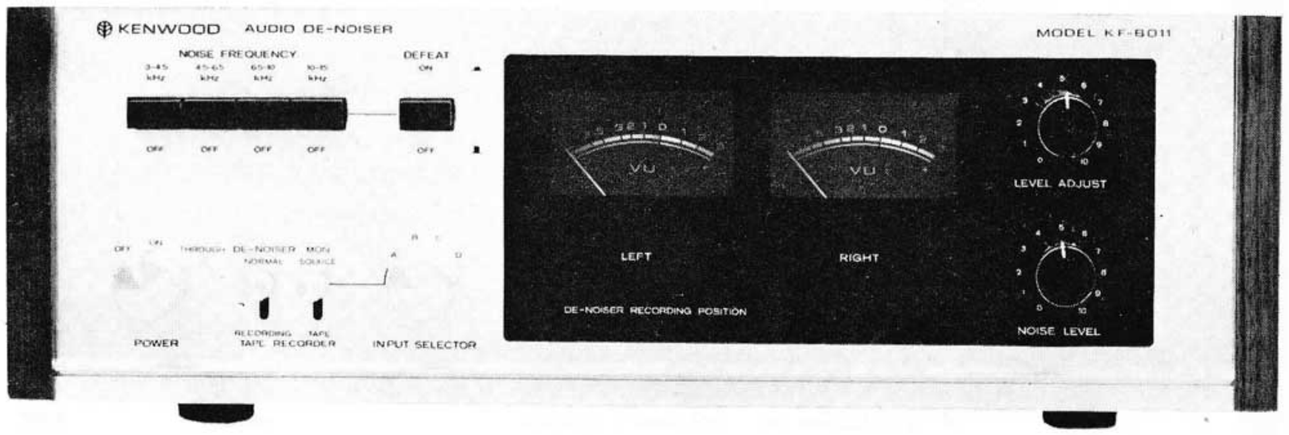
KENWOOD

KF-8011

AUDIO DE-NOISER



INSTRUCTION MANUAL

1. CONNECTING TO AMPLIFIER

Connecting cables with plug are supplied with this unit. Connect INPUT of KF-8011 to the recording jack (REC) of amplifier. Connect OUTPUT to PLAY jack of amplifier. Be sure that the left and right channels are connected correctly. (See Figure 4).

2. CONNECTING TO TAPE RECORDER

Connect recording jack (REC) of KF-8011 to LINE INPUT of tape deck and PLAY jack to LINE OUTPUT, respectively. A single connection can be made with a standard 5 pin RP (DIN) connecting cable. (See Figure 4.).

3. OPERATION

Observe normal operating procedure for your amplifier, tuner or tape recorder. Check all connections to make sure they have been made

