



KB100

Congratulations on your purchase of the **KB100** amplifier. Designed specifically for the keyboard performer's needs, the **KB100** 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 bass ported enclosure and 1" Titanium HF Driver deliver full-range sound. Combined with 100 watts of power, the **KB100** is an ideal amp and stage monitor. The direct LINE OUT allows you to connect to the main house mixer without micing 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 KB100

- Use only a grounded (3 prong) power outlet to prevent a shock hazard. This gives the quietest grounding for the amplifier

CONNECTING INPUTS TO YOUR KB100

- 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.

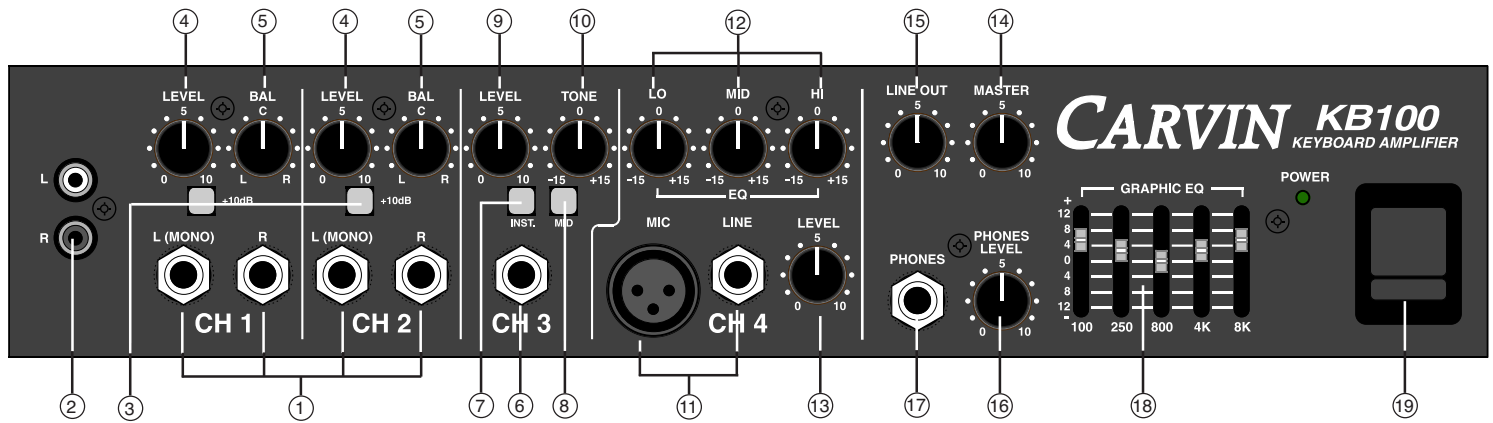
TURNING ON YOUR KB100

- 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 KB100 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.)

KB100 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:	17.5W x 12D x 22.7H, 42 Lbs.





