

# CARVIN ENGINEERING DATA HT760M EQUALIZED MONITOR POWER AMP OPERATING MANUAL



HT760M

The HT760M professional Dual Graphic Monitor amps were designed utilizing Carvin's 33 years of experience in power amp & equalizer technology. The HT760M is ideal for monitor set-ups because its small size, light weight, high power, and EQ capabilities allow you to use only one piece of gear in place of two or three. This saves you work, rack space, and money. Their thick brushed anodized aluminum face plates, large recessed knobs, quality metal sliders with rubber boots, and heavy-duty steel chassis reflect the manufacturing quality within. All models carry the CE approval for world-wide use.

## PURE—TRANSPARENT SOUND

Carvin considers the sound of an amp equally important as its reliability. To insure pure, uncolored sound, we designed one of the fastest responding power amps on the market today. High slew rates greater than 45v/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 any type of harshness which would lead to ear fatigue. The HT Series amps deliver flat, transparent, unaltered sound—especially important to the studio user. And you can drive any type of reactive loads, including 70V transformer distribution systems. These amps are designed to deliver non-stop, continuous power and are completely protected from heat and short circuits.

## ULTRA RUGGED FOR TOURING

Every chassis is made from heavy-duty 16 gauge steel that is galvanized before being painted to prevent rust. All internal cabling is neatly tied and harnessed. Every circuit card is MIL SPEC, double-sided, through-hole plated, fire retardant FR-4 glass epoxy. This insures that the solder flows on the top, bottom and through each hole of every component, preventing components from shaking loose—even through constant tour use. Neutrik™ XLR connectors, heavy-duty power switches, recessed knobs, machined aluminum front panels and extruded handles all give the HT amps a "tank-like" ability to handle rough, touring transport.

## TOTALLY MODULAR

With the HT 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 it and re-install the replacement card in minutes. You don't have to desolder anything. This applies to every aspect of the HT 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 total plug-in.

## HEAVY-DUTY COOLING

Carvin offers up to 30% more cooling than comparable amps rated at the same wattage. This means that the HT Series are thermally "over-engineered" to be sure heat will never be a concern. Even outdoor concerts in direct sunlight will not cause thermal shut down. Carvin uses precision 6063 T-5 aluminum high ratio heat sinks that are extruded for massive amounts of cooling. High efficiency, multi-speed fans cool your amp quietly.

## LOSE THE WEIGHT...NOT THE PERFORMANCE

For some companies weight reduction means cost reduction. Carvin however, uses expensive TOROID transformers to reduce weight. 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 the largest subwoofer application. Not only do toroids deliver high current, but they are known for reducing stray magnetic fields eliminating hum & noise. This is especially important for the recording industry.

For your records, you may wish to record the following information.

Serial No. \_\_\_\_\_ Invoice Date \_\_\_\_\_

76-00760 797

## LIMITED WARRANTY

Your Carvin product is guaranteed against failure for ONE YEAR 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. When RETURNING merchandise to the factory, you may call for a return authorization number. Describe in writing each problem. If your unit is out of warranty, you will be charged the current FLAT RATE for parts and labor to bring your unit up to factory specifications.

## HELP SECTION

### 1) WILL NOT TURN ON

Check the power to the unit. Check for tripped main circuit breakers, unplugged extension cords or power-strip switches that may be turned off. Check the amps circuit breaker on the rear panel. If the black curved center button is in the out position, push it in to reset. If the breaker continues to trip, check your speaker cables and total speaker impedance. If the amps circuit breaker will not reset, then the amp will require servicing.

### 2) 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!

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.

