



DCM1015

The DCM1015 professional dual 15 band graphic EQ amp is designed utilizing Carvin's 37 years of experience in power amp & equalizer technology. The DCM1015 is Ideal for monitor set-ups because of its powerful equalizers which feature precise 2/3 octave filters. The primary advantage for the DCM1015 is its small size, light weight, and high power that only requires two rack spaces. The thick steel face plates, large recessed knobs, and heavy-duty steel chassis reflect the manufacturing quality within. All models carry the CE approval for world-wide use.

Each DCM is hand built at our San Diego factory featuring all steel construction, recessed controls and heavy-duty power components. The rock-solid, efficient design with its superb testimonial-proven sound makes the USA built DCM an amp you'll own for years.

PURE—TRANSPARENT SOUND

Carvin considers the sound of an amp equally important as to its reliability. To insure pure, uncolored sound, we build one of the fastest power stages on the market today. High slew rates of 50v/μs deliver superb transient response. High frequencies are transparent and open—even at extreme levels. Linear feedback circuits reduce distortion to near the theoretical zero limit preventing harshness which would lead to ear fatigue. The DCM deliver transparent, unaltered sound—especially important to the studio user. Drive any type of reactive loads, including 70V transformer distribution systems.

ULTRA RUGGED FOR TOURING

Every chassis is made from heavy-duty 16 gauge steel that is plated before painted to prevent rust. All internal cabling is neatly tied and harnessed. Every circuit card is FR-4 MILITARY SPEC, double-sided, fire retardant glass epoxy. Plated through-holes insure that the solder flows on the top, bottom and through each hole of every component preventing components from shaking loose. Speakon™ connectors, heavy-duty power switches, recessed knobs, all give the DCM amps a “tank-like” ruggedness.

TOROID POWER SUPPLY

Toroids deliver massive amounts of “on demand” current for continuous 2 ohm operation. This gives the power supply a solid foundation, yielding more headroom for large subwoofer applications. Not only do toroids deliver high current, but they are known for reducing stray magnetic fields eliminating hum & noise. This is especially important to the recording industry.

MODULAR CONSTRUCTION

With the DCM Series, Carvin brings you totally modular construction. If you ever need an I/O (input/output) connector card because a connector wore-out, just unplug and re-install the replacement card. This applies to every aspect of the DCM Series amps including the power supply, power cards, heat sinks and fans. Everything is connected by heavy-duty AMP™ and MOLEX™ type connectors for easy replacement—even the Toroid transformer is a plug-in.

DISTORTION-FREE LIMITERS

The purpose of a limiter is to hold down peaks so the amp won't distort with extra hot input signals (helps protect speakers). In addition, a well designed limiter can increase your amp's average output as much as 3 dB allowing levels to be turned up without peak distortion. Part of Carvin's design uses the more expensive, distortion-free linear “opto isolators”. Unlike amps that use FET controlled limiters, which inject small amounts of distortion, the DCM Series limiters keep your sound pure and uncolored!

RECEIVING INSPECTION—read before getting started

INSPECT YOUR UNIT FOR ANY DAMAGE which may have occurred during shipping. If any damage is found, please notify the shipping company and CARVIN immediately.

SAVE THE CARTON & ALL PACKING MATERIALS. In the event you have to re-ship your unit, always use the original carton and packing material. This will provide the best possible protection during shipment. CARVIN and the shipping company are not liable for any damage caused by improper packing.

SAVE YOUR INVOICE. It will be required for warranty service if needed in the future.

SHIPMENT SHORTAGE. If you find items missing, they may have been shipped separately. Please allow several days for the rest of your order to arrive before inquiring.

RECORD THE SERIAL NUMBER on the enclosed warranty card for your records. Keep your portion of the card and return the portion with your name and comments to us.

USA customers register online at: www.carvin.com/registration

All other countries register online at: www.carvinworld.com/registration

FRONT PANELS & CONNECTING UP

The DCM Series feature front panel signal, peak and protect LEDs which let you monitor the status of the amp. Both channels use detente level controls allowing you to see your settings at a glance. Balanced TRS & XLR input connectors are used to eliminate hum & noise. Speaker outputs feature heavy-duty binding posts, Speakon™ connectors and 1/4” jacks.

