

CHAPTER 2

INSTALLATION

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ILLUSTRATIONS

<u>Fig. No.</u>	
2.1	RA 1792 : Rear Panel

CHAPTER 2

INSTALLATION

INTRODUCTION

- 1 This chapter contains general installation data, detailed interface wiring requirements, and a brief initial checkout procedure. All interface connections are made to the rear panel of the receiver, as described in paragraphs 4 to 5. Figure 2-1 illustrates the rear panel connectors.

INSTALLATION DATA

- 2 The RA1792 Receiver is designed to be mounted in any standard 19 inch rack. Four mounting screws are required to secure the receiver to the rack. No special cooling consideration are required for the receiver; however, it should be positioned in the rack to permit convenient operation of the front panel controls.
- 3 The receiver is designed to operate with ac line voltages of 110, 120, 220, or 240 volts. The proper transformer wiring for the different voltages is accomplished with a 'programming card.' This card is located below the fuse on the rear panel. To change the receiver for operation with a different voltage simply disconnect the line cord from the receiver, slide the transparent cover to the left, then remove and reinsert the card so that the desired voltage is visible on the card. Refer to Figure 2-1 for the location of the programming card.

INTERFACE WIRING

- 4 All interface connections to the RA1792 receiver are made through the rear panel connectors. Figure 2-1 identifies the rear panel connectors and Tables 2-1 and 2-2 list the function and signal designations of the connectors.
- 5 After all interface wiring is complete, the initial check-out procedures described in paragraphs 6 to 16 should be performed to insure proper installation.

TABLE 2-1. REAR PANEL CONNECTORS

Reference Designation	Nomenclature	Function
J1	REF IN/OUT	Used in conjunction with switch S2 to accept an external reference source (S2 in EXT position) or to provide an output of the internally generated reference signal (S2 in INT position).
J2	MAIN IF OUTPUT	Receiver second IF output signal at 455 kHz.
J3	AF OUTPUT	25 pin 'D' type connector providing audio output signals. Refer to Table 2-2 for detailed listing of receiver connections.
J7	LO OUTPUT	When used, this connector provides an output of the receiver local oscillator frequency.
J9	ISB IF OUTPUT	When the receiver is equipped with the ISB option, this connector will provide an output of the ISB IF signal at 455 kHz.
A1J1	ANT INPUT	Receiver input from antenna.
A10J1	LINE	Connection for a.c. supply.
A6A1J1	-	Connector for external receiver control. Refer to the Appendix, located at the rear of the manual, for detailed wiring information.
-	GROUND	Grounding post used to connect receiver chassis ground to station ground.

TABLE 2-2. AF OUTPUT CONNECTOR WIRING

Pin	Signal Designation
1 } 14 }	Line 1 Output, 600 ohm Balanced
2	Screen
3 } 15 }	Line 2 Output, 600 ohm balanced
16	Screen
4 } 17 }	Monitor Line Output
5	Monitor Line Output Ground
18	Loudspeaker Output
6	Loudspeaker Output Ground
19	Internal +12 Volt Output (200 mA maximum)
7	Internal +12 Volt Supply Ground
20	Mute Control Line Input
8	Mute Control Line Ground
21	DIV AGC Control Line Input
9	DIV AGC Control Line Ground
22	ISB DIV AGC Control Line Input
23	Scan Inhibit
10 } 11 } 12 } 13 } 24 } 25 }	Not Used

