

SDRuno MAIN

Final SR: 2000000  
IFBW: 1.536MHz (LIF)  
Atten: 43dB

DECIMATION: 1

NOTCHES: MW/FM DAB

RTAC-T

0:00

SDRuno DIVERSITY

Amplitude: 1.64

Phase: 35.63

Scanner Config 0

PRESET RANGES: AIRBAND (ROW)

START FREQ: 118000000 Hz

STOP FREQ: 136975000 Hz

STEP FREQ: 8333 Hz

HOLD TIME: 2 Sec

THRESHOLD: -115 dBm

WAIT ON SIGNAL? ☐ SAVE TO MEM PANEL? ☒

DISPLAY THRESHOLD? ☒ CONT. LOOP? ☒

SDRuno RX CONTROL

DEEMPH: STEP: 1 kHz 127425.000 -86.7 dBm RMS

MODE: AM SAM FM CW DSB LSB USB DIGITAL

VFO A: QM FM MODE: A > B NFM MFM CW OP: 6000 8000 NBW NCH1

VFO B: B > A WFM SWFM ZAP 11K 20K NBN NCH2

QMS QMR CWAFC NR NBOFF NCH3

AGC: OFF FAST NCH4

MED SLOW

SDRuno EX CONTROL

BW: 50 FREQ: -5032.3 N3: 50 2000.0

N2: 50 -5148.4 N4: 50 2500.0

AM SOFT FILTER: SOFT FC 3800

AGC: 100

NB: 100

NR: 100

CWPK: 50

FM DEEM: OFF 50uS 75uS LC 300

AFC MONO FMS-NR PDBPF HC 3000

FMS-NR: 40

SDRuno AUX SP

Span 24 KHz FFT 620 Pts RBW 19.35 Hz Marks 200 H

0:00

SDRuno MAIN SP

127425.000

LO: 127750000

24.14 Hz Marks 10 KH

SDRplay RSPdx

ANT C

ANT B

ANT A

REF IN

USB

HamRadioWorld

2021

Andy Carpenter

Jon Hudson

SDRplay

# The story of SDRplay

- British Company 7 years old
- Joint venture supported by UK chip company Mirics
- 7 employees
- Subcontract manufacturing in the UK
- Registered office in Alton, Hampshire, UK

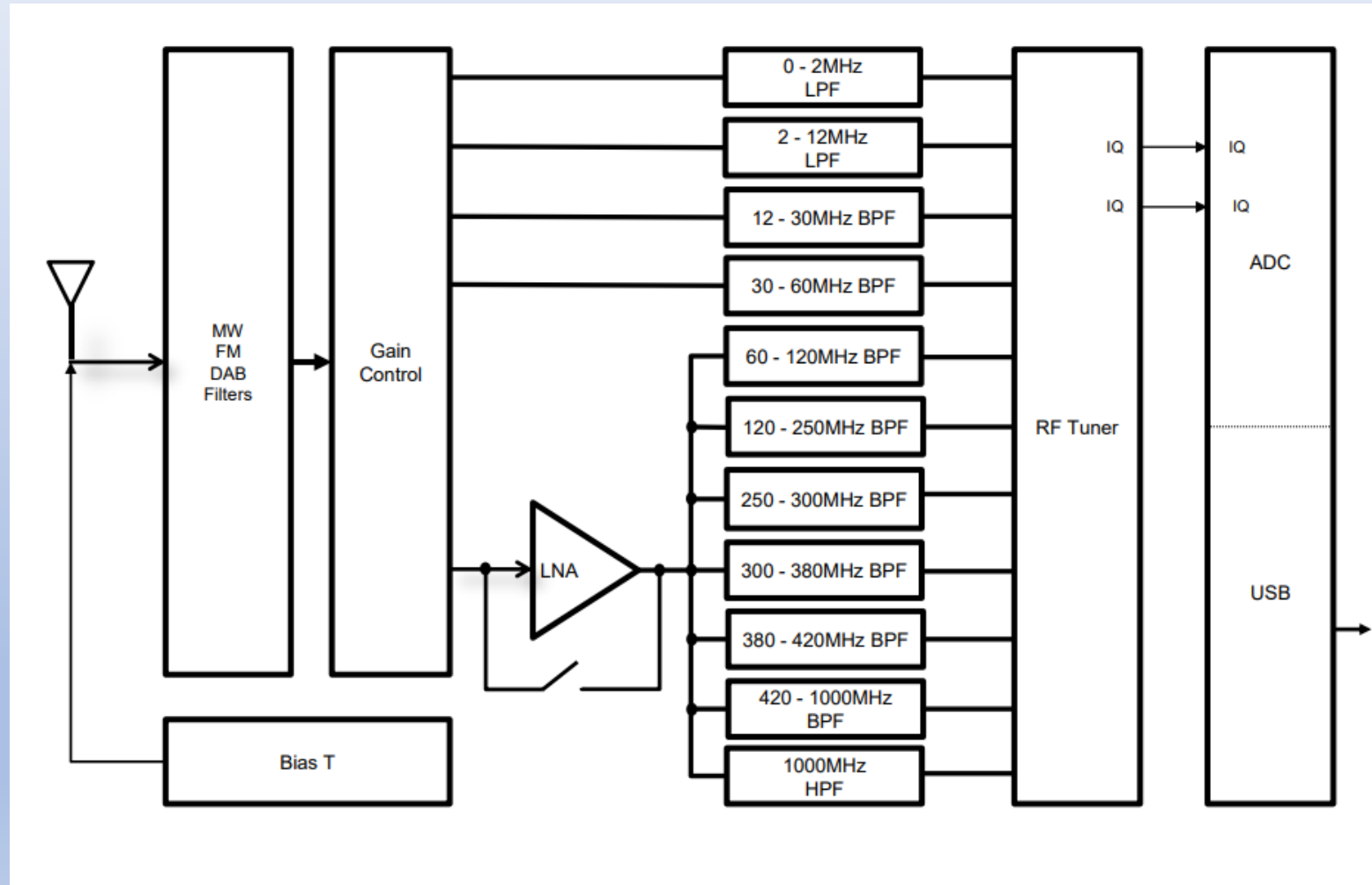
## What is an SDR (Software Defined Radio)?

A radio communication system where components that have been traditionally implemented in hardware

(e.g. mixers, filters, amplifiers, modulators/  
demodulators, detectors, etc.)

