





## **MOD SERIES LINER POWER SUPPLY AMPLIFIERS**

To ensure a transparent and sonically neutral audio experience, the MOD series has been painstakingly innovated. Constant up-gradation in technology in the pro-audio industry has resulted in the creation of new technologies and improved amplifier performance through efficient circuits and components. The MOD is one of the first pro-audio amplifiers in the world to use Silicon Carbide Mosfets [SICMOS], which have extremely low switching loss and result in highly efficient amplifiers with large dynamic headroom.

### **RANGE**

**CSC MOD SERIES** amplifiers are designed to be installed and used in touring applications. It has total 5 models having 2 and 4 channel options.

Four-channel models: MOD 2K4 and MOD 3K4,

Two- Channel Models: MOD 1.6K2, MOD 2.4K2, and MOD 3.4K2

## **DESIGN PHILOSOPHY**

- Sonic performance
- ▶ Ease of Service
- Reliability

The MOD Series is a hybrid of linear power supplies and high-efficiency Class-D output stages. The PCBs are modular in assembly, and on-field replacements are as simple as unscrewing a few fasteners, dropping in a new PCB, and you're back in business.

## AMPLIFIER TOPOLOGY

The Class-D output stages employ a post-filter feedback topology with a  $2^{\text{nd}}$  order active integrator and dual feedback loops to achieve low output stage impedance and damping factors in excess of 1500. The output uses Silicon Carbide Mosfets, which are powered by dedicated isolated drivers with low parasitic capacitance floating power supplies. The output inductors use Triple Stacked Cores for substantial headroom before reaching any saturation current limitations.

### AMPLIFIERS WITH LINEAR POWER SUPPLY

The high current toroidal transformer, in conjunction with dual bridge rectifiers, connects the large capacitor bank as an instantaneous power

reservoir for fast current dispersion at sustained load.

#### **PROTECTION**

The amplifier has a sophisticated set of protections. When the amplifier detects an over current or output voltage limitation during clipping, the limiter-based automatic gain reduction activates, rapidly reducing the drive signal and keeping the output stage in a safe operating area.

The main protection circuit has some great features for countries, where power grids are erratic and unreliable. The CSC amplifier protection circuitry monitors the main AC voltage and automatically shuts down if it exceeds 270 volts. The amp can easily sustain voltages of up to 440 VAC.

# **SOME KEY FEATURES**

High current capability CLASS D amplifier.

- ▶ 2.5U height
- ▶ Stable to 1 Ohm
- 2<sup>nd</sup> order active integrator post-filter feedback for precise cone control
- ▶ Thanks to high capacitive reserves, it drives subwoofers.
- Full power bandwidth of 20hz-20khz
- Toroidal linear power that is dependable
- ▶ Temperature-controlled air flow using Blue Wind fans.
- > 50A Speakon Connectors are used.
- ▶ The Damping Factor is in excess of 1500.
- Operating voltage range is 160-260 volts. It withstands voltages of up to 440 v.
- Cut ting-edge Silicon Carbide Mosfets for increased dynamic power across the entire audio spectrum.
- ▶ Special conformal coating protects PCBs from moisture in highly humid coastal areas where day temperatures exceed 40 degrees, and where voltages are unreliable.

#### **POWER SUPPLY**

The high current Toroidal Transformer, in conjunction with dual bridge rectifiers, connects the high capacity bus capacitance storage, resulting in a system with enormous energy reserves.











