

HRD to Manage Favourites

HDSDR

DDE HRD - - LO

Ext IO Control

ONLY



Selection

Bands

- Manager
- Band's
- General
- UHF 70 cmts.
- VHF 2 mts.
- VHF 4 mts. UK
- VHF 6 mts.

Favourites

Quick Save

Advanced

Macros

Menus

Main busy
Sub busy
Scanning
Filter:
Memory: 1-23
CTCSS: 131.8 Hz
Tone: 131.8 Hz
DSP:

VFO A Sub
VFO B B > A
TX - A A > B
TX - B A / B
Main CH -
Mem CH +

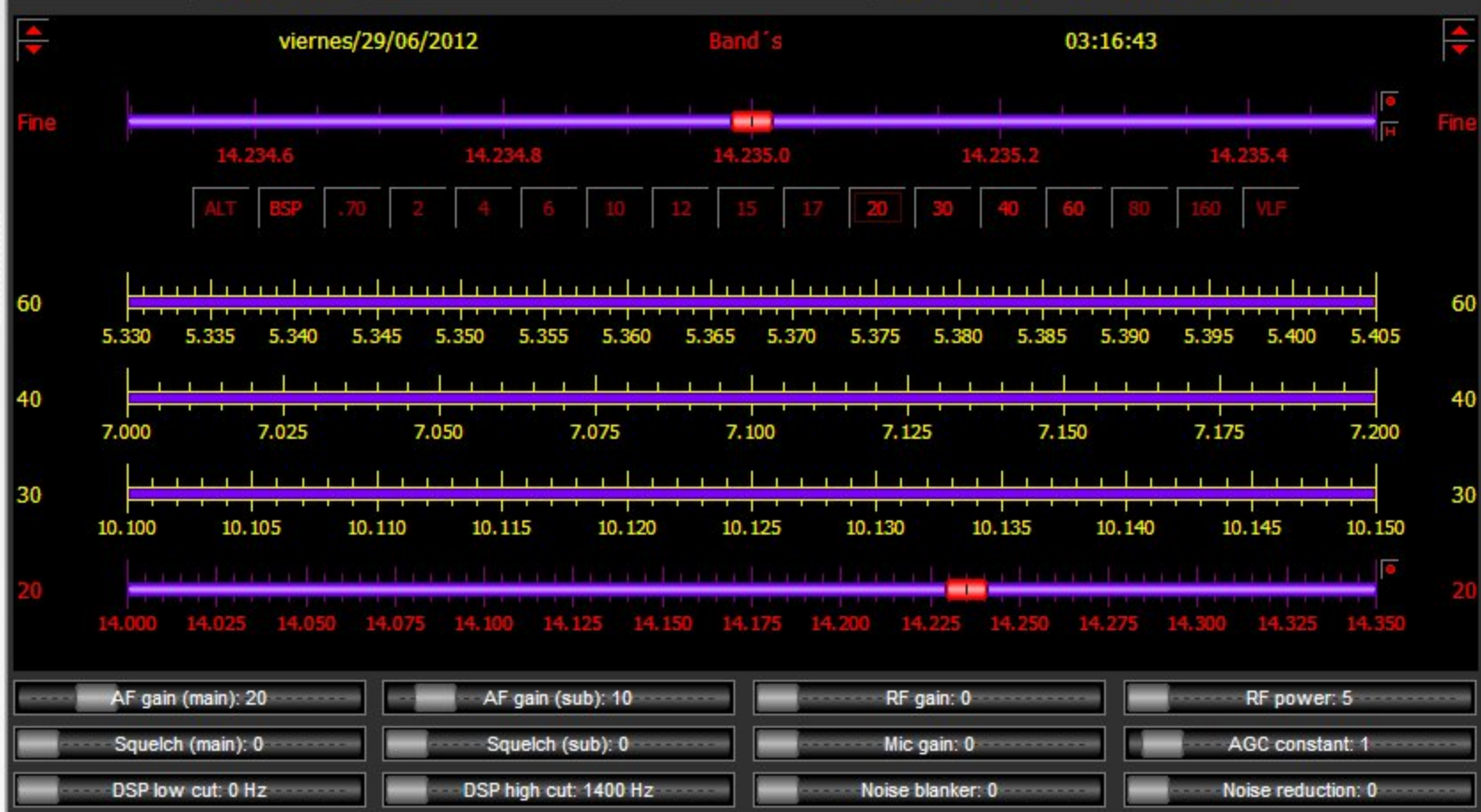
LSB

14.235.000

3.780.000

S1
S

ALT	BC	DCS	NR 1	SAT	Mode: LSB
ATT	Band +	Ex: A	NR 2	Scan	RX Filter
ATU	Band -	Ex: B	Notch	Sub-RX	Quick Mem: Ch 5
Ant 1	CTCSS	Fine	Pre	TF set	Split: Simplex
Ant 2	Call	MBC	Pri	TX	Various
Auto	Comp	NB	RX tone	TX tone	





- Selection
- Bands
 - Favourites
 - DRM BROAD
 - 1.611
 - 3.955
 - 3.965
 - 5.875
 - 5.920
 - 6.015
 - 6.155
 - 7.230
 - 7.320
 - 7.355
 - 7.370
 - 7.390
 - 9.495
 - 9.535
 - 9.700
 - 9.760
 - 9.780 REE
 - 9.850
 - 9.880
 - 9.890
 - 9.950
 - 11.615
 - 11.830
 - 11.875
 - 12.095
 - 13.720 REE
 - 15.120
 - 15.140
 - Quick Save
 - Advanced
 - Macros
 - Menus

Main busy
Sub busy
Scanning
Filter:
Memory: 1-23
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Tone: 131.8 Hz
DSP:

VFO A Sub
VFO B B > A
TX - A A > B
TX - B A / B
Main CH -
Mem CH +

LSB

14.235.000

S7 ■■■■ S

3.780.000

ALT BC DCS NR 1 SAT Mode: LSB |
ATT Band + Ex: A NR 2 Scan RX Filter |
ATU Band - Ex: B Notch Sub-RX Quick Mem: Ch 5 |
Ant 1 CTCSS Fine Pre TF set Split: Simplex |
Ant 2 Call MBC Pri TX Various |
Auto Comp NB RX tone TX tone



AF gain (main): 20 AF gain (sub): 10 RF gain: 0 RF power: 5
Squelch (main): 0 Squelch (sub): 0 Mic gain: 0 AGC constant: 1
DSP low cut: 0 Hz DSP high cut: 1400 Hz Noise blanker: 0 Noise reduction: 0



Confirm [X]

Activate 'RFHamFox 1' support?
 HSDR will get closed!
 TX support requires additional activation (see Options).

[Yes] [No]



AM ECSS FM **LSB**

Lo **0007.100**
Tune **0007.065.000**

ExtIO
Volume#
AGC Thresh.