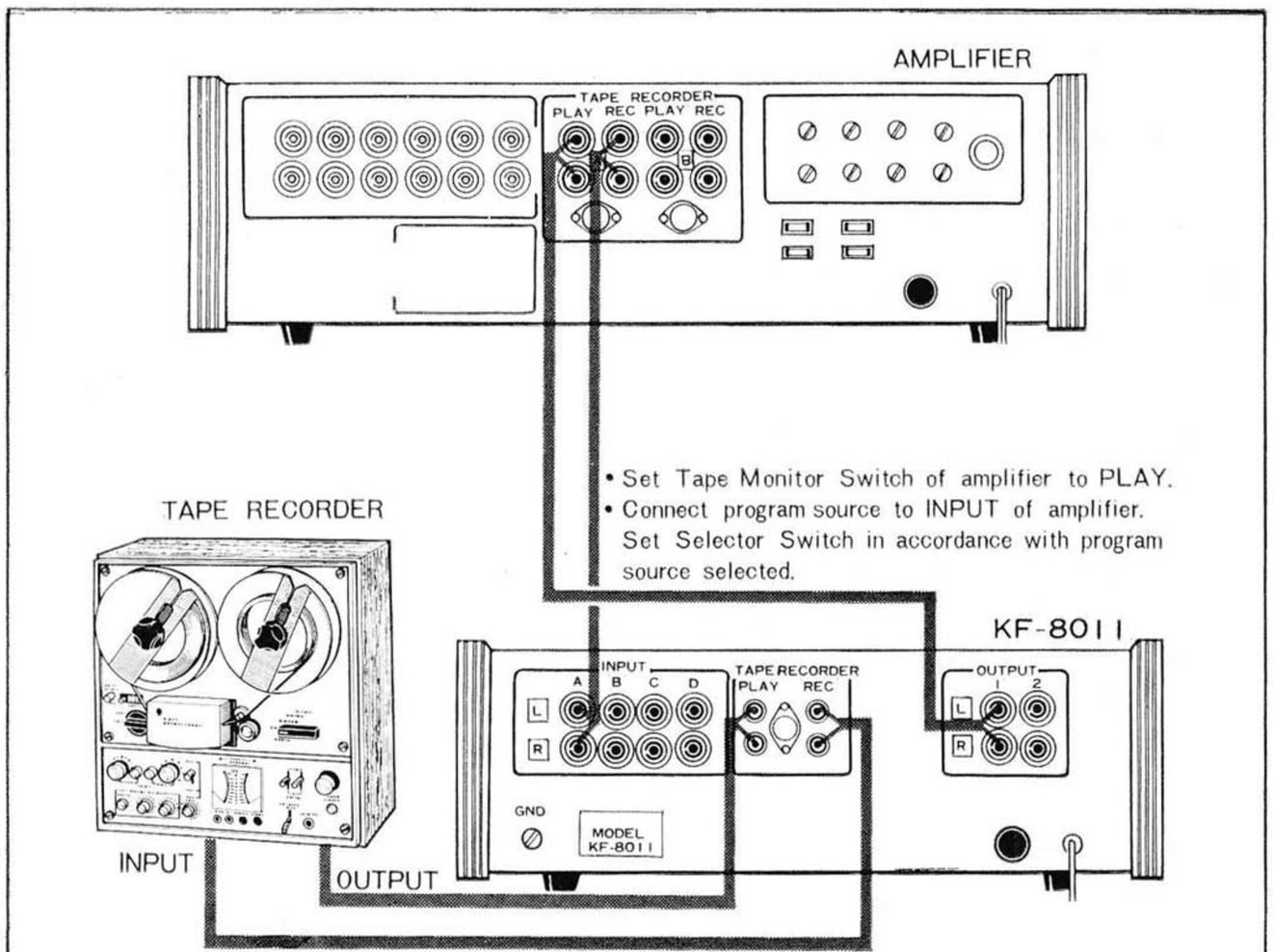


Figure 4. Interconnecting Diagram

REAR PANEL TERMINALS AND CONTROLS

(1) INPUT JACKS

Four pairs of input jacks are available for connecting to the output of a preamplifier, tape recorder, tuner, or to the REC jack of an amplifier. Use INPUT SELECTOR switch to select inputs at jacks A, B, C and D.

(2) TAPE PLAY JACKS

Connect tape deck LINE OUTPUT to these jacks.

(3) 5-PIN RP CONNECTOR

A 5 pin RP (DIN) cable may be used to permit tape recording and playback with a single connection.

(4) TAPE REC JACKS

Connect to LINE INPUT or AUX jack of tape deck to record.

(5) OUTPUT JACKS

A pair of output jacks (1 and 2) performing the same function are available. Connect one pair to the TAPE PLAY or AUX jacks of the amplifier.

(6) GND (Ground)

Common ground with associated equipment can be made if necessary.

(7) POWER SELECTOR SWITCH

Use the 220-240 V setting for 230 line voltage areas. For operation in 117 V areas, remove cover plate and switch to 110-120 V. Do not forget to replace the plate, to so that the "110-120 V" mark is visible.

(8) FUSE HOLDER

For use with 1 ampere tubular glass fuse.

