

CP900, CP1800

Pristine sound, brute power and no-fault reliability make the DCM amps the power amp of choice for pro audio. Massive Toroid power supplies with huge capacitors deliver the bass that kick drums demand. Designed for continuous operation, overheating is not a problem, especially down at 2 ohms where other amps simply turn off. Drive up to four 8 ohm speaker systems per channel and never worry about a shutdown!

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. SpeakonTM 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. I 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 pro tection 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 or below on this manua 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 allow ing 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 input together eliminating Y cables for patching multiple amp systems. The accessor group also features a BRIDGE MODE switch to deliver twice the power into a "monoload or full power into a 70V distribution system, and a LIMITER ON/OFF switch gives the choice of using the internal limiter circuitry.

CP POWER AMP SPECIFICATIONS:

MODEL	CP900	CP1800
Bridged RMS Continuous		
4 , (20-20k Hz, <1.0%)	900w	1800w
8, (20-20k Hz, <1.0%)	600w	1200w
Both Channels RMS Continuous		
2 (20-20k Hz, <1.0%)	450/450w	900/900w
4 (20-20k Hz, <1.0%)	300/300w	600/600w
8 (20-20k Hz, <1.0%)	175/185w	350/350w
THD (20-20k Hz 50% power)	0.03%	0.03%
THD (20-20k Hz 90% power)	0.1%	0.1%
Damping Factor:	>500	>500
Slew Rate: bridged mode	>50v/µs	>50v/µs
Sensitivity: (4, Vms)	1.0 V	1.0 V
Signal to Noise Ratio:	Above 100d	В
Frequency Response:	±0.5 dB, 20 h	Iz to 20kHz
	(±1.5 dB, 10	Hz & 40 kHz)
Innut Imnedance:	>20K halan	red

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 - DCM600: 15A, DCM1000: 20A, 240V/10A, DCM1500: 20A, 240V/10A

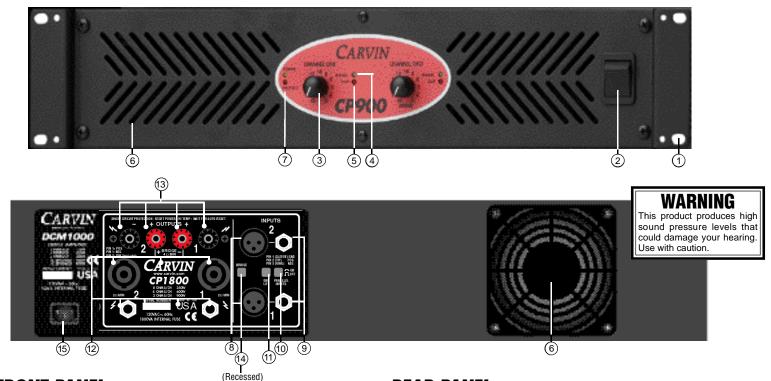
Dimensions: 3 1/2" High x 19" Wide x 10" Depth (2-space) **Net Weight:** CP900: 24 lbs. CP1800: 26 lbs.

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

Serial No.______ Invoice Date_____

CARVIN

12340 World Trade Drive, San Diego, CA 92128



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 start to flash when there is a low signal passing to your speakers (-30dBu). This lets you know when the amp is passing a signal to your speaker connectors.

5. CHANNEL CLIP INDICATOR

The red CLIP LED indicators flash when each channel has reached its maximum output. Occasional flashing caused by low frequencies is OK. However, consistent flashing caused by 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.

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 and the speaker relays disconnect the 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) When the output load draws excessive current or a direct short is detected caused by a shorted speaker cable or speaker system, the RED PROTECT LED will illuminate. <u>Reset this condition by turning the amp off for two seconds and then on again.</u> Check for shorted cables and that the total speaker impedance is not below 2 ohms per channel (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 3 minutes. The PROTECT LED will turn off when ready. Check for the following conditions; a) The rear intake air is not restricted, b) The intake air is not extremely warm, c) The front exhaust vents are not restricted, or d) No excessive speaker load (try other speakers or remove speakers if you have more than one connected to each channel).