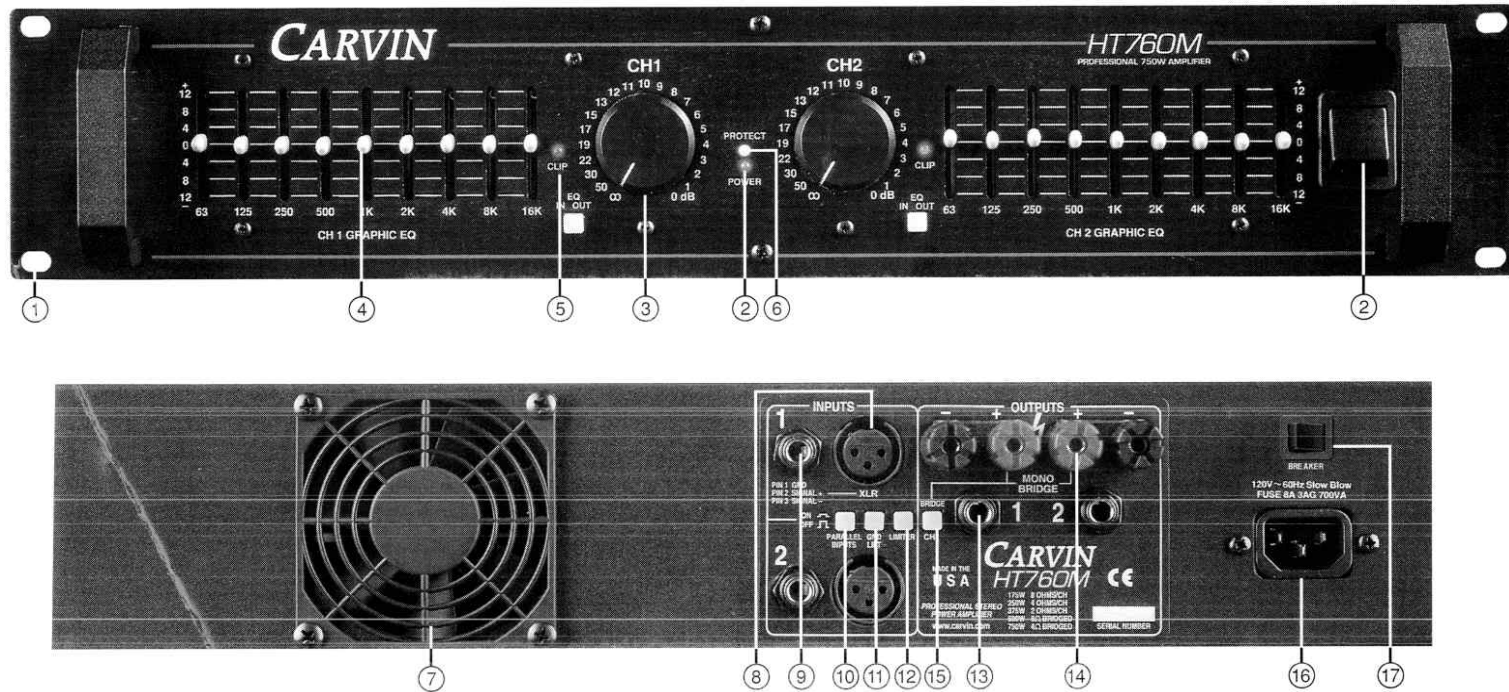
## SAFETY INSTRUCTIONS (EUROPEAN)

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.

