

**POWERED MIXER**

**POWERPOD408 / POWERRACK408**

# USER'S MANUAL



**PHONIC**  
[www.phonic.com](http://www.phonic.com)

## SAFETY PRECAUTIONS!

**WARNING - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.**

Do not allow water or liquids to be spilled into this unit. If the unit has been exposed to rain or liquids, please unplug the power cord immediately from the outlet (with DRY HANDS) and get a qualified service technician to check it. Keep this unit away from heat sources such as radiators, heat registers, stoves, etc.

This unit contains no user-serviceable parts. Refer all service needs to a qualified service engineer through a Phonic dealer.



This triangle on your component alerts you to the presence of uninsulated “dangerous voltage” inside the enclosure that may be sufficient to constitute a risk of shock.

This triangle on your component alerts you to important operating and maintenance instructions in this accompanying literature.

### CAUTION:

**TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVERS (OR BACK). NO USER-SERVICEABLE PARTS ARE INSIDE. REFER ALL SERVICING TO A QUALIFIED SERVICE PERSONNEL.**

Keep this unit clean by using a soft dry brush and occasionally wiping it with a damp cloth. Do not use any other solvents, which may damage the paint or plastic parts. Regular care and inspection will be rewarded by a long product life and maximum reliability.

This unit was carefully packed at the manufacturing site and the packing box was designed to protect the unit from rough handling. We recommend that you carefully examine the packaging and its contents for any signs of physical damage which may have occurred during transportation.

If the unit is damaged: ***Notify your dealer and the shipping company immediately.*** Claims for damage or replacement may not be granted if not reported properly or in a timely manner.

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## INTRODUCTION

Congratulations on your purchase of the Phonic Powerpod408 and Powerrack408 Powered Mixer. The Powerpod408 is built into a rugged wooden cabinet for heavy-duty use. The Powerrack408 is a rack-mount powered mixer. Both of these two powered mixers have the same specifications except as noted in this manual. In order to get the best performance from your Powerpod408 and Powerrack408, please read all of this safety and operation manual before operating the mixers and keep the manual for future reference.