KB100 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

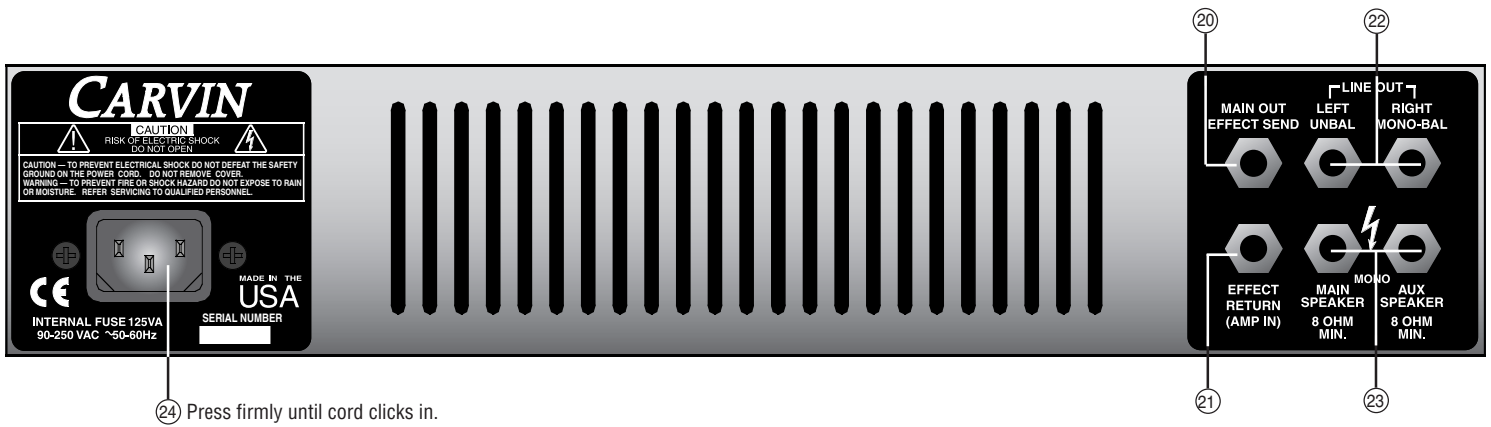
The stereo PHONES jack is driven by high current headphone amps that will drive any pair of headphones.

18. THE 5 BAND GRAPHIC EQUALIZER

The 5 band graphic EQ is an excellent tool to fine tune the overall mix from your KB100. 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.



24 Press firmly until cord clicks in.

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 **EFFECTS 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 **KB100'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 **KB100** to be used in various countries without the need for modifications or external transformers.

25. 1/4" SPEAKER INPUT

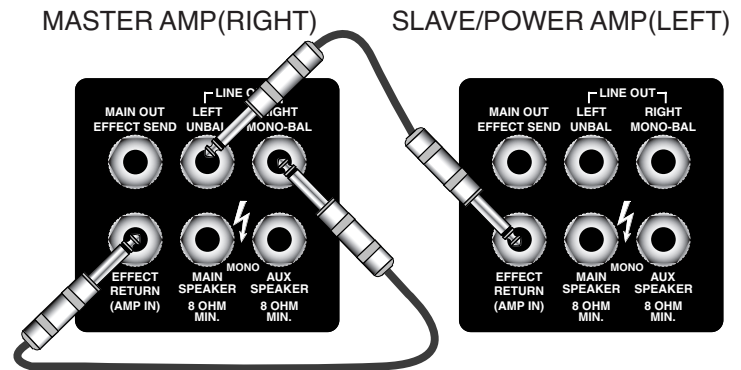
A 1/4" jack is used for connecting the amp to the speaker cabinet.

26. 1" TITANIUM HF DRIVER L-PAD

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



STEREO SETUP USING TWO KB100'S OR ONE ADDITIONAL POWER AMP & SPEAKER:



The **KB100** 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 **KB100** unit. (NOTE: **GRAPHIC EQ** will not function)



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.

LIMITED WARRANTY

Your Carvin product is guaranteed against failure for ONE YEAR unless otherwise stated. Carvin will service and supply all parts at no charge to the customer providing the unit is under warranty. Shipping costs are the responsibility of the customer. CARVIN DOES NOT PAY FOR PARTS OR SERVICING OTHER THAN OUR OWN. A COPY OF THE ORIGINAL INVOICE IS REQUIRED TO VERIFY YOUR WARRANTY. Carvin assumes no responsibility for horn drivers or speakers damaged by this unit. This warranty does not cover, and no liability is assumed, for damage due to: natural disasters, accidents, abuse, loss of parts, lack of reasonable care, incorrect use, or failure to follow instructions. This warranty is in lieu of all other warranties, expressed or implied. No representative or person is authorized to represent or assume for Carvin any liability in connection with the sale or servicing of Carvin products. CARVIN SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

SERVICE

In the USA, please call 800-235-2235 for a RMA # (return authorization number). Write this number on the box and enclose a description of the problem. Prepay to Carvin 12340 World Trade Drive, SD, CA 92128.