## REPLACEMENT PARTS LIST

Parts list for HT760M Power Amplifier	Carvin P/N	Ref. Des.	Description
Binding Post, 2-way, Red/Black	03-10450	D1	Diode 1N4003 Rect Gen 1A 200V
Cover, Black 18GA Steel	10-82005	D2	Diode 1N4003 Rect Gen 1A 200V
Chassis	10-07509	D3	Diode 1N4003 Rect Gen 1A 200V
Fan, 24VDC 80mm	70-02408	O4	Diode 1N4003 Rect Gen 1A 200V
Fan Guard, 30x80mm	03-90080	D5	Diode 1N4003 Rect Gen 1A 200V
Handle, 2-space rack	10-11120	D6	Diode 1N4003 Rect Gen 1A 200V
Knob, Black, 1.25" DIA	07-09001	D7	Diode 1N4003 Rect Gen 1A 200V
Stand-off, Al, 1.5" Hex, 6-32	03-63315	D8	LED Red small #204HD 3mm T-1.0
Front insulator pad 3.8" OD	03-15004	D9	LED Yellow small #204YD 3mm T-1.0
Toroid cover	10-07501-2	D10	Diode 1N4003 Rect Gen 1A 200V
Rear label	77-07508	D11	Diode 1N4003 Rect Gen 1A 200V
Power cord (120V)	05-01603	D12	Diode 1N4003 Rect Gen 1A 200V
Power cord (230V)	05-01903	D13	Diode 1N4003 Rect Gen 1A 200V
10 Amp Circuit breaker (120V)	70-28110	D100	Diode 1N4003 Rect Gen 1A 200V
6 Amp Circuit breaker (230V)	70-28105	O101	Diode 1N4003 Rect Gen 1A 200V
Toroid (120V)	15-75160	D102	LED Green small #204GD 3mm T-1.0
Toroid (230V)	15-75260	O103	LED Red small #204HD 3mm T-1.0
C1, Capacitor 10KµF 63V, Poly 20%	42-10363	O104	LED Red small #204HD 3mm T-1.0
C2B, Capacitor 10KµF 63V, Poly 20%	42-10363	O106	Diode 1N4003 Rect Gen 1A 200V
R30, 1/4W Resistor 47K, .35" prep. 5% Carbon	50-47045	D107	Diode 1N4003 Rect Gen 1A 200V
		O108	Diode 1N4003 Rect Gen 1A 200V
		D109	Diode 1N4003 Rect Gen 1A 200V
		D120	Diode 1N4003 Rect Gen 1A 200V
		D201	Diode 1N4003 Rect Gen 1A 200V
		D202	LED Green small #204GD 3mm T-1.0
		D203	LED Red small #204HD 3mm T-1.0
		D204	LED Red small #204HD 3mm T-1.0
		D205	Diode 1N4003 Rect Gen 1A 200V
		D206	Diode 1N4003 Rect Gen 1A 200V
		D207	Diode 1N4003 Rect Gen 1A 200V
		D208	Diode 1N4003 Rect Gen 1A 200V
		D209	Diode 1N4003 Rect Gen 1A 200V
		D210	Diode 1N4003 Rect Gen 1A 200V
		D211	Diode 1N4003 Rect Gen 1A 200V
		D212	Diode 1N4003 Rect Gen 1A 200V
		D213	Diode 1N4003 Rect Gen 1A 200V
		D214	Diode 1N4003 Rect Gen 1A 200V
		D215	Diode 1N4003 Rect Gen 1A 200V
		D216	Diode 1N4003 Rect Gen 1A 200V
		D217	Diode 1N4003 Rect Gen 1A 200V
		D218	Diode 1N4003 Rect Gen 1A 200V
		D219	Diode 1N4003 Rect Gen 1A 200V
		D220	Diode 1N4003 Rect Gen 1A 200V
		D221	Diode 1N4003 Rect Gen 1A 200V
		D222	Diode 1N4003 Rect Gen 1A 200V
		D223	Diode 1N4003 Rect Gen 1A 200V
		D224	Diode 1N4003 Rect Gen 1A 200V
		D225	Diode 1N4003 Rect Gen 1A 200V
		D226	Diode 1N4003 Rect Gen 1A 200V
		D227	Diode 1N4003 Rect Gen 1A 200V
		D228	Diode 1N4003 Rect Gen 1A 200V
