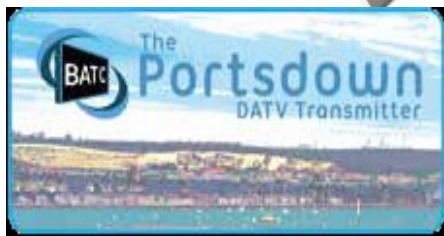
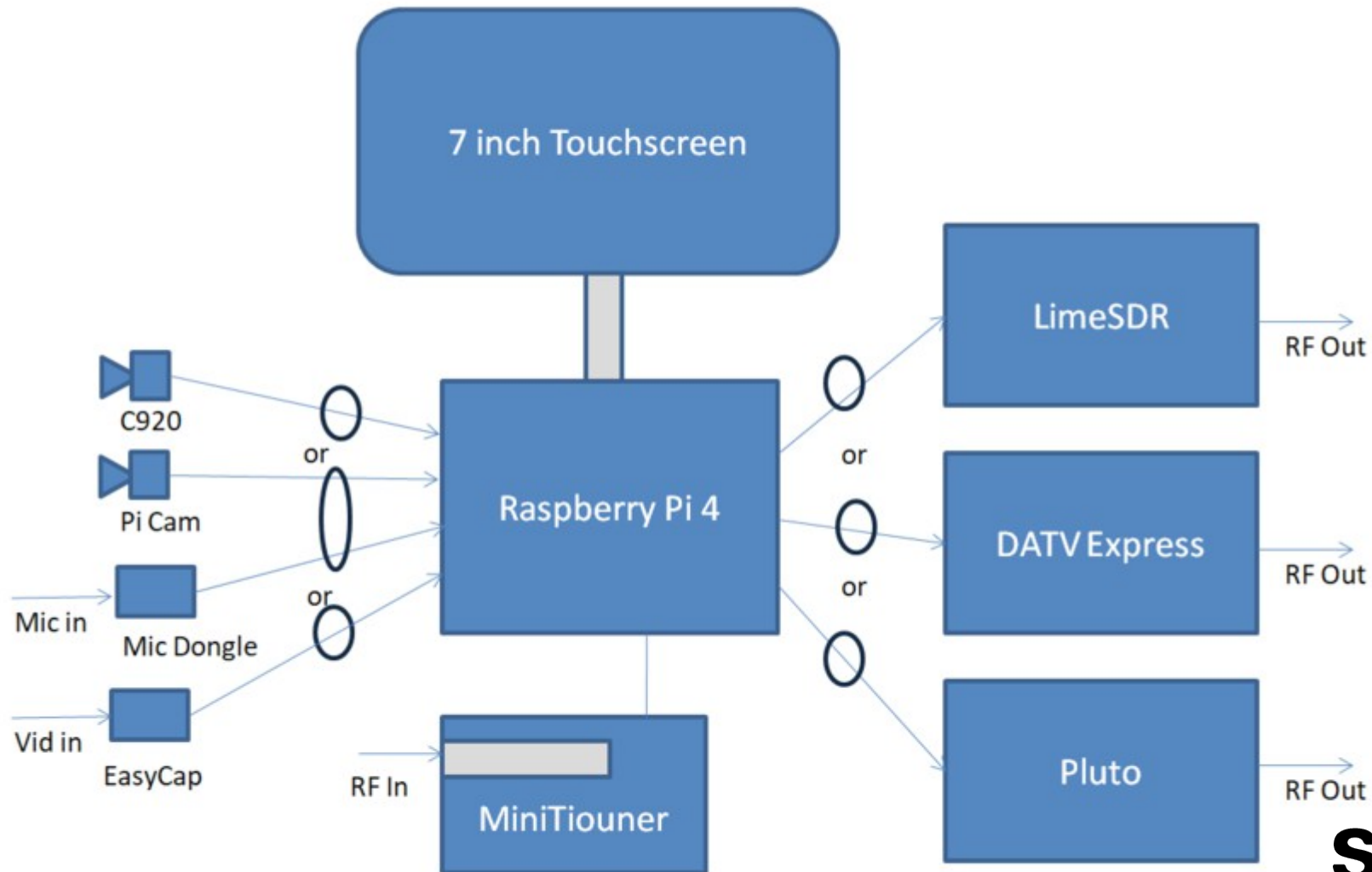


Portsdown 4

Le couteau Suisse de la DATV !

