



# WHAT DO YOU NEED FOR AN ATV STATION IN SOUTHERN CALIFORNIA?



GET THE ATV BUG!

## Watch the Amateur Action on an ATV Repeater

Start with a 1200 MHz downconverter and antenna to see what is going on. Anyone who comes on 434.0 ATV in So. Calif. will be seen in one or more of the ATV repeaters. Coverage on some are over 100 miles and are linked. Talk back to ATVer's at the same time on 146.430 FM simplex. Check the locations of the listed ATV repeaters to see which one(s) you have a line of sight path to.

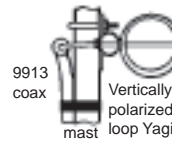


Talk to other ATVer's in your area on 146.43 simplex to get their advice, or ask for some video to be beamed to the repeater you are set for. Check into one of the ATV nets: Santiago Peak outputs on 1253.25 / ATN 8:00pm Tuesdays, Koffe Klatch 9am Sun. - 146.430 (100Hz) FM simplex audio only check-ins are welcome also. 426.25 MHz is R/C and simplex. The TVC downconverters allow you to select all the repeaters. Get some Belden 9913 or Times LMR-400 coax with N connectors for the antenna and connect to the downconverter input. Make sure the antenna is fastened to the mast for vertical polarization and that you weather proof the outside coax connectors. The downconverter outputs on cable TV channel 8 for 23cm and 3 for 33cm and 70cm. You may purchase directly from us by mail or telephone - zoning ordinances prevent direct customer contact, we can only ship product. See our ATV Application Notes on our web site.

## To Receive the Repeater video and audio:

TVC-12S 1200 MHz Downconverter \$159  
\*2424 LYRM 1200 MHz Loop Yagi

(See Catalog page 4)



Directive Systems Loop Yagi  
End mounted, 6 ft boom



*Televise Ham Club Meetings,* demos and presentations like the one on R/C ATV shown, can be transmitted live or later by video tape to those who could not personally make the meeting.



10K Race road crossing, Pasadena Rose Bowl - WB6YSS ATV portable

*Public Service Events* using ATV really gives a better "big picture" to those responsible for insuring the health and safety of the event - races, parades, etc. - as well as remote damage assessment.

## Ready to transmit video from your camera?

With crossband repeaters, you can transmit and receive simultaneously - no connection is needed between transmitting and receiving gear. Antenna vertical separation of about 10 ft will allow you to see your own video coming back. To transmit to the repeater on 434.0 MHz use the Videolynx VM-70X (catalogue page1). Use your two meter FM voice transceiver to talk back and coordinate transmissions with other ATV transmitting stations on 146.430 MHz(100 Hz) simplex while they talk to you on the sound subcarrier. If you dont have a camcorder, color cameras are now as low as \$100 - see catalogue pages 2 and 5. 426.25 MHz is used for simplex ATV. Visit our web site page 3 for more ATV app notes and links.

Your signal will only be as good as your antenna system. If you want to work simplex or DX then the bigger the better. If you only want to get to the selected repeater the DEMI 7025PA amp will get you up to 34 miles snow free line of sight with the OAL 5L-70cm 5 element beam, and over 67 miles with the FO25-ATV. With the 1.5 Watt transmitter it's 6 and 12 miles line of sight with the respective antennas for a snow free picture. There is no way to predict non line of sight conditions - trees, buildings, etc. absorb and attenuate the signal differently. Height to get line of sight is more important than longer coax loss. Ask an ATVer near you on 146.43. The 5L-70cm antenna is small and can be end mounted on a mast for base use and are also popular for portable operations. The 17 ft FO-25-ATV is center mounted. Weather proof all outside coax connections. Note that every 6 dB (4 times power) of increase due to raising power, antenna gain or less coax loss doubles the distance or adds a P unit to the picture quality. Snow free video (P5) is about 200 micro volts at the downconverter input, much more than a few microvolts like FM voice, however, large call letters can be seen into the snow as low as a few micro volts.

## COMPLETE So. Calif. ATV STATION

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Your TV set

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### 5 W ATV Transmitter

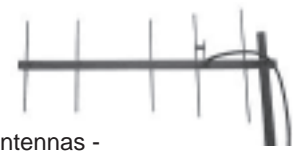
See Videolynx VM-70X App note  
Add Downeast 7025PA or  
Mirage D26N amp for 35-50 W  
pep if you are more than 5  
miles from the repeater.



### Repeater Downconverter

1200 MHz band/ch8 TVC-12S.....\$159  
Add optional DEMI 23LNAPQ  
antenna mounted preamp if >25  
miles from the repeater or high coax  
loss and snow in the picture.

