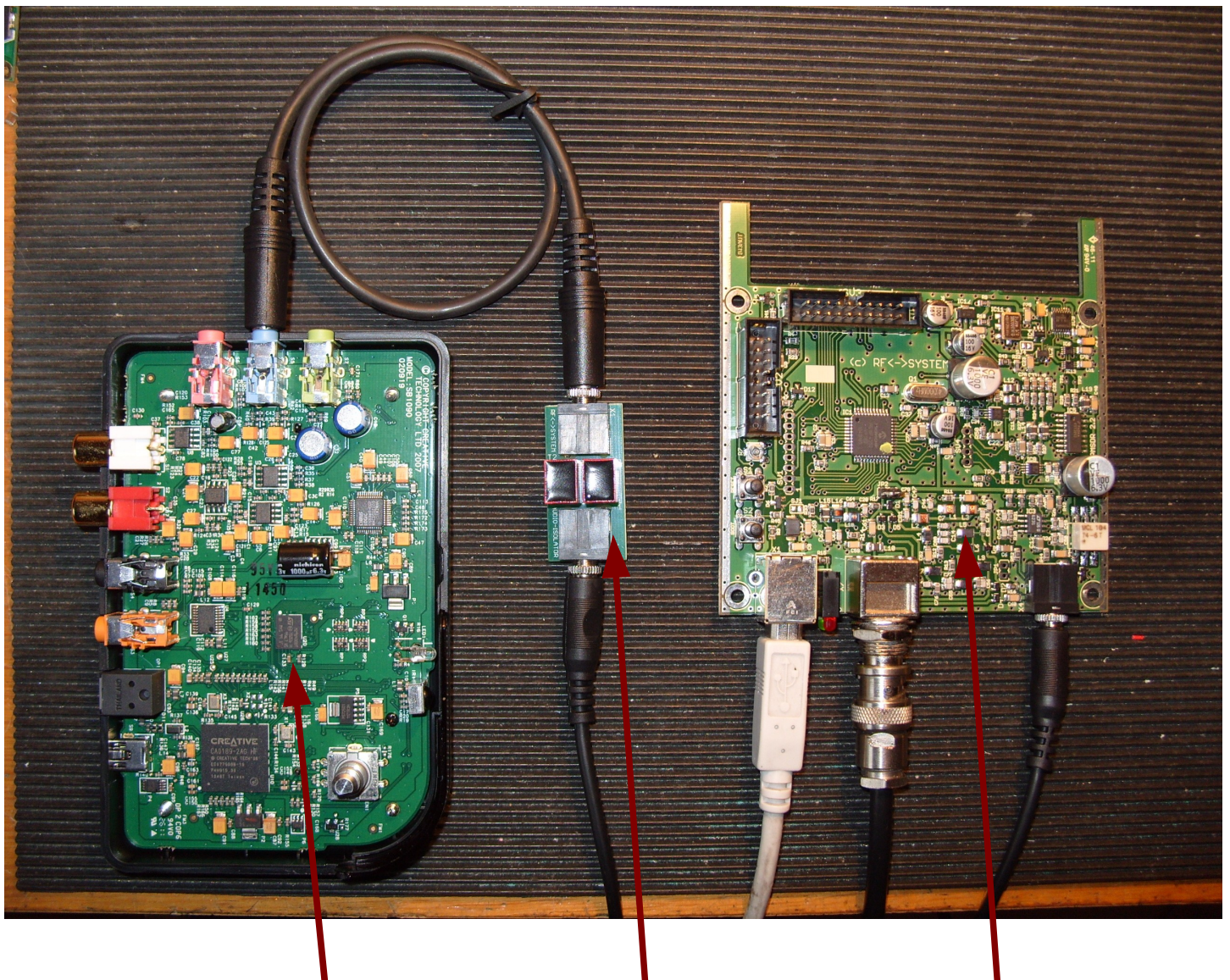


# ***Noise Comparison between PMSSDR 2.1 and PMSSDR 2.2 on the 6m-Band***

Martin Pernter, IW3AUT  
3/4/2012

# ***Test setup and conditions***

- Signal generator: HP8640B, out: 54,169 MHz, level=-120dBm
- PC: HP XW4400 Workstation, WinXP SP3
- Software: HDSDR V2.13, left input mode, RBW=11,7Hz vertical scale: 5dB/div from -135dB to 0dB
- Sound card: Sound Blaster X-Fi Surround 5.1 Pro, sampling rate 96kHz / 24bit, Line input volume is set to maximum