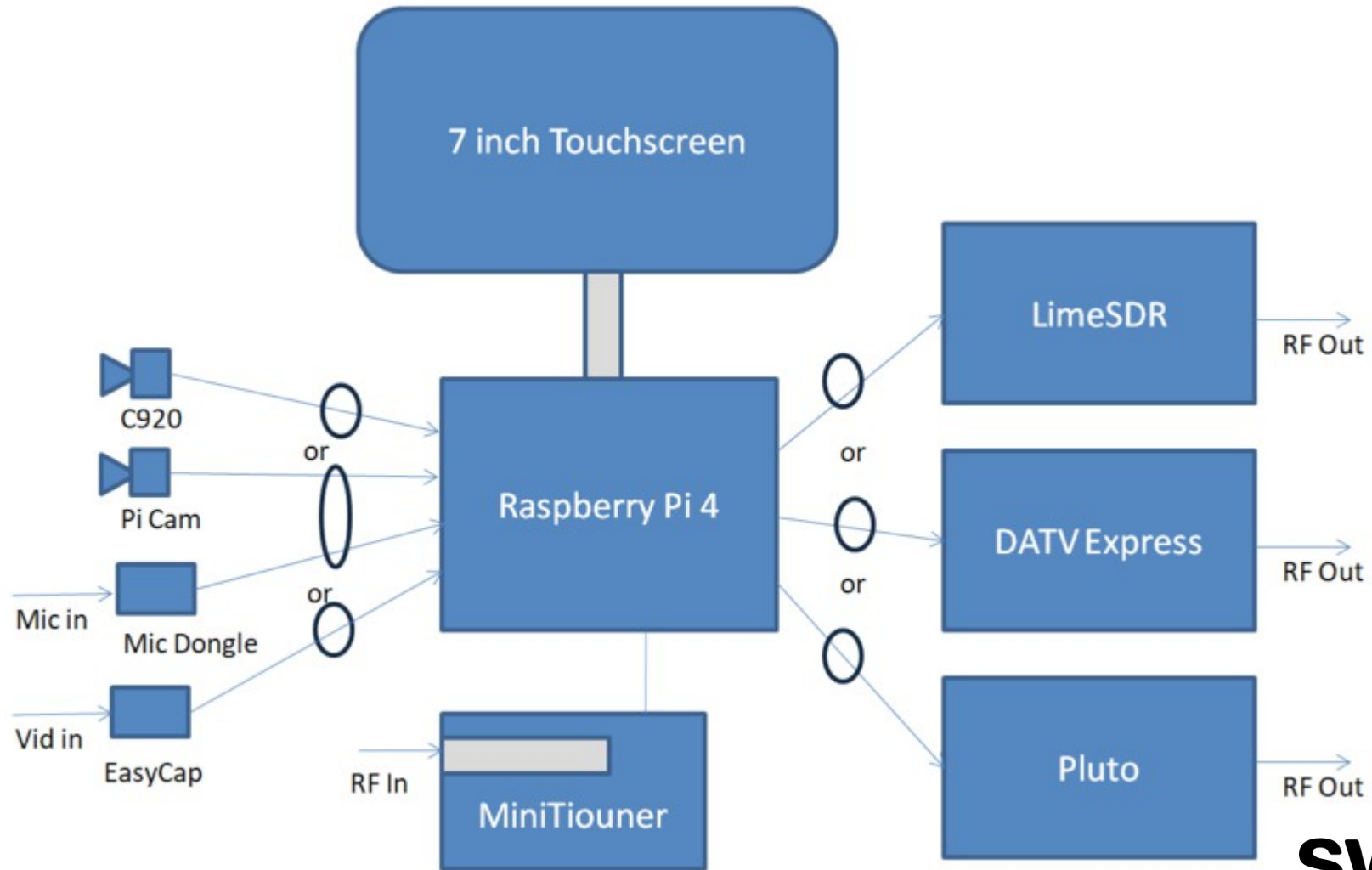


Portsdown 4 - Architecture



Portsdown 4 – Simplified Block Diagram

Portsdown 4 - Architecture



Portsdown 4 – Simplified Block Diagram

Portsdown 4

Applications/Fonctions

- Tx DATV
- Rx DATV
- Trafic
- Gestion/configuration système
- Mesures et tests

Portsdown 4 Tx DATV

BATC Portsdown 4 DATV Transceiver Main Menu

TX		RX	M2	M3
Modulation	Encoder	Output to	Format	Source
S2QPSK	H264	Pluto	4:3	PiScreen
Freq	Sym Rate	FEC	Band/Tvtr	Pluto Pwr
437 MHz	333	2/3	70_cm	-20
EasyCap	Caption	Audio	Atten	Att Level
Comp Vid	Off	Auto	NONE	-10.00
Preset 1	Preset 2	Preset 3	Preset 4	Store
146.5_333	437_Lime	1255_HD	437-Pluto	Preset

Portsdown 4 - Modulation

Modulation Selection Menu (11)

