

CardioMessenger II®

Transmitter for
BIOTRONIK Home Monitoring®

Technical Manual

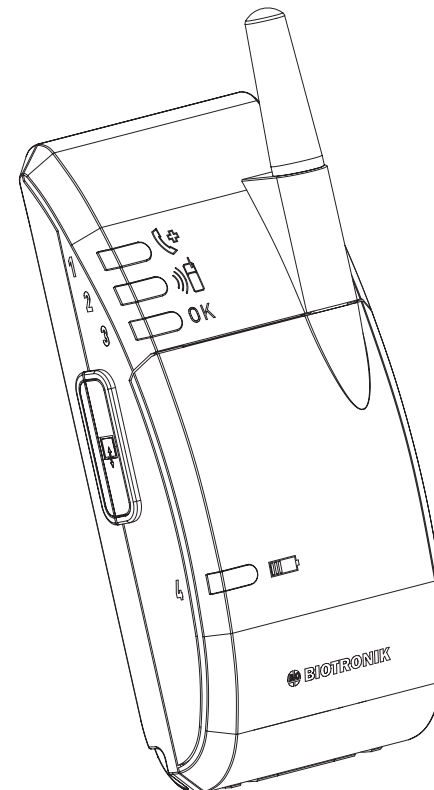
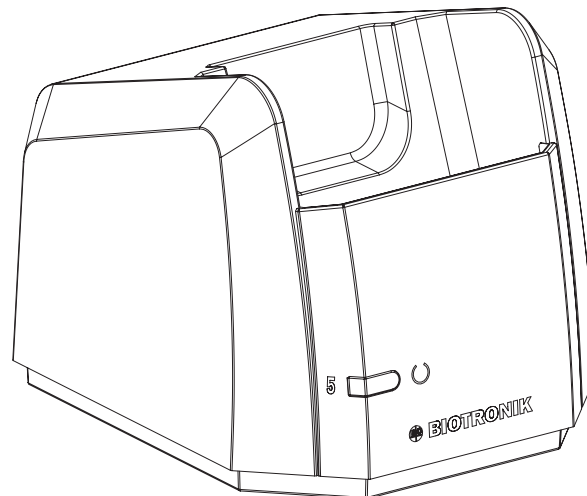


BIOTRONIK

Overview

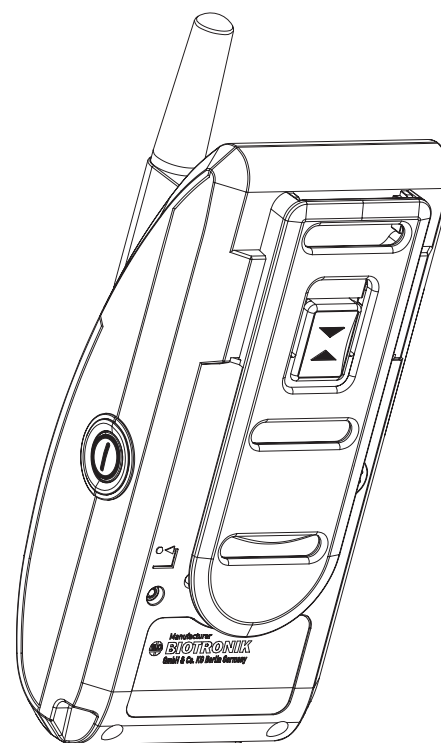
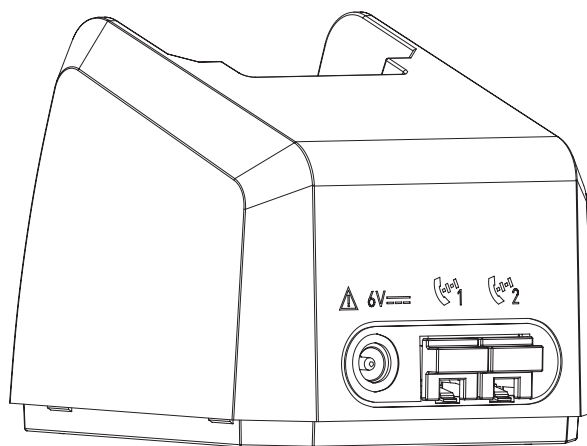
	Physician callback signal	1
	Follow-up data transmission	2
	Ready (CardioMessenger II)	3
	Battery monitor light	4
	Ready (charging station)	5
	Data interface	

A view of the rear side of the device can be found on the back cover.



Overview

- ① On/off button
- ↺ Restart
- ⚠ 6V== Telephone jack
- ⚡ Belt clip



356845/A/6D20

- © by BIOTRONIK GmbH & Co. KG
All rights reserved.

Specifications subject to modification, revision
and improvement.