REAR PANEL

8. XLR CHANNEL INPUTS

For most applications, use the XLR balanced inputs. This will help to reduce hum 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 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" TRS INPUT

This TRS 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 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.

11. INPUT GROUND LIFT

Many times sound systems are 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. If not, install a Carvin's MTF55 "Ground lifter" between the amplifier input and the signal.

12. 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.

13. SPEAKER BINDING POSTS

For high power 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 from end of binding posts). Binding posts are spaced on ISO standards. Use the two center RED binding posts to BRIDGE speaker connections (see 15 BRIDGE MODE).

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

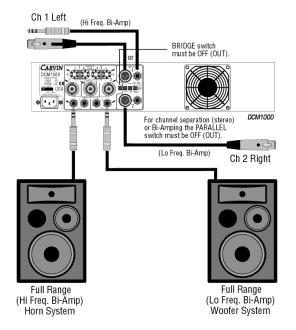
The DCM's can be operated in bridge mode if you require a 25V / 70V mono distribution speaker system or a mono (single channel) amp, which doubles the power into a single load. With your amp off, push "IN" the rear (recessed) BRIDGE switch after you have made your connections to either the bridge Speakon™ or the rear center RED binding posts (ch 1 is + and ch 2 is -). Carefully select or damage may result to the speakers (this is why the switch has been recessed). No other speaker connectors or binding posts can be used at the same time! The INPUT connector and LEVEL is handled by channel 1. Channel 2 is non-operational. The minimum speaker impedance is 4 ohms. CAUTION: The power developed by bridging your amp can destroy most speakers.

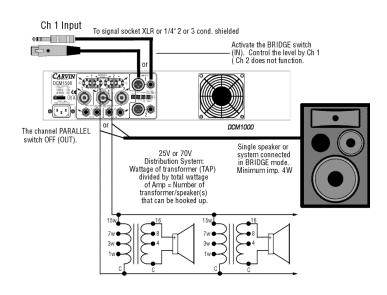
15. AC POWER

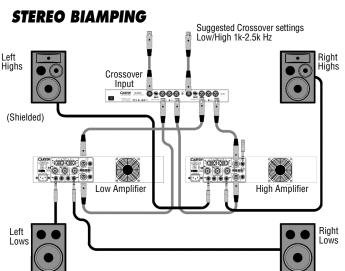
Your amp is designed to run on either 120V 60 Hz or 240V 50Hz depending on the model purchased. The voltage range for 120V model is 95V to 132V and for 240V model it is 195V to 255V. The rear heavy-duty AC receptacle will accept a universal grounded AC cord that is designed your country. Be sure to check 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.

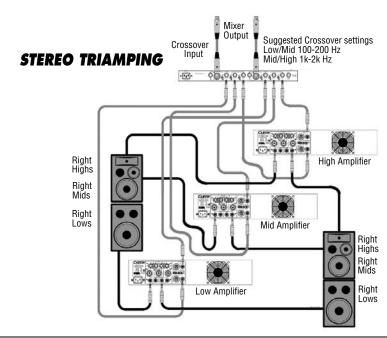
FUSE: The fuse is located within the main chassis above the AC connector mounted on the rear, inside the PC card. Normaly if the fuse fails, the amp will require service. See spec. chart for fuse values.

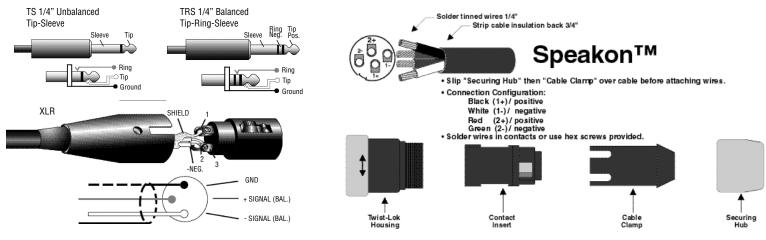
NOTE: Each amp will require a dedicated 20 amp circuit if you are driving the amp to its full output. There will be a sustained loss of power if the AC voltage is below the rated 120V or 230/240V. Use a heavy gauge power cable and power source.











