INSTALLATION INSTRUCTIONS FOR THE KDC 6

Safety First

CAUTION: THESE INSTALLATION INSTRUCTIONS ARE FOR USE BY QUALIFIED PERSONNEL ONLY. TO AVOID ELECTRIC SHOCK DO NOT PERFORM INSTALLATION UNLESS QUALIFIED TO DO SO. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.

Items included in your KDC 6 kit:

(1) KDC 6 Printed circuit board (PCB) with wires installed
(1) Input/Output (I/O) panel
(2) #4-40 x ¼" screws
(3) tie-wraps
Note: Contact your Rane dealer for missing items.

Tools needed:

#2 phillips screwdriver
#1 phillips screwdriver
small blade screwdriver
needle nose pliers
diagonal wire cutters

I/O Panel Exchange Procedure:

1. Unplug the MA 6S from the AC power source. *IMPORTANT: Wait ten (10) minutes before starting the installation of the KDC 6 for the power supply caps to safely discharge.*
2. Disconnect the inputs and speakers from the MA 6S by unplugging the Euroblock connectors.
3. On a sturdy flat surface, place the MA 6S upside down with the bottom facing up.
4. Remove the bottom cover. This is held in place by (16) #6 thread-forming screws. (12) of these screws are located on the bottom surface which is now facing up. (2) more screws are located on each side of the unit. See drawing 522-221 for more details.
5. Remove the I/O panel. This is held in place by (8) #6 thread forming screws and (12) #4-40 x ¼" screws. Remove all (20) screws. Put them in a safe place, you will need all the #4 screws and (7) of the #6 screws for re-assembly. Remove the I/O plate. Keep this panel if you might convert the MA 6S back in the future. See drawing 522-221 for more details.
6. Install the new I/O panel on the MA 6S unit in the same orientation the original I/O panel was. You will note that the new I/O panel does not cover up the silkscreened information and mounting hole for the KDC 6. Replace (7) #6 thread forming screws and (12) #4-40 x ¼" screws that you removed in step 5 above. See drawing 522-222 for more details.
7. The I/O panel exchange is complete. Proceed to the next section to install the KDC 6 PCB.

Installing the KDC 6 PCB:

1. Confirm that the MA 6S is off and unplugged, and the I/O panel exchange is completed.
2. Referring to the included diagram (see drawing number 522-223), connect the wires from the KDC 6 to the correct locations on the MA 6S. Orient the KDC 6 with the component side of the PCB facing up (towards the bottom cover) while doing this.
3. After all wires are connected correctly to the power supply PCB of the MA 6S, install the KDC 6 into the MA 6S chassis with the 3-station Euroblock connector protruding out the rear of the chassis. The components of the KDC 6 circuit PCB should be facing up (towards the bottom cover). Make sure the holes in the chassis of the MA 6S align with the threaded holes on the L-brackets of the KDC 6 and install (2) 4-40 x ¼" screws through the chassis into the L-brackets. See drawing 522-222 for more details.
4. Using the included plastic tie-wraps, bundle the wires of the KDC 6 neatly and route them away from any sharp objects.
5. Reinstall the bottom cover using the (16) screws removed in step 4 of the I/O panel exchange procedure. See drawing 522-221 for more details.
6. You are now done with installing the KDC 6. See the next section on power supply connection.

