



# COM104

## Public Address Amplifier 40W 100V

### Highlights:

---

- unbalanced stereo line input
- 1 x Microphone input
- Priority audio inputs with phantom power
- 1 x Priority mute contact
- Terminal block output connections (4Ω, 70V, 100V)
- Compact design
- Low impedance & constant voltage output
- Table top or half rackspace installation



The COM104 is a compact but versatile public address mixing amplifier which offers solutions for small to medium size audio systems in commercial installations. Typical applications are background music systems in retail stores, bars, restaurants and office buildings.

The compact and simple design allows installation in any location and operation through any possible user.

The amplifier is designed using Class-D amplifier technology and delivers an output power of 40 Watt to constant voltage (100V and 70V) or low impedance (4 Ohm) audio systems. A switch mode power supply allows compatibility with a wide variation of mains voltages for global compatibility.

A stereo line input allows connection for a wide variation of audio sources such as media players, radio tuners, internet audio players, ... and many more. A balanced mic/line input allows connection for an announcement microphone with compatibility for condenser microphones using the integrated phantom power supply (15V). A priority switch overrides the background music when enabled, and compatibility with voice file players is guaranteed by the wide gain adjustment possibility (0 dB - +50 dB).

The COM104 is a table-top standing device, while rack mounting in 10.5" or 19" equipment racks is possible using an optionally available mounting set (MBS310).



### Applications:

---

- Bars, restaurants
- Retail
- Public facilities
- Corporate spaces

## System specifications:

Inputs	Balanced Microphone	Sensitivity (1W/1m)	-0 dB ~ +50 dB
		Connector	3-pin Euro Terminal Block (Pitch - 3.81 mm)
		Type	1 x Balanced Microphone
	Unbalanced Stereo	Type	1 x Stereo Unbalanced Line
		Connector	RCA / 3.5 mm Jack
		Sensitivity (1W/1m)	-4 dB ~ +20 dB
Frequency	Response ( $\pm 3$ dB)		20 Hz - 20 kHz
Signal / Noise			> 90 dB
THD+N (@ 1 kHz)			< 0.5% (1/2 Rated Power)
Crosstalk (@ 1 kHz)			> 70 dB
Technology			Class-D
Power	Supply		Switching mode
		Operating	100 ~ 240 V AC / 50 ~ 60 Hz
Inputs	Balanced Microphone	Phantom Power	15 V DC
			Priority mute contact
Outputs	Connector		4-pin Euro Terminal Block (Pitch - 5.08 mm)
	Voltage / Impedance		100/ 70 V / 4 $\Omega$
Protection	Amplifier		DC Short circuit
			Over heating
			Over load
			Signal limiting
Cooling			Convection cooled
Operating temperature			0° ~ 40° @ 95% Humidity
RMS Power	@ 4 $\Omega$		1 x 40 W

## Product Features:

Dimensions		217.5 x 43.7 x 300 mm (W x H x D)
Weight		3 kg
Mounting		1/2 19" / 1 HE or tabletop
Construction		Steel
Colours		Black
Accessories	Optional	19" Rackmount adapter

## Architects' and Engineers' Specifications:

---

The Amplifier shall be a constant voltage 100 Volt type, containing one controllable amplifier channel with an output power of 40 Watt. The amplifier shall use Class-D Amplifier technology while being powered by a switching power supply. It shall have integrated circuitry to protect against short-circuits, mismatched loads and over-heating. Additionally, the load shall be protected against DC faults and a clip limiter shall automatically reduce the input gain at onset of distortion. The unit shall be housed in a convection cooled enclosure, providing maximum reliability while keeping maintenance and noise levels at a minimum. The front panel shall contain an AC power switch accompanied by a blue power indicator LED and channel operation indicator LED's. Two green signal LED's indicating the presence of an input signal and it's level exceeding the -20 dB level, a clip LED indicating the channel operation at maximum level and a protection LED indicating any fault detected shall be provided on the amplifier's front panel. In addition, a 3.5 mm jack connection on the front panel shall be implemented, allowing convenient connection possibilities for portable devices such as laptops, smartphones and tablets. Besides the output master control, a two-band tone control shall be provided, the master volume control will allow regulation of the overall output volume while the two band tone controls will allow bass / treble adjustment within a range of  $\pm 12$  dB. The output connection shall be performed using a 4-pin Terminal block connector with multiple output possibilities including 100 V, 70V and low impedance (4 Ohm). On the back panel, an unbalanced stereo line input connection shall be implemented through RCA connectors, another input shall be possible through a balanced monotype input allowing easy connection of microphones. A 15 V phantom power switch will allow connecting condenser microphones. Both inputs shall have individual input mixing controls. A priority switch shall be provided whereby other audio sources will be eliminated once a signal is present on this input when enabled it shall also override the priority contact. A priority mute contact shall be provided, allowing easy muting of the background music. This will be convenient for situations where a separate emergency system is installed and complete background music muting is required at the occasion of a fire alarm. The emergency system contacts can be linked to this contact input. The amplifier shall operate on a 100 ~ 240 V AC / 50 Hz mains network and shall be equipped with a removable power cord having a standard shuko (CEE 7/7) AC plug. The connector on the amplifier chassis shall be a fused IEC C14 type. The amplifier shall be housed in a compact half 19" rackspace enclosure which can be used for desktop installation or mounted in an equipment rack using (optionally available) mounting adapters. The half 19" rackspace enclosure allows single installation in a 10.5" equipment rack, or side-by-side (two devices) in a 19" equipment rack its weight shall not exceed 2.2 Kg.

