



Activa™ RC
Neurostimulator

MEDTRONIC DBS CHARGING EXPERIENCE

MEDTRONIC DBS

CHARGING EXPERIENCE

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MEDTRONIC DBS CHARGING EXPERIENCE



The 37651 charging system

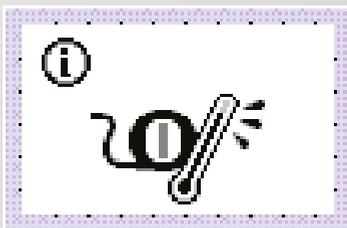
The Medtronic 37651 DBS charging system guarantees patient comfort and safety during the charging experience thanks to:

■ Temperature control during recharging

The system constantly monitors the temperature and the antenna connection.

If the temperature rises above a certain level:

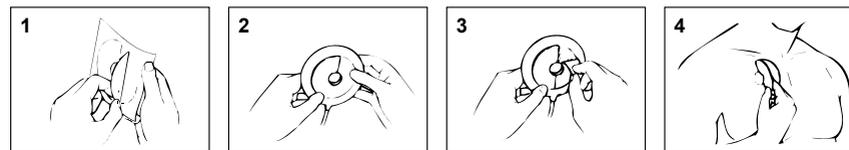
- The system displays a warning message
- The charging power is reduced until the antenna cools down



■ Temperature control function

- Monitors the antenna temperature every minute
- Automatically shuts off when the temperature rises above 38.3°C
- Charging restarts automatically when the temperature returns to a safe level.

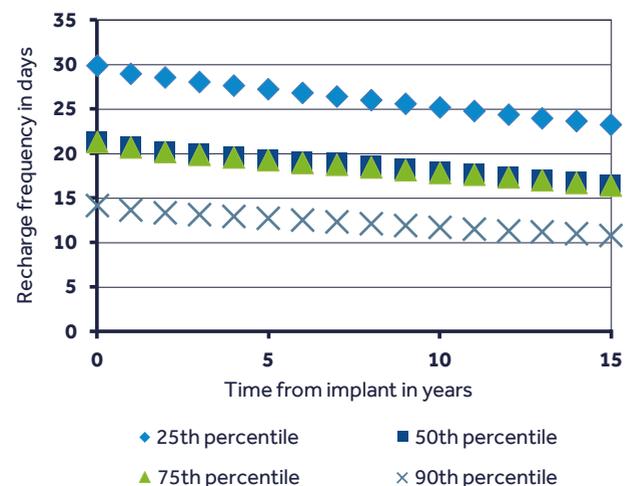
■ Adhesive disc to improve the attachment of the antenna during charging (Ref.: 040618)



These double-sided adhesive discs provide better attachment of the antenna during charging, keeping the head of the antenna from moving unintentionally and thus improving the charging time. It is recommended not to place the adhesive directly on the skin.

■ Long-term battery performance

The proven* long-term performance of the battery used in Activa™ RC neurostimulators shows that patients will experience a similar charging time and frequency over the entire service life of the device.



The recharge frequency corresponds to maximum time allowed between recharge events. In practice more regular charge behaviour might be seen.

The percentile corresponds to patient groups that need different energy levels¹.

¹ Medtronic data on file, document number: NDHF1172-159780

The Activa™ RC can maintain consistent recharge intervals over 15 years to minimally impact the patient experience*.

For more information about the charging system, see the relevant product and therapy manuals.

* Medtronic data on file, document number: NDHF1172-159780

CHARGING SYSTEM FOR ACTIVA™ DBS THERAPY QUICK GUIDE

Charger for Activa™ DBS Therapy from Medtronic, Inc. Model 37751 — For use with the Activa™ RC neurostimulator

Note: This is the quick reference guide for charging the neurostimulator battery and the charger battery.

Read the complete instructions in the user manual before using this guide.