		D229	Diode 1N4003 Rect Gen 1A 200V
		D230	Diode 1N4003 Rect Gen 1A 200V
		D231	Diode 1N4003 Rect Gen 1A 200V
		D232	Diode 1N4003 Rect Gen 1A 200V
		D233	Diode 1N4003 Rect Gen 1A 200V
		D234	Diode 1N4003 Rect Gen 1A 200V
		D235	Diode 1N4003 Rect Gen 1A 200V
		D236	Diode 1N4003 Rect Gen 1A 200V
		D237	Diode 1N4003 Rect Gen 1A 200V
		D238	Diode 1N4003 Rect Gen 1A 200V
		D239	Diode 1N4003 Rect Gen 1A 200V
		D240	Diode 1N4003 Rect Gen 1A 200V
		D241	Diode 1N4003 Rect Gen 1A 200V
		D242	Diode 1N4003 Rect Gen 1A 200V
		D243	Diode 1N4003 Rect Gen 1A 200V
		D244	Diode 1N4003 Rect Gen 1A 200V
		D245	Diode 1N4003 Rect Gen 1A 200V
		D246	Diode 1N4003 Rect Gen 1A 200V
		D247	Diode 1N4003 Rect Gen 1A 200V
		D248	Diode 1N4003 Rect Gen 1A 200V
		D249	Diode 1N4003 Rect Gen 1A 200V
		D250	Diode 1N4003 Rect Gen 1A 200V
		D251	Diode 1N4003 Rect Gen 1A 200V
		D252	Diode 1N4003 Rect Gen 1A 200V
		D253	Diode 1N4003 Rect Gen 1A 200V
		D254	Diode 1N4003 Rect Gen 1A 200V
		D255	Diode 1N4003 Rect Gen 1A 200V
		D256	Diode 1N4003 Rect Gen 1A 200V
		D257	Diode 1N4003 Rect Gen 1A 200V
		D258	Diode 1N4003 Rect Gen 1A 200V
		D259	Diode 1N4003 Rect Gen 1A 200V
		D260	Diode 1N4003 Rect Gen 1A 200V
		D261	Diode 1N4003 Rect Gen 1A 200V
		D262	Diode 1N4003 Rect Gen 1A 200V
		D263	Diode 1N4003 Rect Gen 1A 200V
		D264	Diode 1N4003 Rect Gen 1A 200V
		D265	Diode 1N4003 Rect Gen 1A 200V
		D266	Diode 1N4003 Rect Gen 1A 200V
		D267	Diode 1N4003 Rect Gen 1A 200V
		D268	Diode 1N4003 Rect Gen 1A 200V
		D269	Diode 1N4003 Rect Gen 1A 200V
		D270	Diode 1N4003 Rect Gen 1A 200V
		D271	Diode 1N4003 Rect Gen 1A 200V
		D272	Diode 1N4003 Rect Gen 1A 200V
		D273	Diode 1N4003 Rect Gen 1A 200V
		D274	Diode 1N4003 Rect Gen 1A 200V
		D275	Diode 1N4003 Rect Gen 1A 200V
		D276	Diode 1N4003 Rect Gen 1A 200V
		D277	Diode 1N4003 Rect Gen 1A 200V
		D278	Diode 1N4003 Rect Gen 1A 200V
		D279	Diode 1N4003 Rect Gen 1A 200V
		D280	Diode 1N4003 Rect Gen 1A 200V
		D281	Diode 1N4003 Rect Gen 1A 200V
		D282	Diode 1N4003 Rect Gen 1A 200V
		D283	Diode 1N4003 Rect Gen 1A 200V
		D284	Diode 1N4003 Rect Gen 1A 200V
		D285	Diode 1N4003 Rect Gen 1A 200V
		D286	Diode 1N4003 Rect Gen 1A 200V
		D287	Diode 1N4003 Rect Gen 1A 200V
		D288	Diode 1N4003 Rect Gen 1A 200V
		D289	Diode 1N4003 Rect Gen 1A 200V
		D290	Diode 1N4003 Rect Gen 1A 200V
		D291	Diode 1N4003 Rect Gen 1A 200V
		D292	Diode 1N4003 Rect Gen 1A 200V
		D293	Diode 1N4003 Rect Gen 1A 200V
		D294	Diode 1N4003 Rect Gen 1A 200V
		D295	Diode 1N4003 Rect Gen 1A 200V
		D296	Diode 1N4003 Rect Gen 1A 200V
		D297	Diode 1N4003 Rect Gen 1A 200V
		D298	Diode 1N4003 Rect Gen 1A 200V
