

PSC RF SR 4 SLOT RACK



Frequency Ranges: "Single Band" 470Mhz to 700Mhz "Dual Band" 470-618Mhz and also Lectro Block 941 "Wide Band" 470Mhz to 960Mhz

- Supports Four Slot Receivers
- Built in RF Distribution and Filtering
- Provides Remote Antenna Powering
- Made in the U.S.A.

Operation Manual Version 1.0

Copyright 2023 Professional Sound Corp 28085 Smyth Drive, Valencia, CA 91355 U.S.A. CE RoHS Printed in the U.S.A. Thank you for purchasing your new PSC RF SR 4 Slot Rack. This new product provides low noise RF and power distribution to your Slot Receivers. This new design can be powered by AC (100 to 240Vac) or by 12.8V or 14.4V Batteries or by external DC voltages of 10-18Vdc.

PLEASE BE SURE THAT YOU HAVE READ AND UNDERSTOOD THIS ENTIRE OPERATIONAL MANUAL BEFORE OPERATING YOUR NEW PSC RF SR 4 RACK.

Professional Sound Corporation 28085 Smyth Drive Valencia, CA 91355 U.S.A. PH (661) 295-9395 Email <u>sales@professionalsound.com</u> www.professionalsound.com



The PSC RF SR 4 Slot Rack contains built in low noise, high current RF amplifiers and distribution circuitry. The 4-way, active RF splitters will feed high quality RF to your four slot receivers. This rugged device was developed using the latest super low noise RF amplifiers and is offered in several models that operate over the following frequency ranges:

Model #	Description:	Frequency Range:
MRFSRS	PSC RF 4 Pack, "Single Band"	470-700Mhz
MRFSRD	PSC RF 4 Pack, "Dual Band"	470-618Mhz and also 940-960Mhz
MRFSRW	PSC RF 4 Pack, "Wide Band"	470-960Mhz

Its two RF inputs are traditional BNC connectors for ease of use in interfacing with your external antennas. Each of the four slots offers a typical Rf signal isolation factor of 24 to 28dB between radio receivers. The PSC RF SR 4 Rack also has the ability to power external powered antennas or remote line amplifiers. There are two front panel mounted switches on the unit. One is marked "MAIN POWER" and this controls the overall power to the unit. The second switch is marked "ANT PWR" and this switch controls the power being sent to an external powered antenna or remote line amplifier. Both switches are accompanied by panel mount LEDs for easy to view operation. The entire unit is powered from any source of external DC power of 12Vdc @ approximately 185mA through the rear panel mounted 4 pin XLR power connection. The unit can also be powered from 90 to 240VAC for fixed installations. On the rear of the unit there are eight TA3M mini XLR output connectors. These provide audio output from the four slot receivers as well as DB-25 connector that offers all the audio outputs on one convenient "audio snake

connector". This DB25 Connector is wired to the industry standard "Tascam" wiring standards thus making off the shelf cable snake assemblies readily available through Amazon and many audio dealers.



FRONT PANEL SHOWING: (left to right)

Main Power Switch w/LED

1st Slot Position

2nd Slot Position

3rd Slot Position

4th Slot Position

Remote Antenna Power Switchw w/LED

Panel Close Up Photos and Descriptions:





Main Power Switch

Remote Antenna Power Switch



REAR PANEL SHOWING: (left to right) XLR 4 Pin Male External DC Power Input Antenna "B" RF input TB3M Audio Connectors for Slots 3 & 4 DB-25 Multi-Pin Audio Snake Connector TB3M Audio Connectors for Slots 1 & 2 Antenna "A" RF input AC Power Receptacle



External DC Input



Antenna "B" Input



RX4 and RX3 Audio Outputs in TB3Ms



All Audio Outputs on Multi-Pin Snake Tascam[™] Wiring Standard





RX2 and RX1 Audio Outputs on TB3Ms

Antenna Input "A"



AC Input Receptacle

RF DISTRIBUTION:

Your new PSC RF SR 4 Slot Rack contains RF distribution designed to provide proper, clean RF distribution to your Slot Receivers. Each half of the diversity RF distribution contains a built in DC bias circuit designed to be able to power external remote powered antennas and/or remote RF amplifiers, an RF limiter to help guard against RF overload, RF bandpass filters (various ranges available), a very low noise RF Amplifier, and a RF splitter. Each half of the RF circuitry also contains its own, dedicated power regulation circuit to help eliminate RF cross talk and intermodulation issues.

STEP BY STEP USE GUIDE:

- Install your slot style receivers into the openings on the front of the PSC RF SR 4 Slot Rack noting the correct direction of the DB-25 connectors. Gently slide the receivers into the slots until you feel the DB-25 connectors line up. Once you feel the connectors line up, firmly press the slot receiver fully into place. Lock your receivers into place using the M3 Metric thread screws on the receivers.
- 2. Connect your audio output cables from the eight TA3M audio outputs or from the DB-25 connector to your mixer or recorder's inputs. Either connector type can be used with either analog or AES digital signals. Please note that the DB25 multi-channel audio snake connection is wired using the industry standard "Tacam" wiring for ease of use.
- **3.** Connect either a 12 VDC power source to the 4 pin XLR external power connector or connect the unit to AC power using the AC power receptacle.
- 4. Connect your two receiver antennas to the RF input BNC connectors on the rear panel of the unit. When using powered antennas or remote line amplifiers, turn on the "Antenna" power switch. For all other uses, leave this switch turned off.
- 5. Power up the unit by turning on the main power switch located on the left hand end of the front panel. Note that the BLUE LED located adjacent to the powers switch will light up power when the unit is turned on.

