

Battery Super Reviver User Guide

Overview:

Segway high capacity Li-Ion batteries are complex devices. Complex devices may stop functioning or fail in a wide variety of ways. This DGB International, Battery Super Reviver equipment can revive many (but not all) batteries that have failed in either of 2 specific ways.

Summary of what to do.

Failure Mode 1

Some batteries have stopped functioning because the user has omitted to charge them for too long a period.

There are 5 steps to revive batteries like this:

- ❖ Connect your battery to the BSR ①
- ❖ Turn ON the BSR ②
- ❖ Wait while the BSR automatically runs ③
- ❖ Once the success LED pattern shows (and relay clicks) take your revived battery OFF the BSR and immediately fully charge your battery ④
- ❖ Test the revived battery ⑦

This procedure takes from a few minutes up to about 2 hours. ⑤

Failure Mode 2

Some batteries have stopped functioning, for no readily apparent reason.

There are 5 steps to revive batteries like this:

- ❖ Connect your battery to the BSR ①
- ❖ Turn ON the BSR ②
- ❖ Wait while the BSR automatically runs ③
- ❖ Once the success LED pattern shows (and relay clicks) take your revived battery OFF the BSR and immediately fully charge your battery ④
- ❖ Test the revived battery ⑦

This procedure takes from a few minutes up to about 1 day. ⑥

See the numbered notes on the following pages for more complete descriptions and details.

Summary of what NOT to do.

OBSERVE THESE INSTRUCTIONS.



No benefit can be derived by playing with or tampering with the DGB International, Battery Super Reviver.

Using the Battery Super Reviver outside its guidelines may cause personal injury or damage to the Battery Super Reviver and any attached items.

In particular, DO NOT:

- × Try and revive any other style of battery. ①
- × Connect or disconnect a battery mid-cycle. ②
- × Disconnect power mid-cycle. ③
- × Attempt to revive already functioning batteries. ④
- × Attempt to service this equipment. ⑤
- × Attempt to hack into this equipment. ⑥
- × Attempt to revive any battery that has sustained physical damage, is damp, or is waterlogged. ⑦
- × Plug any foreign items or connectors in to the data port. ⑧
- × Over-tighten battery retaining screws. ⑨

See the numbered notes on the following pages for more complete descriptions and details.

LED Patterns:

Description:	GREEN	RED	YELLOW	Notes:
Revival Type 1. In progress	Slow Flash	OFF	ON	
Revival Type 1. Completed, waiting for user	Slow Flash	OFF	Slow Flash	Alternating flashes + clicking
Revival Type 2. In progress	ON	OFF	Slow Flash	
Revival Type 2. Recently completed	Slow Flash	OFF	Slow Flash	Alternating flashes
Idle Waiting for user to fit battery	ON	OFF	OFF	
Idle – User just fitted battery (Type 1)	Fast Flash	OFF	OFF	Revival will start soon.
Idle – 5 Seconds after user fitted battery (Type 1)	Very Fast Flash	OFF	OFF	Revival will start very soon.
Idle – User just fitted battery (Type 2)	OFF	OFF	Fast Flash	Revival will start soon.
Idle – 5 Seconds after user fitted battery (Type 2)	OFF	OFF	Very Fast Flash	Revival will start very soon.
Idle – Special	ON	OFF	Fast Flash	BSR may need service.
Idle - Special	ON	OFF	Very Fast Flash	BSR will need service soon.
ERROR – Unsuitable Battery	OFF	Fast Flash	Fast Flash	Sync'd Flashes
ERROR – Unsuccessful Revival	OFF	Fast Flash	Fast Flash	Alternating Flashes
ERROR – Special	OFF	ON	Fast Flash	Unit will NOT function. Needs service.
ERROR – A lot of errors encountered	Slow Flash	Slow Flash	Slow Flash	Sync'd Y+G flashes (not RED). Only displayed if idle.
ERROR – Too many errors	OFF	ON	Slow Flash	Unit will NOT function
ERROR – Temporarily TOO HOT	OFF	Slow Flash	Slow Flash	Alternating Flashes Automatically restarts once cool.
ERROR – Special	OFF	ON	ON	Unit will NOT function. Needs service.
ERROR – Special	Fast Flash	Fast Flash	Fast Flash	Unit will NOT function. Needs service.
ERROR BATTERY WRONG POLARITY	Fast Flash	Fast Flash	Fast Flash	Relay Clicking (Red = Alternating)
Factory Tests / Other Errors	Any other Pattern.			Unit will NOT function. Needs service

Table 1.0 LED Patterns and Descriptions.


	SLOW Flash (over a ~ 1 second period)
	FAST Flash (over a ~ 1 second period)
	Very FAST Flash (over a ~ 1 second period)
	Brief Flash (over a ~ 1 second period)

Table 2.0 LED pattern LEGEND.