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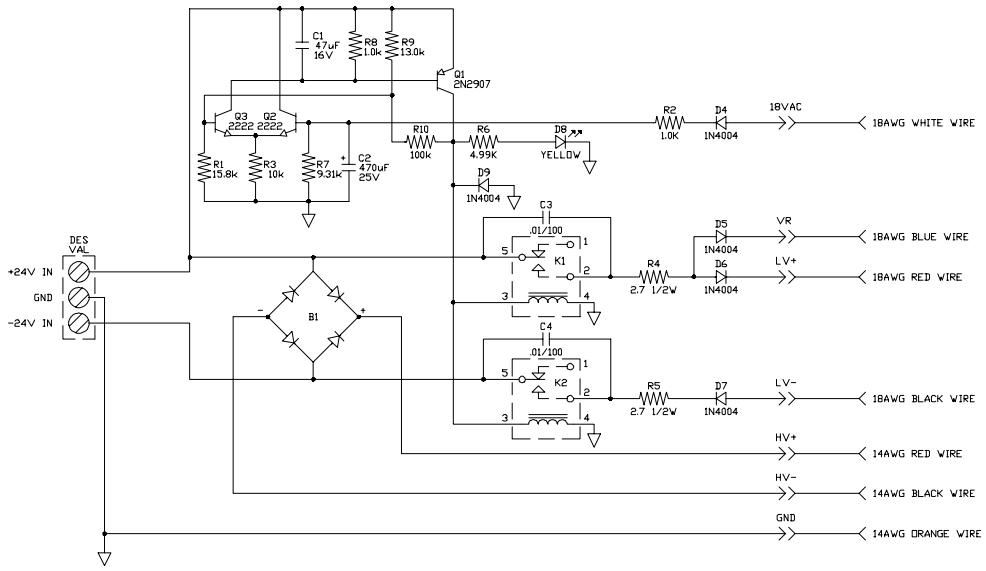
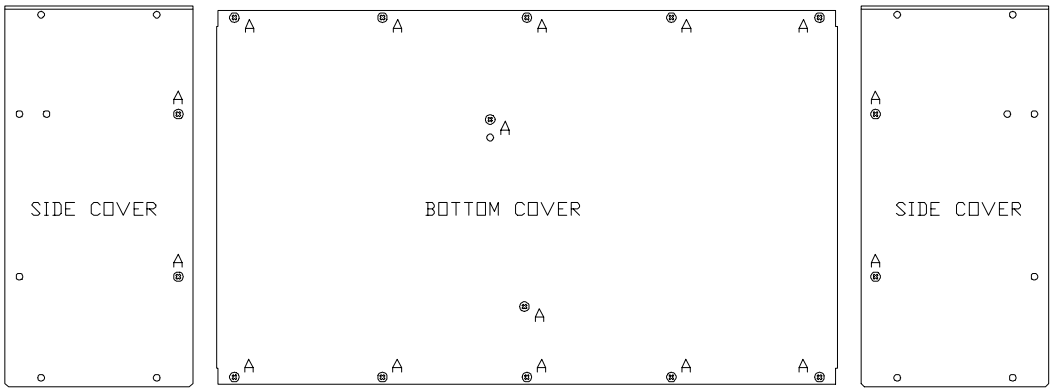


REVISIONS	REV. C	ACTION			DATE 04APR95	APPROVED	
DRAWN R. JOHNSTON	DATE 1MAY94	CHECKED A. CLAXTON	DATE 08SEP94	SHEET 1 OF 1	DO NOT SCALE DRAWING		

RANE
Corp. 10802 47th Avenue West, Mukilteo
WA 98275-5098 (206) 355-6000

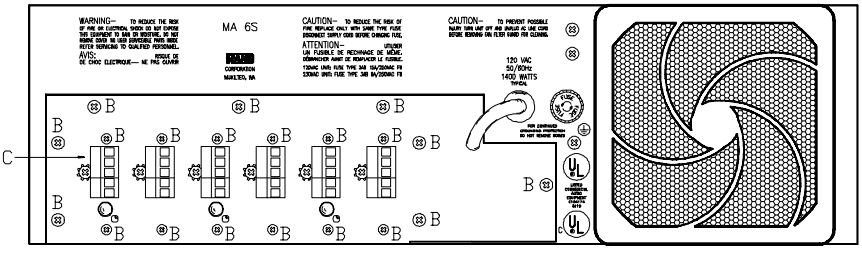
TITLE KDC 6
SCHEMATIC

DRW. NO. 521-231 REV. C



TO REMOVE BOTTOM COVER:

