

**APPLICATIONS.**

NOTE: These couplers will pass power to operate antenna preamplifiers from downlead terminals to "ANT. 1" side. See **SUGGESTED APPLICATIONS.**

The SD-3300, SD-3700 are 82 channel antenna couplers. They may also be used to couple any of type, to a single 300 or 75 ohm downlead with negligible loss.

**DESCRIPTION**

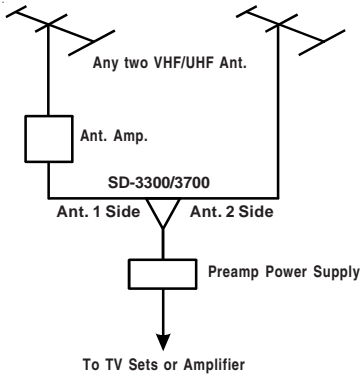
MADE IN U.S.A.  
U.S. Patent No. 3,373,361  
SD-3300 (300 ohm)  
SD-3700 (75 ohm)  
MODELS

**82 CHANNEL ANTENNA COUPLER**

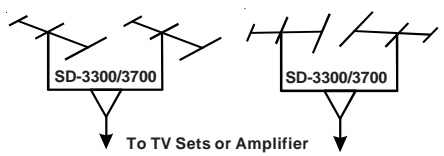


**INSTRUCTIONS**

**SUGGESTED APPLICATIONS**



Identical Ant. Pointed Same Direction      Any Two VHF/UHF Ant. Pointed Different Directions



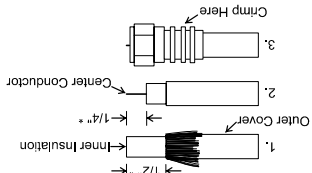
\*If installing in very hot weather, increase these dimensions 1/8".

crush cable out-of-round. **Hex connector requires hex crimping tool. Do not** built-in ferrule with proper crimping tool. Hex con-

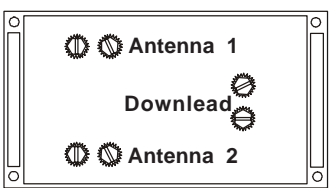
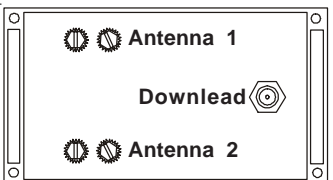
**Step 3:** Slide connector tip between braid and inner insulation (braid and foil, on foil shield cable) and push connector on cable as far as it will go. Crimp touch center conductor. Made sure no foil or braid can

**Step 2:** Trim braid close to outer cover and remove 1/4" of inner insulation **being careful not to nick** center conductor.

**Step 1:** Strip outer cover back 1/2" from end of cable. Fray braid back as far as outer cover will allow.



**INSTALLING FC-5910 CONNECTOR ON COAX CABLE**



**NOTE:** Identical antennas pointed in the same direction with equal lengths of lead between antennas and coupler will have 0 to 3 dB of gain. Identical antennas pointed in opposite directions will have -3 to -4 dB of loss. Different antennas in any direction will average -3.5 dB of loss.

off insulators to hold in place. sheet. Tape downlead to mast or use stand-

**SD-3700:** Install F-connector onto coaxial terminal of coupler. See instructions "Installing FC-5910 Connector on Coax Cable" on this downlead cable and attach to downlead

**SD-3300:** Connect twinlead going to TV set to terminals on coupler marked downlead as described in STEP 4. Twist downlead 1/2 turn per foot and use stand-off insulators as necessary to keep downlead from touching mast, roof or side of house.

**STEP 6:** Attach downlead to coupler.

**STEP 5:** Use stand-off insulators as necessary to prevent twinlead from touching mast or boom of antennas.

**INSTRUCTIONS**

**INSTRUCTIONS FOR STACKING ANTENNAS**

A minimum spacing must be provided between stacked antennas to prevent interaction and loading. Negligible loading will occur if a minimum of **one half wavelength (at the lowest channel received on adjacent antennas)** of spacing is provided.

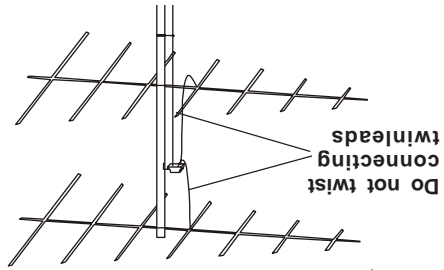
**NOTE:** Where mast space is limited, it may be necessary to install the antennas at the ends of wooden cross arms attached to the tower.

The table below lists half wavelengths for channels 2 thru 13. **Correct spacing** on any two antennas stacked one over the other is **one half wavelength** of the lowest channel either antenna receives.

**HALF WAVELENGTHS OF VHF TV CHANNELS**

CH.#	Half Wavelength	CH.#	Half Wavelength
2	102"	8	32"
3	94"	9	31"
4	86"	10	30"
5	75"	11	29"
6	70"	12	28"
7	34"	13	27"

**NOTE:** When coupling identical antennas, pointed in same direction, **DO NOT TWIST** twinlead between antenna downlead terminals and coupler. Mount coupler and connect twinlead as indicated.

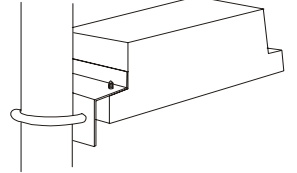


**STEP 4:** Attach twinlead from each antenna to terminals on coupler marked (Ant. 1 and Ant. 2). **DO NOT STRIP INSULATION FROM** TWINLEAD. Slide end of twinlead under serrated washers and tighten. Washers pierce insulation and contact wires.

**NOTE:** While satisfactory results are sometimes obtained from antennas stacked less than one half wavelength apart, severe loss of color fidelity and attenuation are common: Therefore, **we recommend a minimum distance between antenna booms of one half wavelength.**

**INSTALLING COUPLERS**

**Step 1.** Mount antennas on mast as described under "Instructions for Stacking".



**Step 2.** Mount coupler on mast equal distance from each antenna downlead terminals.

**Step 3.** Cut equal lengths of 300 ohm twinlead long enough to connect antenna downlead terminals to coupler. Attach one end of each piece of twinlead to antenna downlead terminals.

(Continued on other side)