DVB-S
QPSK

Carrier

DVB-T

Pilots
Off

Frames
Long

DVB-S2
QPSK

DVB-S2
8 PSK

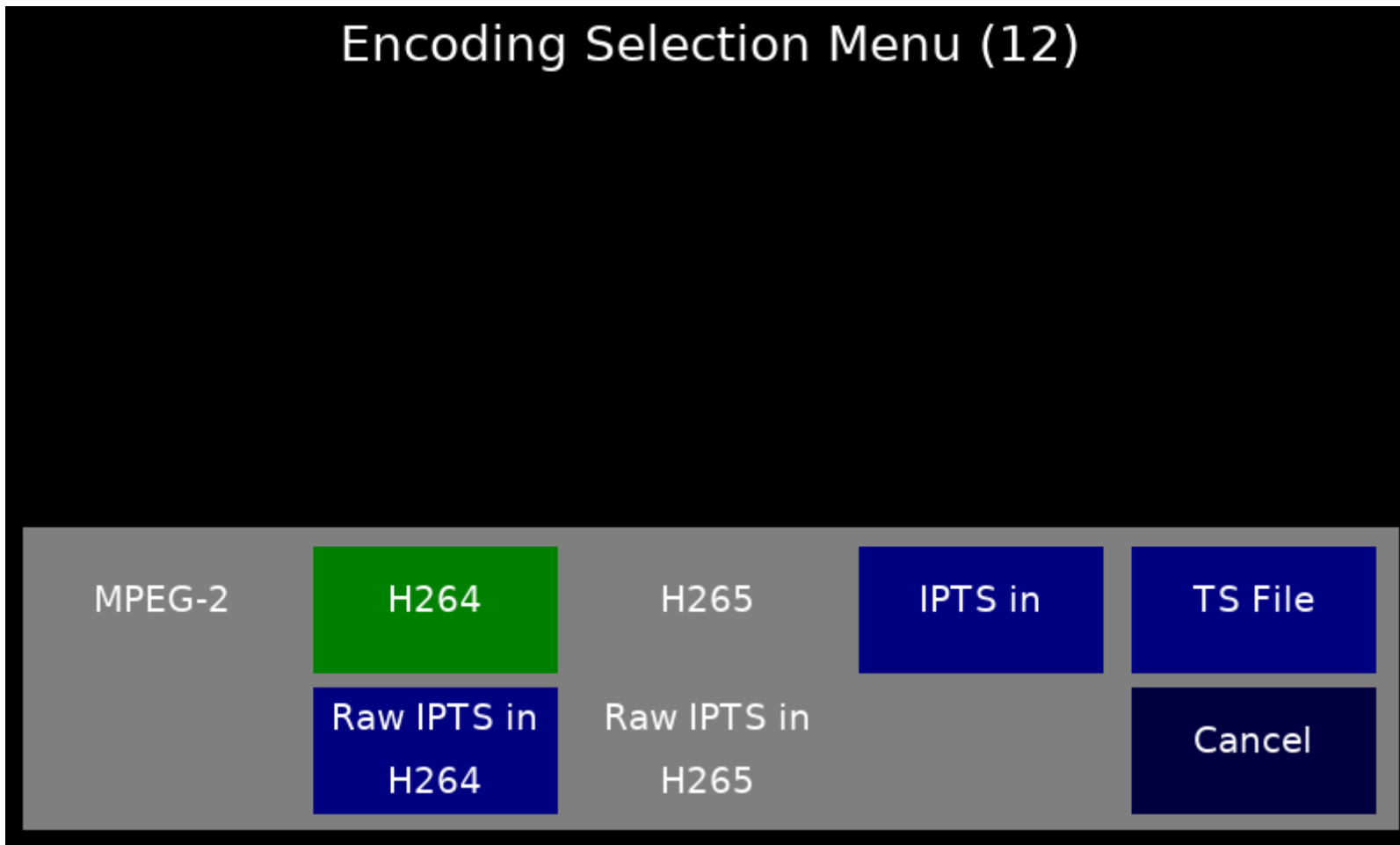
DVB-S2
16 APSK

DVB-S2
32 APSK

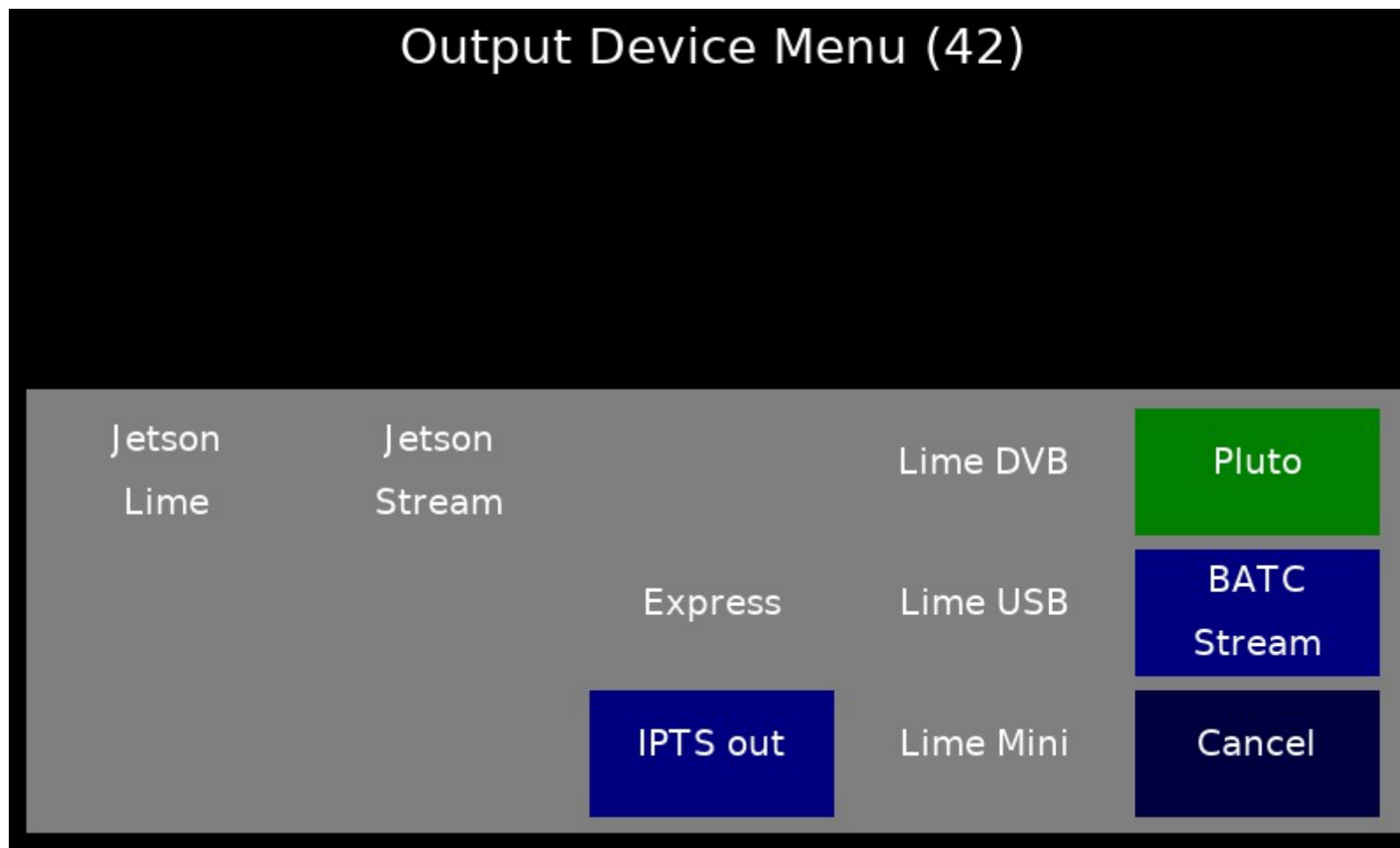
Cancel

Portsdown 4 - Codage

Encoding Selection Menu (12)



Portsdown 4 - Modulateur



Portsdown 4 - Sources

Video Source Menu (45)

Pi Cam

CompVid

TestCard

PiScreen

Contest
Numbers

Webcam
inc C920

HDMI