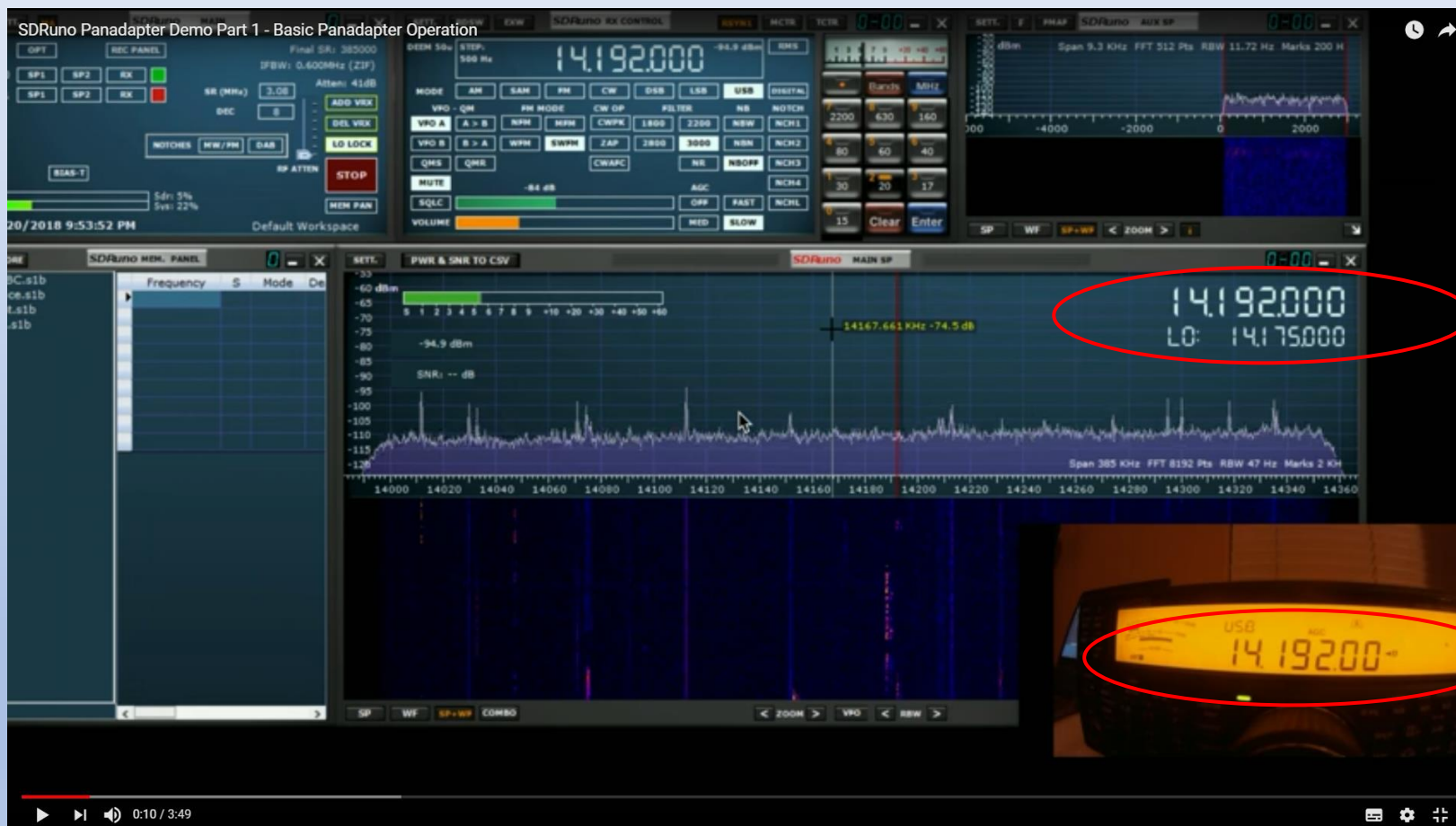
are implemented by software on a PC or embedded system.

# RSP1A Block Diagram





*Visualize whole chunks of spectrum  
as a stand-alone receiver or as a panadapter*







