

User Manual

Body Fat Analyzer LS208-B8



- Thank you very much for selecting the Transtek Body Fat Analyzer LS208-B8.
- 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.

TRANSTEK



FCC ID:OU9LS208-B8

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Table of Contents

- Safety Information**
- Safety and Usage Information 2
- Your Scale and Its Environment 3
- Efficient Use of Your Scale 3
- Overview**
- Device Components 4
- List 4
- LED Display 5
- Initial Start-Up**
- General Instructions 6
- Insert the Batteries 6
- Pair-up 7
- Set Up Your Profile 8
- Select Measurement Unit 9
- Initialising Your Scale 10
- Weight Only Operation 10
- Start Measuring**
- First Measurement 11
- Daily Measurement 12
- Manage Your Health**
- Data Transmission 13
- Troubleshooting**
- Error Prompt 14
- When Measuring 14
- When Data Transmitting... 16
- Specifications** 17
- Maintenance** 18
- Warranty** 18
- FCC Regulations** 19
- Appendix**
- Health Tips – About Body Fat 20
- Health Tips – About Body Water 21
- Health Tips – About Muscle Mass 22
- Health Tips – About Bone Mass 22
- Health Tips – About BMI 23
- Health Tips - About Calorie 24
- EMC Guidance 24

♥ 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" |
|  | The Bluetooth Combination Mark |  | Symbol for "DIRECT CURRENT" |
|  | Symbol for "TYPE BF APPLIED PARTS" |  | 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" |
| SN | Symbol for "SERIAL NUMBER" | | |
|  | Symbol for "MANUFACTURE DATE" | | |

 CAUTION

The Body Fat Analyzer LS208-B8 offers you a seamless way to manage your health. Please be aware that this device is designed for adults' self-measuring and self-monitoring body fat level. Any information provided by this device is in no way meant to treat, cure or prevent any disease or illness from happening. This device should not be used by anyone who is 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. Specific medical advice should be obtained from a physician.

Before diet and exercise, you must first find a professional medical guide.

The body fat analyzer 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 the device .

Portable and mobile RF communications equipment can affect the measuring accuracy of the body fat analyzer.

Kindly note that the use of accessories, transducers or cables other than those specified, with the exception of transducers and cables sold by the manufacturer as replacement parts for internal components, may result in increased EMISSIONS or decreased IMMUNITY of the device.

Be aware that misuse of electrical equipments can cause electric shock, burns, fire and other hazards. Please do not use the device in flammable gas environment.

Warning that the body fat analyzer should not be used adjacent to or stacked with other equipment.

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

WARNING: No modifications of this equipment is allowed.

During using the analyzer, the patient will contact with the surface and the electrode of the Analyzer. The surface and the electrode of the analyzer is type BF Applied part.

The device doesn't need to be calibrated in five years lifetime.

Do not touch the output of batteries when using the analyzer.

The patient is an intended operator. The patient can perform all the operations in the manual, such as measurement, data transmitting, changing batteries.

INDICATIONS FOR USE

- The Transtek Body Fat Analyzer measures weight and estimate BMI and calories, 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.

CONTRAINDICATIONS

1. This device is contraindicated for any female subject who may be suspected of, or is pregnant. Besides provided inaccurate readings, the affects of this device on the fetus are unknown.
2. 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.

♥ Your Scale and Its Environment

To ensure your safety as well as the service life of your scale, please avoid using the scale under the following circumstances:

- Slippery floor such as tile floor
- Jumping onto the platform immediately after bath or with wet feet
- Near a cell phone or microwave oven

Avoid storage in the following locations:

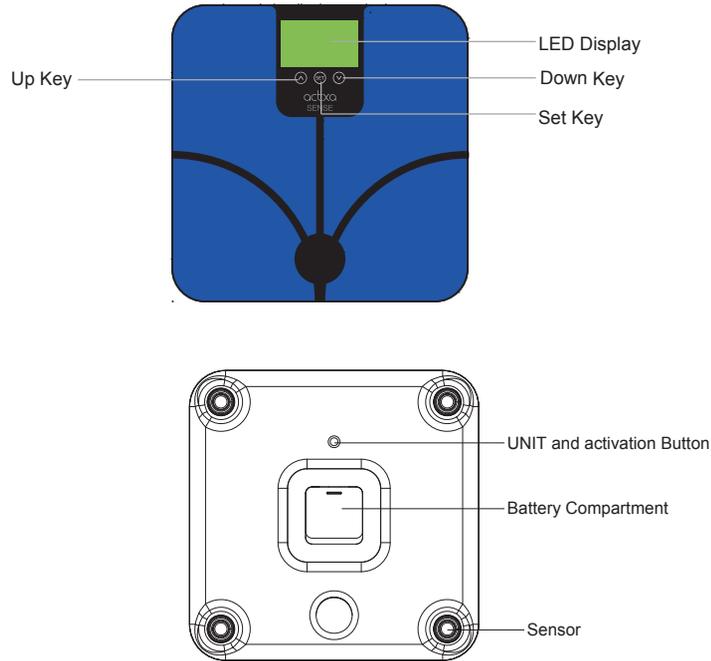
- Where there is water
- Where the device may be exposed to extreme temperatures, humidity, moisture, direct sunlight, dust, or salt air
- Where there is risk of shock or drop
- Where you store chemicals or full of corrosive gases
- Where in reach of the infants or children

♥ Efficient Use of Your Scale

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 scale 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.

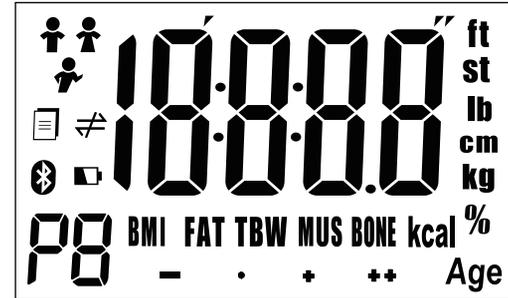
♥ Device Components



♥ List

1. Body Fat Analyzer LS208-B8
2. Four AAA-size Batteries (1.5V per each)
3. User Manual

♥ LED Display



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

♥ General Instructions

Transtek Body Fat Analyzer LS208-B8 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 calorie, BMI, body fat, body water, muscle mass and bone mass. 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 0.5mA. 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 healthy children 10-17 years old and healthy adults.

♥ Insert the Batteries

- Open the battery door in the back of the scale.
- Insert the batteries (4 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 LED.



- Close the battery door and wait until the digits "00" are shown on the LED.



CAUTION

- When the symbol  and "Lo" appear, the device will power off. Then you shall replace with a new set of batteries. Please replace all four 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 and scrapped device.
- If you do not intend to use this unit for a prolonged period of time, it is advisable to remove the batteries before storing.

♥ Install APP and Pair-Up

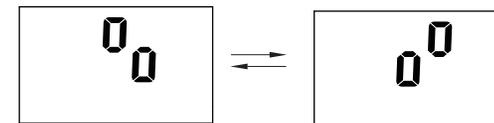
With the advanced Bluetooth 4.0 technology applied, the mobile or portable equipments, which are equipped with Bluetooth function in line with BLE Technical Specifications as well as BLP Protocol established by global organization Bluetooth SIG, are capable to receive your personal health data.

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.

Note: It is only available for the 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 LED alternatively, indicating pair-up is proceeding.



If SUCCEED, symbol "PASS" will be shown on the LED.



If FAIL, symbol "FAIL" will be shown on the LED.



♥ Set Up Your Profile

The body fat analyzer LS208-B8 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 LED 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 \odot or \ominus 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 \uparrow blinks. The operator may press the function key \odot or \ominus 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.



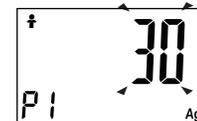
3. Setting Stature

- 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 \odot or \ominus to increase or decrease the numeral.
- You may press and hold the function key \odot or \ominus 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 \odot or \ominus to increase or decrease the numeral.
- You may press and hold the function key \odot or \ominus for fast changing the numeral.
- Press “SET” key to confirm Age.