1. REMOVE ALL (QUAN. 16) SCREWS MARKED "A" AS SHOWN ABOVE.



TO REMOVE INPUT/OUTPUT PANEL:
(NOTE: SILKSCREEN NOMENCLATURE REMOVED FOR CLARITY)

1. REMOVE ALL (QUAN. 20) SCREWS MARKED "B" AS SHOWN ABOVE.
2. REMOVE ALL FEMALE EURO-BLOCK CONNECTORS

REVISIONS	REV. A	ACTION			DATE 07SEP94	APPROVED	
DRAWN A. CLAXTON	DATE 07SEP94	CHECKED R.JOHNSTON	DATE 07SEP94	SHEET 1 OF 3	DO NOT SCALE DRAWING		

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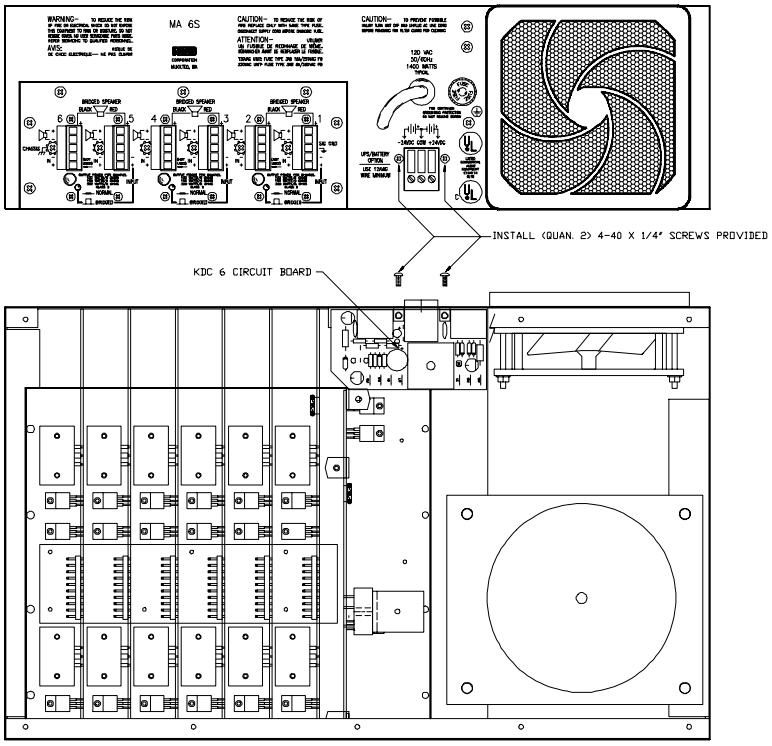
TITLE KDC 6
ASSEMBLY DETAILS

DRW. NO. 522-221 REV. A

MA 6S WITH KDC 6 INSTALLED



REVISIONS	REV. B	ACTION NEW KDC 6 PCB		DATE 01MAR95	APPROVED
DRAWN A. CLAXTON	DATE 07SEP94	CHECKED R.JOHNSTON	DATE 08SEP94	SHEET 2 OF 3	DO NOT SCALE DRAWING

