ATW-49CB

Active Antenna Combiner Kit

Features

- **Allows two sets of antennas to feed single receiver or distribution system**
- **Active device with unity gain compensates for RF signal loss**
- **Switchable power pass-through**
- **Broadband RF response (440-900 MHz)**
- **Rugged metal construction**
- **BNC connectors**
- **Includes two 18" BNC cables**

Description

The ATW-49CB active antenna combiner kit includes a pair of two-input, one-output active antenna combiners along with appropriate RF cables to allow two sets of broadband antennas (i.e. ATW-A49 Wideband Directional UHF LPDA Antennas) to feed a single wireless receiver or antenna distribution system. When used with remote antennas such as the ATW-A49, the overall RF coverage area can be expanded for applications including large performance areas, stadiums, and configurable multi-use spaces such as hotel ballrooms and conference centers.

Each antenna coupler is broadband device with a frequency range of 440-900 MHz that combines two incoming RF signals into one outgoing RF signal. To compensate for RF signal loss associated with signal combining, the Active Antenna Splitters provide unity gain.

The combiners are powered by 12V DC provided on the antenna cable by the associated wireless receiver or antenna distribution system that offers antenna power. A light on each active antenna combiner illuminates when power is applied.

An internal power pass-through switch enables the combiner to extend power (up to 100 mA) to connected devices if required. All RF terminations are standard BNC-type connections designed for use with 50 ohm RF devices. Constructed of extruded aluminum, each combiner is designed for long-life, continuous-duty applications.

Each combiner kit includes two 18" BNC-to-BNC RG 58 coaxial cables for connecting to associated equipment.

Architect's and Engineer's Specifications

The active antenna combiner kit shall consist of two active broadband antenna combiners along with appropriate RF jumper cables for connecting them to associated RF devices. Each combiner shall take two antenna inputs and combine them into a single antenna output. They shall be capable of passing an RF signal bandwidth of 440 MHz through 900 MHz with an operating impendence of 50 ohms and provide active unity RF gain to compensate for RF losses associated with signal combining. The combiners shall operate on 5-14V DC power supplied to them through the RF cable by the associated wireless system or antenna distribution system. Each combiner shall draw no more than 30 mA current at 12V DC and an LED indicator on each combiner shall illuminate indicating power is present. All RF input and output connections shall be through standard BNC-type connectors and appropriate cables to connect the combiners to their associated RF devices shall be supplied. The combiners shall be constructed of extruded aluminum sides with aluminum end caps and shall be finished in a Mil C5541 corrosion resistant chemical film.

The Audio-Technica ATW-49CB is specified.

Specifications

Device type	2-Input Active Antenna Combiner
Bandwidth	440 MHz to 900 MHz
VSWR	< 1.7:1 (within specified bandwidth)
Gain	0 dB typical (within specified bandwidth)
Impedance	50 ohms, typical (within specified bandwidth)
Termination type	3-BNC female connectors
DC input	5-14V DC
Current consumption	30 mA @ 12V DC
Pass-through current	120 mA (maximum to both inputs combined)
Weight	51 g (1.8 oz)
Dimensions	61.0 mm (2.38") W x 47.0 mm (1.83") L x 23.0 mm (0.92") H

* Within specified bandwidth

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.

audio-technica

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