Cancel

Portsdown 4 - Rx DATV

Portsdown DVB-S/S2 Receiver Menu (8)

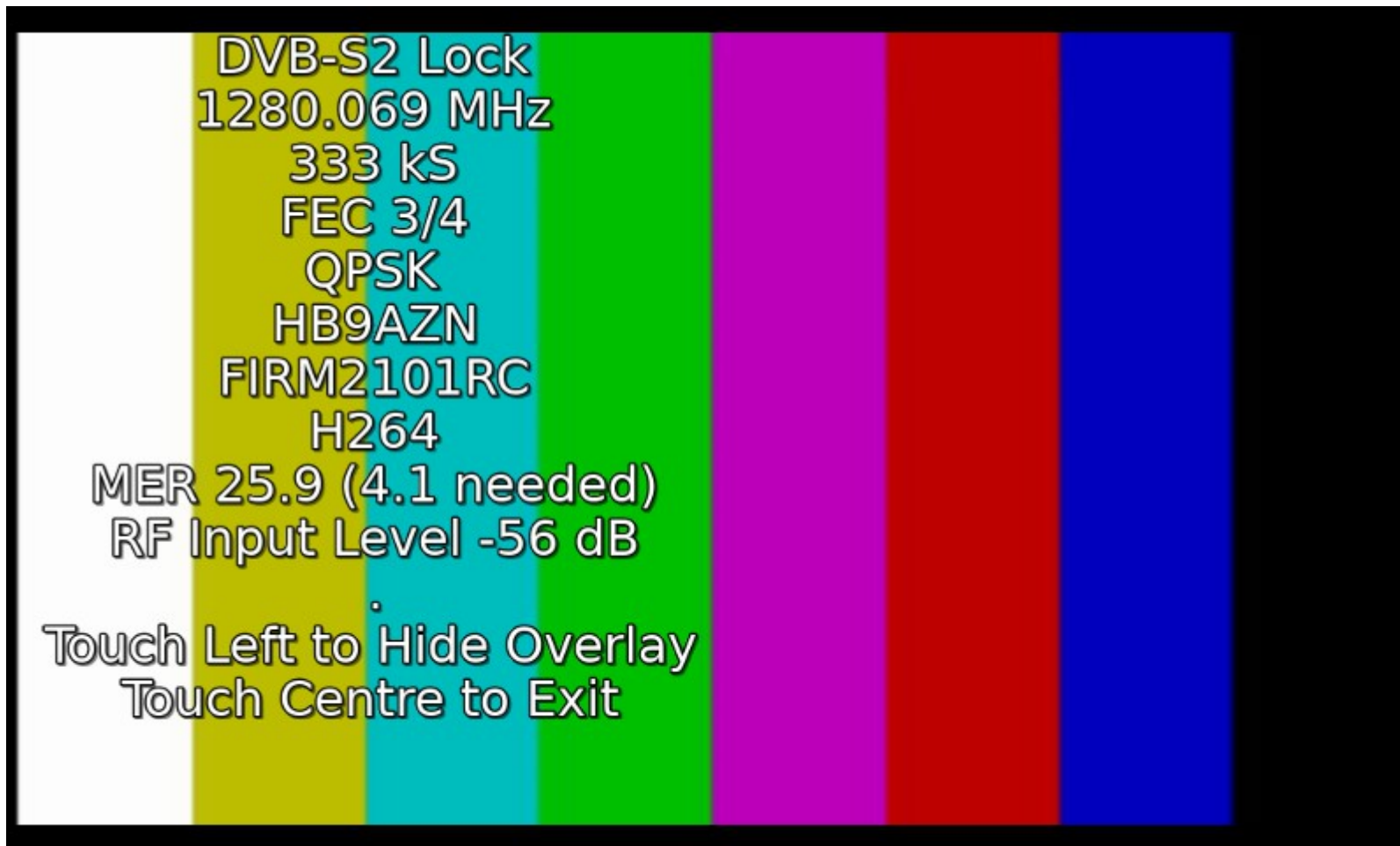
Terrestrial (a)		EXIT	Config	DVB-S/S2	
SR 2000	SR 1000	SR 500	SR 333	SR 250	SR 250 Keyboard
1071.0 MHz	146.5 MHz	437.0 MHz	1249.0 MHz	1255.0 MHz	
2395.0 MHz	2401.0 MHz	2403.0 MHz	2405.0 MHz	1280.0 Keyboard	
RECEIVE	RX with OMX Player	RX DVB-S2 No Scan	Play to UDP Stream	Band Viewer on RX freq	