- After confirming the Age, the LED will display “0.0”, then you can start measuring.



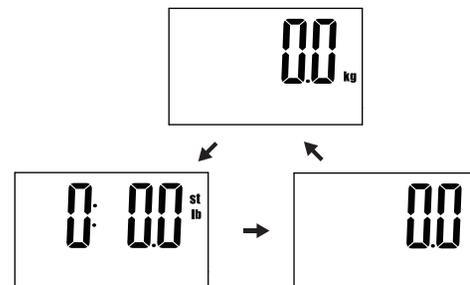
- Repeat procedure for a second user, or to change user details.

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

Note: You may also set up your profile in the APP, when your smartphone is successfully paired with your scale, the personal profile will be transmitted to your scale via Bluetooth.

♥ 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, stone and pound.



♥ Initialising Your Scale

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

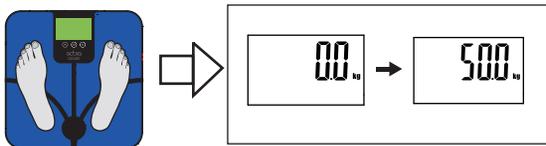


3. The scale will switch off and is now ready for use.
This initialisation process must be repeated if the scale is moved.
At all other times step straight on the scale.

♥ Weight Only Operation

Your TRANSTEK Body Fat Analyzer 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.

Note: The weight value won't be saved in the scale, and won't be transmitted to the APP.

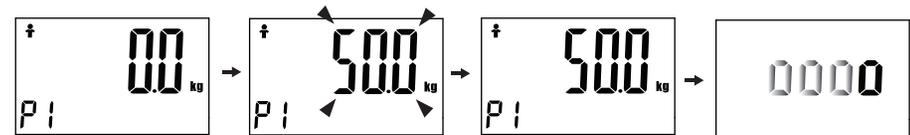
♥ First Measurement

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

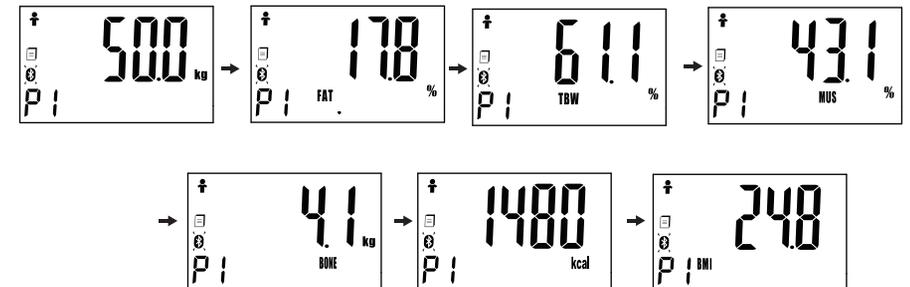
STEP 1: Step on the platform barefooted when the LED display "0.0".



STEP 2: Stand still and the weight data will be locked with blinking twice when the weight is stable. Keep full contact with the scale until the LED stops displaying moving "o".



STEP 3: The measurement results will be displayed followed by Weight, Body Fat, Total Body Water, Muscle Mass, Bone Mass, Kcal and BMI. The data will be displayed three times and then turn off.



* If it fails to complete the analysis, the LED will only display the weight data.
(To find out the solutions, please refer to [Troubleshooting](#) for more details.)

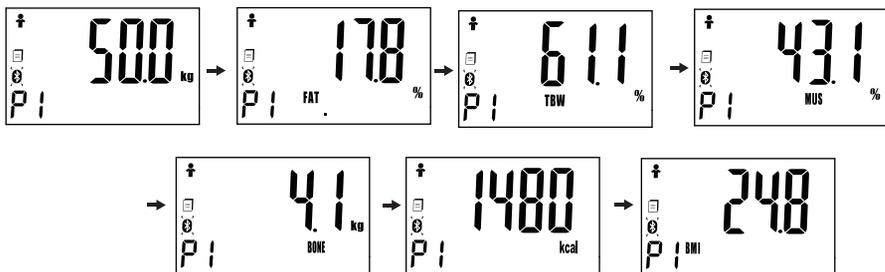
- When your scale is successfully paired with your smartphone and the Bluetooth is ON, LS208-B8 will process data transmission instead.
(Please refer to [Data Transmission](#) for more details.)

