Inside the Box:		
NO	Item	Quantity
1	Main unit	1
2	2.5MHz probe	1
3	Manual	1
4	Charging cable	1
5	Battery	AA LR6 or one 14500 Lithium battery

Input	100 to 240 VAC, 50/60Hz
Output	5V DC，1A

Warranty

Passim Lifesciences Ltd. warrants this unit against defects in materials and workmanship for six months from the date of purchase. During the warranty period, any defective parts will be repaired or replaced free of charge, excluding consumable components which are not covered once used.

Warranty is void if:

- The device is misused or not maintained per this manual.
- Unauthorized repairs or modifications are made.
- Operated in corrosive or harmful environments.
- The warranty card is not fully completed and presented upon claim.

Symbols

MD Medical Device

Refer Instructions Manual

No Trash

Manufactured By

LOT Lot No.

Keep Away From Sunlight

SN Serial No.

Do not use If Package damaged

Warning/Caution

Must not be exposed in rain or excessive moisture

Manufacturing Date

Contact Information

Manufactured By:
Passim Lifesciences Ltd., Plot No. 45, Industrial Area, Phase 2, Panchkula, Haryana 134113, India
Mfg. Lic. No.: MFG/MD/2022/000633
WPC ETA Reg. No.: ETA-SD-20250807431

For complaints or suggestions :
Customer Care No.: 1800 309 3009
(Timing: 9am - 7pm, Mon-Sat.)
Email ID: customercare@drodin.in
Website: www.drodin.in

* Terms & Conditions Apply

WARRANTY CARD

Model No.:..... Lot No.:.....

Invoice No.:..... Date of Purchase.....

Purchased By:..... Contact No.:.....

Address.....

Dealer's Name.....

Register your product

Dealer's Sign & Stamp

IM/OAD/99-00

Dr. Odin®

Instruction Manual
Fetal Doppler

OAD51B with Bluetooth

Please read the instruction manual carefully before using the product

Responsibility of the Manufacturer

The manufacturer only considers itself responsible for any effects on safety, reliability and performance of the equipment:Assembly operations, repairs are carried out by persons authorized by the manufacturer, and the device is used in accordance with the instructions for use.

⚠WARNING:

This device is not intended for treatment. The intended use is for detecting Fetal Heart Rate. If the FHR result is distrustful, please use other methods such as stethoscope to verify immediately.

Terms Used in this Manual

This guide is designed to give key concepts on safety precautions.

⚠WARNING：

A WARNING label advises against certain actions or situations that could result in personal injury or death.

⚠CAUTION：

A CAUTION label advises against actions or situations that could damage equipment,produce inaccurate data, or invalidate a procedure.

NOTE：

A NOTE provides useful information regarding a function or a procedure.

Contents

⚠**Warning:** 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 equipment, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

⚠**CAUTION:** Do not attempt to recharge normal dry-cell batteries, they may leak, and may cause a fire or even explode.

⚠**CAUTION:** Don't touch signal input or output connector and the patient simultaneously.

⚠**CAUTION:** Pocket Fetal Doppler is a tool to aid the healthcare professional and should not be used in place of normal fetal monitoring. This is not intended for fetal use.

⚠**CAUTION:** Please use the probe provided by the manufacturer.

⚠**CAUTION:** Do not pull the line of probe longer than 1 meters, or else the probe may break away from the connector.

⚠**CAUTION:** The device must be serviced only by authorized and qualified personnel.

⚠**CAUTION:**When the home users use this device, they should read the manual carefully, and consult a doctor, dealer or manufacturer if necessary.

⚠**CAUTION:** The device is designed for continuous operation and is 'ordinary'. Do not immerse in any liquid (i.e. not drip or splash- proof).

⚠**CAUTION:** Keep the device clean. Avoid vibration.

⚠**CAUTION:** Do not use high temperature sterilizing process and E-beam or gamma radiation sterilization.

⚠**CAUTION:** Electromagnetic Interference-Ensure that the environment in which the device is operated is not subject to any sources of strong electromagnetic interference, such as radio transmitters,mobile telephones, etc. Keep them far away.

⚠**CAUTION:** The user must check that the equipment does not have visible evidence of damage that may affect patient safety or monitoring capability before use. The recommended inspection interval is once per month or less. If damage is evident, replacement is recommended before use.

⚠**CAUTION:**

Please use a gel that meets the YY/T 0299 standard, or meets the corresp onding IEC or ISO standard, otherwise it may affect the performance of the device and may damage the probe of device.

⚠**CAUTION:** The battery must be properly disposed according to local regulation after their use.

