rtl-sdr.com
RTL-SDR (RTL2832U) and software defined radio news and projects. Also featuring Airspy, HackRF, FCD, SDRplay and more.

Quick Start Guide

Quick Start Guide

This page is a guide aimed at helping anyone set up a cheap radio scanner based on the RTL-SDR software defined radio as fast as possible on a Windows system. If you have any trouble during the installation, please see the troubleshooting guide further down the page. We also have brief instructions for getting started on Linux and OSX at the end of this page.

Please note that the RTL-SDR is not a plug and play device. You will need to have sufficient skills to perform basic PC operations such as unzipping files, installing software, moving and copying files and have the motivation to learn new software.

******* RTL-SDR Blog V3/V4 Users *******

New RTL-SDR Blog V4 USERS: Please remember that you need to install our custom drivers in order to make the V4 work. The quickstart guides below show how to install them on common software. For other software we have generic instructions here rtl-sdr.com/V4.

We suggest the following reading order:

1. **Quickstart Guide:** rtl-sdr.com/QSG - Current page. Helps you install the software and set up your dongle.
2. **V3 Features Guide:** rtl-sdr.com/V3 - Learn how to use special V3 features like the direct sampling HF mode and bias tee.
   V4 Features Guide: rtl-sdr.com/V4 - Learn how to use special V4 features and how to install the required drivers for V4 models.
3. **SDR# Users Guide:** rtl-sdr.com/SDRSHARP - Learn about the settings in SDR#.
4. **Dipole Antenna Guide:** rtl-sdr.com/DIPOLE - Learn how to use your RTL-SDR Blog multipurpose dipole antenna (if purchased in set)

RTL-SDR BLOG V3/V4 BUYERS: PLEASE BE WARY OF COUNTERFEITERS. Opportunistic sellers are advertising all sorts of dongles under our brand "*RTL-SDR Blog*". The dongles with blue or green cases or square rectangular silver cases with four screws per panel (eight total), or those advertised as "Pro" are not ours. Those dongles use poorer quality components, are designed cheaply, and may not have all the V3 features. We cannot provide support for counterfeits and these do not help support the running of the blog and the design of new products. The best place to purchase RTL-SDR V3 dongles is directly from our store at www.rtl-sdr.com/store.

SPOTTING RTL-SDR BLOG V3 CLONES

RTL-SDR.COM/GENUINE

Original RTL-SDR Blog V3

- Slightly curved enclosure
- Website URL on body
- Two diagonal screws on ends
- NSY production QC sticker on back
- Newer units say R860
- Newer silver units have an RTL-SDR Blog logo on the rear
- Latest units come in a conductive black enclosure
- Latest black units have an FCC regulatory compliance statement on the rear
- Green PCB with thermal pad

Fake RTL-SDR Blog V3 Clones:

-Flat enclosure
-May say “RTL.SDR”, “RTL-SDR V3 Pro”, or be unmarked
-Four screws per side panel
-May not have bias tee, HF or TCXO features despite advertising
-No SMA nut, or nut without washer
-PCB sits loosely inside enclosure
-May have significantly more spurs + noise
-No logo on the back
-Yellow double stacked PCB, or blue PCB
-May not have thermal pad
-Signals may be distorted with mysterious high pitched whine in the audio spectrum

Clone sellers may also use images of the original Please try to order from repurable sellers if not ordering directly from our stores.

New Sophisticated Fake V3 Clones

-Looks exactly like an original V3 except for minor differences
-Side panel screws are not diagonally offet
-No NSY QC sticker
-Listings may use our original graphics

****

Equipment Guide

We recommend purchasing one of our RTL-SDR Blog V3 or V4 dongles. See the Buy RTL-SDR dongles page for more information on purchasing.

Generally at least a dual core processor will be required to run most SDR software smoothly. Some command line software and ADS-B decoders may work on less powerful hardware.

To get the most enjoyment out of RTL-SDR you will need a decent antenna. Our packages that come with the dipole antenna set are a great start. Be sure to get them up high and outside (during good weather only) for best results. Units not sold by us may come with a smaller fixed length whip antenna with a magnetic mount base that is okay for testing, but overall is not that great. The recommended outdoor antenna for general scanning is a discone due to their wide band receiving properties. You can also cheaply build a wideband planar disk antenna (pdf warning) out of some metal pizza pans.

SDR# (SDRSharp) Set Up Guide (Tested on Windows 11/10/8/7) (XP/Vista Incompatible)

(Works with RTL-SDR Blog V4/V3)

SDR# is the most commonly used SDR program on Windows. We recommend it as one of the easiest to setup and use with the RTL-SDR.

1. Purchase an RTL-SDR dongle. We recommend purchasing one of our RTL-SDR Blog V3 or V4 dongles. Information on purchasing one can be found here.

2. You must have the Microsoft .NET 8.0 x86 Desktop Runtime installed to use SDRSharp. Most modern PCs will have automatically updated to this already unless you have specifically blocked these updates on your PC.

3. You will also need the Microsoft Visual C++ redistributable installed. Most PCs will have this already installed, but if you do not you can download the x86 version from here.

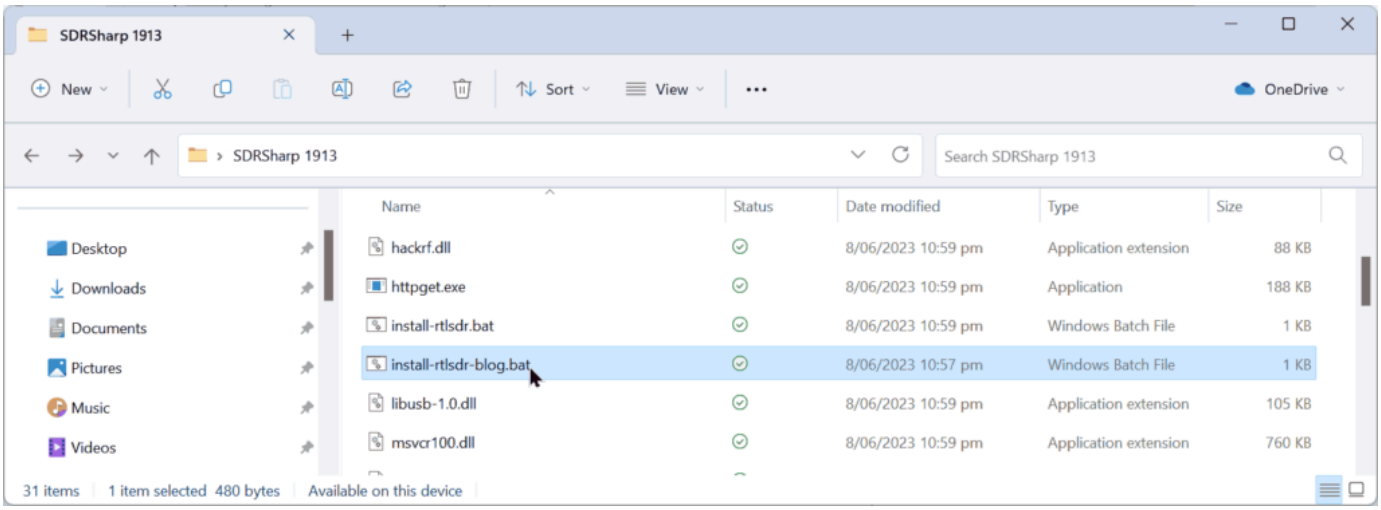
4. **Go to www.airspy.com** and find the downloads button on the top menu. Next to the "Software Defined Radio Package" heading **click on the download button** to download sdrsharp-x86.zip. Do not download the community managed edition, as this is often broken.

5. **Extract (unzip) sdrsharp-x86.zip** to a folder on your PC. (Important! Many people who have issues forget this step! DO NOT run the files from within the zip file or the following steps will fail). (Also, do not extract into a folder within the Program Files directory, or installation may fail as these folders are often automatically made read only by Windows).

6. **Double click on install-rtlsdr.bat** from within the extracted folder. On some versions of Windows you may get a SmartScreen warning. Click on More Info, then Run Anyway. This will start a command prompt that will download all the drivers required to make SDRSharp work with RTL-SDR. Once completed, press any key to close the command prompt.