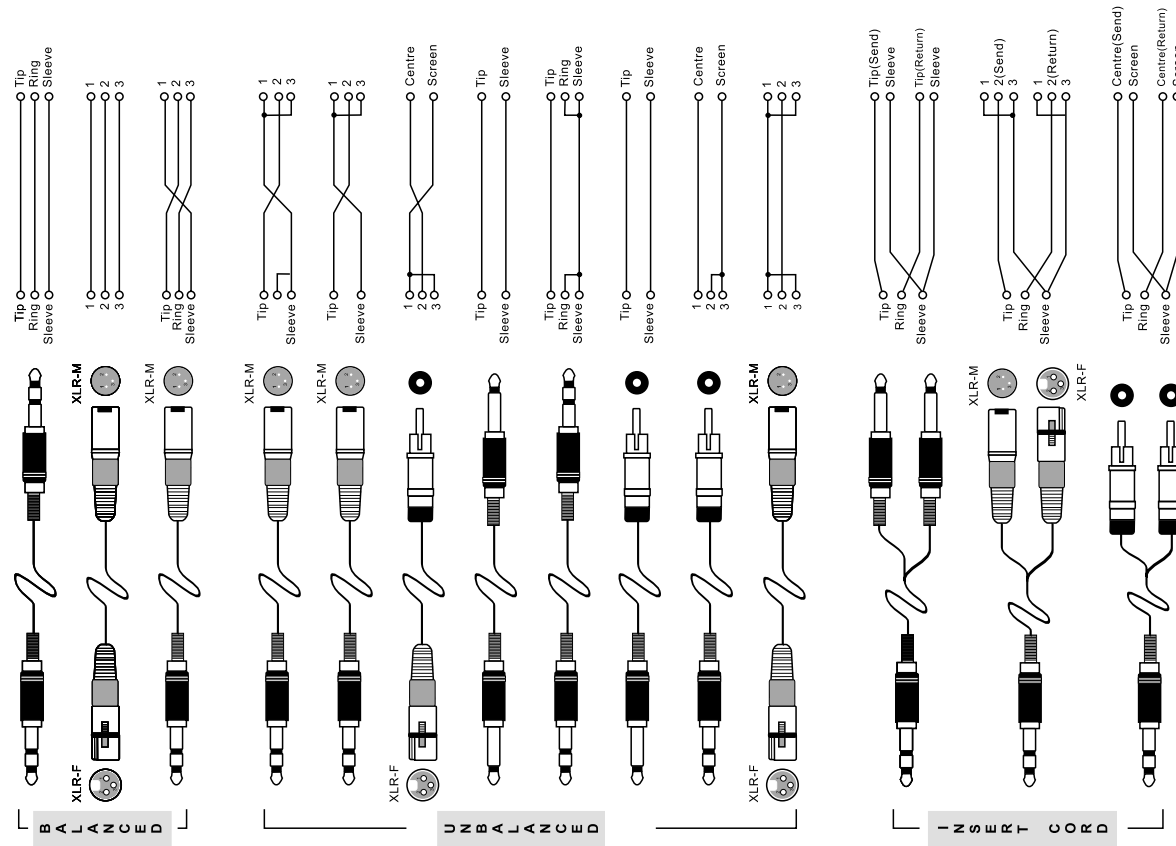
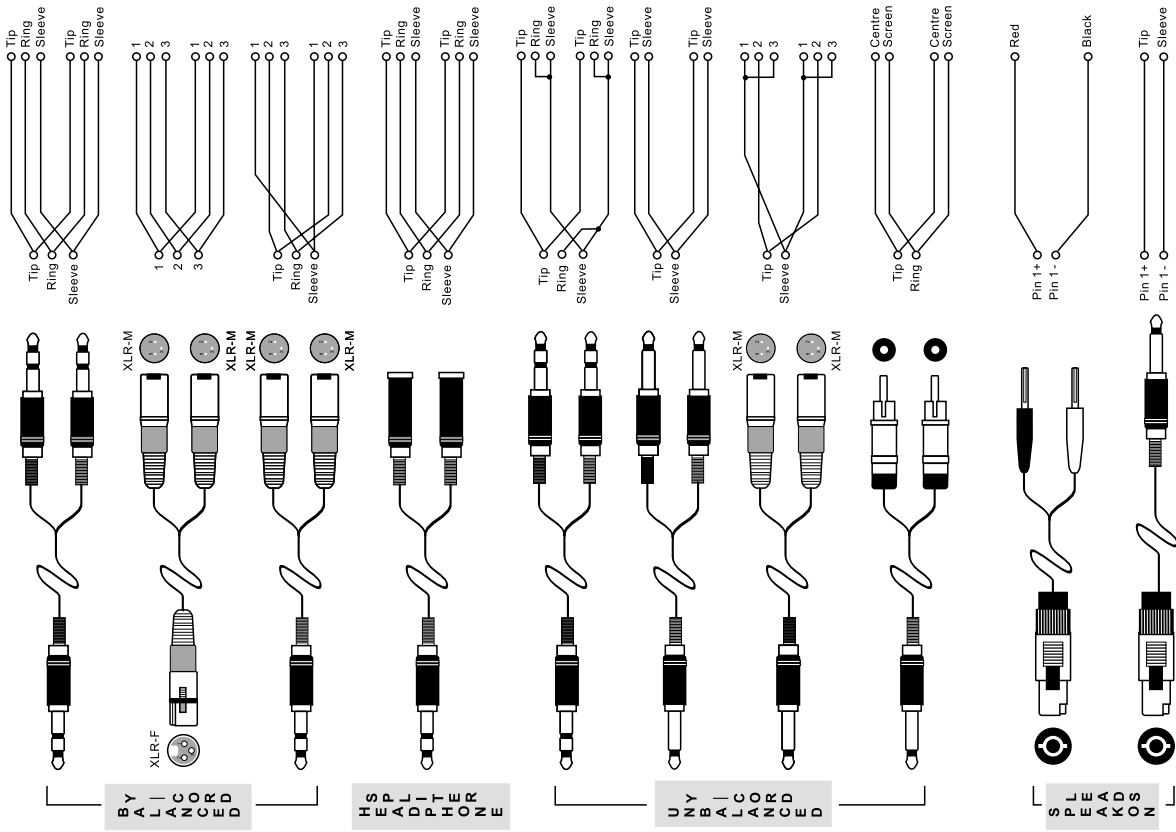
## FEATURES

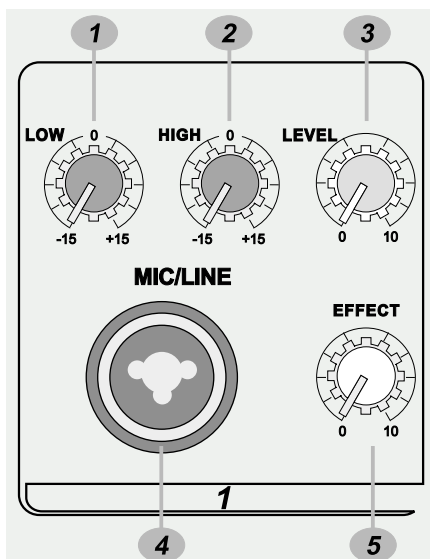
- 4 mono input channels for a wide range of Microphone and Line level signals from separate input sockets
- Built-in 80 watt power amplifier (max. output)
- Built-in Digital Delay
- Super musical 2-band EQ at mono channels
- Record out
- Tape in

## GETTING STARTED

1. Before turning on the power, set the Master output control to the off position.
2. Always turn the power off before connecting or disconnecting cables.
3. Check the AC Voltage before connecting the AC plug.
4. Do not obstruct the back panel at all for proper ventilation.

TYPICAL CONNECTING LEADS





## CHANNEL STRIP DESCRIPTION

### 1 LOW EQ

The control has shelving response giving 15dB of boost or cut at 80Hz. Add warmth to vocals or extra punch to guitars, drums and synths by turning to the right. Turn to the left to reduce stage rumble, hum or to improve a mushy sound.

### 2 HIGH EQ

Turn to the right to boost high frequencies, adding crispness to percussion from drum machines, cymbals and synths. Turn to the left to cut these frequencies, reducing sibilance or hiss. The control has a shelving response giving 15dB of boost or cut at 12kHz.