⚠**CAUTION:** The battery must be taken out from the battery compartment if the device will not be used for a long time.

⚠**CAUTION:** The battery must be taken out from the battery compartment if the device will not be used for a long time.

⚠**CAUTION:** The device shall only be used if the battery cover is closed.

⚠**CAUTION:** Battery must be stored in cool and dry place.

⚠**CAUTION:** If use rechargeable battery, to insure capability and life, please fully charge batteries before first use, normally, batteries must be continuously charged over 14 hours or charged according to the guidance displayed on the battery.

⚠ **CAUTION:** Please don't set anode and cathode of the battery wrongly.

⚠**CAUTION:** After the service life, please return the products to the manufacturer or disposal the products according to local regulations.

⚠**CAUTION:** This device cannot be used with defibrillator or high frequency surgical unit.

⚠ **CAUTION:** Please choose the accessories authorized by our company otherwise the device may be damaged.

⚠ **CAUTION:** Please keep the probe from edge tool.

⚠ **CAUTION:** Please use machine under the environment without strong electromagnetic field,which may influence measure result.

Remove the battery if the equipment is not likely to be used for some time.

⚠The device requires no calibration.

⚠The device contains no user serviceable parts.

⚠The user must check that the equipment functions safely and see that it is in proper working condition before being used.

⚠No modification of this equipment is allowed.

⚠**DISPOSAL:** Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

⚠Battery Disposal**:** Recycle or dispose of the lithium battery in accordance with all federal, state and local laws. To avoid fire and explosion hazard, do not burn or incinerate the battery.

⚠Recycling the batteries:When the battery no longer holds a charge, it should be replaced. The batteries are recyclable. Remove the old battery from the battery cover and follow your local recycling guidelines.

⚠Manufacturer will provide circuit diagrams, component part lists, descriptions, calibration instructions to assist to SERVICE PERSONNEL in parts repair.

⚠Magnetic and electrical fields are capable of interfering with the proper performance of the Fetal Doppler. For this reason, make sure that all external devices operated in the vicinity of the Fetal doppler comply with the relevant EMC requirements. Wireless communications equipment such as wireless home network devices, mobile phones, cordless telephones and their base stations, walkie-talkies or MRI devices are a possible source of interference as they may emit higher levels of electromagnetic radiation.

1.2 Symbols

Mark	Summary	Mark	Summary
	Caution, consult accompanying		Down button
	Type BF Applied part		Serial Number
	Probe Connector		Refer to User manual Documents
	ON/OFF		Date of Manufacturer
	Up button		Manufacturer
	Medical devices		
	The symbol indicates that the device should be sent to the special agencies according to local Environmental Regulations.		

2 Introduction

2.1 Intended use

Doppler is intended to detect fetal heart beats, display fetal heart rate, and play the fetal heart sound.

2.1.1 Intended operator

This Fetal Doppler is intended for use only by clinical professionals or under their guidance. It must only be used by persons who have received adequate training in its use. Anyone unauthorized or untrained must not perform any operation on it.

2.1.2 Intended patient population

Fetal Doppler is indicated for use by health care professionals in hospital, clinic,community and home for singleton pregnancies after 12 weeks gestation.

2.1.3 Medical condition

In hospital, clinic, community and home.

2.3 Main Unit

2.3.1 Appearance

NOTE:

The pictures and interfaces in this manual are for reference only.

This device is a non-invasive handhold Fetal Doppler with an internal speaker. This device has the following special features that will enhance your product use.