The rear professional accessory group offers a GROUND switch to remove the chassis ground from the XLR input. A PARALLEL input switch connects the inputs together eliminating Y cables for patching multiple amp systems. The accessory group also features a BRIDGE MODE switch to deliver twice the power into a “mono” load or full power into a 70V distribution system, and a LIMITER ON/OFF switch gives the choice of using the internal limiter circuitry.

DCM1015 POWER AMP SPECIFICATIONS:

MODEL	DCM1015
Bridged RMS Continuous 4Ω, (20-20k Hz, <0.4%)	1000w
Both Channels RMS Continuous 2Ω (20-20k Hz, <0.2%)	500/500w
4Ω (20-20k Hz, <0.2%)	350/350w
8Ω (20-20k Hz, <0.2%)	225/225w
THD (20-20k Hz 50% power)	0.03%
THD (20-20k Hz 90% power)	0.1%
Damping Factor:	>500
Slew Rate: bridged mode	>50v/μs
Sensitivity: (4Ω, Vms)	1.0 V
Signal to Noise Ratio:	Above 100dB
Frequency Response:	±0.5 dB, 20 Hz to 20kHz (±1.5 dB, 10 Hz & 40 kHz)
Input Impedance:	>20K Ω, balanced
Dual 15 band EQ's	±12 dB @ 25, 40, 63, 100, 160, 250, 400, 630, 1k, 1.6k, 2.5k, 4k, 6.3k, 10k & 16k

Protection Circuits: Short Circuit • No Load Protection • SpeakerGuard™ • Thermal Shut-Off • Mute On/Off
Control and Indicators:

Front: Power switch • Recessed detente attenuators • Signal LED • Clip LED • Protect LED • Power Indicator

Rear: Ground Lift (each channel) • Parallel Input Switch • Speaker Output Bridge Switch • Limiters
IN/OUT Switch • Input Connectors: Two each; Balanced XLR & 1/4” • Speaker Output Connectors: Dual heavy duty binding posts, three Speakon™ & four 1/4”

Internal Fuse SLOW BLOW 20A, 240V/10A


Dimensions: 3 1/2” High x 19” Wide x 10” Depth (2-space); 8.8 x 48.3 x 25.3cm

Net Weight: 24 lbs. (10.7Kgs)

CARVIN


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 too much power.
- 4) SYSTEM HUM:** Switch the rear GND LIFT switch IN or OUT. If the hum is not eliminated, then install Carvin's MTF55 "Ground Lifter" between the amplifier input and signal source. This isolates the input ground from the AC power ground.
- 5) POOR SOUND (BASS):** The speaker systems are wired out of phase to each other. To correct, reverse the wires on one speaker connector only and your sound, especially the bass response 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.

 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.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN


This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



IMPORTANT! FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:

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 so that objects do not fall and liquids are not spilled into the enclosure through openings.

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.

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

POWER CORD PROTECTION: Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

SERVICING: The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

FUSING: If your unit is equipped with a fuse receptacle, replace only with the same type fuse. Refer to replacement text on the unit for correct fuse type.

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. NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAIN PLUG INTO A POWER SOCKET.

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.**

SERVICE:

In the USA, please call 800-235-2235 for a RMA # (return authorization number). Write this number on the box and enclose a description of the problem. Prepay to Carvin 12340 World Trade Drive, SD, CA 92128.

Outside the USA, contact your dealer or go to <http://www.carvinworld.com> for your nearest service center. Include a written description of the problem with serial number and date of purchase.

