PSM® Antenna Combiner User Guide

Guide de l'utilisateur du répartiteur d'antenne PSM

Bedienungsanleitung für die Antennenweiche PSM

Guía del usuario del combinador de antenas PSM

Guida d'uso del combinatore di antenne PSM
The Shure PA821 Antenna Combiners actively combine antenna outputs from up to eight PSM wireless transmitters to a single antenna, improving RF performance and reducing rack clutter.

**INSTALLATION**

Set the power switch on the front panel to OFF before installing. Connect the unit to an AC power source using the supplied power cable. Switch the power ON to use the device. The power light will illuminate. Power the unit OFF when not in use or before disconnecting the unit from the AC power source.

**8-TO-1 COMBINING:**

1. Using the supplied BNC-BNC cables, connect the ANTENNA OUTPUT of each transmitter to the ANTENNA INPUTS of the PA821 (Figure 2).
2. Attach an antenna to the MAIN OUT of PA821. For wideband applications, use PA805 directional antenna (Figure 1).
3. Connect the PA821 to a power outlet using one of the supplied power cables. The PA821 contains a universal power supply to operate anywhere in the world.

**NOTE:** When the PA821 is powered on, the input signal indicators (1-8) on the front panel will illuminate if an active transmitter is connected to the corresponding input (1-8) on the back panel (Figure 1).
FOR MORE THAN 8 TRANSMITTERS:
1. Using the supplied BNC-BNC cables, connect the ANTENNA OUTPUT of each transmitter to the ANTENNA INPUTS of the PA821.
2. Use the 1 ft jumper BNC-BNC cable to connect the MAIN OUTPUT of the PA821 to the A IN of the EXPANSION PORT.
3. Connect another ANTENNA OUTPUT (from a ninth PSM transmitter, second PA821 or other antenna port) to the B IN of the EXPANSION PORT.
4. Attach an antenna to the A + B OUT of the EXPANSION PORT. For wideband applications, use the PA805 directional antenna, Figure 3.

SPECIFICATIONS
RF Carrier Frequency Range
470-870 MHz
System Gain
+0/-5 dB
Input AC Line Voltage
100-240 Vac, 50/60 Hz
Maximum Input Line VA
100 VA
Maximum Current Drain
0.42-1.0 Amperes
(Amperes = 100 VA/Input AC Line Voltage)
Maximum RF Input Power
24 dBm (250 mW) per channel
Input Signal Indicator Threshold
+4 dBm (2.5 mW), +2 dBm (1.6 mW) typical
Impedance
50 Ω nominal
Operating Temperature Range
0° F (-18° C) to +135° F (+57° C)
NOTE: Electrical safety approval is based on a maximum ambient temperature of 35°C.
Overall Dimensions
43.4 mm high x 398.8 mm wide x 331.5 mm deep
(1 11/16 in. H x 15 11/16 in. W x 13 1/2 in. D)
Net Weight
4.53 Kg (10 lbs unpackaged, without power and RF cables)
Input/Output Connector Type
BNC-type 8 input, 1 output ACTIVE
2 Inputs, 1 output EXPANSION PORT

FURNISHED ACCESSORIES
(8) 2 ft. Coaxial Cable (RG58C/U) .............................................. UA802
1 ft Jumper ................................................................. 95E2035
120 VAC Power Line Cord ............................................. 95A8389
230 VAC Power Line Cord ............................................. 95A8247
240 VAC Power Line Cord (U.K.) ...................................... 95A8713

OPTIONAL ACCESSORIES
Wideband Unidirectional Antenna (470-870 MHz) ........... PA805
10 ft. Coaxial Cable (RG-8X/U) .......................................... PA725
25 ft. Coaxial Cable (RG-8X/U) .......................................... UA825
50 ft. Coaxial Cable (RG-8X/U) .......................................... UA850
CERTIFICATIONS


LICENSING

Changes or modifications not expressly approved by Shure Incorporated could void your authority to operate the equipment. Licensing of Shure wireless microphone equipment is the user’s responsibility, and licensability depends on the user's classification and application, and on the selected frequency. Shure strongly urges the user to contact the appropriate telecommunications authority concerning proper licensing, and before choosing and ordering frequencies.

THIS RADIO EQUIPMENT IS INTENDED FOR USE IN PROFESSIONAL ENTERTAINMENT AND SIMILAR APPLICATIONS.

NOTE: THIS EQUIPMENT MAY BE CAPABLE OF OPERATING ON SOME FREQUENCIES NOT AUTHORIZED IN YOUR REGION. PLEASE CONTACT YOUR NATIONAL AUTHORITY TO OBTAIN INFORMATION ON AUTHORIZED FREQUENCIES FOR WIRELESS MICROPHONE PRODUCTS IN YOUR REGION

Licensing: Note that a ministerial license to operate this equipment may be required in certain areas. Consult your national authority for possible requirements.

OPERATION OF THIS DEVICE IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

1) THIS DEVICE MAY NOT CAUSE INTERFERENCE, AND
2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION OF THE DEVICE.