   If the batch file ran successfully the files rtlsdr.dll and zadig.exe will be downloaded into the SDR# directory. If they were not downloaded then your PC or anti virus solution may be misconfigured and may have trouble running batch files (Check that the folder is not read only, and not located in the Program Files directory).

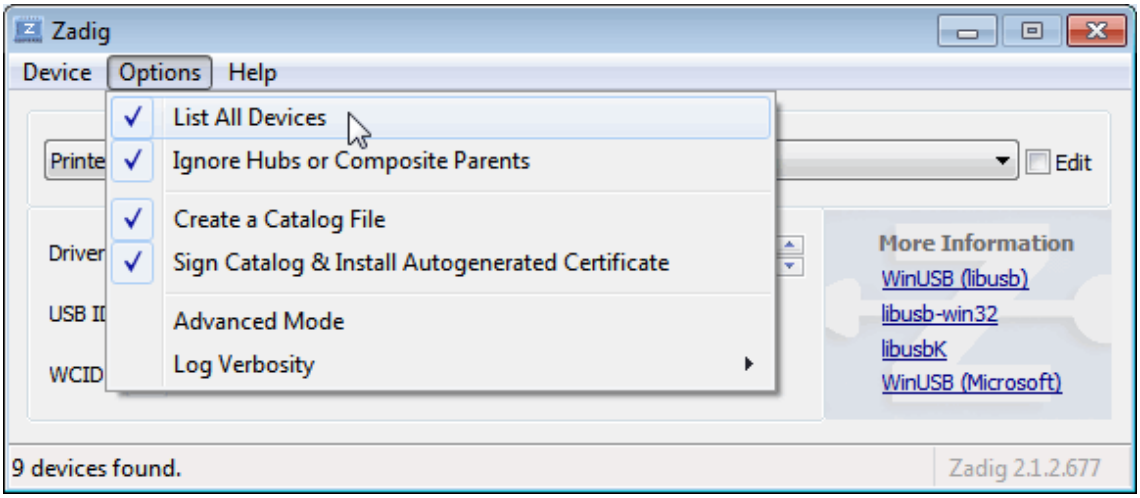
   If install-rtlsdr.bat fails to download the dll or zadig, do a manual driver installation. If Zadig is smaller than 5000kB (5MB), the download has failed and you should download Zadig manually.



7. **Plug in your dongle**. Do not install any of the software that it came with (if any), and ensure that you wait a few seconds for plug and play to finish *attempting* to install the dongle (it will either fail or install Windows DVB-T TV drivers). If you've already installed the DVB-T drivers that came on the CD bundled with some dongles, uninstall them first.

8. In the folder where you extracted the sdrsharp files find the file called **zadig.exe**. Right click this file and select "Run as administrator".

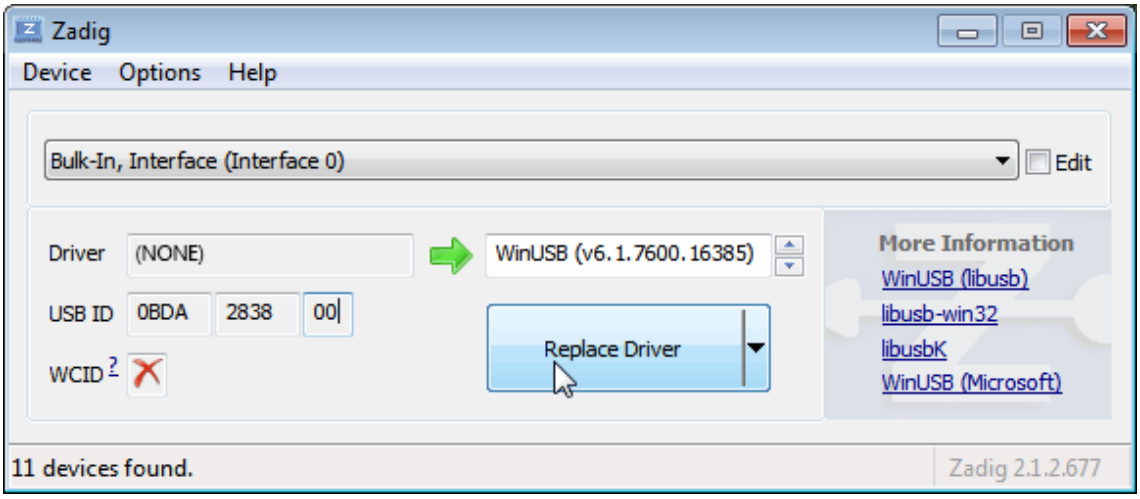
9. In Zadig, go to "**Options->List All Devices**" and make sure this option is checked. If you are using Windows 10 or 11, in some cases you may need to also **uncheck "Ignore Hubs or Composite Parents"**.



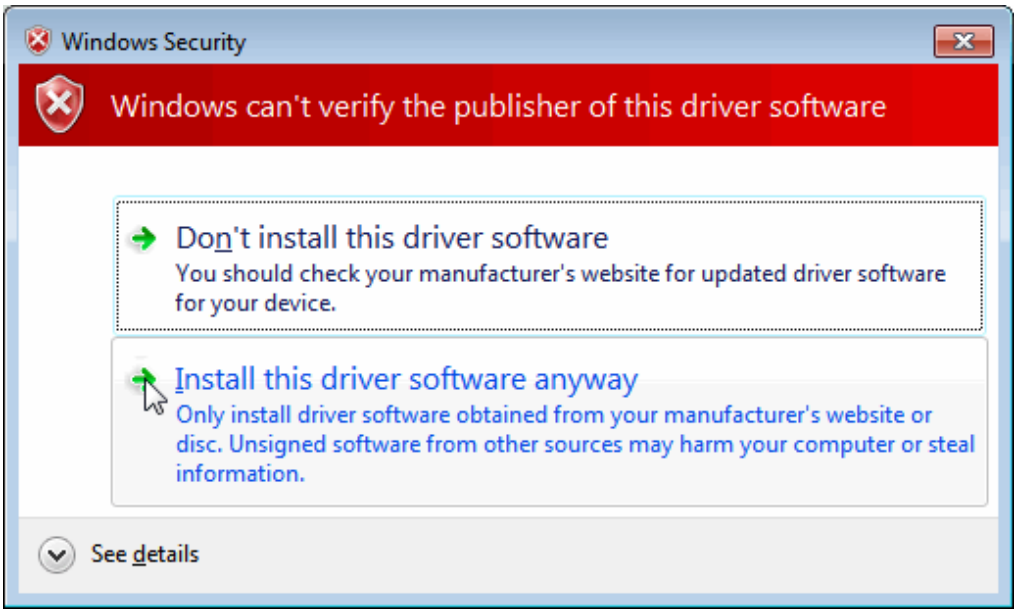
10. Select "**Bulk-In, Interface (Interface 0)**" from the drop down list. Make sure it is Interface 0 (ZERO), and not "1". Note on some PCs you may see something like **RTL2832UHIDIR** or **RTL2832U** or **Blog V4** instead of the bulk in interface. This is also a valid selection. Double check that USB ID shows "0BDA 2838 00" as this indicates that the dongle is selected.

WARNING: DO NOT select *anything else* or you will overwrite that device's driver! DO NOT click around randomly in Zadig. If you do you are likely to overwrite your mouse, keyboard, printer, soundcard etc drivers. Many bad reviews we get are due to people clicking around randomly in Zadig, so PLEASE check what you are doing first.

