

Battery charger

The charger can charge three types of Lithium-ion batteries. It can be powered by AC power or vehicle battery.



The Charger Kit Dual Slot consists of:

- Charger dual-battery slot (P/N 53018010)
- Power supply for charger (P/N 55001403, Japan: P/N 78650)
- Cable Kit-AC for power supply (P/N 55001402; Japan: P/N 78656)
- Charger battery slot insert (P/N 89843-00)

Chargeable batteries

The charge can charge the following types of batteries:

- Lithium-ion Rechargeable Battery (Smart Battery), 3.7 Ah, 7.4 V, (P/N 76767, P/N 89840-00)
- Lithium-ion Rechargeable Battery, 2.6 Ah, 7.4 V, P/N 92600 (remove battery slot inserts to charge this type of battery)
- Lithium-ion Rechargeable Battery, 4,4 Ah, 11.1.V, P/N 49400 (remove battery slot inserts to charge this type of battery)

Charger slots

The charger has two slots. Each slot can charge either type of battery. When charging the smart battery, you must place the inserts into the battery slot before inserting the battery. Batteries are charged sequentially. Beside each slot are two LED indicators (red and green) to indicate the battery status.

Power supply

The charger can be powered by AC power (using the power supply for the charger) or by car voltage using a 12V vehicle adapter for dual battery charger (P/N 89844-00, not included with receiver kit).

AC power supply is an external adapter, usable worldwide. Different cords with appropriate plugs for different countries are supplied with adapter.

Vehicle power

The charger can be powered by vehicle voltage of nominal 12 V. It can withstand voltages of a vehicle voltage of nominal 24 V (maximum 32 V). So if the user connects the vehicle cable by mistake to a 24 V socket in a vehicle the charger does not start charging but latches in fault condition and flashes all green LEDs. The power must be removed to reset the fault condition.

Technical data

Power Supply	Receiver Connection
AC Input Voltage	100 to 240 V AC +/-10%
AC Frequency	50 to 60 Hz
DC Output Voltage	19 V
DC Output current charger	Approx. 3.5 A
DC Power Input Voltage operation	10 V to 21 V Unit switches off if voltage is out of range
DC Power Input Voltage limits	8 V to 32 V
Absolute maximum input voltage	32 V
Over voltage	21 V to 32 V
Working voltage	10 V to 21 V
Under voltage charging	<10 V
Sum of charge time for all batteries	5 to 6 hours
Charger in first hour	>60 %

Charging the battery



Caution – Ensure that nothing obstructs the vents in the back and bottom of the charger.

The battery is supplied partially charged. Charge the battery completely before using it for the first time.

- To charge the battery, use only a charger that Trimble recommends for charging the Lithium-ion battery.

1 Getting Started

- If the equipment has been stored for longer than three months, charge the battery before using the receiver.

The charger operates between 0 °C (32 °F) and 40 °C (104 °F). Charging a battery at temperatures in the range of 0 °C (32 °F) to 5 °C (41 °F) will take longer than charging at room temperature.

To charge the battery:

1. Ensure that the vents in the back and bottom of the charger are unobstructed.
2. Place the charger on a hard, flat and level surface, to ensure that there is airflow under the charger.
3. To apply power to the charger, use the AC to DC converter or 12 V vehicle adapter. The charger scans the slots for a battery.
4. Place the battery in any of the slots. The red light turns off (can take up to 5s). For an explanation of the LED, see LED Status Indicator below.
5. Charging takes approximately 3 hours per battery at room temperature. If several batteries are charging in the battery charger, the batteries will be charged sequentially, from left to right.

Leave a deeply discharged or shorted battery overnight in the charger to attempt to revive the battery. A shorted battery is typically revived as soon as the slot is scanned. If the red LED turns off, the battery is revived. If the red LED stays on, the battery is no longer functional and needs to be replaced.

LED status indicator

Beside each slot are two LED indicators (Red and Green) to display the battery status:



Status	Red	Green
No battery detected (no battery present or battery defect)	On	Off
Battery detected (charging not started yet)		
- Conditioning not required	Off	Off
- Conditioning required	Blinking	Off
Charging in progress		
- Conditioning not required	Off	Off
- Conditioning required	Blinking	Blinking
- Over/under temperature (charge is inhibited)	One flash every 2.5	Blinking

Status	Red	Green
	seconds	
Conditioning in progress	On	Blinking
Conditioning done (battery fully charged)	On	On
Battery fully charged		
- Conditioning not required	Off	On
- Conditioning required	Blinking	On
Power supply over/under voltage	Off	One flash every 2.5 seconds

Troubleshooting

Issue	Solution
Battery is not detected (Red LED does not turn off)	The battery is not properly inserted. Reinsert battery into battery charger slot.
Battery contacts contaminated.	Clean the battery (for example, by inserting and removing the battery several times) or replace the battery.
Deeply discharged.	Leave the battery overnight in the charger to attempt to revive the battery.
Battery defective.	Replace the battery.

Storing the Lithium-ion battery

Do not store batteries in the receiver or in the external charger unless power is applied.

Keep all batteries on continuous charge when not in use. You can keep batteries on charge indefinitely without damage to the batteries.

Disposing of the rechargeable Lithium-ion battery

Discharge a Lithium-ion battery before disposing of it. Dispose of batteries in an environmentally sensitive manner, and adhere to any local and national regulations concerning battery disposal or recycling.