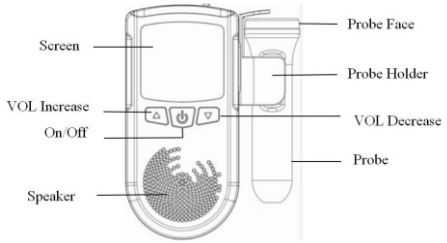


Figure 1 Front Panel of the Device

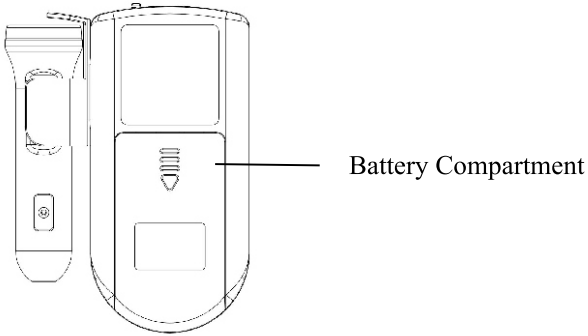


Figure 2 Rear Panel of the Device

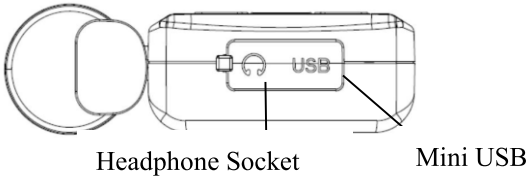


Figure 3 Top Panel of the Device

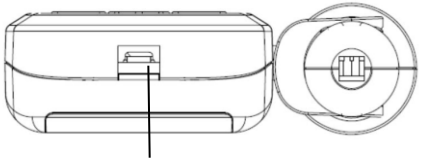


Figure 4 Bottom Panel of the Device

2.3.2 Display

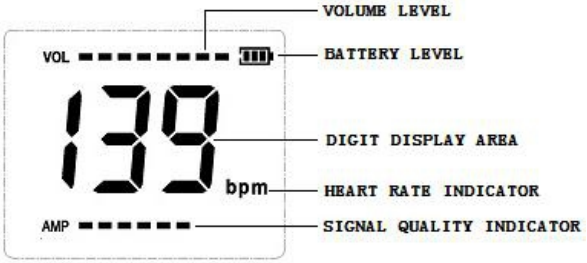


Figure 5 Digit Display Mode

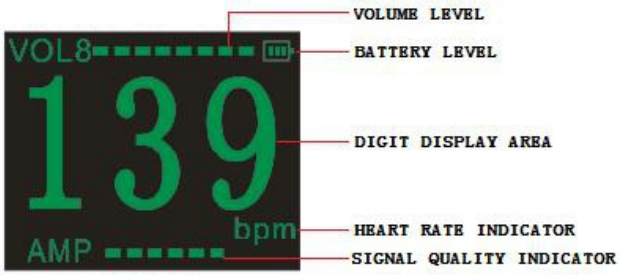


Figure 6 Digit Display Mode

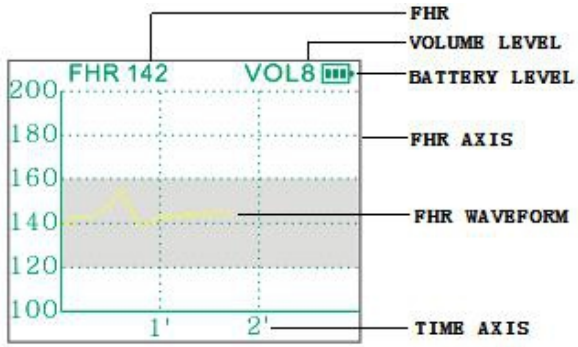


Figure 7 Waveform Display Mode

2.3.3 Buttons

Power Button

Function: Power on/off, change digit display mode into waveform display mode

Power on: Push the button once.

Change mode: Push the button once after power on.

Power off: Push down the button and hold 3 seconds to power off.

Volume Button▲▼

Function: adjust volume

▲: Push the button to increase the volume

▼: Push the button to decrease the volume

Earphone socket

Function: for outputting audio signals, the earphone or line-in cable connects to the Doppler via this socket.

Probe Socket

Connect the 2.5MHz obstetrical probes or supplied by the manufacturer to the Doppler through the probe socket.

⚠CAUTION:

Do not try to connect any other plug to the probe socket except the plug of the probes mentioned above.

Probe cable cannot be pulled up to one metre long

Figure 8 2.5 MHz obstetrical probe

3 Basic Operation

3.1 Switch on/off

Turn the device on by pressing the On/Off button for 1 second. LCD display will be switched on to indicate the power status. Push down On/Off button and hold 3 seconds to power off. the device automatically shuts itself off after 2 minutes if it is not being used. This complete power shutdown preserves the life of the batteries and ensures the device will be ready for operation in case it was accidentally left on.

3.2 Obtaining doppler signals

NOTE：

In some cases, fetal heart beats at 12 weeks gestation can not be detected due to the maternal physical difference and the operator's technique.

Perform fetal heart examining using the following procedures:

1) Confirm the fetus's position by hand.

2) Determine the probable probe location for optimal FHR examining.

3) Take out the probe and switch on the Doppler.

4) Apply a certain amount of coupling gel to the probe faceplate and place the probe against the abdomen at the predetermined location. Move the probe around or tilt it until clear and rhythmic heart sound is heard from the headphone or speaker. At the same time, a numeric FHR is displayed on the LCD.

⚠**CAUTION:** Put the probe on the best detecting position to get better detecting effect. Positions with strong placental sounds or umbilical blood flow sound should be avoided.

