

Power Supply Unit

Instructions for Use



REBEL

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2.0 Getting Started

Thank you for choosing the Rebel Bionics Power Supply Unit. This document is designed to help you understand how to safely and effectively use your device. We highly recommend reading this document carefully before using the power supply. It contains essential safety information, usage instructions, and maintenance guidelines.

The power supply must be fitted by qualified personnel. Users should receive proper instruction from a certified clinician before first use.

Your product's serial number and UDI are located on the packaging. Please retain this information for warranty and support purposes.

Any serious incidents related to this product **MUST** be reported to your clinician and the manufacturer immediately.

We recommend keeping this document for future reference throughout the lifetime of your product.

3.0 Safety Precautions

- Only connect to mains with protective earth.
- Do NOT use while charging; power auto-disables during charge.
- Disconnect battery if storing or shipping.
- Do NOT expose to flames, water, or solvents.
- Avoid high EMC environments.
- Clean with hot soapy water only.
- Service life: 5 years (charge port); battery cells should be replaced annually.
- Do NOT use if damaged or overheating.
- Users should be aware of potential risks such as overheating, electrical failure, or battery leakage. In such cases, discontinue use and contact support.
- Avoid using the device near strong electromagnetic fields such as MRI machines, industrial equipment, or security scanners to prevent malfunction.
- No known contraindications

3.1 Indications of Use

The Rebel Bionics Power Supply Unit is intended to provide reliable electrical power to myoelectric upper-limb prosthetic devices for individuals with unilateral or bilateral limb difference. It is designed to be integrated into prosthetic systems and used under the supervision of a certified prosthetist. The device supports safe and reliable operation of terminal devices such as prosthetic hands and is compatible with standard USB-C charging systems.

3.2 Conditions of Use

The power supply is designed for everyday use in home and community environments. It must not be used in hazardous settings such as areas containing flammable liquids, gases, or high electromagnetic discharge (EMC).

The unit complies with IPX4 water resistance standards, suitable for light splashes but not immersion; it must not be submerged or exposed to open flames. It should never be operated while charging, and any signs of damage, overheating, or unusual noise require immediate discontinuation of use.

Battery cells should be replaced annually, and the charge port has a service life of five years. Only Rebel-approved components should be used, and servicing must be performed by authorized personnel.

3.3 Clinical Benefits

The Rebel Bionics Power Supply Unit ensures consistent and safe operation of myoelectric prosthetic systems. Clinical benefits include:

- Reliable power delivery for uninterrupted prosthetic use
- Visual battery health indicators to support proactive maintenance
- Lightweight, compact design for improved comfort and integration
- Annual battery replacement guidance to maintain optimal performance

These features help users maintain confidence in their prosthetic system and reduce the risk of unexpected power loss during critical activities.

4.0 Environmental Exposure

The Rebel Bionics Power Supply Unit is designed to operate safely within specific environmental conditions. It must be used, stored, and charged within the following limits to ensure optimal performance and safety:

- Operational and Storage Humidity: Maximum 80%, non-condensing
- Charging Temperature Range: -10°C to +45°C (14°F to 113°F)
- Discharge Temperature Range: -20°C to +60°C (-4°F to 140°F)
- Storage Temperature Range: -20°C to +60°C (-4°F to 140°F)
- Pressure Range: 700-1060 hPA

5.0 Electrical Safety

To keep you safe, the power supply must be plugged into a wall socket that has proper grounding (a protective earth connection). Never use the prosthetic limb while the battery is charging—this could damage the device or cause it to behave unexpectedly.

If you notice any damage to the charger, plug, or cables, stop using it immediately and contact your clinician or Rebel Bionics.

The power supply includes sensitive electronic parts that can be affected by static electricity or strong electrical fields. Try to avoid using it near things like security scanners, MRI machines, or other devices that give off strong electrical signals. The system is built to meet international safety standards, so as long as you follow these instructions, it should work safely and reliably.

6.0 Maintenance

To keep your power supply safe and working properly, always check for damage before use and never attempt to open or modify the device yourself—repairs must be done by Rebel Bionics or authorized professionals. Ensure the charge port remains unblocked.

Replace the battery cells every 12 months to maintain performance, and note that the charge port is designed to last up to 5 years.

If the device becomes hot, makes unusual noises, or stops working correctly, stop using it immediately and contact your clinician. If the limb won't be used for a while or is being shipped or stored, disconnect the battery to prevent damage.

