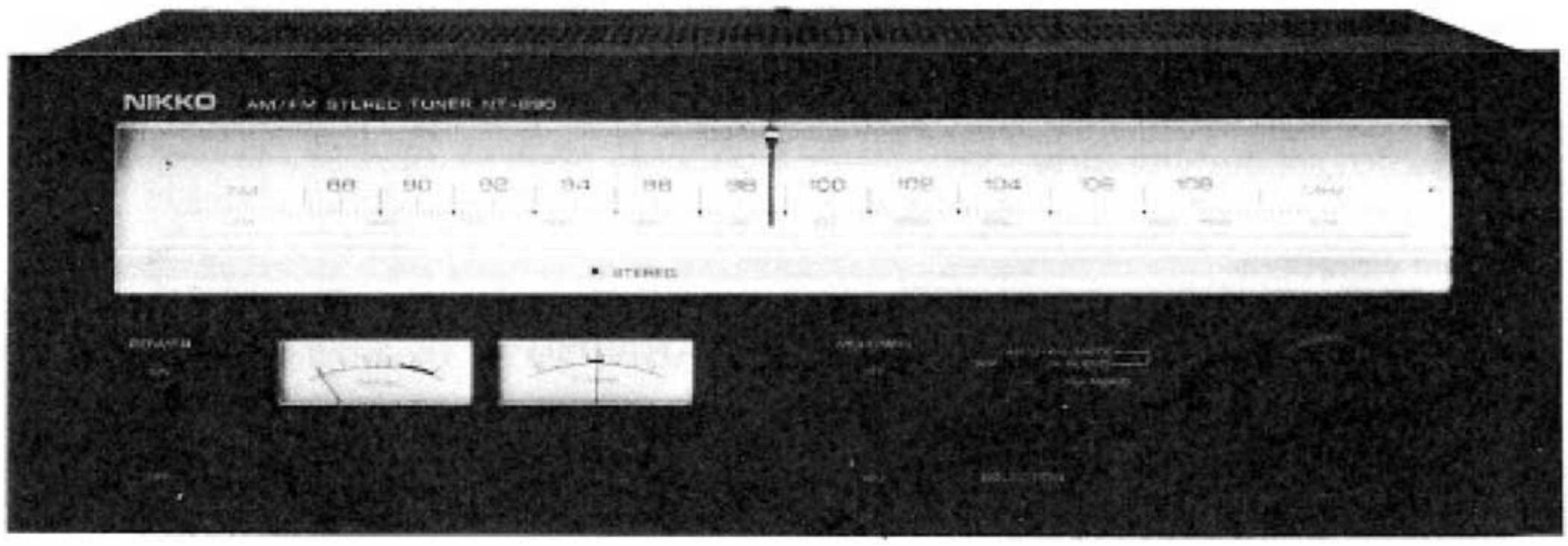
AM/FM STEREO TUNER

NT-890



OWNER'S MANUAL

NIKKO

CAUTIONS

Thank you very much for selecting the Nikko NT–890.
Incorporating the most advanced circuit technology, every Nikko product also passes a rigid series of tests before reaching the audio fan.
In order to derive the maximum performance from this unit, be sure to read this manual carefully and to follow its instructions fully.

Installation:

In order to be sure you derive the maximum service from this unit, please pay attention to the following points, which are often the cause of damage or reduced performance.

- Avoid placing the unit in a location exposed to direct sunlight or heat, such as in front of a heater.
- Avoid a location with insufficient ventilation, or one exposed to moisture or dampness.
- Avoid locations which are dusty or dirty.
- Make sure the unit is mounted on a flat, stable surface, free from vibrations.

1. This unit is designed so that heat created during operation is dissipated through the ventilation openings in the top and bottom panels. Maintain free and unrestricted ventilation by making sure you do not remove the feet from the bottom plate, or cover the ventilation openings in any way (such as stacking another stereo component on top, or installing on a shelf too small for proper ventilation). To be sure of sufficient ventilation, allow at least 5 cm space on all sides.
2. If the cabinet becomes dirty, wipe it with a soft cloth. Do not let alcohol, thinner, benzine, insecticides or petroleum products come into contact with the cabinet.
3. If repaires become necessary, see your nearest Nikko service center or dealer.

