

# UV-5R Vs UV3R receiver frequency test.

## UV3R Dual Display, Received 27/3/2012

Here's how I conducted the UV-3R receiver test. I injected a 3uV signal starting at the test frequency. The deviation was 5KHz using a 1KHz test tone. I set the service monitor to measure audio distortion. I used the supplied UV-3R earpiece/mic and cut off the speaker bud. I connected an alligator test lead to the stripped end of the earpiece/mic and connected the the other end to the service monitor audio in. I recorded the audio distortion for both bands and here are the results.

**BOTH RADIOS WERE TESTED USING A SIMPLEX FREQUENCY. THERE WERE NO OFFSETS. THE TRANSMIT FREQUENCY WAS CHECKED ON BOTH RADIOS AND WERE LESS THAN 50Hz FROM CENTER FREQUENCY.**

Test equipment; HP 8924 communications test set and an HP 8657B RF Generator.

## UV-3R Receiver & Transmit Frequency = 147 MHz

147.002 1.2%  
147.001 .7%  
147.000 .5% ← Receive Center frequency  
146.999 .6%  
147.998 .8%  
147.997 1.4%

## UV-3R Receiver & Transmit Frequency = 444.000

444.003 1.5%  
444.002 .8%  
444.001 .6%  
444.000 .6% ← Receive Center frequency  
443.999 .6%  
443.998 1.4%

## Old Version UV-5R SN ?? Received 27/3/2012

Here's how I conducted the UV-5R receiver test. I injected a 3uV signal starting at the test frequency. The deviation was 5KHz using a 1KHz test tone. I set the service monitor to measure audio distortion. On the UV-5R speaker mic there's a rubber plug at the base of the mic. I removed it and plugged in a 1/8" jack and the other end, using a BNC adapter, connected to the service monitor audio in. I recorded the audio distortion for both bands and here are the results.

**BOTH RADIOS WERE TESTED USING A SIMPLEX FREQUENCY. THERE WERE NO OFFSETS. THE TRANSMIT FREQUENCY WAS CHECKED ON BOTH RADIOS AND WERE LESS THAN 50Hz FROM CENTER FREQUENCY.**

Test equipment; HP 8924 communications test set and an HP 8657B RF Generator.

### UV-5R Receiver & Transmit Frequency = 147 MHz

147.0000 1.5%  
147.0010 1.0%  
147.0020 .5% ← Receive Center frequency (off by 2KHz)  
147.0030 .6%  
147.0040 1.4%  
147.0050 2.2%

### UV-5R Receiver & Transmit Frequency = 444.000

444.0000 1.9%  
444.0010 1.4%  
444.0030 .9%  
444.0040 .5% ← Receive Center frequency (off by 4KHz)  
444.0050 .7%  
444.0060 1.5%  
444.0070 2.3%

Jack WA9FVP  
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# NEW UV-5R SN EU2012031146 Received 18/5/2012 (Corrected 26/6/12)

#3+ Power = Ver BFB238, #6 + Power = 1204171 VER-05

**Note:** Previous versions had a volume control problems whereby the minimum volume was too loud. With this version, the volume control was corrected and no noise is heard when the volume control is turned down. The factory corrected the frequency but 2 meters is still off by +1 KHz

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**BOTH RADIOS WERE TESTED USING A SIMPLEX FREQUENCY. THERE WERE NO OFFSETS. THE TRANSMIT FREQUENCY WAS CHECKED ON BOTH RADIOS AND WERE LESS THAN 50Hz FROM CENTER FREQUENCY.**

Test equipment; HP 8924 communications test set and an HP 8657B RF Generator.

## UV-5R Receiver & Transmit Frequency = 147 MHz

To increase the accuracy finer frequency steps were used.

146.9998 1%  
147.0000 .9%  
147.0002 .8%  
147.0004 .7%  
147.0006 .7%  
147.0008 .6%  
147.0010 .6% ← Receive Center frequency (off by about +1KHz)  
147.0012 .6%  
147.0014 .7%  
147.0016 .8%  
147.0018 .9%  
147.0020 1%

## UV-5R Receiver & Transmit Frequency = 444.000

443.9980 1.2%  
443.9982 1.1%  
443.9984 1.0%  
443.9986 .9%  
443.9988 .8%  
443.9990 .8%  
443.9992 .7%  
443.9994 .6%  
443.9996 .6%  
443.99965 .6% ← Receive Center frequency (off by -350 Hz)  
443.9998 .6%  
444.0000 .6%  
444.0002 .7%  
444.0004 .8%  
444.0006 .9%  
444.0008 1.1%  
444.0010 1.2%

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