

Professional VHF Wireless Systems

ATW-D12a Diversity Antenna Distribution System

ATW-A10 Ground Plane Antenna System

Installation and Operation

ATW-D12a Installation and Operation

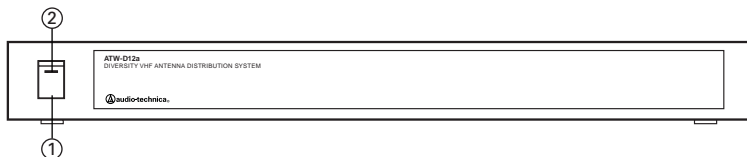
The ATW-D12a is a VHF band antenna distribution system for use with diversity wireless receivers. It provides isolated antenna feeds for up to four VHF diversity wireless receivers.

Function The ATW-D12a has two BNC antenna inputs, one for each antenna of a diversity wireless system. Each channel provides amplification to restore the loss due to signal-splitting. Each nominally unity-gain antenna input/amplifier section has four isolated BNC outputs.

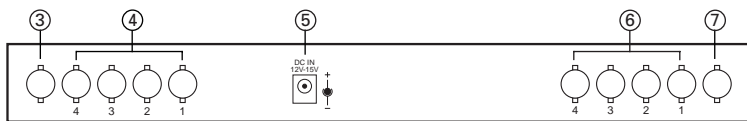
The ATW-D12a is supplied with two extendible antennas, rack adapters for use in standard 19" racks, two BNC (male) to PL259 (female) adapters, and eight 2.6' BNC to PL259 coaxial interconnect cables.

Figure 1

ATW-D12a front view



ATW-D12a rear view



Reference

1. Power Switch
2. Power Indicator
3. Channel B Antenna Input Jack (BNC)
4. Channel B Distribution System Output Jacks (BNC)
5. +12V DC Input Jack
6. Channel A Distribution System Output Jacks (BNC)
7. Channel A Antenna Input Jack (BNC)

ATW-D12a System Configuration The ATW-D12a is designed to work with the included VHF antennas or remote antennas, such as the ATW-A10 ground plane diversity antenna system. When using remote antennas, RG58 cables of up to 25' may be used with little loss. If antenna cable lengths are over 25', RG8 cable is recommended.

The ATW-A10 antennas should be mounted in a clear area away from metal obstructions and spaced at least 3' apart. They may be mounted directly on a microphone stand.

Unused outputs of the ATW-D12a antenna distribution system do not require termination.

ATW-D12a Specifications

Input impedance	50 ohms
Output impedance	50 ohms
Usable frequency range	150 MHz-250 MHz
Nominal amplifier gain	0 dB ± 3 dB
AC adapter power input	120V AC, 60 Hz, 12 W
AC adapter rated output	12V DC, 500 mA
Dimensions	16.54" W x 7.80" D x 1.75" H
Weight (less accessories)	3 lb 7 oz

Accessories Included

- 1 - AC adapter
- 2 - Extendible VHF antennas
- 2 - BNC (male) to PL259 (female) adapters
- 8 - Interconnect cables (BNC to PL259)
- 1 - Rack-mount kit

ATW-A10 Ground Plane Antenna System

The ATW-A10 consists of two base assemblies and eight antenna rods. To assemble, screw four antenna rods into each base assembly as shown in Figure 2.

The 5/8"-27 threads in the end of the base assembly will mate with any standard microphone stand or 5/8"-27 stand adapter.

Connect the ATW-A10 ground plane antennas to the antenna inputs of either a wireless receiver or the ATW-D12a antenna distribution system. Use RG58 cable for cable lengths of up to 25'. For cable lengths greater than 25', RG8 (low loss) RF cable is recommended. RG8 cable lengths over 100' may cause significant signal loss.

For best performance, the two ground plane antennas should be at least 3' apart. Some experimentation with positioning may be required. For optimum operation, at least one antenna should remain within sight of the wireless microphone transmitter at all times.

