

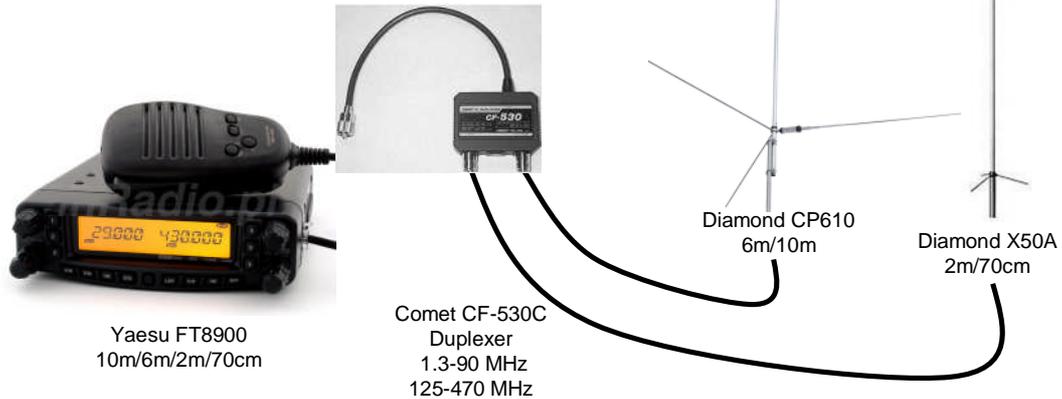
DCS Technical Team Repair/Installation Request



1.	Location(s)	Control #
	Avalon Sheriff Station 215 Sumner Ave, Avalon, CA 90704 (310) 510-0174	AVA-01
2.	Statement of the Problem(s)	
	Avalon currently only has a single Two Meter radio operational. Due to the remote location, it is imperative that they have radios operational on all bands. Additional radios are on site and require more mounting shelf space.	
3.	Recommended Solution(s)	
	<p>See attached diagram for desired equipment mounting positions. Relocate equipment where necessary.</p> <p>A. Extend shelf to cover entire wall by providing one 8’x1”x12” white shelf and shelf brackets.</p> <p>B. Install existing Alinco DR-235 Mk III on existing 220 MHz antenna.</p> <p>C. Install existing Motorola CDM1550 radio on existing 2 meter antenna (remove antenna from existing FT8900.)</p> <p>D. Install new Diamond CP 610 antenna for 6/10 meters and a new Diamond X50A 2m/70cm antenna, and connect both antennas to the existing FT8990 radio using a new Comet CF-530C diplexer to complete 4 band capability on this radio.</p> <p>E. Install new Yaesu FT897D all band transceiver with new LDG AT897 Plus Tuner.</p> <p>F. Install new B&W BWDS-90N antenna connect to the HF/50 MHz antenna port on the FT897D (See suggested mounting location attached).</p> <p>G. .Install new Diamond X50A 2m/70cm antenna and connect to the 144/430 antenna port on the FT897D.</p> <p>H. Install Astron RS-60M-BB rack mount power supply with RigRunner 8012 power distribution unit. Provide minimum #12 red/black power wires with Power-Pole connectors to each radio.</p> <p>I. Run a minimum #4 ground wire from the building Telecommunications Master Ground Bus (TMGB) to a copper ground bar (HARGER GBIS18148HROKIT or equiv.) located below equipment shelf, labeled “Telecommunications Ground Bus (TGB)”. Run a minimum #12 wire from this bus to the chassis of each radio.</p> <p>J. Provide a 2”x2” open slot wire duct (ED-WD-OS-200-200-SM or equiv.) for dressing all wires. See attached drawing for example.</p>	
4.	Concurrences	Date
	Technical Team Contact	Norm Thorn, T-219, norm@noroc.com
	DCO	Glen Gustafson, U-01, blue-2002@gmx.net
	Technical Ops Officer	Deane Bouvier , S-50, n5dq@arrl.net
5.	CFMB Approval	

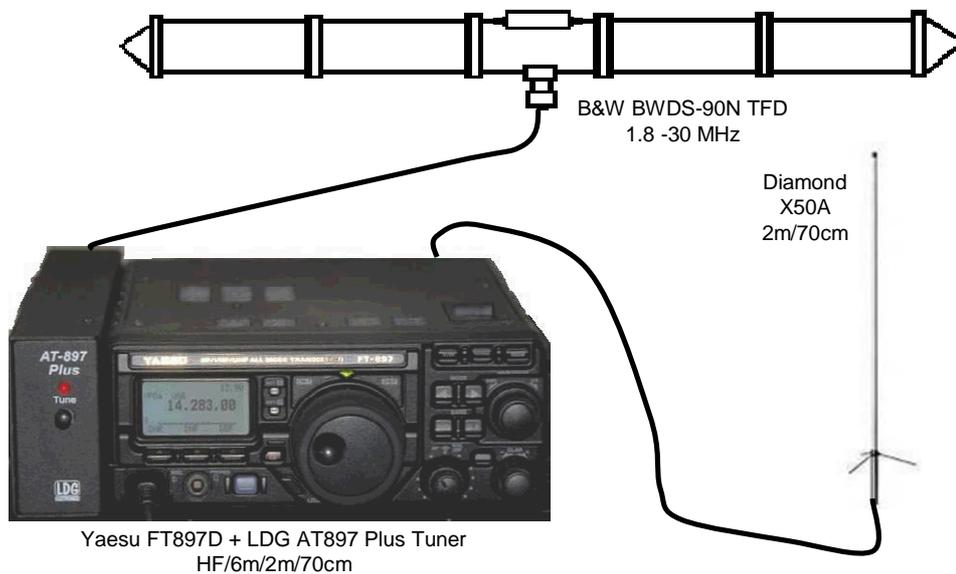
FT 8900 for 6m and 10m Recommended Configuration