WARNING : To avoid the danger of fire or damage, protect the set from rain and dampness.

CONTENTS

STEREO SYSTEM ARRANGEMENT

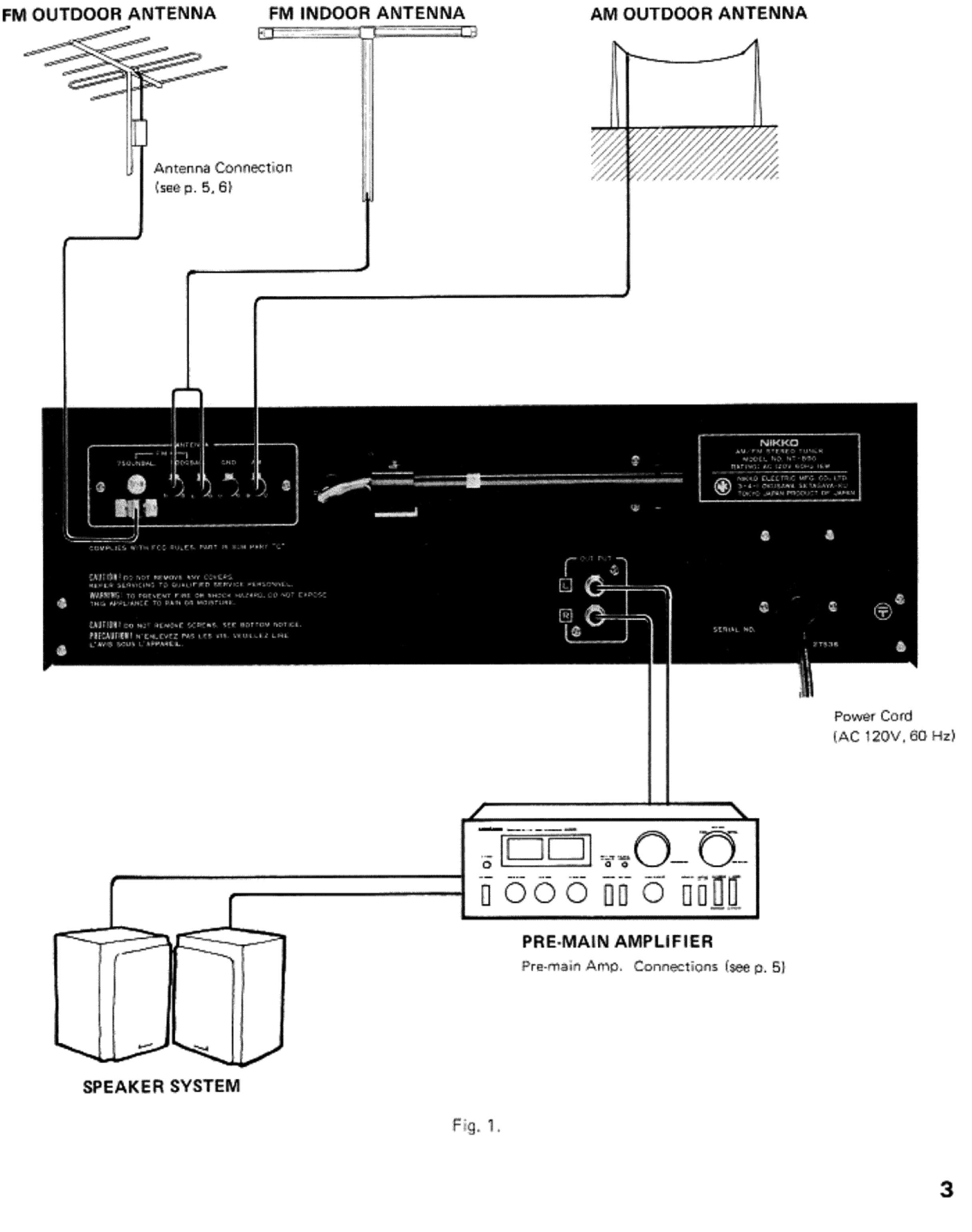


Fig. 1.