(9) POWER LINE CORD

CONTROLS AND THEIR FUNCTIONS

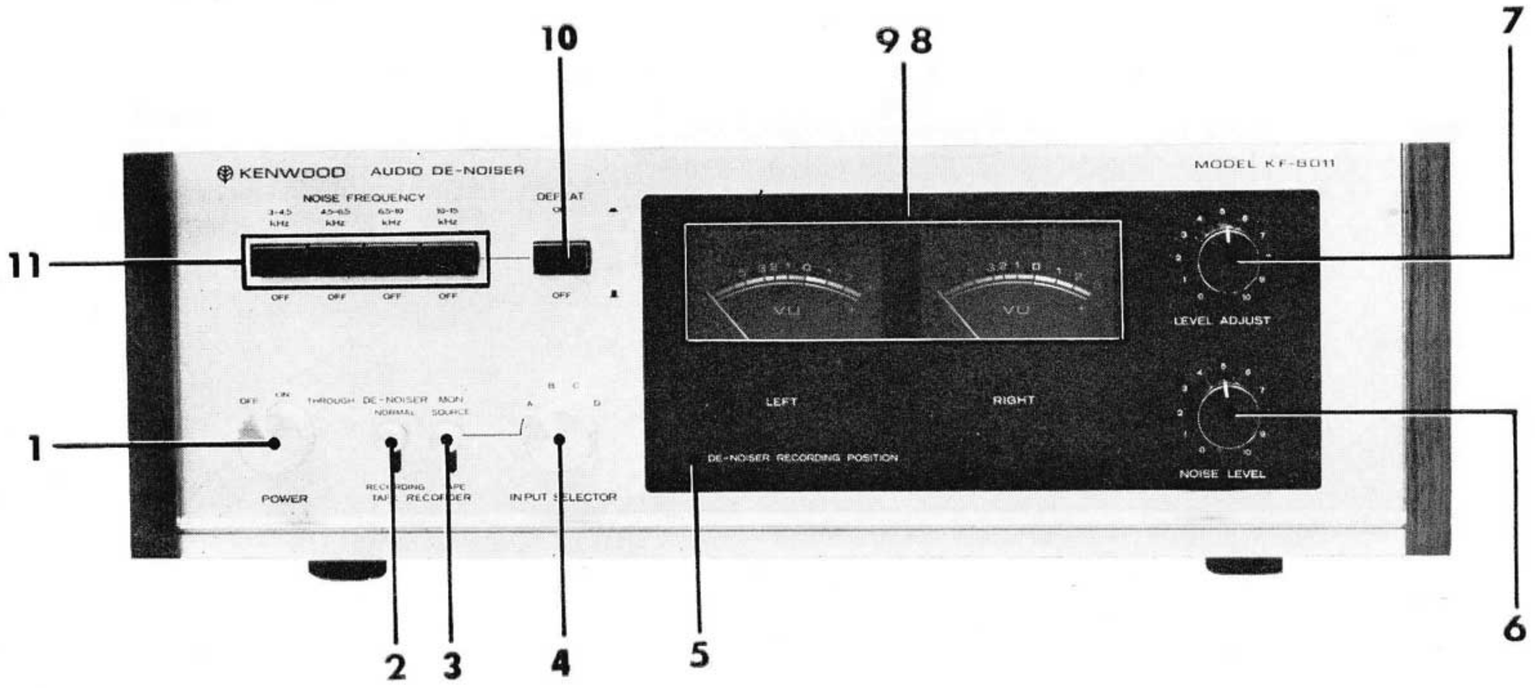


Figure 2. Frontside

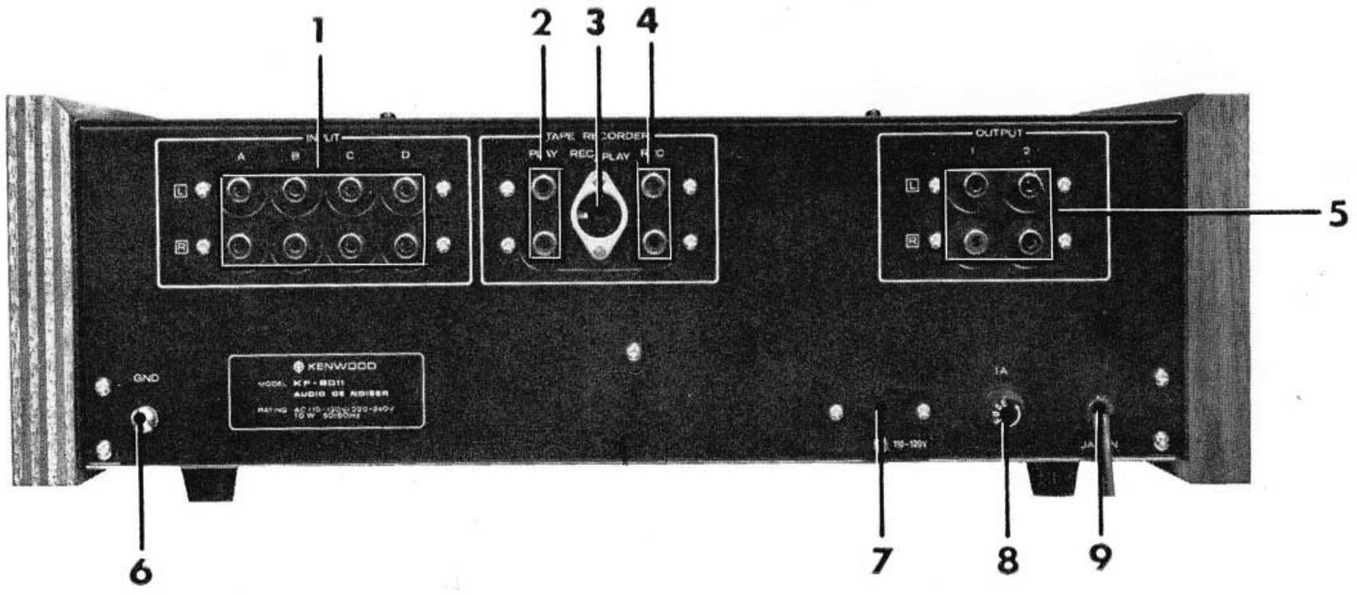


Figure 3. Backside

CONTROLS AND THEIR FUNCTIONS

FRONTSIDE

(1) POWER SWITCH

Consist of ON, OFF and THROUGH settings. To activate the DE-NOISER circuit, set this switch to "ON" position. In the THROUGH position, line voltage is supplied to the unit. Source signals pass through unaffected as the input and output are directly connected. (In this position no signal will be available at the REC jacks).
Unless otherwise notified this switch set to "ON" position in the following descriptions.

(2) DE-NOISER SWITCH

(a) NORMAL: At this position, the signals which are fed to the INPUT jacks or TAPE PLAY jacks appear on the OUTPUT jacks of this set after passing through the DE-NOISER circuit. At this time, denoised signals can not be obtained on the TAPE REC jacks of this set.

(b) RECORDING: Signals from the INPUT jacks appear at the TAPE REC jacks and OUTPUT jacks simultaneously after passing through DE-NOISER circuit.

(3) MON (Monitor) SWITCH

(a) SOURCE: At this setting signals from the INPUT jacks pass through DE-NOISER circuit and appear at the OUTPUT jacks.

(b) TAPE: At this setting signals from the TAPE PLAY jacks appear at the OUTPUT jacks unaltered when the DE-NOISER switch is set to RECORDING.

(4) INPUT SELECTOR

This switch permits the selection of inputs connected to the four pairs of INPUT jacks A, B, C and D of this set.

(5) DE-NOISER RECORDING INDICATOR

Illuminates in red when the DE-NOISER switch is set to RECORDING.

(6) NOISE LEVEL

The noise level can be controlled with this knob. Optimum listening conditions can be obtained without reduction in source signals by setting at a point where the output and input levels of the signals are identical.

(7) LEVEL ADJUST

This control permits adjustment of the signals to the optimum "0" VU meter reading before the signals are fed to the filters. Turn the knob clockwise to increase the signal level: turn counterclock-wise to decrease it. Signal levels ranging from 0.1 to 8 volts can be adjusted for "0" VU reading with this knob. At "0" VU it will handle an 8 volt input signal; at 10 VU it will handle approximately a 0.1 volt input signal.

(8) RIGHT CHANNEL VU METER

This meter permits monitoring the level of right channel signals which are fed to the filters. The LEVEL ADJUST knob should be adjusted so that the unit operates at "0" VU.

(9) LEFT CHANNEL VU METER

Same as above except that this meter indicates the level of left channel signals.

(10) DEFEAT

To activate push in to lock. Signals will not pass through the filters. To deactivate push in again to release. The signals will now be filtered.

(11) NOISE FREQUENCY

Push switch into locking position to activate filters in desired audio segment indicated above these switches. Deactivate filter by pushing in switch again to release.

CONNECTIONS AND OPERATIONS

correctly, and proceed as follows:

(a) Switch power "ON" to the KF-8011, amplifier and tape recorder.

(b) **Set Tape Monitor Switch of amplifiers to TAPE or ON position.**

(c) **Set DE-NOISER switch to NORMAL and MON switch to SOURCE.** The signals thus fed to the unit's INPUT will pass through the denoiser circuit and appear at its OUTPUT. When the MON switch is set to TAPE the signals fed to the PLAY jacks will pass through the denoiser circuit and appear at the unit's OUTPUT. (See Fig. 6).