RSP1A



RSPdx

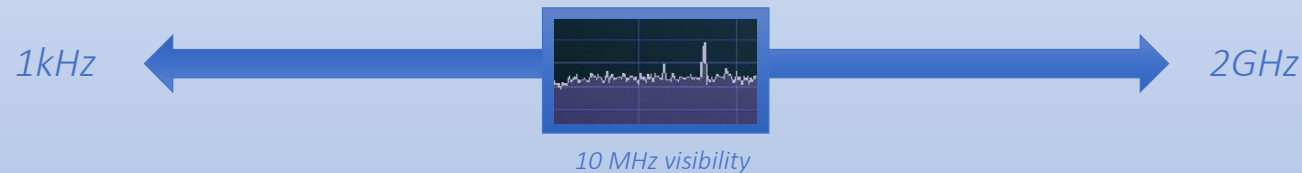


RSPduo



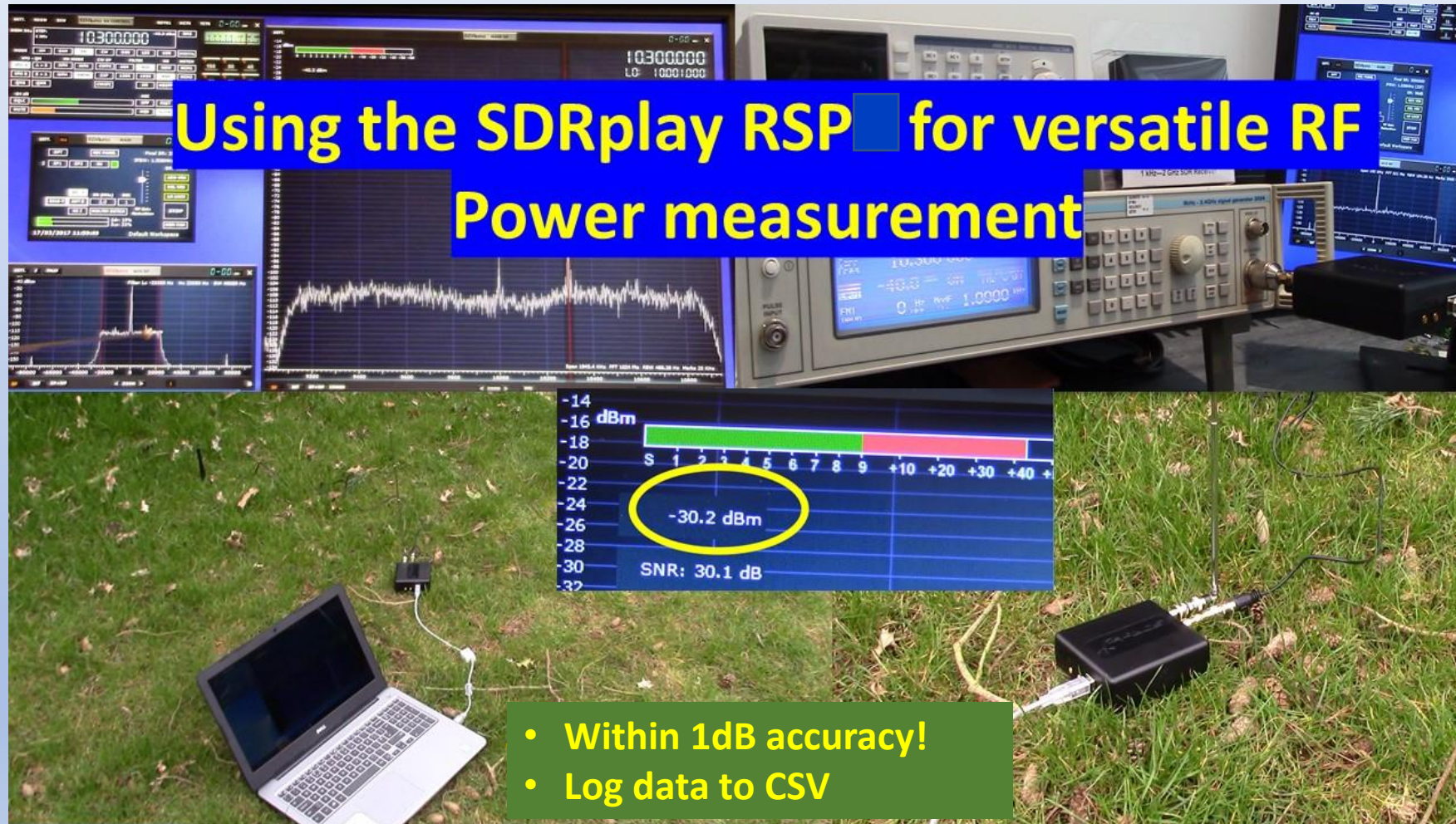
# RSP1A

~€140



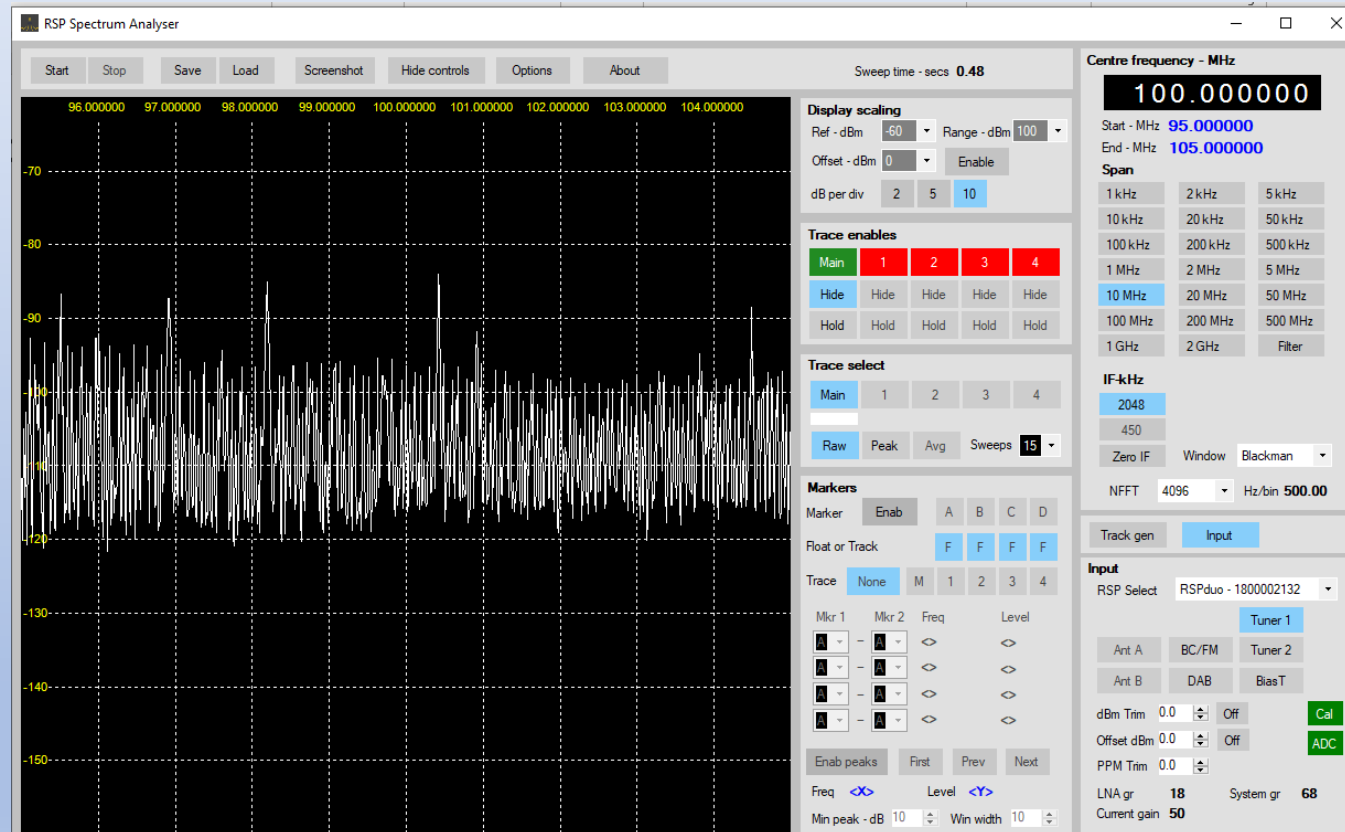
- Clean 1kHz – 2GHz coverage with up to 10MHz spectrum visibility
- All round functionality with single antenna port
- Multiple front-end filters, broadcast band notch filters improvements
- Includes free SDRuno software for Windows
- Spectrum Analyser software
- GNU Radio source block
- Raspberry Pi SD card image
- All you need for a panadapter
- Perfect gift to attract lapsed hams and youngsters into the radio hobby

*Doubles as a new piece of RF lab kit:  
an RF Power meter – get one for work or play!*

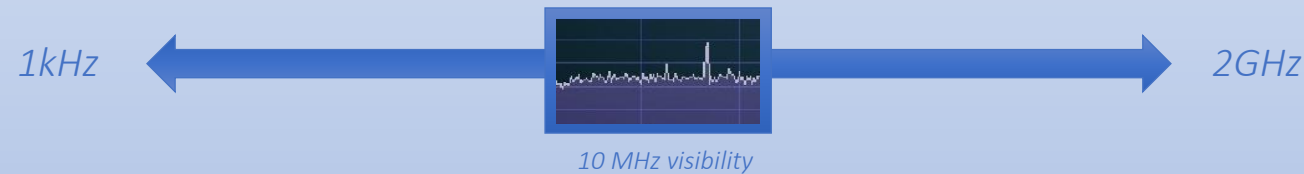




## Spectrum Analyser function



# RSPdx ~€240

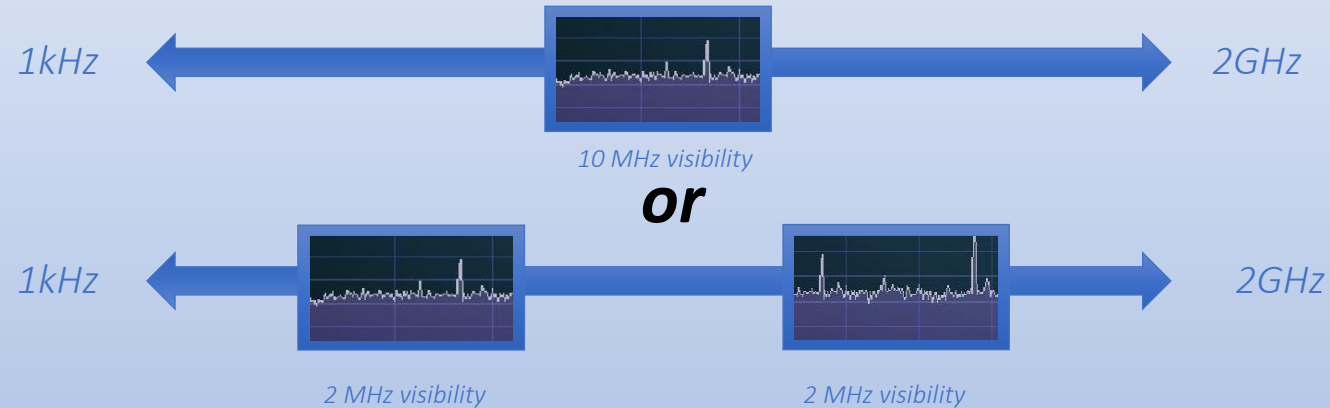


- Complete redesign of the popular RSP2/RSP2pro
- 1kHz – 2GHz coverage with up to 10MHz spectrum visibility
- 3 software selectable antenna ports (2 x 50Ω SMA plus 50Ω BNC)
- Enhanced HF performance – large signal handling vs RSP2
- Outstanding performance below 2MHz using HDR and additional filtering (hardware and software)
- External clock input for GPS accuracy
- Rugged black painted steel case