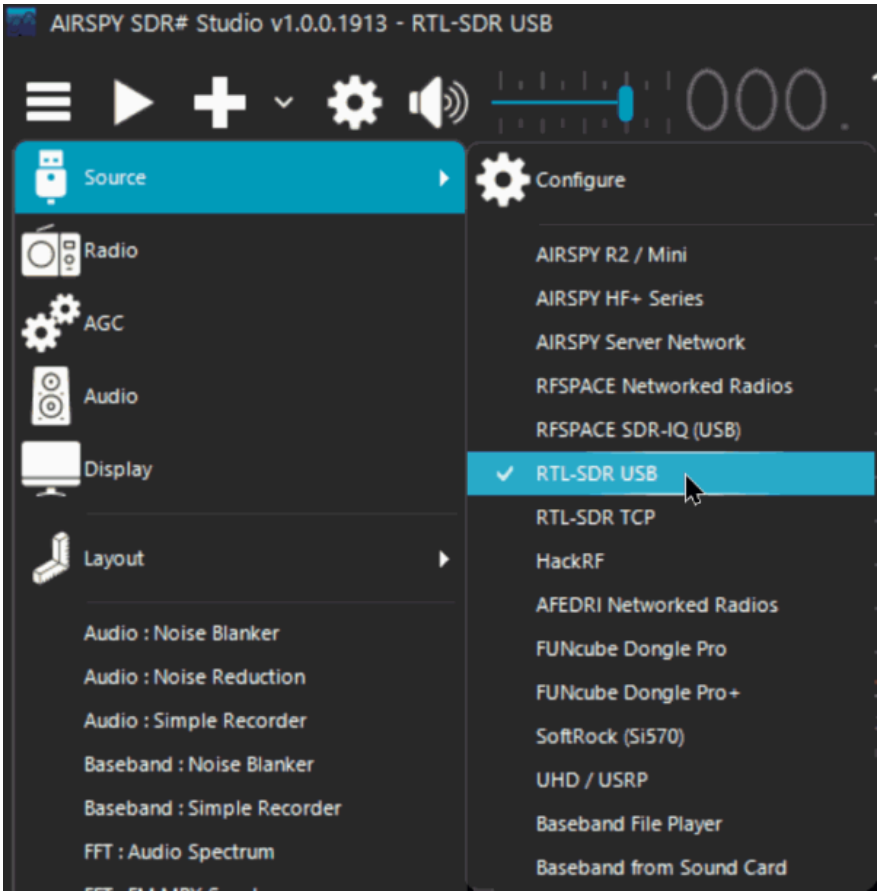
11. **Make sure the box to the right of the arrow shows WinUSB**. The box to the left of the green arrow is not important, and it may show **(NONE)** or **(RTL...)**. This left hand box indicates the currently installed driver, and the box to the right the driver that will be installed after clicking Replace/Install Driver.



12. **Click Replace Driver**. On some PC's you might get a warning that the publisher cannot be verified, but just accept it by clicking on "Install this driver software anyway". This will install the drivers necessary to run the dongle as a software defined radio.



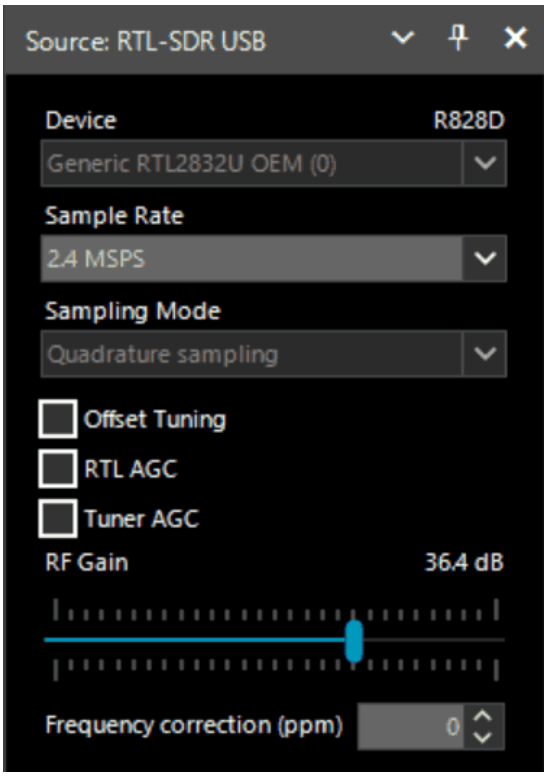
13. **Open SDRSharp.dotnet8.exe and set the "Source" to 'RTL-SDR USB'**. The source menu is in the top left Hamburger Menu (the three horizontal lines).



14. **Press the Play button** ▶ (the right facing triangle in the top left of the program). Your RTL-SDR software radio should now be set up and ready to use! If everything has worked you should be able to start tuning to frequencies.

15. **Important!** Don't forget to also **adjust the RF gain settings** by adjusting it in the Source window, in the lower left of SDR#. By default the RF gain is set at zero. A gain of zero will probably receive nothing but very strong broadcast FM - increase the gain until you start seeing other signals.

    To **receive HF signals below 24 MHz** with an RTL-SDR Blog V3, please see our V3 users guide.



What's Next?

After getting your RTL-SDR set up with SDR# we recommend investigating the following:

1. If you are using a RTL-SDR.com V3 dongle, view our V3 users guide to learn how to use the special features like HF direct sampling and the bias tee. If it is a newer V4 dongle, visit our V4 users guide.

2. Read our SDR# Users Guide to learn what each setting in SDR# does. You may also want to check out the more up to date and comprehensive "SDR# Big Book" which is available on the Airspy downloads page.

3. Check out all our featured articles on this blog for various RTL-SDR related projects and tutorials.

4. Upgrade from the stock antenna. For optimal reception you should use an outdoor roof mounted antenna. The optimal antenna will depend on the frequency and project you are interested in, but for a general all purpose antenna we recommend a Discone or planar disk antenna (pdf).

5. If you are using your RTL-SDR for HF with direct sampling mode or an upconverter then we recommended using SDR# with the special decimation drivers. This will allow you to zoom in on the small bandwidth signals used on HF without loosing resolution.

6. Check out our store for various RF accessories such as filters, LNA's and antennas.

7. Also check out the official list of SDRSharp plugins which can be found here and also our unofficial list of plugins which can be found here.

Troubleshooting (Click to Expand)

Alternative Software

Below are various alternatives to SDR# that we also highly recommend. The first step to all installations is installing the drivers with Zadig. Follow the Zadig guide below when setting up a new dongle if you have not

already done so during the SDR# installation.

Before following the next steps, please make sure you have installed the Microsoft Visual C++ x64 redistributable. Most PCs will have this already installed, but on some fresh installs this may not be the case.

Installing Zadig drivers

1. Purchase an RTL-SDR dongle. The cheapest and best for most applications is the R820T/R820T2/R860 dongle. Information on purchasing one can be found here.

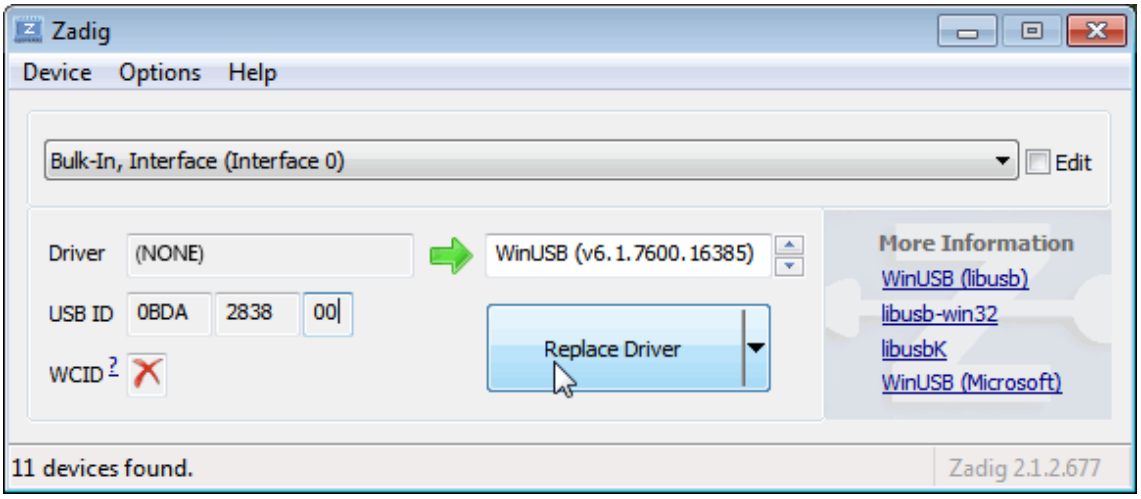
2. Plug in your dongle and do not install any of the software that it came with, but ensure you let plug and play finish trying to install it. If you've already installed the software drivers it came with previously, uninstall them first.

