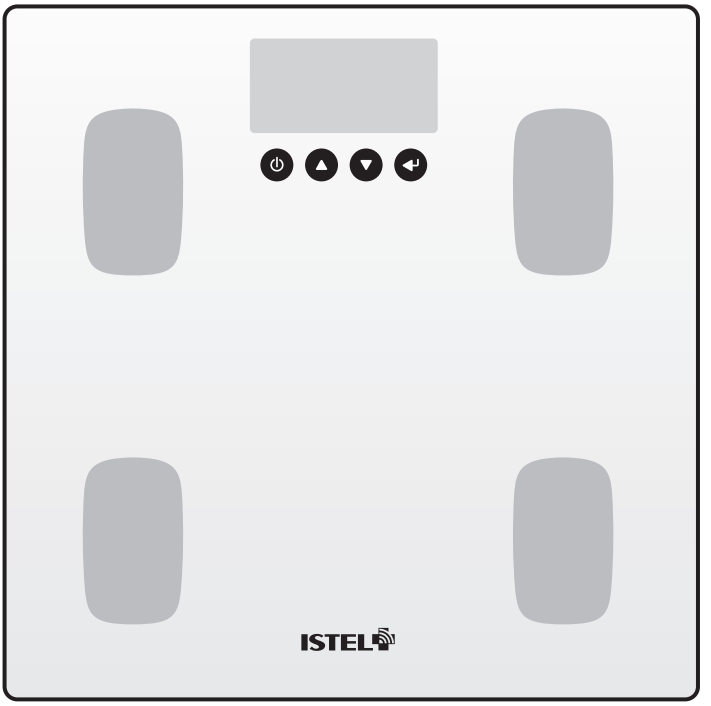
INSTRUCTIONS FOR USE

ISTEL WA-200 BT

BODY COMPOSITION ANALYZER WITH BLUETOOTH®

WITH READINGS FOR WEIGHT, BODY FAT, MUSCLE MASS, BONE MASS, WATER CONTENT AND BMI



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CE

REF 4101

Rev. 2021.03.11 v. 0

1. PURPOSE OF THE PRODUCT

Thank you for purchasing our Istel WA-200[BT] Body Composition Analyzer. The analyzer uses bioelectrical impedance analysis (BIA) to calculate

- TOTAL WATER CONTENT (%) - TBW
- BONE MASS (%) - BON
- MUSCLE MASS (%) - MUS
- FAT TISSUE (%) - FAT
- BMI (BODY MASS INDEX) and KCAL (estimated number of calories a person needs)

Please read these instructions for use carefully before using the device.

2. IMPORTANT SAFETY INFORMATION

Never use this device with the following electronic equipment:

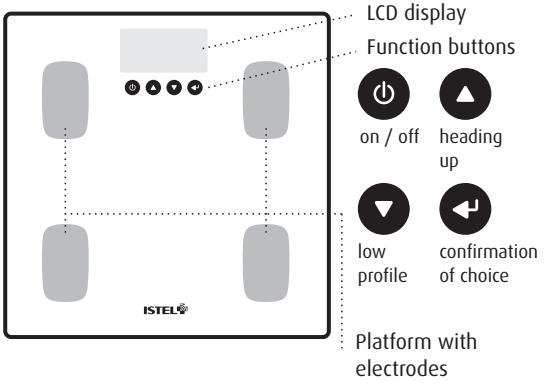
- medical implants, pacemakers, artificial limbs, metal plates or screws, etc.
- electronic life-support equipment, i.e. artificial heart, lung, etc.
- portable electronic medical devices, i.e. electrocardiograph, etc.

- The device is not intended for use bypregnantwomen.
- Do not step on the analyzer with wet feet or when the surface is wet, it may cause a risk of slipping.
- Do not use the device on ceramic tiles or other surfaces that may be slippery, such as a wet floor.
- To avoid injury, do not step on the edges of the analyzer.
- Swallowing batteries can be life threatening. Keep the analyzer and batteries out of the reach of children. If a battery is swallowed, seek medical attention immediately.
- Do not disassemble, repair or modify the device yourself. If you have any problems, please contact Diagnosis.
- The device is intended for use by children aged 10–17 and adults aged 18–85 with an inactive or moderate lifestyle.
- The WA-200 BT Analizer is not suitable for use in the professional sports area.
- Do not leave children unattended while using the device.
- The device is intended for use in a domestic environment. Do not use the device outdoors.
- The analyzer must be placed on a stable support to obtain correct measurements.
- Do not subject the device to strong shocks such as vibrations or drop it on the floor (do not place it e.g. on a carpet).
- Never begin weight loss or exercise based solely on the WA-200BT Analyzer's performance ratings. Contact your doctor or specialist.
- Percent body fat and total water content are variable. Their values are affected by dehydration or excessivewaterretention, due to, .e.g. alcohol consumption, menstruation, illness, heavy exercise, etc.