# RSPduo

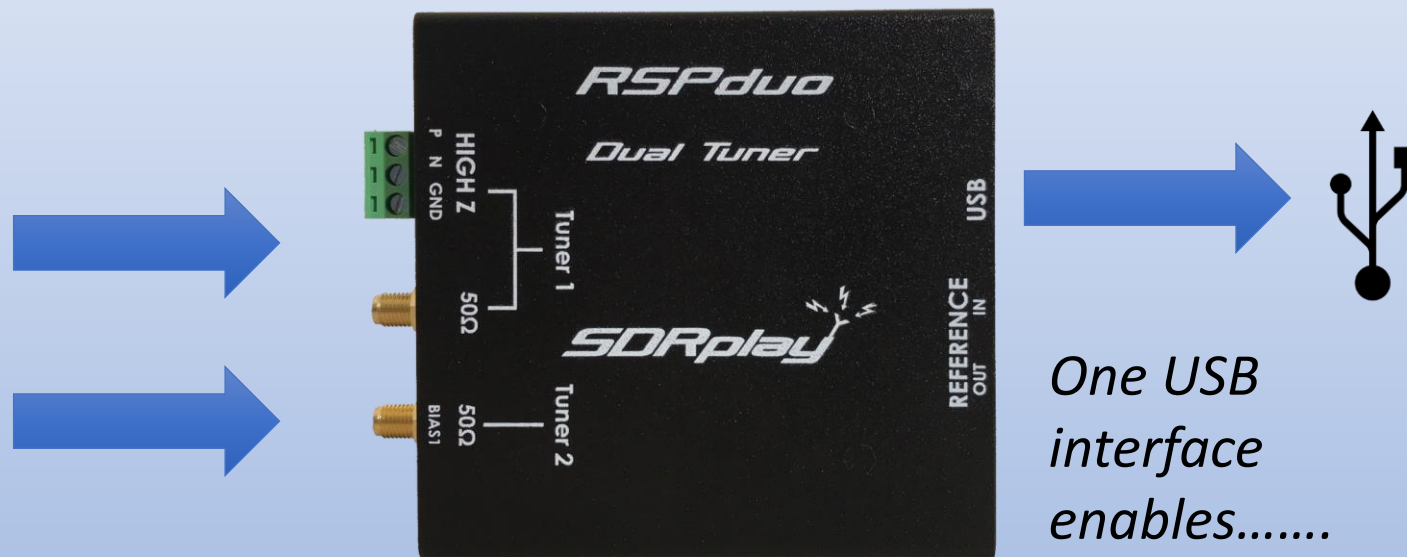
~€290



- 1kHz – 2GHz coverage with up to 10MHz spectrum visibility or...
- 2 independent tuners giving 2MHz visibility anywhere from 1kHz to 2GHz
- Simultaneous processing from 2 antennas enables diversity & noise reduction applications
- 3 software selectable antenna ports (2 x 50Ω plus High Z)
- Perfect for true real-time antenna comparisons
- External clock input for GPS accuracy

## RSPduo

*RSPduo – 2 simultaneous tuners*



*Monitor widely spaced bands simultaneously*

*Diversity Demodulation: Spatial, Frequency and Polarisation:*

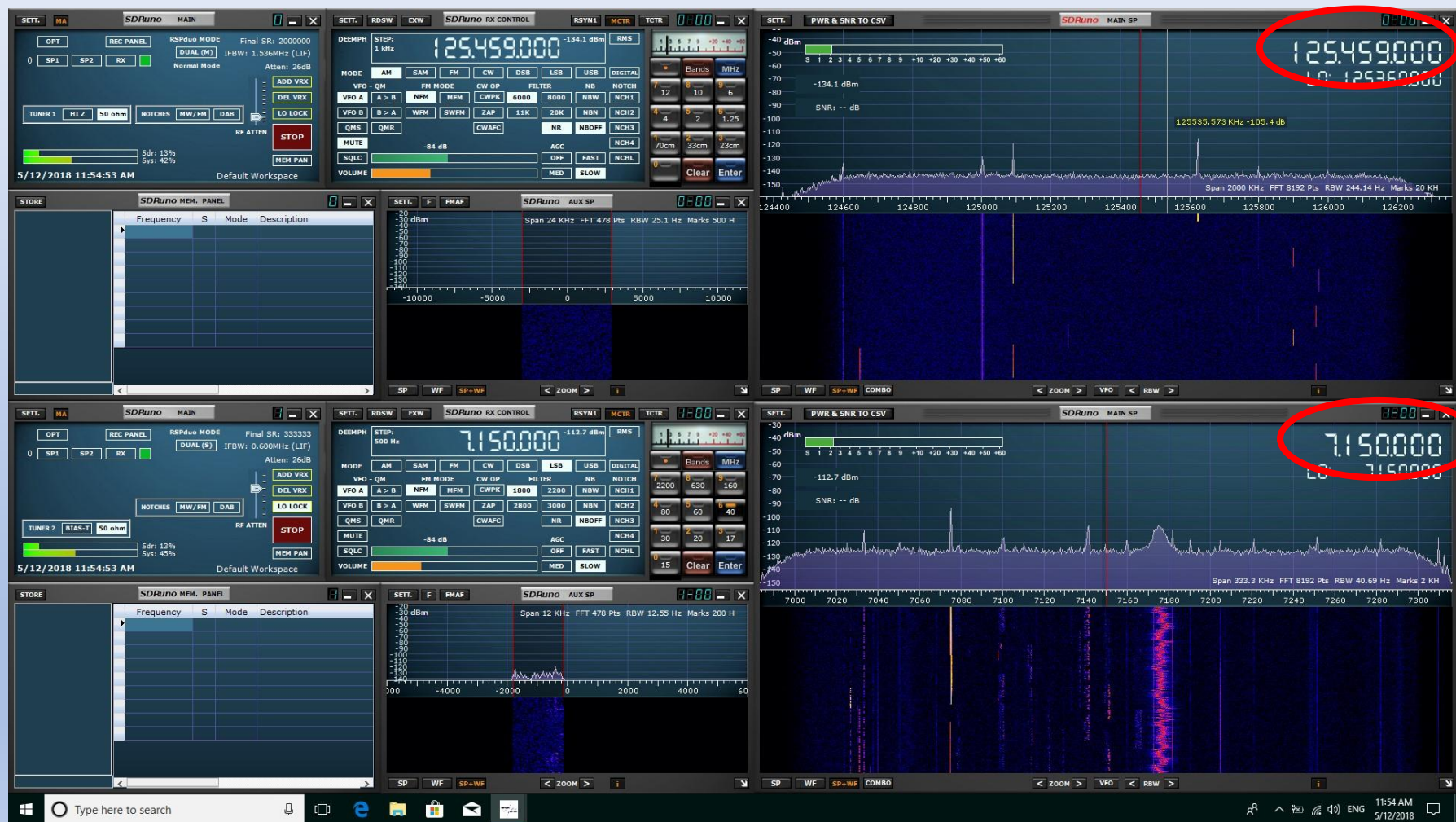
*Signal enhancement & Noise cancelling: subtracting noise from wanted+noise*

