The DCML power amps deliver exceptional sound/reliability, ultra-light weight 15lb (6.4kg) from 1500w to 3800w and it's made in the USA. You'll appreciate the ultra-light feature, which comes in part from its heavy-duty aluminum frame. High power, uncompromised sound and maximum reliability is at its best for both touring systems and fixed installations. The concert stage is the ultimate test of professional audio. Concert audio has to be uncompromising, reliable and efficient and that's where the DCML has made its mark night after night, year after year serving top artists and concert venues for the last decade. The DCML is a proven American made workhorse backed by 40 years of manufacturing excellence.

COOL EFFICIENT DESIGN
A high efficiency heat transfer system offers the most advanced cooling, which is one of the keys to reliable power. Five high ratio 6063-T5 flow-through aluminum heat sinks remove heat fast with multi-speed fans that runs quiet under any load. All ratings EIA 1% THD at 1 kHz except * tested at 1 k Hz no clipping, 33ms on 66ms off

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Power supply protections are not indicated by the protection LED, but by the power turning off completely. Fans need to flow in the same direction or the amplifier will starve for air and thermal off. All active early. The front cooling vents are not to be restricted. Air flows from back to front. The use of external air should not be warmer than 120° with full loading and heavy usage, or the thermal protection could handle the amplifiers output. However, consistent flashing (excessive clipping/square wave) will damage the amplifier. This does not cause damage to the amp.

7. COOLING VENTS/FAN
Upon rack installation, the rear of the amp must be fully exposed to room temperature air. The surrounding air should not be warmer than 120°F with full loading and heavy usage, or the thermal protection could activate early. The front cooling vents are not to be restricted. Air flows from back to front. The use of external fans need to flow in the same direction or the amplifier will starve for air and thermal off.

8. CHANNEL INPUTS
The XLR balanced inputs will help reduce signal interference and allow longer cable runs from your signal source (mixer, etc). Because this is a balanced input, the gain will be 6 dB higher than using an unbalanced 1/4" cable on the 1/4" TRS input jack. XLR pin configuration: Pin 1: Grounded through the GROUND LIFT switch, Pin 2: positive balanced signal, Pin 3: negative balanced signal. The THRU XLR connector passes the signal out for connection to another amplifier’s input. (excludes DCM2004L)

The 1/4" TRS jacks are balanced and designed to receive unbalanced input signals. The DCM12004L features only XLR inputs. Balanced signals coming into this jack should be wired with the connector’s tip going to signal + and the connector’s ring to signal -.

9. PARALLEL “Y” INPUTS
The rear PARALLEL switch connects both channels together from either input. This eliminates Y adapter cables. This feature is used to “daisy chain” one piece of equipment to another. Just plug into the unused input (TRS or XLR) and it will become the output for other equipment.

10. INPUT GROUND LIFT
Systems can be connected in such a manner as to cause a “grounded loop” with the inputs, which results in audible hum. The input GND LIFT switch (TRS & XLR) on the rear panel will help eliminate this problem.

11. LIMITERS (excludes DCM2004L)
To activate the LIMITERS, engage the rear limiter switch. The built-in limiters are recommended to hold down peaks that could cause clipping. To check the effectiveness of the limiters, run the amplifier to the point where clipping begins. Then engage the limiters and listen/watch for the reduction of the distortion and clipping. If the distortion stops, you can try to turn the channel up for more power until distortion is heard. The lower bass frequencies are most affected. WARNING: Do not check in an environment where the sound level could damage your ears! Limiters only affect the signal if the amplifier has entered clipping so it is best to have the limiters engaged at all times to protect the speakers from excessive clipping.

12. BRIDGE MODE (excludes DCM2004L)
With your amp off, push “in” the rear (recessed) BRIDGE switch then make your connections to either the center bridge Speakon™ or the RED binding posts (ch 1 is + and ch 2 is -). In bridged mode, the amplifier channels are out-of-phase from each other. Accidental pressing of the switch will cause damage or improper operation. WARNING: No other speaker connectors or binding posts may be used at the same time! Use channel 1 INPUT and LEVEL for bridge mode. Channel 2 is not used, except for parallel to another amplifier (see 9 PARALLEL). The minimum speaker impedance is 4 ohms.

CAUTION: The power developed by bridging your amp is capable of destroying most speakers.

13. TwistLock SPEAKER OUTPUTS
TwistLock connectors are featured for high power applications. Secure the TwistLock cable connection by turning to the right to the lock position. The center output on the 2-channel amps is for the “Bridge” output only. Turn the amp off before connecting or disconnecting your speakers. TwistLock outputs are compatible with standard 2-conductor TwistLock cables. A 4-conductor TwistLock cable will enable biamping with one 4-conductor cable. No adaptors needed. See Biamping on the following page.

14. SPEAKER BINDING POSTS (excludes DCM2004L)
For wire (banana connectors), use the rear BINDING POSTS to connect your speakers. Wire sizes up to 7 gauge (50 amps) can be inserted into the binding post “side holes”. Larger cable can be used with “banana” plugs which plug into the end of the binding posts. Binding posts are spaced on ISO standards. For BRIDGE speaker connections (see 12 BRIDGE MODE).

