

Panasonic

Operating Instructions

RADIO RECEIVER ANTENNA SYSTEM

MODEL NO. **RD-9820**

Read these instructions completely before operating.

GENERAL DESCRIPTION

Antenna Coupler

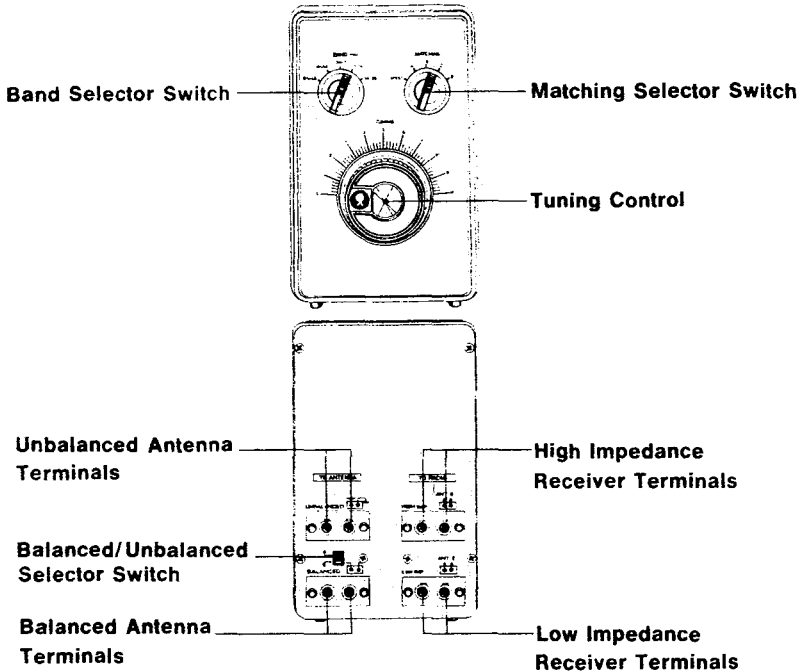
The Antenna Coupler serves as a matching device to connect the antenna to the radio in such a way as to obtain optimum signal transfer. Reception is enhanced and signal loss is reduced when the impedance of the antenna and the impedance of the receiver's radio frequency (RF) input stage are the same. It is normal for an antenna and a radio to exhibit different impedances for different radio wavelengths (frequencies). To overcome this condition, the Antenna Coupler is installed between the antenna and the radio, and adjusted to obtain a suitable match.

This Antenna Coupler is designed for reception of all types of radio signals ranging from 0.5 MHz to 30 MHz, and for coupling either a balanced, or an unbalanced type of transmission line.

Antenna

The antenna furnished in this system is an inverted-L, long-line type, with an unbalanced transmission line. It comes complete with a lightning arrester and grounding system. This type of antenna is one of the easiest to install and use. Its design is a recognized standard.

LOCATION OF CONTROLS AND TERMINALS



CONNECTIONS

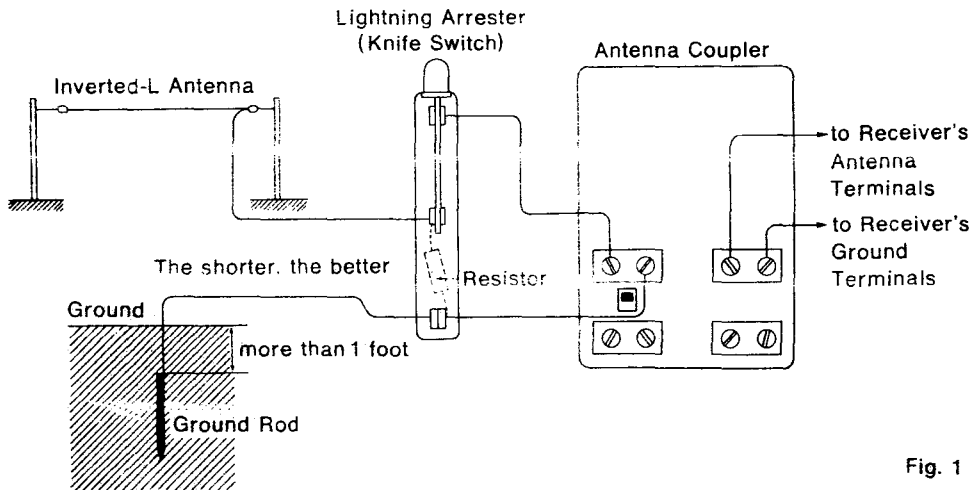


Fig. 1

- As this antenna is of the unbalanced type, switch the **Balanced/Unbalanced Selector Switch** to the up position.