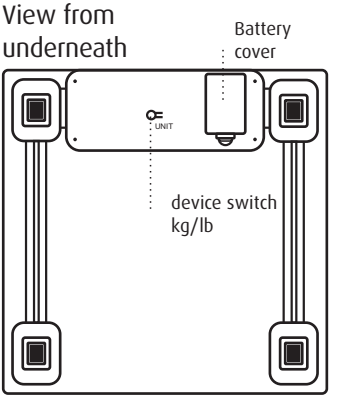
- Use only recommended batteries, do not recharge disposable batteries and do not dispose of them in a fire. (See Preparation before use page 3).
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they can be supervised or instructed on its use by a person responsible for their safety.
- The weighing surface is made of glass. In case of a fall, it may break, which may result in injuries from glass fragments.
- This device may only be used for its intended use as described in the instructions for use. The manufacturer is not responsible for damage caused by improper use of the device.
- The device has sensitive components and must be handled with care.
- Please observe the storage and operating conditions (see Technical Data page 9).
- Protect the device from water and moisture, extreme temperatures, shock, dropping, dust, direct sunlight, heat and cold.
- Do not use the device if it is damaged.
- If the device is not used for a long time, remove the batteries.
- Never repair the device yourself, any unauthorized intervention will void the warranty.
- Do not disassemble the analyzer — there are no user serviceable parts inside. The device may be damaged due to improper handling.
- If you do not the device for a long time, it is recommended to remove the batteries.
- If the scale becomes dirty, gently dampen a cloth in water or mild detergent, squeeze well and wipe the scale. Finally, wipe with a soft and dry cloth.
- Do not subject the device to shocks or vibrations (e.g. dropping it on the floor).

3. DESCRIPTION OF WA-200[BT] ANALYZER

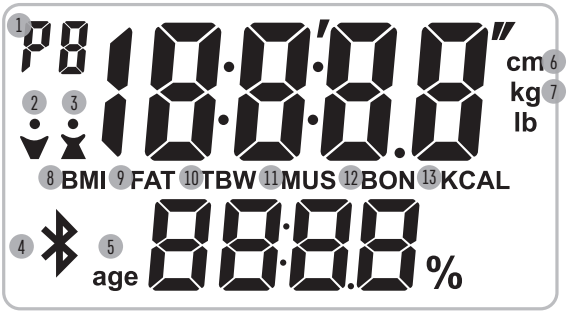
Front view



View from underneath



DESCRIPTION OF ELEMENTS



1. User icon (number of users: 8)
2. Gender icon: male
3. Gender icon: female
4. Bluetooth icon
5. Age
6. Height in cm
7. Weight reading in kg or lb
8. BMI – Body Mass Index
10. FAT — Fat tissue (%)
11. TBW — Total body water (%)
12. MUS — Muscle Mass (%)
13. BON — Bone mass (%)
14. KCAL — kilocalories

4. PREPARATION BEFORE USE

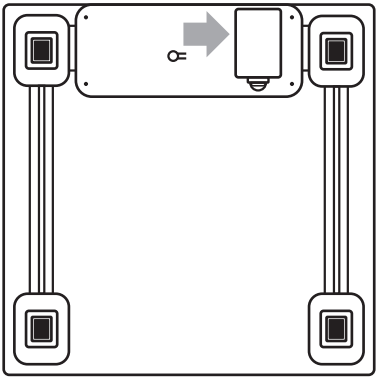
4.1. INSERT BATTERIES

Open the battery cover on the back of the analyzer. Insert 3 AAA batteries correctly.