[Mute] [Play] [Pause] [Stop] [Previous] [Next]

Soundcard [F5]
 Bandwidth [F6]
 Options [F7]

Info / Update [F9]
 Full Screen [F11]

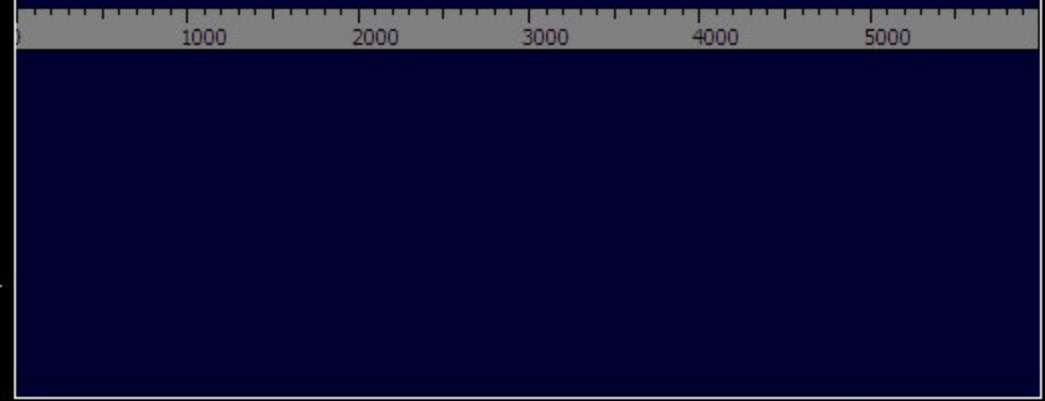
NR NB Notch
 Mute **AGC Slow** Despread
 CW ZAP CW AFC CW Peak CWFullBw



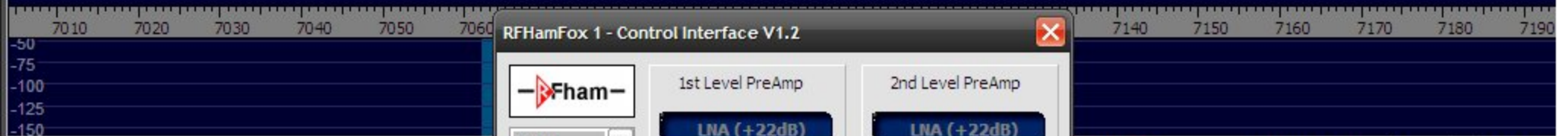
28/06/2012 19:10:52

CPU HSDR: 1%
 CPU Total: 22%

Waterfall Spectrum [Zoom] RBW 1.5 Hz [2] Avg Speed



Waterfall Spectrum [Zoom] RBW 2.9 Hz [2] Avg Speed



RFHamFox 1 - Control Interface V1.2

COM8

Device Status: not connected

more Options

1st Level PreAmp	2nd Level PreAmp
LNA (+22dB)	LNA (+22dB)
Bypass (+0dB)	Bypass (+0dB)
ATT (-10dB)	ATT (-10dB)

AM ECSS FM **LSB**

LO **A** 0007.100
Tune 0007.065.000

S-units Squelch +20

Volume# AGC Thresh.

Soundcard [F5] Bandwidth [F6] Options [F7]

Info / Update [F9] Full Screen [F11]

Start [F2] Minimize [F3] Exit [F4]

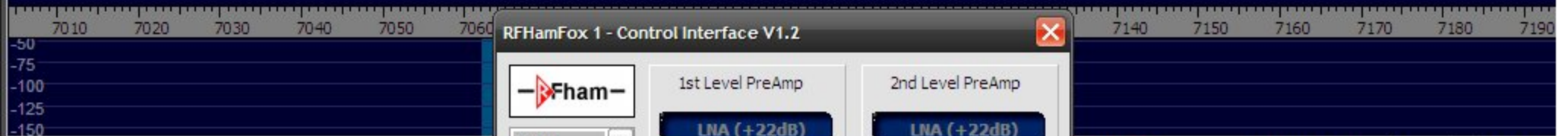
NR NB Notch
Mute **AGC Slow** Despread
CW ZAP CW AFC CW Peak CWFullBw

28/06/2012 19:11:40

CPU HSDR: 2%
CPU Total: 24%

Waterfall Spectrum RBW 1.5 Hz 2 Avg Speed
Zoom

Waterfall Spectrum RBW 2.9 Hz 2 Avg Speed
Zoom



RFHamFox 1 - Control Interface V1.2

COM8

Device Status: connected

more Options

1st Level PreAmp	2nd Level PreAmp
LNA (+22dB)	LNA (+22dB)
Bypass (+0dB)	Bypass (+0dB)
ATT (-10dB)	ATT (-10dB)

AM ECSS FM **LSB**

LO **A** 0007.100

Tune 0007.065.000

S-units Squelch +20

Volume# AGC Thresh.

Soundcard [F5] Bandwidth [F6] Options [F7]

Info / Update [F9] Full Screen [F11]

Start [F2] Minimize [F3] Exit [F4]

NR NB Notch Mute **AGC Slow** Despread CW ZAP CW AFC CW Peak CW FullBw

28/06/2012 19:15:54

CPU HSDR: 0% CPU Total: 21%

Waterfall Spectrum RBW 1.5 Hz 2 Avg Speed Zoom

Waterfall Spectrum RBW 2.9 Hz 2 Avg Speed Zoom

Phase

RFHamFox 1 - Control Interface V1.2

Fham

COM8

Device Status: connected

more Options

Baud Rate: 19200

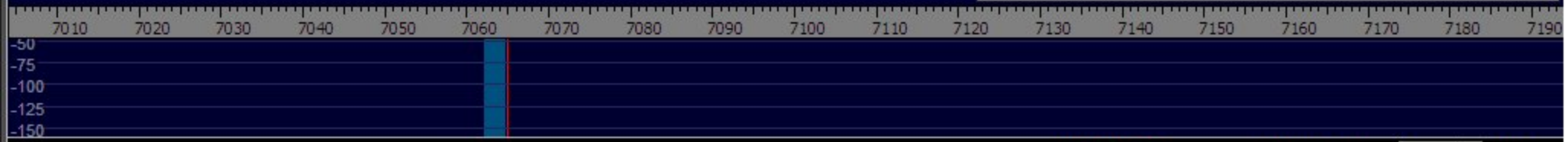
Crystal Frequency: 26000000

Intermediate Frequency: 91650000

Buttons: Reset, Ping, Change (x3)

1st Level PreAmp: LNA (+22dB), Bypass (+0dB), ATT (-10dB)

2nd Level PreAmp: LNA (+22dB), Bypass (+0dB), ATT (-10dB)



AM ECSS FM **LSB** USB CW DRM

LO **0007.100.000** FreqMgr

Tune **0007.065.000** ExtIO

Volume# AGC Thresh.

Soundcard [F5] Bandwidth [F6] Options [F7]

Info / Update [F9] Full Screen [F11]

Start [F2] Minimize [F3] Exit [F4]

NR NB Notch Mute **AGC Slow** Despread CW ZAP CW AFC CW Peak CWFullBw

28/06/2012 19:16:09

CPU HSDR: 1% CPU Total: 29%

Waterfall Spectrum RBW 1.5 Hz Avg Speed

Zoom

Waterfall Spectrum RBW 2.9 Hz Avg Speed

Zoom

RFHamFox 1 - Control Interface V1.2

COM8

Device Status:
connected

more Options

Baud Rate: 19200

Reset Ping

1st Level PreAmp

LNA (+22dB)

Bypass (+0dB)

ATT (-10dB)

Crystal Frequency: 26000000

Change

2nd Level PreAmp

LNA (+22dB)

Bypass (+0dB)

ATT (-10dB)

Intermediate Frequency: 91650000

Change

HSDR DDE Client

Receives data from a DDE server.

DDE format

None

HRD

Orbitron

WXtrack

SatPC32

Wisp

Sync Type

Tune

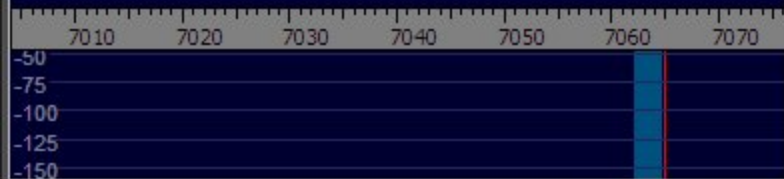
LO (const Tune)

LO

Record all satellite passes.