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.
- NO HIGH FREQUENCIES: Tweeters or midrange drivers have been damaged or blown from feedback or overpowering.
- 4) SYSTEM HUM: Switch the rear GND LIFT switch IN or OUT. 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.
- 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 bass response will improve.
- 20 AMP CIRCUIT: Each amp will require a dedicated 20 amp circuit for its full output. There will be a sustained loss of power if the AC voltage is below the rated 120V or 230/240V input.

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



intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying

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 ORIG-INAL 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 CON-SEQUENTIAL 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..

50-20045

50-68035 R220

50-22065

R222

R223

R22 R22 R230 R23 R232 R233 R23 R235 R23 R238 R239 R24 R250 S3 VR2 VR3

REPLACEMENT PA IST FOR DCM AMPS



1/4W Resistor 20K

CAUTION RISK OF ELECTRIC SHOCK

.35" prep. 5% Carbor

.35" prep. 5% Carbon .35" prep. 5% Carbon

REFER SERVICING TO QUALIFIED SER-VICE PERSONNEL! THIS UNIT CON-TAIN

irts list for PCB Card HT Series Power Amplifiers	Carvin P/N	D108 Diode	1N4003	Rect Gen 1A 200\
ef. Des. Description	Carvin P/N	D109 Diode	1N4003	Rect Gen 1A 2001

Des.	Description	
	IC Op Amp NE5532	Linear Output
	IC Op Amp MC4558	CP1 Dual HFREQ
	IC Op Amp NE5532	Linear Output
	IC Op Amp NE5532	Linear Output
	IC Op Amp MC4558	CP1 Dual HFREQ
	IC Op Amp MC4558	CP1 Dual HFREQ
	IC Op Amp MC4558	CP1 Dual HFREQ
	IC Op Amp NE5532	Linear Output
	Binding Post Red/Black	Combo
	Binding Post Red/Black	Combo
	Diode Bridge AC/DC PCB	
	Capacitor 1000µF 35V	Electrolytic 20%
	Capacitor 1000µF 35V	Electrolytic 20%
	Capacitor 0.047µF 100V	Poly 10%
	Capacitor 0.047µF 100V	Poly 10%
	Capacitor 220µF 50V	Electrolytic 20%
	Capacitor 10µF 50V	Electrolytic 20%
	Capacitor 0.047µF 100V	Poly 10%
	Capacitor 0.047µF 100V	Poly 10%
	Capacitor 0.047µF 100V	Poly 10%
	Capacitor 0.047µF 100V	Poly 10%
	Capacitor 0.047µF 100V	Poly 10%
	Capacitor 0.047µF 100V	Poly 10%
	Capacitor 470µF 25V	Electrolytic 20%
)	Capacitor 27PF 500V	Ceramic 5%
1	Capacitor 27PF 500V	Ceramic 5%
2	Capacitor 22µF 50V	Electrolytic 20%
4	Capacitor 27PF 500V	Ceramic 5%
5	Capacitor 0.047µF 100V	Poly 10%
Des.	Description	
)	Capacitor 0.001µF 100V	Poly 10%
1	Capacitor 22µF 50V	Electrolytic 20%
5	Capacitor 27PF 500V	Ceramic 5%
ŝ	Canacitor 56PF 500V	Ceramic 5%