MAINTAINING YOUR EQUIPMENT

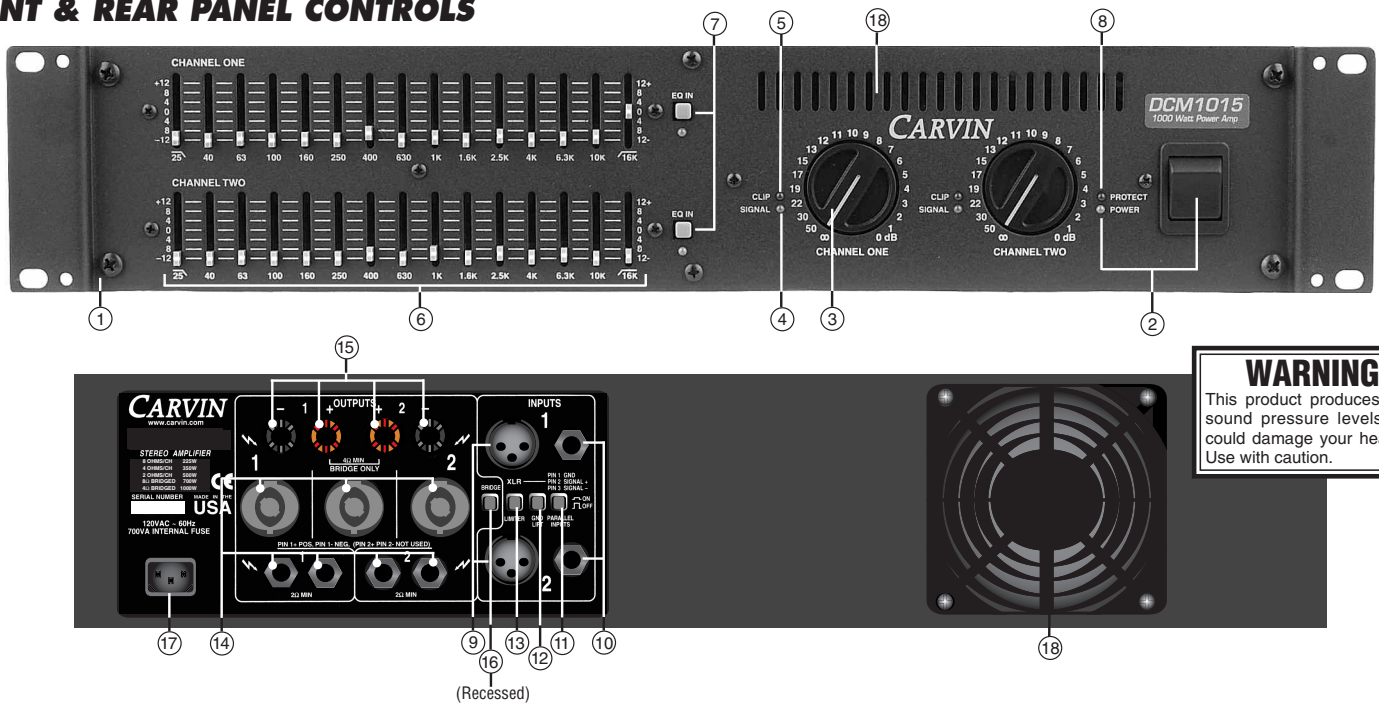
Avoid spilling liquids or allowing any other foreign matter inside the unit. The panel of your unit can be wiped from time to time with a dry or slightly damp cloth in order to remove dust and bring back the new look. As with all pro gear, avoid prolonged use in caustic environments (salt air). When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



CAUTION
RISK OF ELECTRIC SHOCK

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL! THIS UNIT CONTAINS HIGH VOLTAGE INSIDE!

FRONT & REAR PANEL CONTROLS



FRONT PANEL

1. MOUNTING

A sturdy one piece 12 gauge steel face plate accommodates easy transporting along with facilitating rack installation. The rack mounting holes are designed on ISO standard spacing. Four 10-32 x .5" phillips machine screws are normally used to secure the amp. Rear support brackets are not required.

2. POWER SWITCH/INDICATOR/FUSE

Check the power amp connections and verify the AC line power source before engaging the POWER switch. The yellow LED unmistakably indicates that all circuits are properly powered up. Yellow is used so the operator can see the red indicators (clipping or protect) from a distance. If the yellow power LED does not light up, remove the lid and replace the fuse located in the back corner where the AC cord connects to the circuit board. (DCM1015: 20AMP slow blow)

3. CHANNEL LEVEL CONTROL

A precision input LEVEL attenuate is used to adjust the volume levels. To deliver the amps maximum power without reducing the headroom of the signal source, the level controls should be turned full on.

