

Lab Audio

Professional Audio Products





Lab Audio

Discover

Amplifiers

- HA Series
- AUX Series
- EX Series
- CQ Series
- LAQ Series

Power distribution

- IP 32 , IP 63
- C-6 , C-9

Crossover & Network

- AXC-23XL

About

At Lab Audio & we take pride in being the undisputed leader in professional audio products, with a rich history spanning over two decades, our team of highly skilled engineers is committed to delivering unparalleled sound quality for all types of applications. Our latest range of products is designed to surpass the highest demands of commercial, professional indoor/outdoor, cinema, and hi-fi applications.

Our products are carefully constructed to the highest standards, using only the finest materials, which ensures optimal performance and longevity. Our cutting-edge products are designed in a state-of-the-art laboratory and manufactured using globally acclaimed components. We apply the latest technological advancements in the industry to ensure that our products perform at the highest optimal level, delivering immersive true-to-life sound that is second to none.

We are committed to providing exceptional customer service and our industry-leading turnaround time of just 24 hours is unmatched in the industry, means you can count on us to be there when you need us most. Choose Lab Audio & Services for the ultimate experience in professional audio products, and experience the confidence that comes with owning the very best.

-Lab Audio



HA Series



The HA- series include proprietary class H plus (Hybrid Design) technology, has the efficiency of Class-D amplifiers while delivering sound quality similar to Class-A/B amplifiers. It includes an intelligent limiter that safeguards short circuit, DC offset and thermal issues. If an error does occur, the system will automatically reconnect to the speakers load once the problem is resolved.

This series is an ideal solution for professional in the touring industry, Live Performance and Sound Installation, who require exceptional sound reinforcement . With its features and sophisticated circuitry, the HA series ensure reliable and uninterrupted operation, that provides unparalleled sound quality, efficiency and making it an excellent choice for any business setting

Features

- ▶ High voltage output for a wide headroom.
- ▶ Efficient Toroidal transformer core for high power induction response.
- ▶ All-steel 2U/3U durable chassis construction.
- ▶ Unobtrusive recessed carrying handles.
- ▶ European and Japanese components ensure optimal result.
- ▶ Powerful and fast response cooling system.
- ▶ Reduced 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

Model	HA-50	HA-60	HA-90
MAX Output Power RMS 1KHz			
2 Ohms	2 X 2500W	2 X 3000W	2 X 4500W
4 Ohms	2 X 1800W	2 X 2300W	2 X 3600W
8 Ohms	2 X 1050W	2 X 1300W	2 X 2000W
Bridge @ 4 Ohms	5000W	6000W	9000W
Bridge @ 8 Ohms	3700W	4600W	7200W
Frequency Response Power Bandwidth +/-0.50dB	15Hz-25kHz		
Total Harmonic Distortion 20Hz - 20kHz	<0.05%		
Cross Talk 20Hz - 20kHz	≥80dB		
Input Sensitivity @ 8 Ω	1V		
Voltage Gain (Factory setting)	38dB		
Damping Factor 20Hz - 20kHz	>600		
Signal-to-Noise-Ratio A Weighted	>105dB	>110dB	
1/8 rated power @ 4 Ω	5A	8A	14A
Rack Mount Space	2U		3U
Dimensions / W x H x D (mm) / W x H x D (inches)	19 x 3.5 x 18	480 x 89 x 460 19 x 53.5 x 18	19 x 5.5 x 20
Weight	18Kg	21Kg	35Kg
Net / Shipping	19Kg	22Kg	37Kg

AUX Series



The 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 continuous use, even in the toughest ambient conditions, fulfilling every end user requirement.

