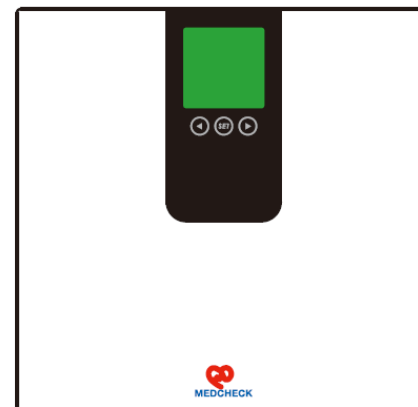


User Manual

Bluetooth BODY FAT WEIGHT SCALE SFBS01



Manufactured for
SMARTFUTURE PTE LTD
#06-01, 178 Paya Lebar Road,
Singapore 409030
www.oursmartfuture.com











- Thank you very much for selecting the Smartfuture Bluetooth Body Fat Weight Scale SFBS01.
- Please do read the user manual carefully and thoroughly so as to ensure the safe usage of this product, and keep the manual well for further reference in case you have problems.

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♥ Safety and Usage Information

The warning signs and symbols are essential to ensure your correct and safe use of this product and protect you and others from injury. Please kindly find the meanings of the warning signs and symbols, which you may encounter in the label and user manual, as follows:

	Symbol for "THE OPERATION GUIDE MUST BE READ"		Symbol for "MANUFACTURER"
	Symbol for "TYPE BF APPLIED PARTS"		Symbol for "COMPLIES WITH EU REQUIREMENTS"
SN	Symbol for "SERIAL NUMBER"		Symbol for "MANUFACTURE DATE"
	Symbol for "DIRECT CURRENT"	 	Symbol for "ENVIRONMENT PROTECTION – Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice"
	Symbol for "INDOOR USE ONLY"		
 Bluetooth	The Bluetooth Combination Mark		



CAUTION

Bluetooth Body Fat Weight Scale SFBS01 offers you a seamless way to manage your health. Please be aware that this device is designed for healthy population over 10 years old self-measuring and self-monitoring body compositions. Any information provided by this device is in no way meant to treat, cure or prevent any disease or illness from happening. If in doubt, contact your physician.

This device is contraindicated for any female subject who may be suspected of, or is pregnant. Otherwise, the effects of this device on the fetus are unknown.

This device is contraindicated for any person who is connected to a wearable or implantable electronic device or instrument such as a pacemaker or defibrillator.

This device should not be used for anyone who is acutely or chronically ill because of suffering from a disease or taking medications that affect your water levels. The accuracy of readings for these patients has not been verified. Specific medical advice should be obtained from a physician.

SFBS01 is equipped with data transmission function. It may emit electromagnetic energy so as to perform its intended function. Nearby portable and mobile RF communications equipment can affect the performance of SFBS01. And the device can interfere vicinity electrical equipment.

Manufacturer will make available on request circuit diagrams, component parts list, etc.

WARNING: No modifications of this equipment is allowed. This may result in increased EMISSIONS or decreased IMMUNITY of SFBS01.

Please use the device according to the user manual. Any misuse can cause electric shock, burns, fire and other unexpected hazards.

Please use and storage the device under the environment which was provided in the user manual. Don't expose the device to extreme temperatures, direct sunlight, moist or corrosive environment. Do not step on the scale when your body or feet are wet, especially after bathing or showering to prevent slipping.

Please keep the device out of reach of infants, children or pets, since inhalation or swallowing of small parts is dangerous or even fatal.

Please don't use the device out of lifetime any more because degraded sensors and electrodes, or loosened electrodes can degrade performance or cause other problems.

If you have an allergy to stainless steel, please avoid to contact to the electrodes of the device.

The patient is an intended operator. The patient can measure, transmit data and charge battery under normal circumstances and maintain the device and its accessories according to the user manual.