4. CHANNEL SIGNAL INDICATOR

The green SIGNAL LED indicators will start to flash when there is a signal passing to your speakers (-30dBM). This lets you know when the amp is passing a signal to your rear speaker connectors.

5. CHANNEL CLIP INDICATOR

The red CLIP LED indicators will start to flash when each channel has reached its maximum output. Occasional flashing caused by lower bass frequencies is OK. However, consistent flashing caused from higher frequencies may damage high frequency drivers (excessive distortion). This does not cause damage to the amp.

6. DUAL 15-BAND GRAPHIC EQUALIZERS

Controlling feed-back in a monitor system and fine tuning your sound are easy with the DCM1015's two on-board EQ's. For feed-back, find the offending frequency and push the slider down to cut the level of that frequency, thus allowing more gain (volume) before feed-back. For tone control, move the sliders up or down from their center detent positions to suit your taste. USE THE IN/OUT SWITCHES TO BYPASS THE EQ's.

7. EQ IN SWITCHES and INDICATORS

To activate the graphic EQ's push in the EQ IN switch and the indicator will light. With the EQ IN switch out the amp functions as a standard amplifier

8. PROTECT LED INDICATOR

The red PROTECT LED provides the operator with information about the status of the amplifier. The PROTECT LED can come on under 3 different conditions (when this happens both channels are muted by disconnecting the output speaker relays protecting your speakers);

- 1) During power-up, the amplifier stays in a muted state for approx. 3 sec until it determines that everything is functioning normally (no output shorts or over temp conditions).
- 2) Both channels are muted when the output load draws excessive current or a direct short is detected caused by a shorted speaker cable or speaker system. Reset this condition by turning the amp off for two seconds and then on again. Check for shorted cables and the total speaker system impedance connected to each channel (2 ohms is the minimum per ch or 4 ohms BRIDGED).
- 3) Overheating is usually determined when the amp stops in the middle of a performance and the PROTECT LED comes on. If this is the cause, leave the amp on for the fan to cool the amp down. The amp will automatically reset within 1 to 3 minutes and the PROTECT LED will turn off when ready. Check for the following conditions: a) The rear intake air is restricted, b) The intake air is extremely warm, c) The front exhaust vents are restricted, or d) Excessive speaker load (try other speakers or remove speakers if you have more than one connected to each channel). Again, the minimum impedance is 2 ohms per ch or 4 ohms BRIDGED)

REAR PANEL

9. XLR CHANNEL INPUTS

For most professional applications, use the XLR balanced inputs. This will help to reduce hum and allow of longer cable runs from your signal source (mixer, etc). Because this is a balanced input, the gain will be 6 dB higher than using the 1/4" input jack with non balanced lines. XLR pin configuration: Pin 1: Grounded through the GROUND LIFT switch, Pin 2: positive Balanced signal and Pin 3: negative Balanced signal.

10. 1/4" CHANNEL INPUTS

These 1/4" TRS phone jacks are designed to receive either balanced or unbalanced input signals. Balanced signals coming into this jacks should be wired with the connector's tip going to signal + and the connector's ring to signal -. The connector sleeve is then tied to ground through the GROUND LIFT switch.

11. PARALLEL OR "Y" INPUTS

The rear PARALLEL switch allows you to drive both channels from either input. All signals entering any input will be available on both channels. This eliminates Y adapter cables. This feature is used to "daisy chain" one piece of equipment to another. Just plug into the unused INPUT (1/4" or XLR) and it will become an output for other equipment.

12. INPUT GROUND LIFT

Many times sound systems are connected in such a manner to cause a grounded loop with the inputs that result in audible hum. The input GND LIFT (1/4" & XLR) switch on the rear panel will help eliminate this problem. If not, another way to eliminate ground loops is to install a "line matching" transformer between the amplifier input and the signal source and cut the ground wire to PIN 1.