Portsdown 4 Rx DATV - Configuration

Portsdown Terrestrial Receiver Configuration (46)

Tuner Timeout	Tuner Scan Width	TS Video Channel	Modulation DVB-S/S2	Show Touch Overlay
Sat LNB Offset		Terrestrial Input a	LNB Volts OFF	Audio out RPI Jack
UDP IP	UDP Port	Set Preset RX Freqs	Set Preset RX SRs	Exit

Portsdown 4 Rx DATV - Configuration



Portsdown 4 - Traffic

From HB9AZN	JN36MW	Bearing	Range
G1LPS	IO94EQ	329 deg	1053 km
M0DTS/P	IO94MJ	329 deg	1001 km
M0DTS/P	IO94DF	327 deg	1017 km
G8LES	IO91LC	312 deg	748 km
F9ZG	IN98JW	293 deg	653 km
G8ADM	IO91TO	317 deg	746 km
G8LES	IO91LC	312 deg	748 km
G0MJW	IO91IO	314 deg	795 km
G4CPE	IO91SW	319 deg	775 km
G3KKD	JO02CF	323 deg	766 km

Touch Screen to Continue

Portsdown 4 - Gestion système

Portsdown DATV Transceiver Configuration Menu 3				
		M1	M2	
Set Band Details	Set Preset Freqs	Set Preset SRs	Set Call, Loc & PIDs	Set ADF Ref Freq
Amend Sites/Bcns	Set RX LOs	Set Stream Outputs	Audio out USB dongle	Set USB Mic Gain
Lime Config	Jetson/LKV Config	Langstone Config	Pluto Config	Select Test Card
Check for Update	System Config	WiFi Config	TS IP Config	