3. Go to zadig.akeo.ie and download Zadig.

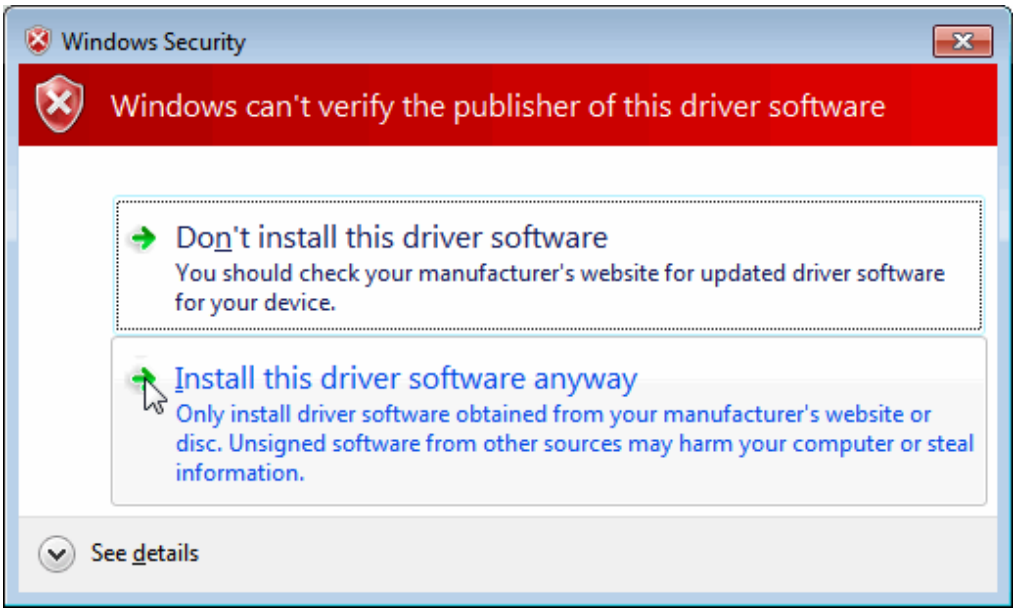
4. In Zadig, go to **Options->List All Devices** and make sure this option is checked.

5. Select "**Bulk-In, Interface (Interface 0)**" from the drop down list. Note on some PCs you may see something like **RTL2832UHIDIR** or **RTL2832U** or **Blog V4** instead of the bulk in interface. This is also a valid selection. Double check that USB ID shows "0BDA 2838 00" as this indicates that the dongle is selected.

   WARNING: Do not select *anything else* or you will overwrite that device's driver! DO NOT click around randomly on Zadig. If you do you are likely to overwrite your mouse, keyboard, printer, soundcard etc drivers.



6. **Make sure the box to the right of the arrow shows WinUSB**. You might get a warning that the publisher cannot be verified, but just accept it by clicking on Install this driver software anyway. This will install the drivers necessary to run the dongle as a software defined radio. Note that you may need to run zadig.exe again if you move the dongle to another USB port, or want to use two or more dongles together.

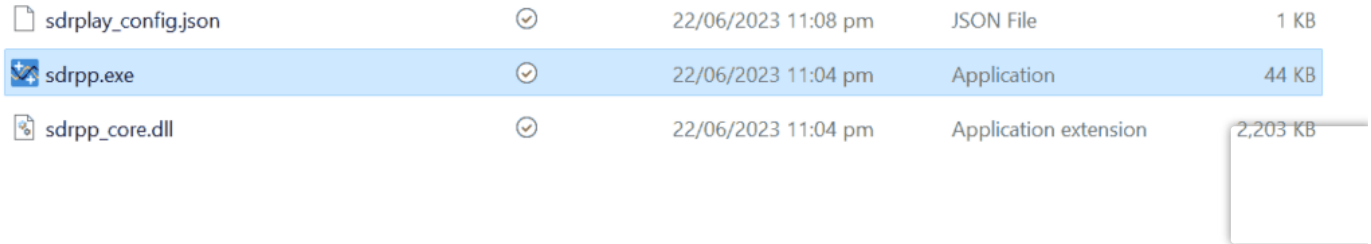


SDR++ Setup Guide (Tested on Windows 7, 10, 11) (Works with RTL-SDR Blog V4/V3)

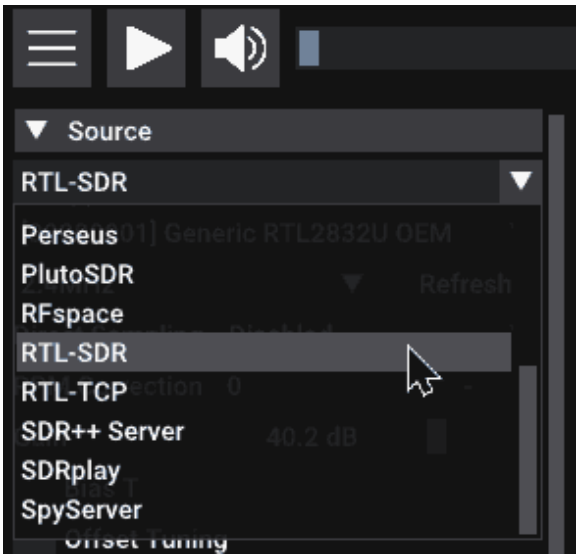
If you experience problems with SDR#, SDR++ is our second choice software that we also highly recommend.

1. Follow the Zadig guide above to install the RTL-SDR drivers via Zadig.
2. Head to www.sdrpp.org and click on the button to Download the latest release.
3. In the "Assets" list click on "sdrpp_windows_x64.zip"

4. Extract the zip file onto a folder on your PC.
5. In the extracted folder, double click on "sdrpp.exe" to start the software.



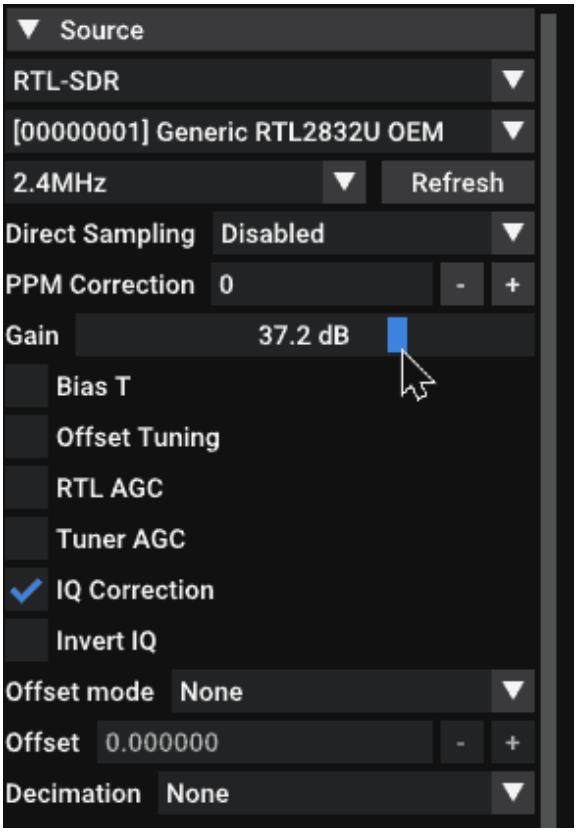
6. In the top left find the "Source" menu, and select "RTL-SDR" from the drop down menu.



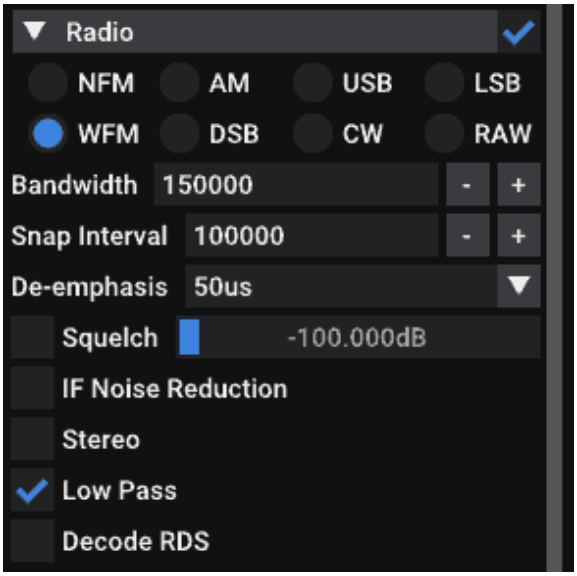
7. Click on the Play button in the top bar.

8. You should begin to see the spectrum and waterfall. You can tune to a new frequency with the frequency tuner in the top bar, and within the active bandwidth by clicking on the spectrum.