- ® CardioMessenger is a registered trademark of
BIOTRONIK GmbH & Co. KG

BIOTRONIK GmbH & Co. KG
Woermannkehre 1
12359 Berlin · Germany
Tel +49 (0) 30 68905-0
Fax +49 (0) 30 6852804

BIOTRONIK, Inc.
6024 SW Jean rd. Bldg. B
Lake Oswego, OR 97035
Phone (800) 547-0394 (24-hr)
Fax (503) 635-9936

sales@biotronik.com
www.biotronik.com

 **BIOTRONIK**



Contents

What is Home Monitoring? 3

Included Equipment 4

How Do I Use the CardioMessenger? 6

Where Should I Put the CardioMessenger? 6

How Do I Install the CardioMessenger? . . 9

Telephone Connection 12

Version A 13

Version B 19

**How Do I Understand the Lights of the
CardioMessenger? 25**

Light 1 25

Light 2 26

Light 3 26

Light 4 27

Light 5 28

How Do I Turn On the CardioMessenger? 29

How Do I Turn Off the CardioMessenger? 30

How Do I Charge the CardioMessenger? .31

How Do I Resolve Problems?32

Light 332

Light 433

Light 533

How Do I Reset the CardioMessenger? . .34

**How Do I Take Care of the
CardioMessenger?35**

How Do I Carry the CardioMessenger? . .36

**Safety Precautions - What Should I Watch
Out For?38**

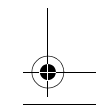
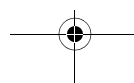
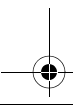
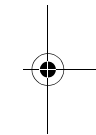
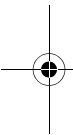
Guidelines40

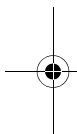
USA40

Canada41

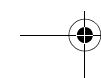
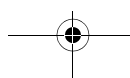
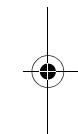
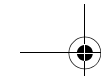
Electromagnetic Compatibility42

Warranty43





Technical Data	44
General	44
Permissible Environmental Conditions	44
During Operation:	44
Shipping and Storage:	44
CardioMessenger Remote Unit	44
CardioMessenger Charging Station	45
Rechargeable Battery (integrated)	45
Power Supply	45
Appendix	46





What is Home Monitoring?

Dear Patient:

You have received a BIOTRONIK pacemaker or implantable cardioverter-defibrillator (ICD) with Home Monitoring function.

Home Monitoring pacemakers and ICDs are additionally equipped with a special transmitter. This transmitter automatically transmits medical and technical information to a mobile device, the CardioMessenger.

The CardioMessenger works like a cell phone and automatically transmits the information received from your implant as encoded messages to the BIOTRONIK Service Center.

The transmission power from your implant is low so as to not impair your health in any way. Since the transmission range is short,

the CardioMessenger is needed to send the information to the BIOTRONIK Service Center.

At the Service Center, the data are processed and can be viewed only by your physician on a secured Internet site in the form of a comprehensive report called a Cardio Report.

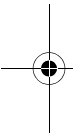
Your doctor can use this Cardio Report to decide whether your implant settings need to be updated or if your therapy plan needs to be changed. Thus, Home Monitoring serves as a practical diagnostic aid.



Included Equipment

The set comes equipped with the following components:

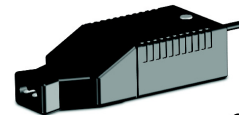
1. Mobile unit
2. Charging station
3. Power supply unit
4. Power supply cable
5. Belt clip (already affixed)
6. Carrying strap
7. Patient manual
8. Telephone cable



1



2



3



4



5



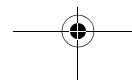
6

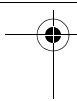


7



8



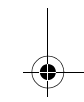
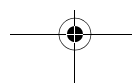
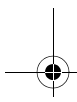
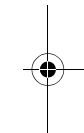
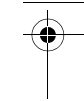
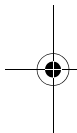


Before use, make sure that none of the components are visibly damaged and that all necessary components have been delivered to you.

Caution! Never use the CardioMessenger if it has been damaged; return it to your physician.

Only use the following original BIOTRONIK devices, as other accessories can increase the interference emitted and the device's susceptibility to interference:

- The CardioMessenger
- The charging station with the appropriate power supply unit (type: FW 7555 M/06)
- The power cord (type: BIOTRONIK NK-29, NK-30, or NK-31)
- The telephone cord (type: BIOTRONIK VK-117)





How Do I Use the CardioMessenger?

The following section describes:

- How to optimize CardioMessenger placement
- How to operate it
- How it functions

Where Should I Put the CardioMessenger?

On your bedside table or close to your bed is a suitable place for your CardioMessenger since it generally fulfills the following conditions:

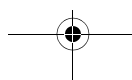
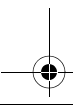
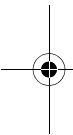
- The distance to the implant is less than 2 meters (6 feet), so that regular data transmission at night is guaranteed.
- The distance to the implant is more than 20 centimeters (7 inches), so that the CardioMessenger does not interfere with the implant.

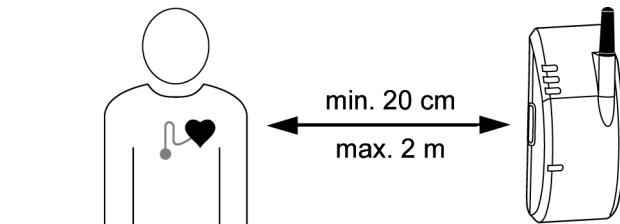
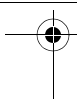
- The CardioMessenger is placed on a solid base and cannot fall.

