

# BT-200V (Hi-dop)

## **Operation manual**



**BT-200V** 

Keep this manual for future reference

P/N: 200V-ENG-OPM-EUR-R06

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## 1. Safety information

## 1.1. Instructions for the Safe Operation and Use

#### **Symbols used:**

The following symbols identify all instructions that are important to safety. Failure to follow these instructions can lead to injury or damage to the device. When used in conjunction with the following words, the symbols indicate:

**WARNING** Can lead to serious injury or product/property damage.

The following symbols are placed on product, label, packing and this manual in order to stand for the information about:

Symbol	Standard/Symbol Reference no.	Description
$\triangle$	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.4.4	Used to identify safety information for caution. Be well-known this information thoroughly before using the device.
☀	IEC 60417 — Graphical Symbols for Use on Equipment / 5333	Indicates the BF applied part.
IPX2	IEC 60529 Degrees of protection provided by enclosures	Indicates the protection level against the ingress of solid object and liquid.  IPX2 is protection against vertically falling water drops when enclosure tilted up to 15°. (See the available probe in BT-200V specification table of 2.3 Product Configuration)
	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.1.3	Indicates the manufacturer.
	ISO 7010 — Graphical symbols — Safety colours and safety signs — Registered safety signs / M002	Refer to the operation manual. Read the manual before placing the device.
[]i	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.4.3	Refer to the operation manual. Indicates the need for the user to consult the instructions for use.
SN	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.1.7	Indicates the serial number of the device.

EC REP	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.1.2	Indicates the authorized representative in the European Community of manufacturer.
X	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.3.7	Indicates the temperature limitation for transport and storage.
<u></u>	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.3.8	Indicates the humidity limitation for transport and storage.
<b>C €</b> 2460	European Medical Directive 93/42/EEC	The product is in conformity with European Medical Directive 93/42/EEC. Notified body identification numbers with CE mark indicate that this has been verified by the notified body.
	Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) EN 50419 Marking of electrical and electronic equipment	This product may contain material which could be hazardous to human health and the environment. DO NOT DISPOSE of this product as unsorted municipal waste. This product needs to be RECYCLED in accordance with local regulations, contact your local authorities for more information. This product may be returnable to your distributor for recycling - contact the distributor for details.
MR	ASTM F2503-13 Standard practice for marking medical devices and other items for safety in the magnetic resonance environment	This symbol means an item is known to pose hazards in all MRI environments.

According to IEC 60601-1-6 General requirements for basic safety and essential performance
 Collateral Standard: Usability, the definition and using these symbols is adjusted.

## 1.2. Warnings

## **MWARNING**

- Do not use the device without consultation of medical professional.
- The relevant law restricts this device to sale by or on the order of a physician.
- Use the Bistos original accessories.
- Do not touch or operate the device with wet hands to avoid electric shock.

- Do not use the device during the use of defibrillators or during defibrillator discharge.
- Do not use the device in the presence of electrosurgical equipment.
- Do not use the device during the use of RF surgical equipment.
- Do not use simultaneously the device to whom that has any active implantable or bodyworn medical device including pacemakers, ICDs, neurostimulators and insulin pumps.
- The device is not specified or intended for operation in conjunction with any other type of monitoring equipment except the specific devices that have been identified for use in this Manual.
- Do not use in the out of range for humidity, temperature and atmospheric pressure environment indicated in this manual.
- Keep the operating environment free of dust, vibrations, corrosive or flammable materials and extremes of temperature and humidity.
- Do not use the device in a flammable atmosphere where concentrations of flammable anesthetics or other materials may occur.
- Do not disassemble or modify the device. The device only has the specified safety and performance when it is manufactured by the manufacturer.
- Do not attempt to repair the device. Only qualified service personnel by Bistos Co., Ltd. should perform.
- The device including probe may be broken when dropped or impacted.
- Do not use the damaged devices.
- Examine the device and any accessories periodically to ensure that there is no visible
  evidence of damage that may affect patient safety or performance. The recommended
  inspection interval is once per week or less. Do not use the device if there is any visible
  sign of damage.
  - Do not operate the device if it fails to pass the power on procedure.
- Use of accessories including probe or cables other than those specified or provided by the
  manufacturer of this equipment could result in increased electromagnetic emissions or
  decreased electromagnetic immunity of this equipment and result in improper operation.
- Medical electrical equipment needs special precautions regarding EMC and needs to be
  installed and put into service according to the EMC information provided in this manual.
  Portable RF communications equipment (including peripherals such as antenna cables and
  external antennas) should be used no closer than 30 cm (12 inches) to any part of the
  device, including cables specified by the manufacturer. Otherwise, degradation of the
  performance of this equipment could result.
- Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
- When disposing of the device, adhere to all applicable laws regarding recycling.
   When handling package materials, abide by local waste disposal laws and regulations.
   Properly dispose of or recycle the depleted battery in accordance with local regulations.

