# RTL.SDR+UpConverter



# **BA5SBA**



# The set includes

A test antenna,

- ---can be used to test signal receiving UV band,
- ---the resonant frequency is GSM band, to receive the effect of UV is not the best. Cannot be used to receive HF signal band, signal receiving HF band needs to meet the HF Antennas such as Long Wire, Random Wire, Dipole etc.. To have a good effect need matching antenna.

A main unit

A USB cable

#### RTL-SDR TECHNICAL SPECIFICATIONS

- Fully assembled and ready to use
- Uses RTL2832U+R820T chip set
- 100KHz to 1766MHz, operating frequency
- Covers all HF amateur bands
- Covers VHF & UHF bands from 24-1766MHz
- Up to 3.2 M Sample rate. (~2.8 MHz stable)
- Receiver modes AM, NFM, FM, DSB, USB, LSB and CW
- Note: depends upon the SDR software used with the receiver
- 8-bit ADC giving ~50 dB dynamic range
- 50 Ohm input impedance
- Double SMA golden antenna connectors
- Diode protection on RF input
- Aluminum enclosure screened panels
- LED power and band indication
- 100 MHz or 40MHz local oscillator for HF conversion
- DBM balance ring mixer
- Small size board
- Freeware software
- Independent antenna inputs for Shortwave and VHF
- USB computer connection (mini usb) Powered by common USB
- Very High dynamic range receiver
- SPDT High Power UltraCMOS™ RF Switch
- Accurate and efficient band filters
- Very clean audio reception
- All specifications subject to change without notice

## Run your SDR.

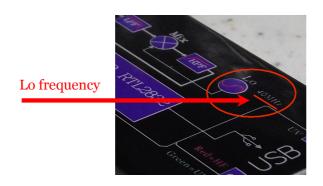


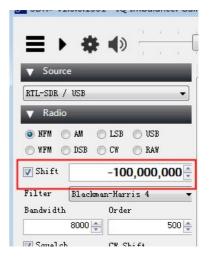
### Operation on HF.

- Click in ON Shift box
- make sure you enter the correct SHIFT frequency (minus) -100 000 000 (or -40 000000)

#### unit is the Hz note 1.

- Switch on SDR toggle switch, Red LED will light
- Tune your SDR Sharp on the bands.
- Reception on this mode from 100KHz to 30MHz
- Input antenna is HF





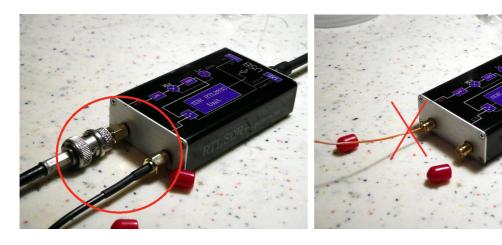
Note 1: Lo frequency is marked in the equipment shell.



## **Operation** on VHF and UP:

- Click OFF the Shift box
- Switch off the SDR toggle switch. Green LED off
- Tune SDR on the band you wish to receive
- Reception from 25MHz to 1.766GHz
- Input antenna is UV

# **ANTENNA CONNECTION**

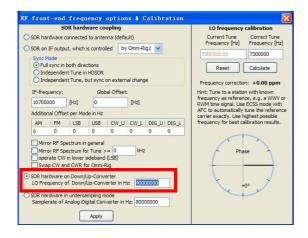


### Frequency offset settings for HDSDR

click Options or press F7, select RF Front-End+Calibration In the select the options within the red line, make sure that the

input offset frequency100 000 000(or 40 000000) unit is the Hz 1.

correct. The first to cancel the selection back to the default.



# **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.

http://www.rtl-sdr.com/rtl-sdr-quick-start-guide/

#### **SDRSharp Guide**

A good guide to learning how to use SDRSharp and what all the options do can be found here.

http://www.atouk.com/SDRSharpQuickStart.html

Another great illustrated guide can be found here.

http://tylerwatt12.com/tips-for-using-sdr/

# RTL-SDR.COM

#### THE BIG LIST OF RTL-SDR SUPPORTED SOFTWARE

http://www.rtl-sdr.com/big-list-rtl-sdr-supported-software/

Antenna Long Wire con Balun 9:1

http://www.radioamatoripeligni.it/i6ibe/balun9a1/balun9a1.htm

Alternative Installation Procedure for RTL.SDR and HDSDR

http://www.hamradioscience.com/alternative-installation-procedure-for-rtl-sticks-and-hdsdr/