

Pristine sound, brute power and no-fault reliability make the DCM amps the power amp of choice for pro audio. Designed for continuous operation. Massive Toroid power supplies with huge capacitors deliver the bass that kick drums demand -you will feel the deep, resonating beat.

Mechanically the DCM's are more rugged than the import amps that are so prevalent today. Each DCM is hand built at our San Diego factory featuring all steel construction, recessed controls and heavy-duty power components. The rocksolid, 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 its reliability. To insure pure, uncolored sound, we designed 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 any type of harshness which would lead to ear fatigue. The DCM 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 RMS 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 plated before painted to prevent rust. All internal cabling is neatly tied and harnessed. Every circuit card is FR-4 MILITARY SPEC, double-sided, through-hole plated, fire retardant glass epoxy. This insures 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 operation. This gives the power supply a solid foundation, yielding more headroom for the 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 for 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 it and re-install the replacement card in minutes. You don't have to de-solder anything. 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 total plug-in.

DISTORTION-FREE LIMITERS

The purpose of a limiter is to hold down peaks so the amp won't distort even with extra hot input signals (this protects your expensive speakers). In addition, a well designed limiter can increase your amp's average output as much as 3 db. Part of Carvin's design uses the more expensive, distortion-free linear "opto isolators". Unlike amps that use FET controlled limiters which can inject small amounts of distortion, the DCM Series limiters keep your sound pure and uncolored!

FRONT PANELS & CONNECTING UP

The DCM Series feature front panel signal, peak and protect LEDs which let you monitor the status of the amp. All channels use precision level controls allow-

ing you to see your settings at a glance. Balanced 1/4" phone jacks are used to eliminate hum & noise. Speaker outputs feature 1/4" jacks and high-current Twist-Lok connectors.

The rear professional accessory group offers a GROUND switch to remove the chassis ground from the 1/4" input. Two Parallel input switches connect the inputs of channels together eliminating Y connectors allowing amp patching in multiple amp systems. The accessory group also features a bridge mode switch for delivering full power into a 70V distribution system and a limiter ON/OFF switch that gives you the choice of using the internal limiter circuitry.

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: <u>www.carvin.com/registration</u> All other countries register online at: <u>www.carvinworld.com/registration</u>

POWER AMP SPECIFICATIONS:

MODEL	DCM1204			
Both Channels RMS Continue	DUS			
4Ω (20-20k Hz, <1.0%)	300/300/300/300w			
8Ω (20-20k Hz, <1.0%)	200/200/200/200w			
Bridged RMS Continuous (ch 2-3)				
8Ω, (20-20k Hz, <1.0%)	600w			
THD (Typical—1/2 power):	0.03%			
Damping Factor:	>350			
Slew Rate: bridged mode	>50v/µs			
Sensitivity: (4 Ω , 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			
Power Requirements:	120VAC 15 Amp circuit minimum			
	240VAC 8 Amp circuit minimum			

Fuse Internal-above AC cord : 25AMP slow blow

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

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

Rear: Ground Lift (each channel) • Parallel Input Switches • Speaker Output Bridge Switch • Limiters IN/OUT Switch • Input Connectors: Four; Balanced 1/4" • Speaker Output Connectors: Three highcurrent Twist-Lok (one bridged) & four 1/4" connectors

Dimensions: 3 1/2" High x 19" Wide x 10" Depth (2-space)

Net Weight: 23 lbs.



FRONT & REAR PANEL CONTROLS



FRONT PANEL

1. MOUNTING

Sturdy one piece 12 gauge steel face plate accommodates standard 19" 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

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.

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 flash when there is a signal passing to your speakers (- $30dB\mu$). 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 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. 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 active the PROTECT LED. The front cooling vents are not to be restricted from exhausting the warm air.

7. 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);

- 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) All four 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. <u>Reset this condition by turning the amp off for two seconds and then on again</u>. Check for shorted cables and the total speaker system impedance connected to each channel (4 ohms is the minimum per ch or 8 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 4 ohms per ch or 8 ohms BRIDGED)

REAR PANEL

8. Balanced 1/4" PHONE JACK INPUTs

This stereo 1/4" 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 tied to ground through the GROUND LIFT switch.