### 3 LEVEL CONTROL

The Level Control determines the proportion of the channel signal in the mix, and provides a clear visual indication of channel level.

### 4 MIC/LINE INPUT

The MIC/LINE is via a combo connector, which allows the connections of XLR or 1/4" type phone jack. Please use a low impedance microphone and a properly wired cable for best results. When the 1/4" phone jack is plugged into the combo connector, the connection can be either a microphone or line level signal.

### 5 EFFECT

This knob decides the signal level which will be sent to the built-in digital delay effect control.

## MASTER SECTION DESCRIPTION

### 6 DIGITAL DELAY

The signal from the input channels, processed by the built-in digital delay will feed to the master output. There are three knobs here to control the effect of digital delay.

#### LEVEL

This knob adjusts the mix level of the effect sound.

#### TIME

This knob adjusts the internal time of the delays; turn to the right to increase the interval time between two delays.

#### REPEAT

To increase the rate of the delays, turn this knob to the right. You will hear the signal repeat at a faster rate.

### 7 TAPE IN CONTROL

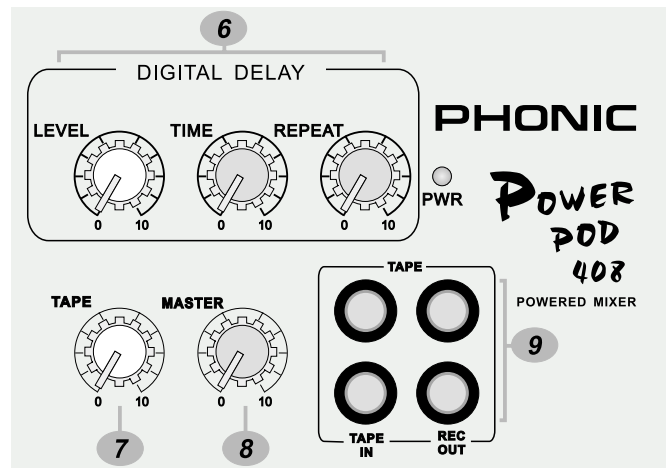
This knob adjusts the level of signal from the Tape In to the Main bus.

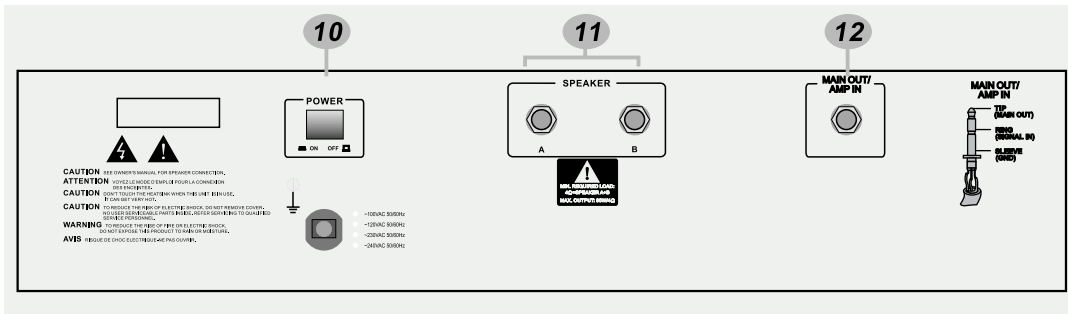
### 8 MASTER CONTROL

This adjusts the final level of the Main bus. It controls the Main bus signal which is output to the speakers.

### 9 TAPE IN AND REC OUT

The TAPE IN sockets allow cassette recorders or CD players to be added to the Main output. The RECORD OUTPUT, with RCA phono sockets, provides signal output to a cassette deck and home audio equipment. The nominal output level and impedance are -10dBV/600ohms.





## REAR PANEL DESCRIPTION

### 10 POWER SWITCH

This switches the powered mixer on and off. While turn it on, the power on blue LED indicator will light up on the master section of front panel.

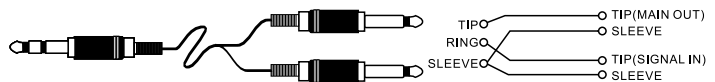
### 11 SPEAKER OUTPUT JACKS

Speakers can be connected to these sockets, two speakers can be connected to the powered mixer. When using 2 speakers at the same time, use 8~16 ohms speakers. When using one speaker only, use a 4~8 ohms speaker. The total minimum required load is 4 ohms. If the total load is less than 4 ohms, it may damage this powered mixer.

### 12 MAIN OUT / AMP IN

This unbalanced insert point is a break between the main out and built-in amplifier to allow the main output to be sent to an external signal processor or power amplifier. The insert is a 1/4" phone jack socket which is normally bypassed. When a jack is inserted, the signal path is broken.