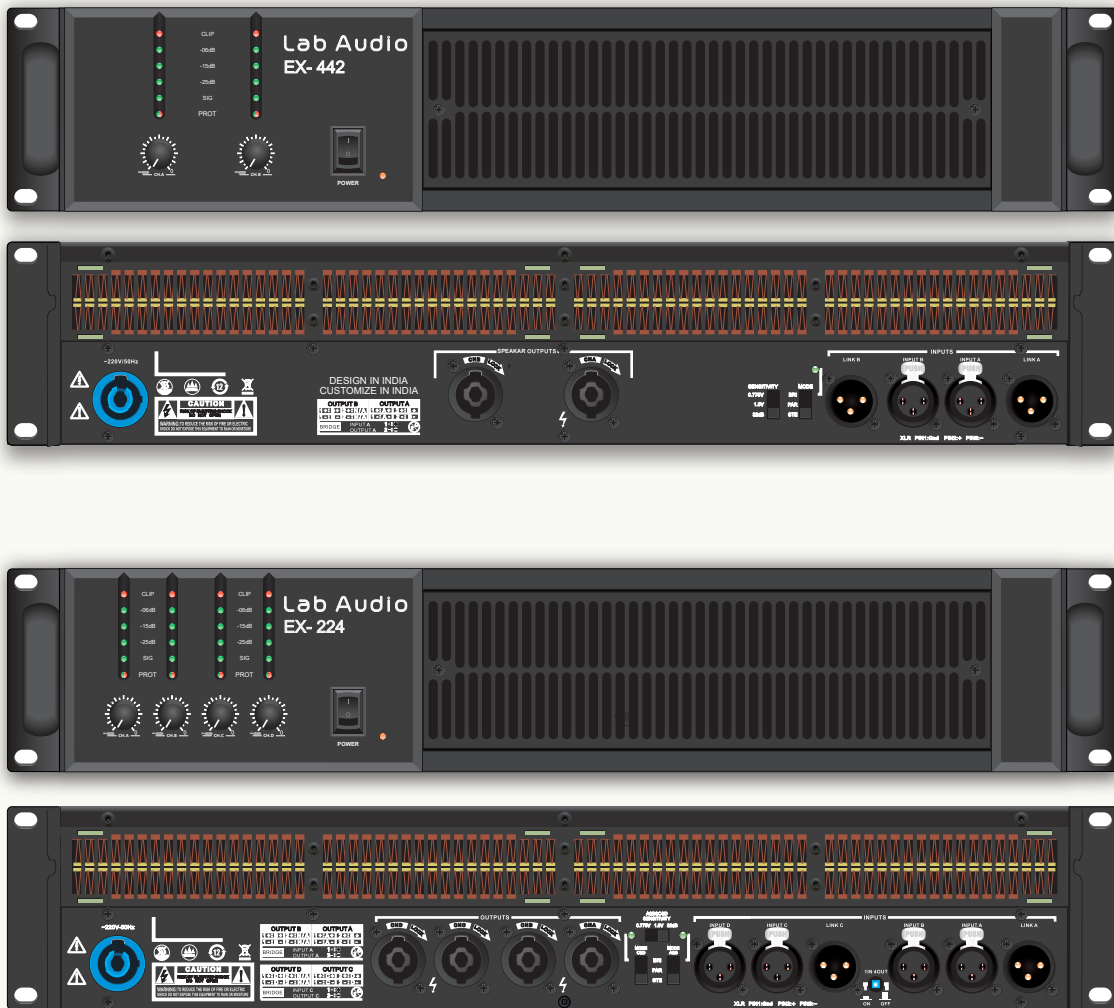
Features

- ▶ All-steel 2U/3U curable chassis construction.
- ▶ Unobtrusive recessed carrying handles.
- ▶ Efficient Toroidal transformer core for high power induction response.
- ▶ 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

Model	AUX-2.0	AUX-4.0	AUX-5.8	AUX-7.0	AUX-8.6
MAX Output Power RMS 1KHz					
2 Ohms	2 X 900W	2 X 1800W	2 X 2500W	2 X 3000W	2 X 3500W
4 Ohms	2 X 650W	2 X 1300W	2 X 1800W	2 X 2200W	2 X 2600W
8 Ohms	2 X 390W	2 X 760W	2 X 1050W	2 X 1300W	2 X 1570W
Bridge @ 4 Ohms	1800W	3600W	5000W	6000W	7000W
Bridge @ 8 Ohms	1300W	2600W	3700W	4400W	5200W
Frequency Response Power Bandwidth +/-0.50dB	20Hz-20kHz				
Total Harmonic Distortion 20Hz - 20kHz	<0.05%				
Cross Talk 20Hz - 20kHz	≥75dB				
Input Sensitivity @ 8 Ω	1.1V	1.2V		1.4V	1.6V
Damping Factor 20Hz - 20kHz	>600				
Slew Rate	>45V/μs				
Signal-to-Noise-Ratio A Weighted	>98dB	>100dB	>102dB	>104dB	
Rack Mount Space	2U			3U	
Dimensions / W x H x D (mm) / W x H x D (inches)	480 x 89 x 406 19 x 3.5 x 16	480 x 89 x 460 19 x 3.5 x 18	480 x 133 x 510 19 x 5.5 x 20		
Weight	20Kg	21Kg	21Kg	37Kg	39Kg
Net / Shipping	22Kg	23Kg	23Kg	39Kg	41Kg

EX Series



EX series is a lightweight SMP amplifier that is supported by PWM (Pulse Width Modulation) circuits with an efficiency of class D, a perfect solution for those who value portability and loads of power. Its compact design makes it easy to transport and its high-performance capabilities ensure sonic excellence.