Status: connection failed :(

Manual connect OK



AM ECSS FM **LSB** USB

LO A 0007.100.000

Tune 0007.065.000

S-units Squelch +40

Soundcard [F5] Bandwidth [F6] Options [F7]

Info / Update [F9] Full Screen [F11]

Start [F2] Minimize [F3] Exit [F4]

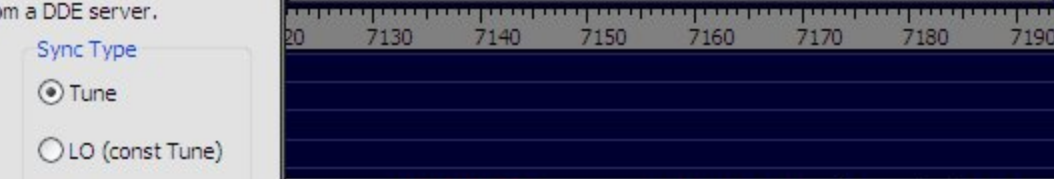
NR NB Notch

Mute **AGC Slow** Despread

CW ZAP CW AFC CW Peak CW FullBw

28/06/2012 19:17:08

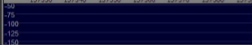
CPU HSDR: 4% CPU Total: 28%



1000 2000 3000 4000 5000

Waterfall Spectrum RBW 2.9 Hz Zoom 2 Avg Speed

137530 137540 137550 137560 137570 137580 137590



AM ECSS FM LSB USB

LO **A** 0137,617,828

Tune 0137,617,830

9-units Squeech +20 +40

Soundcard [F6]
Bandwidth [F6]
Options [F7]

Info / Update [F9]
Full Screen [F11]

Start [F2]
Minimize [F3]
Exit [F4]

NR NB Notch
Mute AGC Off Despread
CW ZAP CW AFC CW Peak CW Fullbw

28/06/2012 19:18:59

CPU HSDR: 3%
CPU Total: 33%

HSDR DDE Client

Receives data from a DDE server.

DDE format

- None
- HRD
- Orbitron
- WXtrack
- SatPC32
- Wisp

Sync Type

- Tune
- LO (const Tune)
- LO

Record all satellite passes.

Status: **connection ok ;)**

Manual connect OK

RFHamFox 1 - Control Interface V1.2

Fham

COM8

Device Status: connected

more Options

Baud Rate: 19200

Crystal Frequency: 26000000

Intermediate Frequency: 916500000

1st Level PreAmp

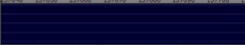
- LNA (+22dB)
- Bypass (+0dB)
- ATT (-10dB)

2nd Level PreAmp

- LNA (+22dB)
- Bypass (+0dB)
- ATT (-10dB)

Reset Ping Change Change

137640 137650 137660 137670 137680 137690 137700 137710



Waterfall Spectrum RBW 1.5 Hz 2 Avg Speed

1000 2000 3000 4000 5000

Waterfall Spectrum RBW 0.4 Hz 2 Avg Speed

SoDiRa

In Wave - EMU

Out Wave - EMU / SC

SR 48 khz (DRM) or 192 khz (WFM) full IF RDS D S D 50 μ s full

Shift OFF

I/Q Direct from Sound Card

L/R - I/Q



Skin View Help



Device:

E-MU 0204 | USB


Sample Rate:

48.0 kHz

Headphone Source :

Main Out 1/2

USB Speed : 2.0

 ToolTips



Skin View Help



Device:

E-MU 0204 | USB


Sample Rate:

192.0 kHz

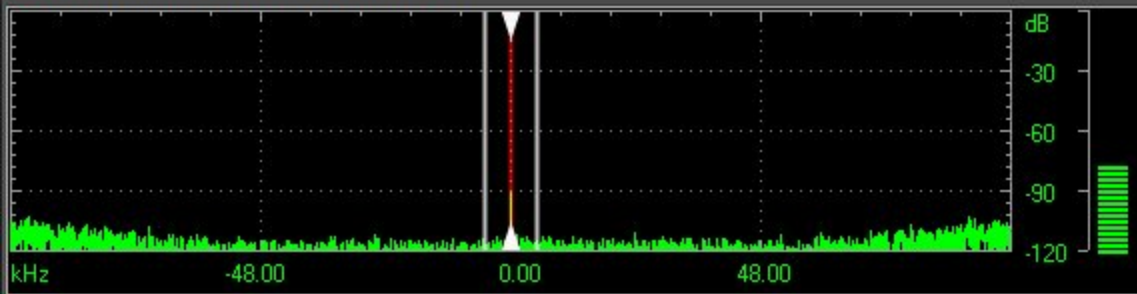
Headphone Source :

Main Out 1/2

USB Speed : 2.0

 ToolTips

No receiver, I/Q-data from soundcard



Antenne/Input Selector

inp1	inp2	inp3
inp4	inp5	inp6
inp7	inp8	inp9

Attenuation Selector

0 dB	10 dB	20 dB
30 dB	40 dB	50 dB

Receiver Options

opt0	opt1	opt2
------	------	------

IF Options

iNB	IQbal	DCfilt
-----	-------	--------

PreAmplifier V1.2

1st Level PreAmp

(+22dB)

Bypass (+0dB)

(-10dB)

2nd Level PreAmp

LNA (+22dB)

Bypass (+0dB)

ATT (-10dB)

HW tuning step: 5.00 kHz

0.000.000.000

GHz MHz kHz Hz

Hfreq: 0.000.000.000 Sfreq: 000.000

Signal out dbFS (16 bit)

-40 -30 -20 -10 0

Configuration

Wavedevice Receiver Options

Using external IO DLL

External IO DLL: [dropdown]

Internal Receiver: No receiver, I/Q-data from soundcard

Port device type: not available

Port device number: not available

Port speed: not available

Used soundchannel: left/right (IQ)

Flip input spectrum

LO calibration: [dropdown]

Preferred IF shift [Hz]: 12000

HW init

Soundcard [F5]

Bandwidth [F6]

Options [F7]

Info / Update [F9]

Full Screen [F11]

Start [F2]

Minimize [F3]

Exit [F4]