NOTES

1. Different brands of wireless receivers require their own specific brand made adapters to work with our Four Pack. These are the same adapters required to install the slot receivers in an Ikigami or Panasonic camera. For example:

Lectrosonics SRB requires their "SRUNI" kit. Wisycom MCR42 requires their "SCK42-IK-PSC" kit. Audio Limited A10-RX no adapter needed.

SPECIFICATIONS:

Size:	17.5" x 6.5" x 1.75" (44.5cm x 16.5cm x 4.5cm)		
Weight:	3.5Lbs. (1.6 kg)		
Power:	External DC, 12 to 18Vdc @ 185mA		
	AC Power: 90 to 240Vac, 30W		
RF Input Connector:	BNC		
RF Input Impedance:	50 Ohms		
RE Output Connector:	SMA		
Maximum Input Signal:	+13dB		
Noise Figure:	0.8dB		
Chassis Material:	Aircraft Aluminum		
Finish:	Black Epoxy Wrinkle Texture Powder Coat		
Warranty:	1 Year, limited		

CONNECTOR PINOUTS:

External DC Power:

Pin 1 = Ground

Pin 4 = + 12Vdc

Mini XLR:

Pin 1 = Ground Pin 2 = Audio + (Hi) Pin 3 = Audio - (Low)

DB-25 Multipin Wiring:



REAR VIEW OF MALE DB-25 CONNECTOR MUST HAVE METRIC SCREW



TERMS OF USE:

THE IMPROPER CONNECTION OF THIS DEVICE TO AUXILIARY EQUIPMENT MAY RESULT IN DAMAGE TO SAID EQUIPMENT AND/OR PERSONAL INJURY. THIS PRODUCT IS DESIGNED TO BE OPERATED BY PROFESSIONALS IN THE FILM AND TELEVISION INDUSTRIES. THE PSC RF SR 4 SLOT RACK SHOULD ONLY BE OPERATED AFTER READING AND UNDERSTANDING THIS ENTIRE INSTRUCTION MANUAL. THE OPERATOR OF THIS DEVICE ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR PROPER USE AND OPERATION OF THIS EQUIPMENT! PROFESSIONAL SOUND CORPORATION AND/OR ITS EMPLOYEES AND OFFICERS ASSUME NO RESPONSIBILITY OR LIABILITY FOR PERSONAL AND PROPERTY DAMAGE INCURRED DUE TO ACCIDENT, CARELESS HANDLING, ABUSE OR MISSUSE, IMPROPER CONNECTION, AND/OR INSTALLATION, IMPROPER ELECTRICAL CONTACT OR GROUNDING. OWNERSHIP AND/OR USE OF THE PSC RF SR 4 SLOT RACK CONSTITUTES AGREEMENT WITH THESE TERMS.

LIMITED WARRANTY CERTIFICATE

Professional Sound Corporation warrants the RF SR4 Slot Rack be free from defective material and workmanship for a period of one year from the original date of purchase and agrees to repair or replace such defective parts or the whole product at its option, provided that the equipment is returned to Professional Sound Corporation. Shipping and insurance costs to and from Professional Sound Corporation must be prepaid by the owner. This warranty does not cover damage due to accident, careless handling, abuse or misuse, improper connection and/or installation, improper electrical contact or grounding. This warranty will be null and void in the event of removal, alteration or tampering with the serial number, or by service or repair work not performed by Professional Sound Corporation. Proof of purchase date (copy of invoice or Warranty Certificate) must be furnished before warranty service will be performed. This warranty is in lieu of any other warranty, expressed or implied, including warranties without limitation, products being merchantable at the time of purchase or suitable for a particular purpose. This warranty does not extend to, or include consequential damage.

DECLARATION OF CONFORMITY:

STANDARD:	EN 60065.2012	Power, Safety	
	EN 55032.2012	Part 1, Emissions	
	EN55032.2012	Part 2, Immunity	
	PSC		
MODEL:	RF Multi SR Four P	RF Multi SR Four Pack	
RESPONSIBLE PARTY:	Professional Sound 28085 Smyth Drive	Professional Sound Corp. 28085 Smyth Drive	
	Valencia, CA 91355	5 USA	
CONTACT PERSON:	Ronald Meyer		
	(661) 295-9395		
TYPE OF PRODUCT:	Antenna Distribution		
MANUFACTURER:	Professional Sound Corp.		
	28085 Smyth Drive	•	
	Valencia, CA 91355	5 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.

September 2023 Professional Sound Corporation.

Professional Sound Corporation 28085 Smyth Drive, Valencia, CA 91355

PH (661) 295-9395 Fax (661) 295-8398 email sales@professionalsound.com