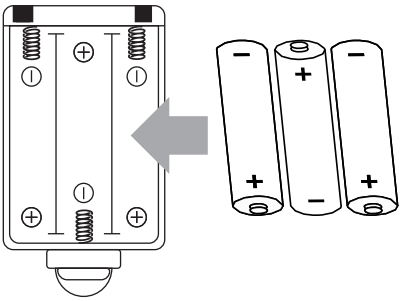
NOTE

Replace the batteries when "Lo" appears in the display.

Opening the battery cover



3 x AAA batteries placement direction



NOTE

- Place the batteries according to the symbols in the battery compartment. Ensure that all batteries are correctly inserted according to their polarity.
- Incorrect placement of batteries may cause leakage.
- Do not mix new and used batteries.
- Use AAA alkaline batteries. Do not use any other type of battery.
- Battery life is dependent on ambient temperature, battery type and usage.
- Remove the batteries, if the analyzer is used for an extended period of time.
- Storing batteries in the device may cause fluid to leak out, resulting in damage.

4.2. SET UP THE ANALYSER IN THE CORRECT POSITION

Use the analyzer on a flat and hard floor surface.
Do not use the device on carpets or wet surfaces.

NOTE

To avoid injury, do not stand on the edge of theplatform.

NOTE

To avoid injury, do not stand with wet feet.

4.3. USER PROFILE SETTINGS

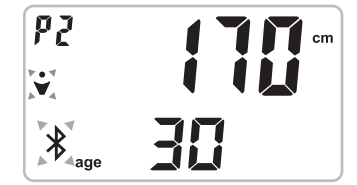
Before performing a full body composition analysis, the following data must be entered into the WA-200[BT] Analyzer: height, age, and gender of the user. Once entered, the data is saved and there is no need to enter it again except to make a change.

Edit user profile
Press and hold button for 2 seconds to turn analyzer on ⏻. Then press ▼ or ▲ to select the user profile (from 1 to 8). Press ↵ to confirm the settings.

Set the height
A flashing growth icon will appear. Press the button ▼ or ▲ to set the height. Press ↵ to confirm the settings.

Set age
A flashing age icon will appear. Press the button ▼ or ▲ to set the age. Press ↵ to confirm the settings.

Set gender
A flashing gender icon will appear. Press ▼ or ▲, to switch between male ♂ and ♀ female. Press ↵ to confirm the settings.

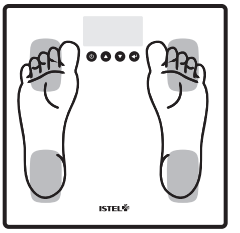


When the settings are complete, the analyzer will display "0.0" — you can perform a full body composition analysis on the profile you set.

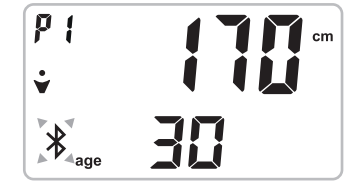
5. MEASUREMENT

5.1. FULL BODY COMPOSITION ANALYSIS

- For the device to correctly perform a full body composition analysis, you must properly place your feet on the electrodes.

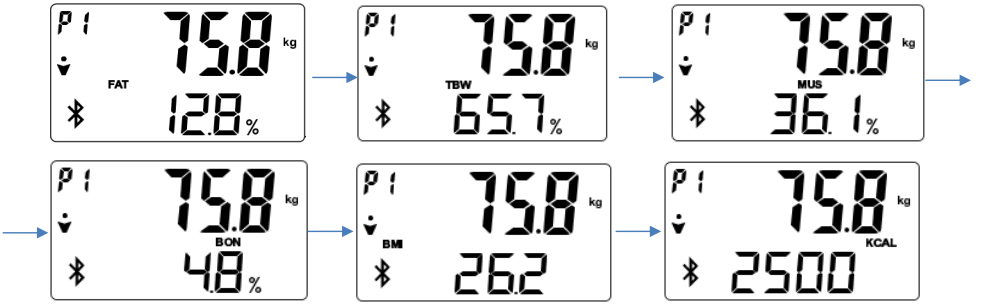


To perform a full body composition analysis: stand barefoot on the platform with the device turned off. The analyzer will indicate on the display for about 2 seconds the last selected user and its parameters.



The device will then go into full body composition measurement mode. During the measurement, have an upright posture and remain still. A progress bar will be displayed on the analyzer.

