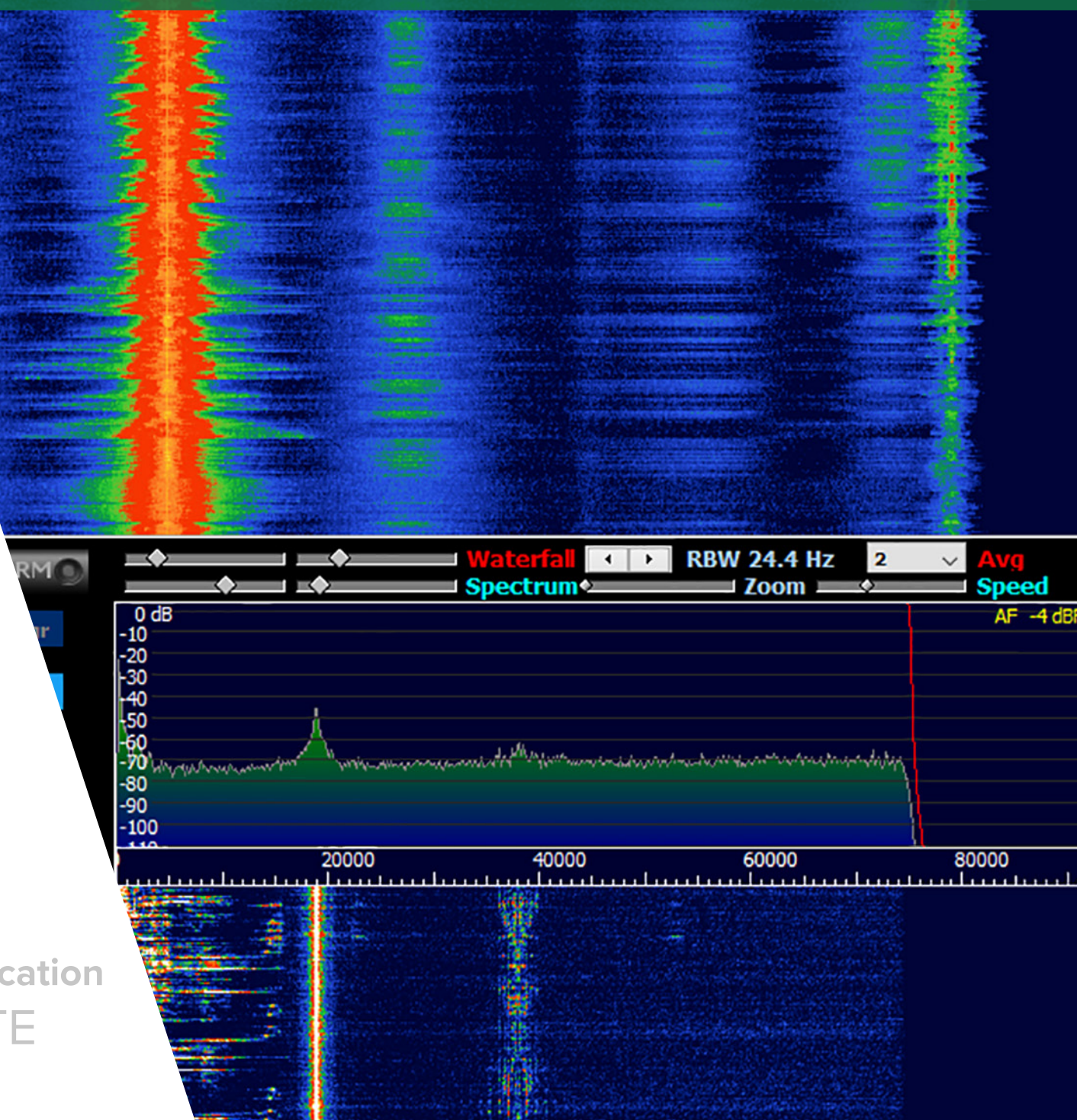


HDSDR Setup for

Signal Hound Receivers

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Application
NOTE

Introduction

This document outlines the procedure for configuring the HDSDR application for use with any of the Signal Hound spectrum analyzers. This includes the SA44, SA44B, SA124A, SA124B, BB60A, BB60C.

