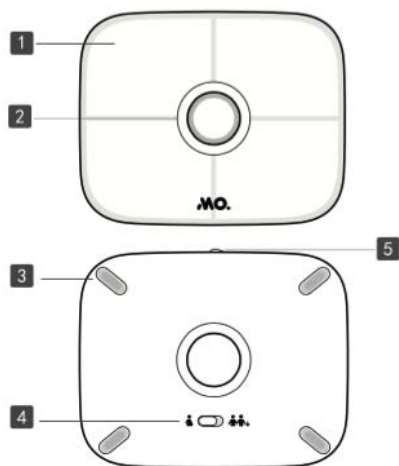
1. Do not use on pregnant women. The result is inaccurate and effects on the fetus are unknown.
2. Body fat percentage estimates will vary with the amount of water in the body, and can be affected by dehydration or over-hydration due to such factors as alcohol consumption, menstruation, illness, intense exercise, etc.
3. The Normal mode is not suitable for people who wear electronic medical devices including pacemaker. In these cases, please use “safe mode”.

### Safe Mode

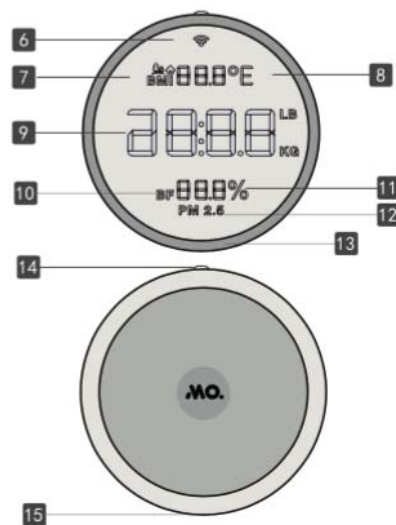
1. Under safe mode, the scale will operate as a basic weight-measuring scale.
2. Please use the switch at the bottom of the scale to turn on/off the safe mode.
3. There will be no electric current under “safe mode”.

### Product description

1. Scale



2. LED screen



1. ITO glass      2. LED light      3. Sensor      4. Mode switch      5. Charging port

6.WiFi 7.indoor/outdoor/BMI 8.Indoor/outdoor temperature 9. Weight/time 10.Body fat 11.BMI  
/Humidity13.E-INK screen 14.Power switch 15.Charging port/Reset

[Please change the picture: LED screen -> E-INK screen, remove PM2.5]

## Instructions

# STEP 1

Turn on the screen



Take out the screen. Press until the screen is turned on

Tips:

- 1.when the screen automatically turns off, please try re-charging it.
- 2.Please allow 4-6 hours to fully charge the screen.
- 3.Normally, the screen can show time, indoor/outdoor temperature and humidity.

# STEP 2

Make sure you are on the right mode



Safe mode Normal mode

The default setup is on “Normal mode” Please switch to “Safe mode” if you are pregnant.

# STEP 3

Download and install the App

You can find the App in App store by searching “MO Health”.

## **MOSCALE REQUIREMENTS**

The MO Scale is designed to be used with the following mobile devices:

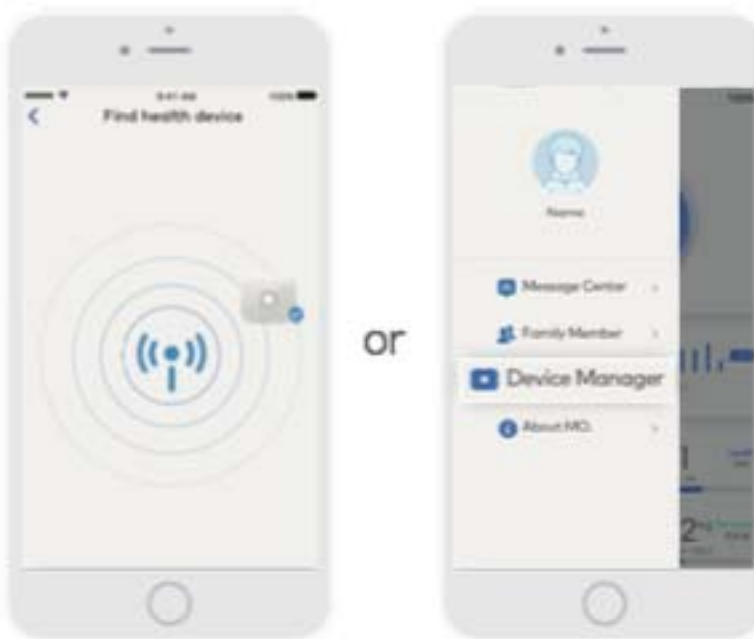
- **iOS** iPhone®, iPad®, iPod Touch®, iPad mini® using iOS 8.1 and above