INDICATIONS FOR USE

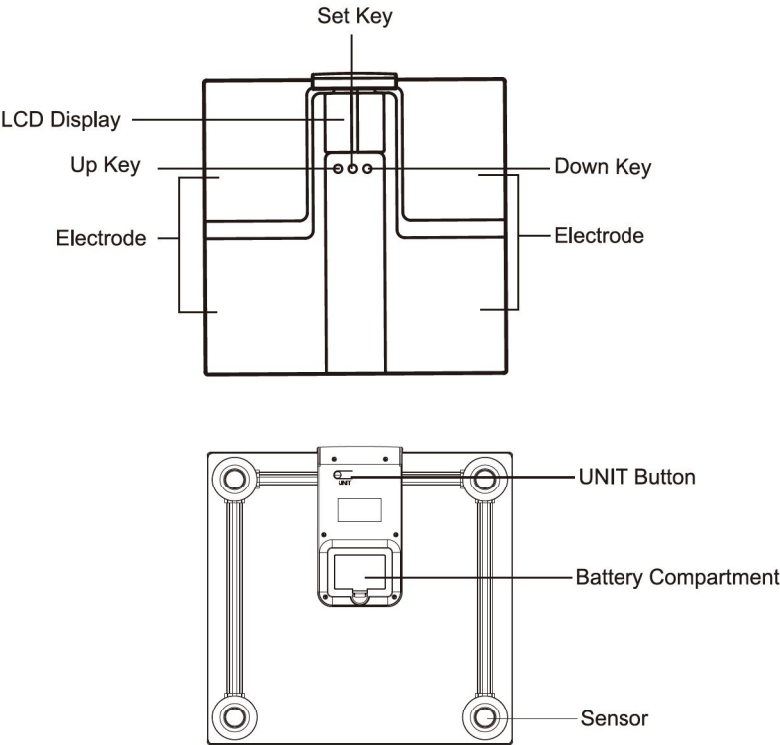
- The Smartfuture Bluetooth Body Fat Weight Scale measures weight and estimate calorie and BMI, and uses bio-electrical impedance analysis (BIA) technology to estimate body fat, total body water percentage, bone mass and muscle mass in generally healthy children 10-17 years old and healthy adults.
- It is intended for use in the domestic setting only.

♥ Tips

To ensure the accuracy of measurement, please follow below instructions when you start measurement.

- Place the scale on a flat, hard surface. Soft surface such as carpet will affect the performance of the scale.
- Step onto the platform with bare feet. Stand still and keep full contact with the electrodes until the measurement is complete.
- Start measurement at least two hours after Getting up or Dinning.
- Avoid measurement immediately after strenuous exercise, sauna or bath, drinking, and dinning.
- Always start measurement in the same time slot and on the same scale located on the same flat, hard surface.
- For maximum accuracy and repeatability, it is recommended that you should use the device in the same time of the day and on the same location.
- 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. Take the reading with clean, slightly damp feet for best accuracy. If you are having a problem on operating this scale please contact customer service.
- 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.

♥ Device Components



♥ List

- 1. Bluetooth Body Fat Weight Scale SFBS01
- 2. Three AAA-size Batteries (1.5V each)
- 3. User Manual

♥ LCD Display



	Body Fat Analysis Result	kg	Kilogram
	Total Body Water Analysis Result	%	Percentage
	Muscle Mass Analysis Result		Male
	Bone Mass Analysis Result		Male Athlete
BMR	Basal Metabolic Rate		Female
BMI	Body Mass Index		Female Athlete
age	Age	P8	User ID (P1-P8)
ft	Foot		Successful Bluetooth Connection
st lb	Stone		Data transmitting / pending to transmit to wireless wellness system
lb	Pound		Low Battery
cm	Centimeter	kcal	Calorie
•	Body Fat Level: Healthy	—	Body Fat Level: Underfat
++	Body Fat Level: Obese	+	Body Fat Level: Overfat

♥ General Instructions

Smartfuture Bluetooth Body Fat Weight Scale SFBS01 applies BIA (Bio-impedance Analysis) technology. A small amount of weak current flows through the human body so as to detect the bio-impedance and estimate body fat. The electrical current is small and may not be felt.

