

WA404 ANTENNA/POWER DISTRIBUTION SYSTEM

The Shure WA404 combines an amplified antenna distribution system and dc power distribution system into one compact unit. The WA404 uses two antennas, splitting the wireless transmitter signals to feed as many as four diversity wireless microphone receivers. Signal amplification compensates for insertion loss.

In addition, four 15 Vdc outputs on the WA404 provide a combined current of up to 2 amps to power up to four Shure diversity wireless microphone receivers, eliminating the need for external power supplies. The built-in, high-efficiency switching power supply accepts mains voltages from 100 V to 120 Vac (WA404) with the appropriate ac power cord

The WA404 is supplied with a detachable, 3-conductor power cord with a 3-pin grounded U.S. type ac connector.

When planning a multiple microphone installation, keep in mind that each microphone must transmit on a different frequency, and that frequencies must be selected in accordance with system characteristics. Contact your Shure dealer for further information and assistance.

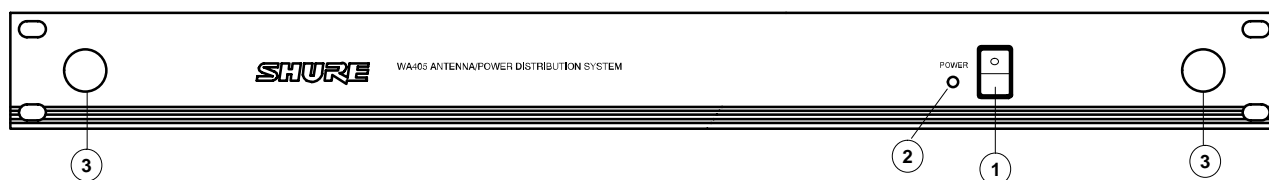
The WA404 is designed for use with Shure Model WA380 or WA490 Half-Wave Antennas and Model WA421 Extension Coaxial Cables or other high-quality 50 Ω coaxial cables. The WA404 can also be used with the quarter-wave antennas supplied with wireless systems. See *Selecting Antennas* in the System Installation section of this guide.

SYSTEM FEATURES

- **Expandability.** Allows up to four wireless receivers to use the same two antennas.
- **Compatibility.** Compatible with all wireless microphone receivers operating from 169 to 240 MHz.
- **Dc Power OUTPUT Ports.** Up to four receivers can be powered from the WA404 dc power output ports.
- **Low Noise and Intermodulation Distortion.** Maintains clean signals with minimal distortion.
- **Insertion Loss Compensation.** Whenever a signal is split to multiple output ports, there is a loss in signal strength known as Insertion Loss. The WA404 amplifies signals to compensate for this phenomenon, ensuring a strong signal to the receivers.
- **Front-Mounted Antennas.** The WA404 comes with hardware to front-mount the antennas, which increases accessibility and keeps antennas free from entanglement with cables on the back of the unit.

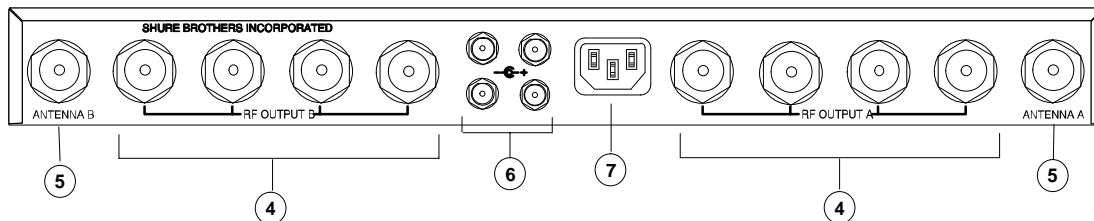
CONTROLS AND CONNECTORS

Front Panel (Figure 1)



1. Power Switch.
2. LED Power Indicator.
3. Bulkhead holes for front-mounting antennas (insert provided hole plugs when not in use).

Back Panel (Figure 2)



4. Rf output ports, channels A and B, connectors for up to four wireless receivers.
5. Antenna input connectors, channels A and B.
6. Dc power output connectors for distributing power to wireless receivers.
7. Ac power input.

SPECIFICATIONS

RF Carrier Frequency Range

169 to 230 MHz

Gain

3.5 dB nominal

Antenna Input Impedance

50 Ω nominal

RF Output Impedance

50 Ω nominal

Power

100 to 120 Vac 50/60 Hz; 50W
(Typical)

DC Power Output

15 Vdc, 2 A maximum/4 outlets (center pin is +)

Overall Dimensions

44.2 mm H x 483 mm W x 173 mm D (1-3/4 in. H x 19 in. W x
6-13/16 in. D)

Weight

1.95 kg (4 lb 4.5 oz)

Certifications

WA404: Listed by UL under UL813; cUL listed under CSA No. 1.
FCC Verified under Part 15 as a Class B digital device.