(d) To record through the KF-8011 set DE-NOISER switch to RECORDING. The signals fed to the INPUT jacks of the KF-8011 will now pass through the denoiser circuit and appear at the REC jacks. These signals are unaffected by the denoiser circuit if the DE-NOISER switch is set to NORMAL. Now, set the MON switch to SOURCE and the same signals will appear at the OUTPUT jacks. If MON switch is set to TAPE, the tape playback or monitor signals will appear at the OUTPUT jacks. Any signal can now be monitored. (See Figure 7).

(e) Input signals will cause a deflection of the VU meter. The LEVEL ADJUST knob should be set to obtain a meter reading of near "0" VU.

(f) Turning the NOISE LEVEL knob counter-clockwise causes noise to disappear and simultaneously results in a gradual lessening of high frequency response. Turning the knob clockwise will restore high frequency response, however, noise may reappear. Depending on the relative noise level and high frequency source signals, this knob should be set so that noise becomes indiscernible without appreciable deterioration of high frequency response.

(g) Adjust the volume control of amplifier to a suitable listening level.

(h) When the POWER switch is set to THROUGH, signals are sent directly from INPUT jacks to OUTPUT jacks.

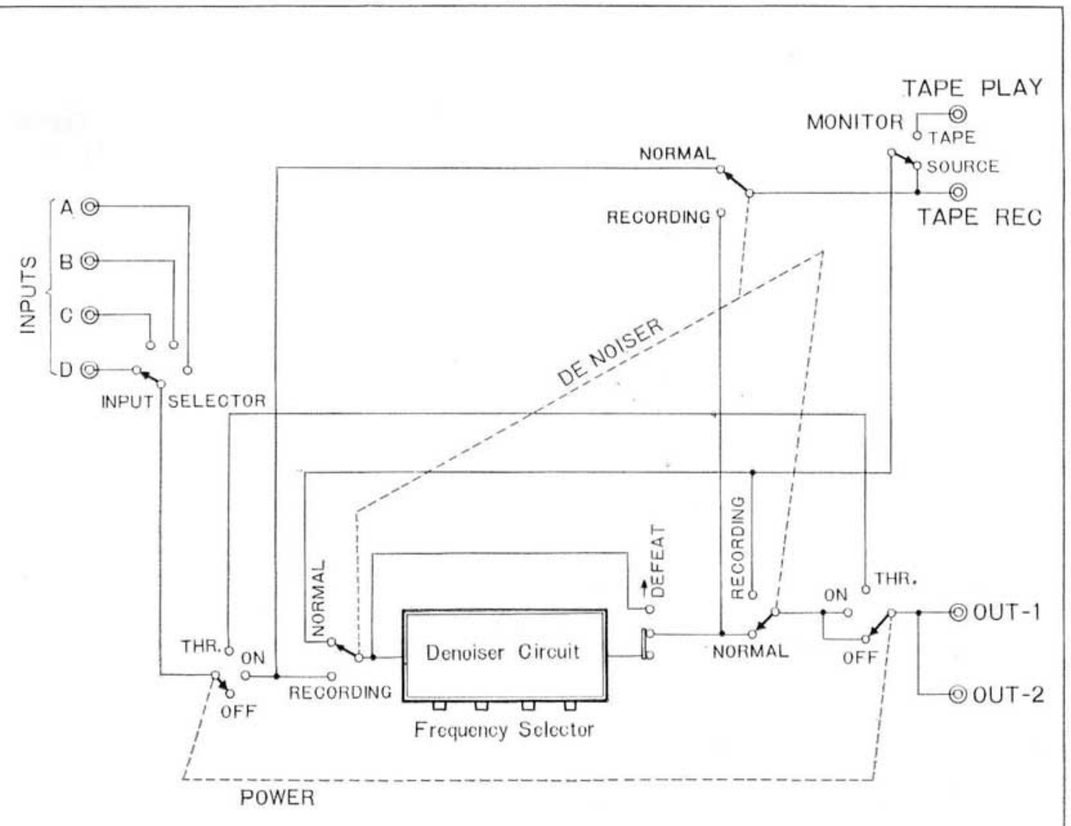


Figure 5 KF-8011 Function Diagram

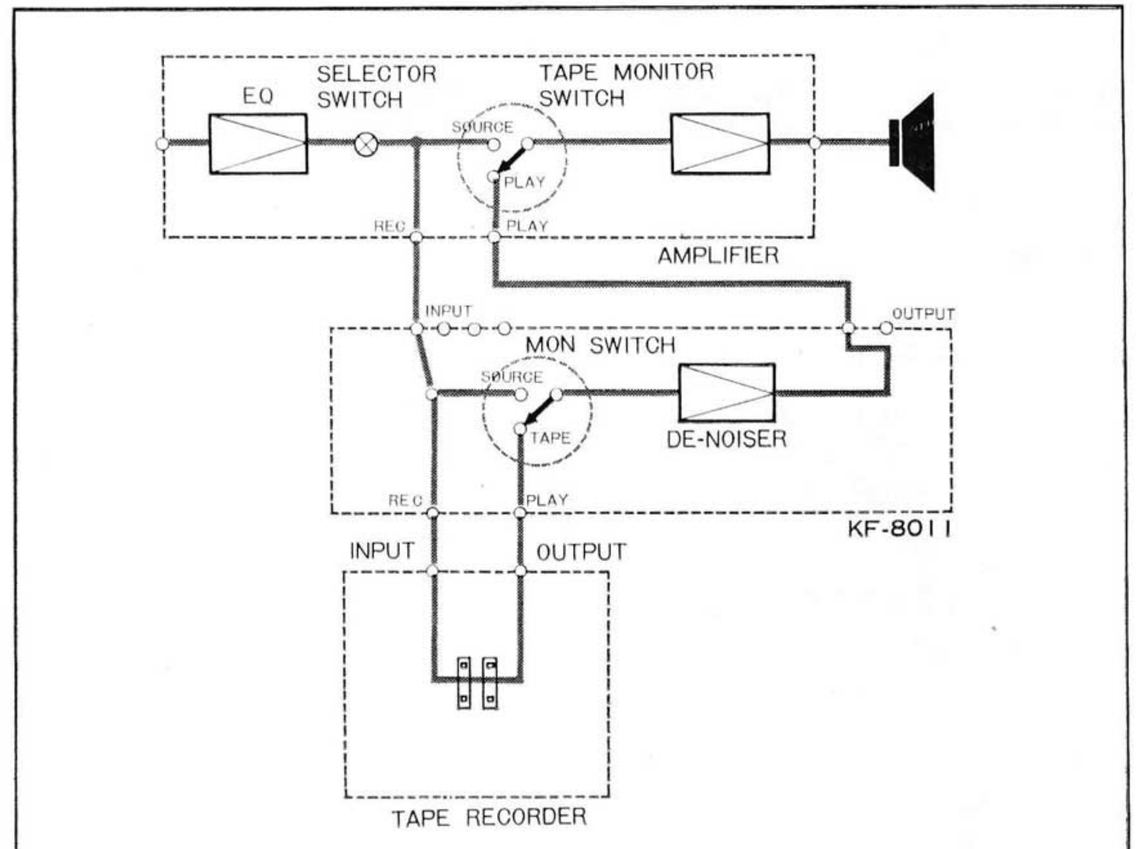


Figure 6. De-Noiser Switch at **NORMAL** position.

CONNECTIONS AND OPERATIONS

4. DUBBING

The use of the KF-8011 will help you to make vastly superior, noise-free tape recordings of previously recorded tape that was not possible with ordinary home tape-copying methods. In this case, the two tape recorders and amplifier are interconnected with this KF-8011 as shown in Figure 8. Procedure and control settings are also explained in Fig. 8.

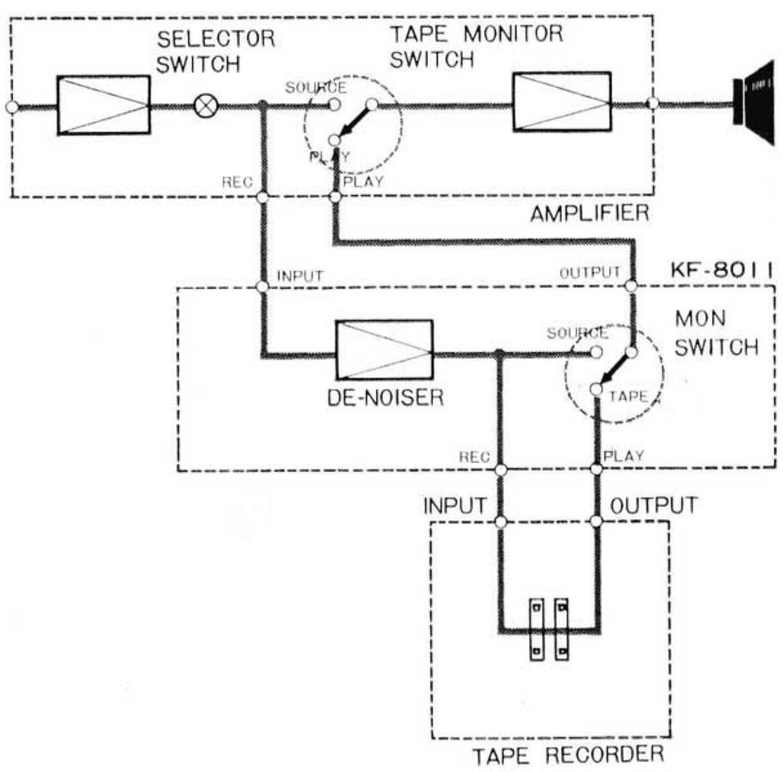
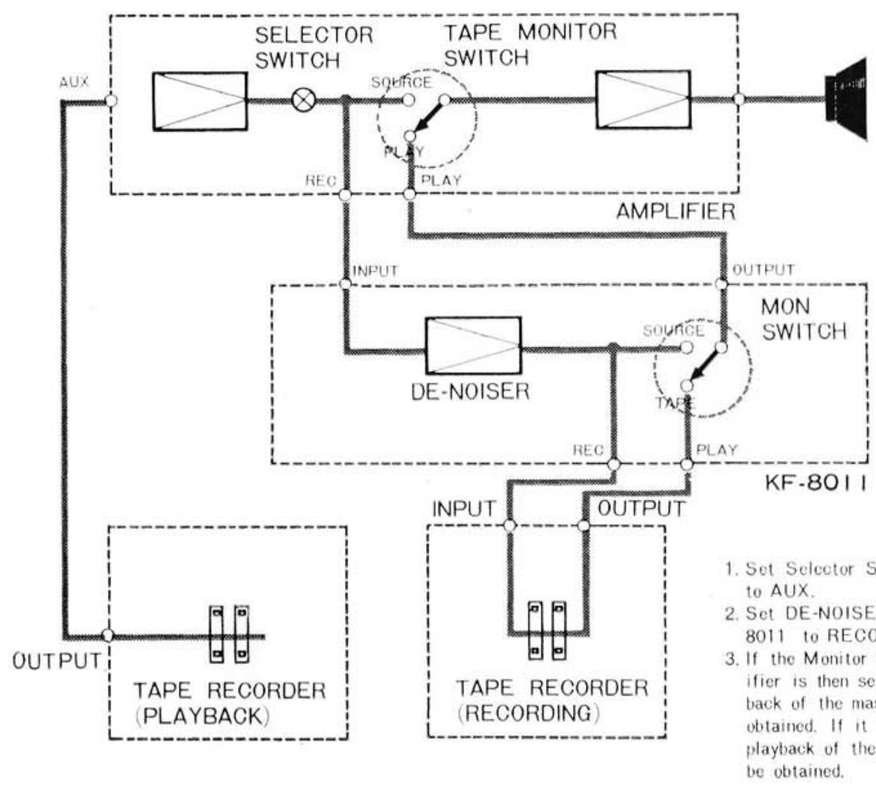


Figure 7. De-Noiser Switch at RECORDING position.