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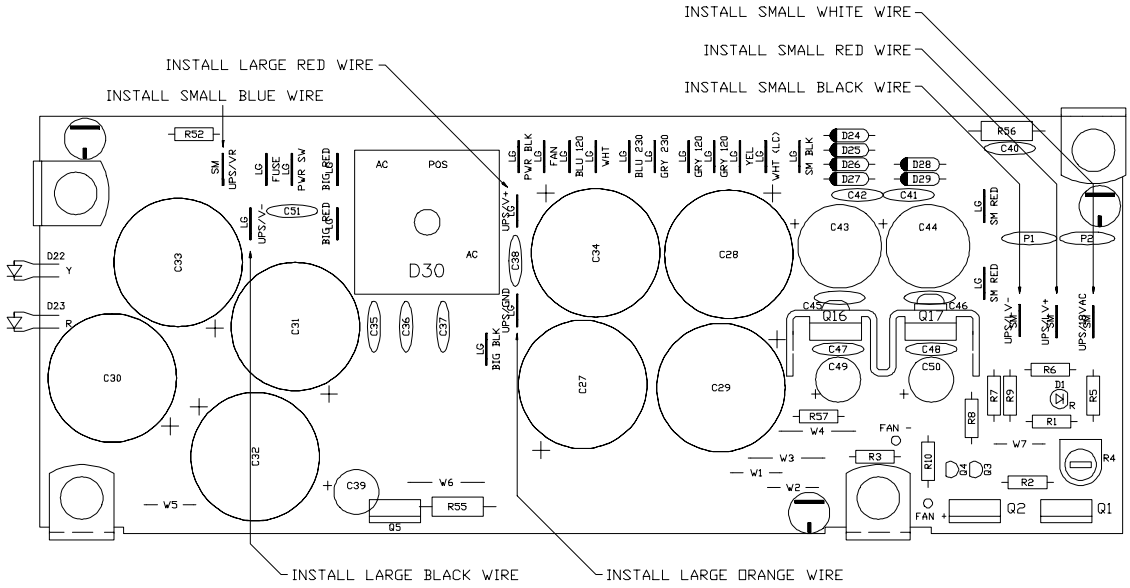
TITLE: KDC 6 ASSEMBLY DETAILS
DRW. NO. 522-222
REV. B



REVISIONS	REV. A	ACTION		DATE 08SEP94	APPROVED
DRAWN A. CLAXTON	DATE 08SEP94	CHECKED R.JOHNSTON	DATE 08SEP94	SHEET 3 OF 3	DO NOT SCALE DRAWING

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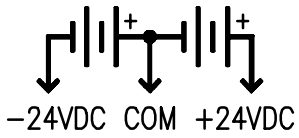
TITLE: KDC 6 WIRING DETAILS
DRW. NO. 522-223
REV. A

Connecting the KDC 6 to Your 48VDC (±24VDC) Power Supply:

1. Confirm that the MA 6S unit is off and unplugged.
2. The KDC 6 must be powered from a 48VDC power supply with a center tap to allow ±24VDC operation. Refer to the following diagram using four automobile batteries. Two 12V batteries connected in series equal 24 volts. Note that all wires used must be 10-12AWG. You should always use fuses when utilizing automobile batteries. These batteries are capable of supplying large amounts of current and can explode if shorted.



3. The Euroblock connector that comes with the KDC 6 has three setscrews used to lock the three DC input wires into the correct location. To insert the wire into the correct hole, you will need to turn each setscrew counterclockwise all the way out. The screw does not have a stop; eventually you will notice that more counterclockwise screw turning does not continue to come out. Stop at that point, and insert the correct wire from your power supply into the correct hole on the KDC 6. The wire end should have the insulation stripped back about ½". When using stranded wire, it is recommended that you tin the stripped end with solder. Now turning clockwise, snug the locking mechanism down on the wire. Once snug, tug on the cable to insure proper locking and move to the next wire.
   a. Connect the wire from the +24VDC supply to the +24VDC Input of the KDC 6.
   b. Connect the wire from the -24VDC supply to the –24VDC Input of the KDC 6.
   c. Connect the wire from the common of your supply to the COM Input of the KDC 6.
4. Once all wires are connected to the KDC 6 and the unit is connected to the 48VDC (±24VDC) power supply, the fan in the MA 6S will begin to turn and the POWER LED lights. After a short period of time the output relays of the MA 6S pick up. When a signal is applied with speakers connected correctly, your signal appears over the loudspeaker system, proving all is well.