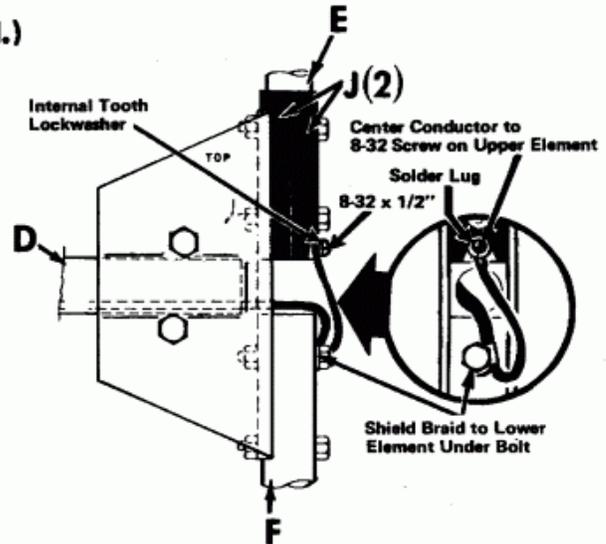


6 VERTICAL ELEMENT ASSEMBLIES (cont'd.)

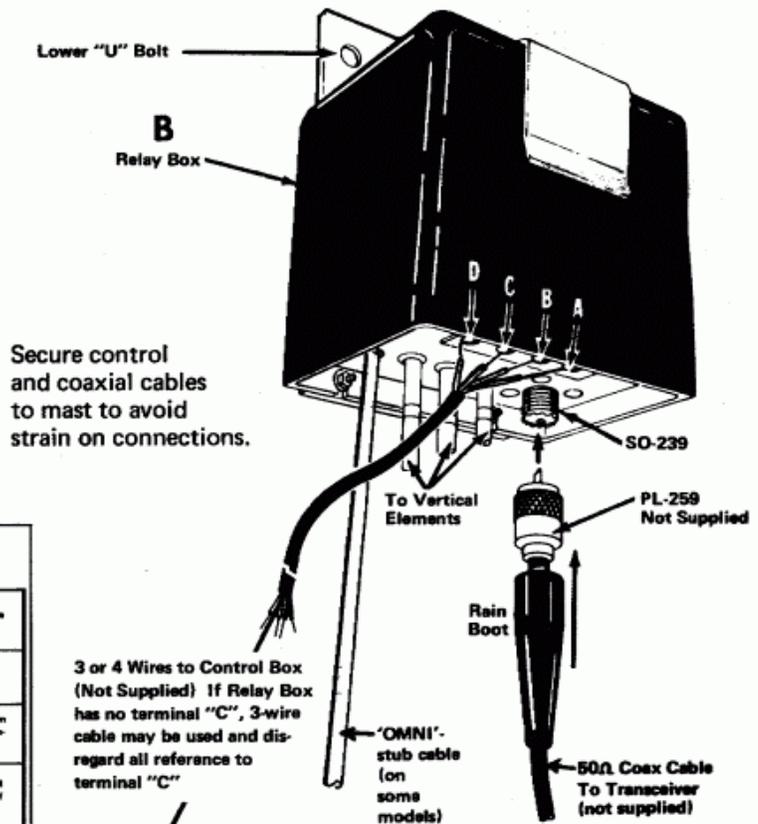
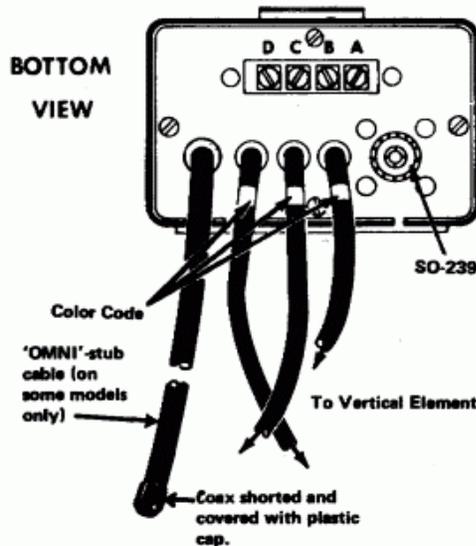
Completed assembly is shown at right. Fasten the center wire of the cable (with small terminal lug ) to upper assembly with an 8-32 self-tapping screw.

