

## Model TP-BN14 Networked Mic Input and Selectable Monitor Station



TP-BN14 with  
user-provided  
microphone

### Microphone to Network Section:

- Converts a Standard Mic Source to a Dante Network Channel
- Mute Button Toggles Output On and Off or Provides Momentary Muting
- No User or Installer Gain Adjustments are Required
- Automatic Microphone Gain of 40 dB for Condenser Mics and 60 dB for Dynamic Mics
- P48 Phantom is Provided on the Microphone Input
- 40 dB per Octave at 100 Hz Low-Cut Filter\*

### Network to Speaker Section:

- 2 Watt RMS Audio Amplifier
- Compressor/Limiter Prevents Clipping
- Amplifier Gain Adjustment is Accessible through the Chassis Bottom\*

### Network to Headphone Section:

- Selection from 3 or 4 Mono Dante Network Sources to a Stereo Headphone
- Single-Button Selection for Each Source with LED Indication
- Upper Button Selects "OFF" or Speaker Source\*
- Output on Professional Quality 3.5 mm stereo Mini-Jack
- Display is Bright During Selection, Dims After Selection
- Front-Panel Output Level Control

### Common:

- Adjustment and Switch Settings on the Chassis Bottom\*
  - High Resolution 24 Bit Analog to Digital and Digital to Analog Conversion
  - Rear-Panel LED Indicators Show Network Sync Status
  - Normal or Hot-Standby Operation from PoE
- \*set by installer

**APPLICATION:** The TP-BN14 is a bidirectional Dante network interface for tabletop use. The unit provides a shock-mounted XLR microphone input with a mute button. A front-panel 2W amplified speaker provides monitoring of a specific audio mix.

The TP-BN14 provides a front-panel headphone Mini-jack with an associated four input source selector. LEDs associated with the input buttons indicate the selected source.

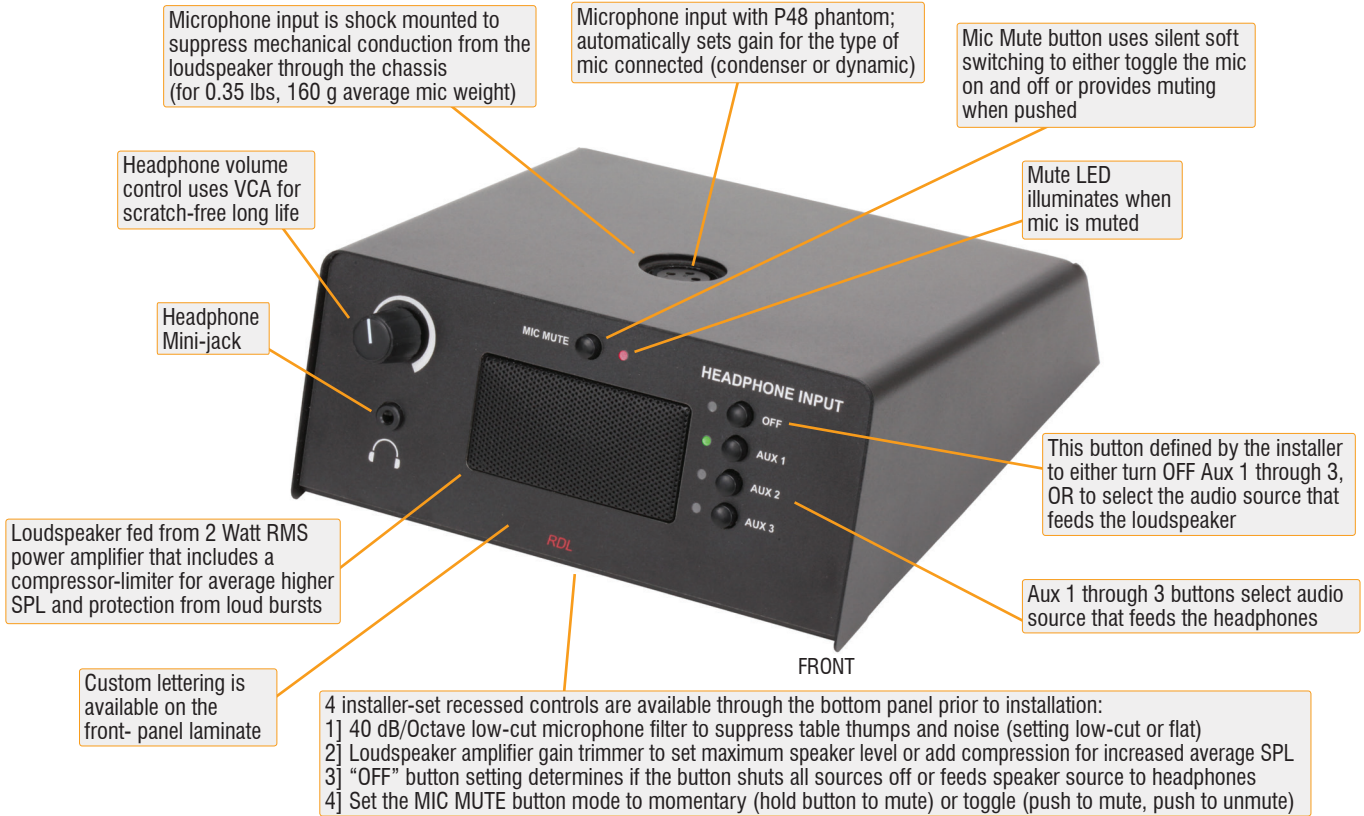
The front panel level control is a long-life potentiometer controlling a VCA. Audio does not pass through this control, assuring years of noise free level adjustment. The output amplifiers deliver more than 90 mW into either high or low impedance headphones. The headphone output may be used to listen to different language translations.

