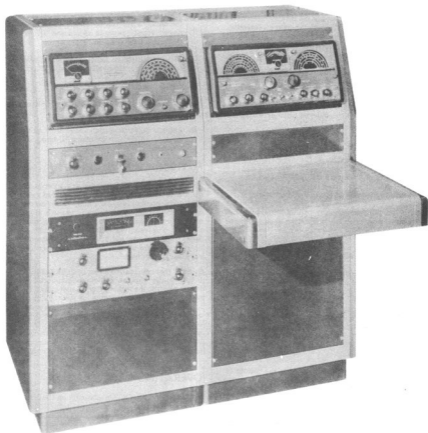


INSTALLATION AND OPERATING INSTRUCTIONS  
FOR  
MODEL SR500 AND HT40 RADIO STATION



the hallicrafters co.

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## GENERAL DESCRIPTION

**GENERAL DESCRIPTION**—Your new SR500 Radio Station is a complete Transmitting and Receiving Unit, factory wired, tested and ready for use. Included in the SR500 are the HT30 Exciter Unit, the HT31 Linear Amplifier, and the SX100 Receiver. The only difference between the SR500 and the HT40 is that in the latter, the SX100 receiver, speaker and associated wiring is not included. Installation and operating instructions which follow are the same for either the SR500 or HT40.

**UNPACKING**—Carefully unpack the SR500, and retain all tags, which may be enclosed, for future reference. Study carefully the individual Operating and Instruction manuals covering the HT30, HT31 and SX100 that are included with the equipment. Packed separately in the carton with the SR500 is the operators desk panel, which is dismounted to facilitate shipping. Illustrated instructions for mounting the desk panel are on page 4 of this book.

**LOCATION**—The SR500 is an extremely compact unit. The following should be considered when selecting the location:

1. Convenience to a power source supplying 117 volts 60 cycle AC. (1100 watts must be available with good voltage regulation.)
2. Proximity of Antenna Lead-ins.
3. Adequate circulation of air for ventilation.

The unit is equipped with easy rolling casters, to facilitate moving for cleaning, inspection or adjustment.

## INSTALLATION

**Rear Connections — SR500.**

Check all plug-in or coax connectors at rear of SR500 including main fuses to make sure none have become loosened in transit. For location see page 3.

**Antenna Panel** — Located just above the HT31 unit, this panel contains five coax connectors for the lead-ins from your 10, 20, 40, 80 meter antennas or a dummy antenna. Each of these connectors will mate with an Amphenol type 83-1SP coax connector (not supplied with the equipment).

**Power Panel** — This panel is located at the bottom of the console cabinet, below the HT31. It contains the main power relay, two 15 amp. main fuses, an octal socket (not connected, but provided for future use) and six 110 volt 60 cycle AC convenience outlets. The HT30, HT31 and SX100 are connected to three of these outlets and three are spares.

**Power Requirements** — Connect the input power plug to an outlet supplying 117 volts 60 cycle AC only. The power source must be capable of supplying 1100 watts with good voltage regulation.

## OPERATION

Individual instruction manuals are included with the equipment for each of the major units that make up the

SR500 or HT40. Once the operation of each unit is understood the following information will enable you to take full advantage of the operating convenience features that are provided by the interconnection of the transmitter and receiver.

## FUNCTION AND USE OF PANEL CONTROLS AND CONNECTORS

**Main Control Panel — Front of SR500.**

1. Master Key Lock Switch — Controls all power to the unit. When turned to the On position, main power supply relay is closed and Green "Power On" pilot light goes on.
2. Red Pilot Light — Indicates when the transmitter is on the air. Controlled by the HT30 unit.
3. Key Jack.
4. Mike Connector — See mike specifications in HT30 instruction book.
5. Antenna Selector Switch — Permits selection of 80-40-20-10 meter antennas, Dummy or special antenna.

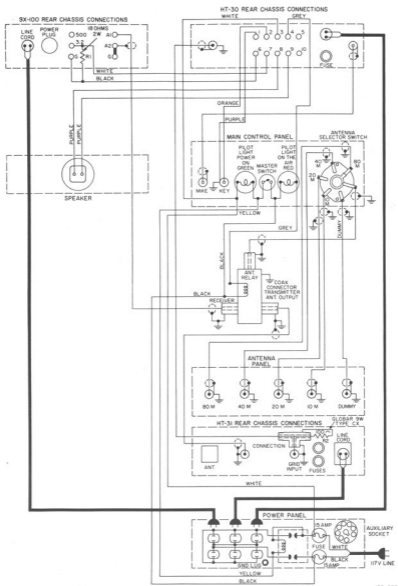
## METHOD OF SWITCHING

The transmitter and receiver are interconnected in such a manner that the Voice Operated relay in the HT30 will control the switching of the antenna relay and simultaneously place the receiver in a standby condition, during transmission, by opening the speaker circuit. The receiver will remain operative (except for the speaker circuit) so that your transmission may be monitored, by means of headphones connected to the receiver, if desired.

Some of the tuning procedures in the HT-30 Instruction Book require that an audio note be obtained from the receiver while the transmitter is energized. This may be accomplished by turning on the crystal calibrator and BFO. This will result in a beat note every 100 Kc on the tuning dial. After tuning for one of these beat notes the tone (frequency of the beat) may be varied by means of the pitch control. This audio signal may then be coupled to the microphone by placing a headphone that is plugged into the receiver headphone jack directly in front of the microphone.