		D299	Diode 1N4003 Rect Gen 1A 200V
		D300	Diode 1N4003 Rect Gen 1A 200V
		D301	Diode 1N4003 Rect Gen 1A 200V
		D302	Diode 1N4003 Rect Gen 1A 200V
		D303	Diode 1N4003 Rect Gen 1A 200V
		D304	Diode 1N4003 Rect Gen 1A 200V
		D305	Diode 1N4003 Rect Gen 1A 200V
		D306	Diode 1N4003 Rect Gen 1A 200V
		D307	Diode 1N4003 Rect Gen 1A 200V
		D308	Diode 1N4003 Rect Gen 1A 200V
		D309	Diode 1N4003 Rect Gen 1A 200V
		D310	Diode 1N4003 Rect Gen 1A 200V
		D311	Diode 1N4003 Rect Gen 1A 200V
		D312	Diode 1N4003 Rect Gen 1A 200V
		D313	Diode 1N4003 Rect Gen 1A 200V
		D314	Diode 1N4003 Rect Gen 1A 200V
		D315	Diode 1N4003 Rect Gen 1A 200V
		D316	Diode 1N4003 Rect Gen 1A 200V
		D317	Diode 1N4003 Rect Gen 1A 200V
		D318	Diode 1N4003 Rect Gen 1A 200V
		D319	Diode 1N4003 Rect Gen 1A 200V
		D320	Diode 1N4003 Rect Gen 1A 200V
		D321	Diode 1N4003 Rect Gen 1A 200V
		D322	Diode 1N4003 Rect Gen 1A 200V
		D323	Diode 1N4003 Rect Gen 1A 200V
		D324	Diode 1N4003 Rect Gen 1A 200V
		D325	Diode 1N4003 Rect Gen 1A 200V
		D326	Diode 1N4003 Rect Gen 1A 200V
		D327	Diode 1N4003 Rect Gen 1A 200V
		D328	Diode 1N4003 Rect Gen 1A 200V
		D329	Diode 1N4003 Rect Gen 1A 200V
		D330	Diode 1N4003 Rect Gen 1A 200V
		D331	Diode 1N4003 Rect Gen 1A 200V
		D332	Diode 1N4003 Rect Gen 1A 200V
		D333	Diode 1N4003 Rect Gen 1A 200V
		D334	Diode 1N4003 Rect Gen 1A 200V
		D335	Diode 1N4003 Rect Gen 1A 200V
		D336	Diode 1N4003 Rect Gen 1A 200V
		D337	Diode 1N4003 Rect Gen 1A 200V
		D338	Diode 1N4003 Rect Gen 1A 200V
		D339	Diode 1N4003 Rect Gen 1A 200V
		D340	Diode 1N4003 Rect Gen 1A 200V
		D341	Diode 1N4003 Rect Gen 1A 200V
		D342	Diode 1N4003 Rect Gen 1A 200V
		D343	Diode 1N4003 Rect Gen 1A 200V
		D344	Diode 1N4003 Rect Gen 1A 200V
		D345	Diode 1N4003 Rect Gen 1A 200V
		D346	Diode 1N4003 Rect Gen 1A 200V
		D347	Diode 1N4003 Rect Gen 1A 200V
		D348	Diode 1N4003 Rect Gen 1A 200V
		D349	Diode 1N4003 Rect Gen 1A 200V
		D350	Diode 1N4003 Rect Gen 1A 200V
		D351	Diode 1N4003 Rect Gen 1A 200V
		D352	Diode 1N4003 Rect Gen 1A 200V
		D353	Diode 1N4003 Rect Gen 1A 200V
		D354	Diode 1N4003 Rect Gen 1A 200V
		D355	Diode 1N4003 Rect Gen 1A 200V
		D356	Diode 1N4003 Rect Gen 1A 200V
		D357	Diode 1N4003 Rect Gen 1A 200V
		D358	Diode 1N4003 Rect Gen 1A 200V
		D359	Diode 1N4003 Rect Gen 1A 200V
		D360	Diode 1N4003 Rect Gen 1A 200V
		D361	Diode 1N4003 Rect Gen 1A 200V
		D362	Diode 1N4003 Rect Gen 1A 200V
		D363	Diode 1N4003 Rect Gen 1A 200V
		D364	Diode 1N4003 Rect Gen 1A 200V
		D365	Diode 1N4003 Rect Gen 1A 200V
		D366	Diode 1N4003 Rect Gen 1A 200V
		D367	Diode 1N4003 Rect Gen 1A 200V
		D368	Diode 1N4003 Rect Gen