All maintenance must be performed by Rebel Bionics or trained service personnel. Users and clinicians must not attempt to disassemble or modify the device. Unauthorized repairs or tampering will void the warranty. Any damage caused by intentional harm or neglect will not be covered under the warranty.

7.0 Training

Before using the power supply, users should receive guidance from a certified prosthetist. The clinician will show how to safely turn the device on and off, charge the battery, and check battery levels.

If you're unsure about any part of the setup or use, always ask your clinician for help. Proper training ensures safe and confident use of your prosthetic system.

8.0 Cleaning

To clean the power supply, gently wipe the outer surfaces using a soft, lint-free cloth slightly dampened with clean hot soapy water. Avoid using any solvents, alcohol, or abrasive materials, as these can damage the charge port or battery housing.

Make sure the device is powered off and disconnected from any power source before cleaning. Do not allow moisture to enter the charge port or battery compartment.

The power supply is reusable. Follow cleaning and maintenance instructions to ensure safe reuse and optimal performance.

9.0 Storage

When not in use, store the power supply in a cool, dry place within the recommended environmental limits.

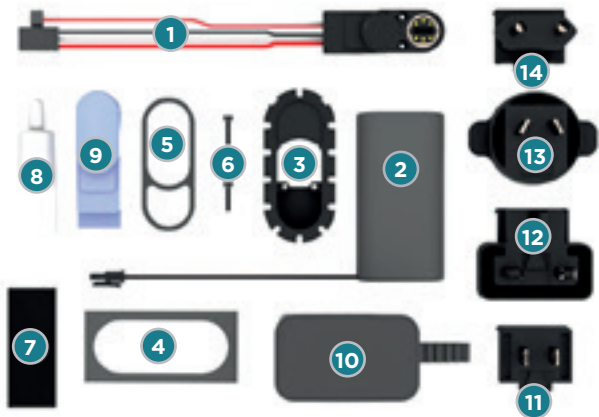
Avoid exposure to direct sunlight, extreme temperatures, or high humidity.

If the prosthetic limb will not be used for an extended period or is being shipped, disconnect the battery to prevent damage.

Always use the original packaging or a protective case to avoid impact or moisture during transport and storage.

10.0 Power Supply System

10.1 What's included?



#	PART NO.	DESCRIPTION
1	B10-A021	CHARGE PORT
2	B10-A006	3350mAh BATTERY
3	B10-0052	MOUNTING BRACKET
4	B10-0058	CUTTING GUIDE
5	B10-0069	ARM SEAL
6	SSCF-M2-10	M2 CAP HEAD

7	B10-0059	BATTERY VELCRO
8	B10-0060	SILICONE ADHESIVE
9	B10-0110	CHARGE PORT BLANK
10	B10-0061	USB-C POWER SUPPLY
11	B10-0062	US ADAPTER
12	B10-0065	UK ADAPTER
13	B10-0063	AUS/NZ ADAPTER
14	B10-0064	EU ADAPTER

10.2 Fitting instructions

TOOLS REQUIRED		
DREMEL OR SIMILAR MULTITOOL	SMALL ROUND NEEDLE FILE	CARVING/ENGRAVING BIT
DREMEL CUTTING WHEEL	SMALL FLAT NEEDLE FILE	PLUseries® 60s Adhesive
T6 TORX DRIVER		



Personal protective equipment must be worn at all times during the fabrication process.



STEP 1.

STEP 2.



Apply the cutting template to the top side of the prosthetic socket.



Carefully cut along the red outline with a cutting disc. File down any sharp edges.

STEP 3.



Offer the internal bracket to the inside of the aperture. Remove material from the wings if the housing is sitting too low in the arm.

STEP 4.



Use the seal to ensure the alignment is correct with the outer surface of the arm. Only bond the mounting bracket, not the seal at this stage. We would recommend bonding the lamination ring into the limb with +PLUSeries® 60 Second Adhesive at this point and allow to cure.

STEP 5.



Offer the internal bracket to the inside of the aperture. Remove material from the wings if the housing is sitting too low in the arm.

STEP 6.

