

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



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

IMPORTANT! FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:

WATER AND MOISTURE: Appliance should not be used near water (near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

POWER SOURCES: The appliance 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 means of an appliance is not defeated.

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

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

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

SAFETY INSTRUCTIONS (EUROPEAN)

The conductors in the AC power cord are colored in accordance with the following code.
GREEN & YELLOW—Earth **BLUE—Neutral** **BROWN—Live**
 U.K. MAIN PLUG WARNING: A molded main plug that has been cut off from the cord is unsafe. NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAIN PLUG INTO A POWER SOCKET.

REPLACEMENT PARTS LIST (for circuit cards)

| | | | |
|-----------|--|----------|--|
| 80-71004A | PCB ASSY MAIN K15 SMT | | |
| 03-00475 | 1 EACH SPACER PAD .1X .4X .75 W/ADHSV SPACER UNDER PL1 | 49-10212 | 1 EACH 0.001UF SMT 10% FILM 0805 50V C61 |
| 03-49553 | 4 EACH TAPE W/ADHSV 3M .375 X .375 | 49-10312 | 6 EACH 0.01UF SMT 10% FILM 080550V "C33, C64, C93, C95, C104, C76" |
| 03-50135 | 1 EACH STANDOFF LED .500 X .135 T1, D1 | 49-10451 | 9 EACH 0.1 uF SMT 10% FILM 1206 50V "C23, C32, C70, C72," |
| 03-60043 | 1 EACH SIL PAD W/ADHESIVE 9 MIL STICK TO VP1 | | "C67, C68, C69, C110, C134" |
| 05-22102 | "6 EACH POLYOLEFIN SHRINK TUBING 1/16"™ | 49-22035 | 33 EACH SMT CAP 22uF 35V ELECTROLITIC "C1, C2, C3, C4, C6," |
| 06-40050 | 3 EACH TERMINAL VERT MALE PC MTG 250 "QC1, QC2, QC3" | | "C8, C9, C14, C17, C19," |
| 06-40060 | 3 EACH TERMINAL 90dg MALE PC MTG .250 "QC4, QC5, QC6" | | "C20, C21, C22, C26, C34," |
| 15-00300 | 2 EACH INDUCTOR .3 mH DRUM CORE "L7, L8" | | "C35, C46, C47, C51, C54," |
| 15-27430 | 4 EACH BEAD W/LEAD .138Dx .35Lx 22AWG "L1, L2, L5, L6" | | "C55, C56, C59, C62, C91," |
| 15-05001 | 1 EACH LINE FILTER/INDUCTOR 5mH 3A, L3 | 49-22212 | 3 EACH 0.0022UF SMT 10% FILM 0805 50V "C75, C78, C106" |
| 15-90032G | 1 EACH TRANSFORMER SWITCHING 100W, T1 | 49-22312 | 1 EACH 0.022UF SMT 10% FILM 0805 50V C60 |
| 21-31100 | 1 EACH RECEPTACLE AC W/FAST-ON CHASS PL1 | 49-25152 | 3 EACH 220PF SMT 5% CERAMIC 0805 "C92, C139, C79" |
