# MACKE. INDUSTRIAL

### **UP 4000 Series**

- The UP4061 is designed for continuous duty in speech, music, paging and sound reinforcement applications in churches, schools, offices, arenas, hotel meeting rooms, convention centers, recreation facilities and other venues demanding high performance, flexible features and rugged dependability.
- The UP4061 offers two discrete inputs with priority. The main program input is actively balanced and terminated to a barrier strip connection on the rear panel. The second input is unbalanced, and terminated to a single RCA connector. A contact closure will give priority to the balanced input. Activation of the balanced input priority turns on 18Vdc (300mA) power at a barrier connector on the rear panel, which may be used to drive LEDs or relays. The unbalanced input features a paralleled output and 0/–20dB sensitivity switch. 12dB/octave Bass and Treble shelving equalization with up to 12dB of boost or cut at 100Hz and 10kHz can be applied to the output signal.
- Output modes include  $4\Omega$  and 25V, 50V, 70V and 100V constant voltage. The output stage is fully protected against permanent damage caused by overloading, shorts and extreme temperatures.
- The UP4061 will operate on either 115 or 230VAC, 50/60Hz, supplied by a detachable IEC power cord. Insulated terminals to connect a back-up 24Vdc battery are provided on the rear panel. Switchover to DC is automatic. A programmable stand-by mode allows the amplifier to be turned on remotely with a contact closure.
- The front panel provides a master volume control and controls for the bass and treble shelving filters. The control knobs can be easily removed for security and the recessed shafts covered with inserts supplied with the unit. LEDs indicate power, stand-by mode, signal present at the output, peak and output overload.
- Accessories include rack mounting ears.
- All products from Mackie Industrial are covered by an exclusive, one-time, NO FAULT repair policy in addition to a five-year limited warranty.

## **UP4061**

### **Power Amplifier**



### **Features**

- 60 Watt RMS Convection Cooled
- **4** $\Omega$  **25V 50V 70V 100V** Outputs
- 2 Inputs w/ Priority
- High-Pass/Low Pass Filters
- 2 RU Rack Mounting Kit included
- Automatic 24Vdc Backup Power Input

- Foreground/Background Music Systems
- Sound Reinforcement Systems
- Paging Systems
- Continuous-duty Applications

# **UP4061** Power Amplifier

## **Specifications**

Performance	
Amplifier Power:	60W, nominal, 90W peak (10mS)
Frequency Response:	50Hz-15kHz ±3dB
Distortion:	Less than 1% THD at 1kHz nominal power
Noise:	Better than 80dB (worst case)
Equalization	
Output:	Treble shelving: ±12dB at 10kHz Bass shelving: ±12dB at 100Hz
Inputs:	H-P filter: 12dB/oct. at 300Hz, L-P filter: 12dB/oct. at 7kHz
Audio Inputs	
Line Level, Balanced:	775mV, 100k $\Omega$ , barrier connector
Line Level, Unbalanced:	775mV, 50k $\Omega$ or 80mV, 50k $\Omega$ , RCA connector
Audio Outputs	
Number of Channels:	One
Constant Impedance:	4Ω
Constant Voltage:	One each, 25V, 50V, 70V, 100V, barrier connectors
Line Level: Parall	el to Unbalanced In, RCA connector
Control Inputs & Outpu	uts
Outputs: Overload Indicator: 18Vdc (300r	
Inputs: Priority Switch In	put: Dry contact closure
Stand-by Switch Input:	Dry contact closure, barrier connectors
Controls	
Front Panel:	Power switch, master Volume, Treble shelving, Bass shelving
Rear Panel:	Unbalanced input sensitivity switch, H-P Filter in/out switch, L-P Filter in/out switch, Mains Voltage Selector switch
Power Supply	
	5/230VAC (±5%), 50/60Hz, 180VA, DC (24V battery) 5A/Hr
Environment	

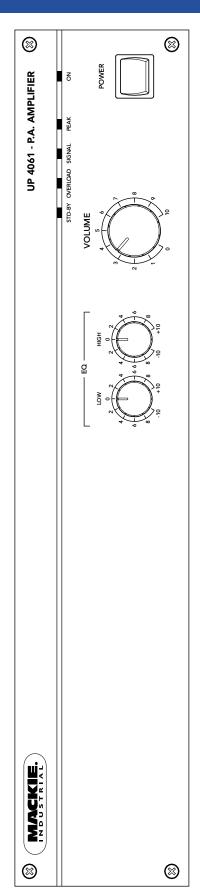
131°F (55°C), Non-precipitating humidity

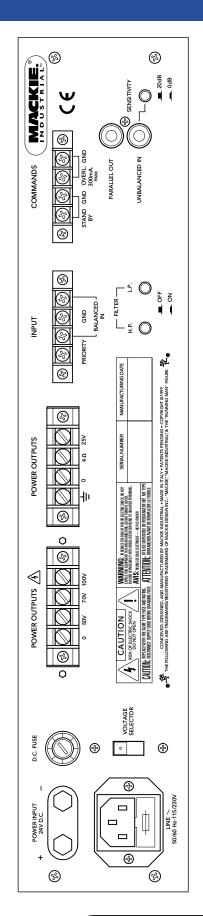
Physical	
Dimensions (HxWxD):	3.46" x 17" x 12.4" (88mm x 433mm x 315mm)
Weight:	30.5 lbs. (11.4kg)
Finish:	Black painted or treated steel, white nomenclature
Warranty	
	3 years, parts & labor
	one time, no-fault repair policy



**Maximum Ambient:** 

# **UP4061** Power Amplifier







# **UP4061** Power Amplifier

#### **Architects' and Engineers' Specifications**

The power amplifier shall have a nominal output power of at least 60W RMS. It shall operate on 115VAC or 230VAC at either 50Hz or 60Hz and have its source power supplied by a detachable IEC power cord. In addition the unit shall be capable of being directly powered by a 24Vdc source such as storage batteries. It shall have a power switch on the front panel. The unit shall have a constant-impedance output to drive a  $4\Omega$  load at its rated output. It shall also have 25V, 50V, 70V and 100V constant-voltage outputs with like performance. The unit shall be capable of being remotely turned on, from a stand-by mode, with a contact closure.

The amplifier shall have an active balanced input and an unbalanced input. The balanced input connection shall be made through barrier connectors. The unbalanced input shall have a sensitivity switch on the rear panel to select between a nominal input signal of OdB or -20dB. This input shall be parallel to an unbalanced output connector. Unbalanced connections shall be made through RCA connectors. The unit shall be capable of being connected to two different input program sources. The balanced input shall be programmable to completely exclude the unbalanced input when its priority link is activated by a contact closure. The inputs shall be equipped with a high-pass filter and a low-pass filter having a response of 12dB/octave and fixed 300Hz and 7kHz, respectively. Each of these filters shall be enabled by a switch on the rear panel. An overload condition shall cause an auxiliary voltage of 18Vdc at 300mA to be present at a pair of terminals on the rear panel.

The unit shall have on its front panel, continuously variable controls for the master volume as well as bass and treble shelving filters. The shelving filters shall have a range of ±12dB with the frequency for the bass fixed at 100Hz and the treble fixed at 10kHz. LED status indicators shall be provided on the front panel to indicate power, stand-by mode, signal present at the output terminals, peak signals near clipping and an overload condition. The amplifier shall be a model UP4061 manufactured by Mackie Industrial.



#### www.mackieindustrial.com

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## Electronic files for this product available at: www.mackieindustrial.com

This Specification Sheet	UP4061.PDF
Ouick-Start Manual	UP40610S.PDF

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