#### 1.3 General Precaution on Environment

- Do not keep or operate the equipment under the environment listed below.

	Avoid placing in an area exposed to moisture. Do not touch the equipment with wet hand.	Avoid exposure to direct sunlight
	Avoid placing in an area where there is a high variation of temperature. Operating temperature ranges from 10°C to 40°C. Operating humidity ranges from 30% to 85%.	Avoid in the vicinity of Electric heater
FACT	Avoid placing in an area where there is an excessive humidity rise or ventilation problem.	Avoid placing in an area where there is an excessive shock or vibration.
	Avoid placing in an area where chemicals are stored or where there is in danger of gas leakage.	Avoid dust and especially metal material into the equipment.
603h	Do not disjoint or disassemble the equipment. BISTOS Co., Ltd. does not take responsibility of it.	Power off when the equipment is not fully installed. Otherwise, the equipment could be damaged.

#### 2. Introduction

#### 2.1. Intended use

BT-200V is a pocket-size fetal Doppler intended to the detection of fetal heart rate from early gestation thru delivery and as a general indication of fetal well-being; and output the sound of fetal heart beat through built-in speaker.

There are no known contraindications.

#### 2.2. Device description

The HI•dop, BT-200V is a pocket sized ultrasonic fetal monitor that measures heart rate, which is displayed on an LCD display, and outputs fetal heart sounds through a built in speaker. The heart rate information of fetus can be obtained through the abdomen of the mother by using the Doppler effect. There are two ultrasonic sensors at the end of the probe, and one ultrasonic sensor generates ultrasonic waves using the piezoelectric inverse effect (when a voltage is

applied, the piezoelectric material causes shape deformation), and the reflected signal is obtained from another ultrasonic sensor using piezoelectric direct effect (when the pressure is applied to the piezoelectric material, an electric potential is generated)

#### 2.3. Product Configuration

HI•dop, BT-200V consists of the following. Unpack the package and check out the following items. Also be sure to check any damage of main body, probe and accessories.

- The monitor and probe (Refer to the below table)
- 2 1.5V Battery(2EA)
- ③ User's manual (1EA)
- 4 Carrying case (pouch, 1EA)



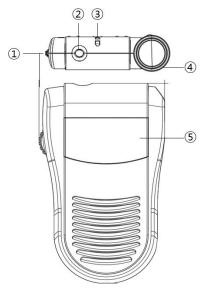
#### **BT-200V Specification table**

Series		BT-200V
Diamlari	LCD type	Mono LCD
Display	Heart rate range(bpm)	50~240 ±2%
Ultrasour	nd frequency (MHz)	2, 4, 5, 8
Prob	e Water proof	IPX2
Probe type		Integral type
Available accessories		detachable, AY-DOP-200V(2M); AY-DOP-200V(4M); AY-DOP-200V(5M); AY-DOP-200V(8M);
Audio output		1.2W speaker, 3.5mm phone jack
Auto shut off		Sound mute: 1min. Power off: 5min.

Series	BT-200V
Power	1.5V battery *2 (AA Type)
Battery life	280min.

