

Congratulations on your purchase of the Series III RedLine bass amp. Your new amp has been totally redesigned from earlier Series I and II releases. Enhancements come from the new internal construction using SMT (surface mounted components). Design changes include the new 12AX7 Tube Emulator (no tube maintenance), noise gate, compressor, high current TwistLok speaker connectors, adjustable Direct Out and separate preamp insert jacks. While all the internal circuits have been changed, the classic outer panel remains the same as one of the leading designs in pro bass amplification. This manual covers the R600 and R1000 head, Cyclops and Red Eye combo amplifiers.

GETTING STARTED QUICKLY

If you are like most players, you probably want to plug in your new amp and get started playing right away. However, with a full featured amp like the R600/R1000, the setup must be right or you will experience unsatisfactory results. Before you start, be sure your amp is plugged into the correct AC voltage.

- 1. Plug your bass guitar into the ACTIVE (bass with preamp) or PASSIVE (bass with no battery) input jack. With your bass full on and playing hard, be sure the CLIP led next to the input jacks is not flashing (very dim flashing is OK) or preamp distortion will result. Use the ACTIVE input if your instrument continues to cause clipping.
- 2. The INPUT GAIN control should be set at the center "0" position. The AMP 1 & 2 and MASTER VOLUME levels should be set at their center "5" position. If these setting are too loud, then bring down the MASTER VOLUME. However, the GAIN control should be kept at "0" or higher for the best signal to noise performance. Note, the GAIN control does not turn the input off.
- 3. Set the COMPRESSOR & GATE to their off position. Read about their functions later.
- 4. Set the LOW, MID SWEEP and HIGH tone controls to their off center "0" position. Adjust later after you are more familiar with the amp.
- 5. Set the 9 EQ bands to their "0" center positions and adjust later if needed. The EQ switch is used to defeat the EQ.
- 6. Set the guitar's level full on and turn the master VOLUME OFF. Now, turn the amp ON and gradually raise the master VOLUME (set the input GAIN at "0" & the AMP 1 & 2 at "5").
 Re-adjust according to the desired volume. Never try to get full power by pushing the input GAIN control to its maximum while keeping the AMP 1 & 2 and MASTER VOLUME levels below 5.
- 7. Your tone shaping should start with the PRE-SHAPE filters. You can use the tone controls and the 9-band graphic EQ as more tone variation is required. It is not recommended to add a lot of bass if the pre-shape bass filter is used especially at high levels because early clipping can occur. Use moderation when dialing in tone.
- 8. Use the built-in COMPRESSOR to limit peaks. This will help you get more power from your system by keeping the amps from clipping.
- 9. Biamping the CYCLOPS combo or any large bass stacks requires careful balancing of the AMP 1 & 2 controls. These amp controls power the woofer and midrange/tweeter independently. Double check to see that the speaker's components are plugged into the correct amp jacks. If the cables are reversed (feeding the wrong speakers), the BRIDGE switch is inadvertently pushed in, or the front BIAMP switch or X-OVER frequency is incorrectly set, your amp will not perform correctly. Carefully checking these items will help prevent service calls.
- 10. Need more power? Even though the R600/R1000 is a powerful amp, adding more speakers is the only way for substantially more output. Every time you double your speakers, your acoustic output goes up by a factor of four. This is far more efficient than trying to add 4 times the power especially when speakers become less efficient when driving them harder. Bridging your amp into a 4 ohm system will give you more output. However, speakers can be be damaged from high power or the amp will go into "protect" if loaded below 4 ohms. Hopefully, this will help you get started. Have fun exploring the many new features and sounds of the R600/R1000. Take your time because you're new amp has a lot of potential if properly setup!

RECEIVING INSPECTION

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 reship 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 or below on this manual for your records. Keep your portion of the card and return the portion with your name and comments to us. You may register your warranty online @carvin.com/registration

DESIGNED FOR TOURING

Every R600 & R1000 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. Toroid transformers are used as they are the engineer's choice for greater power supply current while reducing weight and magnetic "hum" fields.

R600/R1000 RED	LINE SPECIFICA	ATIONS:		
Output Power		R600	R1000	
8 Ω	THD < 1%	175/175w	225/225w	
4Ω	THD < 1%	250/250w	350/350w	
2 Ω	THD < 1%	300/300w	500/500w	
8Ω Bridged 4Ω Bridged	THD < 1% THD < 1%	500w 600w	700w 1000w	
	1HD < 1%	DUUW	TUUUW	
	passive input)	$1M\Omega$		
(i	active input)	200k Ω		
Pre-Shape EQ.	Mid Shi	w Boost: +8dB @ 80 ift: 250 Hz or 500 Hz	@ 10dB	
	н	i Boost: +6dB @ 3k	mz	
Main EQ.	Low ±12dB @ 100Hz			
	Mid S	Mid Sweep ±12dB @ 200Hz-2kHz Hiah ±12dB @ 6kHz		
0 1: 50 5		3		
Graphic EQ Freq.	±12dB @ 50, 80	, 125, 250, 500, 800	, 1.3k, 2.6k, 5k	
Compressor	Variable Th	Variable Threshold Range (-10dB to -35dB)		
•		latio Range (1.3 to 1		
Noise Gate	Variable Threshold Range off to -30dB			
Crossover	12dB per Octave Sweepable 200Hz to 2kHz			
AC Requirements	120VAC 60	Hz or 240VAC 50 Hz	optional model	
Power Requiremen	its R600): 700VA, R1000: 12	200VA	
Dimensions (no cabin	et) 3 1/2" Hi	gh x 19" Wide x	10" Deep	
Shipping Weight with sv	2 Duratuff II™ cabinet	R600: 30 lbs.	R1000:36 lbs	

