

# Lab Audio & Services

Professional Audio Products

Product Brochure

**0 - 1. About us.**

**2 - 3. AUX Series**

**4 - 5. TX Series**

**6 - 7. GX Series**

**8 - 9. EX Series**

**10 - 11. AU 500**

**12 - 13. AXC-23XL**

**14 - 15. BQ 200**

**16 - 17. IP 32 & IP 63**



Founded in 1996, Lab Audio & Services has garnered years of Research and Development in professional audio. Built around a highly experienced, passionate and dynamic team of engineers, we succeed in delivering superior sound quality for all applications. Building sturdy yet great sounding power amplifiers, we now offer a whole range of products best suited to match or exceed the demands in Commercial, Professional, Cinema and HiFi applications.

Designed in a Laboratory, Lab Audio products are manufactured in India using globally acclaimed components. Our products function at peak performance for years, without the need for repairs or replacement. In the odd event of any after sales backup required, we pride ourselves as the Industry's best, with turnaround times as quick as 24 hours. Immersive, true-to-life sound.

-Lab Audio..



# Lab Audio



## AUX Series

AUX SERIES offers 5 power variants which means one can select a model that will ideally match their Power Requirements. The amplifiers are designed perfectly for wide range of sound reinforcement in Touring, Live Performance and Sound Installation applications, Where sonic quality is the Highest Priority. Detailed sound quality is maintained throughout hours of use even though at unwanted Tough Ambient conditions to fulfil every end User Requirement.

### Features :-

- All-steel 2U/3U Durable Chassis Construction.
- Unobtrusive recessed Carrying Handles.
- Efficient Toroidal transformer core for high power induction response.
- High density FR-4 grade PCB's to alleviate any stray capacitance.
- The high-quality grade components ensure optimal result.
- Front panel features individual Gain control for channel, Signal, Clip and Fault/OK LED indicators assists you to monitor amplifier performance.
- Cooling rear to front forced air flow with twin tunnel variable high speed fans.
- Intelligent clip limiter to provide High Dynamics at Negligible Distortion levels.
- Dual, Bridge or Parallel operation.
- DC current, Thermal over load and continuous Short Circuit Protection on each channel.

# Technical Specifications

Models	AUX 2.0	AUX 4.0	AUX 5.0 *	AUX 5.4	AUX 7.0	AUX 8.6
Continuous Average Power RMS , 1 kHz 1.0% @ 2 $\Omega$ @ 4 $\Omega$ @ 8 $\Omega$ Bridge @ 4 $\Omega$ Bridge @ 8 $\Omega$	2 X 900W 2 X 650W 2 X 390W 1800W 1300W	2 X 1800W 2 X 1300W 2 X 760W 3600W 2600W	2 X 2100W 2 X 1550W 2 X 900W 4200W 3100W	2 X 2500W 2 X 1850W 2 X 1100W 5000W 3700W	2 X 3000W 2 X 2200W 2 X 1300W 6000W 4400W	2 X 3500W 2 X 2600W 2 X 1570W 7000W 5200W
Frequency Response Power Bandwidth +/-0.50dB	20Hz-20kHz					
Total Harmonic Distortion 20Hz - 20kHz	<0.05%					
Cross Talk 20Hz - 20kHz	$\geq 75$ dB					
Input Sensitivity @ 8 $\Omega$	1.1V	1.20V	1.43V	1.52V	1.67V	2.0V
Damping Factor 20Hz - 20kHz	>600					
Slew Rate	>45V/ $\mu$ s					
Signal-to-Noise-Ratio A Weighted	>98dB	>100dB	>102dB	>102dB	>104dB	>104dB
1/8 rated power pink noise @ 4 $\Omega$	4.0A	5.0A	7.5A	8.5A	10A	13A
Rack Mount Space	2U	2U	3U	3U	3U	3U
Dimensions / W x H x D (mm)	480 x 89 x 406	480 x 89 x 460	480 x 133 x 510	480 x 133 x 510	480 x 133 x 510	480 x 133 x 510
/ W x H x D (inches)	19 x 3.5 x 16	19 x 3.5 x 19	19 x 5.5 x 20	19 x 5.5 x 20	19 x 5.5 x 20	19 x 5.5 x 20
Weight	20Kg	21Kg	33Kg	35Kg	37Kg	39Kg
Net / Shipping	22Kg	23Kg	35Kg	37Kg	39Kg	41Kg
Protections: Soft-start, Turn-on Turn-off transients, Muting at turn-on, Over-heating, DC, Short-circuit, or mismatched loads.						