*Real time antenna comparisons*

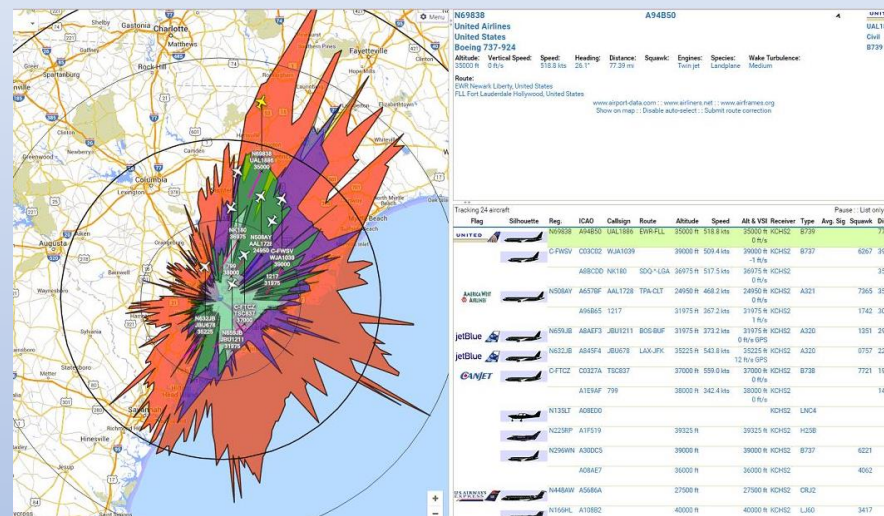
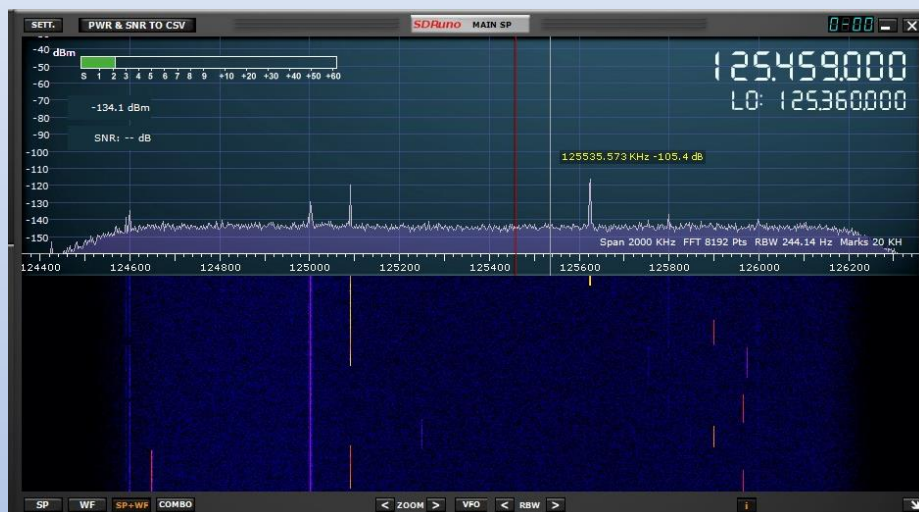