For your records, record the following information.

Serial No._____ Invoice Date_____

12340 World Trade Drive, San Diego, CA 92128 858.487.1600 800.854.2235 www.carvin.com

FRONT PANEL CONTROLS

1. INPUT GROUP

Two 1/4" phone jacks are provided to accommodate both passive and active instruments. The **PASSIVE** input is to be used with bass guitars with standard high impedance pickups. This high impedance input offers 8db more gain than the **ACTIVE** input jack. The **ACTIVE** input is to be used with instruments that contain active electronics. The **INPUT GAIN** knob is used to set the input level and the **BLEND** knob controls how much signal is mixed through the "**TUBE EMULATOR**". The red **CLIP** LED indicates when the input is close to clipping. To avoid clipping, reduce the bass level, **GAIN** knob or use the **ACTIVE** input jack.

2. PRE-SHAPE EQ.

The **PRE-SHAPE EQ** is useful for dialing in your tone quickly. The **LOW BOOST** switch provides a 8dB boost at just under 80Hz. This is useful for adding some depth to the bottom- end without bringing up the lower midrange. The **MID SHIFT** switch offers two different scooped mid selections. In the IN position, the amp has a 10dB cut at 250Hz. Depressing this button raises the cut frequency to 500Hz. The **HI BOOST** switch offers a 6dB boost at 3kHz. This can provide good high frequency compensation when using 15" or 18" speakers with no tweeters.

3. MAIN EQ TONE CONTROLS

The main EQ tone controls consists of a low shelving control, a sweep midrange control and a high shelving control. The LOW EQ control provides the overall shaping of the low frequencies. The action of this control has been carefully matched to the response of the bass guitar. The MID SWEEP controls perform as a semiparametric EQ over the mid frequency range. The MID GAIN knob provides a boosting or cutting action at a relatively narrow band of frequencies. When the EQ GAIN knob of the MID SWEEP controls is set to "0", the mid sweep will have no effect. To boost or cut a specific frequency, rotate the MID GAIN knob clockwise (right) or counter clockwise (left) respectively. The FREQ control knob is used to select the center frequency where the boosting or cutting will occur. The best way to become familiar with the MID SWEEP control is to set the MID GAIN knob at either full cut or full boost and rotate the FREQ knob over its range of frequencies. Listen to the results and experiment with different levels. The MID SWEEP EQ is a powerful sound shaping tool which usually requires some practice to get the best results. The **HIGH EQ** control knob is designed to cut or boost the high frequencies of the bass guitar. Boosting with this control is useful for bringing up the very highest harmonics of the bass, which is especially useful when slapping or popping. Note: boosting the high frequencies can result in increased hiss, especially when using tweeters. This is normal.

4. COMPRESSOR

The **COMPRESSOR** of the RedLine Series amps is designed to limit the peaks so the volume level is more constant. This allows greater average power to your speakers without the power amps clipping (distorting). The R600/R1000 two knob compressor with **THRESHOLD** and **RATIO** controls is more flexible and precise than a single control unit. The user can dial up the exact amount of compression desired and at what level they want the compression to begin. The **THRESHOLD** control knob sets the point where the compressor kicks in. In the **OFF** position, the compressor has no effect on the sound. Rotating this control in the clockwise direction lowers the level where the compressor turns on. The compressor indicator LED shows when this threshold is obtained, thus showing when the compressor is on. The **RATIO** knob is used to set the amount of compression once the threshold has been reached. When this knob is swept all the way counter clockwise (left) the unit is set for a mild compression. As the knob is rotated clockwise (right) the compression ratio increases. The range of available compression ratios is 1.3 to 1 in the full counter clockwise position and 5 to 1 in the full clockwise posi-

tion. The compressor is interactive with the input gain knob and the volume knobs on the bass guitar itself. Lowering the volume feeding the compressor will reduce the amount of compression and raising it will result in more compression. To get a tight limiting sound which is often nice for slap style playing, set the **RATIO** control to the full clockwise position and bring up the **THRESHOLD** knob until the desired reduction is realized.