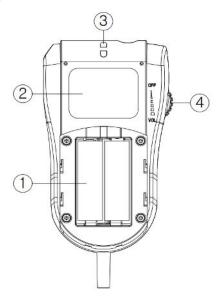
## 2.4. Exterior Component Designation

#### O Front View & Top View



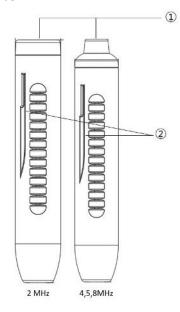
- (1) Power and Volume Switch
- 2 Ear phone jack
- 3 Ring for necklace
- (4) Probe holder
- (5) LCD display

#### O Rear View



- Battery compartment
- ② Label
- 3 Ring for necklace
- (4) Power and Volume Switch

#### O Probe



- 1 Transducer
- ② Groove joint

### 3. Operation

#### 3.1. Operation requirements

- The ambient temperature and humidity of the HI•dop, BT-200V should to be 10  $^{\circ}$ C  $^{\sim}$  40  $^{\circ}$ C and 30%  $^{\sim}$  85%.
- Handle with care.
- Avoid dust or flammable materials.
- When changing the batteries, make sure the batteries are inserted correctly.
- When detaching the probe from the main body, slide the probe upwards to prevent damage.

#### 3.2. How to use?

- Turn the power and volume switch counterclockwise to turn the device on and adjust the volume level.
- Apply a liberal amount of ultrasound gel to the face of transducer (end of the probe).
- If use 4,5,8MHz probe, hold the probe softly against the measurement area at an angle of approximately 45 degrees to the skin surface (see figure 1). Place the probe on the skin and move slowly to locate the point where maximum Doppler sounds are heard.



Figure 1.

• If use 2 MHz probe, place the probe on the measurement area at a 90-degree angle (see figure 2.) and move slowly to locate the point where fetal heart sounds are at the maximum. Or place the transducer directly against the abdomen, just above the point where the pelvic bones meet.

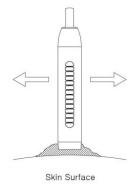


Figure 2.

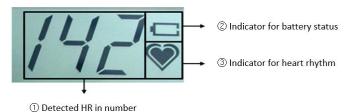
- Search for the fetal heart by slowly moving the probe around until the fetal heart sounds are heard
- Search for the position which can get the clearest heart sound.

#### NOTE

• Use the device with the ultrasound gel that has CE MARK

#### 3.2.1. HI • dop LCD

- When the input signal is good and stable, FHR will appear on the screen and the solid heart rhythm indicator will flash as shown in Figure.
- When the input signal is not stable, the outline heart rhythm indicator will flash.
- If the voltage level of battery is lower than the required level, the battery low message" bat Lo" will appear. In this case, the unit will not functional correctly and the batteries should be replaced.



#### 3.2.2. HI • dop Sound

• FHR measuring method : Calculate the FHR for 1 minute.

#### 3.3. Basic clinical information

- The fetal heart rate range is normally between 120 160 BPM (beats per minute).
- When the fetal heart rate remains outside of this normal range for an extended period, please seek advice from your obstetrician.

#### 3.4. Monitoring sequence overview

#### Step 1: Preparing the Fetal Doppler

- Turn the monitor on and verify that the normal monitoring screen appears on the display. Do not use the BT-200V if an error occurs.
- Check is powered from the AA battery.
- Apply ultrasound gel to the face of the transducer.

#### > Step 2: Acquiring the Fetal Heart Signal

- Determine the location of the fetal heart using palpation or a fetoscope. Place the transducer on the maternal abdomen and listen for the fetal heart signal. Reposition the transducer for the loudest fetal heart signal and verify the heart icon on the screen is blinking at the fetal heart rate.
- Secure the ultrasound transducer. Make sure the transducer is still positioned for the loudest fetal heart signal.
- Verify the monitor is displaying fetal heart rate values and that the heart icon on the screen is blinking at the measured heart rate.

#### > Step 3: Monitor Adjustments

- Readjust the volume settings for the desired loudness.