9. Remember to set the Gain using the slider under the Source menu on the side.

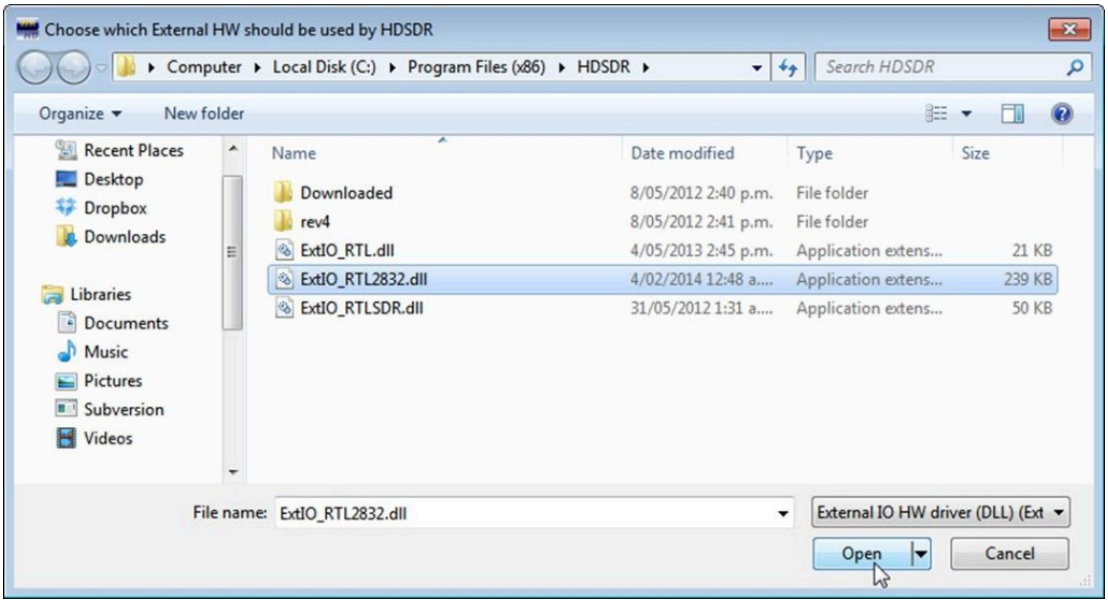


10. Remember to select the correct demodulation mode for the signal you are tuned to via the "Radio" menu on the left.

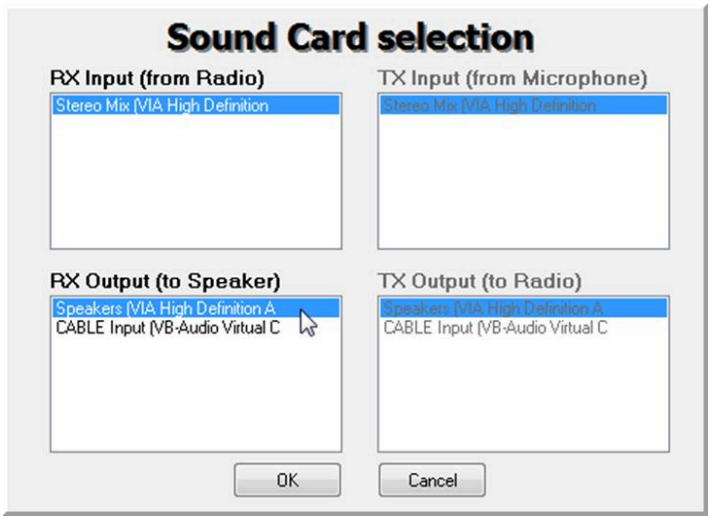


HDSDR Setup Guide (Tested on Win XP and above) (Works with RTL-SDR Blog V4/V3)

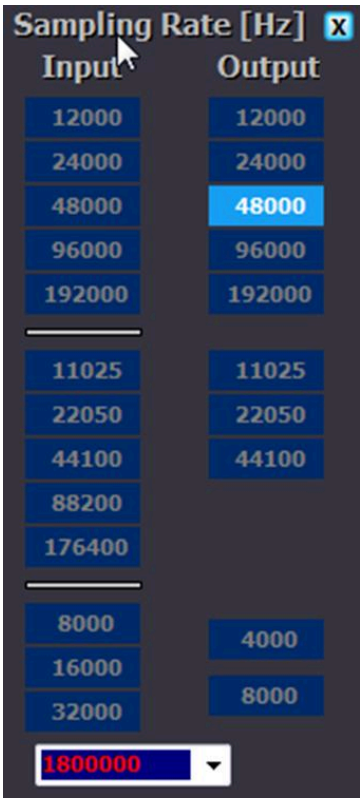
1. Follow the Zadig guide above to install the RTL-SDR drivers via Zadig.
2. Download HDSDR from http://hdsdr.de/, using the download button at the bottom of the page.
3. Use the installer you just downloaded to install HDSDR.
4. Go to https://github.com/hayguen/ExtIO_RTL/releases and download the latest 2023 version of the ExtIO zip file. Open the Zip File.
5. Copy the ExtIO_RTL.dll file into the HDSDR install folder which is by default set to C:\Program Files (x86)\HDSDR.
6. Open HDSDR. You might be asked to select a .dll file. If it asks choose the ExtIO_RTLU.dll file you just copied over and then click Open. It is okay if you do not see this screen as long as you have copied the ExtIO_RTL.dll file over properly in the last step.



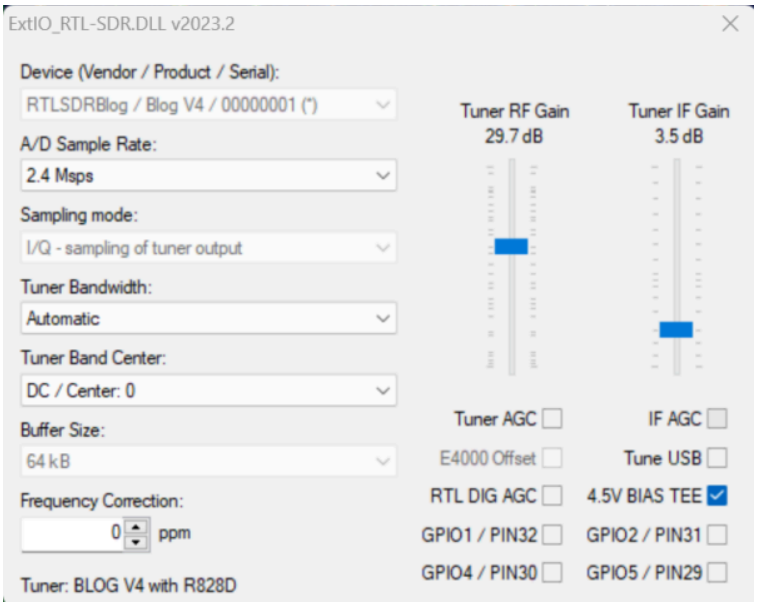
7. Choose your output sound card by clicking on the Soundcard button in the bottom left corner, or alternatively by pressing F5. The only important setting here is the “RX Output (to Speaker)” setting which you should set to your speakers, or desired audio piping software.



8. Click on the Bandwidth button or alternatively press F6. Choose an output Sampling Rate of 48000 Hz for general NFM signals, or choose 192000 for wideband FM signals, like broadcast FM.



10. Press Start or alternatively press F2. This will start the SDR.
11. To set the RTL-SDR sample rate, gain and frequency correction click on the green "SDR-Device" button.



12. For the V4 make sure that "IF AGC" is NOT selected otherwise you may experience problems.

13. To tune to a station, change the Local Oscillator frequency to a frequency near the frequency you are interested in. Then tune to the desired frequency either by clicking in the RF spectrum, or using the Tune numbers.

12. You can zoom in and out of the spectrum by using the Zoom slider which is to the left of the word zoom.

13. The mode can be altered by clicking on the mode buttons.

14. After clicking on the FM mode button, the FM bandwidth can be manually modified with the FM-BW slider.

15. To listen to a typical wideband broadcast FM station, you will need to change the audio sampling rate to 192000 Hz. Do this by clicking on the Bandwidth button or alternatively by pressing F6 and then selecting the output sampling rate as 192000 Hz.

Alternatively for HDSDR you can also use extio_rtl_tcp which will allow you to connect to an rtl_tcp server.