14	Capacitor 27PF 50	οv	Ceramic 5%
15	Capacitor 0.047µF		Polv 10%
. Des.	Description		
0	Capacitor 0.001µF	100V	Poly 10%
1	Capacitor 22µF 50		Electrolytic 20°
5	Capacitor 27PF 50		Ceramic 5%
6	Capacitor 56PF 50		Ceramic 5%
7	Capacitor 120PF 5		Ceramic 5%
8	Capacitor 10µF 631		Electrolytic 20°
9	Capacitor 0.047µF	100V	Poly 10%
0.	Capacitor 0.001µF	100V	Poly 10%
1	Capacitor 0.068µF	100V	Poly 10%
10	Capacitor 27PF 50	OV	Ceramic 5%
11	Capacitor 27PF 50	OV	Ceramic 5%
12	Capacitor 22µF 501	/	Electrolytic 20°
14	Capacitor 27PF 50	OV	Ceramic 5%
15	Capacitor 0.047µF	100V	Poly 10%
0	Capacitor 0.001µF	100V	Poly 10%
1	Capacitor 22µF 501		Electrolytic 20°
5	Capacitor 27PF 50		Ceramic 5%
6	Capacitor 56PF 50		Ceramic 5%
7	Capacitor 120PF 5	VOC	Ceramic 5%
8	Capacitor 0.047µF	100V	Poly 10%
9	Capacitor 0.047µF	100V	Poly 10%
.0	Capacitor 0.001µF		Poly 10%
11	Capacitor 0.068µF		Poly 10%
	Diode 1N4003	Rect Ge	n 1A 200V
	Diode 1N4003		n 1A 200V
	Diode 1N4003		n 1A 200V
	Diode 1N4003		n 1A 200V
	Diode 1N4003		n 1A 200V
	Diode 1N4003		n 1A 200V
	Diode 1N4003		n 1A 200V
			3mm T-1.0
	LED Yellow small		3mm T-1.0
)	Diode 1N4003		n 1A 200V
	Diode 1N4003		n 1A 200V
2	Diode 1N4003		n 1A 200V
3	Diode 1N4003		n 1A 200V
00	Diode 1N4003		n 1A 200V
)1	Diode 1N4003		n 1A 200V
)2			3mm T-1.0
)3			3mm T-1.0
)4	LED Red small		3mm T-1.0

IRT	5 LI
Carvin P/N	D108
Carvin P/N	D100
60-55320	D200
60-45580	D201
60-55320	D202
60-55320	D203
60-45580	D204
60-45580	D205
60-45580 60-55320	D206 D207
03-10400	D207 D208
03-10400	D209
60-35041	H1-A
47-10235	H1-B
47-10235	H2
46-47312	H2-A
46-47312	H2-B
47-22151	H3-A
47-10051 46-47312	H3-B H4-A
46-47312	H4-B
46-47312	H5
46-47312	H6-A
46-47312	H6-B
46-47312	H7
47-47125	J100
45-27052	J101
45-27052	J102
47-22051 45-27052	J200 J201
46-47312	J201
Carvin P/N	Ref. Des.
46-10212	K100
47-22051	K200
45-27052	L100
45-56052	L200
45-12052	0P1
47-10061 46-47312	OP2 P100
46-10212	P101
46-68312	P200
46-68312 45-27052	P200 P201
45-27052 45-27052 47-22051	P201 Q1 Q2
45-27052 45-27052 47-22051 45-27052	P201 Q1 Q2 Q100
45-27052 45-27052 47-22051 45-27052 46-47312	P201 Q1 Q2 Q100 Q101
45-27052 45-27052 47-22051 45-27052 46-47312 46-10212	P201 Q1 Q2 Q100 Q101 Q102
45-27052 45-27052 47-22051 45-27052 46-47312 46-10212 47-22051	P201 Q1 Q2 Q100 Q101 Q102 Q103
45-27052 45-27052 47-22051 45-27052 46-47312 46-10212 47-22051 45-27052	P201 Q1 Q2 Q100 Q101 Q102 Q103 Q104
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45-27052 45-27052 47-22051 45-27052 46-47312 46-10212 47-22051 45-57052 45-56052 45-12052 46-47312	P201 Q1 Q2 Q100 Q101 Q102 Q103 Q104 Q105 Q106 Q107