OPERATING PARTS

1. Power
Switches the unit on and off.

2. Signal Meter (see p. 5)
This meter indicates the strength of the incoming FM broadcast signal.

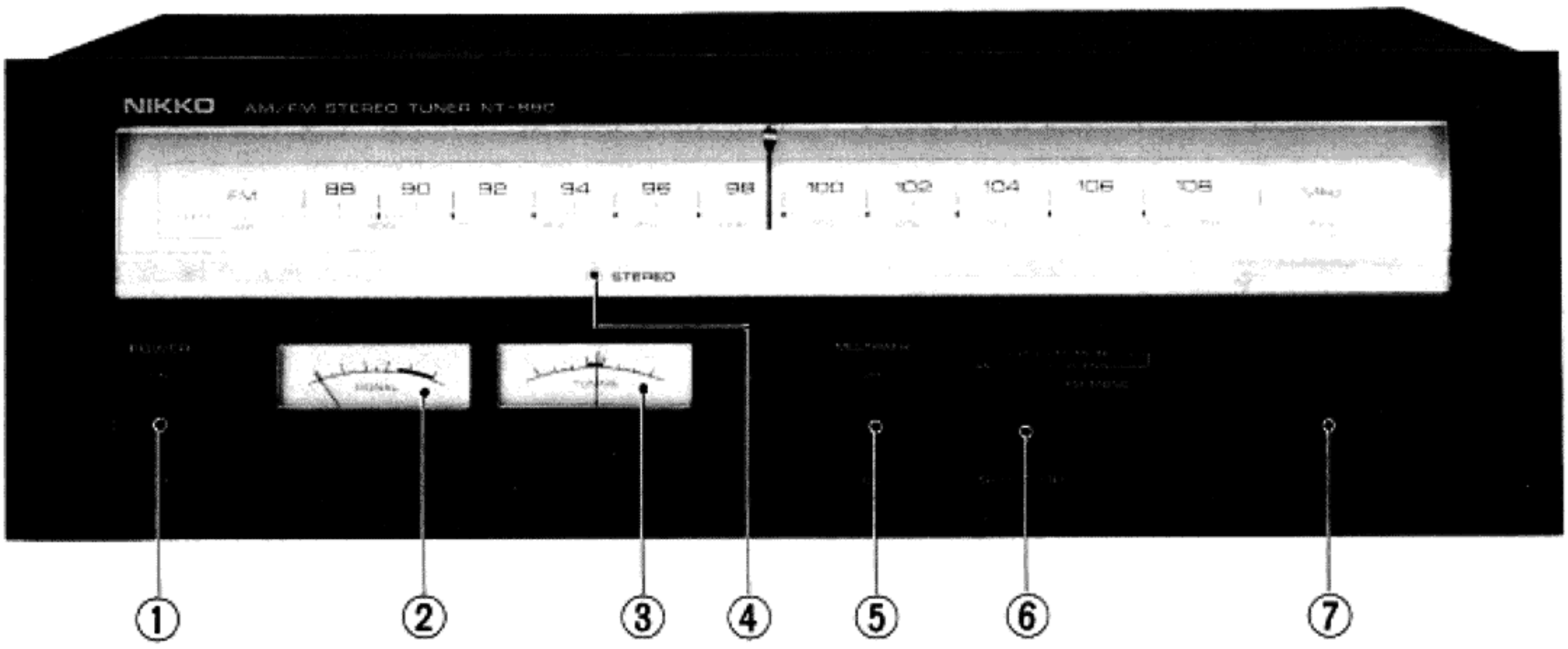
3. Tuning Meter (see p. 6)
When tuning an FM station, this signal provides precise fine tuning.

4. Stereo Indicator
When an FM stereo broadcast signal is being received, this indicator lights.

5 Multipath (see p. 6)
Use this switch to check whether the FM antenna is correctly installed and aimed.

6. Selector (see p. 6)
This switch allows you to choose between AM and FM broadcast bands.

7. Tuning Knob
Use this knob to tune across the dial to find the broadcast you want to hear.



CONNECTIONS AND OPERATION

Do not plug the AC cord into a consent until all connections have been completed. The power switch should also be off when changing any connections.

• PRE-MAIN AMPLIFIER CONNECTION

Connect the NT–890 Output jacks to the pre-main amplifier tuner (or Aux) jacks. Use the pin-plug cords included and be careful not to confuse the left and right channels.

