U30:1M Mixer amplifier 30W, 1 channel





Introducing the U30:1M, a 30 W mixer amplifier designed to cater to the demands of small to mediumsized installations, where paramount considerations include quality, performance, and unwavering reliability. This mixer amplifier is ideal for background music and crystal-clear voice announcement applications, making it a perfect fit for diverse environments such as bars, restaurants, retail outlets, educational institutions, houses of worship, museums, galleries, transport hubs, and conference centers. Thanks to its compact size, standing just one rack unit high and half rack wide, the U30:1M presents numerous installation possibilities, even in spaceconstrained settings. Included brackets facilitate both single and dual rack-mount configurations, while desktop and under-counter installations are equally viable. When rack-mounted side by side, two

- Versatile inputs: 4 inputs 2 aux and 2 mic/ line options with phantom power support
- Full power output supporting 4Ω , 8Ω , 70 V and 100 V
- EMG override input, ensuring critical messages are heard clearly
- Contact override for call station with 2-tone chime for attention-grabbing alerts
- Selectable 120 Hz high-pass filters to customize audio output and eliminate unwanted low-frequency noise
- Space-saving compact ½ rack design, providing versatility without compromising performance
- Voice-over ducking that automatically adjusts background music volume for clear voice communication
- Remote power OFF (Stand by), enhancing energy efficiency

amplifiers can seamlessly inhabit a single rack unit, optimizing space utilization and effectively doubling both channel count and output power.

Functions

Advanced amplification technology

Incorporates class-D amplification topology for superior energy efficiency, product quality, and reliability compared to traditional linear power supply and class-AB amplification.

Compact form factor

Half rack, 1U enclosure ensures space-saving installation without compromising performance.

Full power at low and high impedance

Supports 70V, 100V, 4Ω , and 8Ω speaker systems, offering versatility in system design.

Phantom power

Facilitates microphone operation with power supplied to both microphone inputs.

VOX Ducking

Prioritizes voice input, enhancing clarity during announcements or speeches.

Remote power

Enables remote power ON/OFF functionality via contact closure, enhancing operational convenience.

Bass and treble adjustment

Allows fine-tuning of audio output with dedicated bass and treble adjustment controls.

High-pass filter

Available 120 Hz high-pass filters to tailor audio output according to application requirements.

Flexible mounting options

Offers versatile mounting possibilities including rack mount, side-by-side rack mount, table-top, or undertable mounting, facilitated by included brackets and accessories.

Emergency input

Features 100 V and Line In emergency input with level selection, ensuring critical messages are delivered clearly.

Protection

Equipped with overload and short circuit protection, along with a limiter to safeguard both the amplifier and loudspeaker against accidental overdriving. A temperature-controlled fan ensures optimal cooling without generating acoustic noise at lower output levels.

Accessible front controls

Conveniently adjust output gain, input gain per channel, and bass and treble settings directly from the front panel for effortless customization.

Technical specifications

Electrical

Mains power supply	Mains power supply		
	U30:1M		
Voltage	100 VAC - 240 VAC, 50/60 Hz		
Power consumption	100 VA		
 Standby (Remote OFF active) 	0.6 W		
• Idle mode	6 W / 6 W		
Remote power (ON/OFF Stand by)	2-pin, Eurostyle, contact closure		

Performance				
Frequency response, -3 dB ref. 1 kHz				
•	Any input to output	70 Hz — 22 kHz		
•	Any input to LINE output	<10 Hz — 65 kHz		
Dis	tortion	<1% @rated output power, 1 kHz		
Output stage topology		Class D		
Equalization				
•	Bass shelving	$\pm 12 \mathrm{dB} / 150 \mathrm{Hz} - 3 \mathrm{dB} (100 \mathrm{Hz})$		
•	Treble shelving	$\pm 12\mathrm{dB}/5\mathrm{kHz}\!-\!3\mathrm{dB}(10\mathrm{kHz})$		
Fil	Filter			
•	LO-CUT permanently	f=70 Hz, 12 dB/oct.		
•	LO-CUT switchable, can be activated	f=120 Hz, 12 dB/oct.		