The shield braid terminates in a large terminal lug. Fasten it under head of the 1/4-20 bolt on lower element (F).



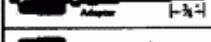
7 RELAY BOX CONNECTIONS

Fasten the Relay Box to the triangular mounting bracket assembly. Connect the cables for the transceiver and the Control Box at the Relay Box before the antenna is mounted on the mast. Be very sure that all strands of each control cable conductor are captured under their respective screw so that they cannot short to the cover plate, between terminals, screws or rivets. Use caution to avoid strain on terminal connections when mounting.



Secure control and coaxial cables to mast to avoid strain on connections.

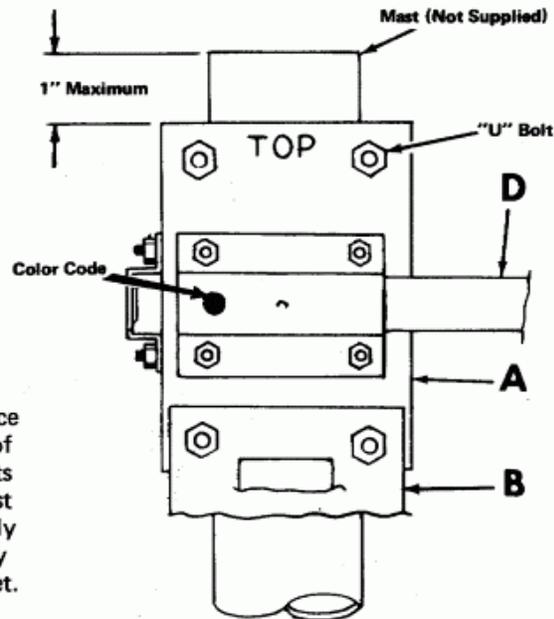
3 or 4 Wires to Control Box (Not Supplied) If Relay Box has no terminal "C", 3-wire cable may be used and disregard all reference to terminal "C"

Assembly of Cable to PL-259 Plug & Adapter	
	Cut end of cable open. Remove vinyl jacket 3/4", slide coupling ring and adapter on cable.
	Fold braid slightly and fold back as shown.
	Position adapter to dimension shown. Press braid down over body of adapter and trim to 3/8". Save 5/8" of conductor. Tin exposed center conductor.
	Screw plug sub-assembly on adapter. Solder braid to shell through solder holes. Use enough heat to create bond of braid to shell. Solder conductor to contact.
	For final assembly, screw coupling ring of plug sub-assembly.

B MOUNTING & ORIENTING THE ANTENNA

MOUNTING THE ANTENNA

The assembled antenna is now ready to be mounted on the mast. As explained before, the mast may be 1-1/2" iron water pipe (O.D. about 2"). It is necessary that the mast extend at least 10' above the structure on which it is mounted in order to make sure that the antenna lower vertical elements clear the mounting structure by at least one foot. It is best to have the mast grounded in accordance with local, state, or national codes.