EX series offers two variants, 2 channels and 4 channels with a soft limiter to prevent any speaker from over driving. Neutrik speakON output connectors and XLRs from A to D ensure optimal connectivity.

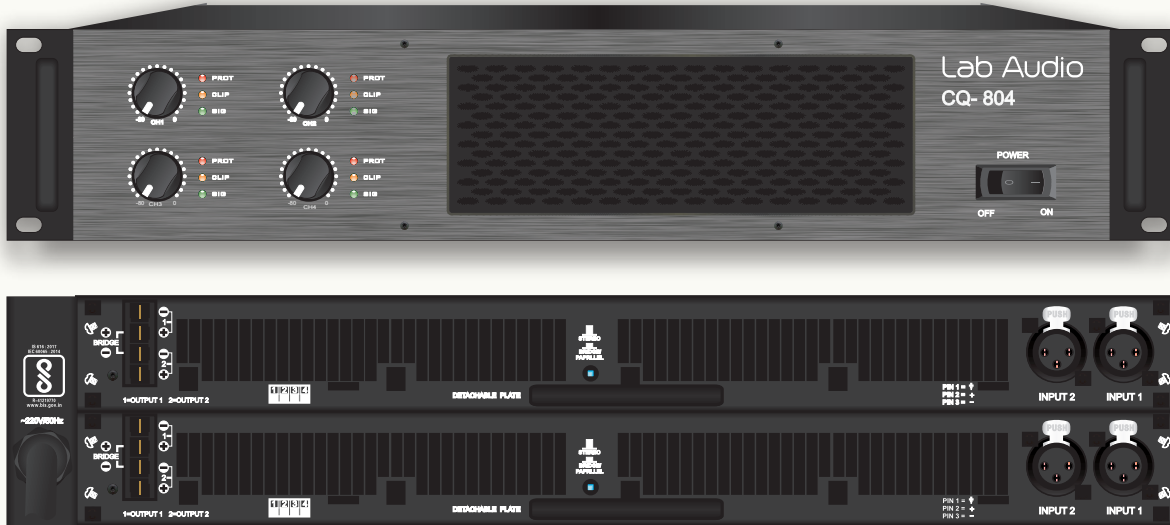
Features

- ▶ Large swing output voltage for a better dynamics performance.
- ▶ High Stability Switch mode power supply.
- ▶ Light weight durable 2U chassis construction.
- ▶ European and Japanese components ensure optimal result.
- ▶ The recessed aluminum front panel features individual Gain control for channels, , Signal, Clip and Fault/OK LED indicators assists you to monitor amplifier performance.
- ▶ Forced cooling front to rear air flow with variable high speed fans.
- ▶ Clip limiter to provide High Dynamics at Negligible Distortion levels.
- ▶ Dual, Parallel or Bridge operation modes.
- ▶ DC, Thermal overload and continuous Short Circuit Protection on each channel.

Technical Specifications

Model - Topology D	EX-442	EX-224
No. Of Channels	2	4
MAX Output Power RMS 1KHz		
2Ω	7000 W	2500 W
4Ω	4400W	2200 W
8Ω	2300 W	1300 W
16Ω	1100 W	650 W
Bridge 4Ω	14000 W	5000 W
Bridge 8Ω	8800 W	4400 W
Bridge 16Ω	4600 W	2600 W
Frequency Response Power Bandwidth +/-0.50dB	5Hz-35kHz	
Total Harmonic Distortion 02Hz - 20kHz	0.05%	
Cross Talk 20Hz - 02kHz	≥70dB	
Input Sensitivity @ 8 Ω	0.775V, 1.0V, 32dB	
Signal-to-Noise-Ratio A Weighted	>110	
Protection Circuits	Short Circuit DC Offset & Overheat	
Rack Mount Space	2U	
Dimensions / W x H x D (mm) / W x H x D (inches)	483x 88 x 396 19 x 3.5 x 15.6	
Weight	12Kg	
Net / Shipping	14Kg	

CQ Series



The CQ-series includes robust four-channel amplifiers, CQ-804 and CQ-1104, deliver exceptional sound reinforcement in live performances, touring, and sound installations. Equipped with protective mechanisms against thermal issues , short circuits, and DC offset.

The CQ-series ensures automatic reconnecting to the speaker load in case of any error. This cost-effective and dependable series caters to both professionals and audio enthusiasts, making it an ideal solution for any audio application.