CubicSDR Set Up Guide (Tested on XP and above) (Works with RTL-SDR Blog V4/V3)

1. Follow the Zadig guide above to install the RTL-SDR drivers via Zadig
2. Go to cubicsdr.com and go to the downloads page. Find the download link for the latest version. Download the version suitable for your particular version of Windows.
3. Run the CubicSDR installer.
4. **(V4 USERS - V3 OPTIONAL) -** Download the latest RTL-SDR Blog drivers from the GitHub releases page. Open the x64 folder in Releases.zip and copy the rtlsdr.dll file into the Program Files\CubicSDR folder, replacing the old one.
5. Plug in your dongle and run CubicSDR from your start menu.
6. You will be greeted with a SDR Devices menu. Choose your RTL-SDR from the menu and click on the "Use Selected" button.
7. CubicSDR will automatically start.
8. Click anywhere on the waterfall to start listening.

Other SDR Windows Software Compatible with RTL-SDR

See the Software Guide for a big list of other compatible RTL-SDR software.

Getting Started on Linux

These are the instructions for installing our RTL-SDR Blog drivers. Type them into the Linux terminal one by one.

First, if you already have some other drivers installed, please purge them from your system using the following commands:

```
sudo apt purge ^librtlsdr
sudo rm -rvf /usr/lib/librtlsdr*
sudo rm -rvf /usr/include/rtl-sdr*
sudo rm -rvf /usr/local/lib/librtlsdr*
sudo rm -rvf /usr/local/include/rtl-sdr*
sudo rm -rvf /usr/local/include/rtl_*
sudo rm -rvf /usr/local/bin/rtl_*
```

Next you can install the RTL-SDR Blog drivers using the following.

```
sudo apt-get install libusb-1.0-0-dev git cmake pkg-config build-essential
git clone https://github.com/rtlsdrblog/rtl-sdr-blog
cd rtl-sdr-blog/
mkdir build
cd build
cmake ../ -DINSTALL_UDEV_RULES=ON
make
sudo make install
sudo cp ../rtl-sdr.rules /etc/udev/rules.d/
sudo ldconfig
```

After installing the libraries you will likely need to unload the DVB-T drivers, which Linux uses by default.
To unload them temporarily type "sudo rmmod dvb_usb_rtl28xxu" into terminal. This solution is only temporary as when you replug the dongle or restart the PC, the DVB-T drivers will be reloaded. For a permanent solution, create

a text file "rtlsdr.conf" in /etc/modprobe.d and add the line "blacklist dvb_usb_rtl28xxu". You can use the one line command shown below to automatically write and create this file.

```
echo 'blacklist dvb_usb_rtl28xxu' | sudo tee --append /etc/modprobe.d/blacklist-dvb_usb_rtl28xxu.conf
```

Now you can restart your device. After it boots up again run "rtl_test" at the terminal with the RTL-SDR plugged in. It should start running.

NOTE: Some devices like the Orange Pi zero have a bug in their current mainline OSes. Instead of blacklisting "dvb_usb_rtl28xxu", you will need to blacklist "dvb_usb_rtl2832u". If you installed rtl-sdr by "apt-get", you will need to update the black list file at /etc/modprobe.d/rtl-sdr-blacklist.conf manually too.

After installing the libraries and black listing the DVB-T drivers we recommend starting off with SDR++ or GQRX. Instructions for installing SDR++ are on their GitHub, and for GQRX it can be downloaded via the package manager in your Linux distribution or from http://gqrx.dk/download. We can also recommend the multi-platform CubicSDR which can be downloaded from http://www.cubicsdr.com.

Raspberry Pi IMPORTANT NOTE

If you are running the latest Raspbian version with release date October 10th 2023, May 3rd 2023, please note that there is a kernel bug that causes the error "rtlsdr_demod_write_reg failed with -7". The fix is simple, simply run "sudo rpi-update" to update to the latest Kernel version. More information on this post.

Getting Started on Mac OSX

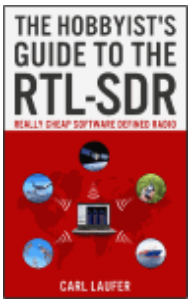
There are several software options that we recommend for Macs. Most software (but not all) now supports Intel and the newer ARM based CPUs. Make sure that you download the correct release for your CPU type.

SDR++ is highly recommended for use on OSX. They now have support for both Intel an ARM Mac CPUs. Simply download the latest zip for your platform on their nightly Releases page.

GQRX is also an excellent SDR program that works well on OSX. It can be downloaded via Macports and/or Homebrew, or installed directly via the dmg on their Releases page.

Another option is **SDRangel**. This is a powerful piece of software with many built in decoders, but it has a bit of a harder to use UI, so it is not recommended for beginners. They have both Intel and ARM support and the latest dmg can be downloaded from their Releases page.

CubicSDR is another option, but it has not been updated in a while. So it may not support the latest OS versions, or the newer ARM based Macs.



For a comprehensive book about the RTL-SDR you may be interested in our book available on Amazon. Available in physical and eBook formats.

The Hobbyist's Guide to the RTL-SDR: Really Cheap Software Defined radio.

Posted in Tagged with guide, install guide, quick start, radio scanner, rtl-sdr, rtl2832u, sdr#, sdrsharp, set up, Software-defined radio, Windows, zadig

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569 COMMENTS

UnstableVeteran (@unstableveteran)
10 days ago

I believe that someone is jamming my home security camera system and heard that this was a good way to determine it. Has anyone used this for that or have any tips about it?

0 Reply

Tinkervation
21 days ago

Been trying to install for 8+ hours; constant driver issues on Surface 7 Laptop running latest ARM…Can you all post how to get past this roadblock. Zadig, Libusb etc. all fail to allow SDRTrunk to view tuner

0 Reply

Systems Department
27 days ago

This software no longer works… Airspy Paid Garbage now…

0 Reply

Jack

2 months ago

When I Select the source to the usb, and select play, it says that there is no device connected, over where it says device I click the usb, It then says that the device is no longer available, I checked to see if it was an issue with the usb port, nothing. Am i doing something wrong? Plz help.

+ 12 — Reply

Len

2 months ago

I have rtl sdr v4 and receiving fm radio but cannot receive anything on HF using a Youloop indoor antenna.
What am I missing?

+ 2 — Reply

Anselm

3 months ago

I’m a noob to all of this but it worked perfectly right out of the box. Didn‘t even need admin mode for zadig (honestly i forgot to turn it on).
Just wanted to say great job, great device! Caught some local transmissions and airtraffic on the first try and even some foreign signals in the evening.
next i‘ll try setting this up on the steam deck for mobilty 😉

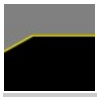
+ 2 — Reply

Eddy O.

3 months ago

So I have followed your steps to a “T” and when I run zadig.exe in Admin mode, I set it set to “List all devices” SelectBulk-Interface0) making sure my target driver is WinUSB (vxxx.xxxx) it still will not update the dongle driver. I get an error “The driver installation failed.” Any help woud be appreciated! Windows 11 pro.

+ 1 — Reply



Daniel

4 months ago

Hi!
I just got the V4 I ordered, and have a few noob-questions. Are the comments the right place to ask or should I go to the forum for that?
Well, I'll give it a try here.

1. After unpacking the v4, connecting it to the antenna and to a Raspberry Pi 5, I started reading the quickstart guide. I took my time and got interrupted a few times, so it took maybe an hour or two until I found the warning about bias tee enabled by default with linux DVB-T drivers. I quickly disconnected the device, but noticed it had gotten really warm (not to say hot), just from being plugged in. So the question is: Can it already be damaged or degraded, and now work worse than it should? A piece of paper with that warning, or the warning on the very top of the quickstart guide would have been nice.
2. Because my order of the v4 on ebay had me expect the delivery in over a month, even though it took only a bit over a week, I also got an nooelec nesdr smart v5 from amazon, because I'm impatient sometimes. While playing around with both devices now, I had their antennas touching for a while without me noticing. Is that something that could damage the devices? As both are passive receivers, and bias tee had been turned off by then, I don't think so, but then again, what do I know?
3. Before using the rtl-sdr-blog drivers, I tried the osmocom drivers, because they mention the v4 in their release notes for release 2, but I couldn't get the v4 to work with those (compiled from source as by the instructions in their wiki). Should those drivers have worked? The ones from by rtl-sdr-blog seem to work so far.