9. PARALLEL OR "Y" INPUT SWITCHES 1-2, 3-4

The rear PARALLEL switches allow you to drive two channels from one input. All signals from ch 1 or ch 2 will be available on channels 1&2, likewise channels 3&4. This eliminates Y adapter. This feature is also used to "daisy chain" one piece of equipment to another. Just plug into the unused INPUT 1/4" and it will become an output for other equipment.

10. INPUT GROUND LIFT

Many times sound systems are connected in such a manner to cause a grounded loop with the inputs which result in audible hum. The input GND LIFT (1/4") switch on the rear panel will help eliminate this problem. If not, another way to eliminate ground loops is to install Carvin's MTF55 "Ground Lifter" between the amplifier input and the signal source. This isolates the input ground from the AC power ground.

11. LIMITERS

To activate the LIMITERS, engage the rear limiter switch. The built-in optio isolator limiters are recommended to hold down peaks that could cause early distortion. These 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!

12. SPEAKER 1/4" OUTPUTS

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

13. SPEAKER OUTPUTS SPEAKON™

Speakon[™] connectors are provided for high power application. Secure the Speakon[™] connection by turning to the right. The center Speakon[™] is for Bridge only. The wiring of the three Speakon[™] connectors are:

First connector from the left:	Channel 1 pin 1+ pos. Pin 1- neg. Channel 2 pin 2+ pos. Pin 2- neg.		
Center connector: (for bridging only)	CH 2-3 bridge pin 1+ pos. Pin 1- neg. not used pin 2+ Pin 2-		
Third connector from the left:	Channel 4 pin 1+ pos. Pin 1- neg. Channel 3 pin 2+ pos. Pin 2- neg.		

This arrangement allows biamp connections with the out side Twist-Lokconnectors (see stereo biamping) and stereo plus a high power bridged subwoofer with all three Twist-Lok connectors (see stereo plus subwoofer).

14. 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 connections with the bridge Speakon[™]. The 1/4" speaker jacks can not be used at the same time! Select carefully or damage may result to your speakers. This is why the switch has been recessed. The INPUT and LEVEL is handled by channel 2. Channel 3 is non-operational. The minimum speaker impedance is 8 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.

15. 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 heavyduty 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. <u>Never defeat the grounded</u> <u>connection or electrocution may result!</u> Firmly push the AC cord all the way into its receptacle. In the case of a blown fuse; unplug the amp, remove the lid and replace the 20 amp fuse located in the back corner above where the AC cord connects to the circuit board.

Note: Each amp will require a dedicated 20 amp circuit if you are driving the amp to its full output. There will be a sustained loss of power if the AC voltage is below the rated 120V or 230/240V so be sure you use a heavy gauge power cable (and source).

TYPICAL STEREO SETUP WITH BRIDGED MONO SUBWOOFER



STEREO MAINS & TWO MONITOR MIXES



25V OR 70V DISTRIBUTION SYSTEM





STEREO BIAMPING





HELPFUL HINTS

- NO SOUND FROM CH 3: The rear 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 overpowering.

4) SYSTEM HUM: Try switching the GND LIFT switch IN or OUT (depending on your use). If 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.

 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 bass response will improve. 6) Note: Each amp will require a dedicated 20 amp circuit if you are driving the amp to its full output. There will be a sustained loss of power if the AC voltage is below the rated 120V or 230/240V input.





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

SWITCH DPDT PUSH PC MTG LOCKNG S3,

SWITCH 4PDT PUSH PC MTG LOCKNG S2

ASSEMBLED SWITCH AND CAP S1

CAP ELEC 10.000 MFD 80V 20%

CAP CERM 560PE 500VOLT 10% C184.

CAP ELEC 1,000 MFD 35V 20% C503,

CAP ELEC 220 MFD 50VOLT 10% C9

0.01UF SMT 10% FILM 080550V

C181, C281, C581, C681

0.001UF SMT 10% FILM 0805 50V C403

0.1 uF SMT 10% FILM 1206 50V C3, C4,

120PF SMT 5% CERAMIC 0805 C115, C116,

SMT CAP 22uF 35v ELECTROLITIC C313, C318,

C310, C219, C222, C114, C214, C514, C614 58-47025 4 EACH

C5, C6, C7, C8, C62, C63, C121 C221,

C215, C216, C515, C516, C615, C616

C120, C220, C520, C620 C110, C111, C118,

C210, C211, C218, C510, C511, C518, C610,

27 PF SMT 5% CERAMIC 0805 C113, C213,

C513, C613, C117, C217, C517, C617

39PF SMT 5% CERAMIC 0805 C112, C212.