Then the measurement result of the full body composition analysis will appear on the screen. The individual measurement results will be displayed while standing on the analyzer for approximately 1 minute, and will disappear after approximately 15 seconds when stepping off the analyzer.
The individual parameters will be displayed in the following order: FAT — body fat, TBW — total body water, MUS — muscle mass, BON — bone mass, BMI — body mass index and kcal.



5.2. WEIGHT MEASUREMENT

To measure weight, press ⏻ and hold for 2 sec. When "0.0" appears on the display — stand on the analyzer. The measurement result is displayed when standing on the analyzer for approximately 2–3 minutes and disappears automatically after getting off the device.

5.3. SHUTTING DOWN THE ANALYSER

Press and hold the button ⏻ for approximately 2 sec. to shut the analyser off. Automatic shutdown occurs after approximately 60 seconds of inactivity.

6. WIRELESS COMMUNICATION FUNCTION

The WA-200BT analyzeruses Bluetooth® LowEnergytechnology.
The WA-200BT analyzerhas a dedicated free Istel Health application.

To start using the Istel Health application, download it from the Google Play Store, Apple App Store and install it on your smartphone/tablet.

7. TROUBLESHOOTING

The screen remains dark even though the device is turned on.
Check if the batteries are correctly positioned — see Preparation before use p. 3

The symbol "LO" is displayed
The batteries are low. Replace the batteries.

The message "---" is displayed.
Get off the analyzer and wait for it to automatically shut down. The analyzer is ready for use again.

"Err 0" is displayed.
Error during startup. Get off the analyzer and wait for it to automatically shut down. The analyzer is ready for use again.

"Err 1" is displayed.
The position during measurement is unstable. Get off the analyzer and wait for it to automatically shut down. The analyzer is ready for use again. Remain still during the measurement.

"Err 2" is displayed.
Weight overload warning. Get off the device immediately.

"Err 3" is displayed.
Measurement error. Impedance cannot be measured. Make sure you stand still and maintain maximum contact between your bare feet and the metal electrodes (make sure your feet are positioned correctly on the electrodes). If not, refer to Preparation before use p. 3.

Unable to resolve "Err 1" to "Err 3" messages
If errors persist after corrective action, remove the batteries and reinsert them after 1 minute.

If, despite corrective action, you still cannot resolve the problem, contact the service. Please have your analyzer with you when you call. This will allow your questions to be answered quickly.

Keep the device away from children and pets. Some parts of the device are small and can be easily swallowed.

8. SYMBOLS

⊕ AAA ⊖	Battery terminal marking		Warnings
	Protect against moisture		Directcurrent
	Bluetooth connectivity	SN	Serial number
	Humidity		Manufacturer
	Temperature	Rev.	Date of last revision
	Keep away from sunlight	REF	Product part number
	Please read the instructions for use before use		

Take used product and batteries to a waste collection point. Contains components hazardous to the environment. By disposing of your device correctly, you can keep valuable resources and avoid negative effects on your health and the environment, which may be compromised by inappropriate waste handling. If you have any doubts where to return the used device, please contact Diagnosis.

9. PRODUCT TECHNICAL SPECIFICATION

Data transmission method	Bluetooth 4.0 Low Energy bioelectrical impedance (BIA)
Measurement method	Body weight, total water %, body fat %, bone mass %, muscle mass % and BMI and kcal
Measurement	Glass
Platform material	8 users
Number of users Maximum load	180 kg, 400 lb
Scale resolution	0.1 kg or 0.2 lb
Measurement resolution for body fat, total body water and bone and muscle mass	0.1%
Age range	10-85 years
Growth range	75 to 225 cm
Body fat range	4 - 60%
Water content range	29 - 70%
Power supply	3 AAA alkaline batteries
Display size	80 mm (W) x 42 mm (H) approx. 300 x 300 x 20 mm
Product dimensions	1.70 kg
Product weight	±0.5 kg(7.5-65 kg); ±0.8 kg (65-135 kg); ±1.2 kg (135-182 kg), ±1.1
Measurement accuracy	lb (11-143.3 lb); ±1.8 lb (143.3-297.6 lb); ±2.6 lb (297.6-400 lb)
Analyzer output power	<300 uA
Conditions of use	Temperature: 15 - 35°C (59 - 95°F) Humidity: 30 - 85% RH
Transport and storage conditions	Temperature: -20 - 50°C (-4 - 122°F) Humidity: 30 - 85% RH
Additional information	4-button operation Auto shut-off function Change devices (kg/lb)
Contents of the package	Body composition analyser, Instructions for use, AAA alkaline batteries (3 pieces)

The manufacturer reserves the right to change technical parameters without prior notice.

