



Shown with optional RM remote meter

The SHUNT BOX provides enhanced power management of simple 12VDC systems, including manual ON/OFF switching, overload and shortcircuit protection (18 Amps), and reverse polarity protection and indication.

The SHUNT BOX can be placed in-line between the power source (battery or DC power supply) and the distribution system to provide remote power management. Manual On/Off control is by the recessed toggle switch, or remotely controlled through the use of Remote Audio's RM Remote Meter. The SHUNT BOX also acts as an interface for the RM's metering capability, in order to display voltage and current draw of any gear connected to the output of the SHUNT BOX.

Using the SHUNT BOX

The SHUNT BOX has a 4-pin XLR input, wired in the standard configuration of PIN 4 +, PIN 1 -. Input voltage should fall within a range of 9 - 20V to protect the internal circuitry. The SHUNT BOX is protected from reverse-polarity at the input. The illuminated power switch will flash to indicate that a reverse-polarity condition is present, and no voltage will be passed to the output connector. There is one DC power outlet on the SHUNT BOX, also wired in the standard 4-pin XLR configuration. This outlet has an auto-resetting 18A breaker to protect against overload. The SHUNT BOX can be mounted with the included self-adhesive Velcro® strips.

Using the SHUNT BOX with optional RM remote meter

When connected to the RM Remote Meter, and the SHUNT BOX toggle switch is in the OFF position, the RM controls the on/off circuit of the SHUNT BOX. This allows the SHUNT BOX to be placed out of the way. To turn the SHUNT BOX on or off with the RM, press and hold both buttons of the RM for three seconds. When on, the RM will display the voltage of the power source. Pressing the lower button (labeled AMPS) will display the current draw of the devices being powered for as long as the AMPS button is pressed. If the SHUNT BOX toggle switch is in the ON position, the RM will not turn off the SHUNT BOX. In this case, the on-off function of the RM will only turn on and off the meter display.

Specifications:

Connector Type:	Lemo-style 6-pin (female on box, male on cable)
Voltage Requirements:	9 - 20 VDC
Current Capacity:	18A
Self-Draw:	20 mA
Dimensions:	3.25" x 1.75" x 1.75"

Information concerning DC Power Cables

There is always some voltage drop in power cables, but the goal is to keep this drop as insignificant as possible. When using a battery system, managing this voltage drop is particularly important and can actually add hours of use before recharging is needed. For example, if a piece of equipment automatically shuts down when its supply voltage goes below 11V, and there is a 1V drop in the cable, then the equipment will shut down when the battery supply goes below 12V. Since much of the capacity of most 12V battery systems is between 12V and 11V, it is easy to see how important it is to minimize the voltage drop within a cable.

The amount of voltage drop in a cable depends on three factors: 1) the amount of current drawn by the device being powered, 2) the size of the conductors inside the cable, and 3) the length of the cable. Simply put, the larger the conductors and shorter the cable, the less the voltage drop will be. But the more the current draw of a piece of equipment, the more the voltage drop. Therefore, a small cable that would have an insignificant drop with equipment drawing only 250mA (for example) may be completely inadequate for equipment drawing 6A. There are equations and formulas available to help determine the amount of voltage drop given a certain length of cable, size of conductors (gauge), and amount of current being drawn. However, the best practice is to use cables that are as large and short as practical. Your Remote Audio dealer should be able to supply cables of proper length and gauge for your needs.

Repairs

Items needing repair may be sent directly to:

Remote Audio Products
220 Great Circle Road, Suite 114
Nashville, TN 37228

Prior to returning any items, contact Remote Audio for an RA# (return authorization number) at 615-256-3513, or repairs@remoteaudio.com

Limited Warranty

Remote Audio warrants the SHUNTBX against defects in materials and workmanship for a period of one (1) year from the date of original retail purchase. Remote Audio will repair or replace qualifying products at its discretion at no charge. Please visit our website for complete terms and conditions or contact us at info@remoteaudio.com.