The TP-BN14 may be powered from a 24 Vdc power supply, available separately, or from PoE. It is used in meeting halls, conference rooms or courtrooms.

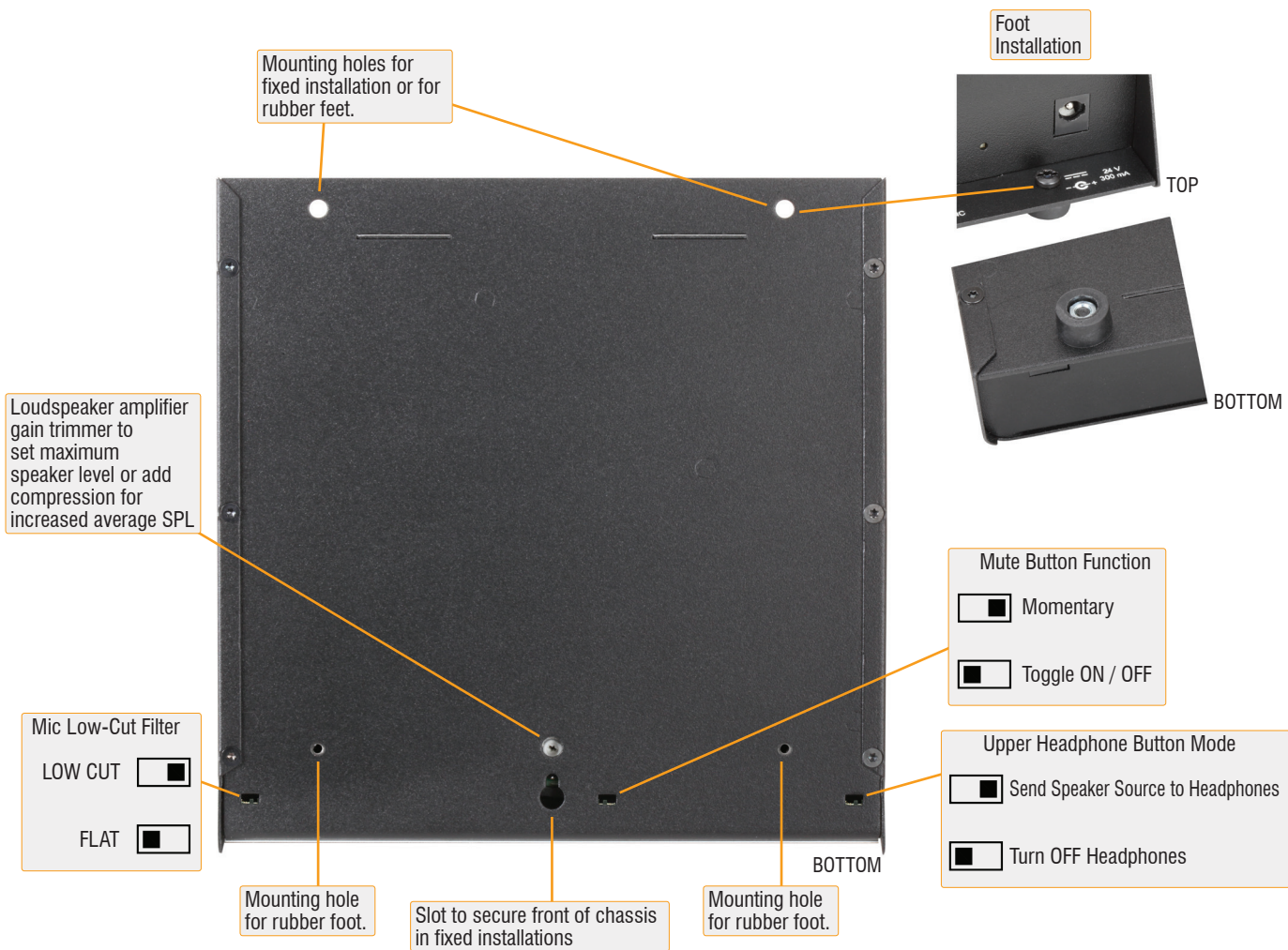


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### TYPICAL PERFORMANCE

|   |  |   |  |
|---|--|---|--|
| <p>Network Connector:<br/>Digital Audio Ethernet Protocol:<br/>Transmission Rate:<br/>Sample Rates Supported:<br/>Bit Depth Supported:<br/>Audio Operating Levels:</p>  | <p>RJ45 Ethercon style<br/>Dante<br/>100 Mbps<br/>44.1 kHz, 48 kHz (default)<br/>24 bits<br/>-20 dBFS = +4 dBu</p>   | <p>Level adjustment:<br/>Output:</p>  | <p>Single-turn front-panel rotary level control<br/>Stereo mini jack,<br/>90 mW per channel (into 100 ohms),<br/>Mono source<br/>20 Hz to 20 kHz (+0, -3 dB, into 100 Ohms)<br/>&lt; 0.2% (1 kHz, 10 mW)<br/>&lt; -70 dB (below 10 mW with a -18 dBFS input)</p> |
| <p><u>Mic Input to Network Interface Section</u><br/>Input:<br/>Gain:</p>   | <p>Balanced, XLR<br/>Automatic; 40 dB for condenser mics,<br/>60 dB for dynamic mics<br/>-56 dBu (dynamic),<br/>-36 dBu (condenser), -19 dBu maximum (unclipped),<br/>-14 dBu maximum (soft clipped)<br/>&gt; 1 kΩ<br/>P48, 48 Vdc<br/>IEC 61938: 2013<br/>20 Hz to 20 kHz (± 0.75 dB) flat;<br/>with low cut filter: -1.5 dB @ 100 Hz,<br/>-8 dB @ 80 Hz, -38 dB @ 50 Hz, -60 dB @ 20 