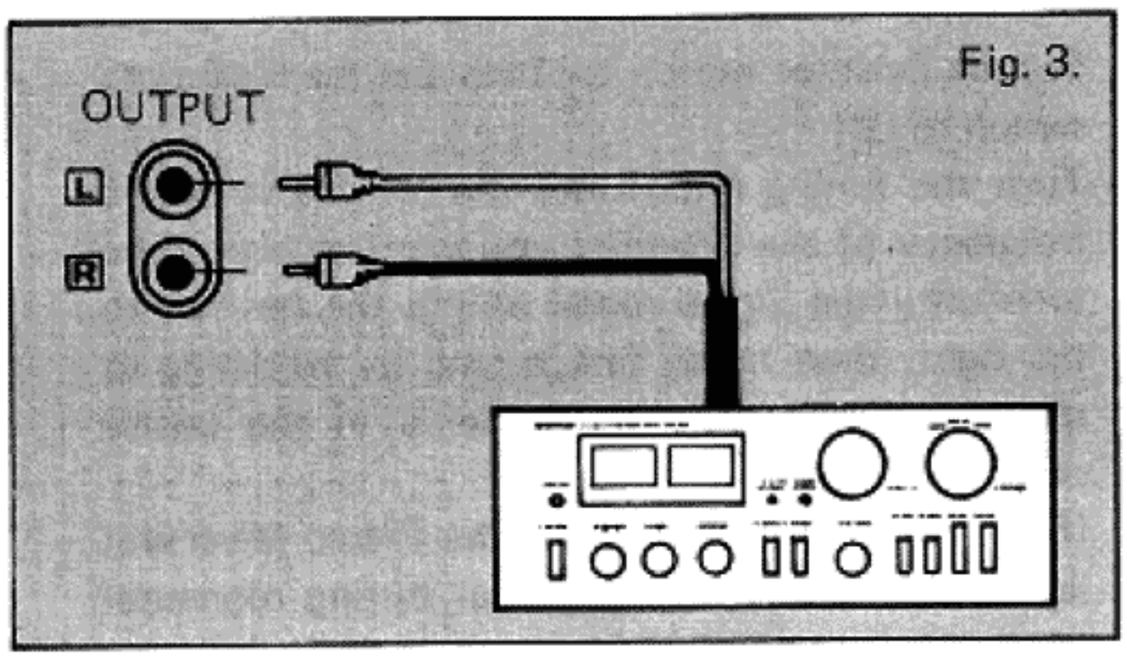


Fig. 3.

• AM ANTENNA CONNECTION

This unit incorporates a high-performance ferrite bar antenna for AM reception. Except in unusually weak signal areas, no external antenna should be necessary. The bar antenna articulates. Adjust it while watching the signal meter for maximum meter indication; this will assure you of the clearest possible reception signal. In a ferroconcrete building, or where reception is particularly bad, a long wire external antenna should be connected. If the set is grounded at the same time, even better reception will be assure.

• AM RECEPTION

(1) Set the Selector switch to AM.
(2) Use the Tuning knob to find the frequency of the station you wish to tune.
(3) Fine tune while watching the Signal meter for maximum needle deviation.

