Wireless Antenna Combiner User Guide

Guide de l'utilisateur du répartiteur d'antenne sans fil

Bedienungsanleitung für die drahtlose Antennenweiche

Guía del usuario del combinador de antenas inalámbrico

Guida d'uso del combinatore di antenne senza fili
DESCRIPTION

Shure PA Series UHF Antenna Combiners combine antenna outputs from up to four PSM wireless transmitters to a single antenna, minimizing intermodulation distortion and reducing rack clutter.

CONNECTIONS

1. Using the cables supplied with each PSM Transmitter, connect the ANTENNA OUT of each PSM Transmitter to the INPUTS of the PA Antenna Combiner.
2. Attach the antenna (one supplied with each PSM Transmitter), or an optional directional antenna such as the Shure Model PA805WB, to the ANTENNA OUT connector of the PA Antenna Combiner.
3. Run the supplied power cable from the power connector to a power supply.

SPECIFICATIONS

UHF Carrier Frequency Range

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Frequency Range</th>
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<tbody>
<tr>
<td>PA760</td>
<td>620 to 670 MHz</td>
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<tr>
<td>PA765</td>
<td>800 to 870 MHz</td>
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<tr>
<td>PA770</td>
<td>720 to 750 MHz</td>
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</table>

System Gain

0 dB (+2 dB, –4 dB)

Input/Output Port VSWR

Less than 1.7:1

Output Port Isolation

Greater than 23 dB

Third Order Intercept Point (3 OIP)

Greater than 25 dBm

Input AC Line Voltage

100 to 240 Vac, 50/60 Hz (country dependent)

NOTE: This product is not completely disconnected from the mains when the power switch is in OFF position.

Maximum Input Current

0.5 Aac

Maximum RF Input Power

+20 dBm (100 mW)

Impedance

50 Ω nominal

Operating Temperature Range

–7° C to +49° C

Overall Dimensions

44.5 mm high x 197.4 mm wide x 225.6 mm deep (1.75 in. x 7.770 in. x 8.880 in.)

Net Weight

1.34 Kg (2 lbs, 15.4 oz)

Input/Output Connector Type

BNC-type (4 input, 1 output)
Furnished Accessories

Rack Mount Kit ................................................................. PA745
2 ft. Coaxial Cable (RG-58/U) ........................................... UA802

Optional Accessories

Unidirectional Antenna (620-870 MHz) .................. PA805WB
2 ft. Coaxial Cable (RG-58/U) .......................................... UA802
10 ft. Coaxial Cable (RG-58/U) .............................. PA725
25 ft. Coaxial Cable (RG-8/X) ................................. UA825
50 ft. Coaxial Cable (RG-8/X) ................................. UA850

Replacement Parts

Bulkhead Adapters ....................................................... 95A8647
120 VAC Power Line Cord ...................................... 95A8389
230 VAC Power Line Cord ...................................... 95A8247
240V VAC Power Line Cord (U.K.) ......................... 95A8713

Certifications

PA760, PA770: Type accepted under FCC Part 74. Certified by IC in Canada under RSS-123. UL and cUL listed to UL813 and CSA 22.2 No. 1.

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.

Rack Mounting Options

Rack Mounting the PA Antenna Combiner

WARNING: Do not torque the screws too tightly, or the chassis may be damaged.

Single Unit

1. Remove the screws and washers from each side of the unit.
2. Align the supplied rackmount brackets over the holes.
3. Using the screws and washers from step 1, fasten the rackmount brackets.

Dual-Mounted Units

1. Remove the screws and washers on each side of both units.
2. Placing the two units side-by-side, screw the link bars to the inside panels of each unit. The units are designed so that the link bar on the right unit will fit directly on top of the link bar of the left unit (facing front). Use two of the screws and washers from step 1 per link bar to fasten them.
3. Align the rackmount brackets on the outside panels of the units and fasten using four of the screws and washers from step 1.
4. Place the two units next to each other so the link bars overlap and the screw holes on the two align.
5. Fasten the link bars together using 4 supplied screws and washers.
Mounting in an Equipment Rack

1. Insert the unit(s) into a 19-inch equipment rack.
2. Fasten the unit(s) to the rack using all four of the supplied screws.

**FRONT MOUNTING THE ANTENNA**

The PA Antenna Combiner comes equipped so the antenna can be front-mounted. Front-mounting prevents antenna cables from becoming entangled and greatly minimizes RF interference from other cables. When a unit is located in a rack, antennas should be either front- or remote-mounted.

1. Insert the bulkhead adapter through the hole of either mounting bracket, and secure it from the back using the supplied hardware.

2. Connect the transmitter antenna output to the bulkhead adapter with the supplied RF cable.

3. Install the antenna on the bulkhead adapter.

NOTE: The PA715 antenna, which comes supplied with the PSM transmitters, cannot be remote mounted. Use a PA805WB antenna for remote mounting.

**Information to User**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.