C512, C612, C175, C176, C276, C576, C676

RES .33 OHM 5W 5% SB VERT R152, R153,

R154, R155, R252, R253, R254, R255, R562,

R553, R554, R555, R652, R653, R654, R655

RES 100.00 OHM 10W 10% SB SDOF R2

100.5 SMT .25W 1206 1% R1. R114.

R214, R514, R614, R405, R146, R149,

R156, R159, R246, R249, R256, R259,

R546, R549, R556, R559, R646, R649,

R618, R637, R642, R643, R644, R645,

R537, R542, R543, R544, R545, R137,

R142, R143, R144, R145, R237, R242,

R243, R244, R245, R318, R325, R135,

10K SMT .25W 1206 1% R112, R113,

R212, R213, R512, R513, R612, R613,

R119, R120, R219, R220, R519, R520,

R619, R620, R177, R277, R577, R677,

R320, R324, R336, R337, R130, R131,

R126, R226, R526, R626, R123, R124,

R223, R224, R523, R524, R623, R624,

100K SMT .25W 1206 1% R178, R179,

R278, R279, R331, R578, R579, R678,

R679, R32, R125, R225, R525, R625

R235, R535, R635, R31, R33

1K SMT .25W 1206 1% R118, R218, R518,

0.0047uF SMT FILM 0805 50V C317

0.047UF SMT 10% FILM 0805 50V

C180, C280, C580, C680

C177, C277, C577, C677

R656 R659

82PF SMT 5% CERAMIC 0805

C182 C282 C284 C582 C584 C682 C684

C501A, C502, C508, C509

S4. S5

EACH

EACH

EACH

EACH

EACH

EACH

EACH

EACH

PCB DCM1204

C504, C507

C611, C618

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 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 FACH CONNECT HEADER 10 PIN STRAIGHT H3A, H3B 58-15025 4 EACH