1. Set Selector Switch of amplifier to AUX.
2. Set DE-NOISER Switch of the KF-8011 to RECORDING.
3. If the Monitor Switch of the amplifier is then set to SOURCE, playback of the master tape will be obtained. If it is set to PLAY, playback of the dubbing sound will be obtained.

Figure 8. Interconnecting Diagram for dubbing

SUPPLEMENTARY INFORMATION

1. CONCERNING TRANSISTORS

Transistors differ fundamentally from radio vacuum tubes and require special attention to ensure their full performance capabilities. Given proper care transistors will provide years of practically trouble-free performance.

(a) Avoid locations subject to direct sunlight.
(b) Avoid high or low temperature extremes.
(c) Keep unit away from heat radiating sources. For example, do not place unit on top of a power amplifier. Also might prevent free circulation of air.

2. REPLACING THE FUSE

If the fuse should fail, always check carefully for all possible causes before replacing fuse. Remember a fuse may sometimes fail by itself. The fuse holder is located on the lower right side of the rear panel. To remove fuse, turn fuse holder cover to the left as indicated by the arrow. Be sure to use the same 1 ampere tubular glass type fuse for replacement. (See Figure 9). Never substitute a piece of wire or other metallic object for a blown fuse.

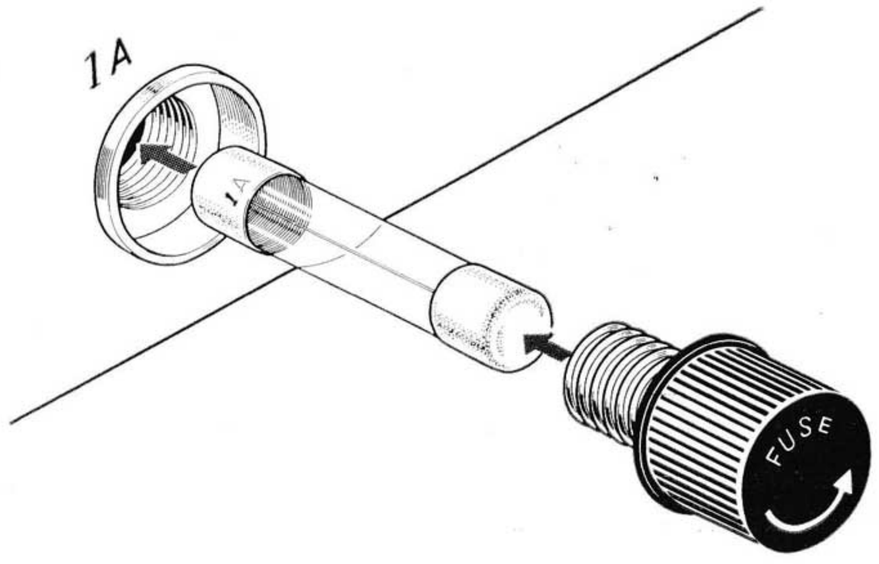


Figure 9. How to replace the fuse

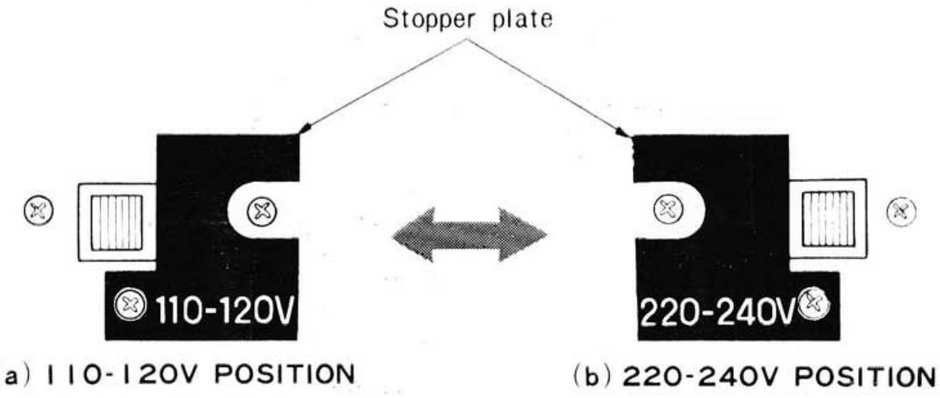
POWER

The KF-8011 operates on 110 — 120 volt AC or 220 - 240 volt AC. The AC Voltage Selector Switch on the rear panel is set to the area to be shipped.

CAUTION: Before plugging cord into the power outlet, it is important to read and follow the directions in the next section "AC VOLTAGE SELECTION". Otherwise, our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC Voltage Selector Switch.

AC VOLTAGE SELECTION

Make sure that the position of AC Voltage Selector Switch on the rear panel corresponds with your line voltage (Figure 10). If it differs from your line voltage, it must be changed to the proper voltage. To change, merely remove the stopper plate and slide AC Voltage Selector Switch to the opposite side. Then reattach the stopper plate to the other side (See Figure 10).



To change switch position, remove stopper plate. Switch the slide switch and reattach plate to the other side.

Figure 10 AC Voltage Selector Switch.

SPECIFICATIONS

FREQUENCY RESPONSE:

10 Hz — 80 kHz ±0.5 dB

NOISE REDUCTION:

At 0 dB = 1 V, 3.5 — 12 kHz.