| 21-40000 | 1 EACH XLR FEMALE CONNECTOR W/O GRND J41 | 49-33312 | 2 EACH 0.033UF SMT 10% FILM 0805 50V "C116, C71" |
| 21-40020 | 1 EACH JACK RCA DUAL PC VERTICAL MTG J13 | 49-39052 | 25 EACH 39PF SMT 5% CERAMIC 0805 "C5, C7, C10, C11, C16," |
| 21-51345 | 1 EACH JACK .250 PHONE MONO PLASTIC, J5 | | "C18, C24, C25, C29, C48," |
| 21-52345 | 10 EACH JACK .250 PHONE MONO STEEL "J1, J2, J3, J6," | | "C49, C50, C52, C53, C57," |
| | "J11, J12, J21, J22, J31, J41" | | "C58, C66, C97, C99, C101," |
| 21-52545 | 2 EACH JACK .250 PHONE STEREO STEEL "J4, J10" | | "C128, C309, C403, C80, C133" |
| 23-03529 | 2 EACH FUSEHOLDER CLIPS 3AG VERT MTG, F1 | 49-47212 | 3 EACH 0.0047uF SMT FILM 0805 50V "C30, C63, C73" |
| 23-11004 | 2 EACH CONNECT HEADER 4 PIN STRAIGHT "H4A, H4B" | 49-47312 | 3 EACH 0.047UF SMT 10% FILM 0805 50V "C12, C13, C74" |
| 23-11008 | 2 EACH CONNECT HEADER 8 PIN STRAIGHT "H1A, H1B" | 49-56152 | 3 EACH 560PF SMT 5% CERAMIC 0805 "C77, C305, C306" |
| 23-11010 | 4 EACH CONNECT HEADER 10 PIN STRAIGHT "H2A, H2B" | 49-82052 | 2 EACH 82PF SMT 5% CERAMIC 0805 "C103, C127" |
| | "H3A, H3B" | 51-00050 | "2 EACH RES 0.00 OHM .50X.20"™ JUMPER" "B5, B7" |
| 25-02201 | 1 * STD 4 EACH ASSEMBLED SWITCH AND CAP "S11, S21, S31, S32" | 53-47045 | 1 EACH RES 47.00KOHM 1.00W 5% CARBON R42 |
| 30-71004B | 1 EACH PCB MAIN K15 | 55-04705 | 2 EACH RES .47 OHM 5W 10% SB VERT "R113, R114" |
| 41-27322 | 3 EACH CAP POLY FILM .027uF 250VAC 10 "C113, C114, C115" | 58-00035 | 4 EACH 0.0 SMT JUMPER 1206 "B3, R51, R58, R59" |
| 41-47322- | 1 1 EACH CAP MYLR .0470UF 250VAC BOX C41 | 58-10015 | 3 EACH 10.5 SMT .25W 1206 1% "R127, R128, R41" |
| 41-47422 | 1 EACH CAP MYLR .47uF 250VAC BOX C122 | 58-10025 | 4 EACH 100.5 SMT .25W 1206 1% "R47, R92, R112, R164" |
| 42-12142 | 1 EACH CAP ELEC 120MFD 400VOLT 20% C27 | 58-10035 | 10 EACH 1K SMT .25W 1206 1% "R25, R111," |
| 45-18152 | 1 EACH CAP CERM 180PF 500VOLT 5% C90 | | "R84, R150, R63, R64," |
| 45-33113 | 1 EACH CAP CERM 330PF 1000VOLT 10% C40 | 58-91025 | "R101, R102, R3, R133" |
| 47-10225 | "2 EACH CAP ELEC 1,000 MFD 25V 20%" "C38, C39" | 60-00083 | 1 EACH TRANSISTOR 15A 100V NPN Q1 |
| 47-22151 | 1 EACH CAP ELEC 220 MFD 50VOLT 10% C31 | 60-00084 | 1 EACH TRANSISTOR 15A 100V PNP Q12 |
| 47-47151 | 4 EACH CAP ELEC 470 MFD 50 VOLT 20% "C42, C43, C44, C45" | 60-20060 | 1 EACH TRANSIENT VOLT SUPP 200V 600W Z1 |
| 49-10050 | 1 EACH CAP SMT 1UF 50V ELECTROLITIC | | |