5. NOISE GATE

The noise **GATE** reduces the noise caused by the pickups. To use the **GATE**, mute the strings with your hand and raise the **THRESHOLD** control knob until the amp's noise is turned off and the green LED turns off. The **GATE** will turn the amp on as the bass is played. The **INPUT GAIN** will affect the gate setting.

6. ELECTRONIC X-OVER (BI-AMPING)

The electronic **X-OVER** is used to set the amp for a bi-amped configuration. When the **BI-AMP** / **FULL RANGE** selector switch is in the "**OUT**" position, the amp is in the bi-amp mode. To select the crossover frequency, rotate the **FREQ** control knob until the desired frequency is obtained. Try 800Hz. A bi-amped system allows the user greater control over the tone of their bass rig. This allows speakers designed for specific frequencies to be utilized to their fullest potential. NOTE: BI-AMPING DOES NOT NECESSARILY DELIVER THE MOST VOLUME FROM YOUR SYSTEM.

7. GRAPHIC EQ/EFFECTS LOOP

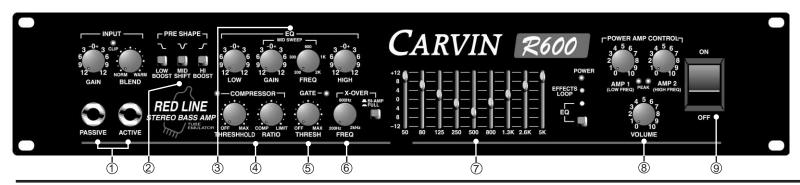
The nine band graphic EQ has been designed with the center frequencies most requested by professional bass players. This EQ can be used to fine tune the tonal content of the amps output. Since the graphic EQ is controllable with either the optional FS22 footswitch or the EQ switch on the front panel, it can be used to develop a second sound from the amp. Musicians that play more than one bass on stage will find this useful to get the sounds they desire out of each instrument. The footswitch selectable graphic EQ can also be useful during passages of a song when the bass needs to punch through the mix. A GREEN LED indicator located along the side of the EQ signifies when the graphic EQ is working. The YELLOW effect loop LED labeled EFF LOOP indicates when the effects loop is turned on. Note: the EQ switch on the front panel overrides the the footswitch. So when the graphic EQ is off, it cannot be turned on with the footswitch.

8. OUTPUT CONTROL GROUP

The output group determines how the RedLine amplifiers interfaces with other gear and speakers. The **POWER AMP CONTROL 1 & 2** controls the volume to the individual amps. These are used to balance the low and high cabinets when in full range or bi-amping modes (stereo). To set the balance, bring up the **AMP 1 (LOW FREQ)** knob until the desired volume level is reached. Now bring up the **AMP 2 (HIGH FREQ)** knob until the desired balance has been achieved. The master **VOLUME** control sets the overall volume.

9. POWER / PROTECT (RESET)

Push the upper portion of the POWER SWITCH to turn the amplifier on. If the power indicator LED is on but no sound is coming out of the speakers, the amp may have gone into one of its protection modes. To reset the amp, turn the power off for one minute and then turn the amp back on. If the problem persists, check for; a) The speaker impedance is too low for the bridge output (4 ohm min.) or normal outputs (2 ohms min. per amp) b) bad speaker cable, c) damaged speaker or, d) blocked rear fan intake.



HELPFUL HINTS

- POOR BIAMP SOUND: The speaker cables from AMP 1 (woofers) and AMP 2 (tweeters) have been reversed, AMP 1 and 2 level controls are not balanced or the X-OVER has been set at an incorrect frequency. (start at 800 Hz).
- NO SOUND FROM AMPS 1 & 2: The rear BRIDGE switch has been inadvertently pushed in or speakers plugged into wrong jacks.
- NO HIGH FREQUENCIES: Tweeters or midrange drivers have been damaged from to much power.
- 4) WEAK BASS: The speaker systems are wired out of phase to each other. To correct, reverse the wires on one speaker connectors.
- 5) DIR XLR HUM: Try switching the rear GND LIFT switch IN or OUT. If the hum is not eliminated, use a 600Ω line input transformer cutting the input ground on the connectors (Pin 3).

SPEAKER CONNECTIONS

Twist-Lok cables are recommended for your bass rig because of their high current capacity. While the standard 16 GA 1/4" cables will work OK with your system, the CARVIN 12 GA Twist-Lok cables will allow you to gain as much as 20% more power at high power levels extracting every watt from your RedLine bass amp. The very short 1/4" cables will work for the RC210 and RL6815 combo amps.

FULL RANGE MODE:

The FULL RANGE mode of your RedLine bass amp works well with separate bass and full-range speaker systems. Instead of using the Bi-Amp mode, you can simply run **AMP 1** into your bass speakers and **AMP 2** into your full-range speakers using the natural crossover frequencies of each speaker system. If you need deeper bass or more highs, just turn up amp 1 or amp 2 for a balance sound. The front panel **X-OVER** switch must be pushed "IN" for the FULL-RANGE MODE.

