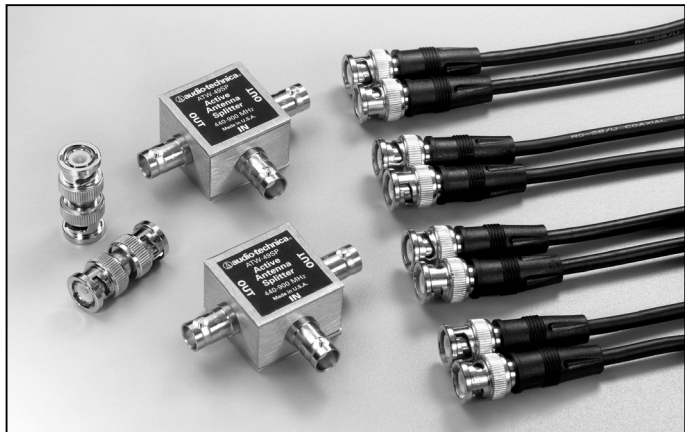


# ATW-49SP

## ACTIVE ANTENNA SPLITTER KIT



The Audio-Technica ATW-49SP Active Antenna Splitter Kit includes two one-input, two-output Active Antenna Splitters designed for use with Audio-Technica 4000 and 5000 Series UHF wireless receivers and ATW-A49 LPDA antennas.\* Each Active Antenna Splitter is a broadband device (frequency range from 440 to 900 MHz) that splits an incoming RF signal into two identical outgoing RF signals. One set of Active Antenna Splitters enables one set of antennas to feed wireless receivers or different frequency bands. To compensate for RF signal loss associated with signal splitting, the Active Antenna Splitter provides unity gain. There is no RF signal loss from the original antenna signal.

**Each kit includes:** two Active Antenna Splitters, four 45mm BNC-to-BNC RG 58 coaxial antenna cables and two BNC-BNC barrel adapters.

**NOTE:** The ATW-49SP Antenna Splitter requires +12V DC power from any Audio-Technica 4000 or 5000 Series receiver or +5 to +14V DC from any wireless receiver or antenna distribution system that offers antenna power. At least one of the receiver's or distribution amplifier's antenna terminals must provide this voltage source. A light on each Active Antenna Splitter indicates that power has been correctly applied.

\* The ATW-49SP Active Antenna Splitter Kit is also suitable for use with other receivers that are in its specified band, use BNC antenna connectors, and provide antenna terminal voltage; it may also be used with a variety of other antennas from Audio-Technica and other manufacturers.

### HOW TO INSTALL THE ATW-49SP ACTIVE ANTENNA SPLITTERS

1. Connect one BNC-to-BNC RG 58 coaxial antenna cable (four supplied) to the OUT connector on one Active Antenna Splitter (two supplied). Connect the other end of this cable to the ANTENNA A input on either a receiver or distribution amplifier, as shown in Figure 1.

2. Use a second BNC-to-BNC RG 58 coaxial antenna cable to connect the opposite OUT connector on the Active Antenna Splitter to the ANTENNA A input of a second receiver or distribution amplifier.

**NOTE:** At least one of the receiver's (or distribution amplifier's) antenna input terminals must provide +12V DC to power the splitter box.

3. Repeat steps 1 and 2 for the ANTENNA B inputs, using the second Active Antenna Splitter.

4. Use coaxial antenna cables (not included) to connect the IN connector on each Active Antenna Splitter to a UHF antenna, as shown in Figure 1.

5. **NOTE: ATW-A49 antennas do not require power. If you are using ATW-A49 antennas, skip Step 5.** If you have an antenna system that requires power (such as an antenna preamp or booster) you must open the ATW-49SP Active Antenna Splitter assembly and activate a switch on the circuit board. (This enables the splitter to pass power through to the antenna.) Current consumption of the preamp or booster should not exceed 100mA.

The unit is shipped with the switch in the "off" position. To flip the switch to the "on" position, first **be certain the splitter is not attached to any power source**. Next, use a Phillips screwdriver to remove the two screws on the Active Antenna Splitter's access panel; remove the access panel; use a tweezers to flip the switch into the "on" position. Finally, replace the access panel and securely tighten the two screws. (See Figure 2.)

### SPECIFICATIONS

DESCRIPTION	2-Way Active Antenna Splitter
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
WEIGHT	51 g
DIMENSIONS	61.0 mm W x 47.0 mm L x 23.0 mm H
DC INPUT	5-14V DC
CURRENT	30 mA @ 12V DC
FINISH ON ENCLOSURE	Chemical film per MIL C 5541
MATERIAL	6063T52 extruded aluminum (sides) 5052-H32 aluminum (top and bottom)
PASS-THROUGH CURRENT	100 mA