CAUTION
RISK OF ELECTRIC SHOCK

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

| | | | |
|----------|---|-----------|--|
| 58-10055 | 4 EACH 100K SMT .25W 1206 1% "R77, R79, R69, R36" | 60-22100 | 1 EACH IC PRIMARY VIPER 100 VP1 |
| 58-10065 | 3 EACH 1M SMT .25W 1206 1% "R166, R168, R93" | 60-25011 | 1 EACH IC OPTO COUPLER ISOLATOR OP2 |
| 58-15035 | 6 EACH 1.5K SMT .25W 1206 1% "R58, R59, R66, R86," | 60-40002 | 1 EACH THERMISTOR 40ohm 2amp 20% TR1 |
| | "R304, R305" | 61-47430 | 1 EACH DIODE ZNR REG 1N4743A 13V 1W Z2 |
| 58-15045 | 7 EACH 15K SMT .25W 1206 1% "R3, R12, R34, R19, R26," | 60-50200 | 4 EACH DIODE GEN REC 1N5402 3A 200V "D14, D15, D16, D17" |
| | "R122, R99" | 60-55500 | 2 EACH TRANS 2N5550 HV NPN 25V T0-92 "Q2, Q11" |
| 58-15055 | 3 EACH 150K SMT .25W 1206 1% "R71, R75, R147" | 60-75330 | 1 EACH LED GREEN DIFFUSED 3MM T-1.00 D1 |
| 58-22035 | 14 EACH 2.2K SMT .25W 1206 1% "C303, C304, C310" | 60-78150- | 1 * STD 1 EACH REG VOLT 15-V 1A (PREPPED) O16 |
| | "R306, R307, R97," | 60-79150- | 1 * STD 1 EACH REG VOLT 15-V 1A (PREPPED) Q17 |
| | "R70, R72, R74, R76, R78, R96," | 60-80200 | 2 EACH DIODE 8A 200V T0-220 "D22, D23" |
| | "R106, R109, R110, R116, R123" | 61-04737 | 1 EACH DIODE REG GEN 1N4737A 7.5V 1W Z4 |
| 58-22045 | 19 EACH 22K SMT .25W 1206 1% "R8, R11, R13, R27, R28," | 62-04739 | 3 EACH SMT DIODE ZENER 4739 "Z8, Z9, Z10" |
| | "R29, R44, R52, R67, R94," | 62-08451 | 1 EACH SMT ZENER DIODE 5.1 VOLT Z501 |
| | "R5, R6, R18, R146," | 62-06001 | 3 EACH DIODE ULTRA FAST 600V 1A SMA "D18, D19, D21" |
| 58-27025 | 1 EACH 274 OHM SMT .25W 1206 1% R50 | 62-19140 | 13 EACH 1N914 HI SPD SMT 250mW DIODE "D2, D3, D5, D6, D9, D10, D11," |
| | "R115, R100, R105, R126, R132" | 62-20430 | 3 EACH NUM2043SMT(TESTED) DUAL HFREQ "A5, A11, A12" |
| 58-33045 | 7 EACH 33K SMT .25W 1206 1% "R7, R9, R20, R23, R48, R537, R43" | 62-45650 | 14 EACH NJM4565 SMT DUAL HI FREQ "A1, A2, A3, A4, A6," |
| 58-36055 | 1 EACH 365K SMT .25W 1206 1% R73 | 70-05710 | 1 EACH RELAY SPDT 12A@120VAC/24V COIL K1 |
| 58-39035 | 2 EACH 3.9K SMT .25W 1206 1% "R40, R54" | 70-21050 | 1 EACH FUSE ABC 5.00A FAST 6.35X32MM F1 |
| 58-47015 | 2 EACH 47.5 SMT .25W 1206 1% "R85, R151" | 71-09252D | "4 EACH POT 9 ""D-P"" 25F B50K-CC BLUE" "P32, P42, P43, P44" |
| 58-47025 | 2 EACH 470.5 SMT .25W 1206 1% "R104, R158" | 71-09253B | "3 EACH POT 9 ""D-P"" 25F B50K WHITE" "P31, P41, P1" |
| 58-47035 | 3 EACH 4.7K SMT .25W 1206 1% "R62, R95," | 71-10320 | 5 EACH FADER 20MM SL20V3-B10K-L15D(G) "P51, P52, P53, P54, P55" |
| | "R91," | 72-12552 | "2 EACH POT 12 ""D-P"" 25F 1B50Kx2-C BLK" "P12, P22" |
| 58-47045 | 18 EACH 47K SMT .25W 1206 1% "R38, R39, R56, R88, R89, R32, R33," | 72-12553 | "4 EACH POT 12 ""D-P"" 25F 1B50Kx2 BLACK" "P11, P21, P2, P3" |
| | "R15, R21, R68, R83, R149," | | |
| 58-56035 | 5 EACH 5.6K SMT .25W 1206 1% "R103, R107, R129, R117, R118, R124" | | |
| | "R14, R16, R30, R31" | | |
| 58-68025 | 1 EACH 680 SMT .25W 1206 1% R49 | | |
| 58-68035 | 2 EACH 6.8K SMT .25W 1206 1% "R25, R53" | | |
| 58-68045 | 1 EACH 68K SMT .25W 1206 1% R132 | | |
| 58-91025 | 2 EACH 910.5 SMT .25W 1206 1% "R45, R46" | | |
| 60-00083 | 1 EACH TRANSISTOR 15A 100V NPN Q1 | | |
| 60-00084 | 1 EACH TRANSISTOR 15A 100V PNP Q12 | | |
| 60-20060 | 1 EACH TRANSIENT VOLT SUPP 200V 600W Z1 | | |