This BIA technology is cheap, safe, non-invasive, toxic-free and harmless. It also possesses the characteristics of simple operation and abundant information.

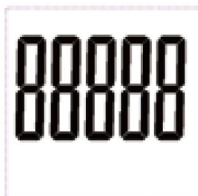
The current mentioned above is less than 1mA. However, please be aware that anyone with an wearable or implantable medical electronic instrument, such as a pacemaker, must avoid using this device.

The intended use of this device is for adult's indoor use only.

♥ Insert the Batteries

- Open the battery door in the back of the scale.
- Insert the batteries (3 x 1.5V AAA) into the battery compartment according to the polarity indications marked inside the compartment.


* The digits "8888" will be shown on the LCD.



- Close the battery door and wait until the digits "0.0kg" are shown on the LCD.



CAUTION

- When the symbol  appears, the device will power off in three seconds. Then you shall replace with a new set of batteries. Please replace all three batteries at the same time. Do NOT mix the old batteries with the new one.
- Worn batteries are hazardous waste. Do NOT dispose of them together with the household garbage. Please refer to the local ordinances and recycling instructions regarding disposal of the worn batteries.

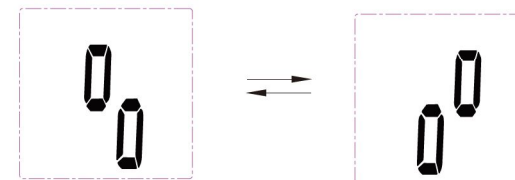
♥ Install the App and Pair-Up

With the advanced Bluetooth 4.0 technology applied, the mobile or portable equipments, which are equipped with Bluetooth function in line with BLE Technical Specifications as well as BLP Protocol established by global organization Bluetooth SIG, are capable to receive your personal health data.

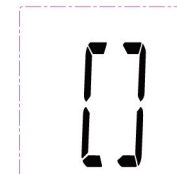
Just simply install the specially-designed app and pair up your scale with your mobile or portable equipments. Then you may enjoy the comprehensive health solution provided by Transtek.

- The App is now available in App Store
You may search the App, then download and install the App in your device which supports Bluetooth 4.0 technology.
- Turn on Bluetooth and the App. Make sure both are ON when pair-up is proceeding.
- Press and hold "UNIT" button in the back of the scale to start pair-up.

Symbol  and symbol  will be shown on the LCD alternatively, indicating pair-up is proceeding.



If SUCCEED, symbol  will be shown on the LCD.

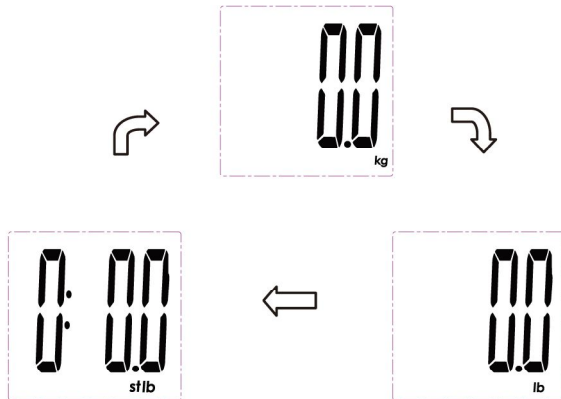


If FAIL, symbol "E1" will be shown on the LCD.



♥ Select Measurement Unit

With batteries correctly installed, press "UNIT" button in the back of the scale to select measurement unit. The default measurement unit is "kg". You may press "UNIT" button to choose among kilogram, pound and stone.



♥ Initialising Your Scale

1. Press the platform centre and remove your foot.
2. "0.0" will be displayed.



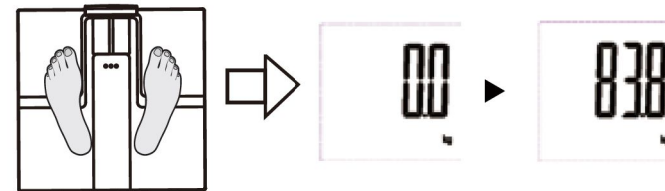
3. The scale will switch off and is now ready for use. This initialisation process must be repeated if the scale is moved. At all other times step straight on the scale.