# Lab Audio



## TX Series

TX Series power amplifier Design Combines with an Efficiency of a Class D design and a Tonal Quality of Class A, Built with European Grade Components. Although the output stage is Class AB Design, The power supply rail continues to Track the Audio Signal in all frequency providing the required Additional Voltages. The entire audio signal remains in Analogy Domain. Since the audio path is outside switching circuit stage, There is no Interference from the switching frequency and this allows well Defined Sonic performance response, Warm and Tight Low end, very Reliable and Maintains a flat response at all given time.

### Features :-

- All-steel 2U/3U Durable Chassis Construction.
- Well grip side Carrying Handles.
- Efficient Toroidal Transformer Core for High Power Induction response.
- High Density FR-4 Grade PCB's to alleviate any Stray Capacitance.
- The High-Quality Grade components ensure optimal result.
- Front panel features Individual Gain Control for Channels, Signal, Clip and Fault/OK LED Indicators assist you to monitor amplifier performance.
- Rear to Front air flow with Twin tunnel Low-Noise High speed fans.
- Clip Limiter to provide High Dynamics at Negligible Distortion levels.
- Dual, Bridge or Parallel operation.
- DC current, Thermal over load and continuous Short Circuit Protection on each channel.

## Technical Specifications

Number of Channel	2	2	2
<b>Model</b>	<b>TX-5</b>	<b>TX-8</b>	<b>TX-10</b>
<b>MAX Output Power RMS 1KHz</b>			
2 Ohms	2500W	3900W	5000W
4 Ohms	1800W	2800W	3600W
8 Ohms	1050W	1650W	2150W
Bridge @ 4 Ohms	5000W	7800W	10000W
Bridge @ 8 Ohms	3600W	5600W	7200W
<b>PERFORMANCE</b>			
THD 20Hz-20kHz at 1W	<0.1%		
THD at 1kHz	<0.5%		
Signal To Noise Ratio	>105dB		
Damping Factor 100Hz	≥600		
Channel Separation (Crosstalk) at 1kHz	>70dB		
Input Impedance	20K Ohms		
Amplifier gain selectable (Rear-panel)	1.4V, 26dB		
Rack Mount Space	2U	3U	3U
Dimension / H x D x W (mm)	480 x 89 x 460	480 x 133 x 510	480 x 133 x 510
/ H x D x W (mm)	19 x 3.5 x 18	19 x 5.5 x 20	19 x 5.5 x 20
Weight	21Kg	35Kg	37Kg
Net / Shipping	23Kg	37Kg	39Kg



# Lab Audio



## GX Series

GXQ 4-Channel Amplifier is a Combination of Class AB & Class H power amplification. Designed for Good Sonic Performance and Incorporates protection features offering the same Reliability and Renowned Audio Quality of all Lab Audio Amplifiers. Suitable for small to medium installations which offer Two Power Variant.

### Features :-

- 2U Rack Space.
- High SNR.
- Low THD, IMD.
- Heavy-Duty power supply for High Dynamic Power.
- Short-Circuit, Thermal, Output DC, RF protection.
- Variable-Speed Twin Fan back-to-front cooling.
- Neutrik Speakon® and binding post output connectors.
- LED indicators for Monitoring, Status, and Operating mode.



# Technical Specifications

Description	4 CHANNEL POWER AMPLIFIER	
Model	GXQ 1.6	GXQ 3.2
Bridged mode 8 Ohms load	2 X 800Watts	2 X 1600Watts
Output power @ 4 Ohms	4 X 400Watts	4 X 800Watts
Output power @ 8 Ohms	4 X 275Watts	4 X 550Watts
Frequency Response	20Hz ~ 20kHz, +/-0.5dB	
THD at rated power @ 1kHz	<0.2%	
Amplifier Class	AB	H
Damping Factor	>300	
Input Connections	XLR with Links	
Output Connectors	Speakon	
Amplifier load protection	Output DC, thermal, RF and short circuit	
Controls - Front	Signal/Clip/Protection indicator. Volume, Level, Control	
Controls - Rear	Switch for stereo, parallel, bridge. Switch for 3 sensitivity settings	
Signal to Noise Ratio	>90dB	
Rack Mount Space	2U	
Dimensions / W x H x D (mm)	480 x 89 x 406	480 x 89 x 460
/ W x H x D (inches)	19 x 3.5 x 16	19 x 3.5 x 18
Weight	20Kg	21Kg
Net / Shipping	22Kg	23Kg