• FM ANTENNA CONNECTION

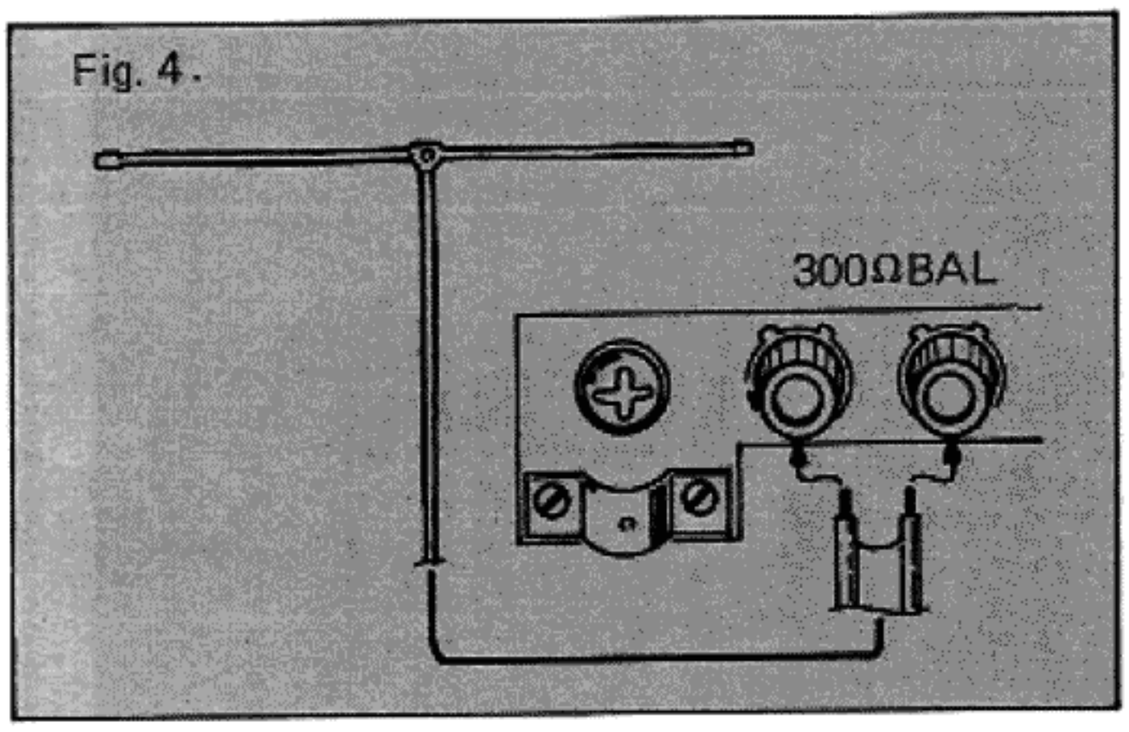


Fig. 4.

1. Connect the T type ribbon antenna (included) to the 300 Ω FM antenna terminals on the rear panel.
2. The horizontal portion (top of the "T") should be pinned to the wall at both ends, but before fixing its position, rotate it 180 degrees until you find the location which provides best possible signal reception.

