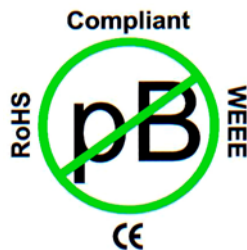



PROFESSIONAL SOUND CORPORATION



RF Multi Dual 1 x 8

UHF WIDE BAND ANTENNA SPLITTER



Operation Manual for RF Multi Dual 1 x 8 with PCB V1.2
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DESCRIPTION

Thank you for purchasing the Professional Sound Corporation RF Multi Dual 1 x 8 UHF Wide Band Antenna Splitter. PSC is confident that this new RF Multi Dual 1 x 8 has set new standards for antenna splitting technologies and features. Please feel free to contact us if you have any comments or questions concerning your new RF Multi Dual 1 x 8. Additionally, we invite you to share your suggestions for new products you would like to see developed.

Professional Sound Corporation extends a one-year warranty on parts and labor to all RF Multi Dual 1 x 8 owners who return their warranty cards at the time of purchase. This warranty gives you specific rights, which are stated on the card, and enables us to keep you informed of product updates.

The PSC RF Multi dual 1 x 8 provides all the functions necessary to produce advanced RF antenna splits in the field. It's user friendly features, rugged design and RF purity make the RF Multi Dual 1 x 8 perfect for reality shows, electronic field production (EFP) and feature film production. There's only one RF Multi Dual 1 x 8 and it's from PSC.

SAFETY WARNINGS:

Please be sure that you have read this entire manual before operating this product.

While special attention has been given to your safety, the operator determines proper and safe use and conditions.

Please note the following:

Do not operate this product outdoors in wet conditions such as rain.

Do not operate this product from unknown AC sources where grounds or neutrals may be inoperative.

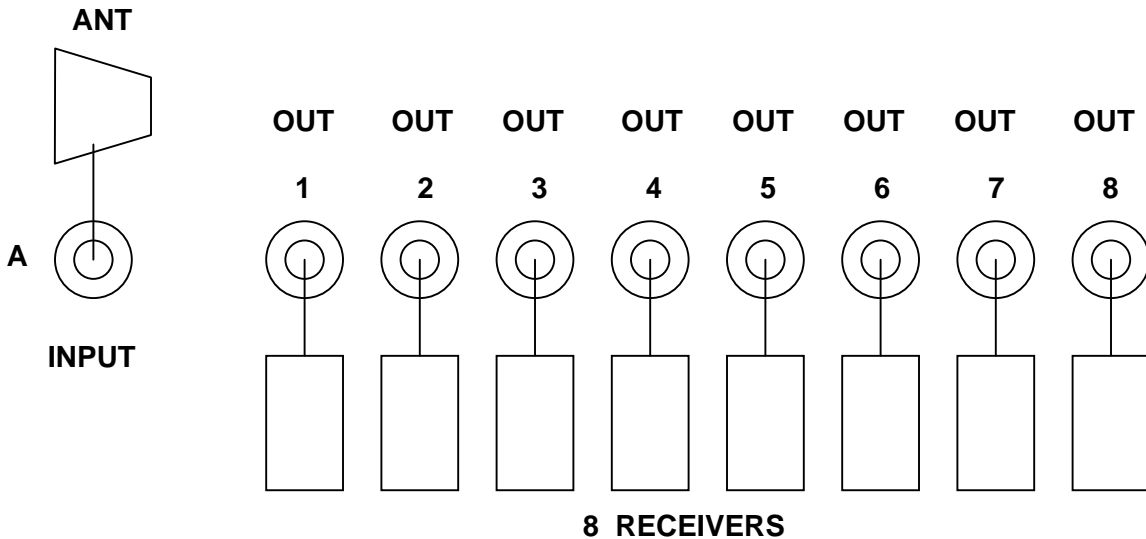
APPLICATIONS

- Reality Television Production
- Location recording (Dialogue and Music)
- Broadcast remotes

FUNCTIONS:

A. 1 X 8 ACTIVE SPLITTERS

The PSC RF Multi Dual 1 x 8 contains two independent 1 x 8 active splitters. Each of these 1 x 8 active splitters contain a very low noise amplifier, a high pass filter and an 8-way splitter providing a low noise signal splitting function without loss and with a high degree of isolation between the signals of your wireless receivers. Because the devices are active, they cannot be used as combiners. You must only feed an RF signal into the single BNC connector labeled with a letter such as “A” or “B”, This signal will then be amplified and split up 8-ways and feed to the corresponding 8 output BNC connectors. These connectors are then connected to the wireless receivers. The 1 x 8 active splitters can be daisy-chained for special applications.