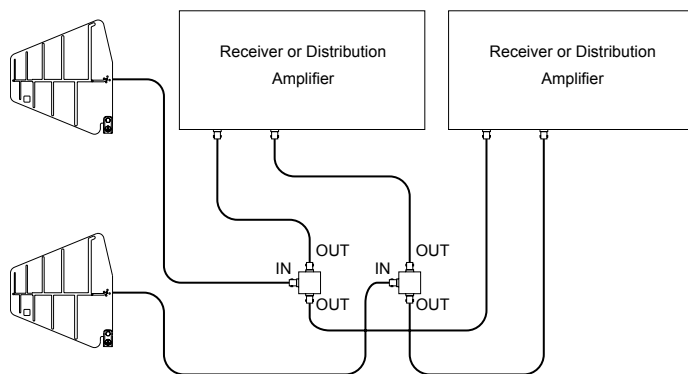


Figure 1

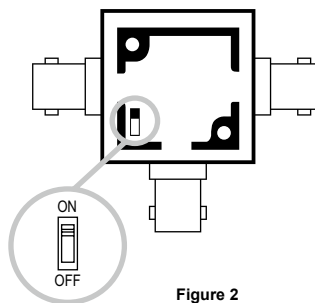


Figure 2

# ATW-49SP

## 有源天线分线器套件



ATW-49SP是一套一路天线输入、两路输出的有源天线分线器，可配合鐵三角4000及5000系列无线话筒及ATW-A49偶极子天线使用\*。每个分线器为宽频率元件（频率范围由440至900MHz），可把天线的射频输入信号分为两个射频输出信号，而一套分线器可配套于接收机或天线分配器使用。天线分线器内置有源放大器，以补偿在信号分线时的电平减低损失，使输出端仍保持原有天线的电平信号。

套件内包括：两个有源天线分线器，四条45mm长BNC-BNC接头RG58同轴天线连接线，两个BNC-BNC连接器。

注：ATW-49SP天线分线器最少需要一台鐵三角4000及5000系列无线接收机提供的+12V直流或其他仪器的+5至+12V直流幻象供电。分线器上设有显示灯，以显示是否正确供电。

\* ATW-49SP天线分线器可配套于其他在频率范围内，以BNC接头及设有供电输出的接收机使用；另外，亦可配套于鐵三角或其他型号的天线使用。

### 安装ATW-49SP天线分线器

1. 使用两条BNC-BNC接头连接线，分别连接天线分线器两个输出端到两台接收机或分配器的A组天线输入。(图1)

2. 使重复第1步骤，用另外两条连接线，连接另一个天线分线器两个输出端到两台B组天线输入。

注：最少需有一台接收机或分配器提供+12V直流幻象供电。

3. 使用天线的同轴连接线或BNC-BNC连接器，连接每个天线分线器输入端到各个天线。(图1)

4. 注：ATW-A49天线不需使用幻象供电，如使用ATW-A49天线，可跳过此说明。如使用的天线系统需要供电(内置前置放大器或增益器)，需开启分线器电路板内的导通电流开关，使幻象供电电流通过分线器传到天线上，而所提供的总电流不应超过100mA。

分线器的导通电流开关，预设为关闭"OFF"位置，需使用十字螺丝刀把底盖打开，再以小型一字螺丝刀把开关推至开启"ON"位置，然后再装回底盖。(图2)

(设定前请先中断供电连接)

### 技术指标

工作情况	2路有源天线分线器
频宽	440 MHz - 900 MHz
电压驻波比	< 1.7 :1 (于指定频宽)
增益	0dB 典型 (于指定频宽)
阻抗	50 欧姆, 典型 (于指定频宽)
端子	3个BNC母头
重量	51 克
外形尺寸	61.0 mm - 宽 x 47.0 mm - 长 x 23.0 mm - 高
供电输入	5-14V 直流
消耗电流	30mA 于 12V 直流
封装涂层	MIL C 5541 化工薄膜
物料	6063T52 压铸铝合金 (边框) 5052-H32 铝合金 (底及顶)
导通电流	100mA

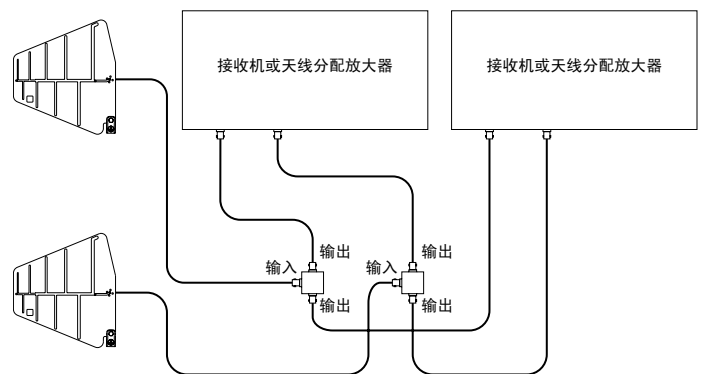


图1

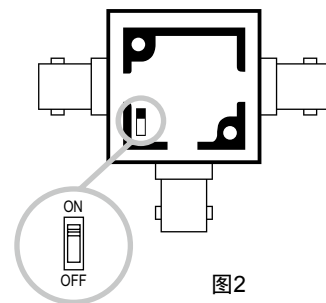


图2