## FRONT & REAR PANEL CONTROLS



### FRONT PANEL

#### 1. MOUNTING

Sturdy one piece aluminum handles make for easy transporting along with facilitating rack installation. The rack mounting holes are designed on ISO standard spacing. Four 10-32 x .5" phillip machine screws are normally used to secure the amp. Rear support brackets are not required.

#### 2. POWER SWITCH

Check the power amp connections and verify the AC line power source before engaging the POWER switch. The red LED unmistakably indicates that all circuits are properly powered up. Yellow was chosen so the operator could see the other indicators from a distance.

#### 3. CHANNEL LEVEL CONTROL

A precision 41 step input LEVEL attenuate is used to adjust the volume levels. To deliver the amps full power without reducing the headroom of the signal source, the level controls should be turned up approximately 1/3 (15 on the dial).

#### 4. DUAL 9-BAND GRAPHIC EQUALIZERS

Controlling feed-back in a monitor system and fine tuning your sound are easy with the HT760M's two on-board EQ's. For feed-back, find the offending frequency (usually in the upper bands) 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. The sliders are designed to move hard so adjustments will stay in place.

#### 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. 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):

- 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) 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 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 is 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. The PROTECT LED will turn off when ready. Check for the following conditions: a) The rear intake air is restricted, b) Intake air is extremely warm, c) Front exhaust vents 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

#### 7. COOLING FAN

The fan is designed to pull air in to the amplifier. Do not restrict or block its intake or the amp will go into protect mode. Hot air entering the amp may also cause the amp to go into protect mode.

#### 8. XLR CHANNEL INPUTS

For most professional applications, use the XLR balanced inputs. This will help to reduce hum and allow for 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 Bal. signal and Pin 3: negative Bal. signal.

#### 9. CHANNEL 1/4" PHONE JACK INPUT

This stereo phone jack is designed to receive either balanced or unbalanced input signals. Balanced signals coming into this jack should be wired with the connector's tip going to signal + and the connector's ring to signal -. The connector's sleeve is then tied internally to ground through the GROUND LIFT switch.

#### 10. 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.

#### 11. 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 (1/4" & XLR) GROUND LIFT 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.

#### 12. LIMITERS

To activate the LIMITERS, engage the rear limiter switch. The built-in high quality limiters are recommended to hold down peaks that could cause early distortion. Limiters will help to rise 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 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!

#### 13. SPEAKER OUTPUTS

The standard 1/4" SPEAKER jacks are used for most applications. Turn the amp off before connecting your speakers.

#### 14. SPEAKER BINDING POSTS

For heavy-duty speaker connections, 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 (remove colored caps). Binding posts are spaced on ISO standards. Use the two center RED binding posts for BRIDGE speaker connections (see 15 BRIDGE MODE).

#### 15. 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 after you have made your speaker connections to the rear 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!