- **Android** 4.3 and above
- Compatible with devices running Bluetooth® 4.0 technology and above

## STEP 4

### Link the scale with App

Please turn on the mobile phone's bluetooth and then perform the following:



Click on the device found

If you fail to add device by searching it, please try

device manager

1. Open the blue tooth on your mobile phone
2. Add device
3. Follow the tips to configure

## TIPS

## Safe mode

Switch at the bottom of the scale

Orange light



Switch to the safe mode

Please use “Safe Mode” only when:

1. You are Pregnant
2. You have a pace maker or any other implanted electronic devices.

## TIPS

### About charging



1. The scale is rechargeable with internal lithium battery

2. When the battery is low, the red light will be flashing. During charging process the green light will be flashing.

3. When charging is completed, the green light will be on. There will be a WiFi icon shown on the screen.

Rest when the following occurs

1. No weight is shown on the screen

2. Failed to be connected to WiFi

# TIPS

## About Accessories



Metal patch Magnet base E-INK screen Reset needle USB charging cable

Metal patch



Magnet base

Satellite screen

The satellite display can be mounted on the wall

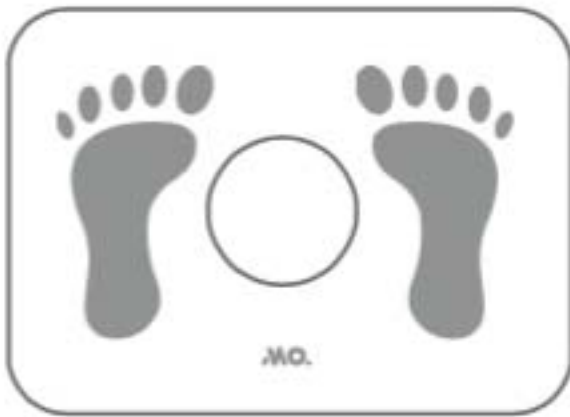


360 degree adjustable

# USE MO

How to measure correctly?

1. Make sure your WiFi is on and the WiFi is correctly setup for the screen.
2. Please put the scale on a flat, hard floor surface.
3. You need to use the product with your bare feet for accurate results. Remove your shoes or socks before using the product.
4. Balance your weight evenly between both feet and stand still for a few seconds until you see a light on.



The correct position to stand

## About Body Fat and BMI

### 1. Why is it important to monitor percentage body fat (%BF)?

The absolute weight traditionally determines whether or not a person is obese. Weight change in itself does not indicate whether it was the weight of body fat or muscle that had changed. In

weight management, it is desirable that muscle mass be maintained while body fat is lost. Thus, monitoring the percentage of fat in the body is an important step toward successful weight management and thus being healthy.

The optimal %BF of an individual varies according to age and gender. The table as follows may be used as a guide:

a) The body fat percentage (%): 5%-60%/0.1%

#### Standard for Men

| Rating          | Age   |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|
|                 | 20-29 | 30-39 | 40-49 | 50-59 | 60+   |
| low             | <13   | <14   | <16   | <17   | <18   |
| Normal          | 14-20 | 15-21 | 17-23 | 18-24 | 19-25 |
| Moderately High | 21-23 | 22-24 | 24-26 | 25-27 | 26-28 |
| High            | >23   | >24   | >26   | >27   | >28   |

#### Standard for Women

| Rating          | Age   |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|
|                 | 20-29 | 30-39 | 40-49 | 50-59 | 60+   |
| low             | <19   | <20   | <21   | <22   | <23   |
| Normal          | 20-28 | 21-29 | 22-30 | 23-31 | 24-32 |
| Moderately High | 29-31 | 30-32 | 31-33 | 32-33 | 33-35 |
| High            | >31   | >32   | >33   | >34   | >35   |

Source: University of Illinois Department of Food Science and Human Nutrition.  
Body Fat Percentage Calculator.