♥ Daily Measurement

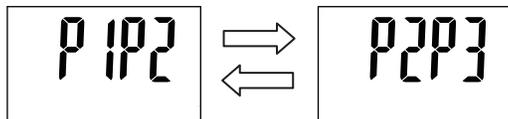
- With original SENSE ON patent technology, LS208-B8 will switch on as you step on the platform barefooted.
- Stand still and keep full contact with the scale until the LED stops displaying moving “o”.



- After the weight is locked, if identify the stored weight is during this weight within +/-3 kg, it will identify the specific user ID.
- If it identifies one user, it will skip the step about user selection, then display the Weight, Body Fat, Total Body Water, Muscle Mass, Bone Mass, Kcal and BMI data sequentially three times and turn off.



- If it identifies two or more users, for example, P1, P2 and P3, the LED will display these users alternately two times, you may press the function key or to choose the 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 LED will only display the weight data then shutdown.

(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, LS208-B8 will process data transmission instead.

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

♥ Data Transmission

- With LS208-B8 successfully pair-up with your smartphone, the measurement data will be transmitted to your mobile via Bluetooth.
- ONLY when the measuring results are attached to a specific User ID will it be transmitted to your mobile after measurement.
- The symbol will disappear after successful data transmission, and you may check your personal health data stored in your smartphone.
- If the data transmission fails, the symbol will remain. The pending measurement data will be temporarily kept in the scale and transmitted to your smartphone 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 4.0 end.

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. | Stop using this scale for measurement. |
|  | Low Battery. The device will power off. | Replace all four batteries in the same time. Please purchase the authorized batteries for replacement. |
|  | Failure of pairing up your scale with your smartphone. | Please check below items: -Bluetooth is ON. -App Collector is ON. -Both devices are within the transmission distance of Bluetooth. |
|  | There has data doesn't upload. (The notebook icon will be displayed.) | Upload the data. |

♥ 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. | Your feet are too dry. | Wipe your feet with a damp cloth, keeping them slightly damp when starting measurement. |
| | Batteries not yet installed. | Install the batteries. (Please refer to Insert the Batteries) |
| No display on LED when the device powers on. | Worn batteries. | Replace all four batteries at the same time. Please purchase the authorized batteries for replacement. |
| | Step onto the platform wearing socks or shoes. | Please keep barefooted during the measurement, and keep full contact with the scale as well. |
| CANNOT proceed to analyze calorie, BMI, body fat, total body water, muscle mass and bone mass. | The system cannot identify the possible User ID with most similar data. | Please assign a User ID following the instruction in Set Up Your Profile . |
| | The user fails to select the User ID from what the system found. | Please assign a User ID following the instruction in Set Up Your Profile . |
| 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. |
| | The App is OFF. | Press the icon to turn ON your app. |
| | Out of range of Bluetooth transmission. | Place your smartphone closer to the scale. |
| | None of the user ID is assigned. | Please assign a User ID following the instruction in Set Up Your Profile . |