Hz<br/>&lt; 0.1%<br/>&lt; -70 dB<br/>&gt; 70 dB (50 Hz to 120 Hz)<br/>Mute Button Toggles Mic On or Off</p> | <p><u>Network to Speaker Output Section</u><br/>Output power:<br/>Frequency Range:</p>  | <p>2 Watts RMS<br/>150 Hz to 20 kHz, nominal</p>   |
| <p>Input Level for +4 dBu (-20 dBFS):<br/>-36 dBu maximum;</p> <p>Input Impedance:<br/>Phantom Power:<br/>Standard for Phantom:<br/>Frequency Response:</p> <p>THD +N:<br/>Noise below +4 dBu (-20 dBFS):<br/>CMRR:<br/>Muting:</p> | <p><u>Common</u><br/>Indicators (8):</p> <p>Power Connections (2):<br/>Ambient Operating Environment:<br/>Power Requirement:<br/>PoE:<br/>Dimensions:</p> <p>Package Type:<br/>Package Dimensions:<br/>Shipping Weight:<br/>WEEE weight:<br/>Tariff code:</p>  | <p>Headphone channel selected (4);<br/>Mic muted, Network Sync,<br/>Ethernet Link and Speed (2)<br/>Power Jack; PoE<br/>0° C to 40° C<br/>24 Vdc @ 300 mA, or PoE<br/>Class 0, IEEE 802.3af<br/>6.95" (17.7 cm) W;<br/>2.85" (7.24 cm) H;<br/>7" (17.8 cm) D<br/>Cardboard Box<br/>7 x 7 x 3 in.<br/>3.26 lbs.<br/>2.97 lbs.<br/>8518.50.0000</p> |  |
| <p><u>Network to Headphone Output Section</u><br/>Selectors (4):</p> <p>Indicators (4):</p>   | <p>Momentary pushbuttons (1 for each channel);<br/>Upper Button Selects "OFF" or Speaker Source,<br/>Set by Installer<br/>Green LEDs, (indicates channel selected)</p>   |   |  |