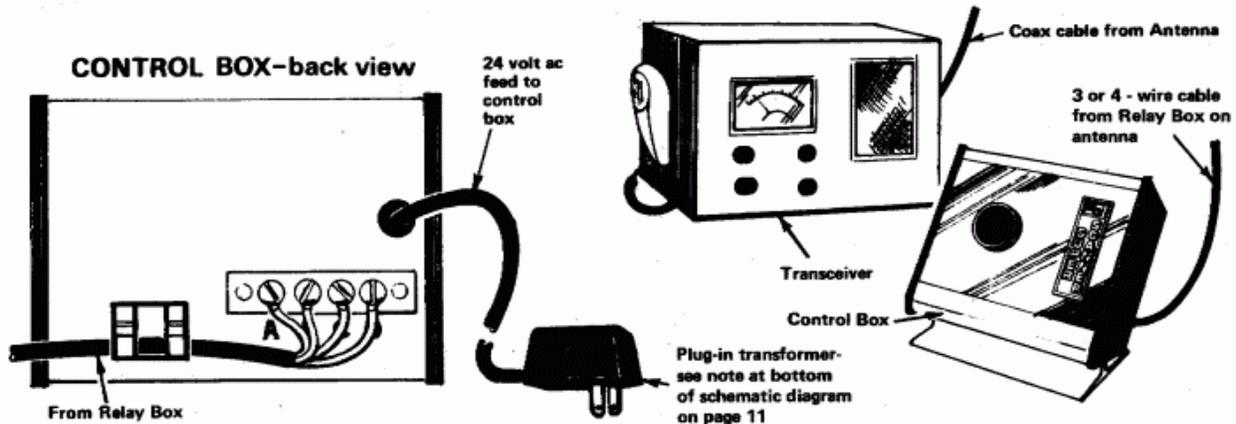
ORIENTING THE ANTENNA

Slide the assembly over the mast allowing 1" clearance as shown in illustration. Point the orange coded portion of the antenna to the North (top light). Tighten all "U"-bolts securely. This will point the red coded assembly Southeast (lower right hand light) and the white coded assembly Southwest (lower left hand light). Obviously, you may choose any starting direction or color on mounting bracket.

Pressure sensitive labels for placement on the face of the Control Box (to indicate compass direction of each element) are provided for your convenience.

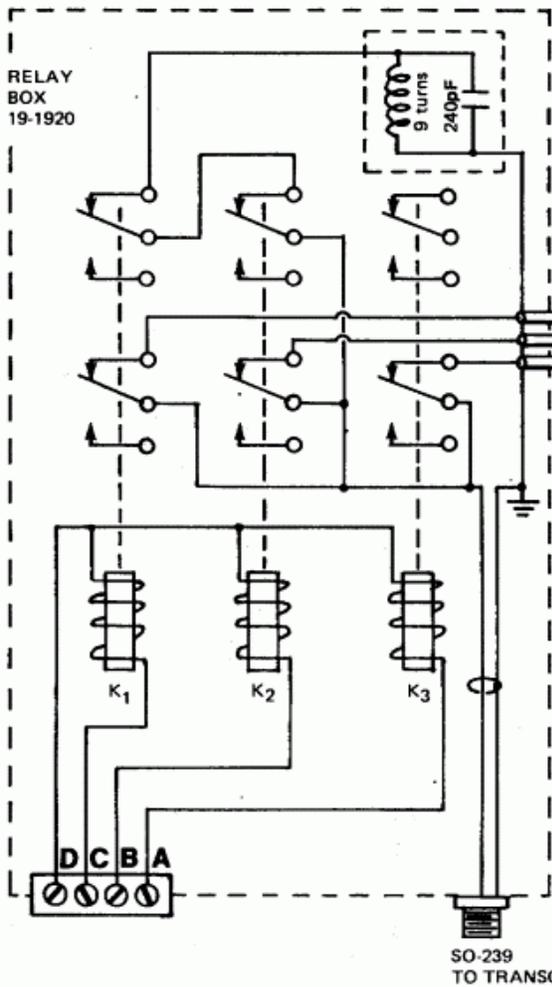
C CONTROL BOX INSTALLATION

With the antenna mounted and oriented in the proper direction, connect the Relay Box cable to the Control Box and the coax cable to the transceiver as shown.



The terminal strips on the Relay and Control Boxes must be wired so that 3 or 4 - wire cable (depending on number of terminals) connects "A" to "A", "B" to "B", "C" to "C" (if applicable) and "D" to "D". Be sure all strands of each control cable conductor are captured under their respective screw so they can not short to the case, other terminals or screws. See "THE SCANNER PRINCIPLE" on page 3 for operating features.