HDSDR is a free SDR program for Windows systems typically used by amateur radio enthusiasts. HDSDR provides a common programming interface to allow the integration of a number of acquisition systems.

The rest of this document will guide you through installation, configuration and usage of the HDSDR software for use with a Signal Hound receiver.

Included in the Download Folder

→ SA Folder

Contains all the files necessary for the SA44/SA124 devices to interface with HDSDR.

- ExtIO_SA.dll
- sa_api.dll
- msvcpl10.dll
- msucr110.dll
- ftd2xx.dll

→ BB Folder

Contains all the files necessary for the Signal Hound BB60C/A devices to interface with HDSDR.

- ExtIO_BB_5M.dll
 - Uses sample rate of 5MS/s with 4MHz of bandwidth.
- ExtIO_BB_20M.dll
 - Uses sample rate of 20MS/s with 16MHz of bandwidth
- bb_api.dll
- msvcpl10.dll
- msucr110.dll
- ftd2xx.dll

→ Source Folder

Contains the source projects for both ExtIO_SA.dll and ExtIO_BB.dll. Both projects are Visual Studio 2012 C++ x86 projects.

Installing HDSDR

HDSDR is provided as a download on the official site at www.hdsdr.de. Download and run the installer on your system. HDSDR is a 32-bit application. Signal Hound receivers have been tested with version 2.80 on Windows 10 64-bit systems.

After installation, you should be able to find the HDSDR files in this location on a 64-bit machine `C:/Program Files(x86)/HDSDR/` and on a 32-bit machine `C:/Program Files/HDSDR/`.

Preparing HDSDR for your Receiver

For HDSDR to interface with your Signal Hound receiver you must place the proper interface files into the HDSDR installation directory.

If you are using an SA44 or SA124 device, place the contents of the SA folder into the HDSDR installation directory.

If you are using a BB60 device, place the contents of the BB folder into the HDSDR installation directory.

If you place both BB60 ExtIO DLLs into the HDSDR directory, you will be asked which one you want to load when you run the HDSDR application. To avoid this selection, move only one of the ExtIO DLLs files.

Running the Software

Before launching HDSDR, ensure the receiver is connected to your PC and the LED on the device is solid green. After launching the software, you can determine if HDSDR found the receiver by selecting *Options*(F7) and highlighting *Select Input*. You should see "Signal Hound" present and selected. You may then start the receiver by selecting *Start*(F2).

Tips

You can find community generated users manuals and answers to common questions on the website at www.hdsdr.de/faq.html.

Wideband FM demodulation can be enabled by selecting *Bandwidth*(F6) while FM is selected, selecting an output rate of 192 kHz, and then using the slider to increase the FM-BW to 192 kHz.

You can increase the sensitivity of the device by selecting the RF button, and using the slider. Sensitivity can be changed in 10dB steps. Larger values represent higher sensitivities. Increasing sensitivity too much may result in an IF overload of the receiver.

Troubleshooting

If at any point the receiver or software is not responding, close the software, cycle the power on the receiver, and restart the software.



Further Reading

See the HDSDR Frequently Asked Questions at <http://hdsdr.de/faq.html>.

About Signal Hound

Signal Hound designs and builds powerful, affordable spectrum analyzers and signal generators for engineers and RF professionals around the globe. Whether you're needing EMC precompliance capabilities in a small two-person shop or spectrum monitoring on a national scale, our test equipment is designed with you in mind. Accurate and powerful enough for mission-critical RF analysis, priced at a point accessible to most, and supported by a talented group of engineers committed to what they do – we truly believe that our devices offer unrivaled value in the test equipment industry.

In business since 1996 and selling our own line of Signal Hound test equipment since 2010, we've built the foundation of our company on years of test equipment repair, service, hardware and software development, and manufacturing experience. Signal Hound is a small company with big goals – and an even bigger commitment to providing our customers with an outstanding experience when purchasing and using our products.

