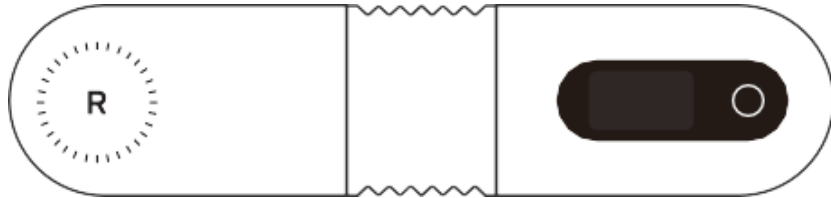


Biocom 6500 Bluetooth ECG Recorder

Setup and Operation Guide



1. General Information

The **Biocom 6500 Bluetooth ECG Recorder** is a wireless device designed for recording electrocardiogram (ECG) signals.

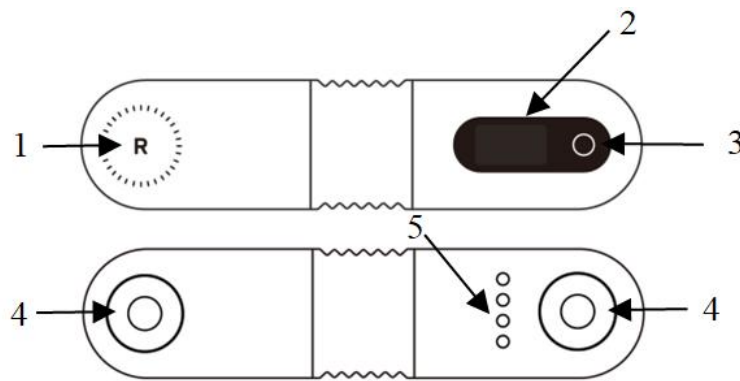
The **Biocom 6500** operates with **Biocom HRV software** running on a Windows PC. ECG data is transmitted through an **Android mobile application** that serves as a bridge between the ECG recorder and the HRV software over a local Wi-Fi network. The Android device and the Windows PC must be connected to the **same Wi-Fi network**.

The bridging application is called **ECG Patch Reader** and runs on an Android smartphone. Biocom can optionally supply an inexpensive Android phone with the application preinstalled. Instructions for operating the application are provided in a separate manual.

The **Biocom 6500** is a lightweight wearable ECG recorder that attaches to the body using either **standard disposable ECG electrodes** or the **included chest strap**.

The device acquires raw ECG signals and streams them in real time to the Android mobile application.


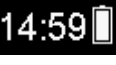











The figure below illustrates the **Biocom 6500** device design.



2. Device Components and Controls

- 1 Right-side mark** When worn, the side marked “R” must face the right side of the body.
- 2 Display screen** Displays the ECG waveform, heart rate, battery level, charging status, and other device information.
- 3 Touch key**
 - Power off:** Press and hold **3 s** to power on the device.
 - Standby (not measuring):** Press and hold **6 s** to power off.
 - Standby:** Press to wake the screen.
 - Standby:** Press and hold **1 s** to display the device time.
 - Standby:** Press repeatedly to cycle through **Device ID, Device Time, and Battery Status.**
 - During Measurement:** Press repeatedly to cycle through **ECG Waveform, Heart Rate, Device ID, Device Time, and Battery Status.**
- 4 Electrode snap connectors** Used to connect the chest strap or disposable ECG electrodes.
- 5 Charging contacts** Used to connect the supplied charging clip.

3. Device Displays

	Powering On
	Battery Status and Time
	Device ID
	Start ECG Recording
	ECG Waveform
	Measured Heart Rate
	Leads Off
	Invalid ECG Signal
	Battery Level Below 15%
	Charging in Progress
	Fully Charged
	Powering Off
	Standby Mode

4. Technical Specification

Parameter	Specification
Signal type	ECG
Number of channels	1
Electrode type	<ul style="list-style-type: none">• Snap ECG electrodes• Chest strap
ECG signal range	±5.0 mV
Maximum input voltage protection	5 kV
Frequency bandwidth	0.67 - 40 Hz
Common-mode rejection ratio (CMRR)	≥60 dB
Input impedance	≥10 MΩ, 10Hz
Maximum sampling rate	125 Hz
Battery discharge control	Yes
Data interface	Bluetooth 4.0+
Power supply	Built-in rechargeable Li-Ion battery
Battery life	Up to 168 hours
Device dimensions	100 x 23 x 10 mm
Enclosure material	ABS plastic
Device weight	20 g
Operating temperature	+5 °C to +45 °C
Storage temperature	-25 °C to +60 °C
Relative humidity	10 – 95%
Atmospheric pressure	700 – 1060 hPa
Waterproof	IP22
Charging method	USB cable
Time to charge	2 h
Onboard data storage	24 h
Drop test	1 m
Expected service life	5 years

5. Package Contents

The **Biocom 6500 Bluetooth ECG Recorder** standard package includes the following items:

No.	Item
1	Biocom 6500 ECG Recorder (OEM model ER1-LB)
2	USB Charging cable with charging clip

No.	Item
3	Chest strap
4	USB power adapter
5	ECG electrodes starter kit
6	Device user's manual
7	Biocom software setup guide
8	Biocom warranty card

Important Notes

- The device is shipped with the battery in an inactive state. **Charge the battery before first use.**
- Use only the cables and accessories specified in this manual.
- The device **does not provide alarm functions** and is **not intended for patient monitoring.**
- Ungrounded equipment near the patient, as well as interference from electrosurgical equipment, may cause instability or noise in the ECG waveform.