| SERI | IES: MOD series                    | High current class D linear power supply amplifier                           |                |                |                |                |                |
|------|------------------------------------|--|----------------|----------------|----------------|----------------|----------------|
| S.no | MODEL NO                           | MOD 2K4  | MOD 3K4        | MOD 1.6K2      | MOD 2.4K2      | MOD 3.4K2      | MOD 4.8K2      |
| 11   | No of channels                     | 4  | 4              | 2              | 2              | 2              | 2              |
| 2    | Power/ channel                     | All channels driven  |                |                |                |                |                |
|      | 8 Ohms                             | 500  | 750            | 500            | 750            | 1000           | 1500           |
|      | 4 Ohms                             | 800  | 1200           | 800            | 1200           | 1700           | 2400           |
|      | 2 Ohms                             | 800  | 1200           | 800            | 1200           | 1700           | -NA-           |
| 3    | Bridge Mode                        | 1200W @ 4 Ohms   | 1700W @ 4 0hms | 1600W @ 4 Ohms | 2400W @ 4 0hms | 3400W @ 4 0hms | 4800W @ 8 Ohms |
| 3    | Input Sensitivity @4 ohms          | 1.42v  | 1.73v          | 1.42v          | 1.42v          | 1.73v          | 2.25v          |
| 4    | Gain                               |  |                | 30dB           |                |                |                |
| 5    | Distortion: 20Hz-20kHz : 2dB       | 0.10%  | 0.10%          | 0.10%          | 0.10%          | 0.10%          | 0.10%          |
| 6    | Slew Rate                          | 30v/uS   | 35v/uS         | 30v/uS         | 30v/uS         | 35v/uS         | 40v/uS         |
| 7    | Frequency Response : +0/-1dB       | 20-20kHz   |                |                |                |                |                |
| 8    | SNR                                | 100dB  |                |                |                |                |                |
| 9    | Max Input: RMS                     | 10v  |                |                |                |                |                |
| 10   | Input Impedance: Ohms              | 10k  |                |                |                |                |                |
| 11   | Damping Factor: 8 ohms: 100Hz      |  |                | 1500           |                |                |                |
| 12   | Output Circuitry                   | Class-D  |                |                |                |                |                |
| 13   | Connector: Input/Link:             | XLR  |                |                |                |                |                |
| 14   | Connector: Output                  | SpeakOn  |                |                |                |                |                |
| 15   | Controls: Front                    | Level  |                |                |                |                |                |
| 16   | Controls: Rear                     | Stereo-Mono/Bridge & Auto-ON   |                |                |                |                |                |
| 17   | Indicators                         | Auto-STBY, Signal, Limit   |                |                |                |                |                |
| 18   | Protection                         | Over current, Over temperature, Mismatched loads, Overvoltage, Short Circuit |                |                |                |                |                |
| 19   | Cooling: 2X Fans                   | Temperature controlled 2-step speed fans                                     |                |                |                |                |                |
| 23   | Mains Operating Range              | 170-260VAC   |                |                |                |                |                |
| 24   | Mains Cable                        | 1 meter in length  |                |                |                |                |                |
| 25   | Dimensions: W x D x H : (mm)       | 486 X 487 X 110 486 X 550 X 110  |                |                |                |                |                |
| 26   | Weight: Net (kgs)                  | 20   | 25             | 16             | 18             | 22             | 30             |
| 27   | Weight: including packing Net (kgs | s) 22  | 27             | 18             | 20             | 24             | 32             |

Specifications subject to change without notice

## **SAFETY INSTRUCTIONS**

- Do not use this product near rain or water.
- Only use a dry cloth for cleaning.
- ▶ Do not block the vents. Install it as per the manufacturer's instructions.
- Installing near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat is not recommended.
- Do not defeat the safety purpose of the polarised or grounding-type plug. A polarised plug has two blades, one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide edge, or the third prong, is for your safety. If the provided plug does not fit into your outlet, consult an electrician to replace it with the appropriate plug.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the unit.
- Unplug the unit during lightning storms or when unused for long periods.
- Refer all service requests to qualified service personnel. Servicing is required periodically and when the unit is damaged, either mechanically or electrically, or is used in a smoky or dusty environment.
- Use the mains plug to disconnect the apparatus from the mains. Do not power the unit without servicing it when it has not been used for a long period of time or stored in a damp environment.