+ 0 — Reply

> **admin (@rtlsdr)** Author
> Reply to Daniel 4 months ago
>
> Hi Daniel,
> 1) The device will get hot to the touch under normal operation, and the heat is normal. The bias tee is protected against shorts anyway, but damage can occur if it is shorted over weeks, months etc. And it won't be shorted anyway, unless you plug in a DC short antenna (the included antenna is not DC shorted)
> 2) Touching antennas won't damage the device.
> 3) The latest Osmocom drivers are compatible with the V4. Be careful not to install them from distro packages though, because those will be very old drivers that are not compatible.
>
> + 2 — Reply

peter
6 months ago

hi, relative newbie on radio/sdr. cant seem to get past the start. 5.3 Mb of files extracted to desktop folder, install-rtlsdr.bat (and zadig) visible but will not run on a command prompt. i get "end of directory signature not found" and "cannot find tmp/Release.zip.zip,period" "0 files. any ideas appreciated. (its a satellite pro on win 7 32 bit, and I know its old…too

old?)
peter

+ 0 — Reply

John

6 months ago

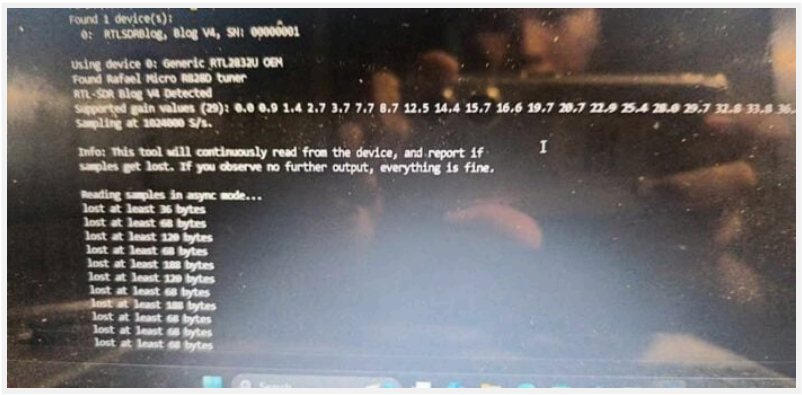
cant read the screen with your stupid time wasting icon on it go away

+ -16 — Reply

Gip huy

6 months ago

A week ago, I was normally receiving satellite signals from GK2A, with the signal strength reaching up to -83 dB. Suddenly, the signal completely deteriorated and disappeared entirely. I checked everything in the system, including the cables, LNA, and antenna, but found nothing unusual. After that i tested it using `rtl_test`, which produced the following output. I also tried using different USB ports, but the results were the same. Was it broked or something. Please help



+ 1 — Reply

song sung hwan

6 months ago

+ 0 — Reply

T....

7 months ago

followed the instructions exactly, installed without a problem. used it many times.

but.

i reinstalled windows a while back, then followed the instructions again? no device found. nothing available on google or anywhere else to solve this. so i go to contact.

they don't offer contact. they offer forums. but, you know what?

if you're going to have a support forum that requires email activation… TRY ACTUALLY SENDING THE EMAIL!

yes, i checked spam and trash folders.

it's no wonder the software's such a pile of #@$@#, they can't even do an email right. congrats, you're worse than the average website from the 90s. you @#$@# clowns. you are worse than worthless. worthless has a value of 0. you are negative value. you take away value. you make things worse than they were by existing.

@#$#@ ripoff bull@#$#@ @#$#@s. even if it works sometimes, nobody should ever buy this piece of @#$@ product. it's garbage. it's an embarrassment. the sellers deserve prosecution for fraud and hard prison time. @#$@# them. you either sell something that works, period… or you don't @&^%#* sell it.

@#$#&. you.

\+ -24 — Reply

> **admin (@rtlsdr)** Author
>
> Reply to T.... 7 months ago
>
> Hi, our contact email is literally on the first sentence of the contact page written in bold. It is again written in bold in the paragraph about lost items and warranty claims.
>
> I just tested the forums and the email system is working. Other people have signed up to the forums successfully today too.
>
> The software is provided by third parties. We sell the hardware, and provide our own optional guides to the third-party software.
>
> Please do not spam the comments with curse words, we have removed your other comments due to uncensored curse words. Kids use this site for school.
>
> *Last edited 7 months ago by admin*
>
> \+ 12 — Reply

Andy

Reply to T.... 2 months ago

I'd like to say two things: Firstly, anger/frustration doesn't justify behaving like a foul-mouthed clown, and secondly, that I unpacked my RTL-SDR v4, followed the instructions on this page, and it worked first time (and ever since). There's nothing wrong with the product, nor is there anything wrong with the setup instructions.

It.Just.Works.

You have to think that if just about everyone else, not just here but splattered all over the internet in obscure places like YouTube report that everything works perfectly well, and yet you just about alone don't find that to be true, the first thing to troubleshoot isn't the product, the instructions, or the copious amounts of support on offer… it's you.

+ 4 − Reply

Stan

7 months ago

This has been working well for over a year. I like to listen to FM while browsing and local mobile.
It survived a new computer with Win 11
But, last few days any attempt to use it gives :no drive selected"
There was a pop up that suggested I turn memory integrity off which didnt help. I even ran Zadig again. any ideas?

+ 6 − Reply

Ted

8 months ago

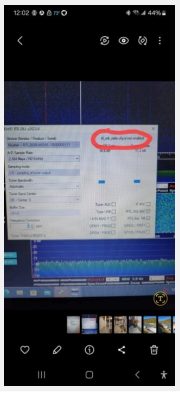
Viewing the QSG page, there is a link to the comments tool at the bottom of the page. I find that it can not be moved. It obscures text and is an annoyance. It would be better if it were on the right margin of the page. Nothing there.

+ -3 − Reply

TerryM (@terrym)

8 months ago

Does anyone know about this message? I copied the DLL EXTIO to the HDSDR folder.

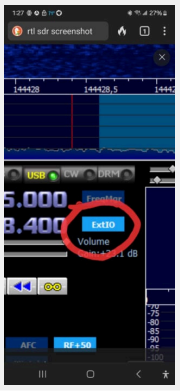


0 Reply

Terry

8 months ago

Hi all. Every time I download RTL-SDR, the EXTIO tab is missing from the display. Very frustrating after at least a dozen attempts. Any ideas guys?



0 Reply

Ben

Reply to Terry 8 months ago

Don’t you mean download HDSDR? That screenshot look’s like an older version of HDSDR, the newer version does not have the EXTIO tab. All you need to do is put your extio dll’s in the HDSDR program directory and when you start HDSDR it will ask you to select which dll to use if you have more than one, then your good to go!

0 Reply

Terry

Reply to Ben 8 months ago

Thank you.

+ 0 — Reply

TerryM (@terrym)

Reply to Ben 8 months ago

I'm now getting "RTL-SDR EXTIO conf. Not enabled.

+ 0 — Reply

Adrian

8 months ago

Just bought the RTL-SDR V4 – I have it running on MacOS (Apple Silicon).
Just a bit of a learning curve to figure out how to get the device showning in the application (SDR++ & Gqrx – both work).
Got to say, I'm impressed. Not got a decent antenna yet (on order), crefully placed a copper speaker wire into the connection (using a converter so I don't damage the on-board connection), it was just enough to allow a decode of a known FM station, all be it very weakly, but hey, it's decernible. 😜

Me: Techie with 30+ years in IT and started work at Racal in the '80s working on HF/VHF receivers mostly.

+ 2 — Reply

Bill Onesty

Reply to Adrian 5 months ago

I have a V.3 that a relative gave me. I am trying to find support for a macBook. Do you know if the V3 works on MacOS? If so how do I find instructions for setting things up? I am a complete newby.

+ 0 — Reply

Niels

8 months ago

UPDATE to my Post
https://www.rtl-sdr.com/rtl-sdr-quick-start-guide/comment-page-7/#comment-260355

It is Not the Software Because it is working with an SDR Copy of the rtlsdr v4
But there is only 14 Days Return policy of the date the order was placed and it took 14 days to get to me. So no luck getting Either A new one or Money back.

