



PA-402

Program and Paging Audio Power Amplifier

The **PA-402** is a Professional Audio Power Amplifier designed with the System Integrator in mind. It is specifically designed for Background Music, and Paging Applications and may be used with other Tech Works products to augment a variety of system designs. The PA-402 has Program Audio Inputs, Paging Audio Inputs, and Control signals that select which Audio inputs are directed to the Speaker. These inputs are transformer balanced allowing several PA-402's to be connected in tandem, for large distributed systems. There is also an unbalanced Stereo Input for "Local" Music insertion.

The logic allows for a wide range of control requirements including; Enabling, Muting, Program, or Page selection. Logic options are selected from a set of jumpers located on the inside of the amplifier. The PA-402 comes ready to use for most applications, and there are Application Templates for other common uses.

The audio quality of the PA-402 is superb. The undistorted output is 40-Watts. The PA-402 is fully protected against overloads. The unit automatically recovers when any overload is removed.

Modular Construction makes the PA-402 ideal for integrated designs. The unit is small; mounting is flexible, and easy, so it is ideal for space conscious requirements. Mounting options include Desk Mount (DM), Rack Mount (RM), and Wall Mount (WM). All signals are connectorized for ease of installation.

Power is from a Universal Plug-in DC power adapter or screw terminals for connection of any regulated 24VDC-3.5 Amp Power Supply (Sold Separately).

BENEFITS

- High Quality Audio
- Very low distortion
- Easy to Operate
- Compact, 1U half rack
- Several mounting options

Associated Equipment:

PA-16HT	Paging Loudspeaker
PA-SI-1	Paging Speaker Interface
PS-2437A	Power Supply 24VDC @3.7A

Design Information:

Power	24V DC , 3.7A (Power Supply Not Included)
Color	Grey Metal Enclosure
Mounting	DM - Desk Mount RM - Rack Mount RM2 - Dual Rack Mount WM - Wall Mount
Dimensions	8.5" W x 6" D x 1.75" H
Weight	3 lbs.
Freq. Resp.	150 – 14k Hz
Output	25V Line (Balanced) 40W RMS, Short Protected
Input	10k/Ohms 0dBm Transformer Balanced / RF and Static Protected
Distortion	< 1% THD

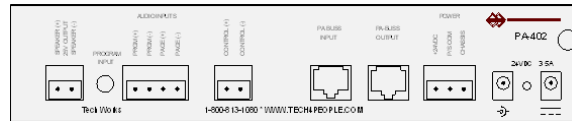


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Rear View and Connections



The PA-402 is easy to use, the inputs and output are connectorized. The Program (PRGM) and Page inputs are either through Euro Style barrier strips or modular RJ-45 connectors. The Stereo Program Input is a 3.5mm TRS connector for direct connection of Smart Phones or Music Players. Power connection is a 5.5mm coaxial jack. Two power jacks are provided for sharing the power supply with other Tech Works Products.

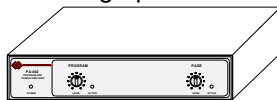
Logic Control Input is: Switch Common - Sensing for Switches, or PLC, Page Switch- Active Low, momentary or sustained. The Configuration Jumpers (inside) are; Reverse Sense so that Page Switch, screw terminal input is active when "Off", Mute Program which causes Program Audio to be ignored, Ignore Active which causes PA-BUSS Active to be ignored, Mute Page which causes Page Audio to be ignored.

The PA-BUSS connectors are for easy connection of the PA-402 to other Tech Works "PA" products by simply plugging in a CAT 6 patch cable. All audio, control, and power is passed from one device to another by the CAT 6 cable, making installation a snap.

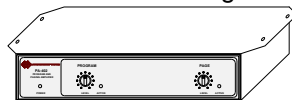
Mounting Options:

The PA-402 packaging is solid, unlike consumer products, and tailored to act as a companion to other Tech Works products. Several mounting options are available, Tabletop, Under Counter, and Rack. The 1U, half rack size compliments other Tech Works products for a complete single source solution.

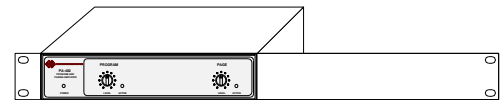
Three mounting options are available as standard configurations.



Desk Mount (DM)
PA-402-DM



Wall Mount (WM) (Under Counter)
PA-402-WM

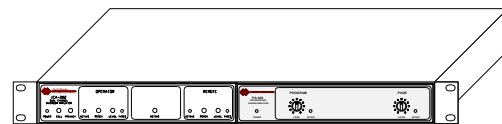


Rack Mount (RM)
PA-402-RM

Other mounting options are available upon request.



Side by Side Wall Mount in a WM-2
Side by Side Rack Mount with an RM-2
IC-52B+PA402-WM2 Shown above



ICA-202D+PA402-RM2 Shown above

Architects' and Engineers' Specifications

The Program and Paging Audio Amplifier shall be a professional quality unit with separate transformer balanced inputs for two audio sources. All switching of audio inputs shall be solid state logic controlled with static electricity protection. The amplifier shall be 1.75" High, 8.5" Wide, and 6" deep producing 40 watts at 25 Volt balanced line with less than 0.1% distortion. The input shall be industry standard 0dBm at 10K ohms and terminations shall be "Euro" style screw terminals modular connectors. The amplifier shall include Tech Works PA-BUSS interface connectors for integration with other PA-BUSS products. Products not fully compatible with Tech Works PA-BUSS technology will not be acceptable under these specifications. The power supply shall be 24 VDC 3.5 Amp universal AC source type. The Paging Audio Amplifier shall be, Tech Works Model PA-402.