-

## 2. How is percentage body fat (%BF) estimated?

The percentage of BF is measured by a method called Bioelectrical Impedance Analysis (BIA). The use of BIA to estimate body fat has been pioneered since the seventies. It was only in the past decade that the estimation of body fat using BIA technology was successfully offered to the consumer as a scale. With BIA technology, a low-intensity electric current is sent through the body. The current is very low and causes no harm in your body. Depending on the amount of body fat of the individual, the electric current will go with a different degree of difficulty. The difficulty with which a current goes through the body is called electrical impedance. Hence, %BF can be estimated by measuring the electrical impedance and applying to the data a proprietary algorithm. Please note that the percentage of body fat, water content, bone mass and muscle mass will not be added up to 100%.

**Please be reminded that the %BF estimated with the scale represents only a good approximation of your actual body fat. There exist clinical methods of estimating body fat that can be ordered by your physician.**

### Reaching Target Weight

Maintaining proper weight is essential to healthy living. Obesity has been linked to a higher risk of heart disease, diabetes and some forms of cancer. The Body Mass Index (BMI) is the most widely accepted measurement of weight according to health professionals. Use the chart below to determine your own BMI by matching your height in the left hand column with your weight in the center. Anyone, male or female, with a BMI of 25 to 29 is considered over weight and a body mass index of 30 is considered obese. Remember to eat right and exercise.

## Body Mass Index Chart

|                 | Normal               |     |     |     |     |     | Overweight |     |     |     |     |     | Obese |     |     |     |     |     |
|-----------------|----------------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|
|                 | Body Weight (pounds) |     |     |     |     |     |            |     |     |     |     |     |       |     |     |     |     |     |
|                 |                      |     |     |     |     |     |            |     |     |     |     |     |       |     |     |     |     |     |
| Height (inches) | 58                   | 91  | 96  | 100 | 105 | 110 | 115        | 119 | 124 | 129 | 134 | 138 | 143   | 148 | 153 | 158 | 162 | 167 |
|                 | 59                   | 94  | 99  | 104 | 109 | 114 | 119        | 124 | 128 | 133 | 138 | 143 | 148   | 153 | 158 | 163 | 168 | 173 |
|                 | 60                   | 97  | 102 | 107 | 112 | 118 | 123        | 128 | 133 | 138 | 143 | 148 | 153   | 158 | 163 | 168 | 174 | 179 |
|                 | 61                   | 100 | 106 | 111 | 116 | 122 | 127        | 132 | 137 | 143 | 148 | 153 | 158   | 164 | 169 | 174 | 180 | 185 |
|                 | 62                   | 104 | 109 | 115 | 120 | 126 | 131        | 136 | 142 | 147 | 153 | 158 | 164   | 169 | 175 | 180 | 186 | 191 |
|                 | 63                   | 107 | 113 | 118 | 124 | 130 | 135        | 141 | 146 | 152 | 158 | 163 | 169   | 175 | 180 | 186 | 191 | 197 |
|                 | 64                   | 110 | 116 | 122 | 128 | 134 | 140        | 145 | 151 | 157 | 163 | 169 | 174   | 180 | 186 | 192 | 197 | 204 |
|                 | 65                   | 114 | 120 | 126 | 132 | 138 | 144        | 150 | 156 | 162 | 168 | 174 | 180   | 186 | 192 | 198 | 204 | 210 |
|                 | 66                   | 118 | 124 | 130 | 136 | 142 | 148        | 155 | 161 | 167 | 173 | 179 | 186   | 192 | 198 | 204 | 210 | 216 |
|                 | 67                   | 121 | 127 | 134 | 140 | 146 | 153        | 159 | 166 | 172 | 178 | 185 | 191   | 198 | 204 | 211 | 217 | 223 |
|                 | 68                   | 125 | 131 | 138 | 144 | 151 | 158        | 164 | 171 | 177 | 184 | 190 | 197   | 203 | 210 | 216 | 223 | 230 |
|                 | 69                   | 128 | 135 | 142 | 149 | 155 | 162        | 169 | 176 | 182 | 189 | 196 | 203   | 209 | 216 | 223 | 230 | 236 |
|                 | 70                   | 132 | 139 | 146 | 153 | 160 | 167        | 174 | 181 | 188 | 195 | 202 | 209   | 216 | 222 | 229 | 236 | 243 |
|                 | 71                   | 136 | 143 | 150 | 157 | 165 | 172        | 179 | 186 | 193 | 200 | 208 | 215   | 222 | 229 | 236 | 243 | 250 |
|                 | 72                   | 140 | 147 | 154 | 162 | 169 | 177        | 184 | 191 | 199 | 206 | 213 | 221   | 228 | 235 | 242 | 250 | 258 |
|                 | 73                   | 144 | 151 | 159 | 166 | 174 | 182        | 189 | 197 | 204 | 212 | 219 | 227   | 235 | 242 | 250 | 257 | 265 |
|                 | 74                   | 148 | 155 | 163 | 171 | 179 | 186        | 194 | 202 | 210 | 218 | 225 | 233   | 241 | 249 | 256 | 264 | 272 |
|                 | 75                   | 152 | 160 | 168 | 176 | 184 | 192        | 200 | 208 | 216 | 224 | 232 | 240   | 248 | 256 | 264 | 272 | 279 |
|                 | 76                   | 156 | 164 | 172 | 180 | 189 | 197        | 205 | 213 | 221 | 230 | 238 | 246   | 254 | 263 | 271 | 279 | 287 |
|                 | 19                   | 20  | 21  | 22  | 23  | 24  | 25         | 26  | 27  | 28  | 29  | 30  | 31    | 32  | 33  | 34  | 35  |     |
| Body Mass Index |                      |     |     |     |     |     |            |     |     |     |     |     |       |     |     |     |     |     |