NR NB Notch

Mute AGC Off Despread

CW ZAP CW AFC CW Peak CWFullBw



29/06/2012 06:21:55

CPU HSDR: 1% CPU Total: 58%

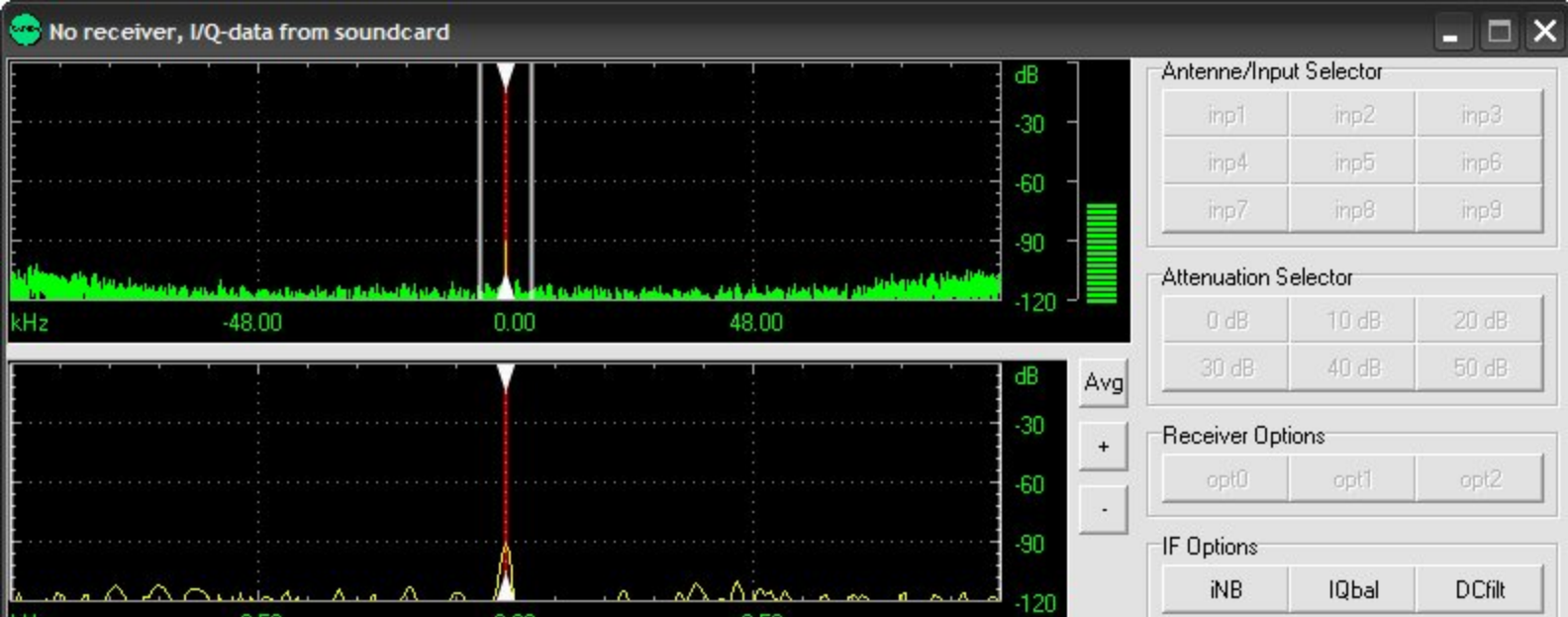
Waterfall Spectrum

RBW 23.4 Hz

Zoom

Avg Speed

2



HW tuning step: 5.00 kHz

0.000.000.000

GHz MHz kHz Hz

Hfreq: 0.000.000.000 Sfreq: 000.000

Signal out dbFS (16 bit)

-40 -30 -20 -10 0

SoDi

Configuration

Wavedevice Receiver Options

Input

Wavedevice: E-MU 0204 | USB

Left channel sample shift: off

Samplerate: 192 kHz

Source mixer channel: CD Audio

Destination mixer

Speaker

Output

Wavedevice: E-MU 0204 | USB

Source mixer channel: Wave

Mute control1 control2

Speaker [Min] [Max] [Close]

Opciones Ayuda

Speaker

Wave

Volumen de altavoz...

Volumen:

Silenciar todo

Balance:

Volumen:

Silencio

E-MU 0204 | USB

Volumen de altavoz [?] [Close]

Volumen de altavoz

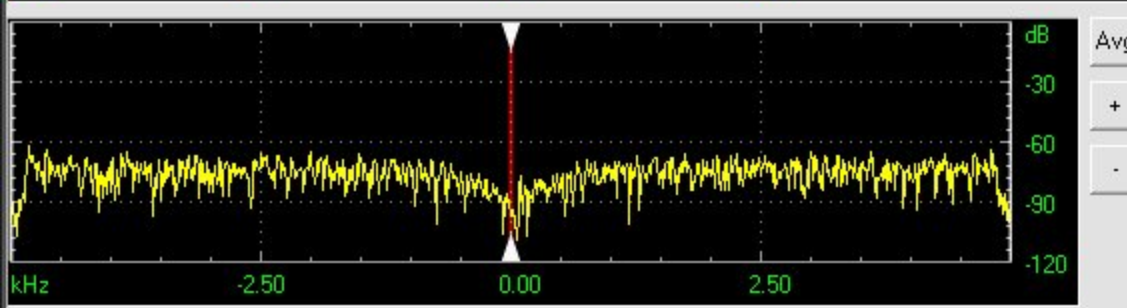
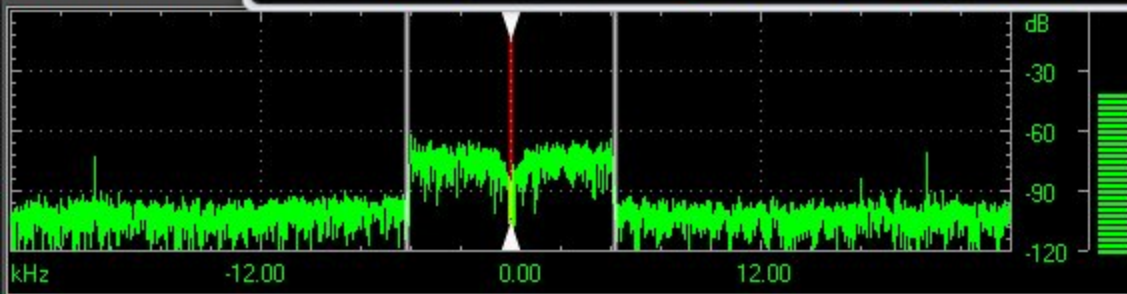
Puede modificar el volumen de todos los altavoces conectados a este equipo con sólo mover los controles deslizantes que se encuentran más abajo.

Izquierda:	Bajo		Alto
Derecha:	Bajo		Alto
Canal 3:	Bajo		Alto
Canal 4:	Bajo		Alto

Mover todos los indicadores de deslizamiento a la vez

Restaurar valores predeterminados

Aceptar Cancelar Aplicar



Antenne/Input Selector

inp1	inp2	inp3
inp4	inp5	inp6
inp7	inp8	inp9

Attenuation Selector

0 dB	10 dB	20 dB
30 dB	40 dB	50 dB

Receiver Options

opt0	opt1	opt2
------	------	------

IF Options

iNB	IQbal	DCfilt
-----	-------	--------

Wave File

Play Stop Rec IQ

time: 00:00:00

Demod/Decode Selector

Dialog Window

DRM Radio

HW tuning step: 5.00 kHz

0.000.000.000

GHz MHz kHz Hz

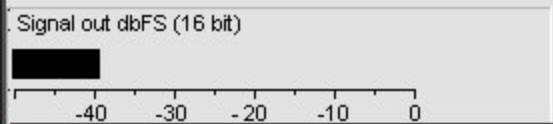
Hfreq: 0.000.000.000 Sfreq: 000.000

Up

Htun	Stun	7	8	9	MHz
Mirror	Search	4	5	6	kHz
Shift	Hlock	1	2	3	Hz
Pre	Mid	0	.	>	Esc

Align

Down



SoDiRa 0.092 www.dsp4swls.de Configuration

Help

S	NR 1	SAT	Mode: AM
A	NR 2	Scan	RX Filter
B	Notch	Sub-RX	Quick Mem: Ch 5
e	Pre	TF set	Split: Simplex
C	Pri	TX	Various
3	RX tone	TX tone	



17 20 30 40 60 80 160 VLF

RF gain: 0 RF power: 5

Mic gain: 0 AGC constant: 1

Noise blanker: 0 Noise reduction: 0

DRM

REE Noblejas

Textservice available, waiting for msccodecng

Level 0.0 dB	Offset: 2.0 Hz	Audio codec: AAC
MSC	DRM Mode: B	AAC SBR: yes
SDC	SNR est.: 10.5 dB	Samplerate: 48000
FAC	SNR FAC: 11.1 dB	Audio mode: P-Stereo
Synchronised	SNR MSC: 14.5 dB	
	Frames good 394	
	Frames bad 865	