REAR PANEL CONTROLS

10. COOLING VENTS

The rear vents are for cooling the internal power amps. Provide a minimum of 3" of clearance for adequate ventilation. Blocking the air flow to these vents will cause the amp to thermally protect and turn the speaker relays off. If this happens, clear the obstruction first, keep the power on, and turn the guitar volume down allowing the amp to cool. The amp will engage the speaker relays when cooling conditions return to normal.

11. EFFECTS LOOP

The **EFF LOOP SEND** and **RETURN** jacks are used to connect external effects into the RedLine's signal chain. The loop is inserted after the main EQ and compressor but before the graphic EQ. To use the effects loop, connect the **SEND** jack to the input of the effects unit and connect the **RETURN** jack to the output of the effects unit. The effects loop can be turned on and off by using the optional **FS22** footswitch. When the footswitch is not connected, the loop will default to the ON position. The status of the effects loop is indicated on the front panel by a **YELLOW** LED marked **EFF LOOP**.

12. PREAMP / DIRECT OUT XLR

The **PREAMP XLR** is a balanced output that can be configured in a number of different ways. The **LINE / DIR** switch is used to select a pre or post pre amp feed. In the "**LINE**" position, the feed is post the preamp section and contains all of the signal processing and effects that are being used. In the "**DIR**" position, a direct feed is taken off of the bass guitar and is similar to using a direct input box at the input jack. To set the output, use the **DIRECT OUT LEVEL** control. A GROUND LIFT switch is also available on the preamp out XLR jack. Set this switch for the lowest noise when using this output. When the **GND / LIFT** switch is depressed, the signal ground is lifted from this jack thus eliminating any ground loops between the RedLine preamp out and the gear it is feeding.

13 & 14. PREAMP INSERT JACKS (HI FREQ & LOW FREQ)

Both preamp inserts are TRS (Tip-Ring-Sleeve) jacks with the tip as the **SEND** and the ring as the **RETURN**. Using a TRS (Tip-Ring-Sleeve) insert cable, the preamp signal can be sent out via the tip to an external effects processor and then returned to the internal power amp via the ring. Use the front amp 1 & 2 controls for level adjustments. When the **X-OVER** is set to full range "in", both outputs receive the same full range signal. When the **X-OVER** is set to **BI-AMP MODE** "out", **AMP 1** receives the low frequency signals and **AMP2** receives the high frequency signals as set by the front panel crossover. If a standard (Tip-Sleeve) instrument cable is used, the low and hi frequencies can be routed from the preamp to an external power amp. These insert jacks break the signal to the internal power amplifier.

15. FOOTSWITCH

Connect the optional **FS22** footswitch to remotely control the nine band graphic EQ and the effects loop. The first button on the **FS22** turns the graphic EQ on and off and the second button turns the effects loop on and off. Any standard footswitch with a stereo plug will work.

16. PHONES JACK

A **PHONES** jack is provided for practicing or as a place to hook up a tuner. Use any high quality headphones with an impedance greater than 50Ω when connecting to this jack. The phones jack does not interrupt the amplifiers output so a tuner can be left plugged into this jack while playing. When using a Tip / Sleeve (mono) cable to attach gear such as a tuner to the phones jack, insert the cable to the first click mono position of the jack.

17. SPEAKER OUTPUTS

The R600/R1000 amp contains two 1/4" and two TWIST-LOK speaker output connectors, one for each amp. The AMP 1 (LOW FREQ) jack corresponds to the AMP 1 (LOW FREQ) and the AMP 2 (HIGH FREQ) jack corresponds to the AMP 2 (HIGH FREQ) knob on the front panel. Multiple speakers can be attached to either the 1/4" or Twist-Lok jacks so long as the total impedance is not below 2Ω per amp.

18. BRIDGE SPEAKER OUTPUTS

The R600 produces 600 watts (bridged mono) into a 4Ω load or 500 watts into an 8Ω load. The R1000 produces 1000 watts (bridged mono) into a 4Ω load or 700 watts into an 8Ω load. To activate, push the rear recessed **BRIDGE** switch "**IN**" with a pencil and plug the speakers into the **BRIDGE ONLY** 1/4" or **TWIST-LOK** jacks. Pins 1+ and 1- are used on the Twist-Lok connector. The minimum total impedance is 4 ohms.

19. INTERNAL FUSE

If there are high AC voltage surges or if the amp is used with excessive loads, the internal fuse will protect your amp from damage. If the fuse fails, the proper replacement fuses for 120 VAC models are; R600-15 AMP and R1000-25 AMP 250VAC slow blow. 240 VAC models; R600-10 AMP and R1000-15 AMP 250 VAC slow blow.

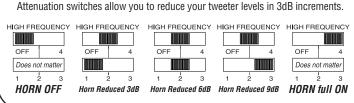
20. AC LINE CORD

All RedLine Series bass amplifiers are supplied with detachable three conductor AC line cords. Make sure the cord is securely inserted into the back of the unit. Never defeat the ground of the AC line cord as it is there for your protection. If you must plug into a two prong outlet, use a quality 3 to 2 prong grounded adapter and properly ground it.

