

HRA-900

The Model HRA900 is a mast-mounted RX pre-amplifier with GaAs FET transistor designed for the 934MHz band. You will be satisfied with its excellent performance, which has not been achieved with the conventional pre-amplifiers.

FEATURES

- * A low noise GaAs FET transistor for UHF bands, 2SK361 is used for high gain and low noise characteristics.
- * Maximum handling power is 50W, and it is fully protected against destruction of GaAs FET.
- * N Type connectors (female) are used at both input and output terminals to minimize the insertion loss and deterioration of impedance characteristics. Also the high quality coaxial relays are used as antenna change-over relays to switch the transmitting and receiving.
- * A waterproof vinyl chloride cover is used to ensure a long term operation outdoors. Chassis, bracket, U-bolt and other hardware are made of rugged and anti-corrosive stainless steel.

CAUTION ON SETTING

- 1) Make cable connection from the HRA900 to antenna as short as possible.
- 2) Set the stainless chassis side down to keep the rain off.
- 3) Fix the coaxial cable from the HRA900 to the transceiver along a mast, so that the weight of the cable is not pulling directly on the unit.
- 4) When connecting a coaxial cable connector, check carefully not to turn input-output sides conversely.

OPERATION

- 1) In case the DC power is not fed to HRA900, the device is made in a "through" state, and the preamp is kept off.
- 2) By switching the DC power supply on, a preamplifier acts in receiving, the sensitivity of RX increases, and noise figure characteristics will be improved.
- 3) By turning the transceiver to "transmit", a change-over relay is automatically activated by the carrier controlled circuitry and preamp is made "through".
- 4) If your transceiver has an RF Gain control, it is sometimes most efficient to reduce the RF Gain a little.

SETTING

- 1) Before the device is connected, be sure to adjust antenna and keep SWR low. If the preamp is used with a high SWR, best performance cannot be achieved, and moreover, it will become the source of trouble.
- 2) Solder vinyl cord attached as DC power lead to the feedthrough terminal at the base. The negative (-) side is connected automatically by an outer braid of coaxial cable. In this case, the negative side of the power supply should be connected to the ground side of the ANT connector at the transceiver as direct current return.
- 3) Set the device to a mast, according to "INSTALLATION".
- 4) Connect a short and thick coaxial cable from antenna to ANT connector.
- 5) Connect a coaxial cable from the transceiver to the "TRANSCEIVER" connector of the HRA900.