The main output signal appears on the TIP of the plug and the external signal is returned on the RING. A 'Y' lead may be required to connect to equipment with separate send and return jacks as shown below:

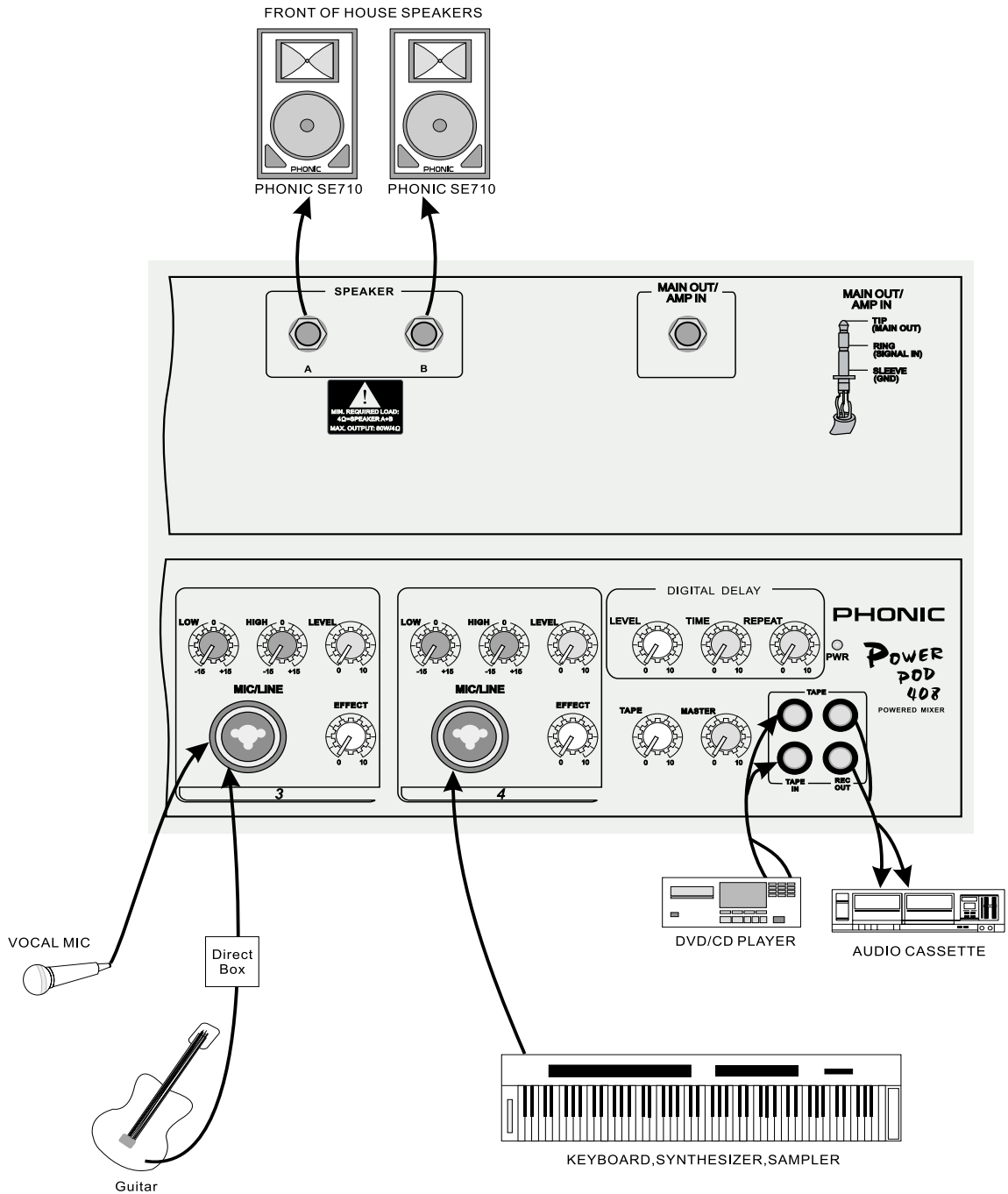




APPLICATIONS

GENERAL APPLICATION

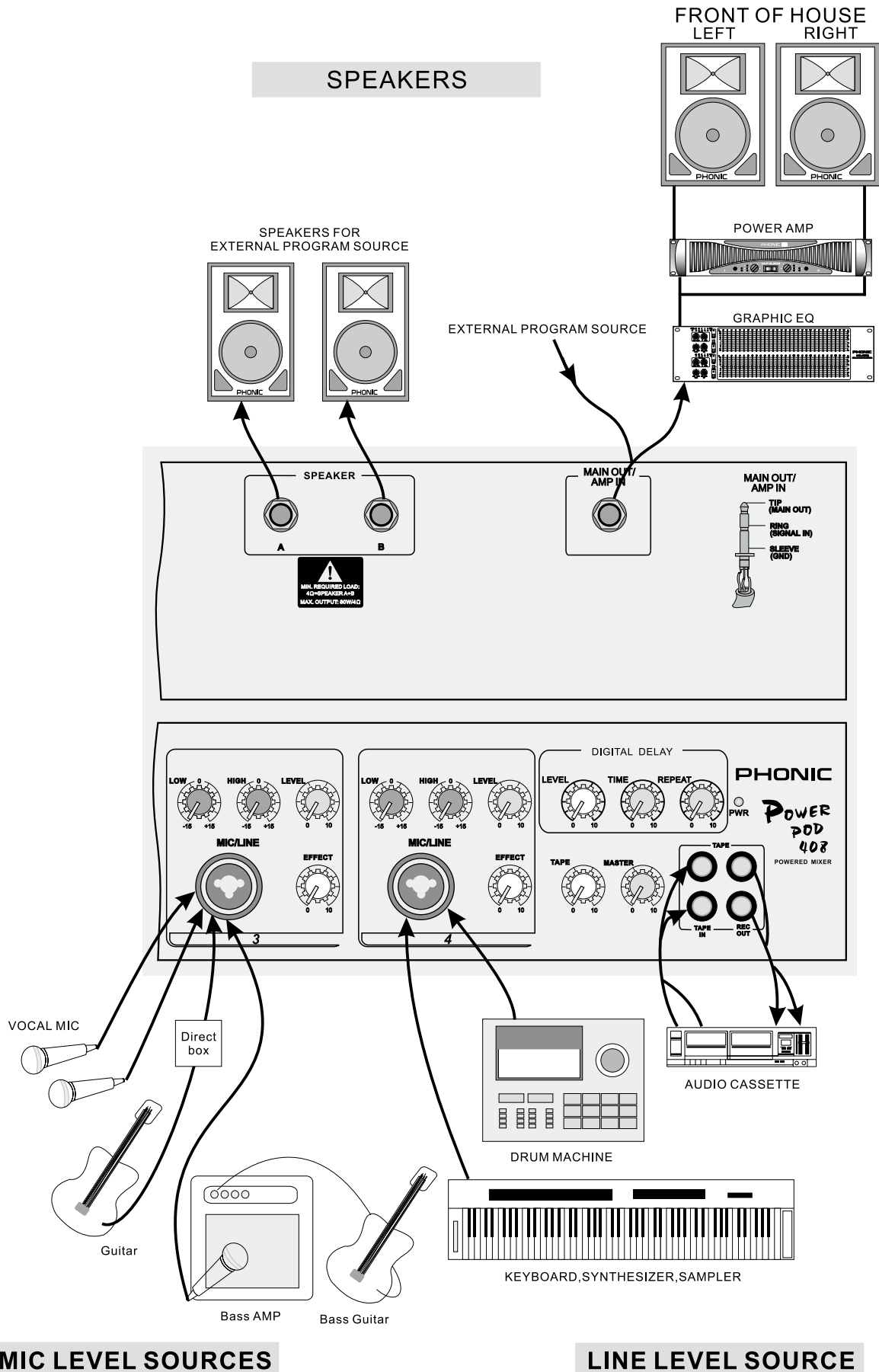
SPEAKERS



MIC LEVEL SOURCES

LINE LEVEL SOURCE

LIVE BAND WITH ADDITIONAL AMPLIFIER

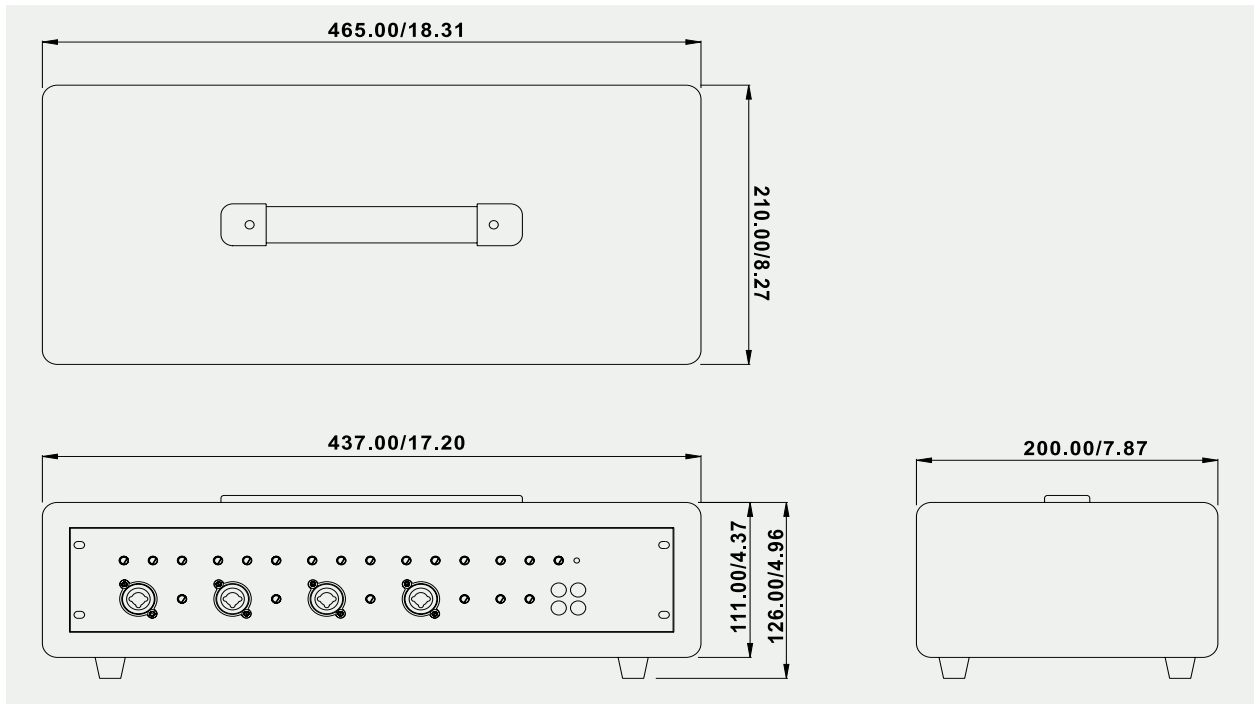