CARVIN ENGINEERING DATA



K15

Congratulations on your purchase of the **K15** amplifier. Designed specifically for the keyboard performer's needs, the **K15** features four input channels with independent levels, a balanced/stereo LINE OUT with independent level and a 5 band graphic EQ.

Channel features include; stereo inputs on channels 1&2 with an additional RCA input on channel 1. Tone control with Mid Contour switch are featured on channel 3 for optional use with bass or guitar. Channel 4 features a 3-band EQ with both 1/4" line and XLR for instruments and microphones. All inputs are designed for simultaneous use without degrading the signal.

The tilt-back bass ported enclosure and high frequency tweeter deliver full-range sound. Combined with 100 watts of power, the **K15** is an ideal amp and stage monitor. The direct LINE OUT allows you to connect to the main house mixer for use in larger venues.

RECEIVING INSPECTION—read before getting started

INSPECT YOUR AMP 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 and below and this manual for your records. Keep your portion of the card and return the portion with your name and comments to us. Or you may register online at www.carvin.com/registration

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

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

Serial No. _____ Invoice Date _____

CONNECTING AC POWER TO YOUR K15

- Use only a grounded (3 prong) power outlet to prevent a shock hazard.

CONNECTING INPUTS TO YOUR K15

- Channels one and two are line inputs. A keyboard or any unbalanced device such as a drum machine can be plugged in using 1/4" phone plug shielded cables.
- Channel one features stereo RCA inputs for connecting devices such as disc players, MP3 players, or tape decks. Both inputs can be used at the same time.
- Channel three is a line/instrument input. A keyboard or any instrument such as a guitar or bass can be plugged in using a 1/4" phone plug shielded cable.
- Channel four is a microphone & line input. Plug a microphone into the balanced XLR MIC input using an XLR shielded cable. Plug a 1/4" shielded cable from a keyboard into the LINE input. Both inputs can be used at the same time.