60-40030 60-40030 60-40030 60-40030 60-40030

60-40030 60-75320

60-75340

60-40030 60-40030 60-40030 60-40030 60-40030 60-75330 R6

60-75320 60-75320 0205

Q208

0209

1/4W Resistor 470K

.35" prep. 5% Carbon

	Diode 1N4003 Rect Gen 1A 200V
	Diode 1N4003 Rect Gen 1A 200V
	Diode 1N4003 Rect Gen 1A 200V
	LED Green small #204GD 3mm T-1.0
	LED Red small #204HD 3mm T-1.0 LED Red small #204HD 3mm T-1.0
	Diode 1N4003 Rect Gen 1A 200V
	Diode 1N4003 Rect Gen 1A 200V
	Diode 1N4003 Rect Gen 1A 200V
	Diode 1N4003 Rect Gen 1A 200V Diode 1N4003 Rect Gen 1A 200V Header 4 Pin AMP 9A 600V PCB MTG
	Diode 1N4003 Rect Gen 1A 200V
	Header 4 Pin AMP 9A 600V PCB MTG Header 4 Pin AMP 9A 600V PCB MTG
	Header 2 Pin Vert Panduit PCR MTG
	Header 4 Pin Vert SHS 2.5mm PCB MTG Header 4 Pin Vert SHS 2.5mm PCB MTG
	Header 4 Pin Vert SHS 2.5mm PCB MTG
	Header 10 Pin Vert SHS 2.5mm PCB MTG
	Header 10 Pin Vert SHS 2.5mm PCB MTG
	Header 10 Pin Vert SHS 2.5mm PCB MTG Header 10 Pin Vert SHS 2.5mm PCB MTG
	Header 2 Pin Vert Panduit PCB MTG
	Header 4 Pin AMP 9A 600V PCB MTG
	Header 4 Pin AMP 9A 600V PCB MTG
	Header 9 Pin AMP 9A 600V PCB MTG
	XLR Jack Female Neutrik Vert PCB MTG
	Phone Jack, 1/4" 7 Pin Plastic, 24mm Tall Phone Jack, 1/4" 3 Pin Plastic, 24mm Tall
	XLR Jack Female Neutrik Vert PCB MTG
	Phone Jack, 1/4" 7 Pin Plastic, 24mm Tall Phone Jack, 1/4" 3 Pin Plastic, 24mm Tall
_	Phone Jack, 1/4" 3 Pin Plastic, 24mm Tall
s.	Description Relay 24V124 SPDT SIEMENS PCR MGT
	Relay 24V12A SPDT SIEMENS PCB MGT Relay 24V12A SPDT SIEMENS PCB MGT
	Inductor 3.3µH Air Core Spool Inductor 3.3µH Air CoreSpool
	Inductor 3.3µH Air CoreSpool
	Opto Isolator VTL5C2 Opto Isolator VTL5C2
	Pot. B10Kx2 41Clk Brkt Rot Knurled 90° Pot. Trimmer 5K Vert PCB MTG Pot. B10Kx2 41Clk Brkt Rot Knurled 90°
	Pot. Trimmer 5K Vert PCB MTG
	Pot. B10Kx2 41Clk Brkt Rot Knurled 90°
	Pot. Trimmer 5K Vert PCB MTG
	Transistor Darlington NPN MPSA14 Transistor 2N5400 PNP AMP TO-92
	Transistor Darlington NPN MPSA14
	Transistor Darlington NPN MPSA14 Transistor TIP31C 3A 100V NPN TO-220
	Transistor MPSW42 HV 1.0W NPN T0-237
	Transistor CENW92 HV PNP 1.0W TO-92 Transistor TIP32C 3A 100V PNP TO-220
	Transister, TID01C 0A 100V NDN TO 000
	Transistor MJ21193 PNP 16A 250V 200W Transistor MJL21194 NPN 16A 250V 200W Transistor MJL21193 PNP 16A 250V 200W Transistor MJL21193 PNP 16A 250V 200W Transistor MJL21193 PNP 16A 250V 200W