Outside the USA, contact your dealer or go to <http://www.carvinworld.com> for your nearest service center. Include a written description of the problem with serial number and date of purchase.

HELP SECTION

1) AMP WILL NOT TURN ON

Check the power to the amp. Check for tripped circuit breakers, unplugged extension cords or power-strip switches that may be turned off. After you have verified there is AC power and the amp still doesn't work, your unit will require servicing.

2) MAINTENANCE

To bring back the new look, your KB100 front panel can be wiped with mild detergent and/or a warm damp soft cloth. This will remove normal dust and oil from the cabinet. Never spray cleaners or detergents directly at the electronic controls. The KB100 is virtually sealed from outside dust and dirt, but it is recommended to keep the unit free from excessive dust, dirt, and moisture as much as possible.

REPLACEMENT PARTS LIST (for circuit cards)

80-71004A	PCB ASSY MAIN KB100 SMT		C15
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/ADHSVE 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," "C67, C68, C69, C110, C134"
03-60043	1 EACH SIL PAD W/ADHESIVE 9 MIL STICK TO VP1	49-22035	33 EACH SMT CAP 22uF 35v ELECTROLYTIC "C1, C2, C3, C4, C6," "C8, C9, C14, C17, C19," "C20, C21, C22, C26, C34," "C35, C46, C47, C51, C54," "C55, C56, C59, C62, C91," "C100, C102, C107, C108, C111," "C303, C304, C310"
05-22102	"6 EACH POLYOLEFIN SHRINK TUBING 1/16"***	49-22212	3 EACH 0.0022UF SMT 10% FILM 0805 50V "C75, C78, C106"
06-40050	3 EACH TERMINAL VERT MALE PC MTG .250 "OC1, OC2, OC3"	49-22312	1 EACH 0.022UF SMT 10% FILM 0805 50V C60
06-40060	3 EACH TERMINAL 90dg MALE PC MTG .250 "OC4, OC5, OC6"	49-25152	3 EACH 220PF SMT 5% CERAMIC 0805 "C92, C139, C79"
15-00300	2 EACH INDUCTOR .3 mH DRUM CORE "L7, L8"	49-33312	2 EACH 0.033UF SMT 10% FILM 0805 50V "C116, C71"
15-27430	4 EACH BEAD W/LEAD .138Dx .35Lx 22AWG "L1, L2, L5, L6"	49-39052	25 EACH 39PF SMT 5% CERAMIC 0805 "C5, C7, C10, C11, C16," "C18, C24, C25, C29, C48," "C49, C50, C52, C53, C57," "C58, C66, C97, C99, C101," "C128, C309, C403, C80, C133"