INITIAL CHECK-OUT PROCEDURE

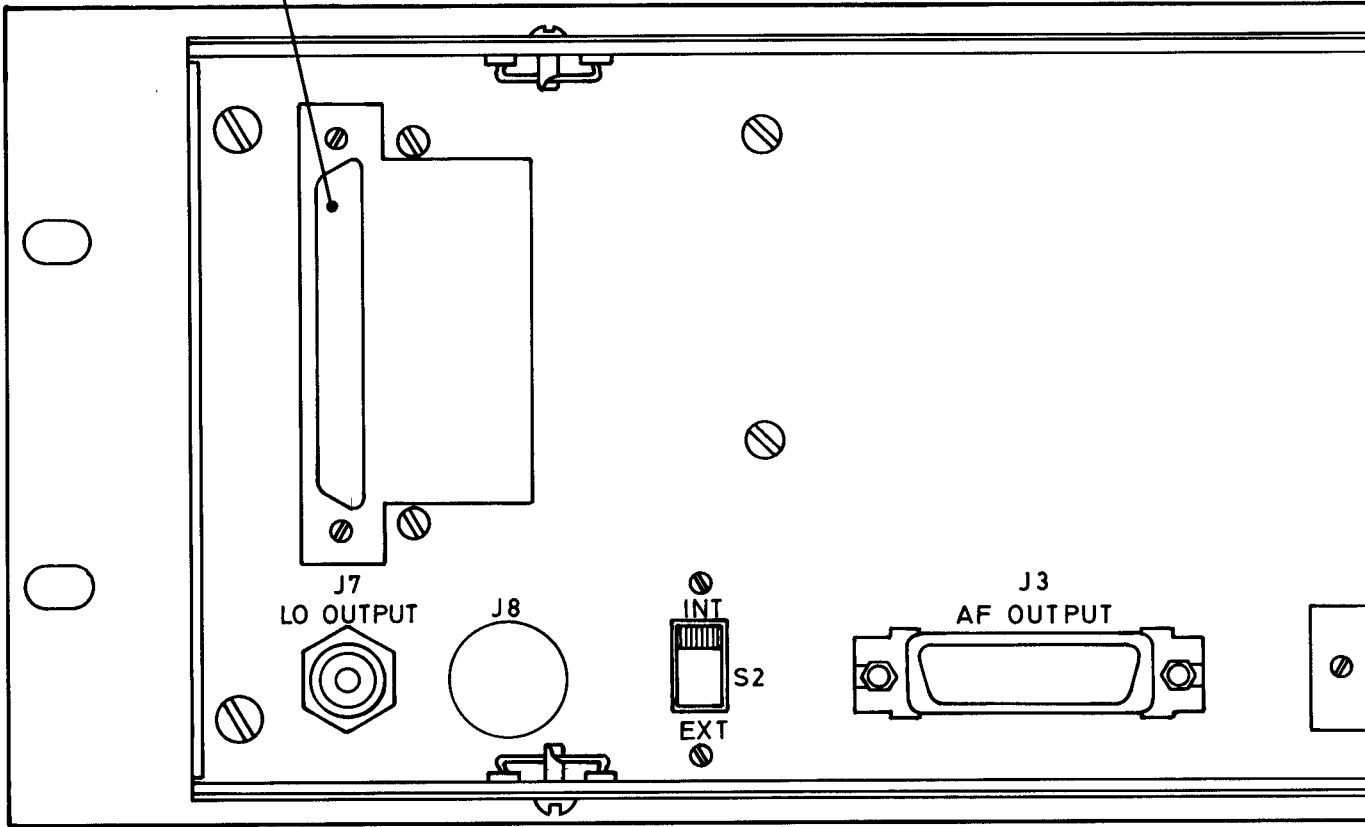
- 6 The following procedure may be used to insure that the receiver is operating properly and that the receiver has been properly installed. For detailed operating instructions, refer to the appropriate procedures contained in Chapter 3 of this manual.

