



Model 34 Talent Amplifier

Key Features:

- Mode switch for flexible operation
- 1/4-inch and 3.5 mm output connectors
- Excellent audio quality
- Low DC power consumption
- Compatible with standard broadcast circuits
- Compact, lightweight package

Overview

The Model 34 Talent Amplifier is a self-contained listen-only “belt pack” unit that drives talent earpieces or headsets. The unit is powered by, and receives audio from, single- or dual-channel broadcast-standard IFB or party-line intercom circuits. A 3-conductor microphone-type cable links the IFB or intercom circuit with the Model 34’s input. The unit’s resources were selected so that a range of single- and dual-channel applications can be supported. For flexibility the dual-channel audio output is provided on both 1/4-inch and 3.5 mm jacks. The jacks are 3-conductor and are compatible with both monaural (2-conductor) and stereo (3-conductor) plugs. An LED indicator lights whenever input power is present, providing setup assistance and user confidence. The Model 34 is housed in a lightweight, yet rugged, aluminum housing. A belt clip allows it to be

directly attached to clothing or accessories. An optional mounting adapter is available enabling the Model 34 to be installed in a permanent location.

The Model 34 is intended for use by on-air broadcast and production support personnel. The unit provides two user-accessible rotary level controls and an output mode switch. The switch is used to select how the one or two audio input sources are routed to the connected earpiece or headset. In the switch’s stereo position input channel 1 (XLR pin 2) is sent to the left output channel while input 2 (XLR pin 3) is sent to the right output channel. The two controls allow the left and right output levels to be independently set. When the output mode switch is set to the mono position, a “mix” of input channels 1 and 2 can be created. Using the level controls, camera or production personnel can create a unique cue mix of either or both audio inputs. This allows independent IFB signals, such as those intended for use by on-air talent and technicians, to be simultaneously monitored. By design, the Model 34’s level controls cannot be set to fully attenuate (“mute”) the input sources. This helps to ensure that users will never accidentally miss important “cues” from directors or producers. While audio quality is not normally considered a factor in IFB or intercom systems, the Model 34 is built to “pro audio” standards. This helps to ensure that the best possible audio reproduction is provided.



The Model 34 is compatible with virtually every standard broadcast IFB and party-line intercom circuit. This type of circuit typically uses 3-pin XLR-type connectors for interfacing with connected equipment. XLR pin 1 serves as common for DC power and audio. Pin 2 provides DC power and, in the case of a dual-channel circuit, DC power and channel 1 audio. Pin 3 provides channel 2 audio in dual-channel systems or channel 1 audio in single-channel systems.

Model 34 units have been tested for correct operation with IFB and intercom circuits associated with systems from RTS®, Clear-Com®, and Studio Technologies. Good performance can be expected when the Model 34 is used with IFB circuits associated with the ubiquitous RTS Model 4010 Central Controller and IFB-828 Interface. With IFB circuits provided by interface units from Studio Technologies, excellent audio quality and support for lengthy cable runs can be expected.

Specifications

Applications: listen-only portable user station compatible with standard single- and dual-channel broadcast IFB and party-line intercom circuits

Connectors:

IFB/Intercom Input: 3-pin female XLR-type

Headphone/Earpiece Output: ¼-inch and 3.5 mm 3-conductor jacks

IFB/Intercom Input:

Compatibility: broadcast-standard single- or dual-channel IFB or party-line intercom circuits

Wiring Scheme:

Pin 1: common for DC and audio

Pin 2: DC only (single-channel circuits) or DC with channel 1 audio (dual-channel circuits)

Pin 3: channel 1 audio (single-channel circuits) or channel 2 audio (dual-channel circuits)

Power Requirement: 18-35 volts DC, 20 mA nominal, 45 mA maximum with one output channel shorted at full level

Headphone/Earpiece Output:

Compatibility: intended for connection to mono (2-conductor) or stereo (3-conductor) headsets or earpieces with nominal impedance of 150 ohms or greater

Type: 2-channel voltage driver

Input/Output Gain: 19 dB, maximum

Audio Routing—Switch Set to Stereo Mode: channel 1 (pin 2) input to left channel output; channel 2 (pin 3) input to right channel output

Audio Routing—Switch Set to Mono Mode: channels 1 & 2 summed (added) then routed to both left and right channel outputs

Maximum Output Voltage: 8 V_{pp}, 1 kHz, 150 ohm load

Frequency Response: 40 Hz-20 kHz, ±1 dB, 150 ohm load

Distortion (THD+N): 0.03%, 1 kHz, 150 ohm load

Options: mounting adapter allows Model 34 to be permanently mounted

Dimensions (Overall):

3.25 inches wide (8.3 cm)

1.80 inches high (4.6 cm)

3.95 inches deep (10.0 cm)

Weight: 0.6 pounds (0.3 kg)

Specifications subject to change without notice.

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