10. ADDITIONAL INFORMATION

1. Why is it important to monitor body fat levels?

Body weight is the primary indicator to determine if a person is obese. The change in body weight, on the other hand, does not indicate whether fat or muscle weight has changed. During weight loss, it is important to retain muscle mass and lose fat mass. Therefore, monitoring body fat percentage is an important step to achieving normal body parameters. The optimal % body fat(FAT) for a person depends on their age and gender. The following table can be used to help interpret the result. Remember that you should not make any treatment decisions without first consulting your doctor or specialist.

Standard for men

Level	Age				
	20-29	30-39	40-49	50-59	60+
Low	<13	<14	<16	<17	<18
Optimal	14-20	15-21	17-23	18-24	19-25
Moderate	21-23	22-24	24-26	25-27	26-28
High	> 23	>24	>26	>27	>28

Standard for women

Level	Age				
	20-29	30-39	40-49	50-59	60+
Low	<19	<20	<21	<22	<23
Optimal	20-28	21-29	22-30	23-31	24-32
Moderate	29-31	30-32	31-33	32-33	33-35
High	>31	>32	>33	>34	>35

People who practice sports often have low body fat levels. Depending on the sports discipline, training intensity and body build, values below these guide values can be achieved. However, it is important to remember that very low values of body fat percentage are a health risk.

2. How is the body fat percentage (FAT) calculated?

The percentage of body fat is measured by bioelectrical impedance analysis (BIA). It involves sending weak and harmless electrical signals through the body. Depending on the amount of body fat, the signal will travel with different resistance. This resistance is called electrical impedance. Using an appropriate algorithm, the percentage of body fat can be assessed. Important: the sum of body fat percentage and total body water content does not give 100%.

Remember that % of body fat calculated by the device is only an approximation of your actual body fat level. There are clinical methods for calculating FAT that can be recommended by your doctor.

3. Why is monitoring total body water (TBW) important?

Water is an essential component of the body, and its level is one of the indicators of health. Water is approximately 50-70% of your total body weight. There is proportionally more of it in fat-free mass than in adipose tissue. Water is a carrier of biochemical reactions that regulate body functions. The products of metabolism are transported out of the cells in water and then excreted outside the body with sweat and urine. Water gives shape to cells, helps maintain body temperature, hydrates skin and mucous membranes, helps cushion internal organs, hydrates joints, and is a component of many body fluids. The amount of water in the body changes with hydration levels and health. The calculation of TBW is also based on the bioelectrical impedance analysis method BIA.

The estimated TBW value varies depending on the level of hydration, i.e. the amount of fluid absorbed or the degree of fluid sweating shortly before the measurement. For better accuracy, it is recommended to avoid large changes in hydration level before taking the measurement. Accuracy in TBW assessment decreases with disease, that cause water to build up in the body. The optimal % TBW for a person depends on their age and gender.

The following table can be used to help interpret the result. Remember that you should not make any treatment decisions without first consulting your doctor or specialist.

	Range of %BF	Optimum range of % TBW
Men	4 do 14%	70 do 63%
	15 do 21%	63 do 58%
	22 do 24%	58 do 56%
	25 do 60%	56 do 29%
Women	4 do 20%	70 do 59%
	21 do 29%	59 do 52%
	30 do 32%	52 do 50%
	33 do 60%	50 do 29%

Remember that TBW calculated by the device is only an approximation of your actual TBW. There are clinical methods for calculating TBW that can be recommended by your doctor.

4. When should I use the body fat and total body water calculations?
For best accuracy and repeatability, parameters should be calculated at the same time of day (e.g. in the morning before breakfast). It is also recommended to avoid large changes in hydration levels prior to measurement. It is also important to determine your personal basal body fat and total body water values and then track their changes.

5. What is muscle mass (%MUS)?
The device calculates by BIA also the percentage of body muscle mass. There are about 640 muscles in the human body and they make up a significant portion of its mass (about 30-50% of body weight). Muscles can be divided into three groups: skeletal muscle, smooth muscle, and cardiac muscle. They have the following functions, among others: skeletal muscles - allow movement, maintain posture, stabilize the joints; smooth muscles: lining the walls of the organs; cardiac muscle - an essential part of the heart structure. The following table can be used to help interpret the result.
Remember that you should not make any treatment decisions without first consulting your doctor or specialist.

