

ATW-DA49

UHF Antenna Distribution System



Features

- **Wide band (440-900 MHz)**
- **Active unity-gain**
- **Dual 1-in by 4-out RF sections**
- **Switchable 12V DC antenna power**
- **Four receiver power jacks (12V DC, 500 mA ea.)**
- **Half-rack width**
- **Includes rack kit for front-mounting antennas**

Description

The ATW-DA49 is a UHF wide-band (440-900 MHz) active unity gain antenna diversity antenna distribution system that enables a single pair of antennas to feed multiple wireless system receivers. Each ATW-DA49 provides two identical "1-in, 4-out" sections comprising an antenna input and four isolated outputs, allowing the unit to be used with as many as four diversity wireless receivers. Designed to complement the Audio-Technica 2000 and 3000 Series wireless systems, it is also suitable for use with many other wireless systems operating within the 440-900 MHz range.

Either active or passive antennas may be used. Both antenna input connections offer switchable +12V DC output power on their center pins to operate Audio-Technica powered antennas or other in-line RF devices drawing up to 100 mA total from each antenna input jack.

All RF connectors are BNC-type; ten BNC-to-BNC RF interconnect cables are included with the unit. Antenna connections can be at the rear of the unit, or brought to the front panel using the included ATW-RM1 rack mount kit with RF cables and connections.

Four power jacks on the rear panel provide 12V DC (center positive) to power as many as four wireless receivers. Each output is short-circuit protected and can supply up to 500 mA. Included with the unit are four DC cables appropriate for use with ATW-R3100b or ATW-R2100a (or like powered) receivers.

The unit's external switching power supply is designed to operate properly from any AC power source 100-240V, 50/60 Hz without user adjustment.

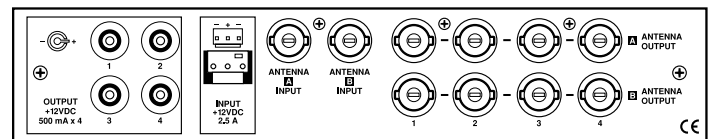
The ATW-DA49 features all-metal construction for extreme durability and protection from radio-frequency interference. Occupying one vertical space, the half-rack sized unit offers flexibility in sharing rack space with a receiver, another ATW-DA49, or front mount antenna connections using the included rack mounting hardware.

Architect's and Engineer's Specifications

The active unity-gain antenna distribution system shall allow for a single

pair of antennas to feed up to four diversity wireless receivers operating in the 440-900 MHz UHF bands. Each distribution system shall consist of identical independent 1-in by 4-out sections each providing a single antenna input and four isolated protected RF outputs. It shall be possible to interconnect the units in a cascade fashion for an expanded system. All RF connections shall be rear panel mounted using standard BNC-type connectors. It shall be possible to apply a 12V DC power to each antenna input to operate powered antennas or in-line RF devices up to 100 mA. Four rear panel DC power outlets shall be provided to enable the unit to supply DC operating power to wireless receivers that operate on 12V DC. All DC power outputs shall be short-circuit protected. The unit shall be equipped with a front panel power switch and indicator showing the unit is operational. The power switch shall also control the DC outputs. The antenna distribution system shall operate on 100-240V AC, 50/60Hz power supplied by an included detachable switching power supply. The unit shall be standard single space, half-rack width configuration with the ability to be mounted side-by-side in a single 19" rack space. It shall be constructed of metal and include removable feet for tabletop use along with appropriate rack mount hardware. When used singly in a rack, the rack mount shall have provisions for front mounting the antenna input connections. Each antenna distribution system shall include ten RF interconnect cables, front mount antenna cables and bulkhead BNC feed-through connectors, and four DC output cables to interface to associated wireless receivers.

The Audio-Technica ATW-DA49 is specified.



Specifications

Bandwidth	440-900 MHz
Gain	0 dB typical (within specified bandwidth)
Impedance	50 ohms typical (within specified bandwidth)
Antenna power (optional)	+12V DC, center positive, 100 mA maximum per antenna input (2 total)
Termination type	BNC Female (10 total)
Power supply	Desktop switching power supply rated at 3A @ 12V DC or 36 Watts. Input Voltage 100-240V AC via detachable IEC 320/C14 cable. Output is provided on an over-molded 3-pin Molex-style termination
Dimensions (Base unit only)	210.0 mm (8.27") W x 45.5 mm (1.79") H x 176.0 mm (6.93") D
Weight	0.9 kg (2.0 lbs.)
Accessories included	IEC 320/C14 power cable; 10 BNC-to-BNC 34" RF cables; 4 DC power interconnect cables; ATW-RM1 rack kit for front mounting antennas and adaptation to a 19" rack

In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

Specifications are subject to change without notice.



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