# Lab Audio



## EX Series

EX400 & 600 is A 2 Channel Mixer Power Amplifier capable of Delivering High-tonal Quality. Perfectly Designed for Portable DJ Sound, Farm House, Corporate, Classrooms, Malls, House of Worship Facilities, Sports clubs, Hotels, Party halls, Bar & Restaurants venue.

### Features :-

- Built-in Bluetooth, USB Player, SD/MMC card and FM receiver.
- Built-in USB Player.
- Two microphone input.
- RCA stereo for AUX input.
- RCA line-out for External Amplifier.
- Tone control for Base/Treble.
- Flexible set-up operation.

## Technical Specifications

Model	EX 400	EX 600
Power 8Ω THD 0.1% 20 Hz-20 KHz	2 X 135W	2 X 200W
Power 4Ω THD 0.3% 20 Hz-20 KHz	2 X 200W	2 X 300W
Frequency Response ±3dB	20Hz-20KHz	20Hz-20KHz
Nosie Level (S/N)	> 80dB, at All Volume control full	
Input Sources	Mono : 2x Mic 0.6mV/ 4.7KΩ phones jack 6.3mm. Stereo: 1x AUX 0.600mV/ 10KΩ, RCA jack (L&R)	
Line Out	Stereo: 1x REC out 1V/220 Ω(L&R) RCA Jack	
Digital Player	Mp3 Player with USB, SD /MMC, Bluetooth & FM.	
Tone control	Bass: ±10dB at 100Hz, Treble: ±10dB at 10KHz	
Protection	Thermal over load and short circuits	
Cooling	Forced air from Front to Rear (Auto)	
Output regulation	< 3dB no load to full load	
Dimension (W x H x D)	432mm x 89mm x 432 mm (17" x 3.5" x 17")	
Net Weight	14Kg	16 kg

# Lab Audio



## AU 500

AU Series 2.1 is per-power HiFi Amplifier with 3 Separate Channels, used as One Mono channel Sub Out and the other Two Channels as L/R full range providing Powerful Bass and Well-defined Sonic Performance. Keeping in mind the customer requirement our Engineers have Designed this product in such that one can use it as a Stereo and can also add a Subwoofer at sub out Terminal for additional Deep Low bass. All three Output Channels Effortlessly handle Demanding Audio condition for Hours. Built in Bluetooth and a USB Player for easy convenient usage. The amplifier delivers Smooth Sound with Plenty of presence and Detail. Great value for Money.

### Features :-

- 2.1 Stereo and Mono Sub Channel
- Bluetooth & USB Media player
- Mic, 2-AUX Input and Line out
- Bass, Mid, Treble and Sub level control
- Intelligent Cooling forced fan air flow.
- Short circuits and Over load safety speaker protection

## Technical Specifications

MODEL	AU-500
Continue RMS power @	
4 ohms Left & Right Channel	2x150 W
@ 8 Ohms	2x90 W
Continue RMS power @ 4 Ohms Subwoofer	200 W
Frequency response	20Hz -20KHz -3dB
Damping Factor @ 1KHz	>300
Signal to Noise Ratio @ 1KHz	>85dB
8 Ohms 20Hz to 20KHz	0.040% THD
Power Band Width	10Hz to 40KHz
Protection- Output Dc and Short circuit	
Input Sensitivity & Impedance	200mv 10KOhms
Output Level & Impedance	200Mv 1K-Ohms
REC OUT	3.2V 1K-Ohms
SUBWOOFER OUT	100Hz
Tone Control Bass	+/-10dB 50Hz
Tone Control Mid	+/-10dB 1000Hz
Tone control Treble	+/-10dB 3.5K
Max Power Consumption @ 8 Ohms	550watt

# Lab Audio



## AXC-23XL

The AXC-23XL, 2-Way/ 3-Way Stereo Active Crossover is a Perfect Addition for Reinforcement to any Sound System.

