IBVPS
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BVPS

Operating Instructions

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BALDWIN BOXALL
COMMUNICATIONS

BVPS - Power Supply/Charger Unit

The power supply provides two individually fused outputs at 24V to feed two BV150 or BV6060 power output modules. In the event of mains failure the DC is maintained using an external standby battery which is continuously float charged by the charger section of the PSU unit. 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 indicators for AC Supply Healthy, any DC fuse ruptured, charger fail, battery voltage high, and battery voltage low are incorporated.

Should any of the above fault conditions occur an internal relay releases providing a changeover contact, signalling to the fire detection panel, refer to figure 2. The charger incorporated is of the constant voltage type set for the recommended float charge. Should the battery be below this float charge it will charge in a constant current mode at the rate of 3 amps and 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 refer to figure 3.

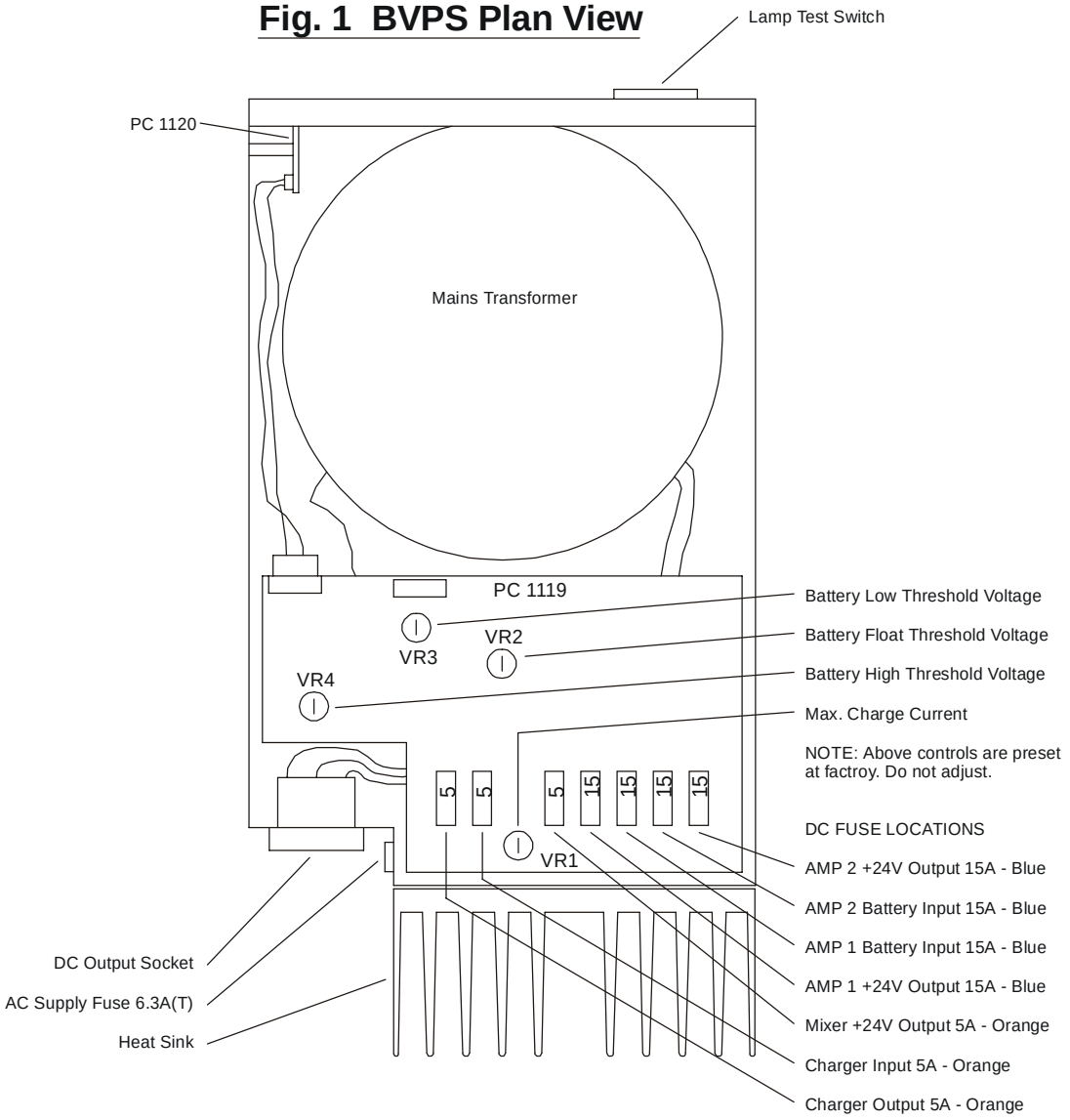
AC Supply Input Voltage	230V 50-60Hz
Maximum Power Consumption	700VA
DC Output 1 to power amplifier 1	30V @ 10A
DC Output 2 to power amplifier 2	30V @ 10A
DC Output 3 to power BVMX Mixer/Aux	30V @ 2A
Battery Charger Output	
Output Voltage @ 20-25° C	27.1V
Output Voltage battery temperature compensations	48mV/Per ° C
Maximum Charge Current	3A
Battery Low Fault Voltage	20V
Battery High Fault Voltage	29V
Volt Free Fault Relay Output Contacts	100V @ 1A Max
Fuse Protection	
1x AC Supply 5 x 20mm	6.3A(T)
2x DC (Amplifier) Automotive Blade Type	15A
2x Battery (Amplifier) Automotive Blade Type	15A
2x DC (Charger) Automotive Blade Type	5A