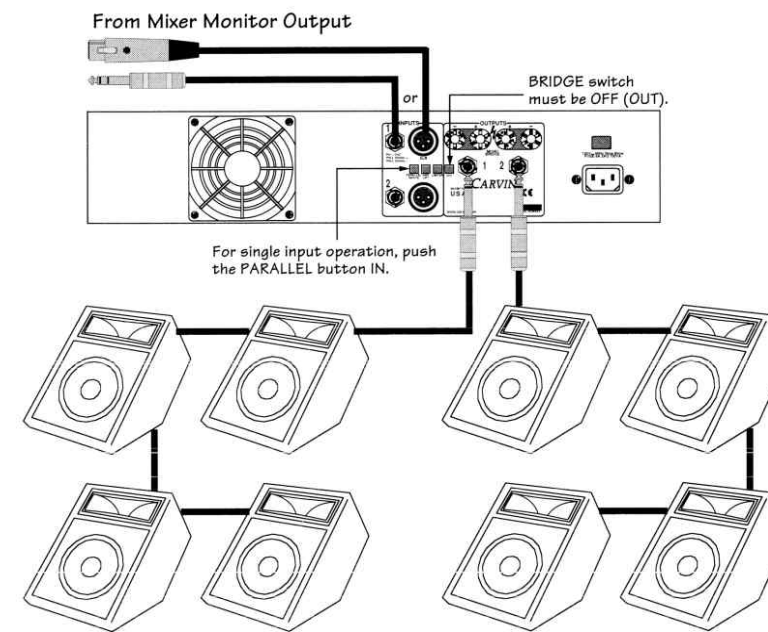
#### 16. AC POWER

Your amp is designed to run on either 120V 60 Hz or 230V 50Hz depending on the model purchased. The voltage range for 120V model is 95V to 132V and for 230V model it is 195V to 253V. The rear heavy-duty AC receptacle will accept a standard 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 its receptacle.

#### 17. AC CIRCUIT BREAKER

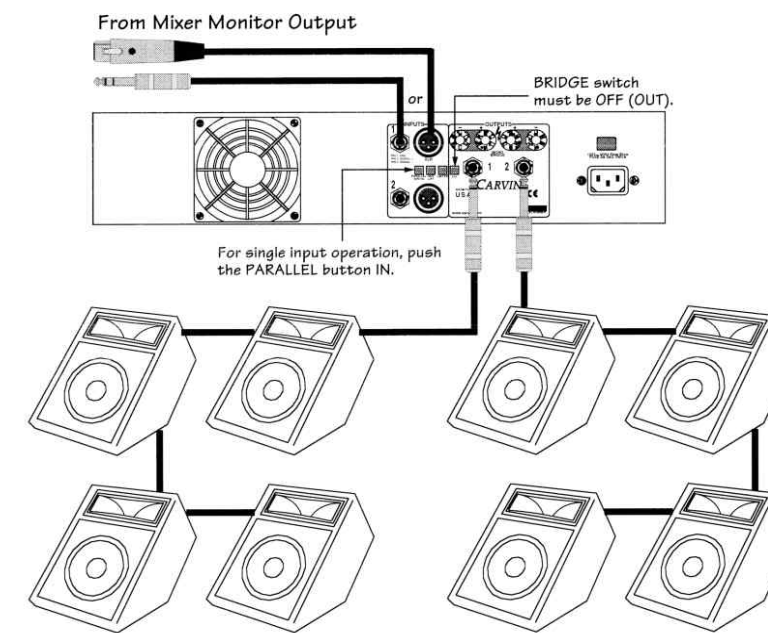
We have provided you with the convenience of a circuit breaker so that you will never have to replace a fuse. Occasionally the circuit breaker on your amp may have to be reset if high AC voltage surges are present or if the amp is used with excessive loads.