Men

age	low	normal	high
10-14	<44%	44 - 57 %	>57 %
15-19	<43%	43 - 56 %	>56 %
20-29	<42%	42 - 54 %	>54 %
30-39	<41%	41 - 52 %	>52 %
40-49	<40%	40 - 50 %	>50 %
50-59	<39%	39 - 48 %	>48 %
60-69	<38%	38 - 47 %	>47 %
70-100	<37%	37 - 46 %	>46 %

Women

age	low	normal	high
10-14	<36%	36 - 43 %	>43 %
15-19	<35%	35 - 41 %	>41 %
20-29	<34%	34 - 39 %	>39 %
30-39	<33%	33 - 38 %	>38 %
40-49	<31%	31- 36 %	>36 %
50-59	<29%	29 - 34 %	>34 %
60-69	<28%	28 - 33 %	>33 %
70-100	<27%	27 - 32 %	>32 %

Remember that MUS calculated by the device is only an approximation of your actual MUS. There are clinical methods for calculating MUS that can be recommended by your doctor.

6. What is bone mass (%BON)?
The WA-200[BT] body mass analyzer also estimates the percentage of bone mass. Proper exercise and a diet rich in calcium are important for maintaining healthy bones. The skeleton of an adult human consists of 206 bones that have different shapes and sizes, as well as a specific structure. Bone mass is greater during childhood and decreases with age.
The typical range of percent bone mass (mineral component mass) for the average man and woman is 4 to 5.3 percent (Source: Rico 1993).
Remember not to confuse bone mass with bone density. Bone density can only be determined by medical examination, so conclusions on bone changes and bone hardness using an analyzer are not possible.

7. What is body mass index (BMI)?
Body Mass Index (BMI) is a value that is often used to assess body weight. Size is calculated based on body weight and height. Formula for BMI: body weight (kg) / height (m)^2.
The following table can be used to help interpret the result.
Remember that you should not make any treatment decisions without first consulting your doctor or specialist.

BMI for adults aged 19-99

BMI	Classification
30 and over	Obesity
25 -29.9	Overweight
18.5 - 24.9	Normal weight
Under 18.5	Nevertheless

Note that for people with significant muscle mass (e.g. bodybuilders), interpretations of BMI indicate overweight. This is due to the fact that above average muscle mass is not included in the BMI index.

8. What is KCAL?
Kcal means kilocalories. The analyzer has a calorie prediction function — an estimate number of calories a person needs. It is determined based on body composition and personal information entered by the user. This tool can be helpful when setting weight loss and exercise goals.

Never start weight loss or exercise based solely on the parameters of the WA-200BT Analyzer. Contact your doctor or specialist.

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shop stamp and seller's signature

WARRANTY CARD

DEVICE NAME . . . . . .

MODEL. . . . . .

SERIAL NUMBER. . . . . .

DATE OF SALE . . . . . .

WARRANTY CONDITIONS

1. Diagnosis S.A. provides a guarantee:
   - 24 months for Istel WA-200^{BT} analyzer

Equipment defects revealed during the warranty period will be repaired free of charge within 21 days. The time limit is counted from the date of delivery of equipment to the service.

2. The purchaser has the right to replace the equipment with defect-free equipment if:
   - the repair has not been carried out within the period specified in point 1
   - an authorized service centre has found a factory defect that cannot be repaired
   - 4 repairs were made during the warranty period, and the equipment still shows defects which make it impossible to use for its intended purpose.

The term repair does not include activities related to checking and cleaning the equipment.

3. .The warranty does not cover batteries, products with an illegible or damaged serial number, damage resulting from improper handling or storage, liquids or foreign bodies getting inside, surges in the mains, repairs by unauthorized persons and random events.
4. The purchaser should deliver the defective equipment to the main service address.
5. The warranty for sold consumer goods does not exclude, limit or suspend buyer's rights resulting from the non-conformity of goods with the contract.
6. The only basis for warranty rights is the warranty card with the date of sale, stamp and signature of theseller. The card that is not filled in, incorrectly filled in, with traces of corrections and entries by unauthorised persons, illegible as a result of damage - is invalid.

Before sending the device for repair, please clean it beforehand from any kind of dirt.

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