	Transistor MJL21194 NPN 16A 250V 200W
	Transistor MJL21194 NPN 16A 250V 200W
	Transistor M.II 21193 PNP 16A 250V 200W
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	Transistor MPSW42 HV 1.0W NPN T0-237
	Transistor CENW92 HV PNP 1.0W TO-92
	Transistor TIP31C 3A 100V PNP TO-220
	Transistor TIP31C 3A 100V NPN TO-220 Transistor TIP31C 3A 100V NPN TO-220
	Transistor M II 21104 NDN 164 260V 200W
	Transistor MJL21194 NPN 16A 250V 200W
	Transistor MJL21194 NPN 16A 250V 200W Transistor MJL21194 NPN 16A 250V 200W Transistor MJL21193 PNP 16A 250V 200W Transistor MJL21193 PNP 16A 250V 200W
	1/4W Resistor 2 2K 35" nren 5% Carhon
	1/4W Resistor 3.3K .35" prep. 5% Carbon
	1/4W Resistor 100K .35" prep. 5% Carbon
	Iransistor MJL21193 PNP 16A 250V 200W 1/4W Resistor 2.2K 35" prep. 5% Carbon 1/4W Resistor 100K 35" prep. 5% Carbon 1/4W Resistor 100K 35" prep. 5% Carbon 1/4W Resistor 150 35" prep. 5% Carbon 1/4W Resistor 39K 35" prep. 5% Carbon 1/4W Resistor 39K 35" prep. 5% Carbon 1/4W Resistor 470K 35" prep. 5% Carbon 1/4W Resistor 470K 35" prep. 5% Carbon
	1/4W Resistor 39K .35" prep. 5% Carbon
	1/4W Resistor 470K .35" prep. 5% Carbon
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60-40030	R12	1/4W Resistor 6.8	RK 35" nren	5% Carbon	50-6803
60-40030	R13	1/4W Resistor 2.2		5% Carbon	50-2206
60-40030	R14	1/4W Resistor 20		5% Carbon	50-22004
60-75330	R15	1/4W Resistor 10	K .35 prep.	5% Carbon	50-1004
60-75320	R16	Not Used			
60-75320	R17	1/4W Resistor 22		5% Carbon	50-2204
60-40030	R18	1/4W Resistor 1K	.35" prep.	5% Carbon	50-1003
60-40030	R19	1/4W Resistor 10	K .35" prep.	5% Carbon	50-1004
60-40030	R20	1/4W Resistor 10		5% Carbon	50-1004
60-40030	R22	1/4W Resistor 5.6	SK .35" prep.	5% Carbon	50-5603
60-40030	R23	1/4W Resistor 47	OK .35" prep.	5% Carbon	50-4705
23-08604	R24	1/4W Resistor 10	K .35" prep.	5% Carbon	50-1004
23-08604	R25	1/4W Resistor 1K	.35" prep.	5% Carbon	50-1003
23-10002	R26	1/4W Resistor 4.7	7K .35" prep.	5% Carbon	50-4703
23-11004	R28	1/4W Resistor 22	 35" prep. 	5% Carbon	50-2202
23-11004	R31	1/4W Resistor 10	OK .35" prep.	5% Carbon	50-1005
23-11010	R100	1/4W Resistor 10	K .35" prep.	5% Carbon	50-1004
23-11010	R101	1/4W Resistor 10	K .35" prep.	5% Carbon	50-1004
23-11010	R102	1/4W Resistor 22	K .35" prep.	5% Carbon	50-2204
23-11010	R103	1/4W Resistor 22	K .35" prep.	5% Carbon	50-2204
23-10002	R104	1/4W Resistor 2.2	2K .35" prep.	5% Carbon	50-2203