Reset Simple fast MSC DRM+

file logging

DRMcalc, count: 0

interval: 3 sframes

detailed log, count: 0

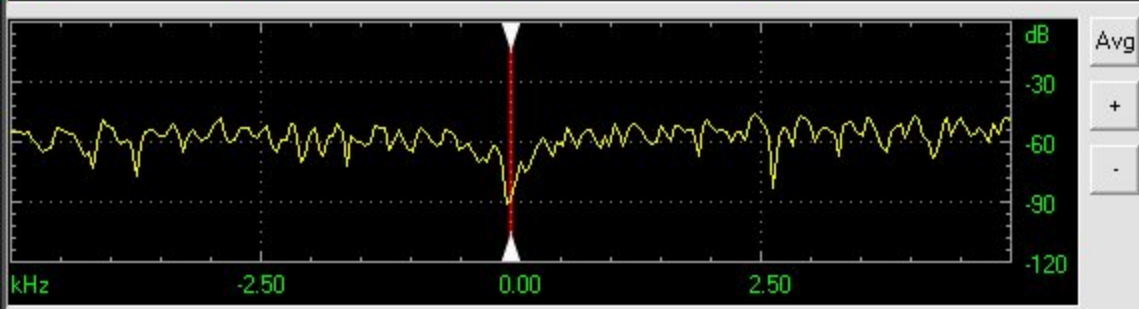
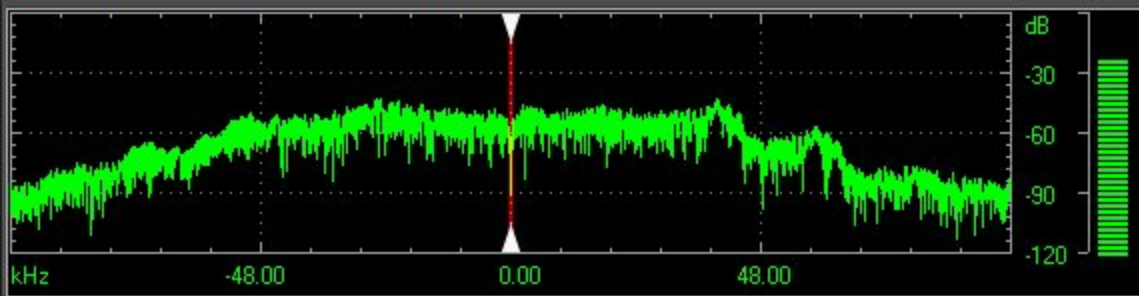
interval: 1 frame

IF input spectrum

vector log, count: 0

Mute

No receiver, I/Q-data from soundcard



Antenne/Input Selector

inp1	inp2	inp3
inp4	inp5	inp6
inp7	inp8	inp9

Attenuation Selector

0 dB	10 dB	20 dB
30 dB	40 dB	50 dB

Receiver Options

opt0	opt1	opt2
------	------	------

IF Options

iNB	IQbal	DCfilt
-----	-------	--------

Wave File

Play Stop Rec IQ

time: 00:00:00

Demod/Decode Selector

Dialog Window

FM Radio

HW tuning step: 5.00 kHz

Up Htun Stun

7	8	9	MHz
4	5	6	kHz
1	2	3	Hz
0	.	>	Esc

FM

COPE

Radiotext available

Frequency Offset: 0.07 kHz

- FM clipping
- Stereo Pilot
- RDS
- Audio Level: -14.0 dB

Mute

RF Bandwidth

10 kHz 15 kHz 25 kHz 50 kHz 75 kHz 150 kHz 300 kHz full IF manuell

Additional Options

High Linearity RDS Decoding Stereo Decoding

Deemphasis

Off 50 us 75 us

AF Bandwidth

3 kHz 5 kHz 7 kHz 10 kHz 15 kHz 20 kHz full Squelch

www.dsp4swls.de Configuration

DREAM

SR 48 khz ONLY in Sound Card Propertys

Dream.exe -c 5 to work in I/Q Mod

In Wave - EMU

Out Wave - EMU / SC

Bandpass Filter ON

Modified Metrics ON



Skin View Help



Device:

E-MU 0204 | USB


Sample Rate:

48.0 kHz

Headphone Source :

Main Out 1/2

USB Speed : 2.0

 ToolTips

Speaker [Minimizar] [Maximizar] [Cerrar]

Opciones Ayuda

Speaker

Wave

Volumen de altavoz...

Volumen:

Silenciar todo

Balance:

Volumen:

Silencio

E-MU 0204 | USB

Volumen de altavoz [Ayuda] [Cerrar]

Volumen de altavoz

Puede modificar el volumen de todos los altavoces conectados a este equipo con sólo mover los controles deslizantes que se encuentran más abajo.

Izquierda:	Bajo		Alto
Derecha:	Bajo		Alto
Canal 3:	Bajo		Alto
Canal 4:	Bajo		Alto

Mover todos los indicadores de deslizamiento a la vez

Restaurar valores predeterminados

Aceptar Cancelar Aplicar

Propiedades de Dream 1.14



General Acceso directo Compatibilidad



Dream 1.14

Tipo de destino: Application

Ubicación de destino: dream_1.14

Destino: "C:\Program Files\dream_1.14\Dream.exe" -c 5

Iniciar en: "C:\Program Files\dream_1.14"

Tecla de método abreviado: Ninguno

Ejecutar: Ventana normal

Comentario:

Buscar destino...

Cambiar icono...

Propiedades avanzadas...

Aceptar

Cancelar

Aplicar

Dream

View Settings ?

Level [dB] **8.30 kbps EEP aac Mono**

DRM RUVR 1B

Russian Russian Federation

News ID:1002

Лидеры БРИКС «сверят часы» перед открытием саммита G20

System Evaluation

SNR: 20.5 dB	MSC CRC: ■	DRM Mode / Bandwidth: B / 10 kHz
MSC WMER / MSC MER: 21.0 dB / 18.8 dB	SDC CRC: ■	Interleaver Depth: 2 s (Long Interleaving)
DC Frequency of DRM Signal: 12001.22 Hz	FAC CRC: ■	SDC / MSC Mode: 16-QAM / SM 64-QAM
Sample Frequency Offset: -0.19 Hz (-3 ppm)	Frame Sync: ■	Prot. Level (B / A): 1 / 0
Doppler / Delay: 0.29 Hz / 5.33 ms	Time Sync Acq: ■	Number of Services: Audio: 2 / Data: 0
	I/O Interface: ■	Received time - date: Mon Jun 18 07:28:00 2012

Chart Selector

- Spectrum
 - Input PSD
 - Input Spectrum
 - Waterfall Input Spectrum
 - Shifted PSD
 - Audio Spectrum
 - SNR Spectrum
- Channel
- Constellation

Input Spectrum

Channel Estimation: Frequency Interpolation

Wiener Linear DFT Zero Pad.