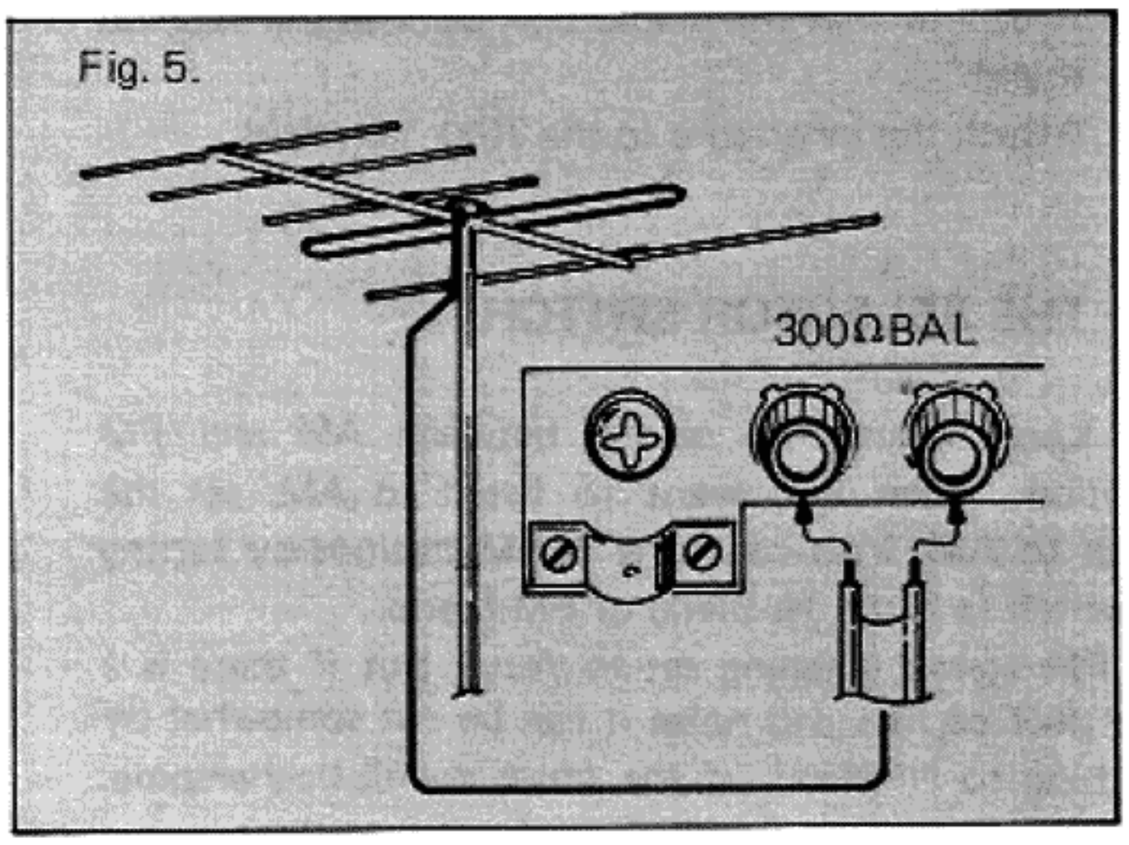
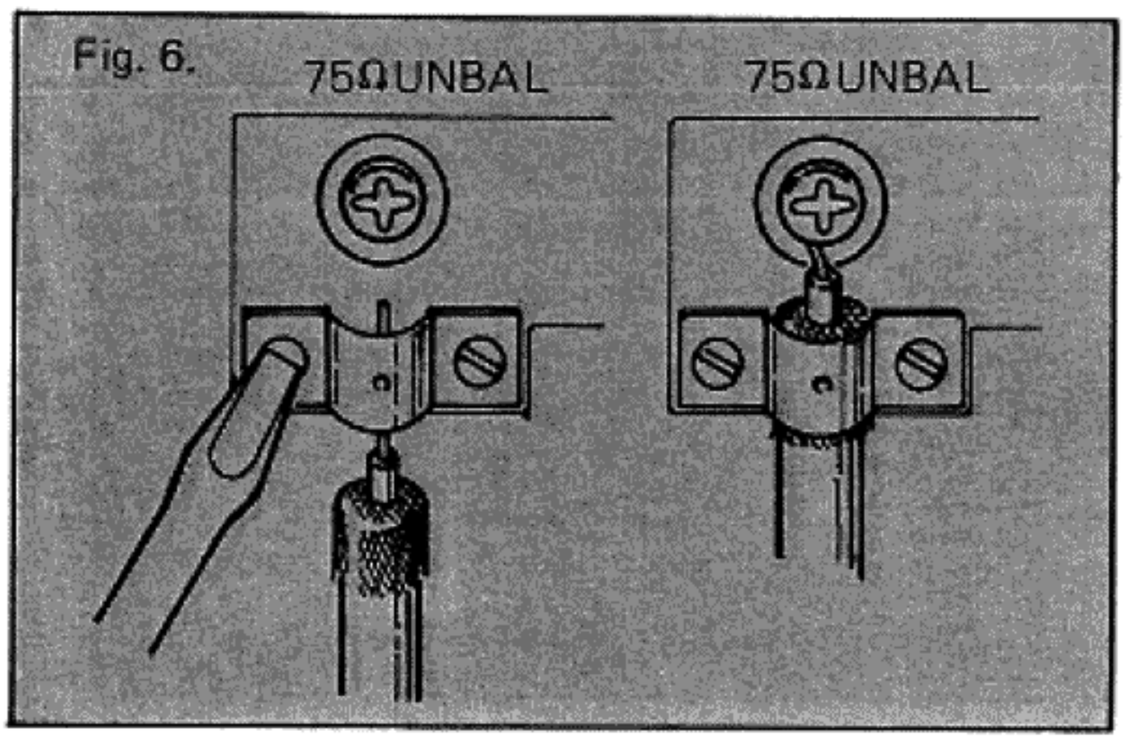


Fig. 5.

The T type antenna is for areas near the FM broadcast stations, with relatively strong signals. In a poor reception area an external FM antenna must be used. In this case be sure to select an FM antenna best suited to your reception area. There are two types of FM antenna terminals on the rear panel: 300 Ω and 75 Ω types. Use the proper terminals depending upon whether your antenna is connected via a 300 Ω balanced feeder or a 75 Ω coaxial cable. If you are troubled by outside interference, such as the noise caused by motorcycle or automobile ignitions, be sure to use a 75 Ω coaxial cable for antenna connection.