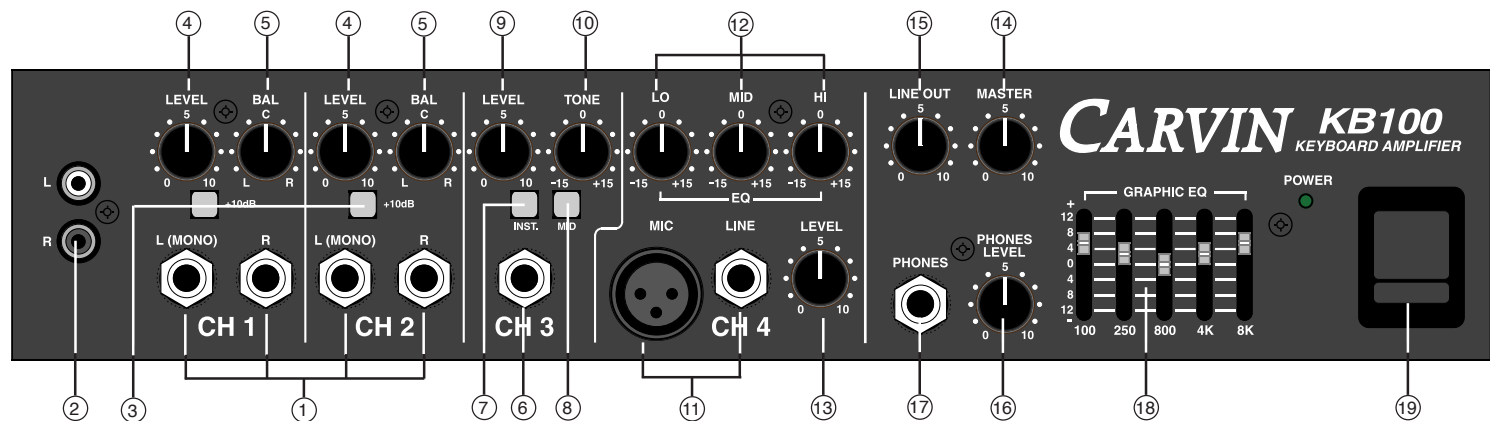
TURNING ON YOUR K15

- Plug in your instruments and microphone into the appropriate channels.
- Adjust all four channel volume controls to their off position (full counter-clockwise).
- Adjust all "BAL" and "EQ" tone controls to their center detent position.
- Turn the K15 on by the power switch on the front panel and watch for the power LED to come on.
- Adjust the volume controls to the desired playing level. (For detail on the individual channel tone controls and the graphic equalizer, see the appropriate sections in this manual.)

K15 KEYBOARD AMP SPECIFICATIONS:

| | |
|----------------------------|---|
| Frequency Response: | Inputs to Line Out: 20Hz-20kHz ±1dB |
| Output Power: | 100 Watts @ 8ohms |
| THD: | Less than 1% |
| Channel 1: | Stereo/Mono 1/4"inputs, RCA Stereo inputs, LEVEL control, BALANCE control, +12dB gain switch |
| Channel 2: | Stereo/Mono 1/4"inputs, LEVEL control, BALANCE control, +12dB gain switch |
| Channel 3: | Mono 1/4" input, TONE control, LEVEL control, Instrument level switch, MID cut switch |
| Channel 4: | Mono 1/4" input, XLR MIC input, 3-band EQ controls, LEVEL control |
| Graphic EQ.: | 5 Band: 100Hz, 250Hz, 800Hz, 4kHz, and 8kHz ±12dB |
| Headphones: | Stereo 1/4"jack, high current output, LEVEL control |
| Rear 1/4"Jacks: | LINE OUTS: 1 Balanced Mono (Unbalanced Right) output, 1 Unbalanced Left output, Independent LINE OUT level control (front) EFFECTS SEND / MAIN OUT EFFECT RETURN / AMP IN MAIN and AUX SPEAKER OUTPUTS, series wired (8ohms min.) |
| SPEAKER SPECS: | 15" PS15 woofer High frequency tweeter with adjustable L-Pad on crossover. |
| Enclosure response: | 57Hz to 16.5kHz |
| Power Consumption: | 150VA @ 120/240VAC |
| Power Requirement: | 100 to 240 VAC, 50-60Hz |
| Size: | 19.3Wx14.9Dx24H, 46Lbs. |





K15 FRONT PANEL FEATURES

CHANNEL 1&2 FEATURES

1. L (MONO) & R INPUT JACKS

These 1/4" **INPUT** jacks are designed for keyboards but will work with most any inputs. Plug the stereo outputs from your keyboard into these jacks. Plugging into the **L(MONO)** jack only will send that input to both **Left** and **Right** at the **LINE OUT** and **PHONES** jacks.

2. CH 1 RCA INPUT JACKS

The **Left** and **Right** RCA inputs on Channel 1 are for connecting disc players, MP3 players, tape decks, as well as keyboards with RCA connectors.

3. +12DB GAIN SWITCHES

For inputs with low level signals on **CH1** and **CH2**, press "IN" the **+12dB** switches to raise the level.

4. LEVEL CONTROL

The **LEVEL** controls adjust the volume of each channel heard through the speaker at the **LINE OUT** jacks and the **PHONES** jack.

5. BAL CONTROL (BALANCE)

The **BALANCE** control adjusts the difference in level between the **L** and **R** inputs of the channel. You can double the number of inputs on these channels by plugging in two different **MONO** sources to the **L** and **R** inputs and adjusting the **BALANCE** control to bring them to equal levels.

CHANNEL 3 FEATURES

6. CH 3 INPUT JACK

The **CH 3** input jack is a high-impedance input designed for keyboard, line level, an unbalanced mic and instruments such as a guitar or bass.

7. INST (INSTRUMENT LEVEL) SWITCH

The **INST** switch increases the level.

8. MID SWITCH

The **MID** switch provides additional tone shaping for instruments by cutting mid frequencies in the 500Hz range.

