

# Redback® 24V DC Battery Backup Charger

**Ideal for PA systems & other applications requiring battery backup.** These models incorporate a highly efficient, intelligent, multi stage switchmode battery charger ensuring optimum battery charging and performance.

An auxiliary 24V DC 1 amp power supply is provided to run ancillary devices without interfering with the charging cycle. Connected loads to this circuit automatically switch to the battery when mains fails. The circuit includes a host of protection to protect both the charger and batteries. These include reverse polarity connection, low battery disconnect feature and battery isolator/circuit breaker. Large heavy duty binding posts are included for battery and load terminals. Individual panel meters are provided for battery voltage and charge current. In normal operation, the panel meters indicate battery charge current and battery voltage. When mains fails, the meters show the load current being drawn (indicated by a minus symbol) and actual battery voltage.

**Mains failure battery backup operation:** With mains power failure the connected batteries are relay switched to the load via two 50A terminals. A sensing circuit disconnects the load when the minimum permissible discharge voltage is reached, thus preventing permanent battery damage. This charger is specifically designed for use on sealed lead acid batteries, gel technology batteries and standard vented lead acid batteries.

Features • 2RU 19" rack mount • Short circuit protection • Electronic reverse polarity protection • Multi stage charging
Automatic boost and float voltages • Precision control of boost and float voltage settings • Digital battery voltage and current meters • Charging indicator • End of charge (trickle) indicator • Suits sealed,vented lead acid and gel batteries • Low battery cut off • 2 switched 50A outputs • Australian designed & manufactured



IMPORTANT NOTE: Batteries must be of the same make and rating. Prior to connection, batteries need to be 'equalised' by connecting in parallel overnight. Batteries must be suitably rated for the capacity of the charger.

72.50

68.00

SPECIFICATIONS			
Input voltage:	240V AC 50Hz		
Boost voltage:	29.4V DC		
Float voltage:	27.6V DC		
AC Load (max):	A 4506 1A , A 4512 2A		
Dimensions:	≈ 483W x 330D x 88H mm		
Weight:	A 4506 ≈ 8kg, A 4512 ≈ 9kg		
Typical charge times (for fully discharged battery):			
A 4506	A 4512		
24Ah 6Hrs	60Ah 8Hrs		

81

See page 266 of Power section for SLA batteries to suit.

80Ah 10Hrs

100Ah 12Hrs

120Ah 14Hrs

40Ah 10Hrs

Price Each	RRP	2+
A 4506 6A model	795.00	750.00
A 4512 12A model	895.00	800.00

#### Calculating Battery Size For PA System Use

T Battery Size =	otal amp power in	Required		
Dattery Size – –	Volts	— x 2 =	amps for 1 hour	
500W amplifier	500	x 2 = 41.6Ah		
Battery Size	24	x 2 = 41.6An		

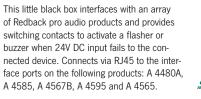
Therefore a 50Ah battery would be suitable Please note: This calculation assumes 100% duty cycle at full power output into full rated load and a 50% audio amplifier power efficiency.

### Latching Relay Box

This latching relay box offers a compact solution to switching high current circuitry on and off using a low current momentary switch. Simply wire your closing contacts into the trigger input, provide 24V DC in via screw terminals and connect your load to the 24V DC out terminals. For indication, terminals are also provided for an LED. Utilises the S 4160C relay (12V coil, 10A rated), see page 350 for specifications. Size: 51W x 70H x 27Dmm (inc. flanges).

Price Each

## 24V DC Power Fail Monitor Relay



Price Each	RRP	2+	4+
A 4471	55.00	50.00	45.00

## **Universal Remote Alarm Plates**

4+

65.00



Designed for both 12VDC and 24VDC operation, these wallplates will sound a buzzer and illuminate an LED indicator when activated. A cancel button allows buzzer to be switched off, whilst the LED remains on. A 4576 requires two core cable to operate. This model works well as a remote monitor when used in conjunction with the A 4567B line monitoring unit. A 4577 is a general purpose monitor and can be used as a remote fault monitor for many applications such as nurse call, fire alarm, alarm and access control systems; machinery failure etc. Requires 1 x figure 8 per zone. **Includes dual cover wallplate**.

Price Each	RRP	2+
A 4576 1 Zone	85.00	75.00
A 4577 6 Zone	135.00	120.00