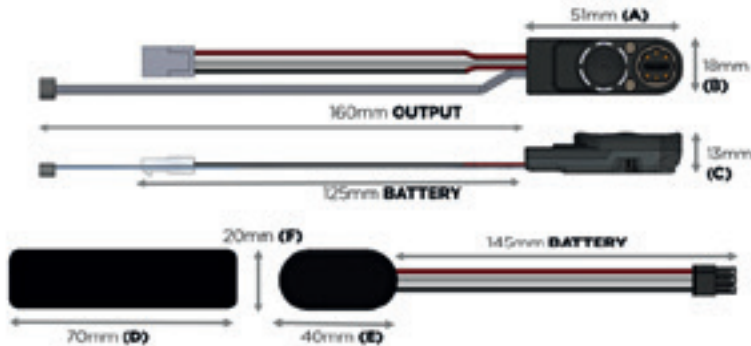


Secure the Charge port with the 2x cap head bolts screws using the T6 Torx driver (0.3Nm). Bond the seal in place with the silicone glue, taking care not to get glue on the outside surface of the charge point or the arm.



Failure to sufficiently enclose the battery will pose a serious threat to user safety due to the risk of water ingress.

11.0 System Specification





PART NUMBER	COGPSU/3350	
CAPACITY	3350mAh	
NOMINAL VOLTAGE	7.4V	
MAX. CURRENT DRAW	7A	
CHARGE PORT DIMENSIONS	51mm (A) x 18mm (B) x 13mm (C)	2" (A) x 0.7" (B) x 0.5" (C)
BATTERY DIMENSIONS	70mm (D) x 40mm (E) x 20mm (F)	2.7" (D) x 1.6" (E) x 0.8" (F)

11.0 System Specification

SYSTEM WEIGHT	125grams	4.4oz
USB-C POWER SUPPLY	FRIWO Gerätebau GmbH - NEO006.0-I-X-05 P No.: 1960559	
	Nominal Input Voltage	100-240V AC +/-10%
	Nominal Output Current:	1400mA
	Nominal Output Voltage:	5V DC +5% / -5%
OPERATIONAL AND STORAGE HUMIDITY	Maximum 80% humidity, non-condensing	
CHARGE TEMP RANGE	-10°C to +45°C	14°F to 113°F
DISCHARGE TEMP RANGE	-20°C to +60°C	-4°F to +140°F
STORAGE TEMP RANGE	-20°C to +60°C	-4°F to +140°F
PRESSURE RANGE	700-1060 hPA	

12.0 Use

TURNING THE LIMB POWER ON	
	When the power is off, hold the push button greater than 1.5s hold turn on limb power, 6x purple will illuminate clockwise and then goes blank.
TURNING THE LIMB POWER OFF	
	When the power is on, hold the push button greater than 1.5s. Hold off limb power, 6x purple will illuminate anti clockwise and then goes blank.
CHARGING	
	TO CHARGER THE DEVICE CONNECT EITHER A USB-C connector or the magnetic charger. If charging correctly, all 6x LEDs will pulse slowly.

12.0 Use

TURNING THE LIMB POWER ON



When the power is off, hold the push button greater than 1.5s hold turn on limb power, 6x purple will illuminate clockwise and then goes blank.

TURNING THE LIMB POWER OFF



When the power is on, hold the push button greater than 1.5s. Hold off limb power, 6x purple will illuminate anti clockwise and then goes blank.

CHARGING



TO CHARGER THE DEVICE CONNECT EITHER A USB-C connector or the magnetic charger. If charging correctly, all 6x LEDs will pulse slowly.

12.1 Power Indication

QUICK PRESS (for less than 1.5 seconds) to view battery charge level for 2.5 secs, then will go out.

At least 96% charge level



At least 80% charge level



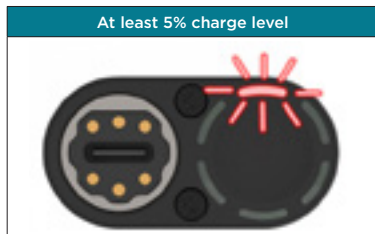
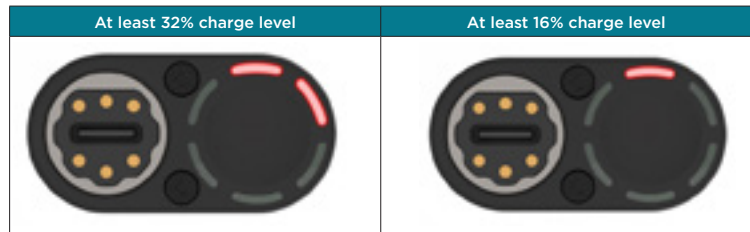
At least 64% charge level