9. LEVEL CONTROL

The **LEVEL** control adjusts the volume of **Channel 3** heard in the speaker, at the **LINE OUT** jacks and the **PHONES** jack.

10. TONE CONTROL

The **TONE** control is used to shape the bass or treble sound of the input signal. Start with the tone control center position where it does not affect the signal. Then as needed, turn to the **Right** to boost **HIGH** frequencies or to the **Left** to boost **LOW** frequencies.

CHANNEL 4 FEATURES

11. XLR MICROPHONE & 1/4" INPUT JACKS

The **MIC** input is designed for balanced low impedance (microphone) input signals. The Balanced input will reduce the common noise picked up on the microphone cables. The XLR connector is wired as per the industry standard; pin 1 is ground, pin 2 is positive and pin 3 is negative. The 1/4" jack is designed for keyboard and line level signals. Both of these inputs can be used at the same time.

12. LO, MID, AND HI TONE CONTROLS

The **LO**, **MID** and **HI** tone controls are used to shape the bass, midrange, and treble sound of the input signal. It is suggested that the tone control settings start in their center positions where they do not effect the signal. Then, as needed, turn the turn to the right to boost, or turn to the left to cut. To add crispness to your sound, set the **Lo** to +10, **Mid** to -10, **Hi** to +10.

13. LEVEL CONTROL

The **LEVEL** control adjusts the volume of the channel heard in the speaker, at the **LINE OUT** jacks and the **PHONES** jack.

MASTER SECTION FEATURES

14. MASTER VOLUME

The overall speaker volume is controlled by the **MASTER** control. Turn up the volume here before increasing the individual channel **LEVEL** controls. The **MASTER** control does not affect the **LINE OUT** or **PHONES** levels.

15. LINE OUT CONTROL

The **LINE OUT** control adjusts the output level of the rear **LINE OUT** jacks.

16. PHONES LEVEL CONTROL

The **PHONES LEVEL** control adjusts the volume heard at the **PHONES** jack.

17. PHONES JACK

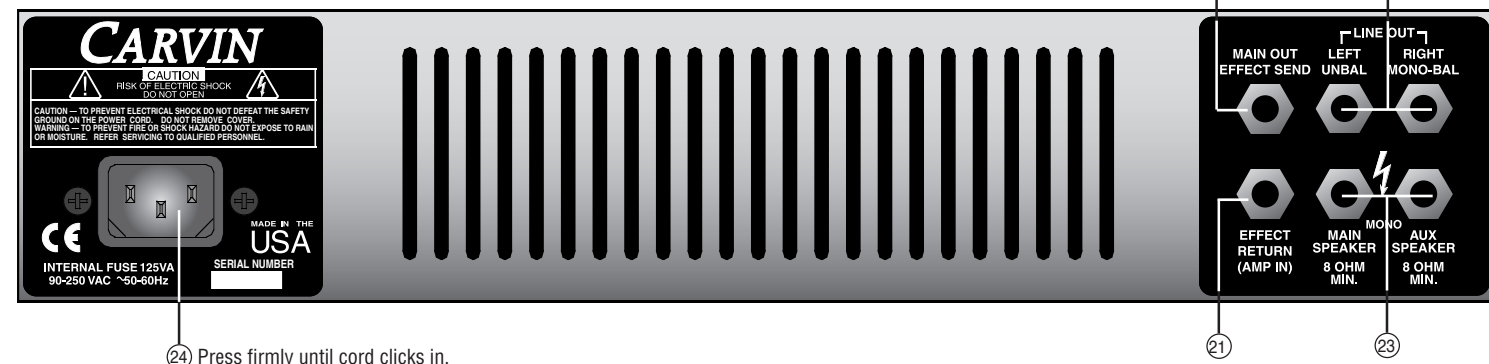
The stereo **PHONES** jack is driven by high current headphone amps that will drive any pair of headphones.

18. THE 5 BAND GRAPHIC EQUALIZER

The 5 band graphic EQ is an excellent tool to fine tune the overall mix from your **K15**. To use the 5 band Graphic, set all sliders to their center detent position. When the sliders are in this position, they do not effect the audio signal. When a slider is raised or lowered, it boosts and cuts the listed frequency. One setting that can be used to enhance your sound is to cut the mid range (set 800 Hz slider to -8) and raise the high and low frequencies as shown. This is a common "smile" curve that gives a tight punchy sound with plenty of highs to cut through a crowd. This EQ does not affect the **LINE OUT** or **PHONES** jacks.