• COAXIAL CABLE CONNECTION



1. When the cable is to be connected to the 75 Ω terminal, first remove enough of the outer insulation so that some of the outer shield portion can be used for connection. Also strip some of the insulation from the inner core wire.
2. Loosen the two screws fixing the cable holder, then slip the cable into the holder and tighten the screws so that the holder clamps onto the exposed shield.
3. Attach the inner core to the 75 Ω terminal.

• THE SELECTOR SWITCH

This knob is used to switch between AM and FM reception. When you want to listen to AM, set the switch to AM. You can tune in FM stations by setting the switch to Auto, Hi-Blend or FM Mono.
For FM stereo listening set to Auto, but if there is a great deal of hiss and noise it can be cut somewhat by switching to Hi-Blend. If the noise is still bothersome, switching to FM Mono will further reduce it.
Note: The FM muting circuit, which cuts interstation noise during FM tuning, works only when the Selector is set to Auto or Hi-Blend.

• THE MULTIPATH SWITCH

This switch is to help you check that your antenna is properly oriented. When this switch is set to On, the noise portion of the received signal is passed to the amplifier and on to the speakers. You can listen to this noise while adjusting your antenna so that it is reduced as much as possible.

• FM RECEPTION

(1) Set the Selector switch to Auto and the Multipath switch to Off.
(2) Turn the tuning knob until the dial indicates the frequency of the boadcast you want to hear. Fine tune until the Signal meter swings the farthest to the right, then finish fine tuning by adjusting so that the Tuning meter needle is in the center position.
(3) If the broadcast is in stereo, the Stereo lamp will light; it automatically goes out during monaural reception.
(4) If there is excessive noise (high-frequency) during stereo reception, set the Selector to Hi-Blend and the noise will be effectively reduced.
(5) If you are using an external FM antenna and there is still excessive noise even with the Selector set to Hi-Blend, turn it one more click to the right, to FM Mono for more radical noise cancellation.
(6) To tune in another FM broadcast, make sure the Selector is set to Auto or Hi-Blend, so that the muting circuit works to cancel interstation noise for silent tuning.

SPECIFICATIONS

FM TUNER SECTION

Usable Sensitivity . . . . . .10.8 dBf/1.9 μV

50 dB Queting Sensitivity
- Mono . . . . . .14.2 dBf
- Stereo . . . . . .30 dBf

Signal to Noise Ratio
- Mono . . . . . .72 dB
- Stereo . . . . . .68 dB

T.H. Distortion
- Mono 0.1%
- Stereo 0.2%

Frequency Response,
20 Hz to 20 kHz . . . . . .+0.5, −1 dB

Capture Ratio. . . . . .1.0 dB

Alternate Channel Selectivity. . . . . .65 dB

Spurious Response Ratio . . . . . .80 dB

Image Response Ratio . . . . . .55 dB

IF Response Ratio. . . . . .90 dB

AM Suppression Ratio . . . . . .55 dB

Stereo Separation
- At 1 kHz . . . . . .50 dB
- 50 Hz to 10 kHz 35dB

Sub Carrier Product Ratio. . . . . .65 dB

Muting Threshold . . . . . .10.8 dBf

Antenna Impedance. . . . . .75 ohms and 300 ohms

Output Level . . . . . .750 V, 400 Hz 100%

AM TUNER SECTION

Usable Sensitivity
- Ferrite antenna . . . . . .280 μV/m
- Ext. antenna. . . . . .20 μV

Selectivity . . . . . .45 dB

Signal to Noise Ratio . . . . . .45 dB

Image Rejection . . . . . .40 dB

IF Rejection. . . . . .40 dB

Output Level . . . . . .150 V, 400 Hz 30%

GENERAL

Power Requirement
- U.S.A. & Canada Model . . . . . .AC 120V 60 Hz
- European Model . . . . . .AC 220~240V 50/60 Hz

Power Consumption. . . . . .16 W

Dimensions
- Width . . . . . .16-1/2 inches 420 mm
- Height. . . . . 5-1/2 inches 138 mm
- Depth . . . . . .14-1/8 inches 359 mm

Weight, without package. . . . . .6.2 kg (13.6 lbs)

* Specifications and design is subject to possible modification without notice.

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960258E 78-10 Printed in Japan.