## 4. Cleaning and disinfection

The BT-200V requires proper control and preventive maintenance. This ensures consistent operation and maintains the high level of performance necessary in monitoring procedures.

#### 4.1 Monitor

Keep the external surface clean and free of dust, dirt, and residual liquids. Clean with a damp cloth using mild soap and water or hospital approved nonabrasive disinfectants.

## **⚠** WARNING

- Do not immerse the unit and transducer in water or allow liquids to enter the case. When using solutions, use sterile wipes to avoid pouring fluids directly.
- Take extra care when cleaning display surface, which are sensitive to rough handling. Rub the lens that covers them with a soft, dry cloth.

#### 4.2 Probe

To avoid damage to the transducers, clean and disinfect according to the following instructions.

## ⚠ WARNING

- Do not autoclave. Do not gas sterilize.
- Do not immerse in liquid. When using solutions, use sterile wipes to avoid pouring fluids directly on the transducer.
- Clean the probe after each use. Turn off the device when cleaning.
- The probe should be kept clean and free of transducer gel and other substances except when used.
- (1) Wipe the device with a sterile wipe soaked in enzymatic detergent safe for use with metal instruments. Wipe the exterior of the device three times. Prepare the detergent according to the manufacturer's recommendations.
- (2) Scrub the transducer with enzymatic detergent using a soft bristled brush for five (5) minutes.

- (3) Wipe the transducer three (3) times with sterile water to remove soap residue.
- (4) Wipe the transducer with a sterile wipe soaked in Cidex™. Wipe all exterior surfaces of the transducer three (3) times.
- (5) Wipe the transducer three (3) times with sterile water to remove Cidex™ residue.
- (6) Dry the device thoroughly with a sterile soft towel or gauze surgical sponge.
- (7) Wrap the dry transducer with a fresh sterile soft towel or transparent sterile wrap for storage until next use.

#### 4.3 Contacting components

Contacting	Material	Disinfection	
component	iviaterial	Distillection	
DOP enclosure	ABS AV20F	Must be cleaned and disinfected prior to use	

#### 4.4 Description of Cidex<sup>™</sup>

- (1) Cidex<sup>™</sup> is FDA-cleared for use in the United States. Therefore, we suggest that the disinfection effect using Cidex<sup>™</sup> is valid.
- (2) FDA-Cleared Sterilants and High Level Disinfectants with General Claims for Processing Reusable Medical and Dental Devices March 2015 (<a href="https://www.fda.gov/medical-devices/reprocessing-reusable-medical-devices-information-manufacturers/fda-cleared-sterilants-and-high-level-disinfectants-general-claims-processing-reusable-medical-and">https://www.fda.gov/medical-devices-information-manufacturers/fda-cleared-sterilants-and-high-level-disinfectants-general-claims-processing-reusable-medical-and</a>)

Manufacturer	Active Ingredient	Sterilant Contact	High Level Disinfectant Contact
		Conditions	Conditions
K924434 Cidex"	K924434 Cidex™ Activated Dialdehyde Solution		
Johnson &	2.4%	10 hrs at 25°C	45 min at 25°C
Johnson	glutaraldehyde	14 days Maximum Reuse	14 days Maximum Reuse
Medical		Contact conditions based	Contact conditions based on
Products		on AOAC Sporicidal	literature references.
		Activity Test only.	

## 5. Troubleshooting and maintenance

Observe all precautions to ensure the safety of the patient and those near the instrument.

- Examine the monitor and any accessories periodically to ensure that the cables, line cords, transducers, and instruments do not have visible evidence of damage that may affect patient safety or monitoring performance. The recommended inspection interval is once per week or less. Do not use the device if there is any visible sign of damage.
- BT-200V Fetal Doppler and accessories do not require periodic calibration or adjustment.
- Perform periodic safety testing to ensure proper patient safety. This should include leakage current measurement and insulation testing. The recommended testing interval is once per year.
- Do not operate the BT-200V monitor if it fails to pass the power on self-test procedure.
- When the displayed condition is not stable, check the battery and replace them.