- If the transmission line is an unbalanced type, connect it to the Unbalanced Antenna Terminals and place the Balanced/Unbalanced Selector Switch in the up position. For a balanced line, use the Balanced Antenna Terminals and place the Selector Switch in the down position.
- Use the Low Impedance terminals to connect the Antenna Coupler to a receiver with a low antenna input impedance, and the High Impedance terminals to a receiver with a high input impedance. If the receiver's input impedance is not known use either the Low or the High Impedance terminals, whichever gives you the best reception.
- Connect the knife switch, as shown in Fig. 1. Place it in the up position to connect the antenna to the radio when listening and in the down position to connect the antenna to ground, when not listening, particularly during an electrical storm.
- Use the short pair of leads that come with this unit to connect the coupler to the radio.
- Select a moist position when burying the ground rod in the ground.

ERECTING THE ANTENNA

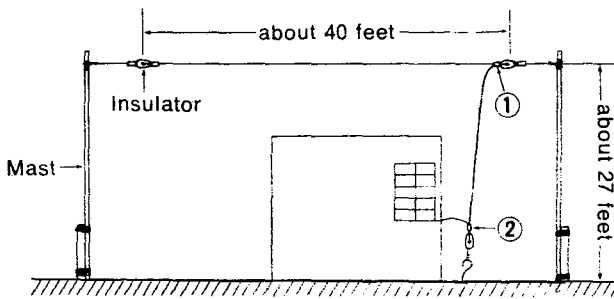


Fig. 2

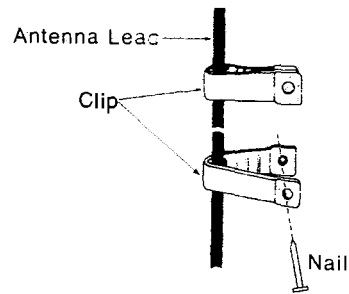


Fig. 3

- Use the easiest way to erect the antenna, by taking advantage of existing vertical structures, poles, etc. (See Fig. 2.)
- After determining the length and height of the antenna, secure the wire at ① and ② shown in Fig. 2, by crimping the metal rings.
- If necessary the plastic straps that come with this unit, may be used to secure the antenna lead-in wire (Fig. 3) around the interior of the house.

Note: Erect the antenna well away from noise generating equipment, electrical appliances etc.

Take care that the antenna wire (between insulators) does not touch trees or other structures.

CAUTION: NEVER ERECT AN ANTENNA NEAR HIGH VOLTAGE AND OTHER ELECTRICAL WIRES. BE AWARE OF THE FACT THAT FALLING LINES COULD MAKE CONTACT IF THEY ARE CLOSE ENOUGH. ALLOW FOR ADEQUATE CLEARANCE IN SUCH AN EVENT.

ADJUSTING THE ANTENNA COUPLER

1. Put the Matching Selector Switch in the DIRECT position (to connect the antenna directly to the receiver.)
2. Set the Coupler Band Selector to the desired frequency band.
3. Turn the radio receiver ON, and tune it to a desired station.
4. Rotate the Antenna Coupler Matching Selector Switch to the "A" position.
5. Adjust the Coupler's Tuning Control for best reception.
6. Repeat Step 5 for each of the other Matching Selector Switch positions "B", "C" and "D", in order. Of the four positions, select the one that provides the best reception.
7. After determining the best position, further adjust the radio receiver's and the Antenna Coupler's controls.

HELPFUL HINTS

- This antenna is for reception only, it cannot be used for transmission purposes.
- To avoid damage to the cabinet and to the parts inside, do not expose the coupler to direct sunlight, heating equipment, hot-air blowers, etc.
- To clean the cabinet, wipe it with a soft cloth, dampened in diluted soap and water. Do not use benzine, thinner, abrasive powders, etc.
- This coupler does not require any batteries or AC line power to operate. It contains tuning circuits that operate without the need for any tubes or transistors.

PRODUCT SERVICE

Should this product require service, please contact any one of our Regional Parts Depots. Their addresses are listed on the warranty card. For your convenience, fill in the "Customer's Record" portion of the warranty card and keep it for future reference.

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