15. AC POWER
Your amp is designed to work with 120V 60 Hz for North America and a 240V 50Hz model is dedicated for Europe. The rear heavy-duty AC receptacle will accept a universal grounded AC cord. Be sure to check your power source before plugging into a grounded (3 prong) outlet. Firmly push the AC cord all the way into the receptacle or the amp will not function. WARNING: Never defeat the grounded connection or electrocution may result! FUSE: The fuse is located within the main chassis near the AC connector on the PC card. Normally if the fuse fails, the amp will require service. See specifications chart for fuse values. NOTE: Each amp will require a dedicated circuit breaker for the amp to achieve its full output.
**Typical Stereo Setup (or Mono Bi-Amp)**

For (stereo) the PARALLEL switch must be OFF (OUT).

Ch 2 Right

Ch 1 Left

**Biamping**

MUST USE AN ELECTRONIC CROSSOVER OR SPEAKER MANAGEMENT SYSTEM TO SEPARATE HIGH AND LOW FREQUENCIES

**Bridged Mono**

Ch 1 Input

To signal socket XLR or 1/4" 2 or 3 cond. shielded

Activate the BRIDGE switch (IN). Control the level by Ch 1 (Ch 2 does not function.)

Use either the Bridged Speaker™ connector or the binding posts. No other connections can be used while in Bridged mode.

**Helpful Hints**

1) NO SOUND FROM CH 2: The rear (recessed) BRIDGE switch has been inadvertently pushed in.
2) STEREO CHANNELS SOUND THE SAME: The rear PARALLEL switch has been inadvertently pushed in.
3) NO HIGH FREQUENCIES: Tweeters or midrange drivers have been damaged or blown from feedback or to much power.
4) SYSTEM HUM: Switch the rear GND LIFT switch IN to reduce hum.
5) POOR SOUND (BASS): The speaker systems are wired out of phase to each other. To correct, check polarity and if necessary reverse the wires on one speaker connector only and your sound, especially the bass will improve.
6) DEDICATED CIRCUIT BREAKER: Each amp will require a dedicated circuit breaker for its full output. There will be a sustained loss of power if the AC voltage falls below the rated 120V or 230/240V input. Normally a 2000w amp or higher would require its own 20 amp circuit to deliver its full power at 2 ohms/channel or 4 ohms bridged.
This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

SAFETY INSTRUCTIONS (EUROPEAN)
The conductors in the AC power cord are colored in accordance with the following code.

GREEN & YELLOW—Earth BLUE—Neutral BROWN—Live

U.K. MAIN PLUG WARNING: A molded main plug that has been cut off from the cord is unsafe.

GROUNDING OR POLARIZATION: Precautions should be taken so that the grounding or polarization is not defeated.

POWER SOURCES: The product should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

WATER AND MOISTURE: Appliance should not be used near water (near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

CARVIN audio products have no user-serviceable parts, servicing by personnel other than Carvin authorized personnel, including when problems are caused by non-compliance with instructions in the literature accompanying the appliance.

LIMITED WARRANTY
Your Carvin product is guaranteed against failure for 3 YEARS unless otherwise stated. Carvin will service and supply all parts at no charge to the customer providing the unit is under warranty. Shipping costs are the responsibility of the customer. CARVIN DOES NOT PAY FOR PARTS OR SERVICING OTHER THAN OUR OWN. A COPY OF THE ORIGINAL INVOICE IS REQUIRED TO VERIFY YOUR WARRANTY. Carvin assumes no responsibility for horn drivers or speakers damaged by this unit. This warranty does not cover, and no liability is assumed, for damage due to: natural disasters, accidents, abuse, loss of parts, lack of reasonable care, incorrect use, or failure to follow instructions. This warranty is in lieu of all other warranties, expressed or implied. No representative or person is authorized to represent or assume for Carvin any liability in connection with the sale or servicing of Carvin products. CARVIN SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

MAINTAINING YOUR EQUIPMENT
Avoid spilling liquids or allowing any other foreign matter inside the unit. The panel of your unit can be wiped from time to time with a dry or slightly damp cloth in order to remove dust and bring back the new look. As with all pro gear, avoid prolonged use in caustic environments (salt air). When used in such an environment, be sure the amplifier is adequately protected by rack, covers, etc..

SERVICE:
In the USA: email: service@carvin.com, or visit our website: www.carvinaudio.com and under “SUPPORT” click on “REPAIR INFORMATION”. Outside the USA: contact your dealer, or go to http://www.carvinaudio.com click on “DEALERS” for your nearest service center. Include a written description of the problem with serial number and date of purchase.

MIN IMPEDANCE
DCM2000L/DCM2500L/DCM3000L and DCM3800L minimum impedance is 2 ohm per channel and 4 ohm bridged.
DCM2004L minimum impedance is 4 ohms per channel.

TwistLock Speaker Cable

- Slip "Securing Hub" then "Cable Clamp" over cable before attaching wires.
- Connector Configuration:
  - Black (1+) positive
  - White (1-) negative
  - Red (2+) positive
  - Green (2-) negative
- Solder wires in contacts or use hex screws provided.

Solder tinned wires 1/4" Strip cable insulation back 3/4"