

## Ham 88 - Band plan vhf/uhf

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**The Band Plan** is a cooperative effort to split up a group of frequencies for various ham activities. Data based on ARRL band plan and ORSI (OklahomaRepeaterSociety.org) coordination plan.

**VHF** repeater transmit offsets to receive frequency by 600 kHz.  
 Co-channel (same channel) distance separation is 120 miles.  
 145.110 – 145.490: Channel spacing = 20 kHz, offset = minus.  
 146.610 – 147.000: Channel spacing = 15 kHz, offset = minus.  
 147.000 – 147.390: Channel spacing = 15 kHz, offset = plus.  
 Bandwidth is 16 kHz, so some adjacent channel interference is likely.

**UHF** repeater transmit offsets to receive frequency by +5 MHz.  
 Co-channel (same channel) distance separation is 120 miles.  
 442.000 – 444.975: Channel spacing = 25 kHz, offset = plus.

**Simplex** has no specified channel spacing, but by convention follows the same guidelines as repeaters.  
 VHF channel separation is 15 kHz. (146.40, 146.415, 146.43, 146.445, etc.)  
 UHF channel separation is 25 kHz. (445.0, 445.025, 445.050, 445.075, etc.)  
 The different mode segments for 2-meter and 70-cm are in the table.

VHF		UHF	
144.00-144.05	EME (CW)	420.00-426.00	ATV repeater or simplex with 421.25 MHz video carrier control links & experimental
144.05-144.10	General CW and weak signals	426.00-432.00	ATV simplex, 427.250-MHz video carrier
144.10-144.20	EME and weak-signal SSB	432.00-432.07	EME (Earth-Moon-Earth)
144.200	National calling frequency	432.07-432.10	Weak-signal CW
144.20-144.275	General SSB operation	432.10	70-cm calling frequency
144.275-144.30	Propagation beacons	432.10-432.30	Mixed-mode and weak-signal work
144.30-144.50	New OSCAR sub-band	432.30-432.40	Propagation beacons
144.50-144.60	Linear translator inputs	432.40-433.00	Mixed-mode and weak-signal work
144.60-144.90	FM repeater inputs	433.00-435.00	Auxiliary/repeater links
144.90-145.10	Weak signal and FM simplex (145.01,03,05,07,09 widely used packet)	435.00-438.00	Satellite only (internationally)
145.10-145.20	Linear translator outputs	438.00-444.00	ATV repeater input with 439.250-MHz video carrier frequency and repeater links
145.20-145.50	FM repeater outputs (-offset)	442.00-445.00	Repeater outputs (OK) (+offset)
145.50-145.80	Miscellaneous and experimental modes	445.00-447.00	Shared by auxiliary and control links, repeaters and simplex (local option)
145.80-146.00	OSCAR sub-band	446.00	National simplex frequency
146.01-146.37	Repeater inputs	447.00-450.00	Repeater inputs & outputs (local option)
146.40-146.58	Simplex		
146.52	National Simplex Calling Frequency		
146.61-146.97	Repeater outputs (-offset)		
147.00-147.39	Repeater outputs (+offset)		
147.42-147.57	Simplex		
147.60-147.99	Repeater inputs		

**Cross-band** ‘magic’ is configuring a mobile to receive on one band and re-transmit on another. For example, set one side of the radio to the VHF repeater channel. Set the other side to the UHF simplex frequency used by the handi-talkie. Set mobile for cross-band operation. The handi is effectively operating on the repeater, through the radio.

**AllStar** nodes with RF radios operate simplex. This can be any simplex channel. Typically we use 446.025, which is just one channel from the national calling frequency, making set-up easier. Program your node simplex frequency into a channel number on the handi-talkie to assure quick set-up.

**On simplex**, a key problem is having tones set on one radio and not the other, effectively blocking that channel. The simplest solution is to open the menu and clear all tones for that channel.

Life is good. Enjoy!