+ -1 — Reply

Niels

8 months ago

I Don´t Know who made this installation's guide But I have trying to install on WIN And LINUX Mint. And NOTHING Sdr# wont start up at all. THERE IS BLA BLA that one get confused. And you end up running in Cirkles. And Studently you have install the program in so many placeres that you have to reinstall A clean version of Windows. l
WHAT DO YOU MEAN IN THIS LINE…….((Also, do not extract into a folder within the Program Files directory, or installation may fail as these folders are often automatically made read only by Windows)……) And Again When A Person Is not Nativ English speakning Then You are Fucked Sorry But I have been trying for A week And Now The dongle is going in the dumpster

-2 Reply

Niels

8 months ago

I Don´t Know who made this installation's guide

0 Reply

Terry

8 months ago

When I start SDR SHARP. I get pa device not recognized. Any ideas?

0 Reply

John S

9 months ago

A software newbie here! (And an SDR newbie but licensed ham since 1980!).

However, I've managed to get on pretty well with Debian 12 Bookworm – so far, anyway.

I bought a genuine RTL-SDR V4 but, like many others it would seem, I simply cannot get it to work with Gqrx (nor this / other SDR on Windows) no matter what I do. Gtrx finds the dongle (as does Debian, of course) and the SDR runs. But the V4 is utterly deaf.

By interrogating Debian with ***lsusb -v*** I get masses of data … most of which is meaningless to me. On the case of the V4 is written, RTL2823U, whilst Debian describes it as, RTL2838 DVB-T: I can't figure why the numbers differ.

Having spent some weeks trying to fix this with online research and my own attempts with the Debian machine, I'm at a loss! Each of the Debian and Windows SDR software fully and properly with an AirspyHF+ so I conclude the dongle is faulty, or the software (driver?) is incorrect, or something else.

I could throw myself in the river through acute frustration, or throw the RTL in the river and use the Airspy, or beg for help from the good folk on here.

Help / advice eagerly sought.

Tks.

John (United Kingdom).

+ 4 — Reply

Zebo

Reply to John S 6 months ago

not a big help but the numbers differ because originally the device was a digital video broadcasting(the DVB) tuner, and the "T" stands for terrestrial…. its reading differently probably because of where the OS is pulling info from…. basically theyre both correct…

other than that make room in that river because im comin in to join you, having my own issues w my V!!!!!

+ 0 — Reply

egirgin

10 months ago

Trying to use V3 dongle with Hamclock – appreciate if anyone can direct me a site where I can find out how it can be configured ? hamclock is running over WIFI (Rasberry PI without an issue) and rtl_test is also ok.. thanks

+ 0 — Reply

solar.gumby `(@solar-gumby)`

11 months ago

xxxx@Rpi5:~ $ rtl_test
Found 1 device(s):
 0: Realtek, RTL2838UHIDIR, SN: 00000001

Using device 0: Generic RTL2832U OEM

Kernel driver is active, or device is claimed by second instance of librtlsdr.
In the first case, please either detach or blacklist the kernel module
(dvb_usb_rtl28xxu), or enable automatic detaching at compile time.

usb_claim_interface error -6
Failed to open rtlsdr device #0.

What did I do wrong?
RPi5, RTL-SDR V3
Ignorant Linux user, followed above installation instructions…

+ 0 — Reply

> **admin (@rtlsdr)** Author
>
> Reply to solar.gumby 11 months ago
>
> You might have missed the blacklist instructions:
>
> ```
> echo 'blacklist dvb_usb_rtl28xxu' | sudo tee --append /etc/modprobe.d/blacklist-dvb_usb
> ```
>
> + 1 — Reply
>
> > **solar.gumby**
> >
> > Reply to admin 11 months ago
> >
> > okay, after I performed the above blacklist edit, I had to reboot and it seems to be running the test now – thanks!
> >
> > + 0 — Reply

Dennis
1 year ago

I have gone over and over it and can't get it work. Most confusing instructions and all over the place.
Its when it goes to the command prompt- it find some fault. And when trying to use it finds NO DEVICE?

+ 2 — Reply

> **admin (@rtlsdr)** Author
>
> Reply to Dennis 1 year ago
>
> If you're getting an error when you run install-rtlsdr.bat at the command prompt, can you please post it? Please double check that you have actually unzipped the files as that is usually the main reason why install-rtlsdr.bat fails to work.

+ 0 − Reply

Robin Rix

1 year ago

I have tried multiple times to get the software to work. No response. I must be doing something wrong??

+ 2 − Reply

admin (@rtlsdr) Author

Reply to Robin Rix 1 year ago

What specific error do you get? And what OS, software, machine are you using?

+ 0 − Reply

Protoham

Reply to Robin Rix 1 year ago

I originally had a problem on Windows 7. As it turns out I did not unzip the software, just ran it in place. So I took everything off, Unzipped the software and ran it again. Everything worked.

+ 3 − Reply

Sam

1 year ago

For about a decade and continuing on, your blog is the only one I need to visit for anything SDR related. I have bought the V3 from you, and everything is working flawlessly. I would like to express my gratitude to the rtl-sdr.com team for allowing this gem of technology to flourish, shining brighter every year. Thank you so much.

+ 8 − Reply

Mike M

1 year ago

I followed these instructions and they work great for getting the RTL-SDR up and working on Windows 11. I can see all signals. I love it.

But the reason I bought this was to be able to decode signals in Universal Radio Hacker, and for some reason, it's not working in Windows 11. I'd prefer to stay on Windows 11, so I can interface with my Arduino IDE stuff, and well, it's just easier for me to use that switching everything over to Linux.

Are there any known issues/fixes that you could recomend to getting getting URH up and running on a Windows 11 platform? Please and Thank You.

+ 4 — Reply

Jamie

1 year ago

Was working well for about half an hour. Then it could no longer tune to anything without overwhelming white noise. Can't even hear commercial radio stations. I get static and can hear a station trying to break through the white noise but it was previously clear and now terrible. I hope it lasts longer then 30 minutes.

+ 0 — Reply

Fred waite

1 year ago

Absolutely impossible to fathom.

+ 0 — Reply

Sheepdog

1 year ago

Everything works well but I have Trouble after adding Plugins Package. "Device is No longer Available". How can I Freq. Scanner Plugin without this Error?

+ 4 — Reply

Topher

1 year ago

RTL-SDR BlogV4 works great on my linux machine! Windows is for the birds…Now if I could just get DragonOS on VBox to recognize the device I could use it on there, but for now I can track planes, use SDR++ to listen into random stations and more. Love this little device

+ 0 — Reply

Greg

1 year ago

Hi, thanks– I found the problem, I “assumed” my Windows 11 would have the Microsoft C++ installed –it didn’t!!! When I installed the C++ and re installed Net framwork, It loaded up and works ok greg

+ 3 — Reply

CHAD HIOGHTOWER

1 year ago

i personally would be ashamed of ripping people off with this product. its going in the trash.

+ -31 — Reply

CHAD HIOGHTOWER

1 year ago

ccess is denied.
Downloading RTLSDR Driver
‘httpget’ is not recognized as an internal or external command,
operable program or batch file.
Downloading Zadig
‘httpget’ is not recognized as an internal or external command,
operable program or batch file.
‘unzip’ is not recognized as an internal or external command,
operable program or batch file.
The system cannot find the path specified.
The system cannot find the file specified.
Press any key to continue . . .

+ -1 — Reply

admin (@rtlsdr) Author

Reply to CHAD HIOGHTOWER 1 year ago

Did you unzip the zip file? These errors are usually seen when you try to run the installer from within the zip file which won’t work.

+ 1 — Reply

james

1 year ago

after selecting my device i get no device selected error

+ 0 — Reply

CAB40

1 year ago

Win11, SDRuno, followed the instructions, installed drivers from a different site?!?!?!?
Downloaded EXTio, placed the dlls in every folder there is.
Nothing, nada, total failure.
Been at this for weeks.
It's going in the bin.

+ -1 — Reply

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Durga on Submit a Story/Contact: “Hi, Do you have any distributors in India”
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Jo names on A New Radiosonde Decoder and Tracker Program for Windows and RTL-SDR: “ignore working now”
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What is RTL-SDR

The RTL-SDR is an ultra cheap software defined radio based on DVB-T TV tuners with RTL2832U chips. The RTL-SDR can be used as a wide band radio scanner. It may interest ham radio enthusiasts, hardware hackers, tinkerers and anyone interested in RF.

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