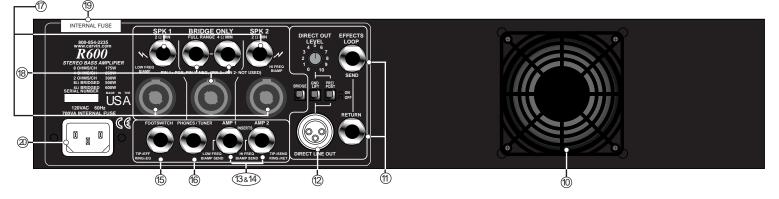


For Carvin RL210T, RL410T or RL810T bass systems with tweeters.

Attenuation switches allow you to reduce your tweeter levels in 3dR increments.



SERIES III WITH TWIST-LOK SPEAKER CONNECTORS



BI-AMP MODE:

To BI-AMP your speakers, connect your bass speaker(s) into AMP 1 and your full-range speaker(s) into AMP 2. The front panel X-OVER switch must be in the "OUT" position for BI-AMPING. Set the X-OVER FREQ control to 800 Hz, as this is normally the best crossover point for most speaker systems. Now adjust the AMP 1 and AMP 2 power amp controls to get a balance sound. For BI-AMPING the RC210 and RL6815, be sure the bass speaker is plugged into AMP 1 and the full-range speakers plugged into AMP 2.

FOR MAXIMUM OUTPUT:

A. To get your loudest output, use multiple speakers or enclosures. Every time you double your speakers, your acoustic output goes up by a factor of four. Load the amplifier down to its lowest minimum impedence for maximum RMS power

B. To get high output from your RedLine bass amp from two 8 ohm speakers, use the FULL-RANGE BRIDGE MODE. Set the front panel X-OVER switch to the "IN" FULL-RANGE position. On the rear of the amp, push the BRIDGE switch "IN". Plug one Twist-Lok cable into the rear amp BRIDGE ONLY connector and daisy-chain another Twist-Lok from speaker to speaker. Two 8 ohm speakers will give you a total impedance of 4 ohms, which is the maximum power from your amp. If you use two 4 ohms speakers, your amp will shut off and go into the "protect" mode. To reset, turn your amp off and connect only two 8 ohm speakers (or one 4 ohm) speaker to your amp when you are in BRIDGE MODE.

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 accord 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 1 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 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..

REPLACEMENT PARTS LIST FOR R600/R1000



CAUTION

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL! THIS UNIT CONTAINS HIGH RISK OF ELECTRIC SHOCK VOLTAGE INSIDE!

03-00560 2 EACH STANDOFF W/ANTI SPIN .56X.25" insert into PCB at B1, B2 03-15010 1 EACH TOROID PAD 4.75" OD X 2" ID X0

03-18200 2 EACH CABLE TIE 8"LX .10"W 2" BNDLE

03-63343 1 EACH STDOFF ALUM ROU #6 L=.437"

03-80602 4 EACH GROMMET NAT PLASTI SCRW #8/10

03-82061 3 EACH CABLETIE 14.5Lx.19Wx 2" BNDL

03-90080 1 FACH GUARD FAN PLASTIC 80x80mm 05-01603 1 EACH PWR AC 3/16AWG 8' 2" W/PLUGS

05-60420 1 EACH CABLE RIBBON 24A 10P/8" W/HDR

05-60435 1 EACH CABLE RIBBON 24A 10P/14" W/HDR

05-62430 1 EACH CABLE RIBBON 24A 2P/12" W/HDR

05-64410 2 EACH CABLE RIBBON 24A 4P/4" W/HDR H2A to H2B. H5A. to H5B

05-64420 1 EACH CABLE RIBBON 24A 4P/8" W/HDR

05-84628 1 EACH CABLE ASSY, 4C 280MIV

05-84616 1 EACH CABLE ASSY, 4C 160MM

06-10120 2 EACH MS PPH 8-32X .500 TYPE F BLACK

06-10133 2 EACH SMS PPH (#8x.375) TYPE A BLK.