### Features :-

- 2 - Way/ 3 – Way Stereo Active Crossover.
- Linkwitz-Riley 24dB filter Designed for PA and Fixed-Installation applications.
- High-Pass 18dB Butterworth filter.
- Frequency selectors switch for selecting between Mid and Low Frequency.
- Individual control for High, Mid and Low Gain.
- Fully active balanced XLR Input and Output.

## Technical Specifications

Model	AXC-23 XL
Input	
Connectors	XLR
Types	Electronically balanced/Unbalanced, RF filtered
Impedance	Balanced > 50K $\Omega$ , unbalanced > 25K $\Omega$
Maximum	+22 dB typical, balanced or unbalanced
CMRR	>40 dB, typically > 55dB at 1KHz
Output	
Connectors	XLR
Types	Electronically balanced/Unbalanced, RF filtered
Impedance	Balanced 100 $\Omega$ , unbalanced 50 $\Omega$
Maximum Input level	>+ 20 dB balanced/ unbalanced into 2K $\Omega$ or greater
Performance	
Bandwidth	20Hz to 20KHz, +0/0.5 dB
Signal to Noise	Ref: +4dB, 20Hz-20KHz bandwidth
THD + Noise	< 0.004% at +4dB, 1KHz
Crossover Frequency	
Low (F2/F1)	110/130Hz
Mid/High	1.75KHz
Power Supply	
Main Voltage	230VAC, 50/60Hz
Power Consumption	<16W

# Lab Audio



## SQ-45C

SQ-45C is a 4 Channel Power Amplifier with 1U Rack Mount, can be used as Full Range and a complete 2 Way Solution for Distributed Loudspeaker. The Amplifier is typically used for sound Reinforcement Systems in Boardrooms, Gym, Restaurants, Boutiques and Conferencing systems. Four Separate Channel each with an output power capability of 40W (4 Ohms) or 28W (8 Ohms). The SQ-45C is fan cooled and Thermal Overload protection. The amplifier outputs are also muted at turn-on and turn-off to eliminate any transients. The front panel includes a power switch and individual level controls for each channel and Sub-woofer out features with Two Input select mode, built in USB and FM Radio. The Rear Panel includes a standard 3-Pin AC Power socket cords. Bus input link and Pre-out for Active Sub-woofer.