03-63294	1 EACH	STANDOFF ALUM 6-32x .25x .94	23-11010 2 EACH
03-63343	2 EACH	STDOFF ALUM ROU #6 L=.437"	25-02201 3 EACH
03-90080	1 EACH	GUARD FAN PLASTIC 80x80mm	
05-01603	1 EACH	PWR AC 3/16AWG 8' 2" W/PLUGS	25-02201-1 EACH
05-60420	1 EACH	CABLE RIBBON 24A 10P/ 8" W/HDR	25-04201 1 EACH
05-60435	1 FACH	CABLE RIBBON 244 10P/14" W/HDR	30-01204B 1 FAC
05-64410	1 FACH	CABLE RIBBON 24A 4P/ 4" W/HDR	42-10381 4 FACH
05-64410			42-10301 4 LACI
05-04420			45 5/152 0 FACU
05-04430		CABLE RIBBON 24A 4P/12 W/HDR	40-00102 8 EACH
05-68440	Z EACH	CABLE RIBBON 24A 8P/16" W/HDR	47 40005 0 5400
05-84628	1 EACH	CABLE ASSY, 4C 280MM	47-10235 3 EACH
05-84616	1 EACH	CABLE ASSY, 4C 160MM	
07-09012	4 EACH	KNOB RECESSED MED 25.0mm BLACK	47-22151 1 EACH
10-15045	1 EACH	PLATE TOROID 4.5" DIA 14A GALV	49-10212 1 EACH
10-01204A	1 EACH	FRONT PANEL 2 SPACE DCM 2/4 CH	49-10312 4 EACH
10-07504	1 EACH	FRONT PANEL INSERT 2-RACK SPAC	
10-07507A	1 EACH	BRACKET FRONT CONTROL DCM/HT	49-10451 17 EAC
10-82005	1 EACH	LID DCM POWER AMPS	
10-10008C	1 EACH	CHASSIS 2 SPACE UNIVERSAL	
15-10172	1 EACH	TOROID 120V DCM1000	49-12152 8 EACH
20-32002	1 EACH	CONNECT THRU .100" 22AWG 2 PIN	
25-31350	1 EACH	SWITCH DPST ROCKER BLACK POWER	49-22035 18 EAC
76-01204A	1 EACH	MANUAL DCM1204	
77-120494	1 FACH	LABEL FRONT DCM1204	
77-07521			
77-012040			40-27052 8 EACH
00.012040		DOM1204 4 CU nouver emp	49-2/032 0 EACH
80-01204		DCW1204 4 CH power amp	40 20052 0 5401
02 00220 4	FACU		49-39052 9 EACH
03-00220 4	EACH	INSELR MICA .0030 .450 X .05	
00.004500.4	FAOL	U106, U206, U506, U606	49-47212 1 EACH
03-004500 1	EACH	INSLIR HISNK 12-01200 SNGL ADH	49-47312 4 EACH
03-00451B 1	EACH	INSLTR HTSNK 12-01200 DBL ADHV	
03-00503 13	EACH	INSULATOR .36X .36X .20" 85deg	49-82052 4 EACH
		On top of each TO-220 package	
03-50135 1	EACH	STANDOFF LED .500 X .135 T1 D36	55-03300 16 EAC
03-92521 10	EACH	STANDOFF LED .925 x .215 T1	
		D26, D33, D34, D103, D203, D27, D29,	
		D32, D35, D28	56-10025 1 EACH
06-10028 16	EACH	MS PPH 4-40X .500 ZINC TYPE F	58-10025 22 EAC
06-10032 4	EACH	MS PPH 4-40X 1.500 TYPE F ZINC	
07-01603 4	EACH	KNOB "6L" 6x6x17.4mm GREY CAP	
		S2, S3, S4, S5	
12-01200C 2	EACH	HEATSINK 225.6MM SMT 1200W 12	
12-57462 2	FACH	HEATSINK VERT W/TABS T0-220 VR3 VR4	58-10035 32 EAC
15-00105 4	FACH	COIL AIR 1 5uH 14AWG 1 1 1 2 1 100 1 200	30-10033 32 EAG
21.21100 1	EACH		
21-31100 1	EACH	SDEAKON & DOLE DOMTO #NILAMD V 11 12 12	
21-40000 0		SPEAKON 4-FOLE FONTO #INE4ND-V J1, J2, J3	
21-52345 4	EACH	JACK .250 PHONE MONO STEEL	
		J101, J201, J501, J601	
21-51545 4	EACH	JACK .250"PHONE STEREO PLASTIC	58-10045 38 EAC
		J102, J202, J502, J602	
23-08604 5	EACH	CONNECT HEADER .086" 4 PIN H5A, H5B,	
		H9B (H9A, H10 SECONDARY BACK SIDE)	
23-08609 1	EACH	CONNECT HEADER .086" 9 PIN H7	
23-10002 5	EACH	CONNECT HEADER .100" 2 PIN	
		H12, Hbias1, Hbias2, Hbias3, HBIAS4	
23-11004 6	EACH	CONNECT HEADER 4 PIN STRAIGHT	58-10055 14 EAC
		H1A, H1B, H11A, H11B, H12A, H12B	
23-11008 4	EACH	CONNECT HEADER 8 PIN STRAIGHT	

H2A, H2B, H13A, H13B

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.

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.