Channel Estimation: Time Interpolation

Wiener Linear

Time Sync Tracking

Guard Energy First Peak

Misc Settings

Flip Input Spectrum

Mute Audio

MLC: Number of Iterations: 1

Log File, Audio

Log File, Freq: kHz

Save Audio as WAV Reverberation

Interferer Rejection

Bandpass Filter Modified Metrics

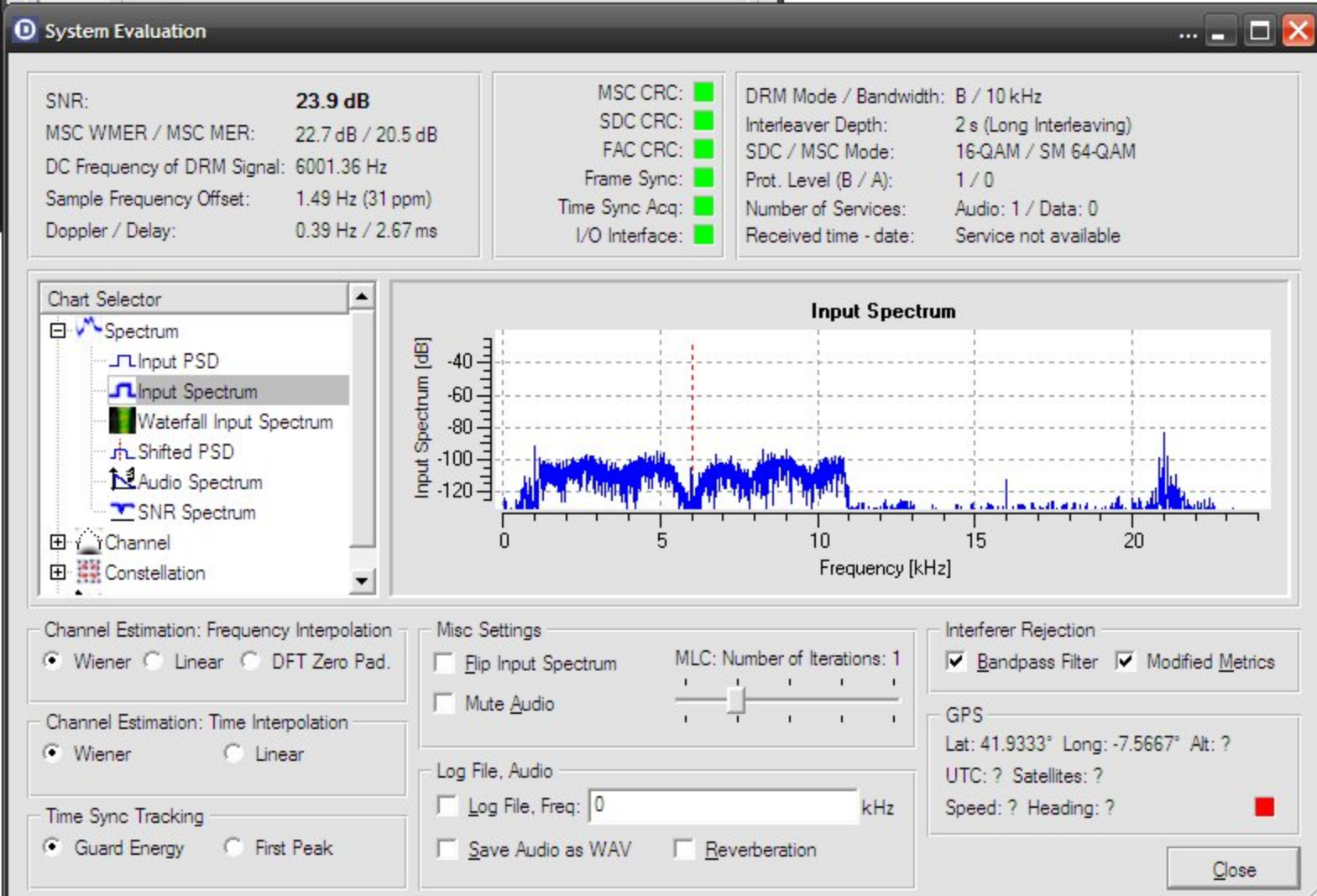
GPS

Lat: 41.9333° Long: -7.5667° Alt: ?

UTC: ? Satellites: ?

Speed: ? Heading: ?

Close



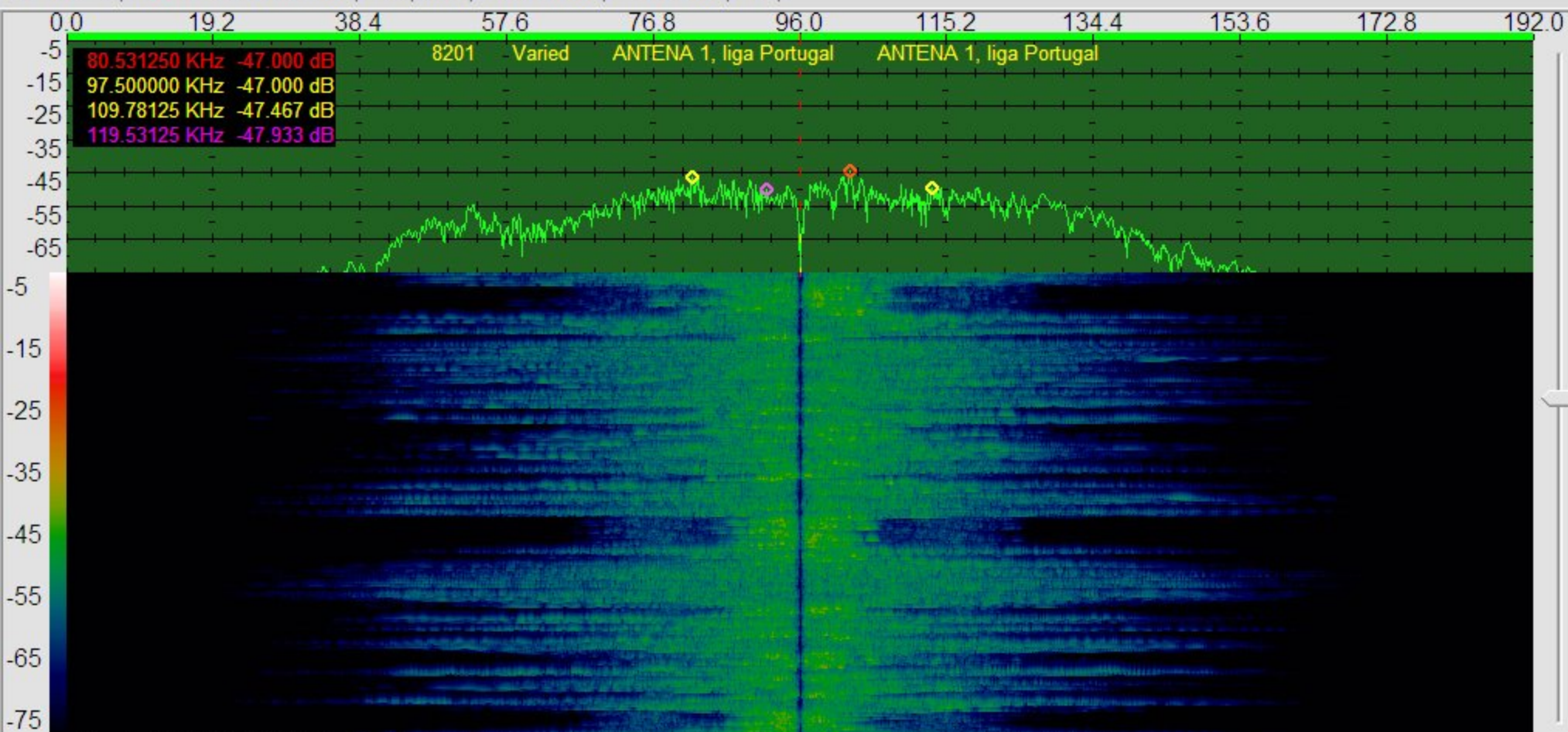
SpectraVue

In SC - EMU

Out SC - EMU

SR EMU 192

Very well audio also if use VAC for output.



