

**Figure 7.4 Batteries** screen with neurostimulator **Finished** status.

**Notes:**

- If recharging is interrupted, or issues are experienced while attempting to recharge. Refer to "Troubleshooting" on page 163 for causes and solutions.
- Refer to "Changing the recharging temperature and speed" on page 155 to change the recharging temperature

and speed while recharging your neurostimulator battery.

**Table 7.1 Recharging status indicators**

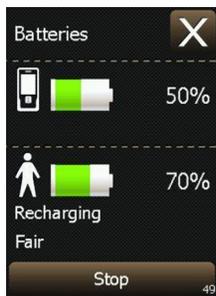
Indicator	Description
Green flashing light	Recharging is in progress.
Green steady light	Recharging is finished. The battery is fully charged.
Amber flashing light	There may be a recharging problem, see "Troubleshooting" on page 163 for information.
Amber steady light	Recharging ended due to a problem, see "Troubleshooting" on page 163 for more information.
Audio alert (Beeping)	<p>There may be a recharging problem, the controller screen may display information to help you resolve the problems. If the problem is not resolved, see "Troubleshooting" on page 163 for more information.</p> <p>The Audio alert is optional and can be turned on or off from the controller Menu, see "Changing the audio and vibration settings" on page 84 for instructions for setting the preferences for the Audio alert.</p>

Using the recharging system with the implanted neurostimulator 7

## To stop recharging the neurostimulator battery

You can stop the recharging process at any time, even before the **Batteries** screen indicates that recharging is **Finished**.

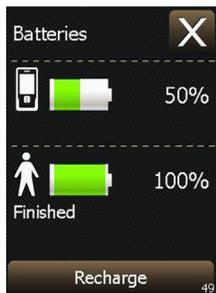
1. If necessary, press and hold the **Lock** (🔒) button on the **Unlock** screen.
2. Press the **Stop** button on the **Batteries** screen (Figure 7.5).



**Figure 7.5 Batteries** screen with the neurostimulator recharging quality.

The **Batteries** screen will read **Finished** with the percentage of battery that the

controller and neurostimulator currently hold (Figure 7.6).



**Figure 7.6** Batteries screen with neurostimulator **Finished** status.

3. Press the **Exit** (X) button to view the **Home** screen.

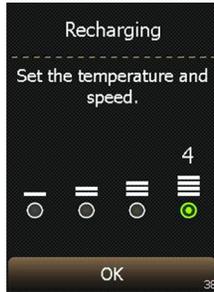
**Note:** If you want to continue recharging, press the **Recharge** button shown on the **Batteries** screen. Refer to "Recharging the neurostimulator battery" on page 146.

## Changing the recharging temperature and speed

The recharging temperature and speed can only be adjusted while the neurostimulator is

being actively recharged. The higher the number, the quicker and warmer recharging will be. The default recharging temperature and speed is **4**.

1. Start the process for recharging the neurostimulator battery. Refer to "Recharging the neurostimulator battery" on page 146.
2. If necessary, press and hold the **Lock** () button on the **Unlock** screen.
3. Press the **Exit** () button on the **Batteries** screen.
4. Press the **Menu** () button on the **Home** screen.
5. Drag the slider bar, or use the **Increase/Decrease** key to view additional preferences on the **Menu** screen.
6. Select the **Recharging** button. The **Recharging** screen is shown (Figure 7.7).



**Figure 7.7** Recharging screen.

7. Using the touchscreen or the **Increase/Decrease** key, select the circle next to the desired recharging temperature and speed (Figure 7.7).
  - The more bars you select, and the higher the number, the faster the recharging speed and the warmer the recharger will feel while you are recharging.
  - It is normal to feel some heat under the recharger while recharging, if this is uncomfortable, reduce the recharging speed.

Using the recharging system with the implanted neurostimulator 7

- The recharging temperature and speed that you select will stay the same until you change the setting again.
- 8. Press the **OK** button to exit.
- 9. Press the **Exit** (⊗) button to return to the **Home** screen.
- 10. Press the **Battery status** (🔋) button to view the **Batteries** screen.  
Or, press the **Lock** (🔒) button to lock the controller.

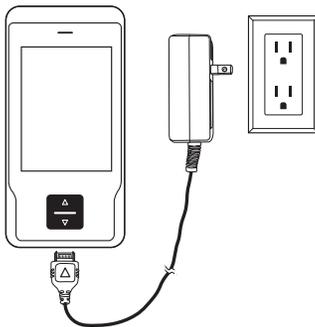
## Recharging the controller battery pack

This procedure requires the power supply packaged with the recharging system. Refer to the manual packaged with the recharging system for more information about the power supply.