## OPERATING PROCEDURE

1. See that all Off-On controls on the HT30, HT31 and SX100 are in the Off position.
2. Turn the Master Key Lock switch to the "On" position.
3. Consult the instruction book covering the HT30, HT31 and SX100 units and make the proper adjustment of controls for initial operation.
4. When transmitting, set the Operation switch on the HT30 for Vox or Mox operation as desired. In the Mox position the antenna relay remains in the transmit position until the switch position is



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# SERVICE PARTS LIST

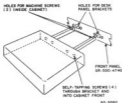
Schematic Symbol	Description	Hallcrafters Part Number	Schematic Symbol	Description	Hallcrafters Part Number
	Baffle, Speaker.....	78C1277		Log, Book.....	31-3391
	Bracket, Chassis Mtg. - Rear.....	67B3631		Marker, Cable (3-85).....	31A3009
	Bracket, Chassis Mtg. - Rear.....	67B3631		Marker, Cable (34-85).....	31A3409
	Bracket, Connector Mtg.....	67D3669		Marker, Cable (97-99).....	31A3409
	Bracket, Shelf (Front).....	67D3637		Mike Connector - Male.....	28A043
	Bracket, Shelf (Rear).....	67D3638		Outlet, AC.....	18A005
	Bracket, Support Rail (RT-33).....	67D3636		Panel, Control.....	68D461
	Cable, Coax RG58A/U.....	87A2238		Panel (3-1/2" Height Perforated).....	68D449
	Caster, Rubber.....	16A693		Panel (5-1/4" Height Perforated).....	68D445
	Clamp, Cable (1/8").....	76A533		Panel (10-1/2" Height Perforated).....	68D447
	Clamp, Cable (1/2").....	76A500		Panel (14" Height Perforated).....	68D448
	Connector, Coax.....	10A179		Panel (21" Height Perforated).....	68D451
	Connector, Coax.....	10A173		Panel (1-3/4" Height Solid).....	68D442
	Connector, Coax.....	10A170		Panel (8-3/4" Height Solid).....	68D448
	Connector, Mike Cable.....	28A044		Panel (21" Height Solid).....	68D453
	Connector "T" Type.....	10A909		Panel, Power.....	68C457
	Cover, Bottom-Chassis.....	66A1304		Panel, Rear (Line Cord).....	68D466
	Cover, Can (Ant. Sw.).....	66B1290		Panel, Side (Right & Left).....	68C458
	Cover, Top.....	66D1297		Receptacle Coax.....	10A058
	Frame, Console (For Writing Top).....	66A1333		Relay, Ant.....	21A229
	Fuse, Holder.....	66B034		Relay, Power, D.P.S.T.....	21A330
	Fuse, Screw Type 15A.....	39A308		Resistor (18 ohms 10% SW Carbon).....	83X40210K
	Indicator, Lamp (Green).....	66A231	R-2	Resistor (100 ohms 10% 9W).....	23A110
	Indicator, Lamp (Red).....	66A230		Shield, Can (Ant. Sw.).....	69D882
	Installation Instructions.....	94C1581		Socket, Ant. Sw.....	63D444
	Key, Jack.....	36A033		Socket, Octal.....	63D396
	Knob, Ant. Sw.....	15B945		Speaker, (4 X 8).....	65B187
	Lamp.....	39A427		Switch, Ant.....	60-751
	Line Cord.....	81A4850		Switch, Key.....	60A750
	Lock, Line Cord.....	76-1607		Top, Writing (Single).....	66A1293

changed. In the Vox position the antenna relay is in the transmit position only while you are talking plus a small time delay period determined by the adjustment of the Vox delay. In either case the Red Pilot Light is On during transmission.

- When using Mox operation turn the Power switch on the HT30 unit to the Standby position during periods of "RECEIVE" operation.
- When it is desired to discontinue use of the equipment, simply turn the Master Switch on control panel of the SR500 to the Off position.

## ATTACHING THE OPERATORS DESK

Illustrated below is the method for attaching the operators desk to the front of the SR500. The four self-tapping screws go through the holes on either side of the box channels extending out from the rear apron of the desk. Insert the box channels into the square openings on front of cabinet and tighten all self-tapping screws. From the rear of the cabinet, reach in and fasten the box channels to the brackets provided inside the cabinet, using the two machine screws.



## SERVICE DATA

For service information concerning the HT30, HT31 or SX100 refer to the individual instruction books covering these units. A schematic diagram of the SR500 showing the interconnection of the units and an associated service parts list are included in this publication.

## WARRANTY

"The Hallcrafters' Company warrants each new radio product manufactured by it to be free from defective material and workmanship and agrees to remedy any such defect or to furnish a new part in exchange for any part of any unit of its manufacture which under normal installation, use and service discloses such defect, provided the unit is delivered by the owner to our authorized radio dealer, wholesaler, from whom purchased, or, authorized service center, in fact, for examination, with all transportation charges repaid within ninety days from the date of sale to original purchaser and provided that each examination discloses in our judgment that it is thus defective.

This warranty does not extend to any of our radio products to which have been subjected to misuse, neglect, accident, incorrect wiring not our own, improper installation, or to use in violation of instructions furnished by us, nor extend to units which have been repaired or altered outside of our factory or authorized service center, nor to cases where the serial number thereof has been removed, defaced or changed, nor to accessories used therewith not of our own manufacture.

Any part of a unit approved for remedy or exchange hereunder will be remedied or exchanged by the authorized radio dealer or wholesaler without charge to the owner.

This warranty is in lieu of all other warranties expressed or implied and no representative or person is authorized to assume for us any other liability in connection with the sale of our radio products."

Form No. 943022

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