♥ Weight Only Operation

Your SMARTFUTURE Bluetooth Body Fat Weight Scale will operate as a conventional weight - reading scale. No special programming steps are required.

Once the scale is initialized, as previously described, you may simply step on the scale to measure your current weight. For only weight reading.

1. Position the scale on a flat, hard surface. Carpeted or uneven floors may affect accuracy.
2. Step onto the scale platform and remain still while the scale computes your weight.
3. The scale will display your weight value.



4. The scale will automatically turn off after a few seconds.

♥ Set Up Your Profile


The bluetooth body fat weight scale SFBS01 supports multiple users (Up to 8). You may follow below instructions to assign User ID and set up your own profile, including Gender, Stature, and Age.

1. Assigning User ID

- With batteries correctly installed, press "SET" key to enter setting mode when the scale is off. Or when the LCD displays 0.0, press and hold "SET" key to enter setting mode.
- The system will request User ID selection first. As pictured below, "P1" blinks. The operator may press the function key ▲ or ▼ to select User ID among P1 to P8.
- Press "SET" key to confirm User ID.

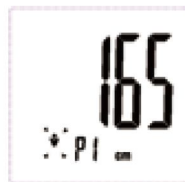


2.Setting Gender

- After confirming User ID, the system will divert to Gender setting automatically.
- As pictured below, the portrait  blinks. The operator may press the function key ▲ or ▼ to select Gender.(Male/Female/Male Athlete/ Female Athlete).
- Press “SET” key to confirm Gender.

Athlete Mode:

An athlete is considered as a person who does 10 hours or more per week of aerobic activity and has a resting heart rate of 60 beats per minute. These individuals should select Athlete Mode for the most accurate measurement results. The body fat analyzer are not calibrated for professional athletes or body builders.



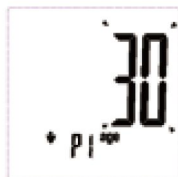
3.Setting Stature

- After confirming Gender, the system will divert to Stature setting automatically.
- As pictured below, the digits “ 165 ” blinks. The operator may press the function key ▲ or ▼ to increase or decrease the numeral.
- You may press and hold the function key ▲ or ▼ for fast changing the numeral.
- Press “SET” key to confirm Stature.



4.Setting Age

- After confirming Stature, the system will divert to Age setting.
- As pictured below, the digits “30” blinks. The operator may press the function key ▲ or ▼ to increase or decrease the numeral.
- You may press and hold the function key ▲ or ▼ for fast changing the numeral.
- Press “SET” key to confirm Age.



5. After confirming the Age, the LCD will display “0.0kg”, then you can start measuring.

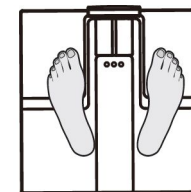
6. Repeat procedure for a second user, or to change user details.

Note: To update or overwrite the memorised data, follow the same procedure, making changes as required.

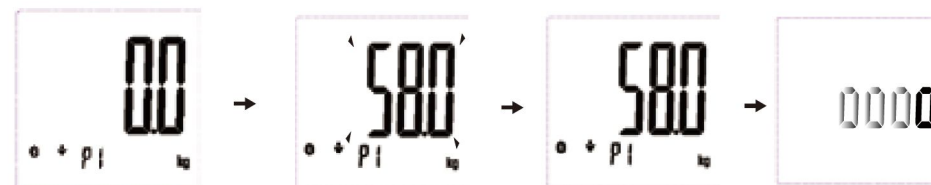
♥ First Measurement

- Please process the user setting before your first measurement.
(Refer to [Set Up Your Profile](#) for more details)