POWERING:

A. DC POWER, 4PIN XLR

The PSC RF Multi Dual 1 x 8 can be powered from DC for ease of use in the field. The RF Multi Dual 1 x 8 is designed to operate off any DC voltage within the range of 9 to 18 VDC. To power the RF Multi Dual 1 x 8 in this way, you simply have to plug in a 4-pin XLR power cable from your battery. In keeping with industry standards, Pin 1 is Ground and Pin 4 is Positive. Because the RF Multi Dual 1 x 8 is reverse-polarity protected, if you inadvertently miss-wire your power cable, no damage will be done, the RF Multi Dual 1 x 8 simply will not power up. The PSC RF Multi Dual 1 x 8 contains a DC to DC converter that allows it to operate over wide range of input voltage without difficulty. At a common voltage of 12Vdc, the RF Multi Dual 1 x 8 consumes approximately 160mA.. Current is inversely proportional to the operating voltage. For example: at 10Vdc the current consumption is 230mA, at 18Vdc the current consumption is 115mA.

B. AC POWER, MAINS

The PSC RF Multi Dual 1 x 8 can also be operated from AC mains. The AC input voltage range is 100Vac to 240 Vac, 50 to 60Hz. This allows the RF Multi Dual 1 x 8 to operate worldwide without adjustment or jumper setting. Power consumption is approximately 15 watts when operated from AC mains.

CONSTRUCTION

A. CHASSIS

The chassis of the RF Multi Dual 1 x 8 is made from formed steel and an aluminum face plate. The chassis is painted with a textured finish black paint and the aluminum front panel is anodized black for a professional appearance. The case occupies two rack spaces and can be installed in all standard racks.

B. ELECTRONIC TOPOLOGY

The circuitry within the RF Multi Dual 1 x 8 has been designed to provide years of trouble free use under normal operating conditions. The DC power supply is reverse polarity protected and the AC supply is designed for wide input range use. The internal voltage regulation is designed for quite, trouble free operation and all of the BNC inputs and outputs are DC protected.

C. ENVIRONMENTAL OPERATION

The PSC RF Multi Dual 1 x 8 can operate over a temperature range of -4°F to $+158^{\circ}\text{F}$ (-20°C to $+70^{\circ}\text{C}$).

WARRANTY AND NON-WARRANTY SERVICE

In the unlikely event your RF Multi Dual 1 x 8 requires service it should be carefully packed and shipped prepaid to:

Professional Sound Corporation
Service Department
28085 Smyth Drive
Valencia, CA 91355 USA
PH 661-295-9395
FAX 661-295-8398
e-mail techsupport@professionalsound.com

Please call before shipping your RF Multi Dual 1 x 8. We may be able to solve your problem via the phone. We are always willing to help you with your RF Multi Dual 1 x 8 questions.

WARRANTY:

Complete details of the PSC RF Multi Dual 1 x 8 warranty are given on the enclosed blue warranty registration card. If you did not receive one, please contact your local dealer or call us directly.

SPECIFICATIONS

Size:	1 Space Rack Mount
Weight:	6.6lbs. (3Kg)
Temp Range:	-4 to +158F (-20 to +70C)
AC Power:	100 to 240Vac, 50-60Hz 0.5 Amp
DC Power:	9 to 18Vdc, Pin 1 Ground, Pin 4 Positive
Case Material:	Steel with Aluminum Face Plate
Finish:	Black Texture Paint, Black Anodize
Global Gain:	Active Splitters, unity gain, +/-2dB
Freq. Response:	450Mhz to 900Mhz
Noise Figure :	2.8dB
Maximum Input:	+13dB
Output Isolation:	>24dB
Warranty:	1 Year, Limited

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CE

DECLARATION OF CONFORMITY

EMC: This product is in compliance with the Electromagnetic Compatibility Directive, 89/336/EEC as defined in EN 50081-1, EN55022 and EN 50082-1. IEC801-2, IEC801-3 and IEC801-4.

LVD: This product is in compliance with the requirements of the Low Voltage Directive, 73/23/EEC. 93/68/EEC as defined in EN60065, 1993 and/or EN60950/A1/A2/A3: 1995

TRADE NAME: PSC
MODEL: RF Multi Dual 1 x 8

RESPONSIBLE PARTY: Professional Sound Corp.
28085 Smyth Drive
Valencia, CA 91355 USA

CONTACT PERSON: Ronald Meyer
(661) 295-9395

TYPE OF PRODUCT: Antenna Splitter

MANUFACTURER: Professional Sound Corp.
28085 Smyth Drive
Valencia, CA 91355 USA

We hereby declare that the equipment bearing the trade name and model number listed above has been tested in accordance with the requirements contained in the above listed directives. All necessary steps have been taken and are in force to assure that production units manufactured will conform to Directive guidelines.

February 2004

Professional Sound Corporation.