Your Super-Scanner-equipped base station is now ready for operation



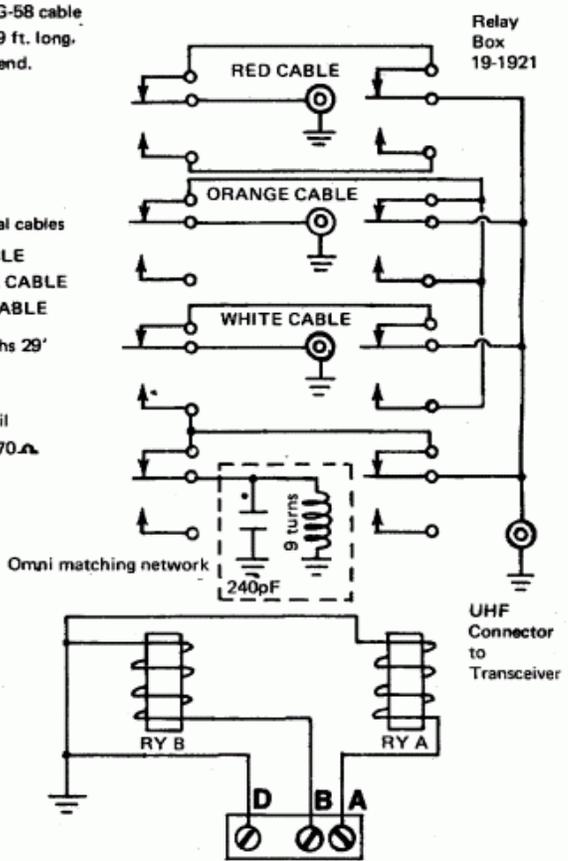
Omni matching network.
On some models this may be a piece of RG-58 cable approximately 9 ft. long, shorted on one end.

RG-58/U coaxial cables
RED CABLE
ORANGE CABLE
WHITE CABLE
cable lengths 29'

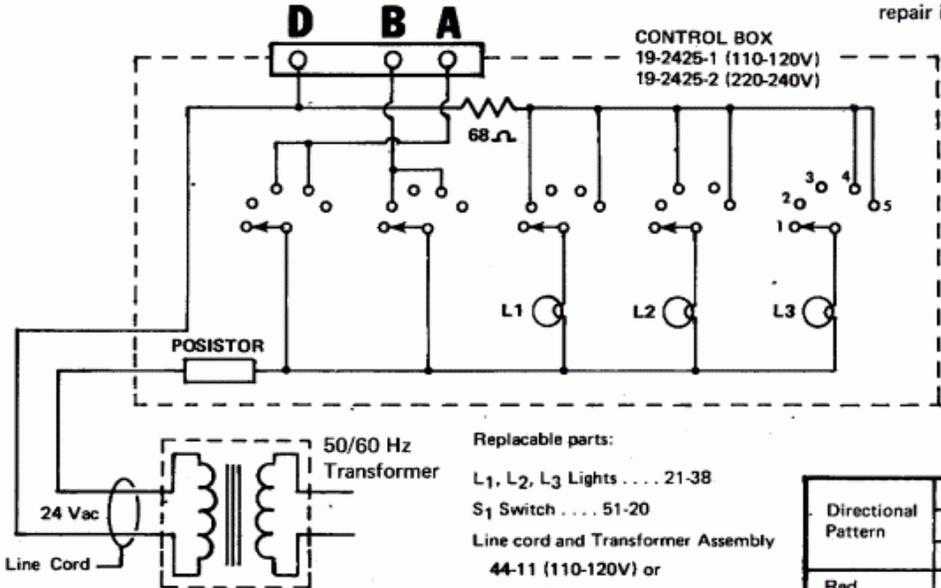
Relay Coil
dc res $\approx 170\Omega$

SO-239
TO TRANSCEIVER

SCHEMATIC DIAGRAM



WARNING: Tampering with circuits in the control or relay box will void warranty! See your supplier if warranty repair is necessary.



Replacable parts:
L₁, L₂, L₃ Lights 21-38
S₁ Switch 51-20
Line cord and Transformer Assembly
44-11 (110-120V) or
44-12 (220-240V)

This model is supplied in two versions; 110-120V and 220-240V. Check transformer nameplate for rating before applying power. A plug adapter may be supplied with 220-240V versions.

Directional Pattern	Relay Condition				
	P/N 19-1921 RY A	P/N 19-1920 RY B	K ₁	K ₂	K ₃
Red	On	On	Off	On	On
White	Off	On	On	On	Off
Orange	On	Off	On	Off	On
Omni	Off	Off	Off	Off	Off

THE ASSEMBLED SCANNER