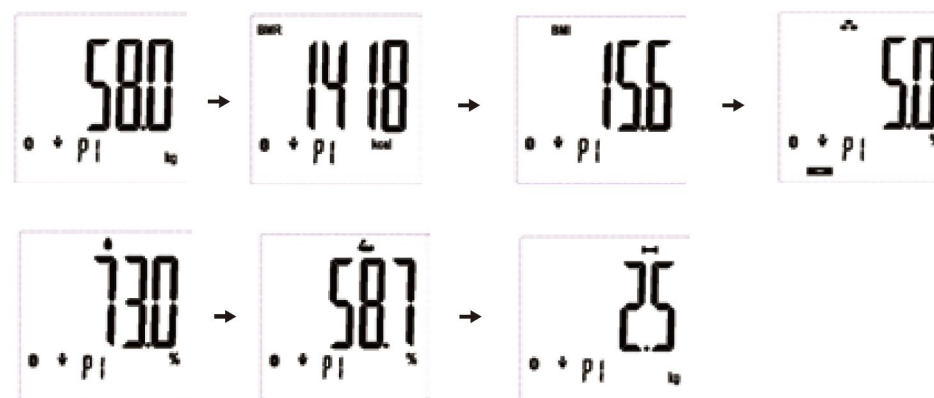
STEP 1: Step on the platform barefooted.



STEP 2: Stand still and the weight data will be locked with the numeral blinks twice. Keep full contact with the electrodes until the LCD stop displaying moving “o”.



STEP 3: Then the measuring results will be displayed sequentially three times: Weight, BMR, BMI, Body Fat, Total Body Water, Muscle Mass and Bone Mass.



* If it fails to complete the analysis, the LCD will display the icon “Err”.

(To find out the solutions, please refer to [Troubleshooting](#) for more details.)

When your scale is successfully paired with your smartphone and the Bluetooth is ON, SFBS01 will process data transmission instead.

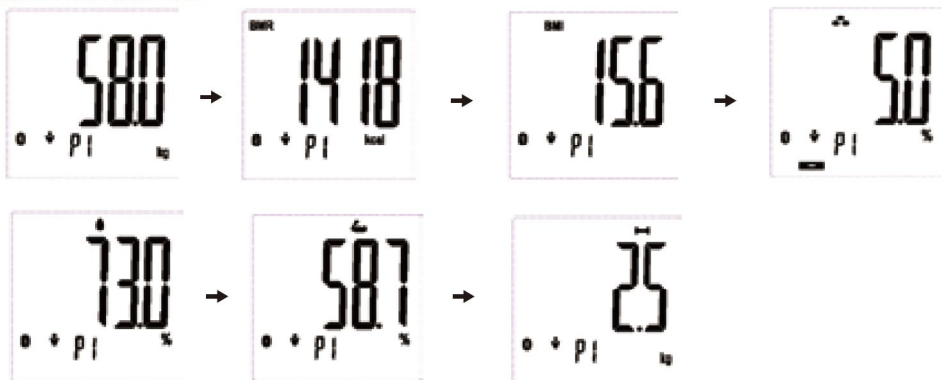
(Please refer to [Data Transmission](#) for more details.)

♥ Daily Measurement

- With original SENSE ON patent technology, SFBS01 will switch on as you step on the platform barefooted.
- Stand still and keep full contact with the electrodes until the LCD stops displaying moving "o".



- After the weight is locked, the system will automatically identify the possible User ID with most similar history records.
- If it identifies one user, it will skip the step about user selection, then display the Weight, BMR, BMI, Body Fat, Total Body Water, Muscle Mass and Bone Mass sequentially three times and turn off.



- If it identifies two or more users, for example, P1 and P8. The LCD will display these users alternately two times. you may press ▲key to choose the left User ID and press ▼ key to choose the right User ID. The measuring results will then be sorted into the User ID you selected and displayed sequentially three times. If you don't choose the user, it will display the weight again and turn off.





- If it fails to identify the possible User ID, the LCD will only display the weight data.
(To find out the solutions, please refer to [Troubleshooting](#) for more details.)
- When your scale is successfully paired with your smartphone and the Bluetooth is ON, SFBS01 will process data transmission instead.
(Please refer to [Data Transmission](#) for more details.)