23-08604	R105	1/4W Resistor 22	 .35" prep. 	5% Carbon	50-2202
23-08604	R106	1/4W Resistor 22 1/4W Resistor 47	OK .35" prep.	5% Carbon	50-4705
23-08609	R107	1/4W Resistor 47	OK .35" prep.	5% Carbon	50-4705
21-40000	R108	1/4W Resistor 1K	.35" prep.	5% Carbon	50-1003
21-06457	R109	Not Used	оо ргор.	5% Carbon 5% Carbon	00 1000
21-06453	R110	1/4W Resistor 47		5% Carbon	50-4705
21-40000	R111	1/4W Resistor 47	0 35" prep.	5% Carbon	50-4702
21-06457	R112	1/4W Resistor 1.5	5K 35" nren	5% Carbon 5% Carbon	50-1503
21-06453	R115	1/4W Resistor 10	K 35" prep.	5% Carbon	50-1004
Carvin P/N		Description	оо ргор.	070 0010011	Carvin P/I
70-05712	R116	1/4W Resistor 10	K 35" nren	5% Carbon	50-1004
70-05712	R117	1/4W Resistor 2.2		5% Carbon	50-2203
15-00165	R118	1/4W Resistor 47	K 35" prep	5% Carbon	50-4704
15-00165	R119	1/4W Resistor 4.7	7K 35" prep.	5% Carbon	50-4703
60-50253	R120	1/4W Resistor 10		5% Carbon	50-1002
60-50253	R121	1/4W Resistor 10	0 .35" prep.	5% Carbon	50-1002
71-10301	R122	1/4W Resistor 4.7	7K .35" prep.	5% Carbon	50-4703
71-25000	R123	1/4W Resistor 68	0 .35" prep.	5% Carbon	50-6802
71-10301	R124	1/4W Resistor 4.7	7K .35" prep.	5% Carbon	50-4703
71-25000	R125	1/4W Resistor 2.2	PK .35" prep.	5% Carbon	50-2203
60-00014	R126	1/4W Resistor 1K	.35" prep.	5% Carbon	50-1003
60-54000	R127	1/4W Resistor 68	0 35" prep	5% Carbon	50-6802
60-00014	R128	1/4W Resistor 2.2	PK .35" prep.	5% Carbon	50-2203
60-31000	R129	1/2W Resistor 4.3	7 0.5 prep.	5% Carbon	52-4700
60-00042	R130	1/4W Resistor 15	0 .35" prep.	5% Carbon	50-1502
60-00092	R131	1/2W Resistor 4.3	7 0.5 prep.	5% Carbon 5% Carbon	52-4700
60-32000	R132	5W Resistor 0.22	V ert 5% Sa	nd Bar	55-0220
60-31000	R133	5W Resistor 0.22	V ert 5% Sa	nd Bar	55-0220
60-31000	R134	5W Resistor 0.22	V ert 5% Sa	nd Bar	55-0220
60-21194	R135	5W Resistor 0.22	V art 5% Sa	nd Rar	55-0220
60-21194	R136	1/4W Resistor 1K	.35" prep.	5% Carbon	50-1003
60-21193	R137	1/4W Resistor 10	K .35" prep.	5% Carbon 5% Carbon 5% Carbon 5% Carbon 5% Carbon	50-1004
60-21193	R138	1/4W Resistor 10 1/4W Resistor 10	OK .35" prep.	5% Carbon	50-1005
60-00014	R139	1/4W Resistor 10	OK .35" prep.	5% Carbon	50-1005
60-00042	R140	1/4W Resistor 33	K .35" prep.	5% Carbon	50-3304
60-00092	R144	2W Resistor 10	0.8 prep.	5% Metal	54-1001
60-32000	R150	2W Resistor 10 2W Resistor 10	0.8 prep. 0.8 prep.	5% Metal	54-1001
60-31000	R200	1/4W Resistor 10 1/4W Resistor 10 1/4W Resistor 22	K .35" prep.	5% Carbon	50-1004