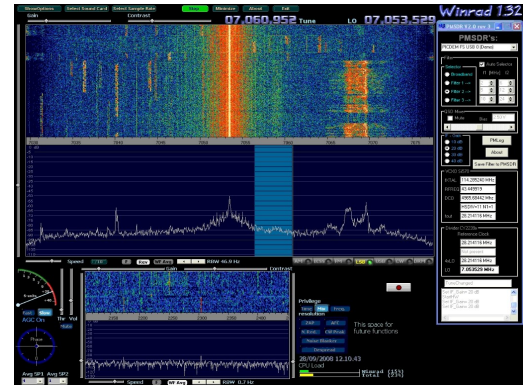
Sound Blaster X-Fi  
Surround 5.1 Pro

Audio galvanic isolator  
(RF-SYSTEM)

PMSDR-  
receiver

# Test setup overview

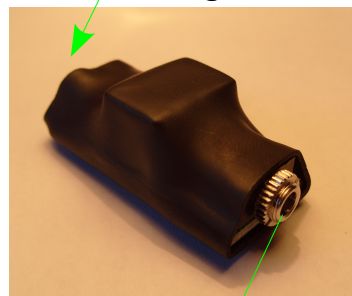
DUT: PMSDR 2.1 or PMSDR 2.2



HP8640B Signal generator



Audio galvanic isolator



USB

PC

USB

Line In

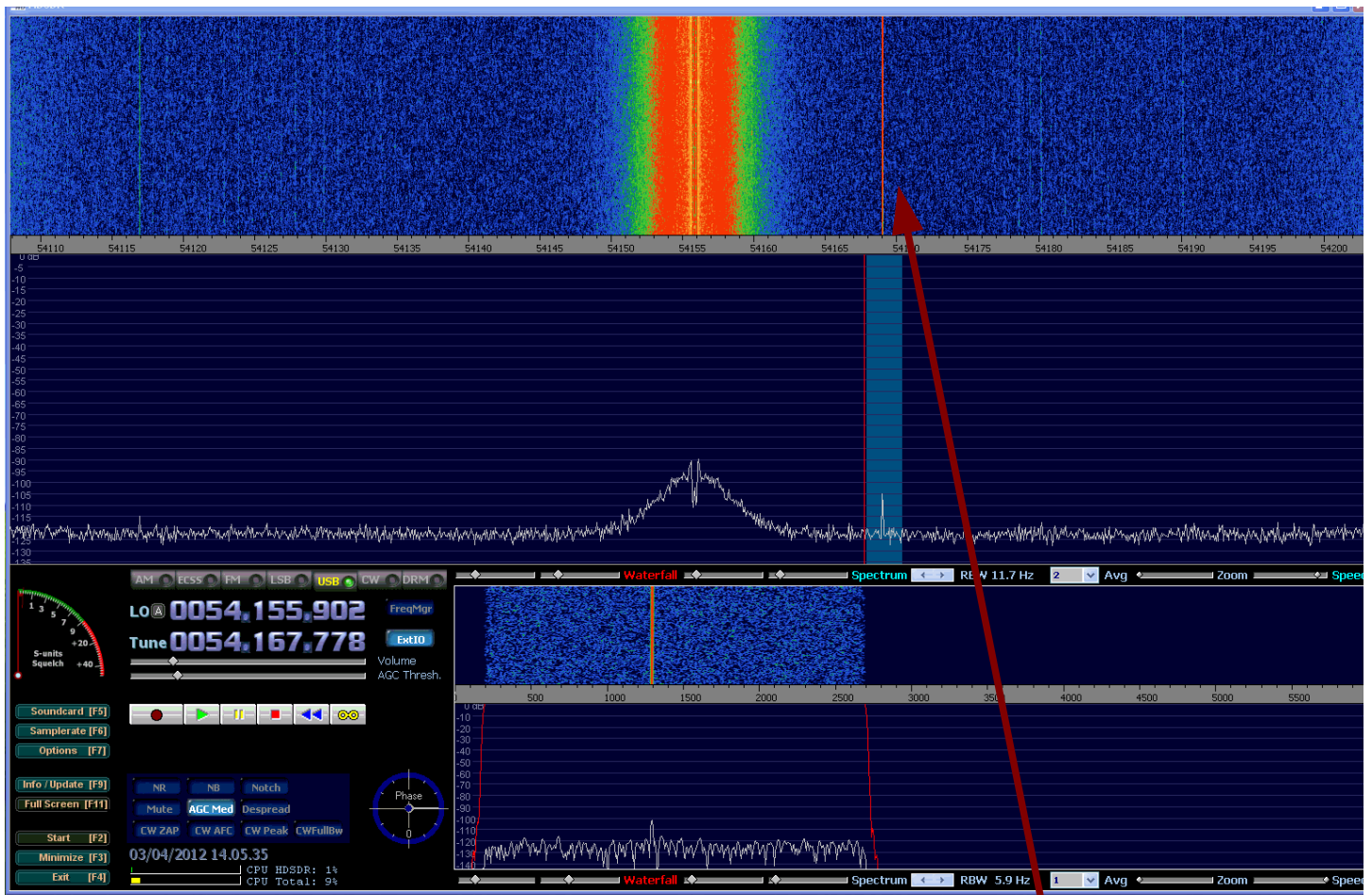
Line out