- Two dual band antennas and a duplexer to achieve 4 bands
- Supports 440 MHz



- Radios are in stock, but not the duplexer or antennas

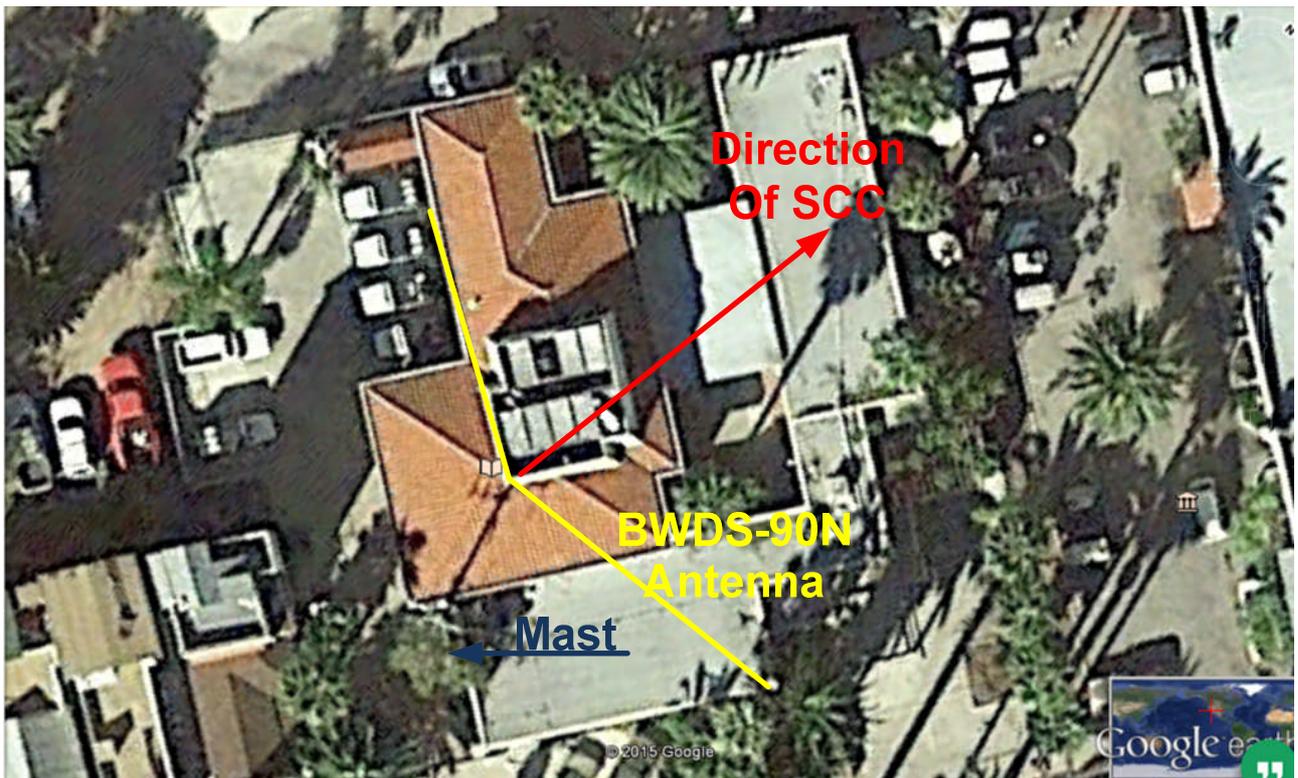
HF Position



- HF bands with horizontal polarization to support NVIS
- Second antenna port for 2m/70cm dual band antenna
- Radio in stock, but not the tuner or other antennas



Yaesu FT897D HF/6m/2m/70cm Rear Connectors



B&W BWDS-90N Recommended Installation

Equipment already on-site at Avalon Station to be used:

- (1) Yaesu FT8900
- (1) Alinco DR-235 Mk III
- (1) Motorola CDM 1550

Suggested checklist of equipment to be sent to Avalon:

- (1) Diamond CP 610 6/10m Antenna
- (2) Diamond X50A 2m/440 antenna
- (1) Comet CF-530C diplexer
- (1) Yaesu FT897D all band transceiver (From Stock)
- (1) LDG AT897 Plus Tuner
- (1) B&W BWDS-90N antenna
- (3) 10' poles and mounting hardware, guy lines for B&W antenna
- (1) Astron RS-60M-BB rack mount power supply
- (1) RigRunner 8012 power distribution unit
- (20) Spare 40a power pole connectors and installation tools to connect radios.
- (2) Crimp connectors for #8 wire for RigRunner connection to power supply.
- (1) Wall mount 6u or 8u rack for power supply.
- (1) 6' Open Slot Wire Duct (ED-WD-OS-200-200-SM or equiv.)
- (1) Shelf, White, 8' x 1"x12"
- (7) Shelf Brackets for 12" shelf with screws
- #4 or larger ground cable, tinned two hole lugs, stainless bolts, nuts, and washers, crimpers.
- #12 or larger green ground cable, tinned lugs, stainless bolts, nuts, and washers, crimpers.
- Copper Ground Bus Bar (HARGER GBIS18148HROKIT – available from Ham Radio Outlet)
- Coax cable plus a supply of connectors and waterproofing supplies, crimpers.
- Any necessary hardware for mounting antennas on the tower or roof.
- Lightning, grounding, and fireproofing supplies.

Note: There is a small Ace hardware store and a small Radio Shack within quick walking distance of the Avalon station.

Local Contacts

Glen Gustafson, DCO, Avalon Station (310) 612-3505
Norman Thorn (Designer, On Mainland) (424) 226-6762