#### 5.1 Ultrasound transducer test

To test the ultrasound transducer:

- (1) Connect the transducer to the monitor.
- (2) Turn on the monitor.
- (3) Adjust the speaker volume to an audible level.
- (4) Hold the transducer on one hand and tap on the transducer face with the other hand. The tapping sound should be heard from the speaker.
- (5) The transducer is operating properly if you can hear the sound from the speaker. If no sound is heard, please stop using the transducer and call for the service.

#### 5.2 Battery

The capacity of the battery is gradually decreased over time and usage. Consequently, the operating time with the battery can be reduced. If the operation time is not long enough, please changing the battery.



- User can open the battery compartment to replace the battery, and use 2 of AA 1.5V batteries.
- The incorrect battery replacement could be caused danger such as excessive temperatures, fire or explosion.
- If it won't be used the device for a long time (over three months), please store the device with the battery removed.
- When leakage or foul smell is found, stop using the battery immediately, If your skin or cloth
  comes into contact with leaked liquid, cleanse it with clean water at once. If the leaked
  liquid splashes into your eyes, do not wipe them. Irrigate them with clean water first and go
  to see a doctor immediately.

## 6. General information and specifications

- Turn the power off after use. If you do not turn the power switch off, 1 minute later, the sound will be muted automatically. In this case, a single "beep" sound will be heard. 3 minutes later, the system will go to sleep mode. In this case two "beep" sounds will be heard. The display will be turned off. In this mode power very little power is consumed. If you want to wake up the device from sleep mode, turn the power off and then 1 second later turn the switch on by turning the switch counterclockwise.
- 1.5V x 2(AA Type) Batteries are used for the system power. Do not use any other type of battery. Use of the wrong battery type may damage the equipment.
- Do not open the device cover or disassemble the device. Refer servicing to qualified personnel of Bistos Co., Ltd.

General		
MI and TI values do not exceed 1.0.		
Ultrasound center frequency	Refer to the comparison table on page 7	
Intensity	<10 mW/cm <sup>2</sup>	
Heart rate range	50~240 bpm	

FHR accuracy	±2% of range	
Sensitivity	10 ~ 12 weeks onward	
Physical characteristics		
Main body	(L)75 mm×(H)128 mm×(D)26 mm	
Probe	(L)25 mm X (H) 131/139 mm X (D) 25 mm	
Weight(Main body with probe)	190 g	
Electrical safety		
Compliance with IEC 60601-1, IEC 60601-1-2		
Ultrasound Doppler system according to IEC 60601-2-37		
Internally powered equipment		
Type BF applied parts		
Probe waterproof Level IPX2		
Power		
Patton	1.5V X 2 (AA type)	
Battery	About 280 minutes for continuously use	

Environmental conditions				
	Operation Storage			
Temperature	10 °C (50° F) ~ 40 °C (104° F)			
Relative Humidity	30% ~ 85% non-condensing			
Atmospheric pressure	79.051 kPa ~ 101.325 kPa			

#### 7. Declaration on EMC

BT-200V needs special precautions regarding EMC (Electromagnetic compatibility) and needs to be used according to the EMC information provided in this user manual. Wireless communications equipment such as wireless home network devices, mobile phones, cordless telephones and their base stations, walkie-talkies can affect the BT-200V and should be kept at least 1 m away from the equipment.

## **⚠** WARNING

- Use of accessories including probe and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.
- Medical electrical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in this manual. Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the device, including cables specified by the manufacturer. Otherwise, degradation of the

performance of this equipment could result.

- Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
- The device makes a beef sound when an abnormal signal input is provided.

#### 7.1. Electromagnetic emissions

The BT-200V is intended for use in the electromagnetic environment specified below. The customer or the user of BT-200V should assure that it is used in such an environment.				
Emissions test	Compliance	Electromagnetic environment-guidance		
RF emissions CISPR 11	Group 1	The BT-200V uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.		
RF emissions CISPR 11	Class B	The BT-200V is suitable for use in all establishments by using a battery.		
Harmonic emission IEC61000-3-2	Not applicable			
Voltage fulctuations /flicker emissions IEC61000-3-3	Not applicable			

## 7.2. Recommended separation distances between portable and mobile RF communications equipment and the BT-200V

The BT-200V is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the BT-200 V can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the BT-200V as recommended below, according to the maximum output power of the communications equipment.