♥ Data Transmission

- With SFBS01 successfully pair-up with your iPhone, the measurement data will be automatically transmitted to your mobile via Bluetooth.




- The symbol  will disappear after successful data transmission, and you may check your personal health data stored in your iPhone.

- If the data transmission fails, the symbol  will remain. The pending measurement data will be temporarily kept in the scale and transmitted to your iPhone when next measurement is complete.

	Successful Bluetooth Connection
	Data transmitting to wireless wellness system: -If SUCCEED, the symbol disappears; -If FAIL, the symbol remains.






CAUTION

- Interference may occur in the vicinity of equipment marked with the following symbol . And the Analyzer may interfere vicinity electrical equipment.
- To enable the data transmission function, this product should be paired to a Bluetooth end at 2.4 GHz.

How to mitigate possible interference?

1. The range between the Analyzer and the Bluetooth end should be reasonably close, from 1 meter to 10 meters. Please ensure no obstacles between the Analyzer and the Bluetooth end so as to obtain quality connection.
2. To avoid interference, other electronic devices (particularly those with Bluetooth transmission / Transmitter) should be kept at least 1 meter away from the Analyzer.

♥ Error Prompt

Error	Description	Solution
	Overload. The device will power off in four seconds.	Stop using this scale for measurement.
	Low Battery. The device will power off in three seconds.	Replace all four batteries at the same time. Please purchase the authorized batteries for replacement.
	Failure of pairing up .	Please check below items: -Bluetooth is ON. -App Collector is ON. -Both devices are within the transmission distance of Bluetooth.

♥ When Measuring ...

Problem	Root Cause	Solution
Abnormal measuring results: - Too high; OR - Too low; OR - Huge difference between two recent measurement.	Incorrect posture	Please step on the platform barefooted and stand still.
	The device is located on the soft ground such as a carpet OR on a rugged surface.	Please place the device on a flat, hard surface.

Problem	Root Cause	Solution
Abnormal measuring results: - Too high; OR - Too low; OR - Huge difference between two recent measurement.	Either your hands or your feet are too dry.	Wipe your feet with a damp cloth, keeping them slightly damp when starting measurement.
No display on LCD when the device powers on.	Batteries not yet installed.	Install the batteries. (Please refer to <u>Insert the Batteries</u>)
	Worn batteries.	Replace all four batteries at the same time. Please purchase the authorized batteries for replacement.
CANNOT proceed to analyze body fat	Step onto the platform wearing socks or shoes.	Please keep barefooted during the measurement, and keep full contact with the electrodes as well.
The device powers off.	Low battery.	Replace all four batteries at the same time. Please purchase the authorized batteries for replacement.

♥ When Data Transmitting ...

Problem	Root Cause	Solution
Data transmission failed.	Bluetooth is OFF.	Turn ON the Bluetooth via "Setting >> General >> Bluetooth".
	The App is OFF.	Press the icon to turn ON your app.
	Out of range of Bluetooth transmission.	Place your iPhone closer to the scale.

♥ Specifications

Product Name	Bluetooth Body Fat Weight Scale (SFBS01)
Dimension	Scale: 310x306x27.6mm
Net Weight	Approximately 1.572kg (Excluding the dry cells)
Display	Digital LCD
Measurement Unit	Kilogram / Pound / Stone
Measurement Range	5~180kg
Division	0.1kg / 0.2lb / st:0.2lb
Accuracy	0-50kg: ±0.3kg; 50-100kg: ±0.4kg; 100-150kg: ±0.5kg; 150-188kg: ±0.7kg
Working Environment	Temperature: 0℃ to 40℃ Humidity: ≤90% RH
Storage Environment	Temperature: -20℃ to 60℃ Humidity: 10%RH to 93% RH
Power Source	4.5V (Three AAA-size Batteries)
Auto-ON	SENSE ON technology
Auto-OFF	10 seconds after clearing
Accessories	1. Three AAA-size Batteries 2. User Manual
Mode of Operation	Continuous Operation

About the Accuracy of This Product

- This product passes strict inspection before delivery and therefore its accuracy is guaranteed by the manufacturer. Please refer to the above table for the descriptions on accuracy.
- This product is specially designed for body fat analysis as well as weight measurement. It should NOT be used by anyone during the process of transaction for verification of goods' weight.