Front Panel Indicators

- AC Supply "ON"
- OK i.e. No Fault
- Fuse Fault
- Charger Fault
- Battery Voltage High Fault
- Battery Voltage Low Fault
- Lamp Test Switch for above indicators

Terminations	
AC Supply Input	IEC 6A Filtered 3 Pin Connector
24V Battery Input	3 Pin Screw Terminated Connector
DC Outputs & Fault Relay Contacts	9 Pin Crimp Terminated Connector

Fig. 1 BVPS Plan View



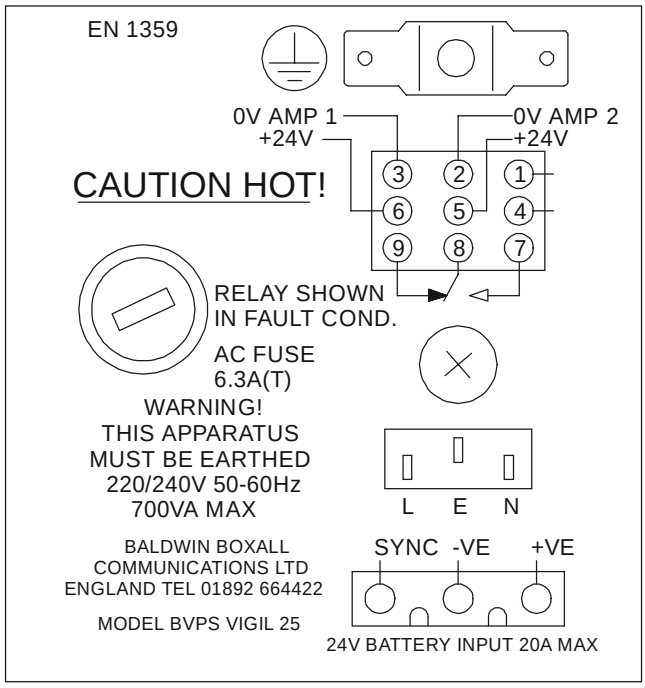


Fig. 2 BVPS Connection Panel

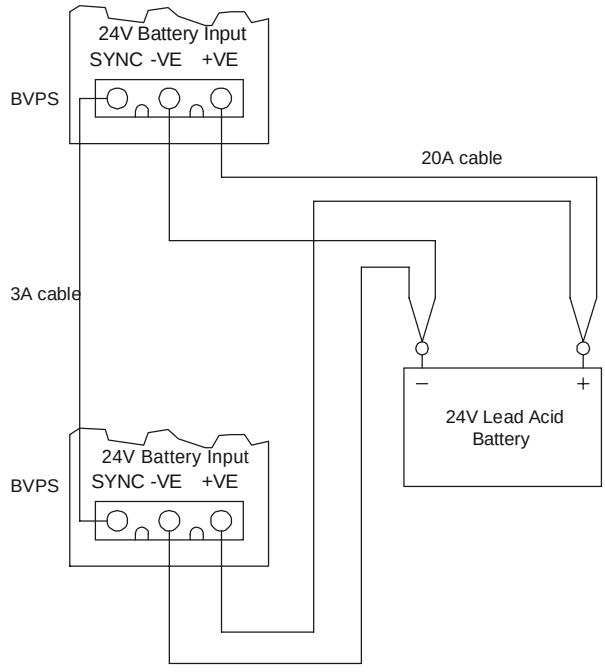


Fig. 3 Battery connection of 2 or more BVPS