The power supply cannot be used to recharge type AA batteries.

1. Plug the power supply into an electrical outlet (Figure 7.8).

2. Plug the connector end of the power supply into the charging port of the controller (Figure 7.8).



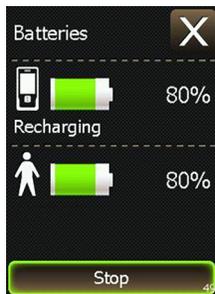
**Figure 7.8** Plug the power supply into the electrical outlet and controller charging port.

**Notes:**

- The recharging light will flash green while your controller battery pack is recharging.

- Refer to Table 7.1 on page 153 for more information about recharging status indicators.

3. Press and hold the **Lock** (🔒) button on the **Unlock** screen. The controller will display the **Batteries** screen (Figure 7.9).



**Figure 7.9** Batteries screen with the controller recharging status.

4. Press the **Exit** (⌫) button to view the **Home** screen.
5. Press the **Lock** (🔒) button to lock the controller while recharging.

**Note:** The controller should be locked while recharging the battery pack to help speed up the recharging process.

When the controller battery pack is completely charged, the recharging light will be steady green and no longer flashing. The **Batteries** screen displays **Finished** (Figure 7.10).



**Figure 7.10** Batteries screen with controller **Finished** status.

6. To complete recharging the controller battery pack at any time, unplug the power supply from the controller charging port.

Using the recharging system with the implanted neurostimulator 7

**162** English 97745 2013-04



---

## 8 Troubleshooting

This chapter will help you if you are experiencing problems with your Controller. It also provides information on when to call your clinician.

**Note:** If you cannot solve a problem or if your problem is not described here, contact your clinician.

## Controller screens

The controller displays three different types of screens: warning screens, alert screens, and notification screens. These screens provide you with information about your system, alert you to a problem with your system, or guide you during controller use.

Icon	Description	Screen type
	Red triangle with an exclamation point	Warning screen
	Orange triangle with an exclamation point	Alert screen
	Blue circle with the letter 'i'	Notification screen

## Warning screens

Warning screens indicate a problem with the controller, recharger, or neurostimulator.

Table 8.1 describes the possible warning screens and provides instructions (**see blue text**) on how to resolve the problem and clear the screen.

If the warning screen is not resolved using the instructions in Table 8.1, write down the message on the screen and the number in the bottom right corner of the warning screen, and call Medtronic or your clinician.

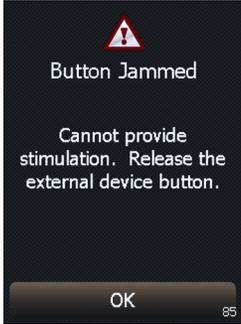
**Table 8.1 Warning screens**

Message	Cause and action
 <p>The screenshot shows a black background with a red warning triangle icon at the top. Below it, the text reads "Battery Empty". In the center is a white battery icon. Below the icon, the text reads "Cannot continue. Recharge the controller." At the bottom right corner, the number "79" is visible.</p>	<p>The controller batteries are depleted. Programming is not available.</p> <p><b>Recharge the controller battery pack now. Refer to "Recharging the controller battery pack" on page 158.</b></p>
 <p>The screenshot shows a black background with a red warning triangle icon at the top. Below it, the text reads "Batteries Empty". In the center is a white battery icon. Below the icon, the text reads "Cannot continue. Replace the controller batteries." At the bottom right corner, the number "79" is visible.</p>	<p>The controller batteries are depleted. Programming is not available.</p> <p><b>Replace the controller batteries now. Refer to "Replacing the type AA controller batteries" on page 206.</b></p>

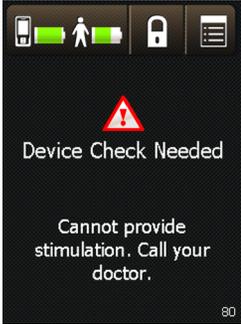
**Table 8.1 Warning screens (continued)**

Message	Cause and action
	<p>The implanted neurostimulator batteries are depleted. Stimulation is not available.</p> <p><b>Recharge the implanted neurostimulator. Refer to "Recharging the implanted neurostimulator battery" on page 146.</b></p>
	<p>The external neurostimulator batteries are low and stimulation will not be available soon.</p> <p><b>Write down the message on the screen and the screen number in the bottom right corner. Do not replace the external neurostimulator batteries by yourself. Call your clinician.</b></p> <p><b>Press the OK button to exit this screen.</b></p>