# Test results

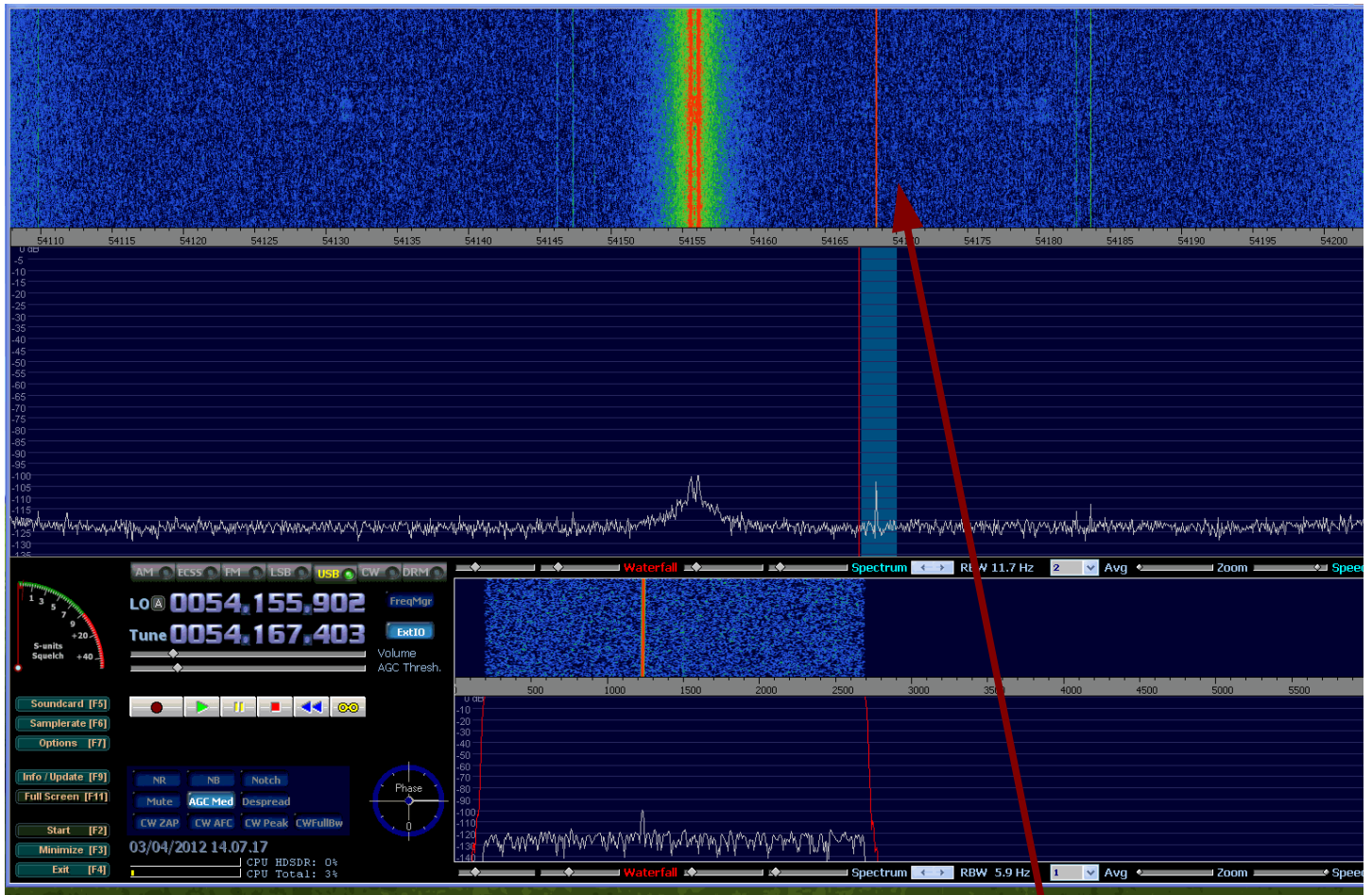
## Test 1: PMSDR 2.1 (with modification)



Test signal @ 54,169 MHz, level=-120dBm

# Test results

## Test 2: PMSDR 2.2



Test signal @ 54,169 MHz, level=-120dBm

The PMSDR 2.2 have a lower noise around the center frequency. The difference between the PMSDR 2.2 and PMSDR 2.1 board are especially noticable at higher bands.