♥ Maintenance

When carrying out usual maintenance, please ensure practice of the following Do's and Don'ts:

- DO use a dry soft cloth to wipe the dust.
- DO use a wet soft cloth, dipped into water and wrung out, to wipe the dirt. Then use a dry soft cloth to dry up the device.
- DON'T wash the device with water or immerse it in water.
- DON'T use propellant, abrasive or other chemicals to wipe the dirt in avoidance of discolor or malfunction.
- DON'T disassemble this device. If you have any problems, please contact Smartfuture.
(Please refer to Warranty for contact information)

♥ Warranty

- Smartfuture warrants its products free of defects in materials and workmanship in normal use for a period of TWO years from the date of retail purchase.
- This warranty does NOT cover damages caused by misuse or abuse, including but not limited to:
 - Failure caused by unauthorized repairs or modifications;
 - Damage caused by shock or drop during transportation;
 - Failure caused by improper operation inconsistent with the instructions stated in this user manual;
 - Malfunction or damage from failure to provide the recommended maintenance;
 - Damage caused by improper use of power supply.
- Should this device require maintenance (or replacement at our option) under warranty, please deliver the original package to SMARTFUTURE PTE LTD prepaid. Please return the store receipt (with the retail purchase date) and a note with reasons to return on it as well.

Manufactured for
SMARTFUTURE PTE LTD
#06-01, 178 Paya Lebar Road,
Singapore 409030
www.oursmartfuture.com

♥ Health Tips - About Body Fat

Human body is made up of, amongst other things, a percentage of fat. Body fat is vital for a healthy, functioning body, protects vital organs, helps regulate body temperature, stores vitamins and helps the body sustain itself when food is scarce. However, too much body fat or indeed too little body fat will damage to your health. It is difficult to gauge how much body fat we have in our bodies simply by looking at ourselves in the mirror.

This is why it is important to measure and monitor your body fat percentage. Body fat percentage gives you a better measure of fitness than weight alone—the composition of your weight loss could mean you are losing muscle mass rather than fat—you could still have a high percentage of fat even when a scale indicates 'normal weight'.

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	13-20	14-21	16-23	17-24	18-25
Moderately High	20.1-23	21.1-24	23.1-26	24.1-27	25.1-28
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	19-28	20-29	21-30	22-31	23-32
Moderately High	28.1-31	29.1-32	30.1-33	31.1-34	32.1-35
High	>31	>32	>33	>34	>35

♥ Health Tips - About Body Water

Body water is the single most important component of body weight. It represents over half of your total weight and almost two thirds of your lean body mass (predominantly muscle). Water performs a number of important roles in the body:

All the cells in the body, whether in the skin, glands, muscles, brain or anywhere else, can only function properly if they have enough water. Water also plays a vital part in regulating the body's temperature balance, particularly through perspiration.

The combination of your weight and fat measurement could appear to be 'normal' but your body hydration level could be insufficient for healthy living.

The table as follows may be used as a guide:

Table of Body Water Level (Unit: %)

b) The body water percentage (%): 43%-73%/0.1%

	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%
	33 and over	49 to 37%

♥ Health Tips - About Muscle Mass

According to the American College of Sports Medicine (ACSM), lean muscle mass may decrease by nearly 50 percent between the age of 20 and 90. If you do nothing with it you're losing muscle and increasing fat. It is also important to know your muscle mass % during weight reduction. At rest, the body burns approximately 110 additional calories for each kilo of muscle gained. Benefits of gaining muscle mass include:

- Reversing the decline in strength, bone density and muscle mass with aging
- Maintenance of flexible joints
- Guide weight reduction when combined with a healthy diet.