Input Level	Noise Reduction
0 dB	0 dB
— 30 dB	0 dB
— 40 dB	2 dB
— 45 dB	10 dB
— 50 dB	15 dB

NOISE FILTER CHARACTERISTICS:

3 ~ 4.5 kHz — 15 dB (1 kHz = 0 dB)

4.5 ~ 6.5 kHz — 15 dB (1 kHz = 0 dB)

6.5 ~ 10 kHz — 15 dB (1 kHz = 0 dB)

10 ~ 15 kHz — 15 dB (1 kHz = 0 dB)

–20 dB at the center frequency of each band; i.e. 3.5 kHz, 5.5 kHz, 8 kHz, 12 kHz.

AMPLIFICATION FACTOR:

0 dB ±1 dB

MAXIMUM INPUT LEVEL:

8 V at maximum Level control position

TOTAL HARMONIC DISTORTION:

Less than 0.09% at 5.5 kHz, 1V input

TRACKING ERROR OF LEFT & RIGHT:

Within ±1dB at 1 kHz.

SIGNAL TO NOISE RATIO:

Better than 75 dB at 1 kHz.

CHANNEL SEPARATION:

Better than 55 dB

INPUT AND OUTPUT TERMINALS:

4 Sets of Input Jacks, 2 Sets of Output Jacks, TAPE PLAY, TAPE REC., DIN Connector.

POWER SUPPLY

110 · 120V/220 · 240 V, AC 50/60 Hz.

POWER CONSUMPTION:

10 watts

DIMENSIONS:

16⅜" W x 5⅛" H x 11" D.

WEIGHT:

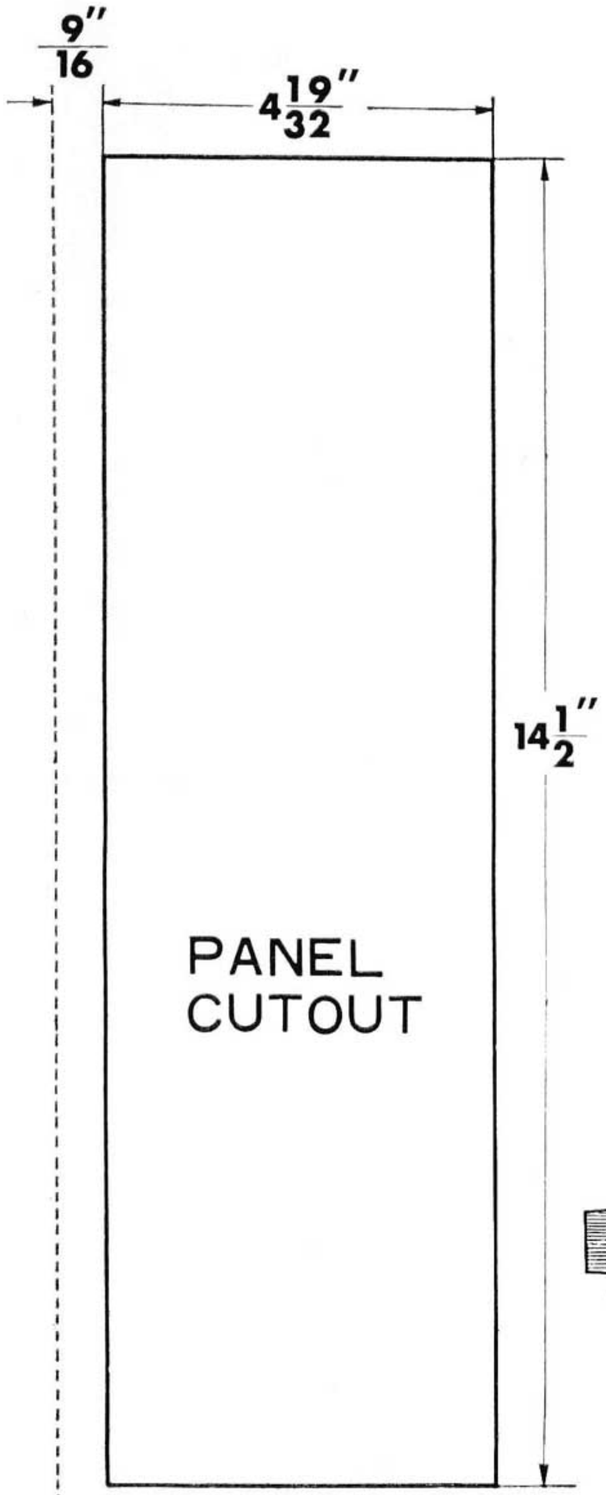
13.5 lbs.