06-03125 13 EACH WSH INTERNAL LOCK 5/16 ID

06-10034 2 EACH SMS PPH #4X 1.00 TYPE AB BLK

06-10045 7 EACH SMS PFH #6X .375 TYPE AB BLACK

06-10061 2 EACH SMS PPH #6 X .375 TYPE A BLACK

06-10080 2 FACH MS PPH 6-32Y 750 RI ACK

06-10150 4 EACH MS PPH 10-32X .375 BLACK

06-10151 4 EACH MS PTH 10-32X .500 BLACK

06-10159 2 EACH MS PPH 10-32X .500 TYPE F BLK

06-10174 4 EACH SMS POH #10X 1.25 TYPE A BLACK

06-10196 1 EACH MS CTH #1/4-20X 3.00 BOLT BLK

06-11700 13 EACH NUT METRIC 7MM BLACK ALPHA

06-30029 2 EACH WSH FLT #8 STEEL CLEAR ZINC

06-30035 4 EACH WSH FLANGED #10 BLACK ZINC

06-45001 2 EACH NUT CHROME FOR 21-01804 JACK 06-45002 2 EACH BEZEL BLACK FOR 21-01804 JACK

06-45003 2 EACH WASHER BLACK FOR 21-01804 JACK

06-50035 5 EACH NUT KEP #6-32 ZINC CADMIUM

06-50051 8 FACH NUT KEP#10-32 7INC CADMILIM

06-50061 1 EACH NUT HEX #1/4-20 ZINC W/NYLN IN

06-50545 10 EACH NUT PLSTC FLANGED

03-63294 1 EACH STANDOFF ALUM 6-32x .25x .94

07-10813 1 FACH KNOR "8" ROTARY RED

07-70183 9 EACH CAP EO GREY .093X .250 07-77708 13 FACH KNOR BED ANODIZE W/SET SCREW

10-10008B 1 EACH CHASSIS 2 SPACE UNIVERSAL

10-15045 1 EACH PLATE TOROID 4.5" DIA 14A GALV

10-40611-1 1 EACH PANEL FRONT 2 SPACE R600 10-40611-2 1 EACH PANEL FRONT 2 SPACE R1000

10-40605 1 FACH PANEL COVER R600/1000 RASS AME

15-70160-1 TOROID 120V R600 15-10172-1 TOROID 120V R1000

20-32002 1 EACH CONNECT THRU .100" 22AWG 2 PIN

25-31350 1 EACH SWITCH DPST ROCKER BLACK POWER

76-00001 1 FACH WARRANTY CARD "CARVIN"

76-40000 1 EACH MANUAL R600/1000/RC210T/RL6815 77-00010 1 EACH LABEL CAUTION ELECTRICAL SHOCK

77-02800 1 EACH LABEL AC CORD INSERTION WARNS

77-40608 1 EACH LABEL LEXAN R1000 REAR 77-40609 1 EACH LABEL LEXAN R600 REAR

80-40626 1 EACH PCB ASSY MAIN R600 SMT 80-41000 1 EACH PCB ASSY MAIN R1000 SMT

1 EACH CABINET 2-SPACE R600 BASS AMI

80-40626 / 80-41000 REV N

03-00450 1 EACH INSLTR 9.125x1.5x.01" SGL ADHV

03-00451 1 FACH INSLTR 9.125x1.5x.02" DBL ADHV 03-00475 1 EACH SPACER PAD .1X .4X .75 W/ADHSV

03-00503 4 EACH INSULATOR .36X .36X .20" 85deg

03-44262 4 EACH WASHER NYLON .115IDx.250Dx.062

03-50135 8 EACH STANDOFF LED .500 X .135 T1 D1, D4, D5, D6, D11, D21, D103, D203 1 EACH CABLE TIE 14.5Lx .19Wx 2" BNDI

06-10028 12 EACH MS PPH 4-40X .500 ZINC TYPE F

06-10032 4 EACH MS PPH 4-40X 1.500 TYPE F ZINC

07-01602 5 EACH KNOB "6" 6x6x9.7mm GREY CAP

07-01603 3 EACH KNOB "6L" 6x6x17.4mm GREY CAF

12-00860 2 EACH HEATSINK 9"L 2nc FAN MOUNTED

12-57462 2 EACH HEATSINK VERT W/TABS T0-220

15-00105 2 EACH COIL AIR 1.5uH 14AWG

21-01804 2 EACH JACK .250 90d STEREO W/CRM NUT

21-31100 1 EACH RECEPTACLE AC W/FAST-ON CHASS

21-40001 1 EACH XLR MALE CON NEUTRIK #NC3MAV

21-45000 3 EACH SPEAKON 4-POLE PCMTG #NL4MD-V

21-50345 6 EACH JACK .250" PHONE MONO PCB MTG J4. J5. J9. J11. J102. J202

21-50545 4 EACH JACK .250" PHONE STEREO PCB MT J1, J13, J2, J3

23-03529 2_EACH FUSEHOLDER CLIPS 3AG VERT MTG

23-08604 5 EACH CONNECT HEADER .086" 4 PIN H1A, H1B, H6A, H6B, H10

23-08609 1 EACH CONNECT HEADER .086"9 PIN

23-10002 3 EACH CONNECT HEADER .100" 2 PIN H8, H9, H12 23-11002 2 EACH CONNECT HEADER 2 PIN STRAIGHT

23-11004 6 EACH CONNECT HEADER 4 PIN STRAIGHT H2A, H2B, H4A, H4B, H5A, H5B

23-11010 4 EACH CONNECT HEADER 10 PIN STRAIGHT H3A. H3B. H11A. H11B

8 EACH SWITCH DPDT PUSH PC MTG LOCKNG \$1, \$2, \$3, \$4, \$5, \$6, \$7, \$9 30-40600M1 EACH PCB CARD MAIN R600/R1000 REVI