At least 48% charge level



12.1 Power Indication

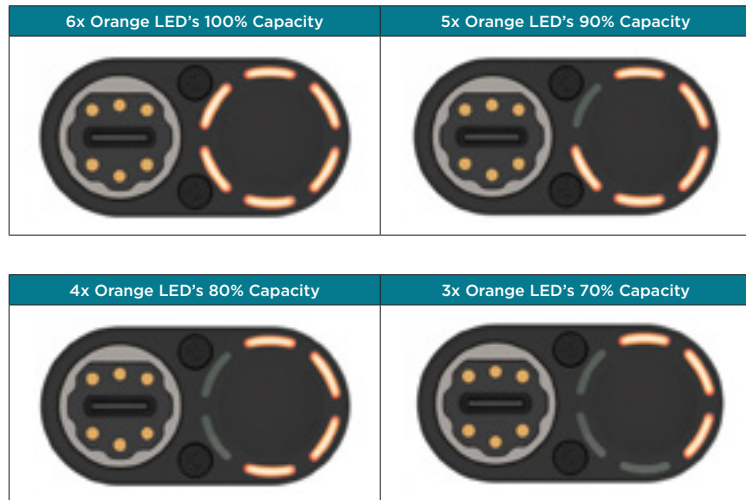


Lower LED will flash red when the battery is lower than 5%. This doesn't require a button press.

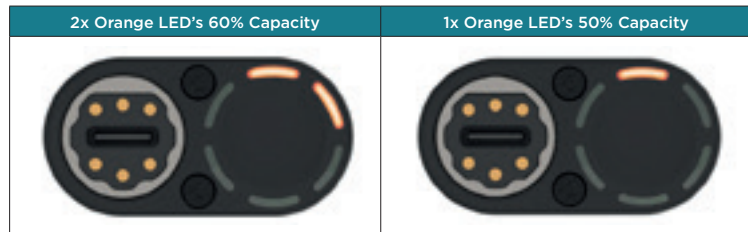
12.2 Battery Health Indication

2x QUICK PRESS (first within 1.5s and the second within 1.5s) enters the battery health indication display. This will appear for 2.5 secs, then will go out.

The following displays what to expect the battery level indication to be at various states.



12.2 Battery Health Indication



Recommended: Change Battery Cells



MUST Change Battery Cells

12.3 Full System Reset

To enable Full System Reset, you will need the Limb Power OFF and not charging.

2x QUICK PRESS within a 1.5 second succession will skip through to the Full System Reset Indication.

6x Further presses within a 1.5 second succession illuminates the LED's in a clockwise direction one by one.

Final press it will flash aqua marine and flash blue twice. This confirms the system is complete reset.



A FULL RESET WILL BE REQUIRED IF THE BATTERY IS SWAPPED.



12.4 Compatibility

The Rebel Bionics Power Supply Unit is compatible with:

- Rebel Bionics Hand (all models using 6–8.4V input)
- Rebel Bionics Electrode System (COGDAC/EL2)
- USB-C charging systems and Rebel Bionics magnetic chargers

Only batteries and connectors approved by Rebel Bionics should be used. Use of non-approved components may result in overheating, signal loss, or damage. Compatibility updates and approved accessory lists are available in the Technical Manual via the Rebel Bionics Website or upon request.

12.5 Battery Replacement

The Rebel Bionics Power Supply Unit is compatible with:

- Rebel Bionics Hand (all models using 6–8.4V input)
- Rebel Bionics Electrode System (COGDAC/EL2)
- USB-C charging systems and Rebel Bionics magnetic chargers

12.6 Replacement Instructions

- Use the limb until the battery is completely drained and no longer powers movement.
- Carefully disassemble the limb to access the battery compartment.
- Replace the old cells with the official Rebel 3350mAh Battery (Part Number B10-A006)
- Reconnect the battery to the USB-C charger, making sure the cable colours match:
 - Red to red, black to black, and white to white.
- Perform a full system reset (see instructions in the IFU).
- Allow the system to fully charge before using it again.

If this initial charge or the full reset is not conducted properly, it will negatively affect how the system calculates the remaining charge.