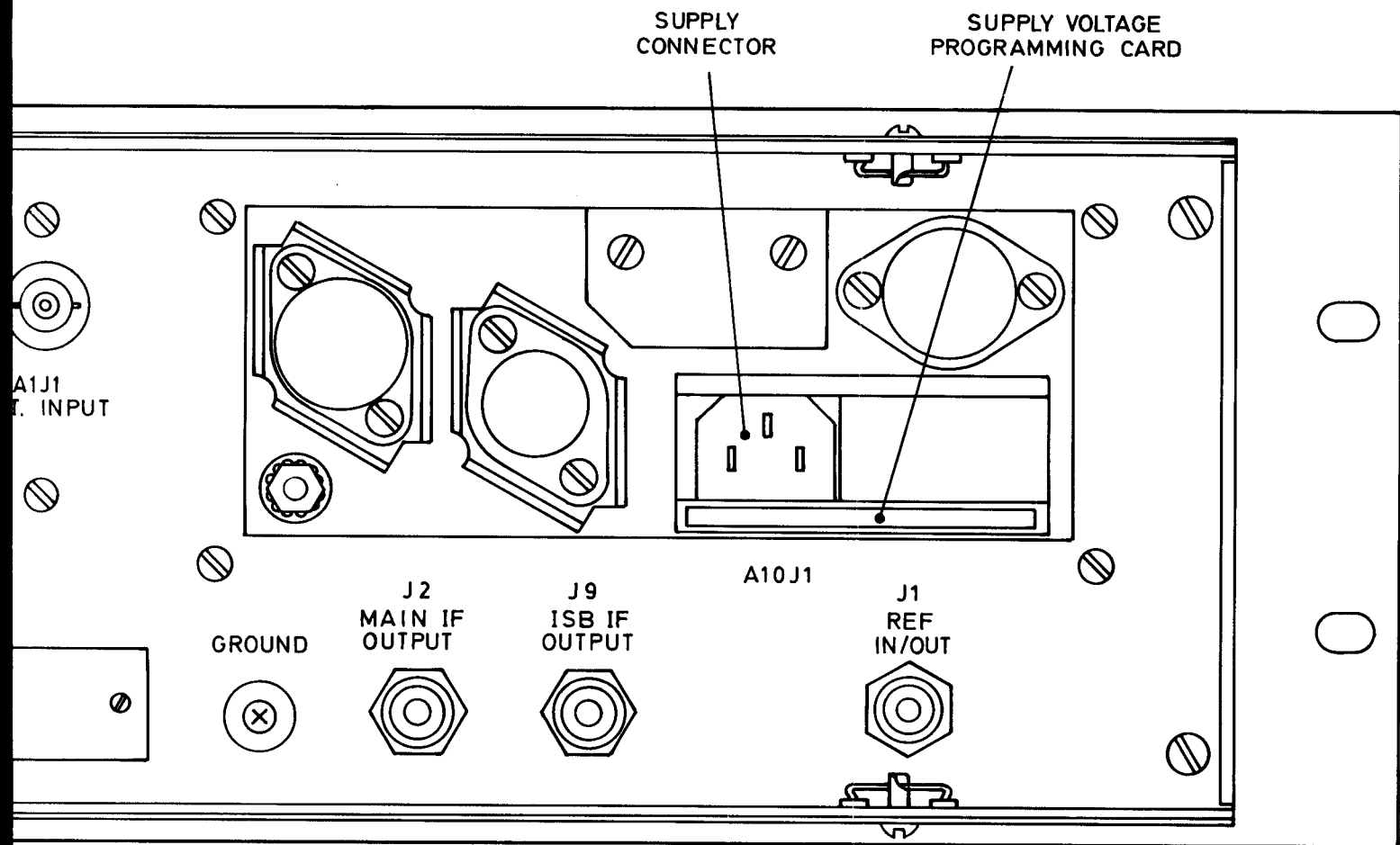
CAUTION

Before attempting to operate the receiver, make certain that the programming card for voltage selection is properly inserted. (The selected voltage is visible on the top of the card). Refer to Figure 2-1.

- 7 Turn on the receiver by depressing the SUPPLY rocker switch. A random display may be present on both the frequency display and the mode display.
- 8 Depress the TUNE pushbutton. The TUNE indicator should be present in the frequency display and the tuning knob should be enabled. Use the tuning knob to select a known station. Spinning the knob at a fast rate will cause the frequency to change at a greater rate.
- 9 When the desired frequency is shown in the display, the TUNE pushbutton may be depressed a second time to disable the tuning knob.
- 10 Select the desired operating mode by depressing the AM, FM, CW, or sideband pushbuttons. In the AM, FM, and CW modes the desired bandwidth filter (BW1 to BW5) and the AGC (MAN, SHORT, MED, or LONG) operating mode may also be selected. The appropriate indicators will be displayed when the mode is selected.
- 11 In the CW mode, the BFO frequency may be changed by depressing the BFO pushbutton. The tuning knob may then be used to vary the BFO frequency as desired.
- 12 The front panel loudspeaker may be used by activating the L/S switch. When a headset jack is inserted in the PHONES jack the loudspeaker will be disabled. The VOLUME control is used for both the headphones and the loudspeaker.
- 13 The METER switch is used to display either the RF or the AF signal amplitude on the front panel meter. The IF GAIN control is used to adjust the IF signal amplitude if the MAN AGC mode is selected.
- 14 To select a station using the numeric keypad, depress the FREQ pushbutton. The frequency display will be set to all zeros, and an indicator will be present at the tens MHz digit. Use the numeric keypad to enter the desired tens MHz digit (0, 1, 2, or 3). Note that if a 3 is inserted, the receiver will not accept any additional digits since the maximum receiver frequency is 30 MHz. If a 0, 1, or 2 is entered, the indicator will move to the units MHz digit. After this digit (0 through 9) is entered the indicator will continue to step down to the 10 Hz digit. When the desired frequency is shown on the display, the ENTER pushbutton must be depressed to set the receiver to that frequency. The receiver mode, bandwidth, and AGC may be selected as described in steps 10 to 13.
- 15 The receiver may be turned off by depressing the SUPPLY rocker switch. When the receiver is turned back on, the receiver should automatically return to the last operating frequency and mode.
- 16 This completes the basic check-out procedure for the RA1792 receiver. Refer to the detailed operating instructions contained in Chapter 3 of this manual for additional instructions.

OPTIONAL
REMOTE DIGITAL
I/O





RA 1792: Rear Panel

Fig.2.1