13. LIMITERS

To activate the LIMITERS, engage the rear limiter switch. The built-in professional limiters are recommended to hold down peaks that could cause early distortion. Limiters will help to raise the average power so that you can get more output from each channel. To check the effectiveness of the limiters when the channel starts to distort (under the amps full output), engage the limiters and hear the reduction of the distortion. If the distortion stops, you can try to turn the channel up for more power. The lower bass frequencies are most affected. **WARNING:** Do not check in an environment where the sound level could damage your ears!

14. SPEAKER 1/4" AND SPEAKON™ OUTPUTS

The standard 1/4" SPEAKER jacks are offered for low power applications. Speakon™ connectors are provided for high power application. Secure the Speakon™ connection by turning to the right. The center Speakon™ is for the "Bridge" output only. Turn the amp off before connecting your speakers.

15. TWIST-LOCK & BINDING POSTS SPEAKER OUTPUTS

Use the rear BINDING POSTS or TWIST-LOCKS as an alternate high powered connection. 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 (remove red caps). Binding posts are spaced on ISO standards. Use the two center RED binding posts for BRIDGE speaker connections (see 15 BRIDGE MODE). Use 12 GA cable for Twist-Lock connection. Insert cable and twist to lock into place. Use center Twist-Lock connector for BRIDGING speaker connections. **NOTE: REMEMBER TO PUSH IN "BRIDGE" BUTTON WHEN BRIDGING.**

16. BRIDGE MODE—25V/70V DISTRIBUTION SYSTEMS

The "DCM" Series can be operated in bridge mode if you require a 25V / 70V distribution speaker system or a high powered mono (single channel) amp. With your amp off, push in the rear (recessed) BRIDGE switch. Use the center Twist-Lok speaker output or make your speaker connections to the center RED binding posts (ch 1 is + and ch 2 is -). No other speaker connectors or binding posts can be used at the same time. The INPUT and LEVEL is handled by channel 1. Channel 2 is non-operational. The minimum speaker impedance is 4 ohms or a 25V distribution line. **CAUTION:** The power developed by bridging your amp can destroy most speaker systems! Make sure your speaker(s) are of the proper impedance and power handling.

17. AC POWER

Your amp is designed to run on either 120V 60 Hz or 240V 50Hz depending on the model purchased. The voltage range for 120V model is 95V to 132V and for 240V model it is 195V to 255V. The rear heavy-duty AC receptacle will accept a universal grounded AC cord that is designed your country. Be sure to check your power source before plugging into a grounded (3 prong) outlet. **Never defeat the grounded connection or electrocution may result!** Firmly push the AC cord all the way into the receptacle.

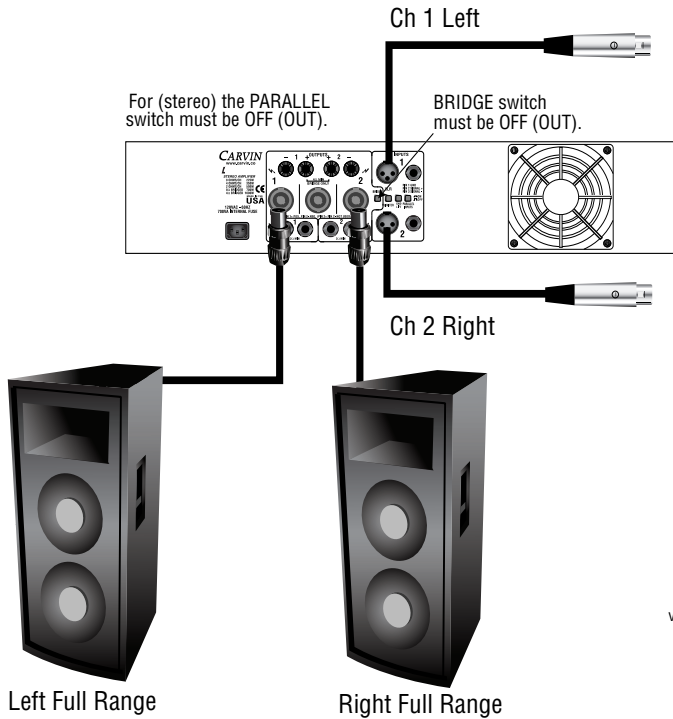
FUSE: The fuse is located within the main chassis above the AC connector mounted on the rear, inside the PC card. Normally if the fuse fails, the amp will require service. See spec. chart for fuse values.