Please also consider the following:

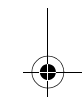
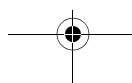
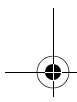
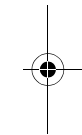
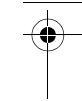
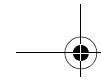
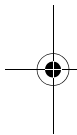
- Do not expose the device to moisture or heat; exposure to direct sunlight and taking the device into the bathroom are not recommended.
- The CardioMessenger should not be connected to a power outlet controlled by a light switch.
- Do not place the device next to a television set, microwave oven, or similar source of electromagnetic interference.

Warning! The distance between the implant and CardioMessenger must not be less than 20 centimeters (7 inches).



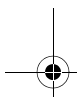
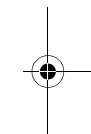
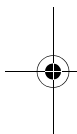


Note: If the CardioMessenger is too close to a loudspeaker (or a radio alarm or TV), you may hear interference noises typical for mobile phones.

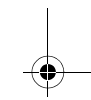
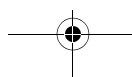


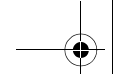


CardioMessenger.book Page 8 Tuesday, May 2, 2006 5:05 PM

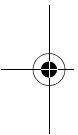


8





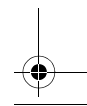
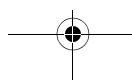
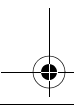
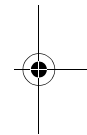
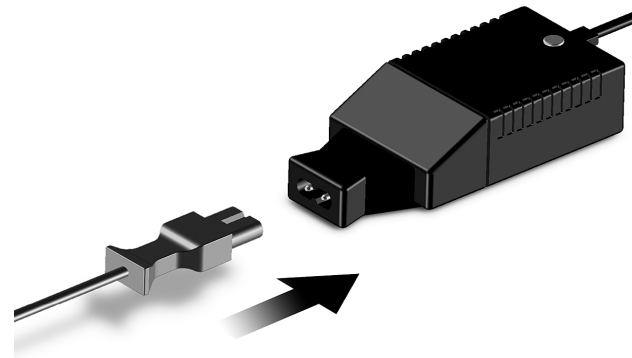
How Do I Install the CardioMessenger?

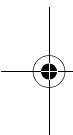


Insert the power cable plug into a socket in your wall and the other end of the cable into the power supply.

Make sure you do not connect the CardioMessenger to a power outlet controlled by a light switch.

Now the green light on the upper side of the power supply should be illuminated; if not, please refer to „How Do I Resolve Problems?“ on page 32.

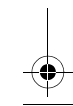
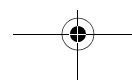
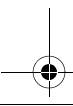
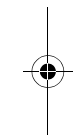


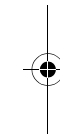
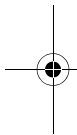
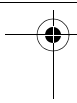


Now, insert the other end of the power supply cable (the end with the small plug) into the charging station. The port for the small plug is situated on the rear side of the charging station and is marked with the following symbol:



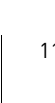
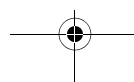
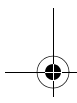
Use only the original power supply unit that came with the CardioMessenger, see „Included Equipment“ on page 4.





Light 5 is situated on the front side of the charging station. The charging station is operational when this light is illuminated.

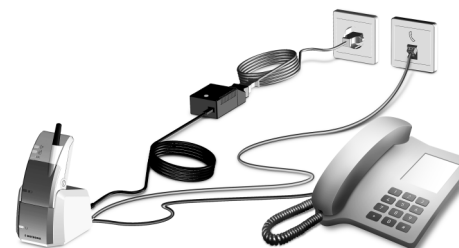
If this light is not illuminated, please refer to „How Do I Resolve Problems?" on page 32.



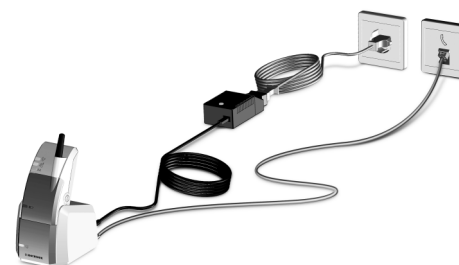


Telephone Connection

Version A



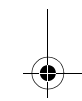
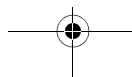
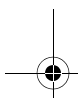
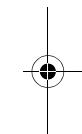
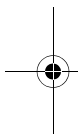
Version B



You need a telephone connection so that your CardioMessenger can send the Home Monitoring data to your physician.

You may operate your CardioMessenger with your existing telephone sharing one single telephone socket (version A) or connect it **directly** to a free telephone socket (version B).

Either way, your normal phone use remains unaffected.



Version A

Unplug your telephone cable from your telephone socket in your wall.

Remove the safety plug on port 1  1 on the rear side of the charging station.



Now insert the free end of your telephone cable into the inlet of the charging station.

