AATCOMM™ Universal Communications Radio Speaker/Amplifier Interface

Model URSAI 1-4, Spectra and XTL

Application: Public safety vehicles equipped with mobile radio systems requiring the addition of up to four (4) indoor or outdoor speaker/amplifiers of various types interfaced with the radio system, such that the volume level at each speaker may be individually adjusted independent of the volume control setting at the radio control head – or dashmount radio control - typically located in the vehicle cab.

Compatibility:

- o Motorola Astro™ XTL Series Digital Mobile Radio.
- o Motorola Spectra Series Mobile radio
- Motorola HSN 4035C Power Speaker DC coupled with opto-isolator
- o Atkinson-Dynamics Industrial outdoor speaker amplifiers
- Any power speaker or speaker/amplifier which accepts a 600 Ohm balanced or unbalanced input with an input level no higher than 6 volts peak-to-peak

Please inquire for other makes and models of radios or speaker amplifiers.

Description: The AATCOMM URSAI 1-4 is furnished as a kit consisting of an interface module with mounting flange and a radio-specific cable with connectors on each end that attaches the URSAI 1-4 module to the radio accessory connector. A combination plug-in and screw terminal interface is provided for cabling each of four output channels to the amplified speaker. The interface housing is designed to be mounted near the radio transceiver.

The URSAI 1-4 provides four (4) isolated outputs, each of which may provide either a 600 Ohm line-level output of up to 6 volts peak-to-peak or alternatively, an output level compatible with a Motorola® HSN 4035C Power Speaker. Each of the four (4) speaker/amplifier driver output levels is internally adjustable using a miniature trim potentiometer to accommodate varying speaker/amplifier input level requirements for each of the four URSAI 1-4 output channels.

A modular plug-in interface is provided with wire-capture screw terminals and cable strain relief to connect up to four power speaker lines to the URSAI 1-4. No special tools are needed for installation.

<u>Please Note</u>: The Motorola® Astro[™] XTL Series Digital Mobile Radio accessory connector provides a low-level filtered high impedance audio output that is independent of the radio volume control. The available audio level at the accessory connector is insufficient to drive a power speaker and is also ungated or unsquelched and is therefore unsuitable for use as a direct source to drive a conventional speaker/amplifier. The URSAI 1-4 interface provides isolation and amplification and makes use of the XTL "channel Activity" line to control an audio gate thus effectively providing a built-in "squelch" capability needed for compatibility with an amplified or power speaker.





