

COM108 Public Address Amplifier 80W @70/100V

Highlights:

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

The COM108 is a compact but versatile public address mixing amplifier which offers solutions for small to medium size audio systems in commercial installations. Typical application 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 80 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 COM108 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:

Connector Type	Inputs	Balanced Microphone	Sensitivity (1W/1m)	-0 dB ~ +50 dB
Connector Connector RCA / 3.5 mm Jack			Connector	3-pin Euro Terminal Block (Pitch - 3.81 mm)
Frequency Response (± 3 dB) 20 Hz - 20 kHz Signal / Noise > 90 dB THD+N (@ 1 kHz) < 0.5% (1/2 Rated Power)			Туре	1 x Balanced Microphone
Frequency Response (± 3 dB) 20 Hz - 20 kHz Signal / Noise >90 dB THD+N (@ 1 kHz) < 0.5% (1/2 Rated Power)		Unbalanced Stereo	Connector	RCA / 3.5 mm Jack
Signal / Noise >90 dB THD+N (@ 1 kHz) <0.5% (1/2 Rated Power)			Sensitivity (1W/1m)	-4 dB ~ 20 dB
THD+N (@ 1 kHz)	Frequency	Response (± 3 dB)		20 Hz - 20 kHz
Crosstalk (@ 1 kHz)	Signal / Noise			> 90 dB
Technology Class-D Power Supply Switching mode Inputs Balanced Microphone Phantom Power 15 V DC Priority mute contact Priority mute contact Outputs Connector 4-pin Euro Terminal Block (Pitch - 5.08 mm) Protection Amplifier DC Short circuit Protection Amplifier DC Short circuit Cooling Signal limiting Cooling Convection cooled Operating temperature 0° ~ 40° @ 95% Humidity	THD+N (@ 1 kHz)			< 0.5% (1/2 Rated Power)
PowerSupplySwitching modeInputsBalanced MicrophonePhantom Power15 V DCOutputsConnectorPriority mute contactOutputsConnector4-pin Euro Terminal Block (Pitch - 5.08 mm)ProtectionAmplifierDC Short circuitCoolingSignal limitingCoolingConvection cooledOperating temperature0° ~ 40° @ 95% Humidity	Crosstalk (@ 1 kHz)			> 70 dB
InputsBalanced MicrophonePhantom Power15 V DCOutputsConnectorPriority mute contactOutputsConnector4-pin Euro Terminal Block (Pitch - 5.08 mm)ProtectionAmplifier100/ 70 V / 4 ΩProtectionAmplifierDC Short circuitCoolingSignal limitingCoolingConvection cooledOperating temperature0° ~ 40° @ 95% Humidity	Technology			Class-D
Inputs Balanced Microphone Phantom Power 15 V DC Outputs Connector 4-pin Euro Terminal Block (Pitch - 5.08 mm) Voltage / Impedance 100/ 70 V / 4 Ω Protection Amplifier DC Short circuit Over heating Cooling Convection cooled Operating temperature Some Amplifier Some Amplifier Some Amplifier Some Amplifier Some Some Some Some Some Some Some Some	Power	Supply		Switching mode
Priority mute contact Outputs Connector 4-pin Euro Terminal Block (Pitch - 5.08 mm) Voltage / Impedance 100/ 70 V / 4 Ω Protection Amplifier DC Short circuit Over heating Signal limiting Convection cooled Operating temperature Operating temperature Priority mute contact 4-pin Euro Terminal Block (Pitch - 5.08 mm) Over heating Cover heating Convection cooled				
OutputsConnector4-pin Euro Terminal Block (Pitch - 5.08 mm)Protection100/70 V / 4 ΩProtectionAmplifierDC Short circuitCover heatingOver heatingCoolingConvection cooledOperating temperature0° ~ 40° @ 95% Humidity			Operating	100 ~ 240 V AC / 50 ~ 60 Hz
ProtectionAmplifierDC Short circuitCoolingOver heatingCoperating temperatureConvection cooled	Inputs	Balanced Microphone		
Protection Amplifier DC Short circuit Over heating Signal limiting Cooling Operating temperature Oo ~ 40° @ 95% Humidity	Inputs	Balanced Microphone		15 V DC
Cooling Convection cooled Operating temperature Operating temperature Over heating Signal limiting Convection cooled One 40° @ 95% Humidity				15 V DC Priority mute contact
Signal limiting Cooling Convection cooled Operating temperature O° ~ 40° @ 95% Humidity		Connector		15 V DC Priority mute contact 4-pin Euro Terminal Block (Pitch - 5.08 mm)
Cooling Convection cooled Operating temperature Convection cooled 0° ~ 40° @ 95% Humidity	Outputs	Connector Voltage / Impedance		15 V DC Priority mute contact 4-pin Euro Terminal Block (Pitch - 5.08 mm) 100/ 70 V / 4 Ω
Operating temperature 0° ~ 40° @ 95% Humidity	Outputs	Connector Voltage / Impedance		15 V DC Priority mute contact 4-pin Euro Terminal Block (Pitch - 5.08 mm) 100/ 70 V / 4 Ω DC Short circuit
	Outputs	Connector Voltage / Impedance		15 V DC Priority mute contact 4-pin Euro Terminal Block (Pitch - 5.08 mm) 100/ 70 V / 4 Ω DC Short circuit Over heating
RMS/AES power handling $@4\Omega$ $1 \times 80 \text{ W}$	Outputs Protection	Connector Voltage / Impedance		15 V DC Priority mute contact 4-pin Euro Terminal Block (Pitch - 5.08 mm) 100/ $70 \text{ V} / 4 \Omega$ DC Short circuit Over heating Signal limiting
	Outputs Protection Cooling	Connector Voltage / Impedance		15 V DC Priority mute contact 4-pin Euro Terminal Block (Pitch - 5.08 mm) 100/ $70 \text{ V} / 4 \Omega$ DC Short circuit Over heating Signal limiting Convection cooled

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 70/100 Volt type, containing one controllable amplifier channel with an output power of 80 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 ± 12 dB.

The output connection shall be performed using a 4-pin Terminal block connector with multiple output possibilities including 100V, 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 mono type 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 occasion of a fire alarm. The emergency system contacts can be linked to this contact input.

The amplifier shall operate on a $100 \sim 240 \text{ V}$ 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 it's weight shall not exceed 2.8 Kg.