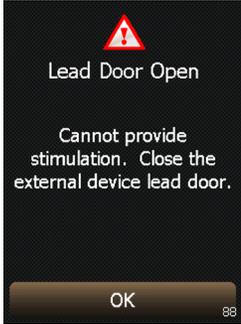
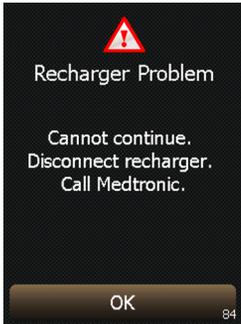
**Table 8.1 Warning screens (continued)**

Message	Cause and action
 <p>The screenshot shows a warning screen with a red triangle icon containing an exclamation mark. The text reads: "Button Jammed", "Cannot provide stimulation. Release the external device button.", and "OK" at the bottom right with the number "85".</p>	<p>The <b>ENS</b> button on the external neurostimulator is stuck in the pressed position.</p> <p><b>Press and release the ENS button, then press the OK button to clear the screen.</b></p> <p><b>If this does not solve the problem, write down the message on the screen and the screen number in the bottom right corner, and call your clinician.</b></p>
 <p>The screenshot shows a warning screen with a red triangle icon containing an exclamation mark. The text reads: "Cannot Recharge Device", "The controller battery is too low. Recharge the controller.", and "OK" at the bottom right with the number "86".</p>	<p>The controller battery pack is low and the controller is unable to recharge the implanted neurostimulator battery.</p> <p><b>Recharge the controller battery pack. Refer to "Recharging the controller battery pack" on page 158.</b></p> <p><b>Press the OK button to exit this screen.</b></p>

**Table 8.1 Warning screens (continued)**

Message	Cause and action
	<p>The external neurostimulator may have reached its end of service (EOS) and needs to be checked by your clinician. Stimulation is not available.</p> <p>The implanted neurostimulator needs to be checked by your clinician. Stimulation is not available.</p> <p><b>Write down the message on the screen and the screen number in the bottom right corner, and call your clinician.</b></p>
	<p>The neurostimulator therapy settings are not complete.</p> <p><b>Write down the message on the screen and the screen number in the bottom right corner, and call your clinician.</b></p>

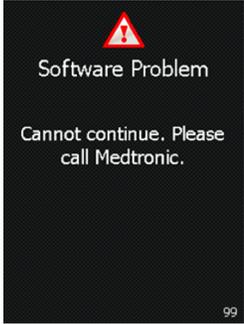
**Table 8.1 Warning screens (continued)**

Message	Cause and action
	<p>The external neurostimulator lead door was open while attempting to adjust stimulation.</p> <p><b>Close the lead door on your external neurostimulator. Retry adjusting your stimulation settings. If you cannot easily close the door, contact your clinician.</b></p> <p><b>Press the OK button to exit this screen.</b></p>
	<p>There is a problem with the recharger. The recharger will not be able to recharge your implanted neurostimulator.</p> <p><b>Disconnect the recharger from the controller.</b></p> <p><b>Write down the message on the screen and the screen number in the bottom right corner, and call Medtronic.</b></p> <p><b>Press the OK button to exit this screen.</b></p>

**Table 8.1 Warning screens (continued)**

Message	Cause and action
 <p>The image shows a warning screen with a black background. At the top center is a red triangle with a white exclamation mark. Below it, the text reads: "Recharging Not Available", "Cannot continue. Install Medtronic battery pack and try again.", and "OK" in a white button at the bottom. A small number "78" is visible in the bottom right corner of the screen.</p>	<p>Your controller is using type AA batteries. Type AA batteries cannot be used to recharge an implanted neurostimulator.</p> <p><b>Replace the controller batteries with the battery pack. Refer to the recharging system user manual for instructions on replacing the battery pack.</b></p> <p><b>If you do not have a battery pack, call Medtronic.</b></p> <p><b>Press the OK button to exit this screen.</b></p>

**Table 8.1 Warning screens (continued)**

Message	Cause and action
	<p>The software is not working correctly. Stimulation may have stopped.</p> <p><b>Write down the message on the screen and the screen number in the bottom right corner, then follow these steps:</b></p> <ol style="list-style-type: none"><li><b>1. Remove and reinsert the controller batteries, then retry the action that caused the error screen to appear.</b></li><li><b>2. If this does not solve the problem, call Medtronic.</b></li></ol>