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Antennas -

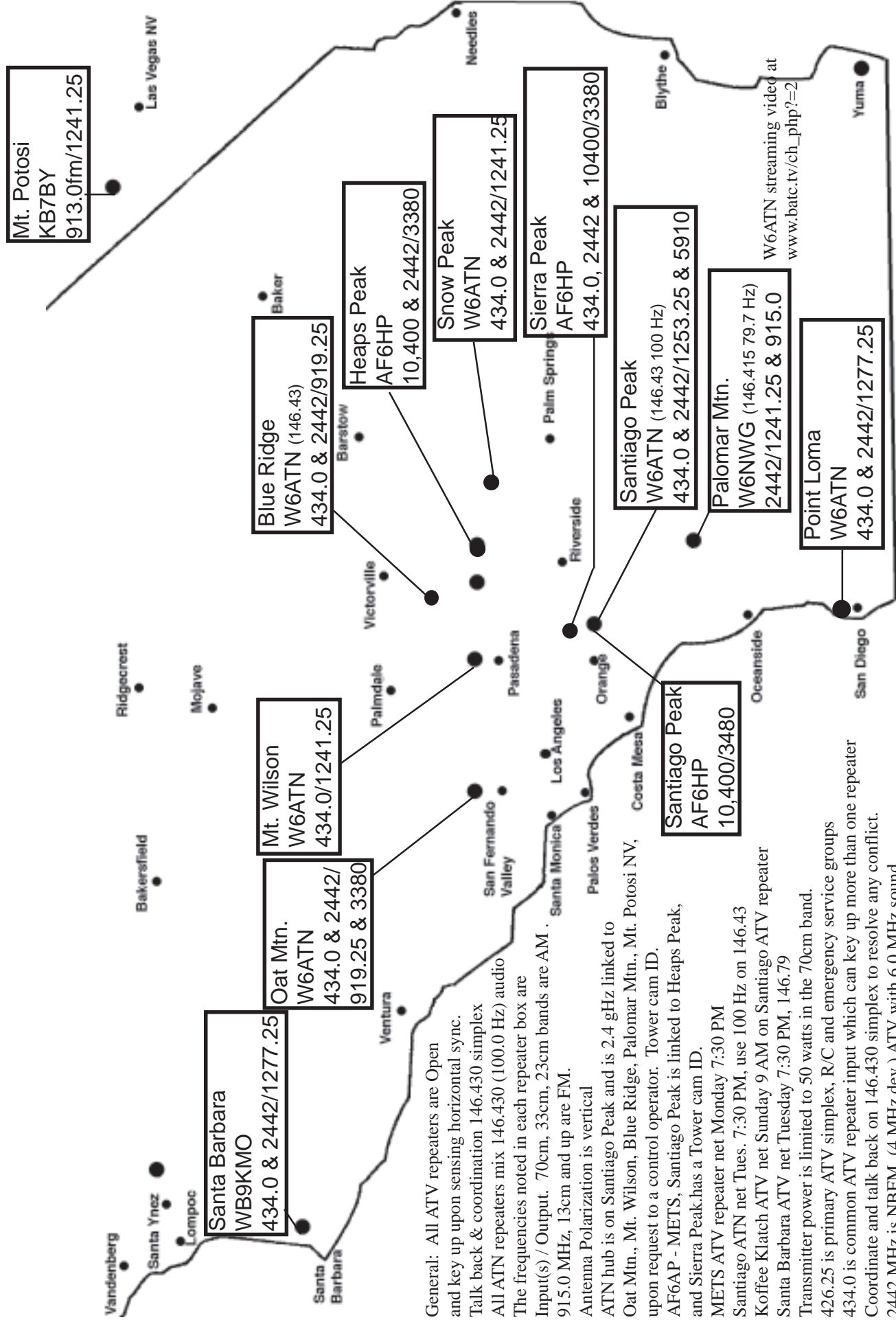
see catalogue page 3

Dir. Sys. DSFO ATV-25 Yagi, 17 ft, 16 dBd.....\$229  
OAL-5L-70cm Yagi end mtg 8 dBd, 31inches...\$85  
\*Contact Directive Systems for the 33cm  
3318LYRM or 23cm 2424LYRM Loop Yagies -  
www.directive-systems.com



Your video camera  
or camcorder - see pg 2 & 5

# Southern California Coordinated ATV Repeater Map



W6ATN streaming video at [www.batc.tv/ch\\_php?=2](http://www.batc.tv/ch_php?=2)

General: All ATV repeaters are Open and key up upon sensing horizontal sync. Talk back & coordination 146.430 simplex. All ATN repeaters mix 146.430 (100.0 Hz) audio. The frequencies noted in each repeater box are Input(s) / Output. 70cm, 33cm, 23cm bands are AM. 915.0 MHz, 13cm and up are FM. Antenna Polarization is vertical. ATN hub is on Santiago Peak and is 2.4 GHz linked to Oat Mtn., Mt. Wilson, Blue Ridge, Palomar Mtn., Mt. Potosi NV, upon request to a control operator. Tower cam ID. AF6AP - METS, Santiago Peak is linked to Heaps Peak, and Sierra Peak has a Tower cam ID. METS ATV repeater net Monday 7:30 PM. Santiago ATN net Tues. 7:30 PM, use 100 Hz on 146.43. Koffee Klatch ATV net Sunday 9 AM on Santiago ATV repeater. Santa Barbara ATV net Tuesday 7:30 PM, 146.79. Transmitter power is limited to 50 watts in the 70cm band. 426.25 is primary ATV simplex, R/C and emergency service groups. 434.0 is common ATV repeater input which can key up more than one repeater. Coordinate and talk back on 146.430 simplex to resolve any conflict. 2442 MHz is NBFM (4 MHz dev.) ATV with 6.0 MHz sound. 3 and 10 GHz is WBFM (11 MHz dev) ATV with 6.8 MHz sound.