## RSPduo & SDRuno - Monitoring 2 widely spaced bands, simultaneously



## *RSPduo – mix and match applications simultaneously*



ATC

ADSB

SDRuno plugin  
coming soon

## SDR Receivers

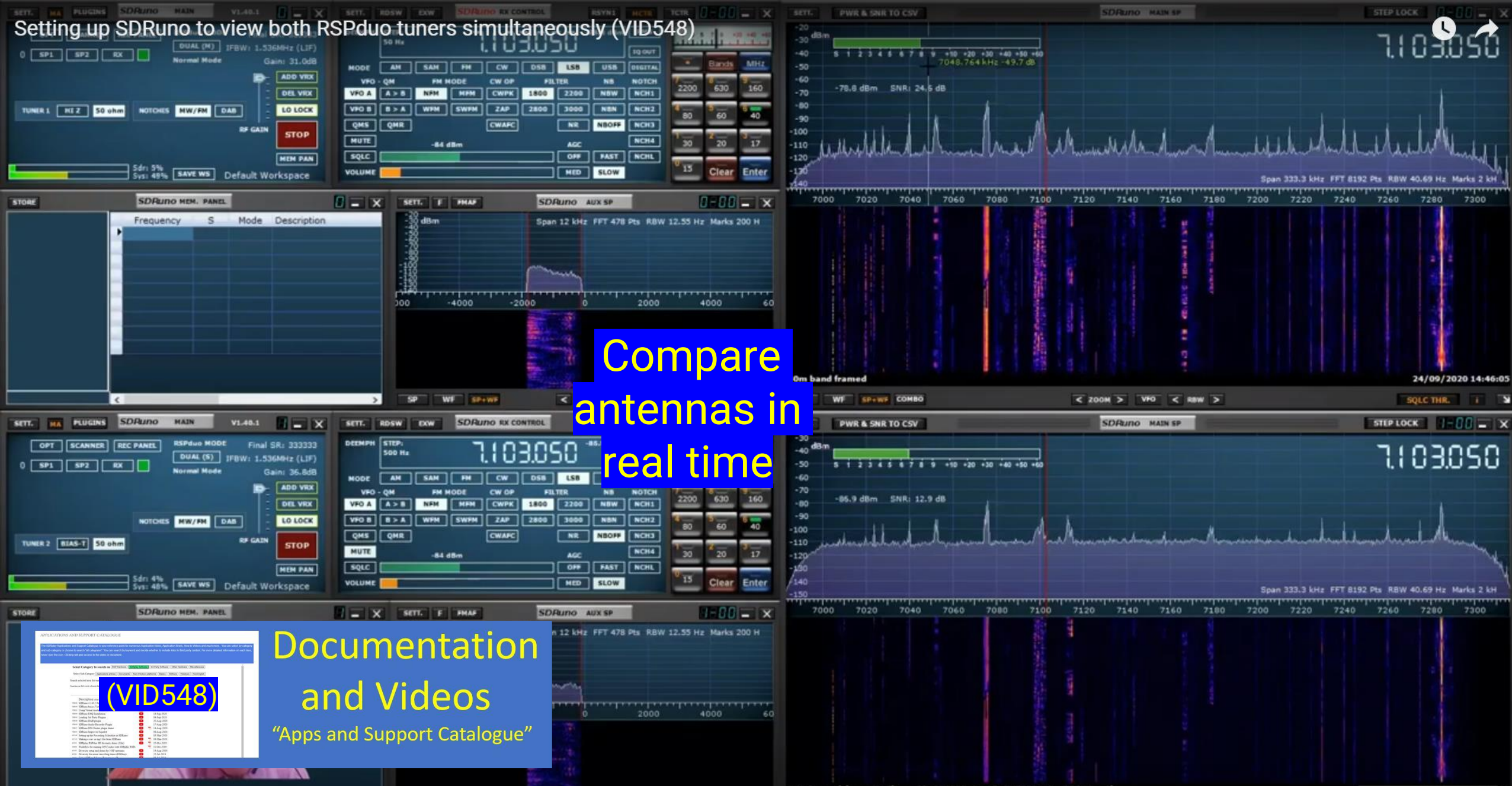
## *SDRuno + RSPduo - Diversity Tuning*



- RSPduo only
- MRC (Maximum Ratio Combination) for signal enhancement (Auto mode)
- Interference Rejection (Manual mode)



Setting up SDRuno to view both RSPduo tuners simultaneously (VID548)



# Documentation and Videos

“Apps and Support Catalogue”

## “Apps and Support Catalogue”





# Comparison Chart



Key specifications and highlights	RSP1A	RSPdx	RSPduo
Continuous coverage from 1kHz to 2GHz	✓	✓	✓
Up to 10MHz visible bandwidth	✓	✓	✓
14-bit ADC silicon technology plus multiple high-performance input filters	✓	✓	✓
Software selectable AM/FM & DAB broadcast band notch filters	✓	✓	✓
4.7V Bias-T for powering external remote antenna amplifier	✓	✓	✓
Powers over the USB cable with a simple type B socket	✓	✓	✓
50Ω SMA antenna input(s) for 1kHz to 2GHz operation (software selectable)	1	2	2
Additional software selectable Hi-Z input for up to 30MHz operation			✓
Additional software selectable 50Ω BNC input for up to 200MHz operation		✓	
Additional LF/VLF filter for below 500kHz		✓	
24MHz Reference clock input (+ output on RSPduo)		✓	✓
Dual tuners enabling reception on 2 totally independent 2MHz ranges			✓
Dual tuners enabling diversity reception using SDRuno			✓
Robust and strong plastic case (with internal RF shielding layer)	✓		
Rugged black painted steel case		✓	✓
Overall performance below 2MHz for MW and LF	Good	Best	Good
Multiple simultaneous applications	Good	Good	Best
Performance in challenging fading conditions (*using diversity tuning )	Good	Good	Best*





# SDRuno

# latest news

STORE

SDRuno MEM. PANEL

Frequency	S	Mode	Description
SHORTWAVE BANDPLAN			
2300000	Y	AM	120 Meters 2.300
3200000	Y	AM	90 Meters 3.200
3900000	Y	AM	75 Meters 3.900
4750000	Y	AM	60 Meters 4.750
5800000	Y	AM	49 Meters 5.800
7200000	Y	AM	41 Meters 7.200
9400000	Y	AM	31 Meters 9.400
11600000	Y	AM	25 Meters 11.600
13570000	Y	AM	22 Meters 13.570
15100000	Y	AM	19 Meters 15.100
17480000	Y	AM	16 Meters 17.480
18900000	Y	AM	15 Meters 18.900
21450000	Y	AM	13 Meters 21.450
25600000	Y	AM	11 Meters 25.600-26.100
SHORTWAVE BROADCASTS			
7380000	Y	AM	All India Radio
9445000	Y	SAM	All India Radio
9865000	Y	SAM	All India Radio
11560000	Y	SAM	All India Radio
9420000	Y	SAM	Voice of Greece
11710000	Y	SAM	Voice of Korea
9435000	Y	SAM	Voice of Korea
9925000	Y	SAM	The Mighty KBC
11850000	Y	SAM	Radio Romania Int
13840000	Y	SAM	RNZI

la

HF BROADCAST.s1b

File

Sources ALL

SWSKEDS File A20-200726-2330G-CSV read 21728 records





# SDRuno

# latest news



# SDRuno Roadmap

## 1.41

- Improved ini file support (backup/restore)
- Generic Scheduling Function
- Ability to create and recall complete receiver profiles
- Save VFO for each VRX

## 1.42

- Remote operation
  - New TCP Server (cross-platform)
  - SDRuno client
- Start-up tips

## 1.43

- Memory Panel updates (if blank use current value)
  - RF Gain
  - IF Gain/AGC enable
  - Scanner Threshold
- Scanner updates
  - Lockouts in a separate file
  - Statistics logging
  - Use memory panel threshold
- Custom controls
  - SP2 Filter bandwidth
    - Up to max available SP2 bandwidth for RX mode
  - Band buttons
  - Variable band centre
  - Bandwidth from a selectable list

## 2.0

- Cross Platform (Windows, MacOS, Linux) x86
- Add Hamlib support for non-Windows platforms
- GUI update – ability to lock panels together





## Not just for amateur radio.....

### APPLICATIONS

#### **Amateur**

Shortwave radio listening  
Broadcast DXing (AM/FM/TV )  
Panadaptor  
Aircraft (ADS-B and ATC)  
Slow Scan TV  
Multi-amateur band monitoring  
WSPR & digital modes  
Weather fax (HF and satellite)  
Satellite monitoring  
Geostationary environmental satellites  
Trunked radio  
Utility and emergency service monitoring

#### **Industrial**

Surveillance  
Wireless microphone monitoring  
RF surveying  
IoT receiver chain  
Signal logging  
RFI/EMC detection  
Broadcast integrity monitoring  
Spectrum monitoring  
Power measurement

#### **Educational/Scientific**

Teaching  
Receiver design  
Radio astronomy  
Passive radar  
Ionosonde  
Spectrum analyser  
Receiver for IoT sensor projects  
Antenna research



**Need Product Info?**

[Click here](#)



**Designed & made in the UK**

**Want to purchase?**

[Click here](#)



**Need Software for your RSP?**

[Click here](#)



**Need Help?**

[Click here](#)