♥ Specifications

| | |
|--|--|
| Product Name | Body Fat Analyzer (LS208-B8) |
| Dimension | Scale: 320x320x26mm (Approximately) |
| Net Weight | Approximately 1.98kg |
| Display | Digital LED |
| Measurement Unit | Kilogram / Stone/ Pound |
| Measurement Range | 5kg to 180kg / 0st: 11lb to 28st: 5lb / 11lb to 397lb |
| Division | 0.1kg / 0.2lb/1lb (≥20st) |
| Accuracy | 50kg: ±0.3kg; 100kg: ±0.4kg; 150kg: ±0.5kg; 180kg: ±0.7kg |
| Working Environment | Temperature: 5 °C to 40 °C Relative Humidity: ≤90% RH Atmospheric pressure: 86kPa to 106kPa |
| Storage Environment | Temperature: -20 °C to 60 °C Relative Humidity: ≤90% RH Atmospheric pressure: 50kPa to 106kPa |
| Power Source | 6V (Four AAA-size Batteries) |
| Turn on Method | SENSE ON technology |
| Auto-OFF | The scale will turn off after about 15 seconds if there is no operation |
| Accessories | 1. Four AAA-size batteries 2. User Manual |
| Mode of Operation | Continuous Operation |
| Degree of protection | Type BF applied part |
| Software Version | A0 |
| Protection Against Ingress of Water | IP21 |

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 Transtek. *(Please refer to [Warranty](#) for contact information)*

♥ Warranty

- Transtek warrants its products free of defects in materials and workmanship in normal use for a period of FIVE 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 ZHONGSHAN LIFESENSE ELECTRONICS CO., LTD prepaid. Please return the store receipt (with the retail purchase date) and a note with reasons to return on it as well.

ZHONGSHAN LIFESENSE ELECTRONICS CO., LTD
 23, Jin'an Road, Minzhong, Zhongshan, 528441, Guangdong, China
 Tel: 86-760-88282982
 Website: <http://www.transtek.cn>

♥ FCC Regulations

FCC User Guide Information

Radio Frequency Interface Requirements - FCC

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.

Radio Transmitters (Part 15)

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.

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

FCC RF Exposure Guidelines

Safety Information

Reducing RF Exposure - Use Properly

Only operate the device in accordance with the instructions supplied.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment.

♥ 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:

Table of Body Fat Level (Unit: %)

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

Standard for Men

Standard for Women

| Rating | Age | | | | | Rating | Age | | | | |
|-----------------|---------|---------|---------|---------|---------|-----------------|---------|---------|---------|---------|---------|
| | 20-29 | 30-39 | 40-49 | 50-59 | 60+ | | 20-29 | 30-39 | 40-49 | 50-59 | 60+ |
| low | <13 | <14 | <16 | <17 | <18 | low | <19 | <20 | <21 | <22 | <23 |
| Normal | 13-20 | 14-21 | 16-23 | 17-24 | 18-25 | Normal | 19-28 | 20-29 | 21-30 | 22-31 | 23-32 |
| Moderately High | 20.1-23 | 21.1-24 | 23.1-26 | 24.1-27 | 25.1-28 | Moderately High | 28.1-31 | 29.1-32 | 30.1-33 | 31.1-34 | 32.1-35 |
| High | >23 | >24 | >26 | >27 | >28 | High | >31 | >32 | >33 | >34 | >35 |

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

www.ag.uiuc.edu/~food-lab/ai/bfc.html

♥ 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%

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% |
| | 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

(Source: International Commission on Radiological Protection, 1975)

| | |
|--------------|---|
| 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

(Source: Rico et al. 1993)

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.

The table as follows may be used as a guide:

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

Body Mass Index

♥ 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 | 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. Recommended separation distance $d = \left[\frac{3.5}{V_1} \right] \sqrt{P}$ |
| Radiated RF IEC 61000-4-3 | 3 V/m 80 MHz to 2.5 GHz | 3 V/m | $d = 1.167 \sqrt{P}$ 80 MHz to 800 MHz $d = 2.333 \sqrt{P}$ 800 MHz to 2.5 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 metres (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:  |
| NOTE 1 | At 80 MHz and 800 MHz, the higher frequency range applies. | | |
| NOTE 2 | 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 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. | | | |
| ^b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than $\left[\frac{3.5}{V_1} \right] \text{V/m}$. | | | |

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 |
| For transmitters rated at a maximum output power not listed above, the recommended separation distance <i>d</i> in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where <i>P</i> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. NOTE 1 At 80MHz and 800MHz, the separation distance for the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people. | | | |