If pregnant woman adopts horizontal position and the fetus position is normal, put the probe on the position of lower navel midline to get the clearest FHR sound.It is impossible to examine FHR unless a fetal heart sound is present. The fetal pulse can be distinguished from the maternal pulse by feeling the mother's pulse during the examination.

3.3 Volume controller

The audio level can be adjusted using the " ▲","▼"buttons. Push the " ▲"button will increase the volume, while push the "▼" button will decrease it.

3.4 Display mode

There are two display modes(Digit Display and Waveform Display) which can be changed if short press the On/Off button "⏻" (less than 1 second).

Figure 9 Digit Display

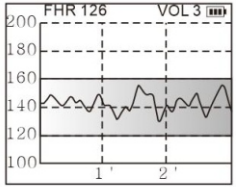
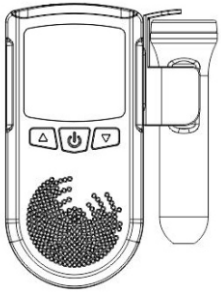


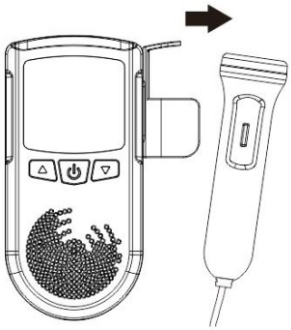
Figure 10 Waveform Display

3.5 Probe Operation

3.5.1 Taking out the probe

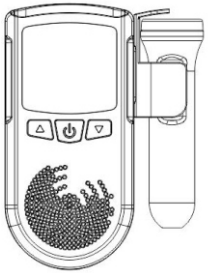
Hold the main unit with one hand. Pinch the probe and pull it outwards using mild force.





3.5.2 Placing the probe

Hold the main unit with one hand. Pinch the probe and align it with the probe holder. Push the probe inwards using mild force until it clicks in position.



⚠**CAUTION:** Do not take out or place the probe when the Doppler is on. Remember to take out the probe before switching on the Doppler, and place the probe after switching off the Doppler.

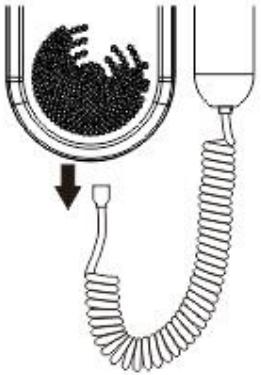
3.5.3 Replacing the Probe

Remove the old probe:

Switch off the Doppler,hold the main unit with one hand and pinch the jacket of the mini USB socket. Lift the jacket up slightly and pull it out with mild force; take out the probe.

Replace it with a new probe:

Put the USB socket of new probe into the probe interface of the Doppler.



⚠**NOTE:** Place the temporarily unused probe carefully and avoid falling off, splash or stress, etc. When the Doppler is not used for a long time, it is recommended connect the probe to the Doppler and keep them safely in the package.

3.6.2 Battery Energy Indication

there is a battery symbol in the top right corner of LCD.

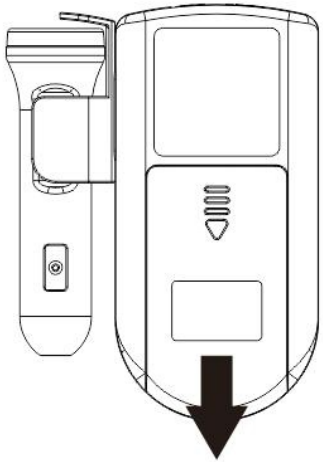
When the power is low, the empty battery symbol flashes,to remind the customer to change another new battery or charge the battery (only the chargeable battery can be charged.).

3.6.3 Replacing the Batteries

⚠**CAUTION:**Make sure the Doppler is shut down before opening the battery compartment.

The rear panel is upturned. First open the battery compartment, then take out the battery from the battery compartment.

Put two alkaline batteries/one lithium battery into the battery compartment (as for the direction of battery, please refer to the instruction inside the battery compartment), at last close the battery compartment.



⚠**CAUTION:**The battery must be taken out from the battery compartment if the device will not be used for a long time.

3.7 Product specifications

Product Name: Fetal Doppler

Model No.: OAD51B

Liquid Proof Degree:

Main unit: Degree of protection:IPX1

Probe: Prevent from water splashing, degree of protection: IPX2. The probe is treated as the applied part.

