

Knowledge Base

KB88 Charging Pylontech batteries using the Long Wei charger

Version 1.0 25/03/2024

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1. Introduction

This document describes how to recharge Pylontech low or high voltage batteries using the Long Wei charger, available for loan from Redback. The charger can charge one battery at a time.

The Long Wei charger is recommended for recharging the following batteries, used in Redback Hybrid Battery products.

BRAND	MODEL NUMBERS	CATEGORY
Pylontech	US2000B, US2000C, US3000, US5000	Low Voltage
Pylontech	H48050, H48074	High Voltage

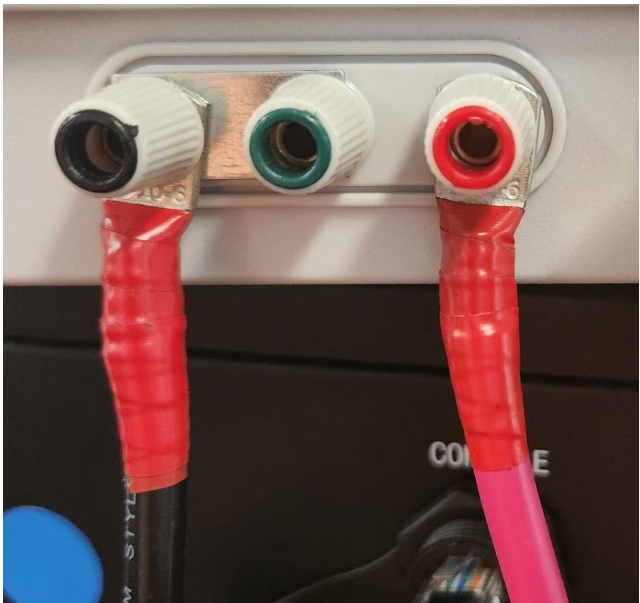
2. Audience

This document is for use by Redback installers or Redback technical staff. It is not for use by homeowners or non-qualified personnel.

3. Tools/parts required

TOOL/PART	ILLUSTRATION
Long Wei charger Notes: 1. Borrow this from Redback Technologies 2. DO NOT connect anything to the red or black posts at the rear of the charger. 3. On the front of the charger, ensure that the metal bridge is in place between the negative and earth binding posts.	 Front Panel  Rear Panel
Charging cables Ring lug -to-Amphenol plug, colour-coded, and supplied with the Long Wei charger.	 Battery Charging DC Cables

4. Charging procedure

STEP	DESCRIPTION	ILLUSTRATION
1	Select a suitable site to recharge the batteries, noting the charger and batteries must be fully protected from the weather; from any chance of getting wet; and must be ventilated for cooling.	
2	Remove batteries to be recharged from the Redback battery enclosure and relocate to the charging site.	
3	At the battery, connect the charging cables to the DC connectors, observing polarity i.e., orange to orange, and black to black. <i>Note: Pylontech batteries may have pairs of DC connector plugs- these are connected internally, so you may select either plug.</i>	
4	Ensure that the metal link between Negative and Earth binding posts is installed, for correct operation.	
5	At the charger, attach the charger cables to the binding posts at the front of the charger. Observe polarity: black to black; red to red. Ensure all three finger nuts are tight.	

6	For Pylontech USxxxx low voltage batteries: 1. Turn battery ON 2. Press the Red button while observing the LEDs. 3. The LEDs should activate. <i>Note: if the LEDs do not activate the battery may be completely depleted. This may self-rectify at Step 8.</i>	
7	At the back of the charger, plug in the AC cable and connect to a 230V AC outlet.	
8	To begin charging, press the green button at the front of the charger. The charger display indicates charging rate (amps) and the measured battery voltage (volts). <i>Note: For a USxxxx battery that failed to activate LEDs at Step 6, observe the battery for any LED activity as you press the green button. If the LEDs fail to illuminate contact Redback for assistance on 1300 240 182.</i>	
9	Adjust the charging current to $5 \pm 0.1A$, using the Coarse and Fine adjustment knobs located just above the power switch, on the front of the charger. The charger is now charging correctly and can be left ON.	
10	The battery is recharged when the indicated voltage reaches 50V. Charging typically requires 4 to 5 hours, or up to 8 hours, depending on the state of the battery.	

11	The battery is now charged. Press the green button and turn the charger OFF, before disconnecting any cables.	
12	Disconnect the Amphenol plugs from the battery. Connect the next battery, if required, and restart the charging process from Step 6.	

5. Further assistance

If you think you will require assistance, book Redback Technical Support 2 days before going to site. This ensures that technical support is reserved for you if you are on-site and need assistance. Redback support is in Brisbane, Australia and is available 8am-4pm (Brisbane time) Monday to Friday. There are three ways to book a support call:

Web: redback.link/support

SMS: 0417 632 065

Tel: 1300 240 182

6. Document history

VERSION	DETAIL	AUTHOR	DATE
1.0	First published version	Tom Urdanoff	25Mar2024
Document Owner	Tom Urdanoff		
Version	1.0		
Contributors	Tom Urdanoff, Adam Shipway		
Approved by	Ali Shah		
Filename:	KB88 Pylontech battery charging using the Long Wei charger		
Issue date:	25Mar2024		