NOTE: Each amp will require a dedicated circuit if you are driving the amp to its full output. There will be a sustained loss of power if the AC voltage falls below the rated 120V or 230/240V. Use a heavy gauge power cable and power source.

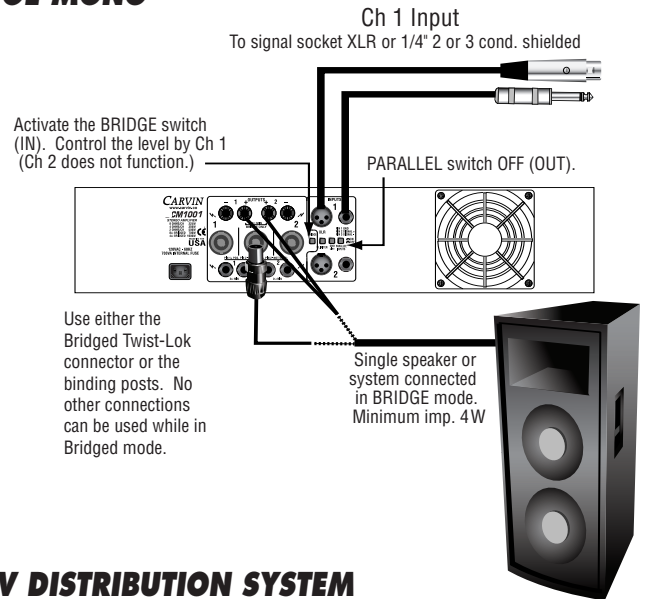
18. COOLING VENTS/FAN

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° or the thermal protection could activate the PROTECT LED. The front cooling vents are not to be restricted.

TYPICAL STEREO SETUP* (OR MONO BI-AMP)

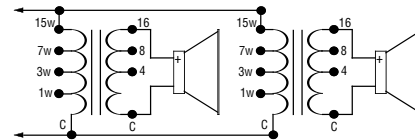


BRIDGE MONO

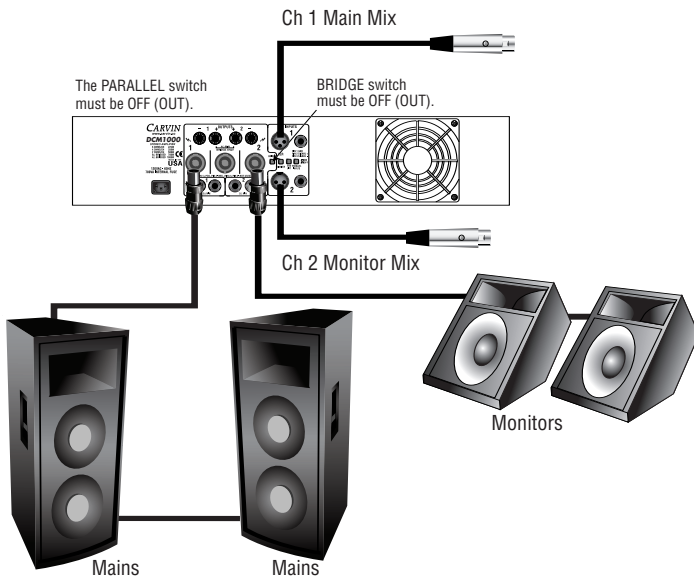


70V DISTRIBUTION SYSTEM

Connect the DCM1015 in "bridge mode" to deliver 70 volts. Higher powered amps will exceed 70v, damaging transformers and speakers.



MONO MAINS & MONITORS



TYPICAL DUAL MONITOR MIX SETUP