The table as follows may be used as a guide:

Muscle Mass Percentage

Men	Approximately 40% of total body weight
Women	Approximately 30% of total body weight

♥ Health Tips - About Bone Mass

Regular exercise and a balanced diet can help maintain healthy bones. Like muscle, bone is a living tissue that can respond to exercise by becoming stronger. For most people, bone mass peaks in their thirties. Then people begin to lose bone. Regular exercise can help prevent that loss.

Calcium and vitamin D, good sources of which are dairy products, green leafy vegetables and fish, contribute to healthy bones.

The bone mass readings given by this product are an estimation of the amount of bone in your body. Those with osteoporosis or low bone densities may not get accurate estimations. If you have any concern regarding your bones please consult your doctor timely.

The table as follows may be used as a guide:

Bone Mass Percentage

The average bone mass percentage for both men and women is between 4 to 5%.

♥ Health Tips - About BMI

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. The Analyzer will calculate your BMI on your height and weight.

♥ Health Tips - About Calorie

The device uses your age, height, gender and an activity level setting to calculate the estimated number of calories you can consume a day to maintain your present weight. This estimation may gradually help you with a weight loss, gain or maintenance plan.

♥ EMC Guidance

Table 1 Guidance and MANUFACTURER's declaration – ELECTROMAGNETIC EMISSIONS- for all ME EQUIPMENT and ME SYSTEMS

Guidance and manufacturer's declaration – electromagnetic emissions		
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 2	The device must emit electromagnetic energy in order to perform its intended function. Nearby electronic equipment may be affected.
RF emissions CISPR 11	Class B	
Harmonic emissions IEC 61000-3-2	Not applicable	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable	

Table 2 Guidance and MANUFACTURER's declaration – electromagnetic IMMUNITY – for all ME EQUIPMENT and ME SYSTEMS

Guidance and manufacturer's declaration – electromagnetic immunity			
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device 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	±6 kV contact ±8 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 ±1 kV for input/output 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	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	<5% U_T (>95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 s	Not applicable	Mains power quality should be that of a typical commercial or hospital environment. If the user of the device requires continued operation during power mains interruptions, it is recommended that the device be powered from an uninterruptible power supply or a battery.
Power frequency (50/60Hz) magnetic field IEC 61000-4-8	3A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE U_T is the a.c. mains voltage prior to application of the test level.			

Table 4 Guidance and MANUFACTURER's declaration – electromagnetic IMMUNITY – for ME EQUIPMENT and ME SYSTEMS that are not LIFE-SUPPORTING


Guidance and manufacturer's declaration – electromagnetic immunity			
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an 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	Not applicable	<p>Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p>Recommended separation distance</p> $d = \left[\frac{3.5}{V_1} \right] \sqrt{P}$ <p>$d = 1.167 \sqrt{P}$ 80 MHz to 800 MHz</p> <p>$d = 2.333 \sqrt{P}$ 800 MHz to 2.5 GHz</p> <p>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).</p> <p>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</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p> 
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	
<p>NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.</p> <p>NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.</p>			
<p>^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 device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the device.</p> <p>^b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than $[V_1]/V/m$.</p>			

Table 6 Recommended separation distances between portable and mobile RF communications equipment and the ME EQUIPMENT or ME SYSTEM – for ME EQUIPMENT and ME SYSTEMS that are not LIFE-SUPPORTING

Recommended separation distances between portable and mobile RF communications equipment and the device.			
The device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the device 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 $d = \left[\frac{3.5}{V_1} \right] \sqrt{P}$	80 MHz to 800 MHz $d = 1.167 \sqrt{P}$	800 MHz to 2.5 GHz $d = 2.333 \sqrt{P}$
0.01	Not applicable	0.117	0.233
0.1	Not applicable	0.369	0.738
1	Not applicable	1.167	2.333
10	Not applicable	3.690	7.378
100	Not applicable	11.67	23.33
<p>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.</p> <p>NOTE 1 At 80MHz and 800MHz, the separation distance for the higher frequency range applies.</p> <p>NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.</p>			