**SDRplay "Misc" page – news, reviews, blogs, educators, developers, non-English & more**

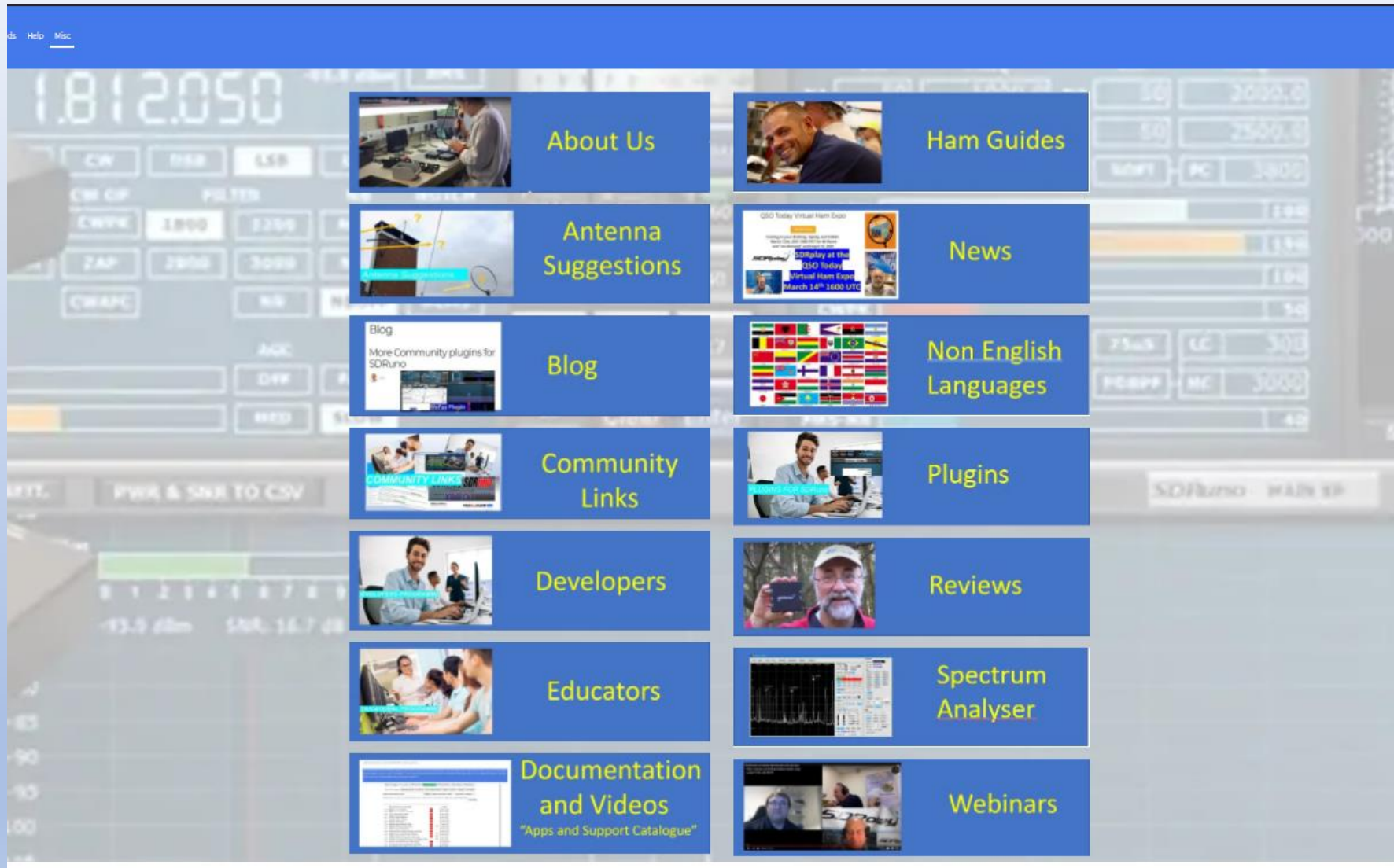


**Misc**  
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## Software (Downloads)



Start  
Here

New User? We recommend  
you click here to follow the  
[StartHere](#) flow

Need other software, or using a different  
Operating System?  
Fill in the dropdowns below and we'll take  
you there...

Select your RSP model ▾

and

Select Operating System ▾

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**SDR Receivers**



## Interactive Technical Help including ticket system for one-to-one support

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### Welcome to Help

Need help with your RSP? What do you want to do?



Got a new RSP and don't know where to begin?

Click on the green button and you will be walked through the software installation. OR Review the videos and documents shown below to get started running your RSP!

 Basic Introduction to SDR & RSP1A   
Unboxing the RSPdx   
Introducing the RSPduo 

Where's my order? Check an existing support ticket?



[Browse our APPLICATIONS AND SUPPORT CATALOGUE](#) [For other NON TECHNICAL queries](#)

### Technical Help

[Home](#) [Search](#)

Please tell us what makes up your system so we can direct you to the most relevant help. Select from each category

[RSP Hardware](#)  
[Software](#)  
[Panadapter](#)  
[Other Hardware & Accessories](#)

#### Frequent Support Questions -all platforms

- [Why don't I see/hear any signals?](#)
- [What does "No RSPs found" mean?](#)
- [I may have damaged my RSP. What can I do?](#)
- [Common SDRuno questions](#)
- [I see "API Fail"](#)

[Go Back](#)

## Common SDRuno questions


[Home](#)[Search](#)

Please tell us what makes up your system so we can direct you to the most relevant help. Select from each category

The current supported version of SDRuno is SDRuno 1.40.1

If you do not have this version [please click here to download](#)

If you are a newcomer and it seems like SDRuno isn't running or picking up any signals, [CLICK HERE](#) to check our "quick start" guide which covers the four things that are the most likely causes of initial problems.

SDRuno FAQ Installation 

This list of common questions (and answers) about SDRuno can also be found here:

[Common SDRuno questions](#)

Why is there both a regular version and an "EXTIO" version of SDRuno?

What are "LO" and "VFO"?

I like SDRuno but I want to run on a different computer platform.

What other enhancements are planned for SDRuno in the coming months?

Where is the SDRuno documentation?

The tuning steps are too coarse or too fine. How do I change them?

The scanner seems to work but it's not finding anything. What might be wrong?

Why does the spectrum noise floor seem to dip down at each end of the range?

SDRuno does not create a nice layout of panels on my screen. What can I do?

Why can't I tune outside one of the preset (framed) "bands"?

Why does the measured noise level go up as you reduce the RF gain control?

Still need help? Click here to raise ticket

[Go Back](#)



## Applications and Video guides: YouTube channel & Searchable catalogue

SDRplay Home Start Here Products Distributors Reviews Purchase Downloads Community Blog Support

### APPLICATIONS AND SUPPORT CATALOGUE

The SDRplay Applications and Support Catalogue is your reference point for numerous Application Notes, Application Briefs, and more. You can browse through the entire list, or use the category drop-down to home in on your area of interest. Or you can just look for keywords and click on the corresponding icon for the YouTube Video or the PDF document. For more detailed information on each item, click or tap on the icons.

RSP hardware

enter word or phrase to search on

Sort by

Description click for more details	Created
AV001 Basic Introduction to SDR & RSP1A	05-Jun-2018
AB006 Basic Troubleshooting the RSP	20-Jul-2018
AN005 Setting up a panadapter	11-Oct-2017
AV017 More Panadapter Tips & Tricks	07-Sep-2018
AB005 Omnirig and Kenwood communications issues	19-Jun-2018
AN008 Using HRD with SDRUno	15-Mar-2018
WP003 Optimising RSP1A Performance below 60MHz	15-Mar-2018
MT019 Pre-selection filters of the RSP1 and RSP2	05-Aug-2017
AN003 RSP2 Reference Clock Usage	08-Dec-2016
AN002 Connection to the Hi-Z port	01-Dec-2016

SDRplay Software Defined Radio Receiver 4,967 subscribers

SDRplay reviews and demos PLAY ALL

Here you will find lots of Reviews and demos of RSPs in use with SDRUno and 3rd party software - SDRplay continues to work with other software authors to update and improve functionality on

SDR Console V3.02 (Beta) for SDRplay RSPDuo Quick Test

SDRplay RSPDuo Overview

SDRuno Panadapter Demo Part 1 - Basic Panadapter...