## Care and maintenance

1. Do not disassemble the scale; it contains no user serviceable parts. Damage to the scale may occur as a result of improper handling.

2. Clean the scale after use with a dampened cloth. Do not use solvents or immerse the unit in water.
3. Avoid excessive impact or vibration to the scale, such as dropping it onto the floor.
4. Recharge the screen when it turns off automatically. Recharge the scale when the red light is flashing.
5. Do not store anything on the scale, as it is a sensitive weighing device.
6. Do not store the scale where you store cleaning chemicals. The vapors from some household products may affect the electronic components of your scale.

Tips:

1. when the screen automatically turns off, please try re-charging it.
2. Please allow 4-6 hours to fully charge the screen.
3. Normally, the screen can show time, indoor/outdoor temperature and humidity.

## Problem solving

1. You must take this measurement with your bare feet. In order to get the most accurate and consistent reading, wipe your feet with a damp cloth, leaving them slightly damp before stepping on the scale. Repeat measurement again, maintaining maximum contact between your feet and the metal electrodes.
2. The condition of the skin on the bottom of your feet can affect the reading. The natural effects of aging or activity can make this skin hard. If you are having a problem to operate this scale, please contact customer service.
3. Move your scale to a location where it will not be bumped. If your scale is bumped while being activated or while in use, an inaccurate reading will occur.
4. Place scale on a hard surface. Carpeted or uneven floor may affect accuracy.
5. Make sure the batteries are properly charged.
6. If the scale does not show body fat, water content, muscle mass and bone mass: a) You must use the product with your bare feet. Remove your shoes and socks before proceeding. Clean, slightly moist feet will provide the best results. Position your feet for maximum contact with the metal electrodes on the scale.  
  
b) The scale cannot identify the possible user with the most similar weight reading. Please properly setup your personal profile.