15-05001	1 EACH LINE FILTER/INDUCTOR 5mH 3A, L3	49-47212	3 EACH 0.0047UF SMT FILM 0805 50V "C30, C63, C73"
15-900326	1 EACH TRANSFORMER SWITCHING 100W, T1	49-47312	3 EACH 0.047UF SMT 10% FILM 0805 50V "C12, C13, C74"
21-31100	1 EACH RECEPTACLE AC W/FAST-ON CHASS PL1	49-56152	3 EACH 560PF SMT 5% CERAMIC 0805 "C77, C305, C306"
21-40000	1 EACH XLR FEMALE CONNECTOR W/O GRND J41	49-82052	2 EACH 82PF SMT 5% CERAMIC 0805 "C103, C127"
21-40020	1 EACH JACK RCA DUAL PC VERTICAL MTG J13	51-00050	"2 EACH RES 0.00 OHM .50X.20" JUMPER "B5, B7"
21-51345	1 EACH JACK .250 PHONE MONO PLASTIC, J5	53-47045	1 EACH RES 47.00KOHM 1.00W 5% CARBON R42
21-52345	10 EACH JACK .250 PHONE MONO STEEL "J1, J2, J3, J6," "J11, J12, J21, J22, J31, J41"	55-04705	2 EACH RES .47 OHM 5W 10% SB VERT "R113, R114"
21-52545	2 EACH JACK .250 PHONE STEREO STEEL "J4, J10"	58-00035	4 EACH 0.0 SMT JUMPER 1206 "B3, R51, R58, R59"
23-03529	2 EACH FUSEHOLDER CLIPS 3AG VERT MTG, F1	58-10015	3 EACH 10.5 SMT .25W 1206 1% "R127, R128, R41"
23-11004	2 EACH CONNECT HEADER 4 PIN STRAIGHT "H4A, H4B"	58-10025	4 EACH 100.5 SMT .25W 1206 1% "R47, R92, R112, R164"
23-11008	2 EACH CONNECT HEADER 8 PIN STRAIGHT "H1A, H1B"	58-10035	10 EACH 1K SMT .25W 1206 1% "R25, R111," "R84, R150, R63, R64," "R101, R102, R3, R133"
23-11010	4 EACH CONNECT HEADER 10 PIN STRAIGHT "H2A, H2B" "H3A, H3B"	58-10045	33 EACH 10K SMT .25W 1206 1% "R2, R22, R24, R4, R10," "R17, R35, R57, R61, R65," "R80, R81, R87, R135, R136," "R55, R60, R119, R90, R148, R82," "R153, R312, R108, R98,"
25-02201	1 * STD 4 EACH ASSEMBLED SWITCH AND CAP "S11, S21, S31, S32"		
30-71004B	1 EACH PCB MAIN KB100		
41-27322	3 EACH CAP POLY FILM .027uF 250VAC 10 "C113, C114, C115"		
41-47322-	11 EACH CAP MYLR .0470UF 250VAC BOX C41		
41-47422	1 EACH CAP MYLR .47UF 250VAC BOX C122		
42-12142	1 EACH CAP ELEC 120MFD 400VOLT 20% C27		
45-18152	1 EACH CAP CERM 180PF 500VOLT 5% C90		
45-33113	1 EACH CAP CERM 330PF 1000VOLT 10% C40		
47-10225	"2 EACH CAP ELEC 1,000 MFD 25V 20%" "C38, C39"		
47-22151	1 EACH CAP ELEC 220 MFD 50VOLT 10% C31		
47-47151	4 EACH CAP ELEC 470 MFD 50 VOLT 20% "C42, C43, C44, C45"		
49-10050	1 EACH CAP SMT 1UF 50V ELECTROLYTIC		



