# **Telephone Paging Amplifiers**



# TPU35B, TPU60B, TPU100B, TPU250



Bogen's TPU-Series of amplifiers are the ideal choice within the telephone paging industry. With five models to choose from, ranging in power from 15 watts to 250 watts, each model provides signal-activated, automatic muting of background music during a telephone page, and gradual return of music following a page.

#### Product Features:

- 15, 35, 60, 100 and 250 watt models speciallydesigned for telephone paging systems
- 3 inputs on TPU250 and TPU-B models: 1 TEL, 1 MIC (Lo-Z), 1 AUX (Hi-Z)
- 2 inputs on TPU15A: 1 TEL, 1 AUX (Hi-Z)
- Sensitivity: 0.3 mV, MIC; -20 dBm, Tel; 85 mV, Aux
- 600-ohm balanced TEL input for direct connection to page ports and adapters
- TEL input has Automatic Level Control (ALC) for constant page announcement level
- Separate MIC input for a low-impedance pushto-talk microphone (TPU-B models only)
- Music input mutable by external contact closure (TPU-B models only) or activity on TEL input
- Separate volume controls for mic, paging, background music, and night ringer
- Built-in night ringer can be activated from 90V ring signal (TPU-B models only) or external contact closure

- 25V and 70V constant voltage outputs, balanced and unbalanced; also 8-ohm on TPU15A
- Wall-mount design provides minimum protrusion from backboard (TPU250 can also be rackmounted)
- Easily accessible, recessed front-panel controls (TPU-B models only) for setting volume, muting, music, etc.
- RCA jacks provided to allow amplifier bridging to double the number of amplifier inputs and outputs (TPU-B models only); a TPU250 can only be bridged with one other TPU250
- Thermal and electronic overload protection (TPU-B models only), resettable circuit breaker (except TPU250), slow blo fuse on TPU250

	(s:	Inputs			plouse	Control	S		ivel	ute	_	Night Ringer		Outputs				
Model	Output Power (Watts)	Telephone	Music	Microphone	Adjustable Mute Threshold	Automatic Level Co	Bass/Treble Controls	Peak Level LED	Adjustable Mute Level	Fade Back From Mute	Aphex Aural Exciter	90V Activation	Contact Closure	70 <i>V</i>	25V	25 VCT	8 Ohms	16 Ohms
TPU250	250																	
TPU100B	100																	
TPU60B	60																	
TPU35B	35																	
TPU15A	15						*											

<sup>\*</sup> Treble Cut only

Technical Specifications, Dimensions, and Weights can be found on Page 67

## Specialized Telephone Input

The TPU-Series' 600-ohm transformer balanced input is perfectly suited to connect to paging ports and paging adapters such as Bogen's TAMB. Here are a few specially-designed features:

- The background music will mute whenever paging activity is present on the telephone input, even if control contacts are not available. (Separate mute control contacts are also available.)
- To avoid problems with noise on the lines falsely muting the background music, a built-in VOX threshold control (not on TPU15A) lets you decide what's a real signal and what's noise.
- Because not everyone speaks at the same level, the Automatic Level Control feature keeps loud voices from booming out of the paging system's speakers.

### Aphex® Aural Exciter

Crisp, clean, intelligible sound is the goal of every paging system. The Aphex® Aural Exciter circuit, which was originally developed for the recording industry, adds back the high frequency harmonics that are lost through the handsets and speakers. With one simple control, you can adjust the amount of high-frequency content the Aphex® circuit adds back until optimum intelligibility is reached.

#### Variable Music Mute

Add some polish to announcements by using the TPU's built-in variable mute feature. Variable mute allows you to control the level of the music heard in the background during a page. It's fully adjustable from no muting of music to full suppression of music. The TPU also gracefully fades the muted music back in after the page is finished for a smooth, professional sound (not available on TPU15A).

#### **Bridging**

Bridging two TPU amplifiers permits them to be used in tandem with one another to increase the total output power of the system, thereby permitting additional speakers to be added. For example, when two 250-watt amplifiers are bridged, the total output capacity of the system is 500 watts. Also, both amplifiers will receive the same input signal, amplify it, and deliver it to the speaker loads connected to each amplifier (not available on TPU15A).

#### Accessories



WMT1A Line Matching Transformer