# Product specifications

Productname: Smart BodyAnalyzer

Model: MO -1602-MA

Product dimension:374\*300\*21.2mm

Weight: 2.3kg

Screen: E-INK Screen

System: Android 4.3、ios8 and above

turn on/off range :5-15kg

Capacity: 2.5-180kg

Graduation: 0.1kg

Accuracy: temperature 25±5°C: 0.0~50.0kg ±0.4kg 50.0~100.0kg ±0.5kg 100.0-180.0kg ±0.6kg

Working environment:temperature:0~40°C humidity:≤90%RH pressure:80kPa~106kPa

Storage environment: temperature:-0~40°C humidity:≤90%RH pressure:50kPa~106kPa

Turn on :Auto on and auto off

Accessory:Screen、 User Manual、 Quick start guide 、 Usb charging cable、 Reset needle、 E-INKscreen

## Questions and Answers

### How exactly is my body fat being measured?

This Body Fat Scale uses a measurement method known as Bioelectrical Impedance Analysis (BIA). A small current is sent through your body, via your feet and legs. This current goes easily through the lean muscular tissue that has a high fluid content, but not easily through fat which has a lower fluid content. In this way, the bio-impedance (i.e. resistance to the current) is used to estimate body fat and body water. The electric current is small and may not be felt. Contact with the body is made via metal electrodes on the platform of the scale.

### What is the amount of the current passing through my body when the measurement is taken?

**Is it safe?** This BIA technology is safe, non-invasive, toxic-free and harmless. The current is measured at less than 1mA. However, please be aware that anyone with a wearable or implantable medical device, such as a pacemaker, must avoid using this device. Do not use on pregnant women. The result is inaccurate and effects on the fetus are unknown.

### What is “Safe Mode”

It has a safe mode designed specially for pregnant women, users carrying pacemaker, or kids. Previous scales use electric current to measure body composition, which is unsafe for many users.

### **Why is it important to monitor percentage Total Body Water (%TBW) in the body?**

Water is an essential component of the body and its level is one of the health indicators. Water makes up approximately between 50-70% of the body's weight. It appears proportionally more in lean tissue compared to fat tissue. Water is a medium for biochemical reactions that regulate body functions. Waste products are carried in water from cells for excretion in urine and sweat. Water provides form to cells; helps to maintain body temperature; provides moisture to skin and mucosa; cushions vital organs; lubricates joints and is a component of many body fluids. The amount of water in the body fluctuates with the hydration level of the body and state of health. Monitoring the level of body water can be a useful tool for one's health maintenance. Similar to body fat estimation, the %TBW function provided in this scale is based on BIA.

The estimated %TBW may vary according to your hydration level, that is, how much water you have drunk or how much you have sweated immediately prior to the measurement. For better accuracy, avoid fluctuation in hydration level prior to the estimation. The accuracy of the scale in estimating TBW will also decrease with individuals suffering from diseases that tend to accumulate water in the body.

The optimal %TBW of an individual varies according to age and gender. **The table as follows may be used as a guide:**

The body water percentage(%):43%-73%/0.1% Source:Derived from Wang&Deurenberg:"Hydration of fat-free body mass". American Journal Clin Nutr 1999.69:833-841.

|       | BF % RANGE         | OPTIMAL TBW% RANGE |
|-------|--------------------|--------------------|
| Men   | 4 to 14%           | 70 to 63%          |
|       | 15 to 21%          | 63 to 57%          |
|       | 22 to 24%          | 57 to 55%          |
|       | 25 and over        | 55 to 37%          |
| Women | 4 to 20%           | 70 to 58%          |
|       | 21 to 29%          | 58 to 52%          |
|       | 30 to 32%          | 52 to 49%          |
|       | <u>33 and over</u> | <u>49 to 37%</u>   |

**Please be reminded that the %TBW estimated with the scale represents only a good approximation of your TBW. There exist clinical methods of estimating total body water that can be ordered by your physician.**

## Warnings:

- BIA (Bioelectrical Impedance Analysis) method estimates your body fat percentage by sending a harmless electric current through the body.
- This device should not be used by anyone with an implanted electronic medical device, such as a pacemaker, as a precaution against disruption to that device.
- If in doubt, contact your physician.
- This scale will give body fat estimates for a majority of people, but is not intended for use by the following groups: **Children:** Anyone under the age of 18 years **Pregnant Women**

## FCC STATEMENT :

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**Warning:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

**RF warning statement:**

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.