42-10363 2 EACH CAP ELEC 10,000 MFD 63V 20% C501, C502 42-22235-1 EACH CAP ELEC 2,200 MFD 35V 20% C503 C504

47-10235-1 1 EACH CAP ELEC 1,000 MFD 35V 20%

47-47125-1 EACH CAP ELEC 470 MFD 25VOLT 20%

49-10212 5 EACH 0.001UF SMT 10% FILM 0805 50V C3. C44. C4. C403. C56

49-10312 13 EACH 0.01UF SMT 10% FILM 080550V C15, C181, C28, C281, C29, C36, C45 C50, C51, C89, C11, C39, C12

22 EACH 0.1 uF SMT 10% FILM 1206 50V C14, C270, C5, C35, C37, C62, C63, C96, C121 C221, C23, C31, C33, C75, C83, C85, C99 C100, C101, C310, C505, C506

49-12152 5 EACH 120PF SMT 5% CERAMIC 0805 C57, C58, C59, C67, C72

49-18152 1 EACH 180PF SMT 5% CERAMIC 0805.C6

24 EACH SMT CAP 22uF 35v ELECTROLITIC C102, C18, C20, C27, C313, C318, C401 C10, C404, C406, C407, C408, C409, C410, C52 C64, C65, C69, C7, C70, C76, C77, C82, C186

3 EACH 0.0022UF SMT 10% FILM 0805 50V C42, C38, C97

49-22312 6 EACH 0.022UF SMT 10% FILM 0805 50V C26. C32, C43, C54, C55, C34

6 EACH 27 PF SMT 5% CERAMIC 0805 C84, C88, C93, C94 C175, C275 49-27052

49-33152 9 EACH 330PF SMT 5% CERAMIC 0805 C30, C49, C60, C73, C74, C78, C79, C80, C81

5 EACH 0.0033UF SMT 10% FILM 0805 50 C1, C17, C22, C40, C98

2 EACH 0.033UF SMT 10% FILM 0805 50V

7 EACH 39PF SMT 5% CERAMIC 0805 C176, C19, C24, C276, C405, C53, C8.

3 EACH 0.0047uF SMT FILM 0805 50V

EACH 0.047UF SMT 10% FILM 0805 50V 2, C90, C92, C95, C180, C280, C61, C87, C9, C91

C13, C21, C46, C48, C66, C182, C183, C184, C185, C282, C283, C284, C285

2 EACH 82PF SMT 5% CERAMIC 0805 C177 C277

54-47025-1 1 EACH RES 470.00 OHM 2.00W 5% CARBON

2 EACH RES 5.00 OHM 5W 5% SB VERT

1 EACH RES 3.00KOHM 5W 5% SB WIRE

1 EACH RES 270.00 OHM 10W 10% SB SDOF 56-27025 2 EACH 10.5 SMT .25W 1206 1% R16, R210

13 EACH 100.5 SMT .25W 1206 1% R127, R128, R135, R235, R405, R54, R212 R129, R165, R166, R167, R211, R154

19 EACH 1K SMT.25W 1206 1% R114, R117, R118, R119, R120, R13, R137, R142 R143, R144, R145, R237, R242, R243, R244, R245 R318, R325, R42,

45 EACH 10K SMT .25W 1206 1% R102, R104, R106, R152, R116, R123, R124, R125 R126, R177, R188, R2, R320, R277, R194, R324, R407, R408, R414, R48, R49, R421, R422, R52, R58, R78, R82, R196, R98, R424, R425 R168, R170, R172, R173, R174, R180, R181, R183, R184, R190, R417, R198, R188, R185

15 EACH 100K SMT .25W 1206 1% R14, R1, R178, R179, R25, R278, R279, R331, R35, R402, R410, R87, R93, R7, R198

58-10065 6 EACH 1M SMT .25W 1206 1% R157, R158, R159, R160, R202, R191

17 EACH 1500hm SMT .50W 1206 1% R132, R148, R248, R406, R409, R146, R149, R216 R217, R219, R220, R222, R223, R224, R225, R246, R249

1 EACH 1.5K SMT .25W 1206 1% R62

58-15045 4 EACH 15K SMT .25W 1206 1% R176, R276, R45, R107

11 EACH 150K SMT .25W 1206 1% R17, R3, R30, R37, R71, R77, R22 R189, R289, R204, R111

4 EACH 1.8K SMT .25W 1206 1% R66, R64, R315, R312

14 EACH 2.2K SMT .25W 1206 1% R133, R233, R39, R50, R51, R60 R68, R70, R72, R74, R76, R19, R100, R101

20 EACH 22K SMT .25W 1206 1% R109, R110, R130, R131, R230, R231, R26, R193 R31, R317, R32, R327, R33, R94 R34, R5, R205, R206, R207, R208