Figure 2

ATW-A10 Ground Plane Antenna System

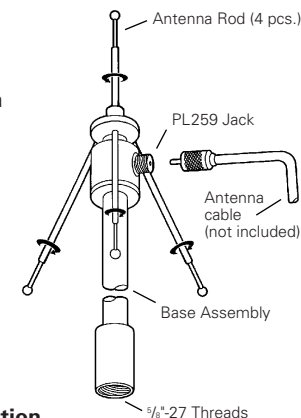
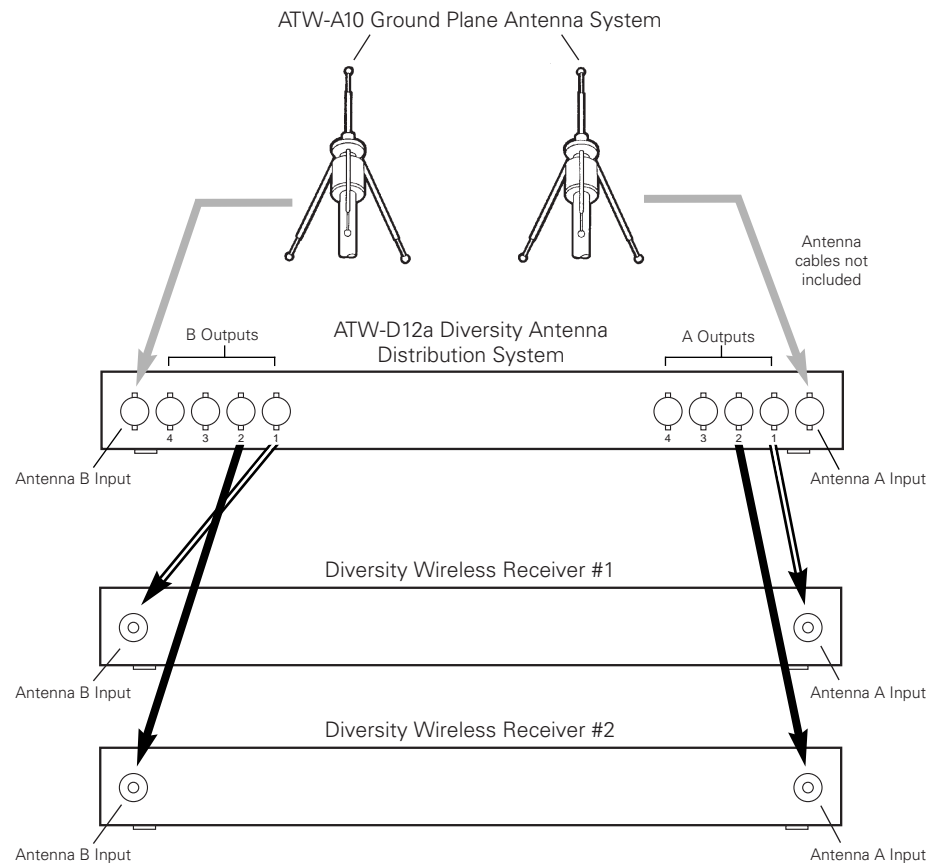


Figure 3. System Configuration



The ATW-D12a feeds up to 4 diversity wireless receivers

One-Year Limited Warranty

Audio-Technica brand products purchased in the U.S.A. are warranted for one year from date of purchase by Audio-Technica U.S., Inc. (A.T.U.S.) to be free of defects in materials and workmanship. In event of such defect, product will be repaired promptly without charge or, at our option, replaced with a new product of equal or superior value if delivered to A.T.U.S. or an Authorized Service Center, prepaid, together with the sales slip or other proof of purchase date. **Prior approval from A.T.U.S. is required for return.** This warranty excludes defects due to normal wear, abuse, shipping damage, or failure to use product in accordance with the instructions. This warranty is void in the event of unauthorized repair or modification, or removal or defacing of the product labeling.

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