## TYPICAL SINGLE MONITOR MIX SETUP



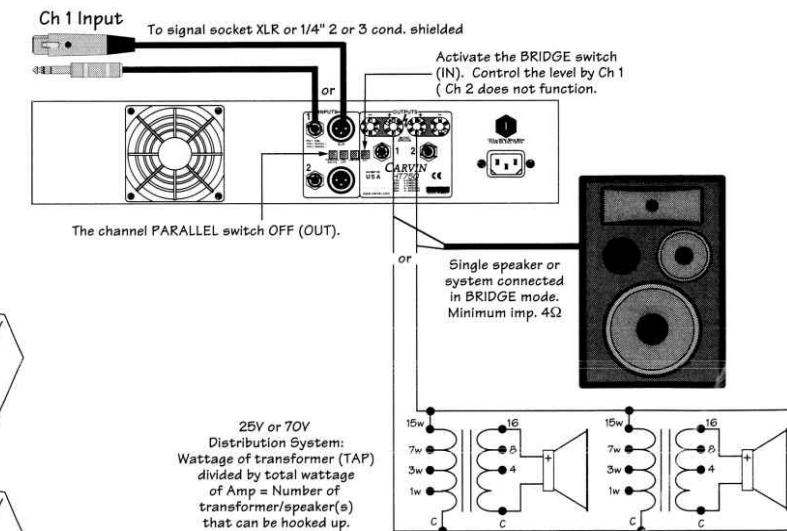
Up to four monitors per side using 8 ohm systems or two monitors per side with 4 ohm systems.

## TYPICAL DUAL MONITOR MIX SETUP



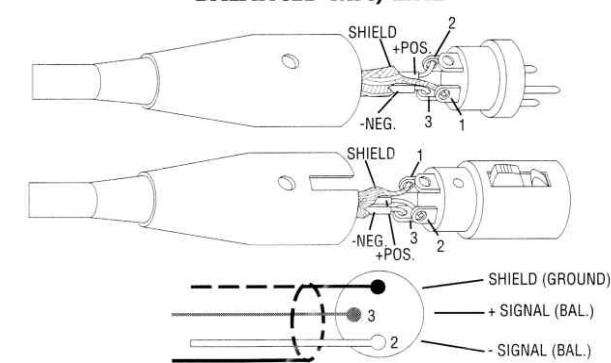
Up to four monitors per side using 8 ohm systems or two monitors per side with 4 ohm systems.

## 25V OR 70V DISTRIBUTION SYSTEM

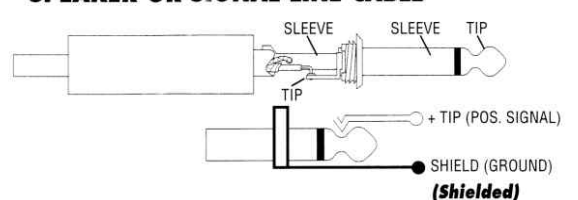


25V or 70V Distribution System: Wattage of transformer (TAP) divided by total wattage of Amp = Number of transformer/speaker(s) that can be hooked up.

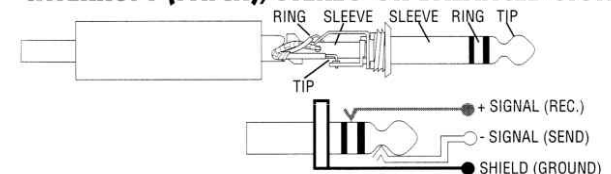
### (Shielded) BALANCED MIC/LINE



### (Unshielded) (Shielded) SPEAKER OR SIGNAL LINE CABLE



### INTERRUPT (PATCH)/STEREO OR BALANCED SIGNAL LINE



\* For monaural (mono) systems, depress the PARALLEL button (IN) and use only CHANNEL 1 input (speaker hookup identical to stereo). Mono is normally recommended for live stage applications. Live stereo sounds great in the center of the audience, however, the audience on one side will not hear the program material presented on the other side.

## Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>