60-31000	R201	1/4W Resistor 10	K .35" prep.	5% Carbon	50-1004
60-21194	R202	1/4W Resistor 22	K .35" prep.	5% Carbon	50-2204
60-21194	R203	1/4W Resistor 22	K .35" prep.	5% Carbon	50-2204
60-21193	R204	1/4W Resistor 2.2	2K .35" prep.	5% Carbon	50-2203
60-21193	R205	1/4W Resistor 22	 35" prep. 	5% Carbon 5% Carbon 5% Carbon 5% Carbon 5% Carbon 5% Carbon 5% Carbon 5% Carbon	50-2202
50-22035	R206	1/4W Resistor 22 1/4W Resistor 47	OK .35" prep.	5% Carbon	50-4705
50-33035	R207	1/4W Resistor 47	OK .35" prep.	5% Carbon	50-4705
50-10055	R208	1/4W Resistor 1K	.35" prep.	5% Carbon	50-1003
50-15025	R209	Not Used			
50-39045	R210	1/4W Resistor 47	OK .35" prep.	5% Carbon	50-4705
50-39045	R212	1/4W Resistor 47		5% Carbon	50-4702
50-47055	R215	1/4W Resistor 10	K .35" prep.	5% Carbon	50-1004
50-47055	R216	1/4W Resistor 10	K .35" prep.	5% Carbon	50-1004
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S	HIGH VOLTAGE INSIDE!	
9	1/4W Resistor 4.7K .35" prep. 5% Carbon	50-4703
0	1/4W Resistor 100 .35" prep. 5% Carbon	50-1002
1	1/4W Resistor 100 .35" prep. 5% Carbon	50-1002
2	1/4W Resistor 4.7K .35" prep. 5% Carbon	50-4703
3	1/4W Resistor 680 .35" prep. 5% Carbon	50-6802
4	1/4W Resistor 4.7K .35" prep. 5% Carbon	50-470
5	1/4W Resistor 2.2K .35" prep. 5% Carbon	50-2203
6	1/4W Resistor 1K .35" prep. 5% Carbon	50-1003
7	1/4W Resistor 680 .35" prep. 5% Carbon	50-6802
В	1/4W Resistor 2.2K .35" prep. 5% Carbon	50-2203
9	1/2W Resistor 4.7 0.5 prep. 5% Carbon	52-4700
0	1/4W Resistor 150 .35" prep. 5% Carbon	50-1502
1	1/2W Resistor 4.7 0.5 prep. 5% Carbon	52-4700
2	5W Resistor 0.22 Vert 5% Sand Bar	55-0220
	5W Resistor 0.22 Vert 5% Sand Bar	55-0220
4	5W Resistor 0.22 Vert 5% Sand Bar	55-0220
5	5W Resistor 0.22 Vert 5% Sand Bar	55-0220
6 7	1/4W Resistor 1K .35" prep. 5% Carbon	50-1003
	1/4W Resistor 10K .35" prep. 5% Carbon	50-1004
В	1/4W Resistor 100K .35" prep. 5% Carbon	50-100
9	1/4W Resistor 100K .35" prep. 5% Carbon	50-100
0	1/4W Resistor 33K .35" prep. 5% Carbon	50-330
4	2W Resistor 10 0.8 prep. 5% Metal	54-100
0	2W Resistor 10 0.8 prep. 5% Metal	54-100
	Switch DPDT Push, Vert Small PCB MTG	25-0220
	Switch DPDT Push, Vert Small PCB MTG	25-0220
	Switch DPDT Push, Vert Small PCB MTG	25-0220
	Switch DPDT Push, Vert Small PCB MTG	25-0220
	Voltage Regulator 7815 +15V 2A	60-781
	Voltage Regulator 7915 -15V 2A	60-791
	Voltage Regulator 7915 -15V 2A	60-791