6. Device Inspection

Inspect the **Biocom 6500** and its accessories regularly and **before each use** to ensure proper operation.

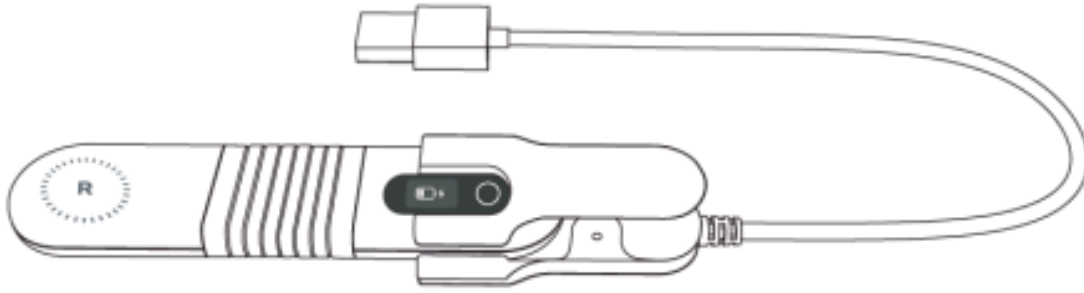
- **Inspect the device housing.**
Ensure that the device is clean and that the enclosure shows no signs of damage.
- **Check ECG electrodes.**
Ensure an adequate supply of ECG electrodes is available. Verify that the electrodes have not exceeded their expiration date (if marked) and that the packaging is intact.
- **Verify battery charge.**
Ensure that the device battery is fully charged before use.

7. Charging the Device Battery

The device contains a rechargeable lithium battery. Charge the battery using a laptop USB port or a USB power adapter with the supplied charging cable.

Charging Procedure

1. Attach the USB charging clip to the device.
2. Connect the charging cable to a laptop USB port or a USB power adapter.
3. During charging, the display shows a charging icon.
4. When the battery is fully charged, the display shows a charge-complete icon.



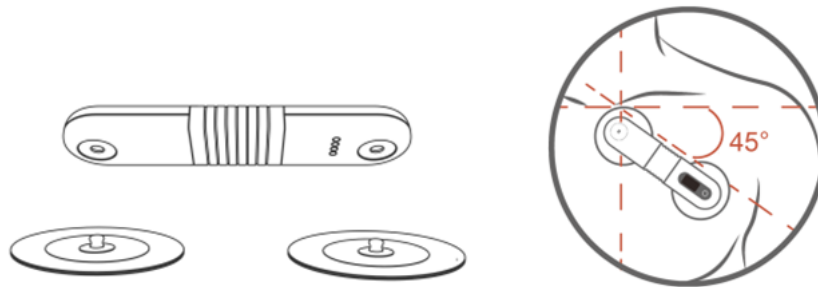
Important Notes

- The device **cannot be used while charging.**
- Keep the device **out of reach of children during charging.**
- If the device is not used for an extended period, **recharge the battery periodically** to maintain battery performance.

8. Attaching Electrodes to a Client

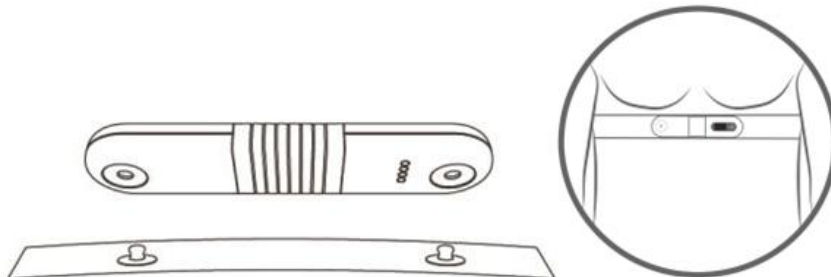
Using ECG Electrodes

1. Use a **new pair of disposable ECG electrodes.**
2. Snap the electrodes onto the device connectors.
3. Place the device on the subject's chest as shown in the illustration above.



Using the ECG Chest Strap

1. Attach the device to the chest strap with the **"R" mark facing the right side of the body.**
2. Position the strap at the level of the **lower sternum.**



Important Notes

- Check the **expiration date** of disposable ECG electrodes before use.
- Ensure that the electrodes make **direct contact with the skin**. Prepare the skin by cleaning and drying it thoroughly, then briskly rubbing it with a towel or gauze to lightly abrade the surface and remove oils and debris.
- **Do not use alcohol, tincture of benzoin, or antiperspirant** when preparing the skin.

9. Cleaning

Clean the device and chest strap **after each use** to prevent cross-contamination.

Use **alcohol swabs only** for cleaning. Do not use aggressive or abrasive cleaning chemicals.

10. Troubleshooting

Problem	Possible Cause	Recommended Action
The device does not operate	Low battery	Charge the battery.
	Device malfunction	Contact customer service.
The ECG waveform is noisy or unstable	Improper device placement	Reposition the device as described in the instructions above.
	Poor ECG electrode contact	Replace the ECG electrodes or reposition the chest strap.