Features

- ▶ All-steel 2U/3U durable chassis construction.
- ▶ European and Japanese components ensure optimal result.
- ▶ Soft start upon start-up, overload, overheating, short circuit, DC output, peak voltage limit and intelligent clip protection.
- ▶ Easy detachable amp plate boards help making service jobs easier.
- ▶ High-speed fans start-up for dusting functions and also allows in reducing temperature.
- ▶ LED indicator for monitoring, status and operating modes.

Technical Specifications

Model - Topology H	CQ-804	CQ-1104
No. Of Channels	4	4
MAX Output Power RMS 1KHz		
2Ω	1000 W	1350 W
4Ω	800 W	1100 W
8Ω	425 W	620 W
Bridge 4Ω	2000 W	2700 W
Bridge 8Ω	1600 W	2200 W
Frequency Response Power Bandwidth +/-0.50dB	20Hz-22kHz	
Total Harmonic Distortion 20Hz - 20kHz	0.05%	
Cross Talk 20Hz - 20kHz	≥72dB	
Input Sensitivity @ 8 Ω	1.4V	
Signal-to-Noise-Ratio A Weighted	>101	
Protection Circuits	Short Circuit DC Offset & Overheat	
Rack Mount Space	2U	
Dimensions / W x H x D (mm) / W x H x D (inches)	483x 88 x 406 19 x 3.5 x 16	
Weight	24Kg	
Net / Shipping	26Kg	

LAQ Series



The LAQ series of amplifiers utilizes Class-D topology that produce smooth and responsive across the power bandwidth. These amplifiers incorporate the latest Lab Audio regulated SMPS design, resulting in lightweight units that are ideal for use in various professional uses.

The LAQ series includes a soft limiter, short circuit, DC offset, and thermal protection. These features makes an excellent choice for sound reinforcement in touring, live performances, and sound installations. In summary, the LAQ series of amplifiers is a reliable, and ease of use, making them a valuable investment for any audio professional.

Features

- ▶ All-steel 2U durable chassis construction.
- ▶ European and Japanese components ensure optimal result.
- ▶ Short circuit, DC output and peak voltage limit.
- ▶ Power regulated switching power supply.

Technical Specifications

Model - Topology D	LAQ-1004	LAQ-1504
No. Of Channels	4	4
MAX Output Power RMS 1KHz		
2Ω	1300 W	2000 W
4Ω	1000 W	1500 W
8Ω	650 W	875 W
16Ω	400 W	500 W
Bridge 4Ω	2600 W	4000 W
Bridge 8Ω	2000 W	3000 W
Frequency Response Power Bandwidth +/-0.50dB	15Hz-28kHz	
Total Harmonic Distortion 20Hz - 20kHz	0.08%	
Cross Talk 20Hz - 20kHz	≥82dB	
Input Sensitivity @ 8 Ω	0.775V, 1.0V, 32dB	
Signal-to-Noise-Ratio A Weighted	>105	
Protection Circuits	Short Circuit DC Offset & Overheat	
Rack Mount Space	2U	
Dimensions / W x H x D (mm) / W x H x D (inches)	483x 88 x 467 19 x 3.5 x 18.4	
Weight	12Kg	
Net / Shipping	14Kg	

AXC-23XL

ANALOG CROSSOVER



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 Ω , unbalanced > 25K Ω
Maximum	+22 dB typical, balanced or unbalanced
CMRR	>40 dB, typically > 55dB at 1KHz
Output	XLR
Connectors	
Types	Electronically balanced/Unbalanced, RF filtered
Impedance	Balanced 100 Ω , unbalanced 50 Ω
Maximum Input level	>+ 20 dB balanced/ unbalanced into 2K Ω 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

INTELLIGENT POWER MANAGEMENT

The Lab Intelligent Power Distributor is an indispensable accessory for Professional Audio and lighting system. Extremely compact and most Economic Rack Mount which is ideal for Touring and installation. 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.

Maximum 23Kw.

Voltage range – 180V to 255V.

Frequency range- 42Hz to 57Hz.

Automatic restarts in 5 seconds after power restoration in Auto mode.

DSP based contractor for Auto Mode.

Change over switch for Auto and manual mode.

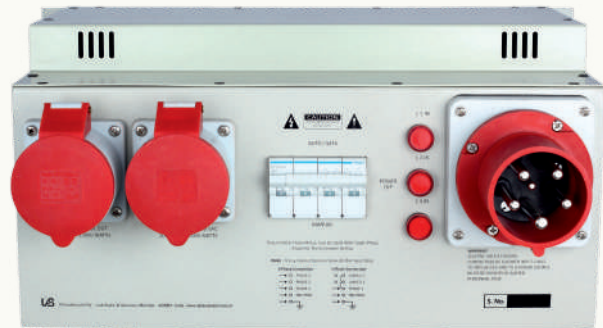
Load Per phase up to 32A.