Portsdown 4- Configuration système

BATC Portsdown 4 Information Screen

Software Version: Buster 202404160

IP: 192.168.1.154

CPU temp=52.1'C GPU temp=52.1'C

Temperatures and Supply voltage OK

TX 440.75 MHz SR 333 FEC 2/3

H264 coding from RPi Camera

Output to LimeSDR Mini

SD Card Serial: 0x72f20da2

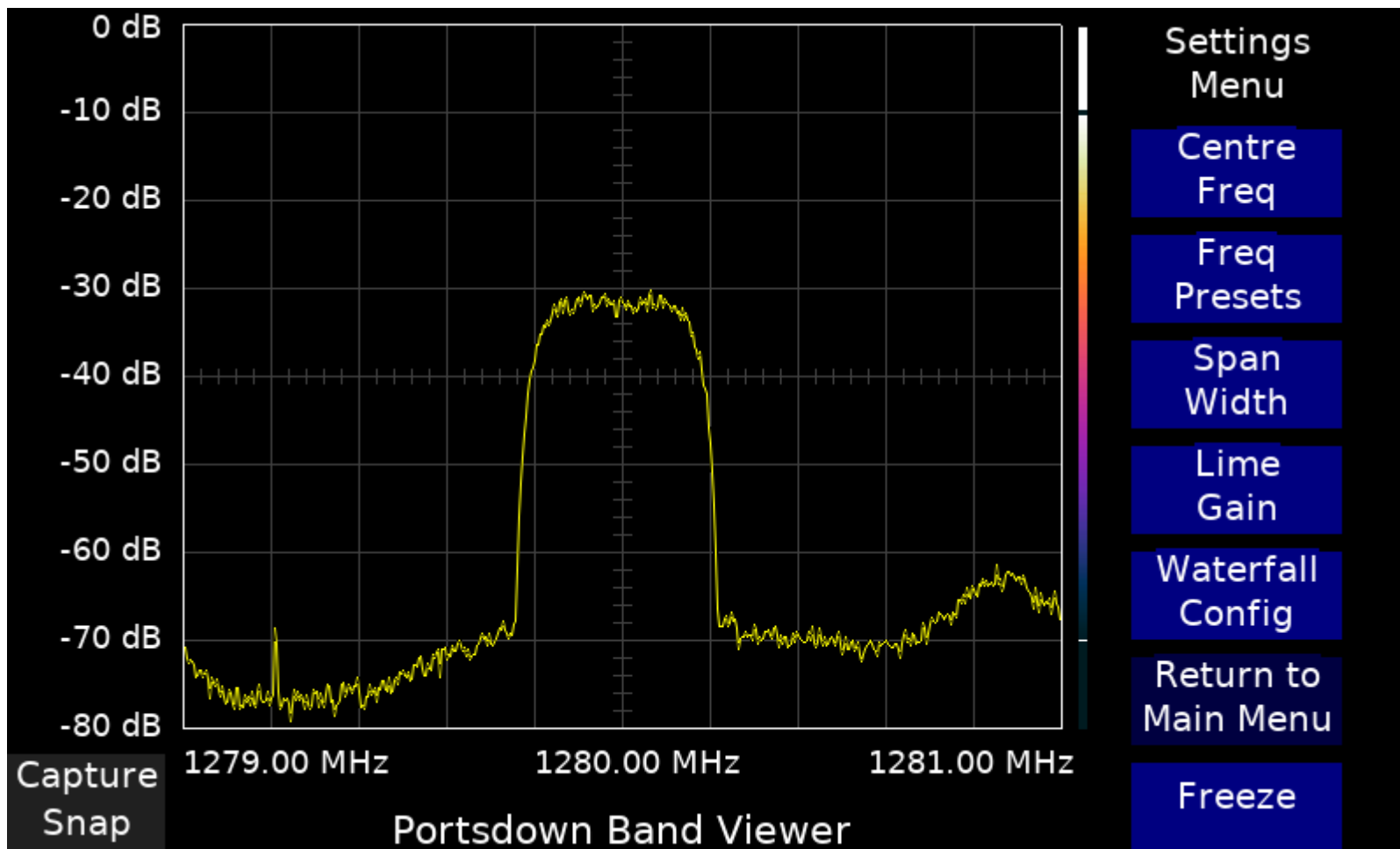
Audio Devices:

card 1: usbtv [usbtv], device 0: USBTV Audio [USBTV Audio Input]

