

# S-Charge System

Flexible Battery System with  
Display and Magnetic Charger  
**User Guide**



# 14:17

## Friday 19th January

was the moment when **Richard** experienced the very latest in prosthetic battery technology. Hidden within his prosthetic forearm, Richard's flexible, slender S-Cell batteries work in perfect harmony with the hub and digital display, to provide him with the most streamlined, responsive and informative battery system he has ever used.

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## Your S-Charge System

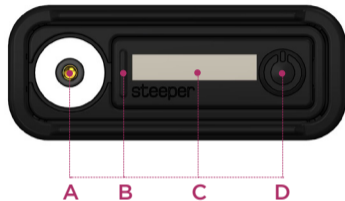
The S-Charge System is an easy to control charging system that is fitted into your prosthetic forearm to allow you to easily activate, deactivate, charge and monitor the power status on your prosthesis.

Your S-Charge System is operated using a standby switch, a visual display and a magnetic wall charger.

The display screen which is nestled into your forearm notifies you of the remaining power within the system and informs you if there is a charging fault.

For information the image opposite shows the operational buttons for the Display.

## Display buttons



- A** Magnetic charging point
- B** Mode button
- C** OLED display
- D** Standby button

## Features and benefits

- Fully charges the prosthesis within 4 hours
- Visual display of the power status
- Visual display informing you of any charging faults
- Allows you to activate and deactivate your prosthesis at a touch of a button
- Simple to use button that switches to and from standby
- Raised mounting frame to prevent accidental activation
- Magnetic charger allows for easy connection to the power supply
- Quick-release magnet protects against damage
- Automatic Sleep mode activation to save power
- The language can be changed into the following languages: English, French, German, Spanish, Italian, Portuguese, Dutch, Turkish, Russian, Chinese

## Compatibility

Please only use your S-Charge System with a prosthesis that is in line with the guidance provided by your prosthetist.

The S-Charge System is only compatible with Steeper S-Cell flexible batteries.

## S-Charge System start-up

To turn on the system, hold down the standby button (D) for 3 seconds.



The Display will read “HELLO” in the language selected by your prosthetist.



**Warning:** To ensure that the S-Charge System is not damaged, do not directly press the Display whilst taking the S-Charge system into/out of its standby mode

This will be displayed for 5 seconds, after which the display will show the current charge of the battery.



This screen will be displayed for 5 seconds, after which the system will automatically enter Sleep Mode and the screen will turn blank.

## Waking up the S-Charge System

The S-Charge System can be woken up by a short press of the standby button (D). Once woken up, the display will show the current charge of the battery.

**Warning:** Ensure the Display is not accidentally pressed so as not to damage the S-Charge System.

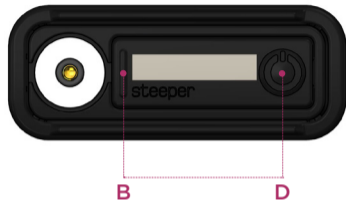
## Changing the language

Your S-Charge System's language has been set by your prosthetist in clinic. If required the system can be changed into the following languages:

- English
- German
- French
- Italian
- Spanish
- Portuguese
- Dutch
- Turkish
- Russian
- Chinese

Should you wish to change the language, first, press the Mode button (**B**) once to display the version number, then press again and hold for 5 seconds to enter the Language Change mode.

Short presses of the Standby button (**D**) will change the language.



Once the desired language is displayed; wait for 5 seconds and the display will automatically set the language.



## Low battery

1. Once the battery level falls below 10% the Display will flash and show one of the following:



**A:** If the S-Charge System is awake.

Or



**B:** If the S-Charge System is in Sleep Mode.

## Charging the prosthesis

1. Connect the magnetic plug to the magnetic charging port (**A**) of the S-Charge System.



**Note:** if the magnetic charger is pulled, it will automatically release.

2. Once the power supply is turned on, the charging display will be shown.



3. The solid segments of the battery show the current charge of the battery. The cycling segments of the battery highlights the proportion of the battery total capacity that has yet to be charged.

4. Once the battery is fully charged, all segments will be solid.



5. Once the magnetic plug is disconnected, the display will say either:

- GOODBYE - if the prosthesis was deactivated prior to charging.

- The current charge of the battery - if the prosthesis was not deactivated prior to charging.

### Putting the prosthesis into standby

1. If the S-Charge System is in Sleep Mode, it must be first woken up by a short press of the standby button (D).

2. After which, the prosthesis can be put into standby by holding down button D for 5 seconds.

3. The display will read "GOODBYE" in the selected language.



4. This will be displayed for 5 seconds, after which the S-Charge System will automatically enter Sleep Mode and the screen will become blank.