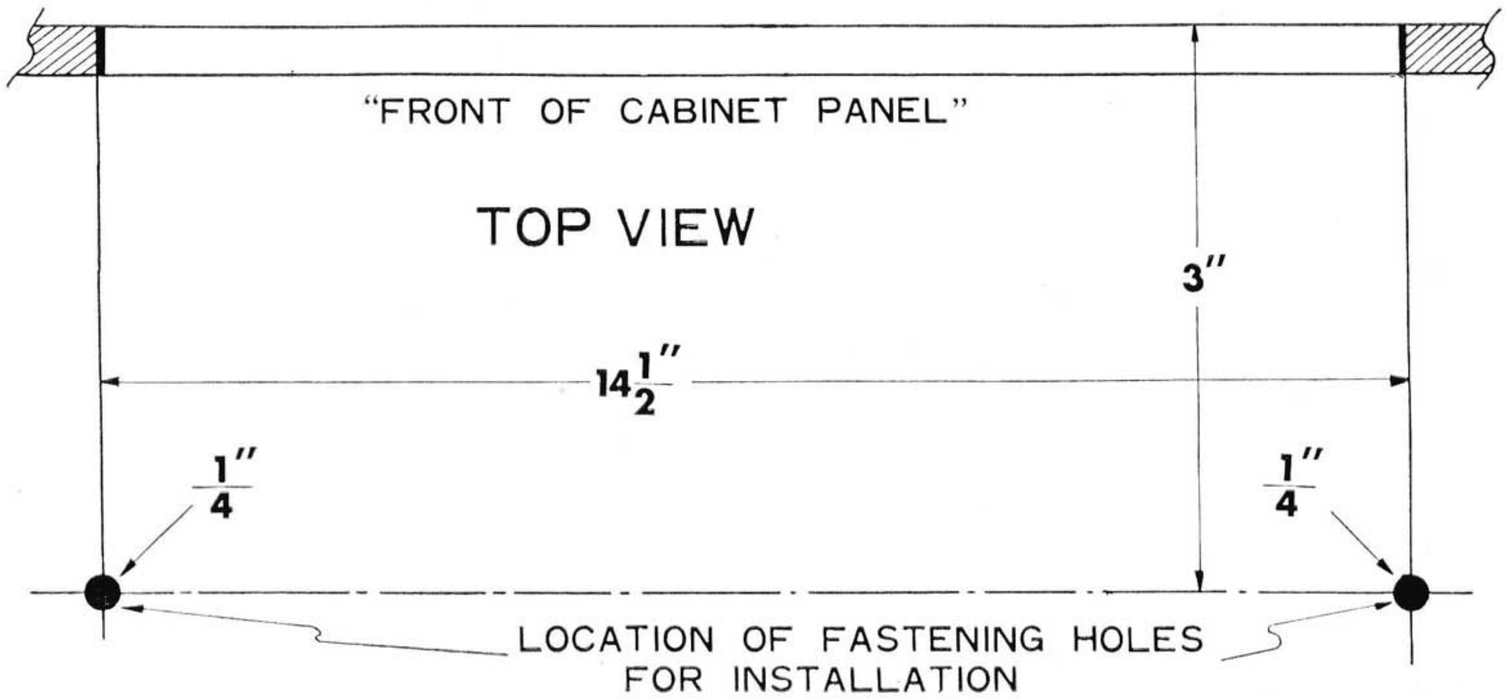
TROUBLE SHOOTING

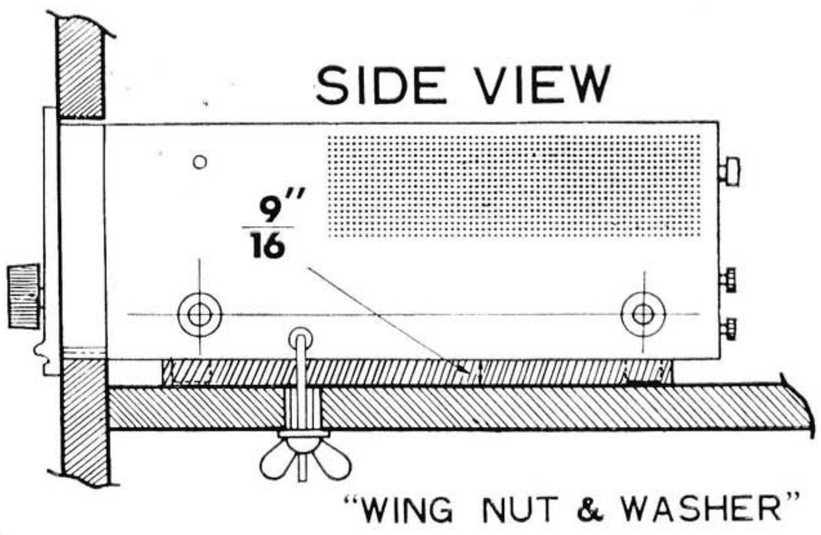
Improper connections may result in one or more of the following indications of trouble. Their possible causes and corrective measures are listed below.

Indications	Cause	Correction
Power switched on but meter fails to light, no meter action, and no output.	Poor power line contact.	Check power plug connection.
	Blown fuse.	Replace fuse. Repeated fuse failures indicate trouble.
Dim meter light.	Power Selector Switch (rear panel) not set to line voltage.	For 230 V power requirement, remove cover plate of switch and set to 220-240 V. Reattach plate.
Meter lamp lights, but no output.	Poor connections.	Check all interconnecting connections.
	Controls of amplifier or tape recorder set incorrectly.	See that correct operating procedure for these associated equipment are followed.
No VU meter action and loss of high frequency response.	Level Adjust knob is set at MIN.	Feed input signal and set Level Adjust knob to get a "0" VU meter reading.
Noise persists even with input signals set at "0" VU level.	Source noise is excessive.	Adjust Noise Level knob for best signal-to-noise ratio.
Howling when De-Noiser is located atop a pre-main amplifier with treble tone set at maximum, and De-Noiser Level Adjust knob set at MIN.	Excessive leakage from Pre-Main amplifier.	Locate De-Noiser away from Pre-Main amplifier.

MOUNTING TEMPLATE







DIRECTIONS FOR PANEL MOUNTING

1. Remove the two wooden side boards from the set.
2. Secure the case to the chassis by using four short screws (supplied with the set on the lower holes only. Do not use the screws removed from the side boards.
3. Remove the four bottom legs.
4. Locate the supporting shelf at the height you wish the set positioned.
5. Make a panel cutout in the size shown at left. 4-19/32" X 14-1/2". The bottom of the cutout should be flush with the bottom plate of the set, as shown in the side view. The distance between the bottom of the cutout and the top of the supporting shelf is 9/16".
6. An air space must be made between the bottom of the set and the supporting shelf to assure good ventilation and cool operation. This space can be made by placing two boards which measure 9/16" thick by 1 ~ 2" width between set and supporting shelf.
7. The set is held in place by two bolts (supplied with set). The holes must be made in the shelf to correspond with the holes in the set. Use the "Top View" template to locate these holes on the supporting shelf. The holes should be made 1/4" in diameter or somewhat larger.

KF-8011 Serial No. _____

Owner _____

TRIO

A Product of

TRIO ELECTRONICS, INC.,

TOKYO, JAPAN.

© 23611 PRINTED IN JAPAN B50-0550-10 ① (UMW) (R)