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

58-15035 1 EACH

58-15045 8 EACH

58-15055 8 EACH

58-18035 1 EACH

58-22025 1 EACH

58-22035 8 EACH

58-22045 3 EACH

58-22055 1 EACH

58-27045 1 EACH

58-33035 2 FACH

58-33045 4 EACH

58-47035 19 EACH

58-47045 10 EACH

58-47055 14 EACH

58-56035 1 EACH

58-68025 4 EACH

58-68045 1 EACH

58-92201 28 EACH

60-31000 4 EACH

60-21193A 8 EACH

60-21194A 8 EACH

60-15032 4 EACH

60-15033 4 EACH

60-35041 1 EACH

60-50253 4 EACH

60-75320 6 EACH

60-75330 4 EACH

60-75340 1 EACH

60-78150-1 EACH

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

60-79120-1 EACH 150ohm SMT .50W 1206 1% R148, R248, R548, R648 60-79150-1 EACH 1.5K SMT .25W 1206 1% R312 62-00014 1 EACH 15K SMT .25W 1206 1% R121, R122. 62-06001 14 EACH R221, R222, R521, R522, R621, R622 150K SMT .25W 1206 1% R102, R202. R502, R602, R132, R232, R532, R632 62-19140 38 EACH 1.8K SMT .25W 1206 1% R315 220.5 SMT .25W 1206 1% R3 2 2K SMT 25W 1206 1% R100 R101 R133, R233, R500, R533, R600, R633 22K SMT .25W 1206 1% R319, R317, R327 62-03400 5 EACH 220K SMT .25W 1206 1% R9 27K SMT .25W 1206 1% R323 62-03500 4 EACH 3.3K SMT .25W 1206 1% R309, R329 33K SMT .25W 1206 1% 62-20430 7 EACH R104, R204, R504, R604 470.5 SMT .25W 1206 1% 62-29010 2 EACH 62-45650 6 EACH R140, R240, R540, R640 4.7K SMT .25W 1206 1% R134, R139, R141 R234, R239, R241, R326, R534, R539, R541, 62-54001 10 EACH R634, R639, R641, R30, R200, R128, R228, R528, R628 47K SMT .25W 1206 1% R176, R276, 62-55500 10 EACH R576, R314, R311, R138, R238, R538, R676, R638 70-02408A 1 EACH 470K SMT .25W 1206 1% R322, R10, R127. 70-05710 5 EACH R227, R527, R627 R115, R116, R215, R216, R515, R516, R615, R616 70-22125 1 EACH 5.6K SMT .25W 1206 1% R321 71-09221 4 EACH 680 SMT .25W 1206 1% R147, R247, R547, R647 71-24500 4 EACH 68K SMT .25W 1206 1% R330 22 SMT 1W 2512 20% R5, R6, R11, R12, R13, R14, R15, R16, R550, R551, R23, R25, R26, R27, R650, R651, R136, R150, R151, R182, R332, R333, R334, R335 R250, R251, R419, R420 **BIPOLAR PWR TIP31C NPN 3A 100V** 0106. 0206. 0506. 0606 TRNS PWR MJW21193 PNP TO-247 0114. Q116, Q214, Q216, Q514, Q516, Q614, Q616 TRNS PWR MJW21194 NPN TO-247 0110. Q115, Q210, Q215, Q510, Q515, Q610, Q615 TRANS MJE15032 NPN T0-220 0107.0207.0507.0607 TRANS MJE15033 PNP T0-220 Q111, Q211, Q511, Q611 RECTIFIER BRIDGE 35AMP/400V PC OPTO ISOLATOR VACTROL AXIAL OP100, OP200, OP500, OP600 LED RED DIFFUSED 3MM T-1.00 D28, D33, D34, D103, D203 (ALL WITH STANDOFF) D36 WITH 03-50135 STANDOFF LED GREEN DIFFUSED 3MM T-1.00 D27, D29, D32, D35 (ALL WITH STANDOFF) LED YELLOW DIFFUSED 3MM T-1.00 D26(WITH STANDOFF) REG VOLT 15+V 1A (PREPPED) VR3

REGULATOR VOLTAGE 12 (PREPPED) Q7 REG VOLT 15-V 1A (PREPPED) VR4 MMBTA14 SOT-23 SMT 04 DIODE ULTRA FAST 600V 1A SMA D108, D109 D208, D209, D501B, D502B, D503B, D504B, D505B, D506B, D508, D509, D608, D609 1N914 HI SPD SMT 250mW DIODE D2, D3, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D19, D106, D107, D111, D206, D207, D310, D311, D312, D506, D507, D606, D607, D1, D4, D25, D18, D20, D21, D22, D100, D30, D31 TRANSISTOR SMT MJD340 Q105, Q205, Q301, Q505, Q605 TRANSISTOR SMT PNP MJD350 Q104, Q204, Q504, Q604 NJM2043SMT(TESTED) DUAL HFREQ A100, A200, A500, A102, A202, A502, A602 NJM2901SMT QUAD COMP A1, A2 NJM4565 SMT DUAL HI FREQ A20, A21, A101, A201, A501, A601 MMBT5401LT1 PNP SOT-23 SMT Q117, Q217, Q303, Q517, Q103, Q203 Q503, Q304, Q603, Q617 MMBT5550 NPN SOT-23 Q2, Q10, Q9, Q302, Q17, Q102, Q202, Q502, Q14, Q602 FAN DC24V 80mm X 80mm X 25mm 4 RELAY SPDT 12A@120VAC/24V COIL K1, K100, K200, K300, K400 FUSE MDA 25.00A SLOW 6.35X32MM F1 POT 9 D-P B10K 21 DETENT P100, P200, P500, P600 POT VERT TRIMMER 500ohm PHILL P101, P201, P501, P601