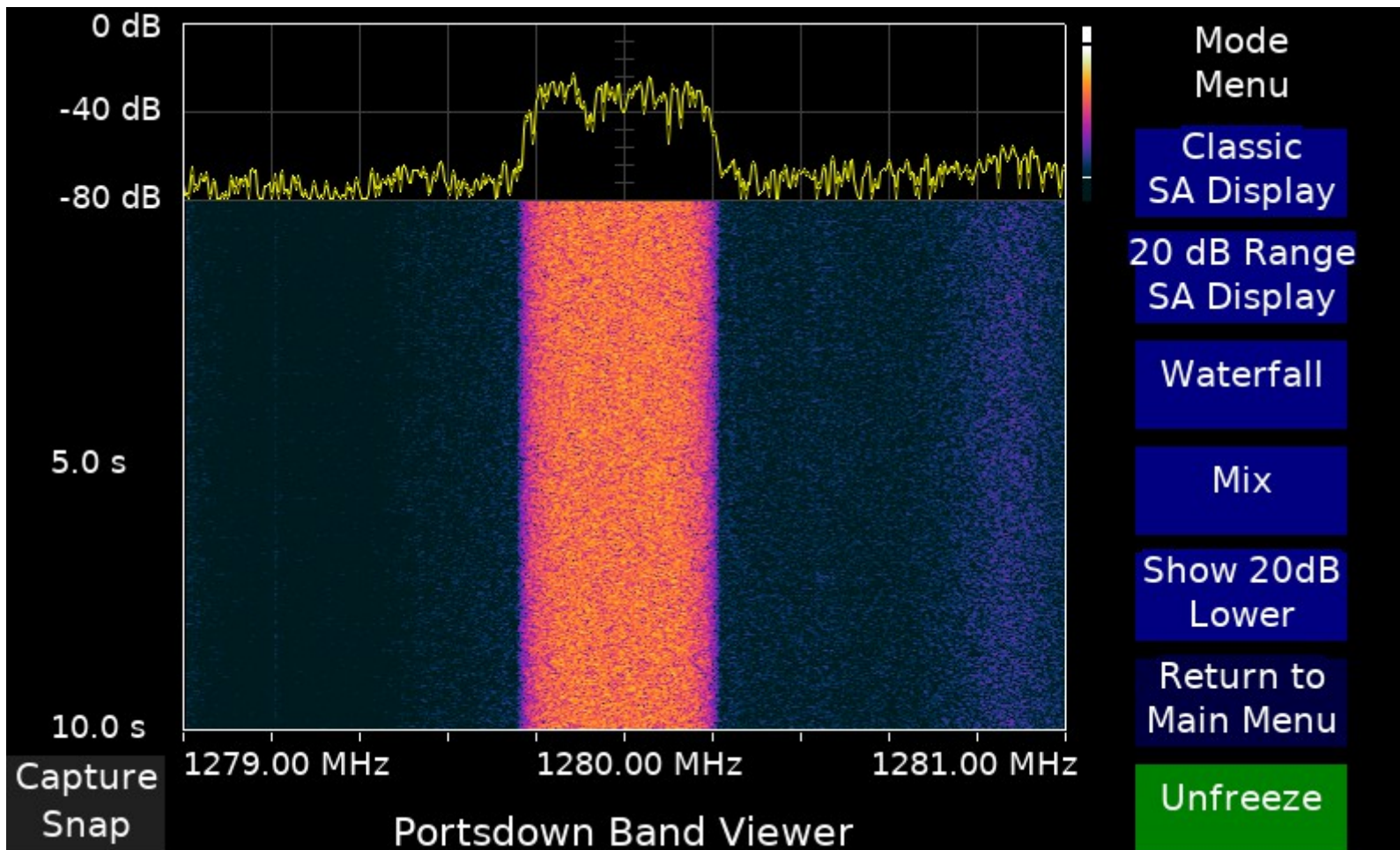
TS Bitrate Required = 440310

Touch Screen to Continue

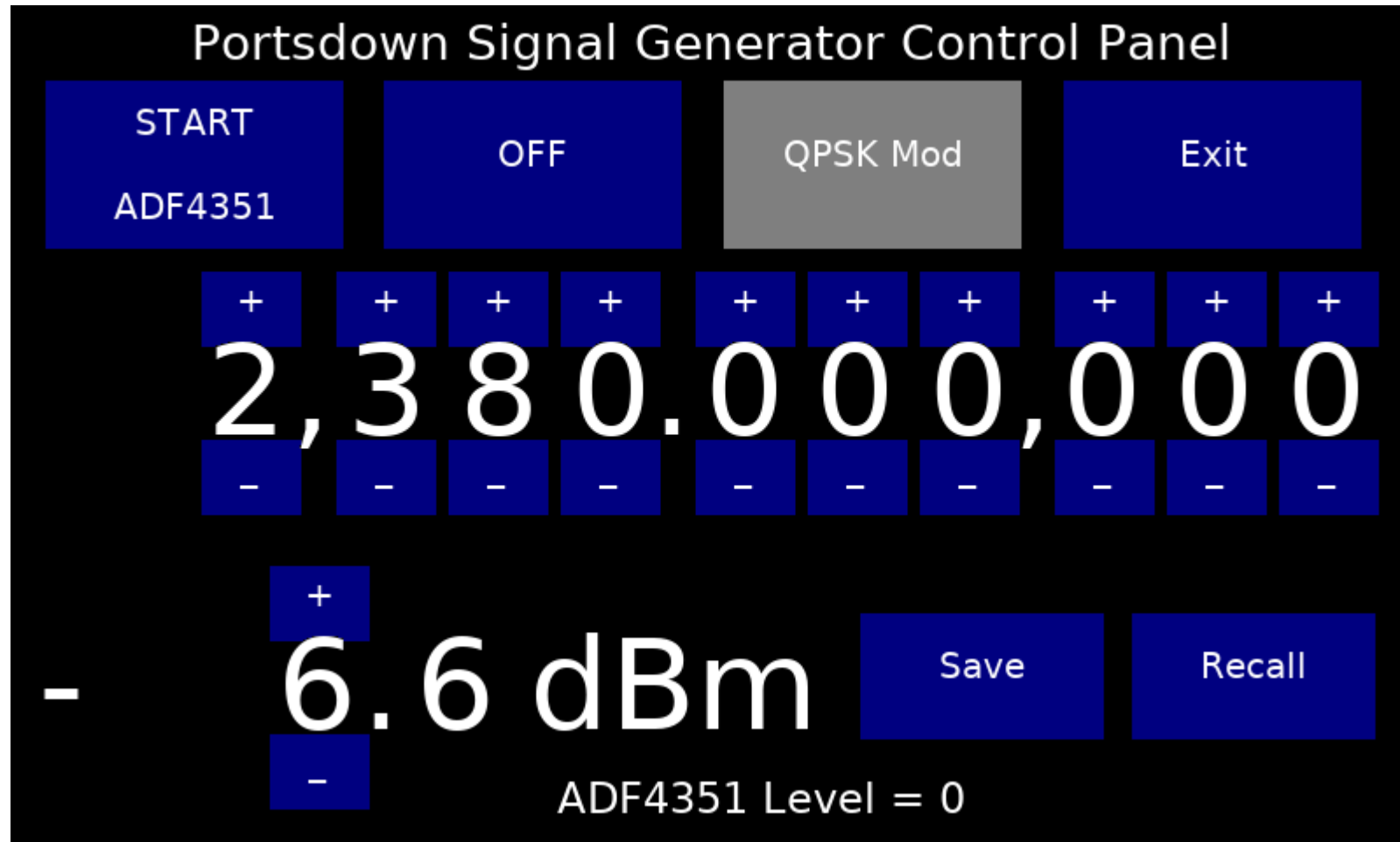
Portsdown 4 - Band Viewer



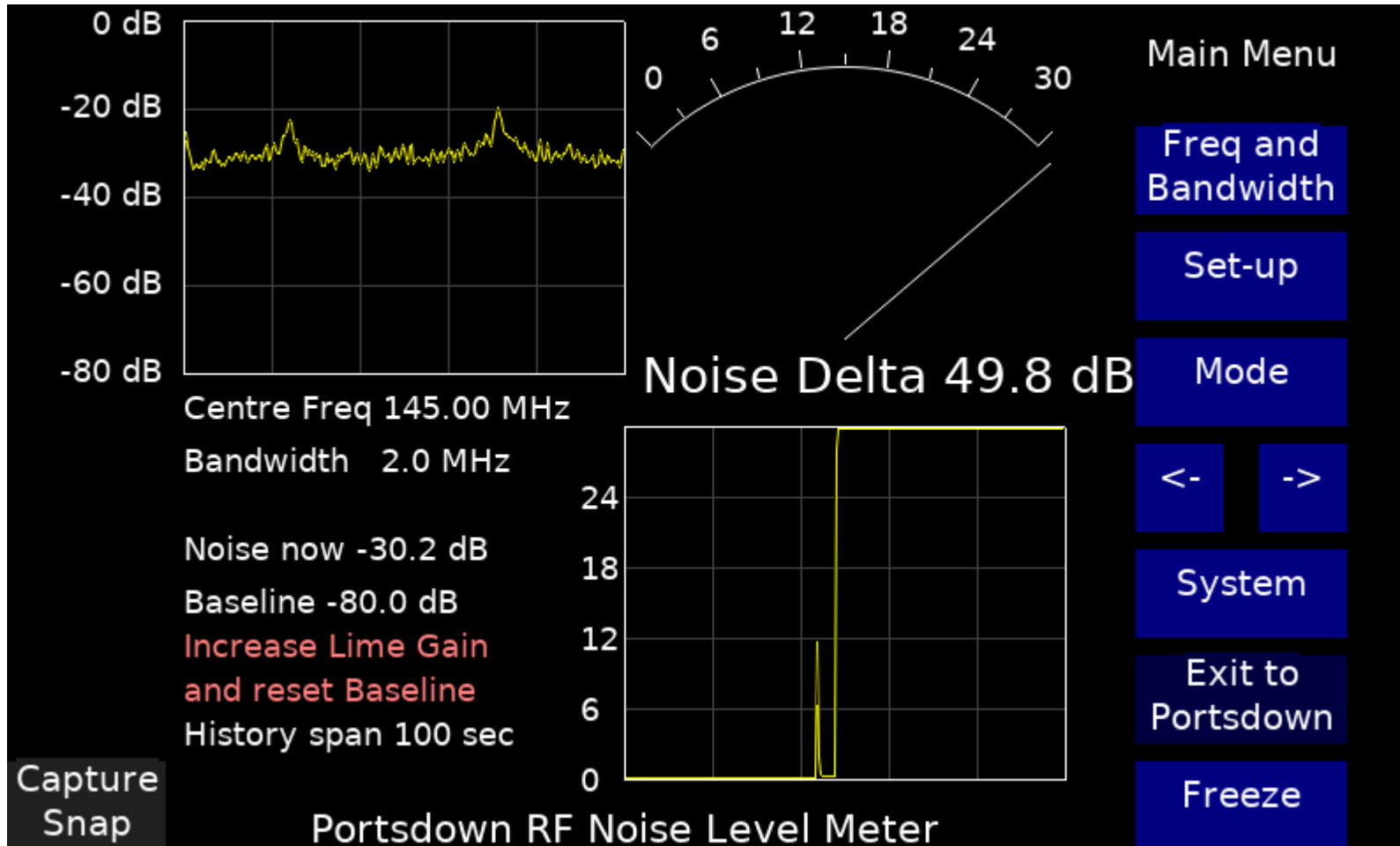
Portsdown 4 - Band Viewer



Portsdwn 4: Générateur de signal



Portsdown 4 - Noise Meter



Portsdown 4

Conclusions

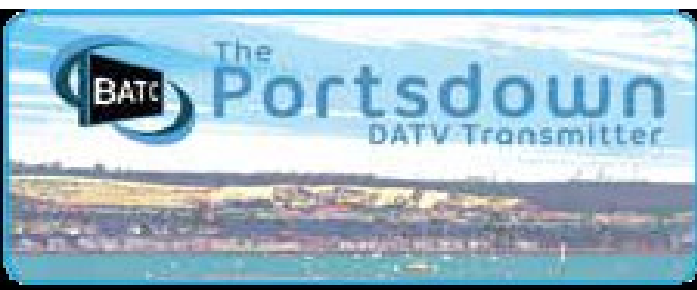


Avantages :

- Modulaire et polyvalent
- Compacte et autonome
- Simple à utiliser
- Mises à jour/nouvelles fonctions
- Matériel disponible
- Bien documenté
- Coûts raisonnables

Portsdown 4 – Documentation

- Site BATC
- Wiki, forum, github
- CQ-TV (Portsdown news)
- Hamradio 2023/Présentation G8GKQ
- Flyer SwissATV
- SwissATV Webpage



HB9AZN/25.4.2024/V6