Charging system components

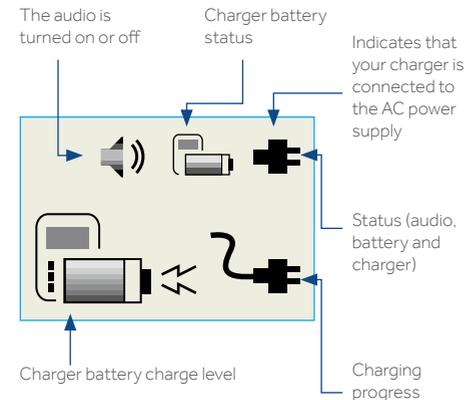


Checking the battery status

Both the neurostimulator and the charger need to be charged.

Charge the charger battery

1. Connect the charger cable (AC power supply) to an AC outlet. The green light on the power supply indicates that it is live.
2. Connect the AC power supply. The charger will begin to be charged when it is connected to the AC power supply, and the charging session screen will be displayed on the charger.



Synchronising the programmer and the neurostimulator

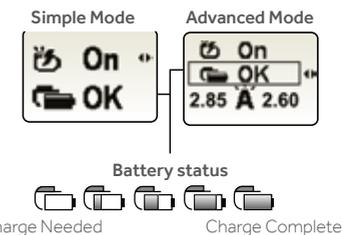
You can check the neurostimulator by positioning the patient programmer over the implant or by using the programmer's antenna.

1. Place the programmer or the antenna over the neurostimulator and press the CHECK KEY

Note: Pressing the CHECK KEY for synchronisation also turns on the patient programmer.



2. The Therapy screen shows the neurostimulator battery status.

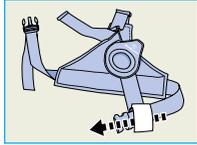


It is very important that you check the neurostimulator battery every day.

Note: If your physician has enabled the Alert function and you do not check the battery before the alarm time each day, an alarm will sound to remind you that you must check the neurostimulator battery.

CHARGING SYSTEM FOR ACTIVA™ DBS THERAPY QUICK GUIDE

Placing the shoulder strap and adjusting the antenna



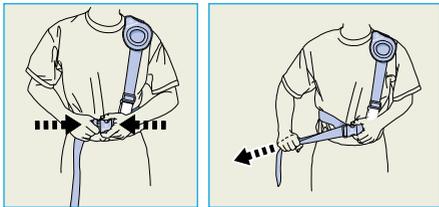
1. Remove the shoulder strap from the packaging. Pass the left end of the shoulder strap through the white fastener.

2. Press the skin in the area where the neurostimulator is located. In this example, the patient has the neurostimulator implanted on the left side.



3. Put the shoulder strap on the left shoulder. Place the antenna in the opening and secure it in position using the adhesive strip.

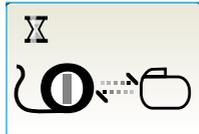
4. Secure the buckle and tighten the shoulder strap. Adjust the belt so that the antenna is centred over the neurostimulator.



Note: For more information about an implant located on the right side, see the instructions for use on the RC antenna case.

Charge the neurostimulator battery

1. Place the belt or shoulder strap over the neurostimulator.
2. Place and secure the antenna in position.
3. Press the green START CHARGE/TEST  button on the charger.
4. The charger display will show the Charger Waiting screen, which indicates that the neurostimulator and the charger are trying to communicate.

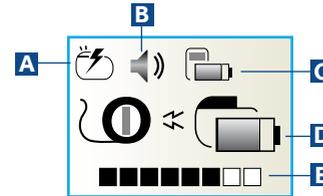


Charger Waiting screen

Note: After placing the charger over the neurostimulator, wait for at least 10 seconds to check for maximum efficiency.

5. When charging begins, the Neurostimulator Charging screen will appear. This screen:

- Confirms the status and progress of the neurostimulator charging session.
- Shows you the status of the charger battery.
- Shows a blinking battery icon for the neurostimulator, which indicates that the battery is recharging.



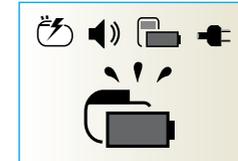
Neurostimulator Charging screen

- A** The neurostimulator is ON () or OFF ().
- B** The Audio is turned ON or OFF.
- C** STATUS row: Shows information about the neurostimulator and the charger.
- D** CHARGING PROGRESS row: Indicates the charging progress.
- E** CHARGING EFFICIENCY row: Indicates the efficiency of the charging signal between the neurostimulator and the charger (a greater number of black boxes indicates greater efficiency and a shorter charge time).