## Charging fault

1. If there is a fault detected during charging, the display will be as follow:



2. If this occurs, disconnect and reconnect the charger.

**Warning:** To ensure the S-Charge System is not damaged, do not directly press the Display whilst taking the S-Charge System into/out of its standby mode.

3. If the problem persists, disconnect for 30 minutes and try again.

4. If the issue has not been resolved, contact your prosthetic provider.

## Care, cleaning & safety

It is important to inspect your S-Charge System regularly to ensure early detection of any potential problems. However, please do not adjust, dismantle, attempt to maintain or modify the S-Charge System. Tampering with the device will invalidate the warranty.

The S-Charge System has been designed to minimise the requirement for any maintenance, therefore if the device is not functioning as you believe it should, please contact your prosthetic provider for guidance.

The Display can be gently wiped clean using a soft cloth only. The use of solvents or abrasives may damage the screen, thus affecting the visibility of the text.

If used with a glove, please ensure that water does not run down the inside of the glove at any time.



## Important Information

It is important to inspect your system regularly to ensure early detection of any potential problems.

- The S-Charge System is not waterproof.
- Moisture must not enter the system. If liquid does enter the system, it must not be operated and should be returned to your clinician immediately.
- Do not expose the system to a naked flame or excessive heat.
- Avoid impacts and do not subject the system to excessive loads.
- The hand will not be operational during charging.
- Do not modify - these products are not designed to be opened and have no user accessible or replaceable internal components.
- Do not charge the system whilst the limb is being worn.
- Do not directly press the Display at any time as this may cause damage to the S-Charge System.



## Important Information

- Do not leave unattended when charging.
- The S-Charge System must only be charged with the S-Charge System charger supplied by your clinician.
- If the S-Charge System is stored, ensure that it is fully charged every 6 months, otherwise the functionality may be affected
- If the S-Charge System has either been in storage or is being transported for longer than an hour, please leave in an ambient temperature (20° C) for a minimum of 2 hours before use.
- If the system gives off an odour, immediately remove the prosthesis and contact your clinician.
- To avoid potential damage to the Wall Charger, do not affix magnetic contact to any metallic surface other than the S-Charge System.

## Troubleshooting

If you are experiencing any problems with any of the components in your S-Charge System, disconnect and reconnect the charger. If this has not rectified the fault, disconnect the device for 30 minutes and try again. If the problem persists, please contact your prosthetist for further assistance.

Please do not attempt to open or modify any components within the S-Charge System. This could cause injury and will invalidate the warranty.

**Note:** before following the troubleshooting guidance, ensure that the batteries are charged, the wall charger is plugged in and switched on and that the prosthesis switches are in the 'on' position.

### **Display not working when power button pressed**

Press and hold mode button for 10 seconds. If there is no response, return the S-Charge System and the wall charger to your clinician for further assessment.

### **Distorted display**

1. If the prosthesis is operational, run until the batteries are flat, then charge for 15 minutes.
2. If the prosthesis is not operational, but the distorted display is still visible leave. Leave the batteries to fully drain then connect the wall charger for 15 minutes.
3. If the problem persists, return the S-Charge System and the wall charger to your clinician for further assessment.

### **System does not charge**

1. If there is no response on-screen when the wall charger is connected for 5 minutes, return the S-Charge System and the wall charger to your clinician for assessment.
2. Broken battery symbol has appeared, disconnect and leave for 30 minutes. If the problem persists, return the S-Charge System and the wall charger to your clinician for assessment.

### Prosthesis non-operational despite full charge and power on

Turn the system off and leave for 2 hours, then retry. If the problem persists, return the S-Charge System and the wall charger to your clinician for further assessment.

### Prosthesis operational despite S-Charge power off

Run the batteries until they are flat then recharge, the prosthesis should now be operational. If the problem persists, return the S-Charge System and the wall charger to your clinician for further assessment.

### Incorrect language

See page 10 in this guide for information on how to resolve this.

## Disposal

The S-Charge System is an electrical system and should not be mixed with general household waste. For proper treatment, recovery and recycling, please return to your prosthetic provider for appropriate disposal.



### Environmental operational conditions

Storage, transport and operation	-20°C (-4°F) to +50°C (+122°F)
Operational	-5°C (-23°F) to +40°C (+104°F)
Pressure range	700-1060 hPA

Maximum 80% relative humidity, above non-condensing

Do not expose to EM emissions above 8kV contact, 15kV air

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