13.0 Disposal




When it's time to dispose of the power supply or its battery, do not throw them in regular household waste. These components contain materials that could harm the environment if not handled properly. Batteries may pose fire or chemical hazards if not disposed of properly. Do not incinerate, puncture, or expose to high heat.

Please follow your local regulations for electronic waste and battery disposal. If you're unsure how to dispose of the device safely, contact your clinician or local waste authority for guidance.







Always remove the battery before disposal and recycle it through an approved battery collection point.









14.0 Symbols Used

Symbol	Title	Description	Standard	Ref. No. of symbol
	Manufacturer	Indicates the medical device manufacturer	ISO 15223-1	5.5.1
	Consult instructions for use	Indicates the need for the user to consult the instructions for use.	ISO 15223-1	5.4.3
	Keep Dry	Indicates medical device kept away from moisture	ISO 15223-1	5.3.4
	Temperature Limit	Indicates temperature the medical device can be exposed	ISO 15223-1	5.3.7
	Humidity limitation	Indicates the range of humidity to which the medical device can be safely exposed.	ISO 15223-1	5.3.8

Symbol	Title	Description	Standard	Ref. No. of symbol
	Type BF applied part	Indicates an electrical medical device that complies as Type B	IEC 60601-1 IEC 60601-1 IEC 60878 ISO 9687:2015	5334
	Caution: Federal (USA) law restricts this device to sale by or on the order of a physician	Device is prescription use only by a designated healthcare professional	None; this is symbol generated by the company	21 CFR 801
	Caution	Indicates the need for the user to consult the instructions for use for important cautionary information such as warnings and precautions that cannot, for a variety of reasons, be presented on the medical device itself.	ISO 15223-1	5.4.4
		This product contains electrical and electronic components that may contain materials which, if disposed of with general waste, could be damaging to the environment. Residents of the European Union must follow specific disposal or recycling instructions for this product. Residents outside of the European Union must dispose of or recycle this product in accordance with local laws or regulations that apply.	IS EN 50419	Fig. 1

14.0 Symbols Used

Symbol	Title	Description	Standard	Ref. No. of symbol
	Bluetooth™	Bluetooth™ wireless or enabled technology	Trademarks of Bluetooth Special Interest Group (SIG)	N/A
	Follow instructions for use	Refer to instruction manual/ booklet	IEC TR 60878	N/A
IP 22	Ingress Protection Level	Protection against solid foreign objects of 12.5 mm diameter and greater, and protection against vertically falling water drops when tilted up to 15 degrees.	IEC 60601-1	Table D.3, Symbol 2
	FCC Part 15	Electromagnetic interference from the device is under limits approved by the Federal Communications Commission.	Federal Communications Commission	N/A
	Complies with Australian Radio communications requirements.	Complies with Australian Radio communications requirements.	AS/NZS 4417.1	N/A
	CE Mark	For European Compliance	93/42/EEC Medical Devices Directive	Annex XXII
	Recycling	Battery is recyclable - follow local recycling & reclaiming procedures	ISO 7000	1135

Symbol	Title	Description	Standard	Ref. No. of symbol
	China RoHS Mark	China RoHS Mark I logo. Product does not contain toxic and hazardous substances or elements above the clip level in any material or application including those exempt from the requirements of the EU RoHS Directive.	SJ/T11364-2006	N/A
	Recycling under the Waste Disposal Act	Subject to recycling under the Waste Disposal Act.	Environmental Protection Administration, R.O.C. (Taiwan)	N/A
	Serial Number	Indicates a unique identifier used for identification and traceability purposes	ISO 7000 / IEC 60417	N/A
	Medical Device	Indicates the product is a medical device	ISO 15223-1	N/A
	Unique Device Identifier	A unique numeric code that identifies the labeler and the specific version of the device.	ISO 15223-1:2021	N/A
	European Union Representative	Indicates the authorized representative in the European Community/European Union.	ISO 15223-1:2016 Reference no 5.1.2	N/A
	Non Sterile	Indicates a medical device that has not been subjected to a sterilization process.	ISO 15223-1:2016 Reference no. 5.2.7. (ISO 7000-2609)	N/A
	Single Patient - Multiple use	To indicate that the medical device may be used multiple times (multiple procedures) on a single patient	ISO/DIS 15223-1:2020(E) Ref no. 5.4.12. (ISO 7000-3706)	N/A

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Your notes:

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