CAUTION
RISK OF ELECTRIC SHOCK

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

	"R111, R120, R121, R125," "R134, R535, R37, R137"	60-22100	1 EACH IC PRIMARY VIPER 100 VP1
58-10055	4 EACH 100K SMT .25W 1206 1% "R77, R79, R69, R36"	60-25011	1 EACH IC OPTO COUPLER ISOLATOR OP2
58-10065	3 EACH 1M SMT .25W 1206 1% "R166, R168, R93"	60-40002	1 EACH THERMISTOR 40ohm 2amp 20% TR1
58-15035	6 EACH 1.5K SMT .25W 1206 1% "R58, R59, R66, R86," "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," "R122, R99"	60-50200	4 EACH DIODE GEN REC 1N5402 3A 200V "D14, D15, D16, D17"
58-15055	3 EACH 150K SMT .25W 1206 1% "R71, R75, R147"	60-55500	2 EACH TRANS 2N5550 HV NPN 250V TO-92 "Q2, Q11"
58-22035	14 EACH 2.2K SMT .25W 1206 1% "R306, R307, R97," "R70, R72, R74, R76, R78, R86," "R106, R109, R110, R116, R123"	60-75330	1 EACH LED GREEN DIFFUSED 3MM T-1.00 D1
58-22045	19 EACH 22K SMT .25W 1206 1% "R8, R11, R13, R27, R28," "R29, R44, R52, R67, R94," "R5, R6, R18, R146," "R115, R100, R105, R126, R132"	60-78150-	1 * STD 1 EACH REG VOLT 15+V 1A (PREPPED) Q16
58-27025	1 EACH 274 OHM SMT .25W 1206 1% R50	60-79150	1 * STD 1 EACH REG VOLT 15-V 1A (PREPPED) Q17
58-33045	7 EACH 33K SMT .25W 1206 1% "R7, R9, R20, R23, R48, R537, R43"	60-80200	2 EACH DIODE 8A 200V TO-220 "D22, D23"
58-36055	1 EACH 365K SMT .25W 1206 1% R73	61-04737	1 EACH DIODE REG GEN 1N4737A 7.5V 1W Z4
58-39035	2 EACH 3.9K SMT .25W 1206 1% "R40, R54"	62-04739	3 EACH SMT DIODE ZENER 4739 "Z8, Z9, Z10"
58-47015	2 EACH 47.5 SMT .25W 1206 1% "R85, R151"	62-08451	1 EACH SMT ZENER DIODE 5.1 VOLT Z501
58-47025	2 EACH 470.5 SMT .25W 1206 1% "R104, R158"	62-06001	3 EACH DIODE ULTRA FAST 600V 1A SMA "D18, D19, D21"
58-47035	3 EACH 4.7K SMT .25W 1206 1% "R62, R95," "R91,"	62-19140	13 EACH 1N914 HI SPD SMT 250mW DIODE "D2, D3, D5, D6, D9, D10, D11," "D12, D13, D20, D27, D28, D29"
58-47045	18 EACH 47K SMT .25W 1206 1% "R38, R39, R56, R88, R89, R32, R33," "R15, R21, R68, R83, R149," "R103, R107, R129, R117, R118, R124"	62-20430	3 EACH NJM2043SMT (TESTED) DUAL HFREQ "A5, A11, A12"
58-56035	5 EACH 5.6K SMT .25W 1206 1% "R14, R16, R30, R31"	62-45650	14 EACH NJM4565 SMT DUAL HI FREQ "A1, A2, A3, A4, A6," "A7, A8, A9, A10, A14," "A15, A16, A17, A19"
58-68025	1 EACH 680 SMT .25W 1206 1% R49	62-54001	9 EACH MMBT5401LT1 PNP SOT-23 SMT "Q3, Q4, Q5, Q6, Q9, Q10, Q12, Q14," Q18
58-68035	2 EACH 6.8K SMT .25W 1206 1% "R25, R53"	62-55500	5 EACH MMBT5550 NPN SOT-23 "Q1, Q7, Q8, Q13, Q19"
58-68045	1 EACH 68K SMT .25W 1206 1% R132	70-05710	1 EACH RELAY SPDT 12A@120VAC/24V COIL K1
58-91025	2 EACH 910.5 SMT .25W 1206 1% "R45, R46"	70-21050	1 EACH FUSE ABC 5.00A FAST 6.35X32MM F1
60-00083	1 EACH TRANSISTOR 15A 100V NPN Q1	71-09252D	"4 EACH POT 9 ""D-P"" 25F B50K-CC BLUE" "P32, P42, P43, P44"
60-00084	1 EACH TRANSISTOR 15A 100V PNP Q12	71-09253B	"3 EACH POT 9 ""D-P"" 25F B50K WHITE" "P31, P41, P1"
60-20060	1 EACH TRANSIENT VOLT SUPP 200V 600W Z1	71-10320	5 EACH FADER 20MM SL20V3-B10K-L15D(G) "P51, P52, P53, P54, P55"
		72-12552	"2 EACH POT 12 ""D-P"" 25F 1B50Kx2-C BLK" "P12, P22"
		72-12553	"4 EACH POT 12 ""D-P"" 25F 1B50Kx2 BLACK" "P11, P21, P2, P3"