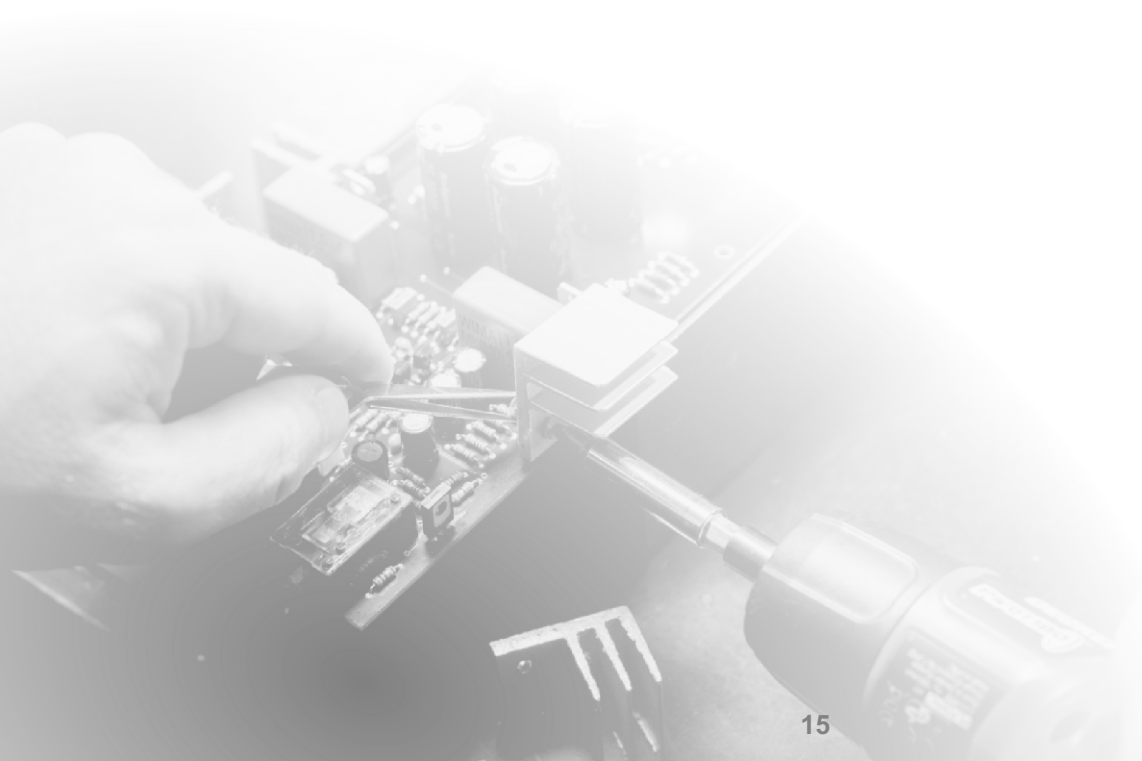
### Features :-

- 4 Separate Amplifier Channels
- 40 Watts per channel into 4 Ohms and 28 Watts into 8 Ohms
- Sub-woofer out
- Optional functional Two Way or Full Range
- Fan cooled
- Slow-Blow fuse for short circuit and Thermal Overload Protection
- No turn-on “Thump”.



# Technical Specifications

Bus Input Type:	Electronically un-balanced and RF filtered
Impedance:	10k Ohms, Unbalanced
Rated Output:	40 Watts RMS per channel at 4 Ohms
	28 Watts RMS per channel at 8 Ohms
Pre sub woofer out	Max 2.5 VRMS
Input Level for Rated Output:	1.2 VRMS at maximum level
Signal-to-Noise Ratio:	88dB relative to 40W at 4 Ohms
System THD:	Less than 0.1%, 20Hz to 20kHz (40W into 4 Ohms)
System IMD:	Less than 0.1%, 60Hz/7kHz (40W into 4 Ohms)
Slew Rate:	16V/uS
Power Consumption:	280 Watts max at 230VAC
Weight:	9Kg.
Dimensions:	19" wide x 1 3/4" high x 8 1/4" deep



# INTELLIGENT POWER PACK

The lab Intelligent Power Distributor is indispensable accessory for Professional Audio and lighting system extremely compact and most Economic Rack Mount which is ideal for Touring. A voltage and frequency monitoring circuit constantly keeps a watch simultaneously at the input stage on individual phases using an intelligent controller. It protects from over voltage, under voltage, Inadequate frequency and phase failures.



MODEL IP 32



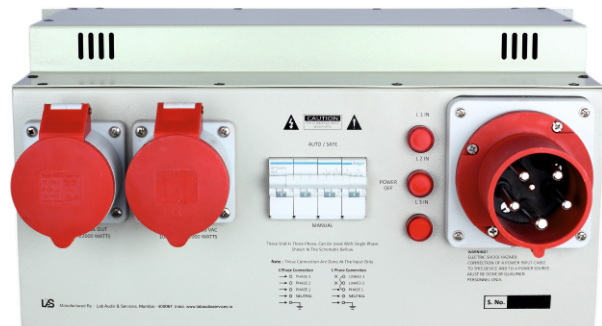
## Features :-

- Maximum 23 KW
- Voltage range – 180 to 255V
- Frequency range -42 to 57 Hz
- Automatic restarts in 5 sec. after power restoration.
- DSP based contractor for Auto Mode.
- Change over switch for Auto and manual mode.
- Load Per phase up to 32 A

# Lab Audio



MODEL IP 63



## Features :-

- Maximum 43 KW
- Voltage range – 180 to 255V
- Frequency range -42 to 57 Hz
- Automatic restarts in 5 sec. after power restoration.
- DSP based contractor for Auto Mode.
- Change over switch for Auto and manual mode.
- Load Per phase up to 63 A



Professional Audio Products

## Lab Audio & Services

Gala No.D-4, Akurli Industrial Premises CSL, Akurli Road, Kandivali (E), Mumbai- 400 101, INDIA.

☎ :- 022-40058273 / 28850012. 📞/📠 :- +91 72080 18190.

