

# ARB-704 Quick Connect

The ARB-704 connects between the radio and amplifier, preventing damage to the radio from amplifier voltages.

The ARB-704 works with all standard manufactured amplifiers, including those with positive, negative and AC relay lines. This includes, but is not limited to, Ameritron, B&W, Collins, Command, Dentron, Heathkit, Kenwood, and Yaesu amplifiers.

The safest way to tell if the ARB-704 will work is to look at the relay connection on the amplifier panel. If the connection is through a phono (RCA) jack, or has one terminal directly grounded to chassis, this unit will almost certainly work.

This unit is supplied with the following:

- (1) Power connector cord and plug with red wire (+12 volts) and black wire (- and ground).
- (3) Phono (RCA) cord with connectors on each end. These cables are for relay, ALC and amplifier control lines.
- (1) ARB-704 unit

***Mobile radios, such as the IC-706 and FT100, do not have phono (RCA) connections for keying amplifiers.***

Many of the following radios do NOT require special plug and play cable assemblies, and can use the standard phono (RCA) connector cables supplied with every ARB-704. If for some reason you want to use band data or DIN plug connections, such as when using a full QSK amplifier, Ameritron has plug and play cables available for the following radios:

**ICOM:**

IC-706 series use PNP-13D

**Yaesu:**

FT-100 use PNP-35

FT-747, 767, 900, 920, 990, and 1000 series use PNP-8D

FT-817, 840, and 890 use PNP-8M

FT-847 use PNP-5M

FT-980 use PNP-5DY

**Kenwood:**

TS-50, 120, 130, 140, 180, 430, 440, 450, 530, 690, 870, 950, and 2000 use PNP-7D

TS-520 and 820 use PNP-7DK2

TS-930 use PNP-7DK

## Connecting the ARB-704

Connect the ARB-704 RADIO jack to your radio's amplifier control jack. This jack is normally labeled with one of the following names:

RELAY, SEND, TX, TX GND, PTT, or XMT Key

If you are unsure which jack is used to control the amplifier, you must either *look in your radio manual at the section describing use of external PA's (power amplifiers), or call the manufacturer or dealer who sold you the radio.*

Most radios use phono jacks for the relay control line, and will not require special cables. They can connect directly to the ARB-704 using any one of the three phono-connector cables we have supplied. Compact radios and mobile radios are generally the exception. A few radios, like the Yaesu FT-1000, have an internal switch that must be moved to active an external amplifier. The *radio* manual tells you how to do this.

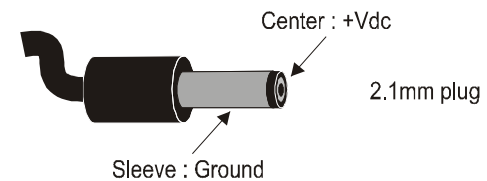
If your radio does NOT have a phono jack, you can either cut one end off the phono cable supplied and wire it directly to a plug that fits your radio , or purchase a plug and play cable from Ameritron.

Connect AMP jack of the ARB-704 to the amplifier's relay jack. Virtually all amplifiers have phono (RCA) connectors for the radio connections. One of the three phono (RCA) cable leads can be used between the ARB-704 and the amplifier.

If using ALC, connect ALC from the radio's ALC to the amplifier's ALC. The ALC connection on the ARB-704 is not used unless the MULTIPORT jack is used. We have included a cable for this, but the ARB-704 does NOT process or buffer harmless ALC voltages. With some plug and play cables for special radios, you can get the ALC voltage from the ARB-704 ALC jack. Your amplifier and radio manual will detail ALC connections.

**NOTE: When using a Plug and Play Cable the Power Lead is not used in most cases. Refer to the Plug and Place Instructions.**

Connect the power lead to a 12 volt source, with the positive supply to red and the negative lead to black. Plug power cord into POWER jack of the the ABR-704.



When the transceiver is placed into transmit, the light (LED) on the ARB-704 will illuminate and the amplifier will go into transmit.