Raw Data 2D Plot 3D Plot V Waterfall H Waterfall Combo Continuum Phase

Offset 0

2 FFT Ave

0 Smoothing

2048 FFT/BLK

Fs=192000 RBW= 94 Hz

5 dB/Div V Scale

NCO Null

Demod Frequency - Ins

L 96.000 KHz Auto Scale (A)

Span 192.000 KHz Memory(M) Channels

Stop-F10 Pause-F11 Start-F12

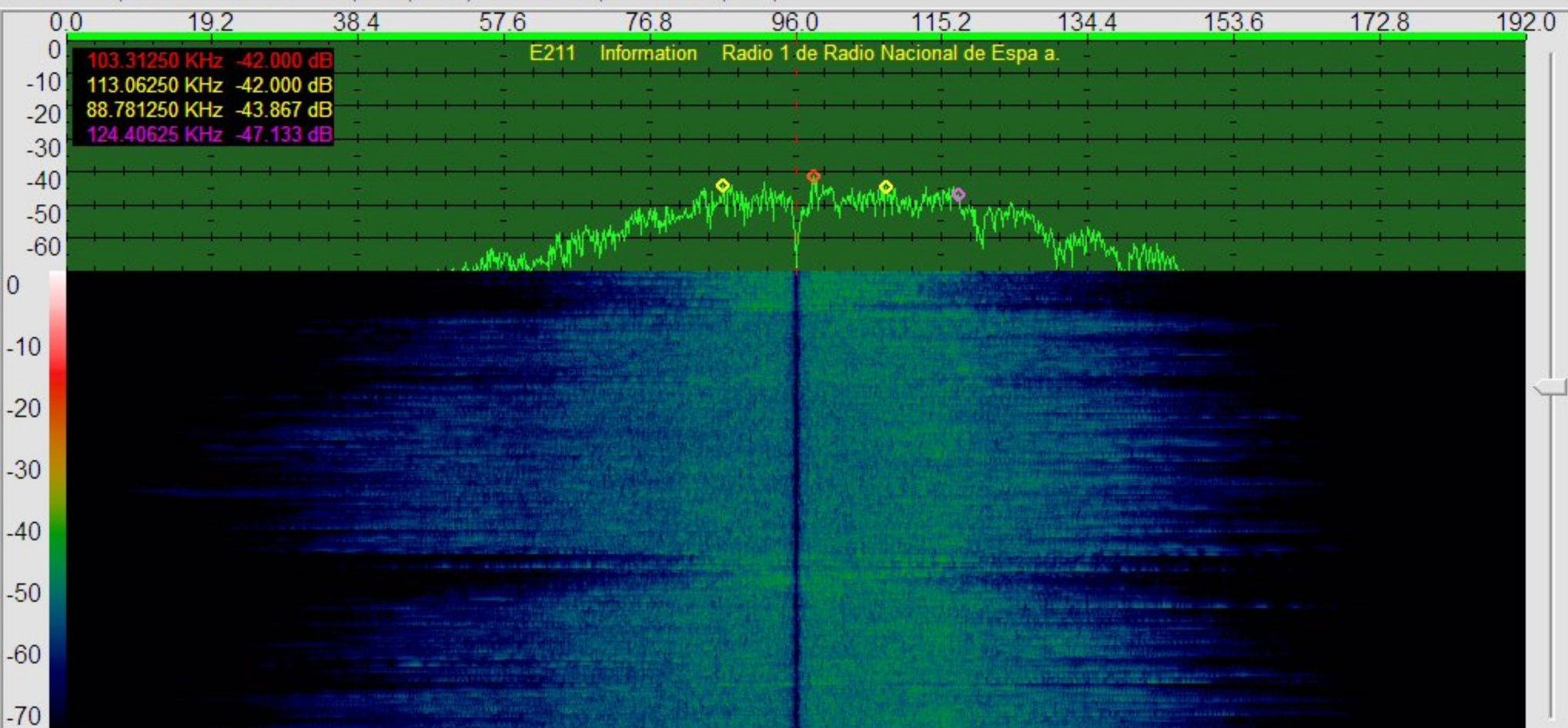
Mute SpaceBar Audio Volume

Demod On

AM WFM
 FM NFM
 LSB USB
 SAM WUSB
 CW-L CW-U
 NB Off

-43.2dB

Filter -100000 200000 100000 Peak



Raw Data 2D Plot 3D Plot V Waterfall H Waterfall Combo Continuum Phase

Offset 0

2 FFT Ave

0 Smoothing

2048 FFT/BLK

F_s=192000 RBW= 94 Hz

5 dB/Div V Scale

NCO Null

Demod Frequency - Ins

L 96.000 KHz Auto Scale (A)

Span 192.000 KHz Memory(M) Channels

Stop-F10 Pause-F11 Start-F12

Mute SpaceBar Audio Volume

Demod On

AM FM LSB SAM CW-L CW-U WFM NFM USB WUSB CW-U

NB Off Setup...