MIC LEVEL SOURCES

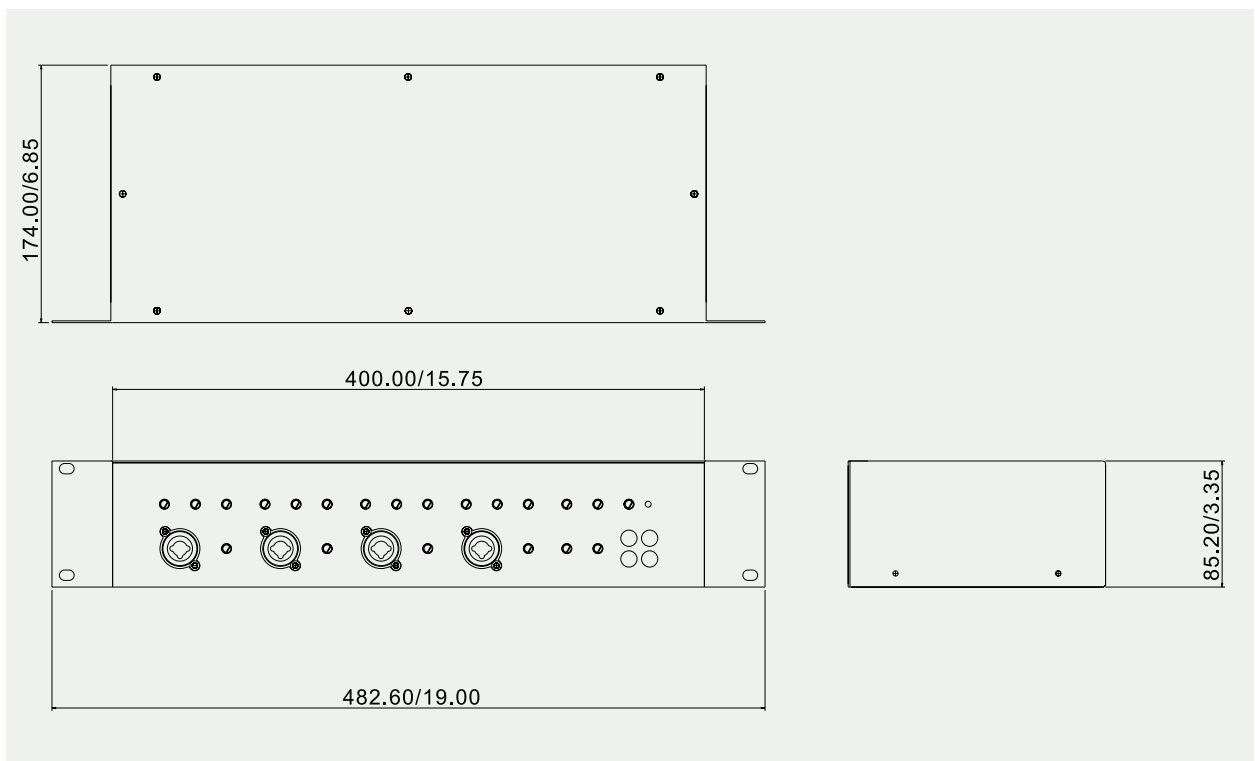
LINE LEVEL SOURCE

**DIMENSIONS**

**POWERPOD408**



**POWERRACK408**



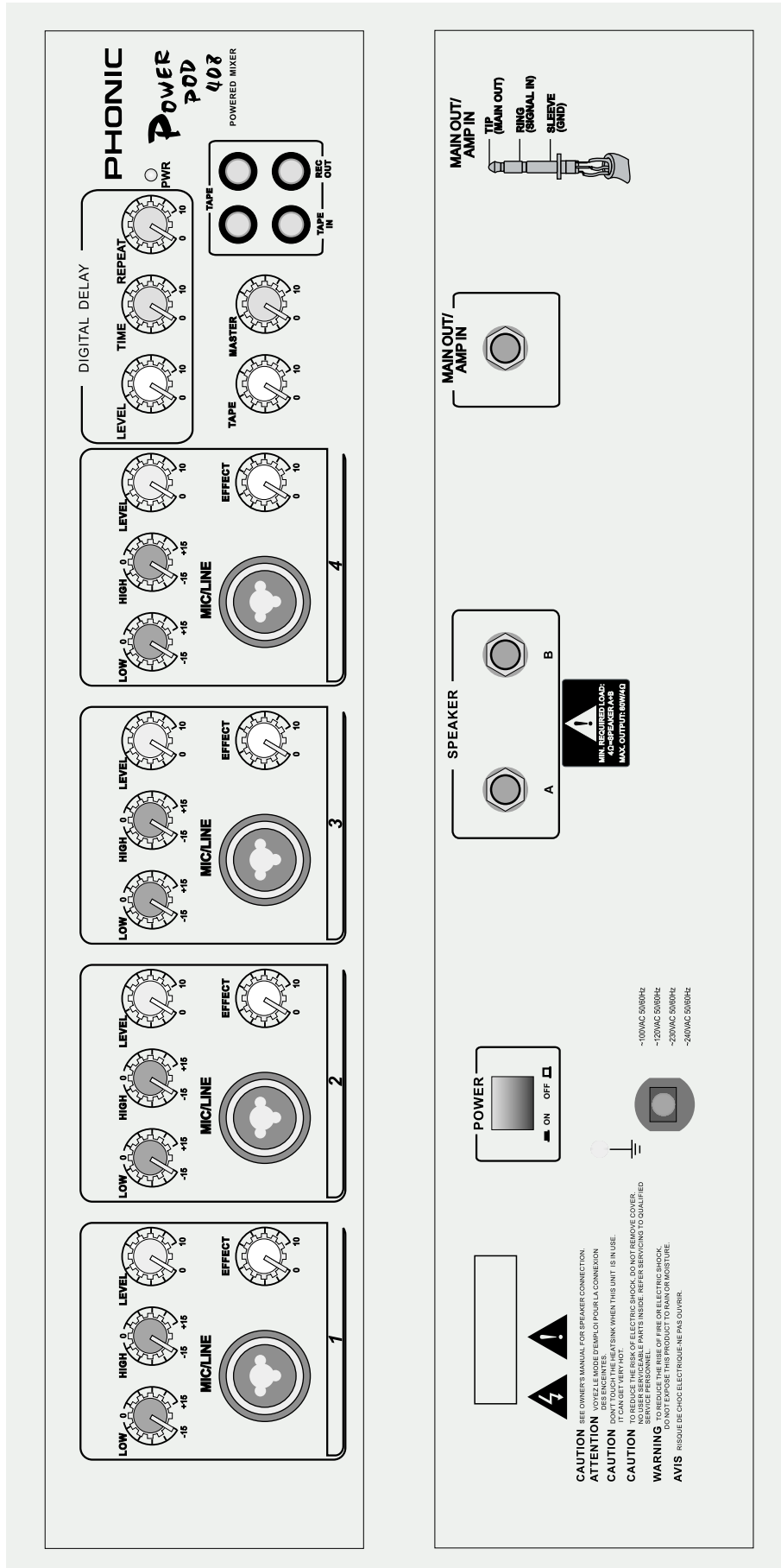
Measurements are shown in mm/inch.