58-27045 1 EACH 27K SMT .25W 1206 1%

58-33035 3 EACH 3.3K SMT .25W 1206 1% R192, R209, R329

EACH 33K SMT .25W 1206 1% R108, R113, R138, R199, R238, R319, R415, R53, R57, R80, R84, R9

58-47005 2 EACH 4.7 SMT .25W 1206 1% R200 R201

6 EACH 470.5 SMT .25W 1206 1% R11, R140, R24, R240, R413, R418 14 EACH 4.7K SMT .25W 1206 1% R18, R134, R139, R141, R234, R239 R241, R326, R41, R43, R44, R47, R88, R89

58-47045 30 EACH 47K SMT. 25W 1206 1% R55, R56, R85, R81, R20 R31, R314, R112, R213, R21 R12, R314, R112, R213, R21 R46, R86, R90, R81, R82, R29, R38, R40, R46, R86, R90, R81, R82, R89, R115

58-47055 4 EACH 470K SMT .25W 1206 1% R214. R322. R15. R203

58-56035 1 EACH 5.6K SMT .25W 1206 1%

58-68025 2 EACH 680 SMT .25W 1206 1%

58-68035 3 EACH 6.8K SMT .25W 1206 1% R12. R79. R83 58-68045 2 EACH 68K SMT .25W 1206 1% R8. R330

12 EACH 22 SMT 1W 2512 20% R136, R150, R151, R182, R332, R333 R334, R335, R250, R251, R419, R420

60-21193-1 4 EACH TRNS BIPOLAR MJL21193-PREPPED Q112, Q113, Q212, Q213, (R1000 only Q114

60-21194-1 4 EACH TRNS BIPOLAR MUL21194-PREPPED Q108, Q109, Q208, Q209, (R1000 only Q110, Q210)

60-15032 2 EACH TRANS MJE15032 NPN T0-220 0107, 0207

60-15033 2 EACH TRANS MJE15033 PNP T0-220 Q111, Q211

60-25458-12 EACH IC J-FET 2N5458 PREP 012. 013

60-35041 1 EACH RECTIFIER BRIDGE 35AMP/400V PC 60-50253 2 EACH OPTO ISOLATOR VACTROL AXIAL

60-55500-2 2 EACH TRANS 2N5550 HV NPN 250V T0-92 Q106, Q206

60-75320 5 EACH LED RED DIFFUSED 3MM T-1.00 D1. D103. D11. D203. D4 (WITH STANDOFF)

60-75330 2 EACH LED GREEN DIFFUSED 3MM T-1.00

60-75340 1 EACH LED YELLOW DIFFUSED 3MM T-1.00 D5 (WITH STANDOFF) 60-78150-11 EACH REG VOLT 15+V 1A (PREPPED)

60-79120-11 EACH REGULATOR VOLTAGE 12 (PREPPED) 07

60-79150-1 1 EACH REG VOLT 15-V 1A (PREPPED) VR2 61-60010 2 EACH DIODE ULTRA-FAST SWTCH 600V 1A

9 EACH DIODE ULTRA FAST 600V 1A SMA D18B, D108B, D109B, D208B, D209B, D501B D503B, D504B, D505B

62-00014 1 EACH MMBTA14 SOT-23 SMT 01 21 EACH 1N914 HI SPD SMT 250mW DIODE D10, D106, D107, D111, D12, D13, D14, D15 D16, D17, D2, D206, D207, D3, D310, D311, D8, D9 D7, D19, D312

62-29010 2 EACH NJM2901SMT SNGLE SUPPLY A11, A22

62-03400 5 EACH TRANSISTOR SMT MJD340 0102. Q105, Q202, Q205, Q301 62-03500 4 EACH TRANSISTOR SMT PNP MJD350 Q103, Q104, Q203, Q204

62-04391 4 EACH TRANSISTOR SMT MMBF4391LT1 02, 03, 04, 05

62-20430 2 EACH NJM2043SMT(TESTED) DUAL HFREQ 21 EACH NJM4565 SMT DUAL HI FRED

A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A23 A12, A13, A14, A15, A16, A19, A20, A21 A24, A25 62-54001 3 EACH MMBT5401LTI PNP SOT-23 SMT Q117, Q217, Q303

62-55500 4 EACH MMBT5550 NPN SOT-23 O6, O10, O9, O302

70-02408 1 EACH FAN DC24V 80x80x25mm 42cfm SUN

70-05713 3 EACH RELAY SPDT 12A@120VAC/24V COIL K1, K100, K200

70-22115 1 EACH FUSE MDQ 15.00A SLOW 6.35X32 71-09253 1 EACH POT 9 "D-P" 25F B50K- P11

71-24450 2 EACH POT VERT TRIMMER 5000hm

71-16501 10 EACH POT 16 F15 B50K POI P1, P2, P3, P4, P5, P6, P7, P8, P10, P12

71-10334 9 EACH FADER 30MM \$L30V3-B10K-L15D(G) P13, P14, P15, P16, P17, P18, P19, P20, P21

72-16503 3 EACH POT 16 F15 15C50Kx2 POI