

# BVSMP / BVSMP/LT

## Operating Instructions



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**BALDWIN BOXALL**  
COMMUNICATIONS

## **BVSMP / BVSMPPLT Power Supply & Charger**

Both the BVSMP and BVSMPPLT employ “switch mode” techniques that improve efficiency, reduce unwanted heat dissipation and weight.

The BVSMP contains two independent PSU modules and can power either two BV220, two BV120D, two BV050Q or one BV440 power amplifier module.

The BVSMPPLT contains a single PSU module and can power either one BV220, one BV120D or one BV050Q power amplifier.

The power supplies have over Current and over Voltage protection circuits and provide full monitoring of the Charger and all DC outputs to ensure system reliability.

In the event of mains failure the DC supplies are maintained using an external standby battery.

The unit has built in deep battery discharge cut off; this prevents total discharge that can destroy the standby batteries in the event of AC power failure for any long periods.

A third fused output is provided to power a mixer or auxiliary circuits. All these outputs together with a fault volt free changeover contact are provided by a 9 way crimp connector plug and socket.

The charger section is totally monitored and has front panel LED fault indicators for the following states:

- AC Supply Healthy,
- Fuse failure,
- Charger failure,
- Battery voltage high,
- Battery voltage low.

Should any of the above fault conditions occur an internal relay releases providing a changeover contact. This fault contact is normally connected to a fault input on a router or used to indicate a fault at the fire detection panel.

When a fault has been detected the relevant fault LED will illuminate and the OK LED will extinguish.

If the fault is then cleared the OK LED will illuminate, and the relevant fault LED will flash to indicate the fault that existed. This is useful when fault finding.

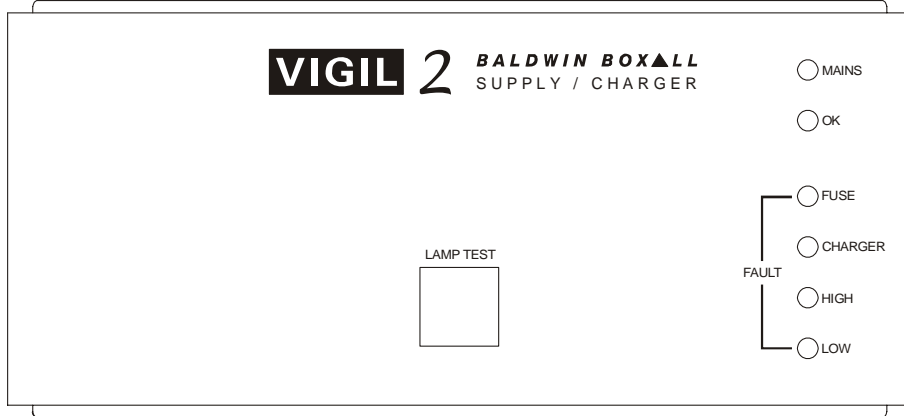
To clear these “latched” faults press the Lamp Test button.

The charger incorporated is of the constant voltage type set for the recommended float charge. Should the battery be below this voltage the BVSMP will charge in a constant current mode at the rate of 3 amps which progressively reduces once the battery has achieved its nominal float level. Several chargers may be paralleled when used for larger systems and must be synchronised.

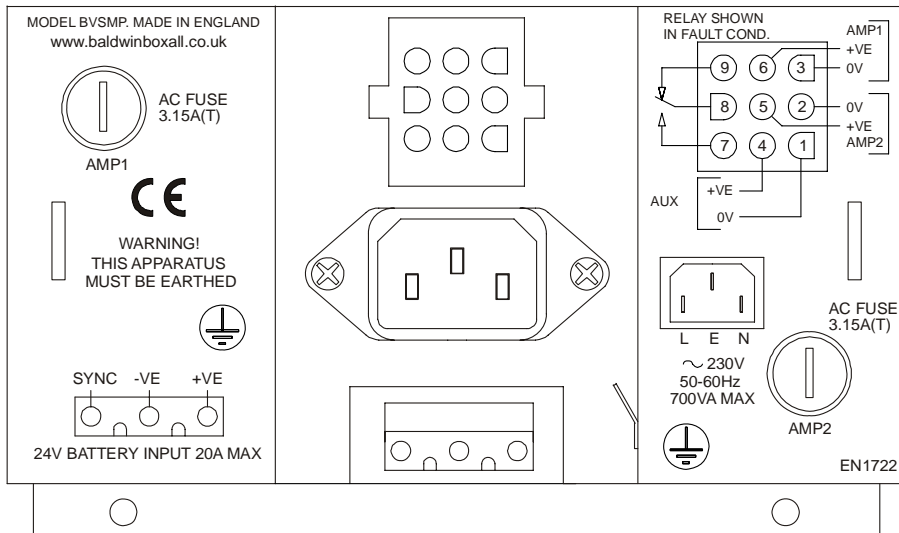
## BVSMP / BVSMP LT SPECIFICATIONS

	<b>BVSMP</b>	<b>BVSMP LT</b>
AC supply input Voltage	200V – 250V 50 – 60Hz	200V – 250V 50 – 60Hz
Maximum power consumption:	700VA	350VA
Maximum inrush current @ 230V:	18A	9A
DC output 1 to amplifier 1:	31V @ 12A	31V @ 12A
DC output 2 to amplifier 2:	31V @ 12A	--
DC output 3 auxiliary mixers etc:	31V @ 2A	31V @ 1A
<b>Battery charger output:</b>		
Voltage @ 20 °C:	27.1V	
Temperature compensation:	-66mV/°C	
Maximum current:	3A	
Battery low fault Voltage:	21V	
Battery high fault Voltage:	29V	
Battery deep discharge cut off Voltage:	16V	
Volt free fault relay output contacts:	100V @ 1A max	
<b>Fuse protection:</b>		
AC supply (5 x 20mm):	2 x 3.15A(T)	1x 3.15A(T)
Battery (automotive blade):	2 x 20A	1 x 20A
Charger input (self-resettable):	6A	6A
Charger output (self-resettable):	4A	4A
Aux output (self-resettable):	1.1A	1.1A
<b>Front panel indicators:</b>		
AC supply	AC supply 'ON'	
OK	No fault	
Fuse	Fuse fault	
Charger	Charger fault	
High	Battery Voltage high fault	
Low	Battery Voltage low fault	
Lamp test for the above indicators		
<b>Terminations:</b>		
AC supply input:	IEC 6A filtered connector	
24V battery input:	3-pin screw terminated connector	
DC outputs & fault relay contacts:	9-pin crimp terminated connector	

## Front Panel View



## BVSMP Rear Panel View



## BVSMPLT Rear Panel View