## SPECIFICATIONS

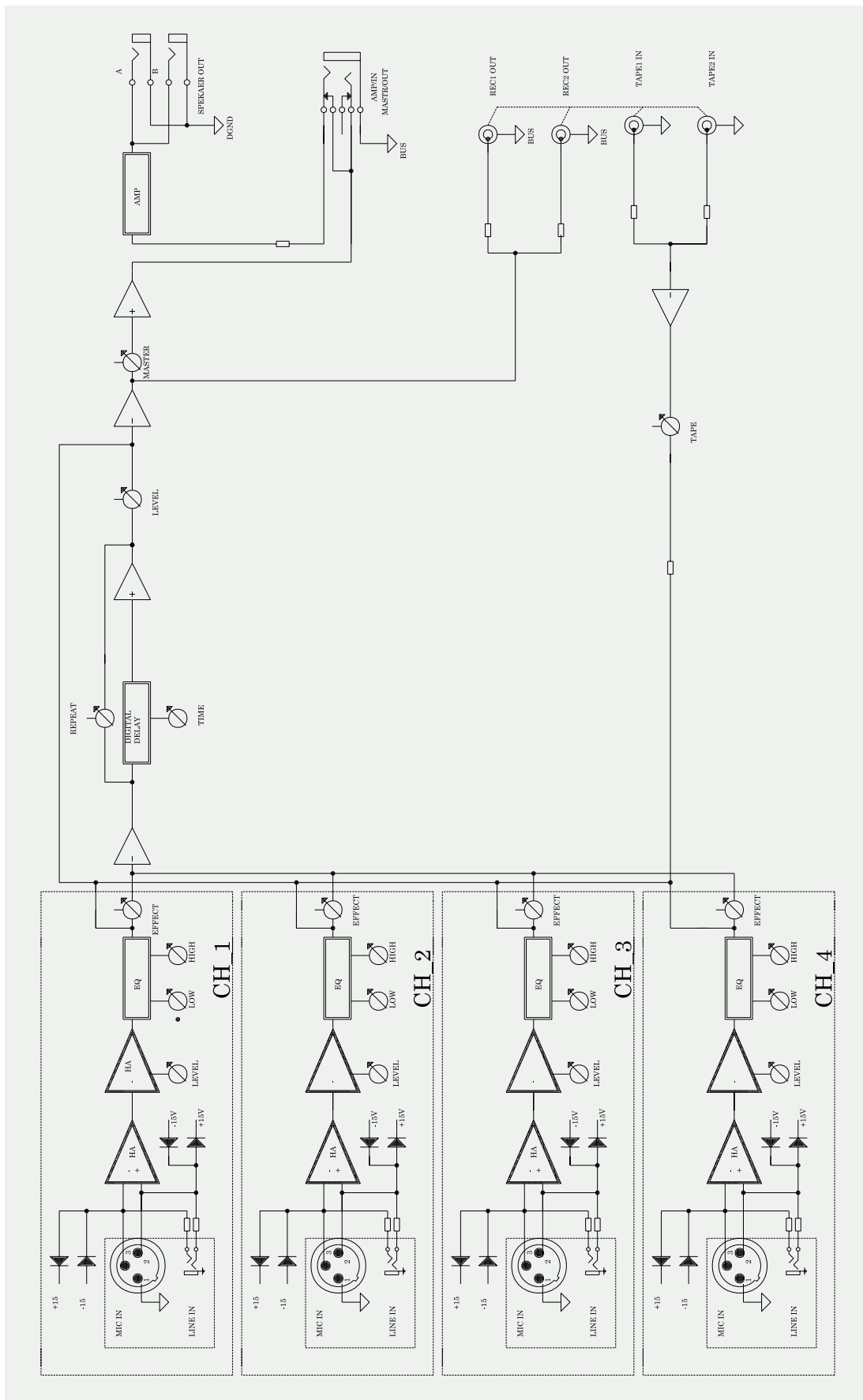
	Powerpod 408	Powerrack408
<b>POWER AMP, max. output power in watts</b>		
Number of Power channels	1	
8 $\Omega$	40	
4 $\Omega$	80	
<b>Inputs</b>		
Balanced mono Mic/Line channels	4	
2T input	1	
<b>Outputs</b>		
Main out	TRS, unbal.	
<b>Channel Strips</b>	4	
Volume Controls	Rotary	
<b>Master Section</b>		
Rotary Fader	Master	
<b>Built-in Digital Effect</b>	Digital Delay (2ms-150ms)	
<b>Noise</b> (20Hz to 20KHz bandwidth, line inputs to master output)		
Master output, all faders down	-86dBu	
Power amp output, all faders down	-52dBu	
<b>THD</b>		
Power output, 20Hz to 20KHz	@30 watts, 4 $\Omega$ <1%	
<b>Crosstalk</b> (1KHz @ 0dBu, 20Hz to 20KHz bandwidth, channel in to master output)		
Channel fader down	<-63dB	
<b>Frequency Response</b> (Mic input to output)		
20Hz ~ 20KHz, line level o/p @ +4dBu into 600 $\Omega$	+1/-3dB	
20Hz ~ 20KHz, power amp o/p 1 watt into 8 $\Omega$	+1/-3dB	
<b>Sensitivity @ mixer output +4dBu</b>		
Mic/Line	-50dBu/-35dBu	
Tape in	-6dBu	
<b>Channel Equalization</b>	2-band, $\pm$ 15dB	
Low EQ	80Hz	
Hi EQ	12KHz	
<b>Microphone Preamp E.I.N.</b> (150 ohms terminated, max. gain)	<-122dBm	
<b>Power Consumption</b>	60 watts	
<b>Power Requirements</b>	100-120, 220-240 VAC, 50-60 Hz	
<b>Dimensions(WxHxD)</b>	465.0 x 155.0 x 210.0mm (18.31"x6.10"x8.27")	482.6x 85.2x174.0 mm (19"x3.35"x6.85")
<b>Weight</b>	7.4 kg (16.3 lbs)	5.66 kg (12.47 lbs)

Due to continuous product improvement, the specifications are subject to change without notice.

PANEL LAYOUT



# SYSTEM BLOCK DIAGRAM



## APPENDIX

### REFERENCE BOOKS

Phonic recommends the following books for those interested in advanced audio engineering and sound system operation:

- Sound System Engineering by Don and Carolyn Davis, Focal Press, ISBN: 0-240-80305-1
- Sound Reinforcement Handbook by Gary D. Davis, Hal Leonard Publishing Corporation, ISBN: 0-88188-900-8
- Audio System Design and Installation by Philip Giddings, Focal Press, ISBN: 0-240-80286-1
- Practical Recording Techniques by Bruce and Jenny Bartlett, Focal Press, ISBN: 0-240-80306-X
- Modern Recording Techniques by Huber & Runstein, Focal Press, ISBN: 0-240-80308-6
- Sound Advice – The Musician’s Guide to the Recording Studio by Wayne Wadham, Schirmer Books, ISBN: 0-02-872694-4
- Professional Microphone Techniques by David Mills Huber, Philip Williams. Hal Leonard Publishing Corporation, ISBN: 0-87288-685-9
- Anatomy of a Home Studio: How Everything Really Works, from Microphones to Midi by Scott Wilkinson, Steve Oppenheimer, Mark Isham. Mix Books, ISBN: 091837121X
- Live Sound Reinforcement: A Comprehensive Guide to P.A. and Music Reinforcement Systems and Technology by Scott Hunter Stark. Mix Books, ISBN: 0918371074
- Audiopro Home Recording Course Vol 1: A Comprehensive Multimedia Audio Recording Text by Bill Gibson. Mix Books, ISBN: 0918371104
- Audiopro Home Recording Course Vol. 2: A Comprehensive Multimedia Audio Recording Text by Bill Gibson. Mix Books, ISBN: 0918371201

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