Filter -100000 200000 100000

Peak

-40.9dB

MANUAL WFM

rfhamfox_one_alone_3v2

WR-SDR

In SC - EMU

Out SC - EMU

SR In 192 khz SR Out 48 khz

Benefit of use WR-SDR, best decoding, settings, RDS Info, etc

HF

8m

2m

70

23

94.500.000



Down

Up

 Mox

PTT

Pre Amp. 1



Attn. 1



Off

Pre Amp. 2



Attn. 2



Off

RFhamFox One

Port

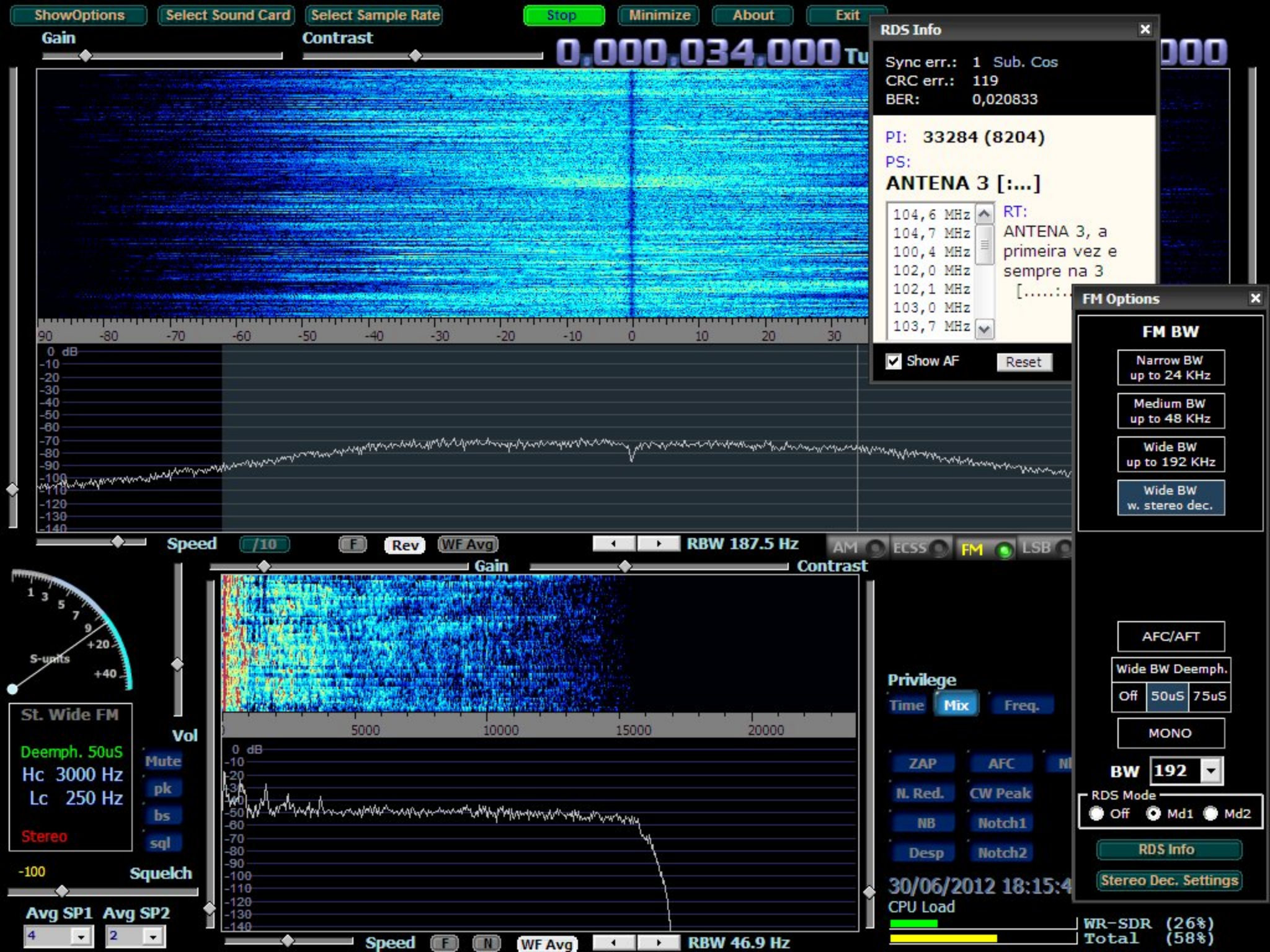
Connection

Disconnect

COM8

Connected

Connect



ShowOptions

Select Sound Card

Select Sample Rate

Stop

Minimize

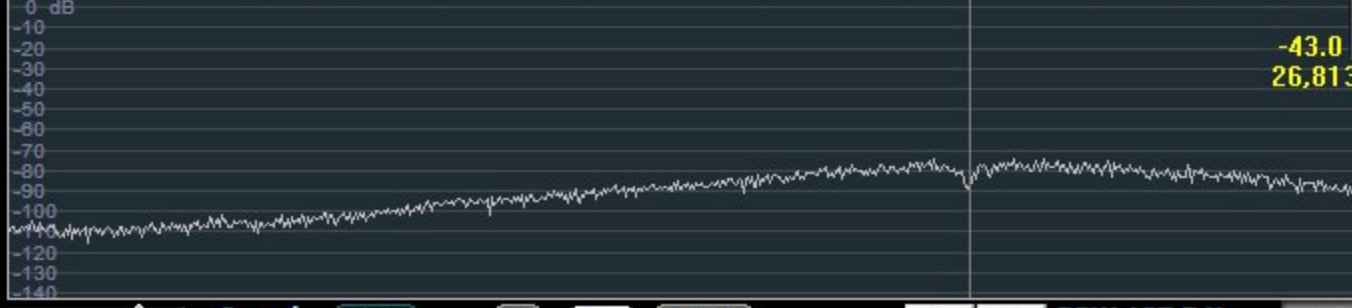
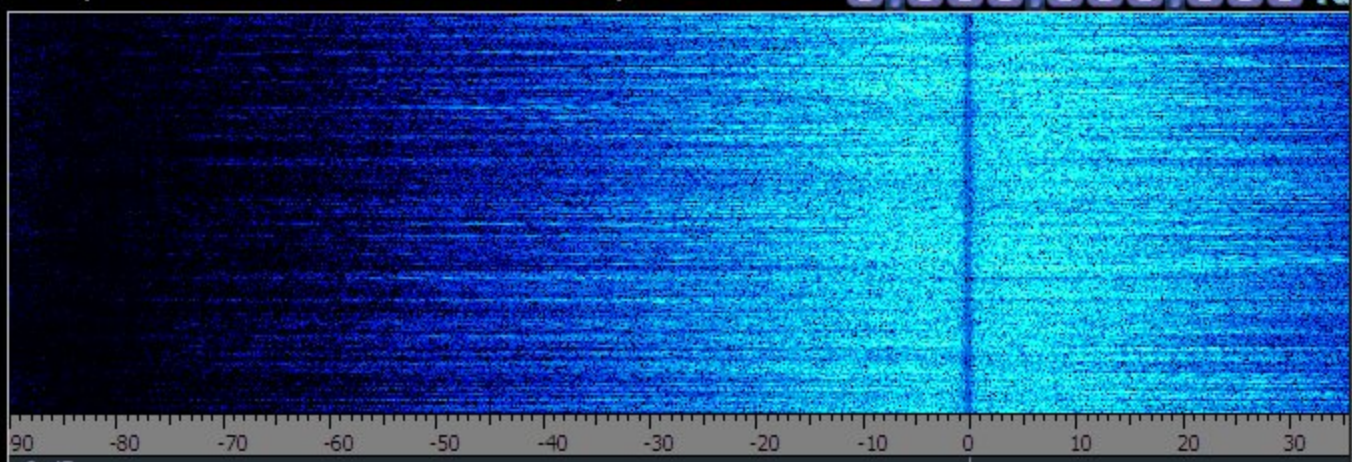
About

Exit

Gain

Contrast

0.000.000.000 Tu



RDS Info

Sync err.: 3 Sub. Cos
 CRC err.: 1072
 BER: 0,000791

PI: 32909 (808D)
 PS:
 RLCHAVES [...]

RT:
 [.....]

Show AF Reset

FM Options

FM BW

Narrow BW
up to 24 KHz

Medium BW
up to 48 KHz

Wide BW
up to 192 KHz

Wide BW
w. stereo dec.

Speed /10

F

Rev

WF Avg

RBW 187.5 Hz

AM

ECSS

FM

LSB

Gain

Contrast



St. Wide FM

Deemph. 50uS

Hc 3000 Hz

Lc 250 Hz

RDS

Stereo

Vol

Mute

pk

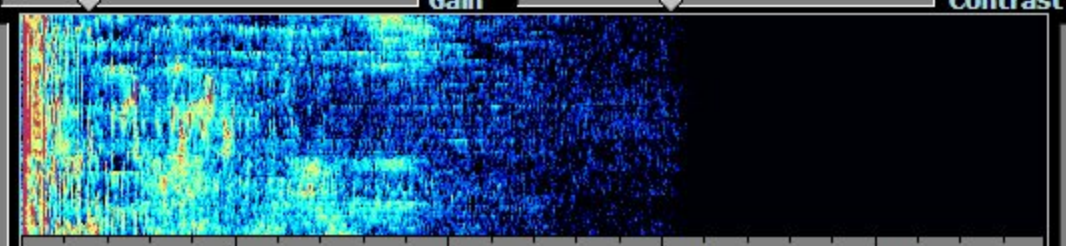
bs

sql

Squelch -100

Avg SP1 Avg SP2

4 2



Speed

F

N

WF Avg

RBW 46.9 Hz

Privilege

Time Mix Freq.

ZAP

AFC

N. Red.

CW Peak

NB

Notch1

Desp

Notch2

AFC/AFT

Wide BW Deemph.

Off 50uS 75uS

MONO

BW 192

RDS Mode Off Md1 Md2

RDS Info

Stereo Dec. Settings

30/06/2012 18:10:5

CPU Load



WR-SDR (27%)
Total (63%)