F6300vsDuo

SDRplay RSP-1A and SDRUno Gen Coverage RX (#115)

Using the SDRplay Record Function

More Panadapter Tips and Tricks

More Panadapter Tips and Tricks (replaced)

SDRuno & RSP - Basic installation, troubleshooting & Usage

Gain and AGC Settings in SDRUno (AN009)

Guides to using 3rd Part s/w (SDR-Console, HDSDR, CubicSDR etc.) with the RSP PLAY ALL

SDRplay RSP 1 & 2 with SDR Console V3 (AV009)

SDRplay RSP1A with HDSDR (AV011)

SDR Console V3 Install Setup And Overview on SDRplay...

SDR-Console remote access for SDR Radios

SDRplay RSP1 - SDR Console V3 installation, overview, an...

[www.youtube.com/c/SDRplayRSP](http://www.youtube.com/c/SDRplayRSP)

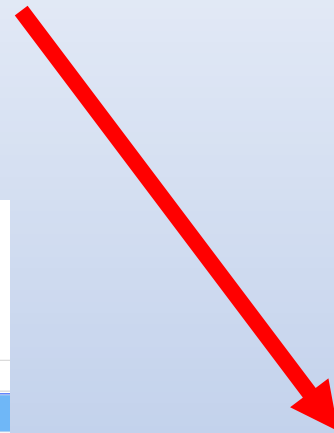
[www.sdrplay.com/apps-catalogue/](http://www.sdrplay.com/apps-catalogue/)

[www.sdrplay.com](http://www.sdrplay.com)

**SDR Receivers**



Community Support:  
Facebook Group (16000+ members) →  
& SDRplay forums



## SDRplay Users

### Forum

[SDRplay Independent Community Forum](#) > Forums

Forum	Topics	Posts
<a href="#">SDRplay News</a> Announcements on SDRPlay news will be posted here by the Admin team	2	2
<a href="#">General</a> General Discussions and suggestions for categories	14	67
<a href="#">SDRPlay Devices</a> RSP1, RSP1a, RSP2, RSP Pro, RSPDuo related content	3	9
<a href="#">SDRUno</a> Information and questions on SDRUno	8	25
<a href="#">SDR Software (RSP Compatible)</a> Software that is compatible or can integrate with SDRplay Devices	4	13
<a href="#">SDR Antennas</a> Question or information on Antennas for use with SDRplay devices	4	17
<a href="#">S1b File Sharing</a> Files for SDRUno	2	2

[sdrplayusers.net/forum](http://sdrplayusers.net/forum)

[www.facebook.com/groups/sdrplay](http://www.facebook.com/groups/sdrplay)

[www.sdrplay.com](http://www.sdrplay.com)

[SDRPlayUsers@groups.io](http://SDRPlayUsers@groups.io)





Purchase  
direct or from resellers



[www.sdrplay.com/purchase](http://www.sdrplay.com/purchase)

SDRplay and its fulfilment centres  
BUT please be aware that  
SO please be patient if  
IF we are unable to arrange a carrier

We will let you know if this happens

Product	Price ex VAT GBP £	Quantity
Radio		
<a href="#">RSP1A</a>	86.00	<input type="text"/> RSP1A in stock
<a href="#">RSPduo</a>	199.95	<input type="text"/> RSPduo in stock
<a href="#">RSPdx</a>	160.00	<input type="text"/> RSPdx in stock
Shipped by Courier 7.00		
Shipped by Mail 5.40	7.00	
VAT GB	0	20.0 %
Total	£ 0.00	

[www.sdrplay.com](http://www.sdrplay.com)

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Distributors

WORLD WIDE DISTRIBUTORS

As well as supporting you directly with a purchase and after-sales help, our network of authorized distributors and resellers can often provide local language support and preferential shipping arrangements. Some offer supporting services and complementary product lines. This is our current list (please note that RS-Components is our worldwide channel partner (outside the USA))

Country	Distributor	Website	Address
.Worldwide	RS Components	<a href="https://www.rs-components.com/index.html">https://www.rs-components.com/index.html</a>	Google RS Components for local address
Australia	Strictly Ham Pty Ltd	<a href="http://www.strictlyham.com.au/">http://www.strictlyham.com.au/</a>	Shop 12B Church Street Bayswater Victoria
Belgium	ParmaCom	<a href="http://sdrplay.nl/">http://sdrplay.nl/</a>	online
Belgium	Van Dijken Elektronica	<a href="http://www.vandijkenelektronica.eu/">http://www.vandijkenelektronica.eu/</a>	JOHAN VAN ZWEDENLAAN 7A 9744 DX GRONINGEN
Canada	Radioworld Inc.	<a href="http://www.radioworld.ca">http://www.radioworld.ca</a>	4335 Steeles Ave. West Toronto ON M3N 1V7
Canada	Radioworld Central Inc.	<a href="http://www.epscentral.ca/">http://www.epscentral.ca/</a>	#8, 711 - 48 AVENUE SE Calgary, AB T2G 4X2
China	MyHamPlace Inc.	<a href="http://myhamplace.taobao.com/">http://myhamplace.taobao.com/</a>	14F, Beidou Mansion, #6 Huida Rd., Hi-Tech Zone, Pukou Nanjing 210032
China	Wu GuiZhong	<a href="mailto:support-china@sdrplay.com">mailto:support-china@sdrplay.com</a>	SDRplay Customer Service Support (Chinese) QQ Group: 365106171
France	Passion Radio	<a href="http://www.passion-radio.fr/">http://www.passion-radio.fr/</a>	<a href="http://passion-radio.com">passion-radio.com</a>
Germany	Funktechnik Dathe	<a href="http://funktechnik-dathe.de">http://funktechnik-dathe.de</a>	Gartenstrasse 2c 04651 Bad Lausick
Germany	CJ-Elektronik GmbH	<a href="https://shop.funk24.net/">https://shop.funk24.net/</a>	Seilgraben 33 - 52062 Aachen
Germany	Bouto	<a href="https://www.hamradioshop.net">https://www.hamradioshop.net</a>	Gerichtsweg 3, D-29320 Hermannsburg
Greece	FreeBytes	<a href="http://www.freebytes.com">http://www.freebytes.com</a>	Boriss Ipirou 78 Kolonos Athens
Hungary	Anico KR	<a href="http://anico.hu/">http://anico.hu/</a>	4400 Nyiregyhaza, Debreceni ut 125,
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**SDR Receivers**

**[Click Here to see recent examples of fake SDRplay® products and websites](#)**



**Only purchase from our website or a trusted reseller that you know. Double check you are on a genuine secure site and viewing genuine products. Fake RSP devices are unlikely to work with SDRplay® software including SDRuno®. BEWARE AliExpress and Banggood and check the vendor on Amazon and eBay is trustworthy (especially eBay).**