	Separation distance according to frequency of transmitter[M]		
Rated maximum output power of transmitter [W]	150 kHz	80 MHz to	800 MHz to
	to 80MHz	800 MHz	2.5 GHz
	$d=1,2\sqrt{P}$	$d=1,2\sqrt{P}$	$d=2{,}3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (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.

NOTE 1) At 80 MHz and 800 MHz, 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.

### 7.3. Electromagnetic immunity

The BT-200V is intended for use in the electromagnetic environment specified below. The customer or the user of the BT-200V should assure that it is used in such an environment.

Immunity test	IEC 60601 Test level	Compliance level	Electromagnetic environment-guidance
Electrostatic discharge (ESD)	±8 kV Contact	±8 kV Contact	Floors should be wood, concrete or ceramic tile. If
IEC 61000-4-2	±2 kV, ±4 kV, ±8 kV, ±15 kV Air	±2 kV, ±4 kV, ±8 kV, ±15 kV Air	floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transient/burst IEC 61000-4-4	Not applicable	Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	Not applicable	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	Not applicable	Not applicable	Mains power quality should be that of a typical commercial or hospital environment. If the user of the BT-200V image intensifier requires continued operation during power mains interruptions, it is recommended that the BT-200V image intensifier be powered from a battery.
Power frequency (50 Hz and 60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

The BT-200V is intended for use in the electromagnetic environment specified below.
The customer or the user of the BT-200V should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment- guidance
Conducted	3 Vrms	3 Vrms	Portable mobile RF communications

	T	
150kHz to 80MHz	150kHz to 80MHz	equipment should be used no closer
6 Vrms in ISM	6 Vrms in ISM	to any part of the BT-200V, including
bands between	bands between	cables, than the recommended
0.15Mb and 80	0.15 M and 80	separation distance calculated from
MHz	MHz	the equation applicable to the
		frequency of the transmitter.
		. ,
		Recommended separation distance
		$d = 1,2\sqrt{P}$
		$d=1,2\sqrt{P}$ 80 MHz $\sim$ 800 MHz
10 V/m	10 V/m	$d=2,3\sqrt{P}$ 800 MHz $\sim$ 2.5 GHz
•		2.3 die
0070, 2112 AIVI	Other Znz	where P is the maximum output
DE Wiroloss	RF Wireless	power rating of the transmitter in
		watts (W) according to the
Comm	Commi	transmitter manufacturer and d is the
		recommended separation distance in
C 1 Cl 1	Group 1 Class B	meters(m).
Group 1, Class A	Group 1, Class B	Field strengths from fixed RF
		transmitters, as deter-mined by an
		electromagnetic site survey, <sup>a</sup> 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 :
		(( <u>w</u> ))
	bands between 0.15Mb and 80 Mb	6 Vrms in ISM bands between 0.15 Mb and 80 Mb

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.

<sup>b</sup> Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

<sup>&</sup>lt;sup>a</sup> 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 BT-200V is used exceeds the applicable RF compliance level above, the BT-200V should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the BT-200V.

## **Product Guarantee**

Product Name	HI∙dop
Model Name	BT-200V
Approval No.	
Approval Date	
Serial No.	
Warranty Period	1 Years (Probe excluded)
Date of Purchase	
Customer	Hospital:
	Address:
	Contact Name:
	Telephone:
Sales Agency	
Manufacture	Bistos Co., Ltd.

<sup>※</sup> Thank you for purchasing HI•dop, BT-200V.

<sup>\*</sup> This product is manufactured and passed through strict quality control and inspection.

<sup>\*</sup> Compensation standard concerning repair, replacement, refund of the product complies with

<sup>&</sup>quot;Framework Act on Consumers" noticed by Fair Trade Commission of Republic of Korea

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