Note: The charging efficiency (number of filled boxes) depends on the position of the antenna and the location of the implant. In some cases, maximum efficiency can be achieved with fewer than eight black boxes filled.

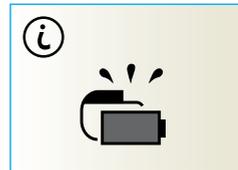
Use the antenna handle or the adhesive discs to improve efficiency if necessary.

6. When the neurostimulator battery is almost completely charged, the Neurostimulator Charge Sufficient screen will appear.



Neurostimulator Charge Sufficient screen

7. When the neurostimulator battery is fully charged, the Neurostimulator Charge Complete screen will appear and the charger will stop.



Neurostimulator Charge Complete screen

CHARGING SYSTEM FOR ACTIVA™ DBS THERAPY QUICK GUIDE

Charger information screen

Information Screens	What to do
Neurostimulator battery screens	

 	<p>Charge the neurostimulator</p> <ul style="list-style-type: none"> ■ The neurostimulator battery charge level is low. ■ Stimulation will stop soon.
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 	<p>End the neurostimulator charging session</p> <ul style="list-style-type: none"> ■ Stop charging the neurostimulator battery with the charger.
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 	<p>The charging of the neurostimulator has completed</p> <ul style="list-style-type: none"> ■ The neurostimulator's battery is fully charged. ■ Press the AUDIO control button to clear the message.
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Information Screens	What to do
Charger battery screens	

 	<p>Charge your charger</p> <ul style="list-style-type: none"> ■ The charger battery level is low. ■ Charge the charger battery using the AC power supply.
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 	<p>End the charger charging session</p> <ul style="list-style-type: none"> ■ The charger battery is only partially charged. ■ Stop charging the charger battery using the AC power supply.
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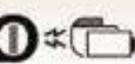
 	<p>Charger charging complete</p> <ul style="list-style-type: none"> ■ The charger battery is fully charged. ■ Press the AUDIO CONTROL key to clear the message.
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Antenna screens	What to do
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 	<p>Relocate the antenna</p> <ul style="list-style-type: none"> ■ Communication between the charger and the neurostimulator has been interrupted or has not been established. ■ Relocate the antenna over the neurostimulator and press the START CHARGE/TEST KEY. 
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 	<p>Check the antenna</p> <ul style="list-style-type: none"> ■ The connection between the antenna and the charger is loose or the antenna is not connected. ■ Make sure there is complete contact between the antenna and the charger. ■ Connect the antenna or adjust the connection and try again. ■ The antenna or the charger may need to be repaired.
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Warning screens	What to do
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 	<p>Charge the neurostimulator battery now</p> <ul style="list-style-type: none"> ■ The neurostimulator battery level is low. ■ Stimulation has stopped. ■ Press the START CHARGE/TEST BUTTON  ■ Charge the neurostimulator battery now.
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Warning screens	What to do
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 	<p>Charge the charger battery</p> <ul style="list-style-type: none"> ■ The charger battery charge is insufficient to charge the neurostimulator. ■ Connect the charger to the AC power supply to clear the screen. ■ Charge the charger now.
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 	<p>Call physician</p> <ul style="list-style-type: none"> ■ The system is not functioning correctly. ■ Stimulation may have to be stopped. ■ Note the number that appears on the screen and call your physician. ■ Indicate to them the specific error code that appears on the charger display.
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 	<p>Battery near the end of its service life (ERI, elective replacement indicator)</p> <ul style="list-style-type: none"> ■ The neurostimulator must be replaced. ■ Therapy will soon no longer be available. ■ Call your physician and indicate the error message that appears on the charger screen.
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See the Activa™ DBS Therapy patient programmer User Manual and the Activa™ DBS Therapy patient manual for additional instructions and complete information about warnings, preventive measures, potential risks and benefits from their use.

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