Ge	neral					
Fre	Front status LEDs					
•	Protect (Red)	Protection, short circuit				
•	Peak (Red)	1 dB before clip (input and output)				
•	Signal (Green)	Input and output signal				
•	Call (Green)	EMG / priority trigger / Vox input active				
•	Power (Green)	Power on condition				
DIP switches		EMG (HiZ/LowZ), Two-tone Chime (ON/OFF), HPF (120 Hz), VOX (ON/OFF), Phantom power (+48 V/OFF) Output (HiZ/LowZ), Amp mode $(70 \text{ V}/100 \text{ V}; 4\Omega/8\Omega)$				
Protections						
•	Amplifier	Audio limiters, high temperature, DC, HF, short circuit, over current protection				
•	Switching mode power supply (µPC controlled)	Mains over/under voltage protection, inrush current limiter, mains over current, high temperature				
•	Remote power OFF	Contact closure				
Inputs						
	Number of inputs 2 mic/line, 2 aux (+EMG)					
Sensitivity with all level controls in max. position						
•	MIC / Call station	-68 dBu (300 μV)				
•	AUX (only L or R)	-22 dBu (60 mV)				
•	AUX (Stereo) (L and R)	-28 dBu (30 mV)				
Maximum input level						
•	MIC / Call station	+8 dBu				

 $10\,k\Omega$

 $4.7 k\Omega$

>15 kΩ

>470 kΩ

Input impedances

MIC / Call station

AUX

EMG (Line)

EMG (HiZ)

Inputs	
LINE (L and R)	75 Ω
Noise, MIC input to output, A- weighted, (HiZ 100 V)	-58 dBu
Input 1	
Type	Mic/Line, contact override with chime
Connector	3-pin XLR, balanced / 5-pin Eurostyle, balanced (3 pin for input, 2 pin for trigger
Dynamic range	61 dB (Mic gain min—max)
S/N (A-weighted)	≥98 dB
Phantom power supply, switchable	48 V DC
Input 2	
Туре	Mic/Line, VOX ducker override
Connector	3-pin XLR, balanced
VOX Ducking	Ducking control 0 dB—-45 dB
VOX Threshold	-60dBu — +8 dBu, adjustable
Dynamic range	61 dB (Mic gain min – max)
S/N (A-weighted)	≥98 dB
Phantom power supply, switchable	48 V DC
Input 3	
Туре	Line
Connector	RCA (chinch), stereo converted to mono, unbalanced
S/N (A-weighted)	≥98 dB
Input 4	
Туре	Line
Connector	RCA (chinch), stereo converted to mono, unbalanced
S/N (A-weighted)	≥98 dB
EMG Input	
Туре	Line; 100 V
Connector	2-pin, balanced
S/N (A-weighted)	≥98 dB
Loudspeaker output	
Connector	4-pin Eurostyle (2 pin for LowZ, 2 pin for HiZ)
Rated output power	30 W
Max output voltage, 1 kHz,	4 Ω 8 Ω 70 V 100 V

Enclosure			
Color in RAL	RAL 9017 Traffic black		
Net weight (without accessories)	2.26 kg (4.98 lb)		
Net weight (with accessories)	2.72 kg (5.99 lb)		
Shipping weight	3.10 kg (6.83 lb)		
Mounting	Stand-alone; 19" rack; rack side-by- side; half 19" rack; table-top; under- table		

Environmental

Climatic conditions	
Cooling concept	Fanless (convection cooling)
Operating temperature	-5°C-45°C (23°F-113°F)
Storage temperature	-40°C — 70°C (-40°F —158°F)

Mechanical

THD=0.5%, no load

Enclosure		
IEC protection class	Class I (grounded)	
Dimensions (HxWxD), without accessories	44.2 mm x 218 mm x 217.7 mm (1.74 in x 8.6 in x 8.57 in)	

 $12\,V_{\text{RMS}} \quad 16\,V_{\text{RMS}} \quad 87\,V_{\text{RMS}} \quad 118\,V_{\text{RMS}}$



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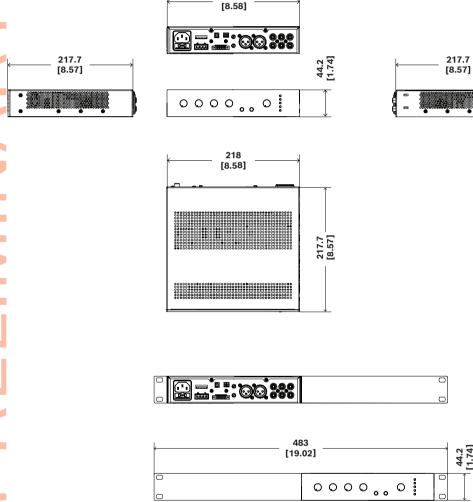


Fig. 1: Dimensions

Ordering information

U30:1M-CN Mixer amplifier 30W 1 channel, CN 1-channel, 30 W mixer amplifier Order number U30:1M-CN | F.01U.425.754

U30:1M-EU Mixer amplifier 30W 1 channel, EU 1-channel, 30 W mixer amplifier Order number **U30:1M-EU | F.01U.425.746**

mm [in]

U30:1M-US Mixer amplifier 30W 1 channel, US 1-channel, 30 W mixer amplifier

Order number U30:1M-US | F.01U.425.750

Accessories

PLE-1CS Call station, all-call

An all-zone call station with 2 m cable and lockable Euro style connector.

Order number PLE-1CS | F.01U.066.940

Represented by:

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