Degree of Safety in Presence of Flammable Gases: Equipment not suitable for use in presence of flammable gases

Working System: Continuous running equipment

Physical Characteristic

Size: 140 mm (Length) ×95 mm (Width) ×30 mm (Height)

Weight: about 180g (including probe, excluding battery)

Environmental Specifications

Temperature range: 0 °C ~ 40 °C

Humidity range: 30% to 90%

Atmospheric pressure range: 60.0kPa ~ 110.0kPa

Transportation and Storage

Temperature range: -10 ° C ~ 60 ° C

Humidity range: 10% to 93%

Atmospheric pressure range: 50.0kPa ~ 110.0kPa

Display: 1.77" LCD display

FHR Measuring Range: 50 BPM ~ 240 BPM (BPM: beat per minute)

Resolution: 1 BPM

Accuracy: ± 2 BPM

Power Consumption :< 0.8 W

Auto Shut-OFF: After 2 minute no signal, power off automatically.

Standard Configuration:2.5 MHz Ultrasound Probe

Nominal Frequency: Continuous wave Doppler

Working Frequency: 2.5 MHz±5%

Audio bandwidth and power: 250Hz ~1.25kHz, 1.5W

Ultrasonic output power:< 40mW

Space peak time peak sound pressure:< 0.35MPa

Effective ultrasonic transmitting/receiving area： 2.45cm ±30%

Comprehensive sensitivity shall not be less than 90dB at a distance of 200mm from the probe surface

4 Maintenance

4.1 Maintenance

This device requires very little maintenance. However, it is important to continuing function of the unit and the health of the patients that the unit is cleaned and examined regularly per the following guideline:Annually inspect the main unit and probes for signs of cracks or breaks in the mechanical housing. Inspect cables and connectors for signs of wear or failure. The user should discontinue use of the unit with any sign of loss of housing integrity. Contact Manufacturer Technical Services Department or your local representative for instructions.It is recommended that the internal rechargeable battery be replaced every two years. Contact Manufacturer Technical Services Department or your local representative for instructions of replacing the internal battery.

4.2 Cleaning

Before cleaning, switch off and take out the batteries.Keep the outside surface of the device clean and free of dust and dirt, clean exterior surface (display screen included) of the chassis with a dry, soft cloth.If necessary, clean the chassis with a soft cloth soaked in a solution of soap, or water and wipe dry with a clean cloth immediately.Wipe the probe with soft cloth to remove any remaining ultrasound coupling gel. Clean with soap and water only.

CAUTION

Don't use strong solvent, for example, acetone.Never use an abrasive such an steel wool or metal polish.Do not allow any liquid to enter the product, and do not immerse any parts of
the device into any liquids.Avoid pouring liquids on the device while cleaning.Don't remain any cleaning solution on the surface of the device.

NOTES

Wipe the surface of probe with 70% ethanol, self-air dry, or clean with a clean, dry cloth.

4.3 Trouble shooting

Poor sound quality

- Inadequate gel use
- Try and relocate the probe for a better signal
- Signal from other equipment

Heart Rate inaccurate

- Try and relocate the probe for a better signal
- Ensure maternal sounds are not mixing with fetal sounds

Battery indicator flashing

- The battery will run out soon, please replace it with new batteries, if the machine is a lithium battery, please charge battery in time

How to Connect Your Dr. Odin Fetal Doppler via Bluetooth

Step 1: Download the App
First, you'll need to download the official Dr. Odin app. You can find it by searching for "**Dr. Odin**" on the Google Play Store for Android devices or the Apple App Store for iOS devices.

Step 2: Enable Bluetooth
Once the app is installed, open it on your device. The app requires Bluetooth to function, so make sure it's enabled in your smartphone's Settings menu. This allows the app and the Fetal Doppler to communicate with each other.

Step 3: Log In or Create an Account
You'll be prompted to either create a new user account or log in with an existing one. Follow the on-screen instructions to proceed.

Step 4: Pair Your Device
On the app's home screen, navigate to the "**Connect Your Devices**" section and select Fetal Doppler. Next, start your Dr. Odin Fetal Doppler to begin a temperature reading. The app will automatically detect the device. Then tap on device to connect it with you app.

Step 5: Sync Your Data
After the Fetal Doppler completes the measurement, the results will be automatically reflected on the app via Bluetooth. The app will then save this data to your memory for future reference and tracking.

Important Note: To ensure a successful data transfer, keep the app open and active on your phone until the measurement is complete and the results have appeared.

Troubleshooting
If you encounter any issues with the Bluetooth connection, try the following steps:

1. Restart the app.
2. Re-connect the device by repeating the pairing process.

Remember, even if Bluetooth communication fails, you can always view your measurement data directly on the Fetal Doppler’s display.