Bright LED displaying values.

5-pin socket on the back side for looping.

Available in Schuko, C-Form and Indian sockets.

MODEL IP 63



Features

Maximum 43Kw.

Voltage range – 180V to 255V.

Frequency range- 42Hz to 57Hz.

Automatic restarts in 5 seconds after power restoration in Auto mode.

DSP based contractor for Auto Mode.

Change over switch for Auto and manual mode.

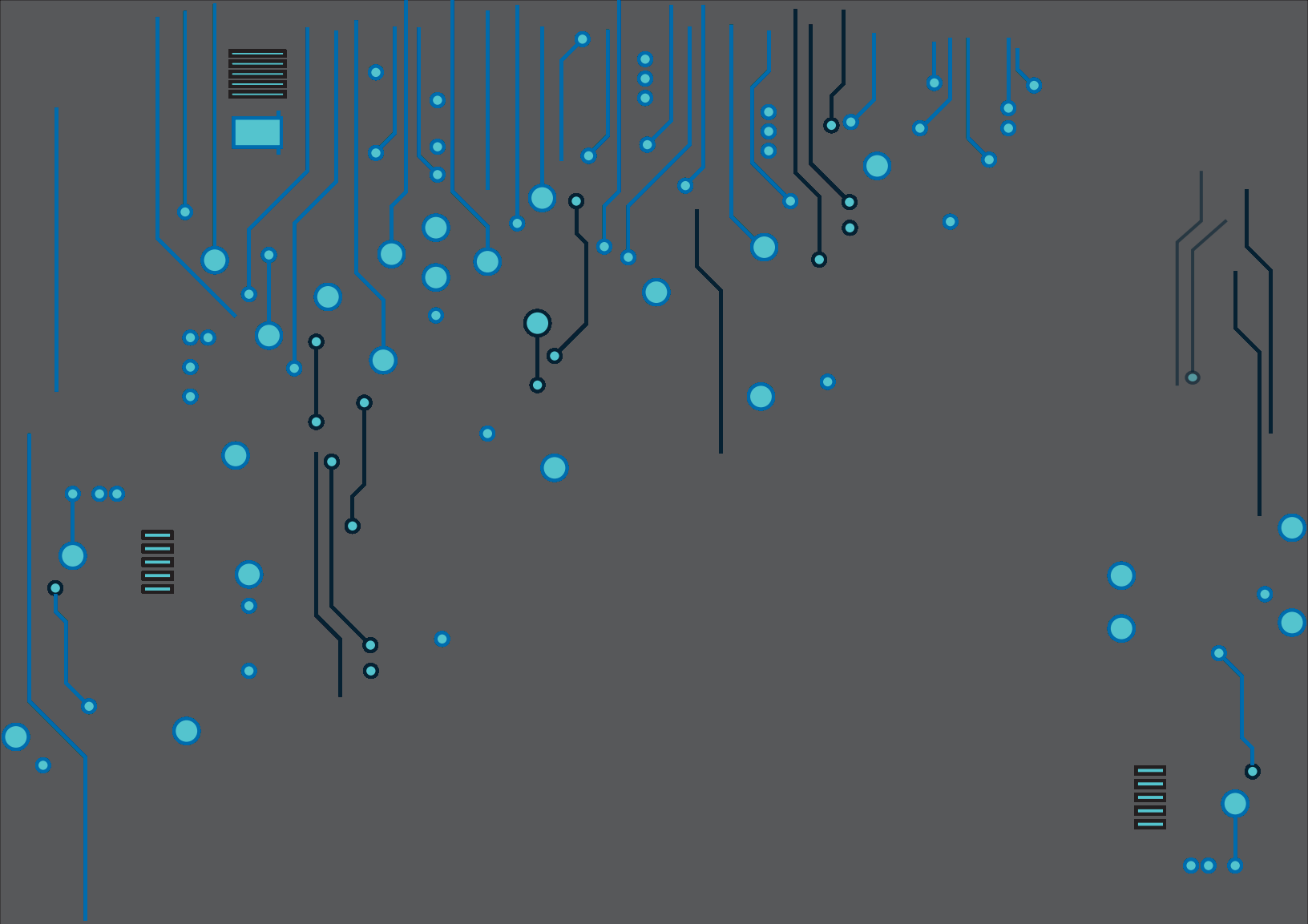
Load Per phase up to 63A.

Bright LED displaying values.

5-pin socket on the back side for looping.

Available in Schuko, C-Form and Indian sockets.





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.