19. POWER SWITCH

The power switch is to be utilized as the master ON/OFF switch. If the power LED does not turn on, check the power cable and make sure it is properly connected at the back of the amp. Also verify there is power at the wall receptacle. If the amp does not power up after this is verified, contact customer service.



REAR PANEL FEATURES

20. MAIN OUT (EFFECTS SEND) JACK

The **MAIN OUT** jack is a post EQ output jack for pre amplifier signal access. This output is the same signal that is being fed to the internal power amplifier. Use this jack as your **EFFECT SEND** when using external effects. It will also drive an external amp should you require more power.

21. EFFECTS RETURN (AMP IN) JACK

The **EFFECTS RETURN** jack is the input return jack that completes the effects loop. This jack will interrupt the signal path when plugged into. Plug the output of your external effects unit into this jack.

22. LINE OUT JACKS

The front **LINE OUT** control sets the output level of these jacks. They are fully independent from the **MASTER** control.

The **RIGHT / MONO-BAL** jack is a **MONO**, balanced **TRS** (Tip-Ring-Sleeve) output when used by itself. When a plug is inserted into the **LEFT/UNBAL** jack, the **RIGHT** jack becomes a standard unbalanced output and you have a pair of stereo outputs.

The **LINE OUT** jacks are generally used to connect your amp to the main mixer.

23. EXTERNAL SPEAKER JACK (CHASSIS)

The **EXTERNAL SPEAKER** jack is for connecting additional speaker cabinets. The jack is configured so an external speaker cabinet can be connected in series with the **K15**'s internal speaker. Recommended external speaker impedances are 4 to 8 ohms. Carvin recommends the **112AG** extension speaker.

24. AC POWER

The detachable **AC POWER CORD** supplied is designed to operate with one type of voltage (the European 230V export model uses a CEE-7 plug cord set). Make sure the cord is securely inserted into the back of the unit. Plug the cord into a grounded "3" prong" power source. No attempt should ever be made to defeat or use the amp without the ground connected. The internal switching power supply will "auto-switch" from 100 VAC to 250 VAC, 50 to 60 Hz. This allows the **K15** to be used in various countries without the need for modifications or external transformers.

25. 1/4" SPEAKER INPUT

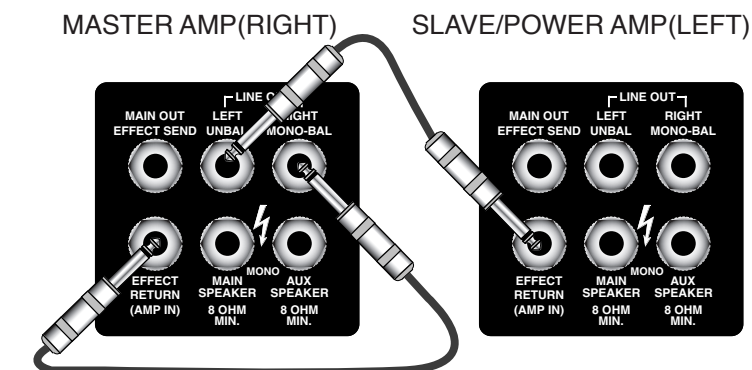
A 1/4" jack is used for connecting the amp to the speaker cabinet.

26. TWEETER L-PAD

The rear **TWEETER L-Pad** adjusts the level of the tweeter to give crisp clear highs. If distortion is heard when playing excessively loud, turn the tweeter down as it can amplify distortion.



STEREO SETUP USING TWO K15'S OR ONE ADDITIONAL POWER AMP & SPEAKER:



The **K15** is capable of stereo operation if another amp is available. Connect the **RIGHT LINE OUT** jack to the **AMP IN** (**EFFECT RETURN**) of the amp you have your instruments connected to. Use the **LEFT LINE OUT** jack to connect to the **INPUT** of a separate power amp, or to the **AMP IN** (**EFFECT RETURN**) of another **K15** unit. (*NOTE: GRAPHIC EQ will not function*)