

Product Code: RX380
Revision: 01

VideoSys
Broadcast

Receiver- RX380

Product Manual



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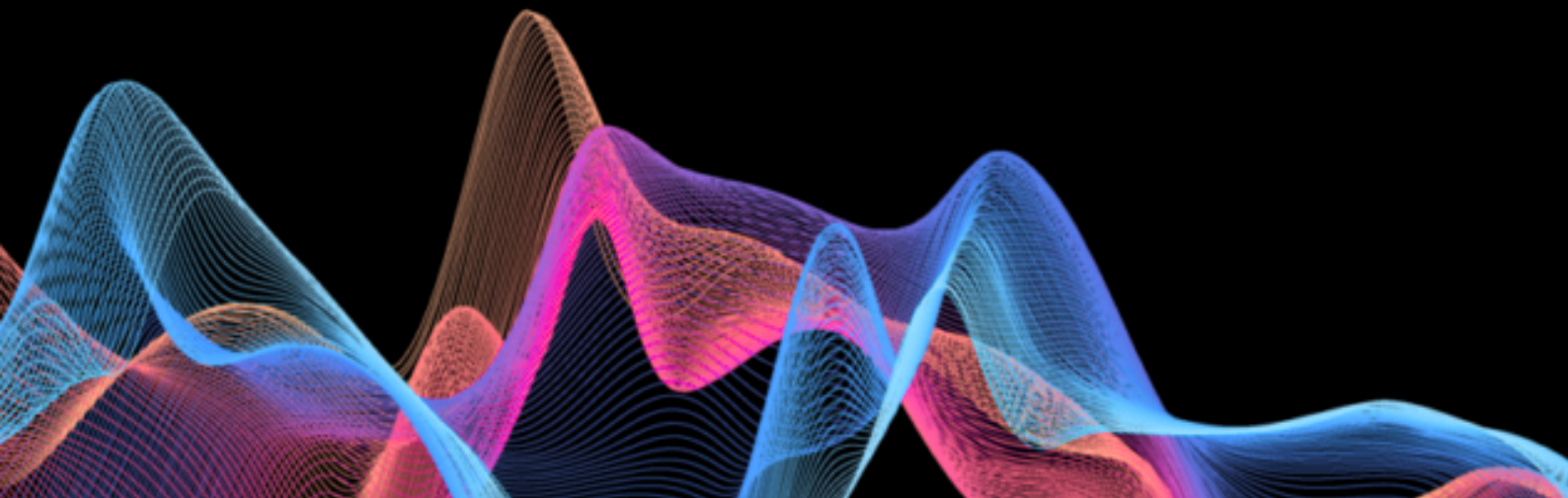
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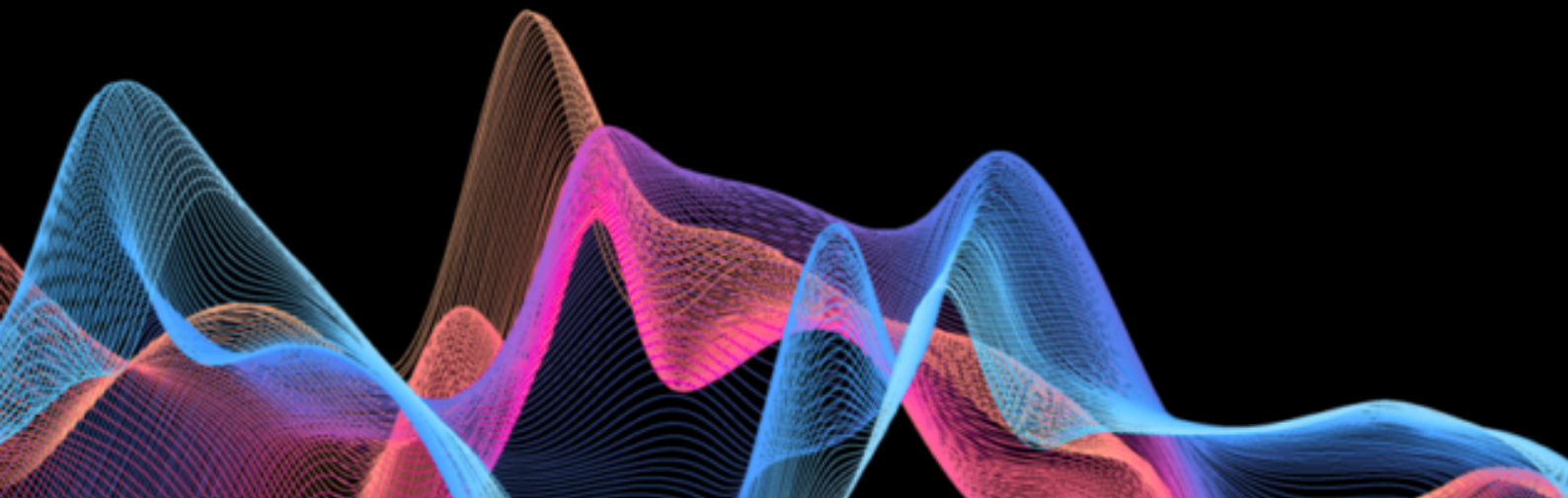
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PRODUCT DATA SHEET



RX 380 Receiver

The RX380 is a standalone COFDM diversity receiver with 8 RF inputs, which can demodulate both DVBT-T and UMLV signals. When paired with our wide range of external downconverters, the RX380 can be used to receive a broad range of frequencies (single and dual pedestal), and when paired with one of our HEVC decoders (e.g. DEC150) it is ideal for receiving 4K video feeds from our COFDM transmitter range (e.g. TX160).

With up to 4 separate demodulators and 2 independent ASI outputs the receiver is very versatile, and can handle any broadcast requirement. The ASI inputs allow for more receivers to be cascaded to achieve a 16 RF input diversity system in order to expand the range and coverage.

Key Features:

- 8-way MRC Diversity Receiver
- DVB-T Single/Dual Pedestal & UMLV compatible
- Up to 4 demodulators (licence feature)
- Automatic FEC, Guard Interval, and Polarity Selection
- Easy system setup and troubleshooting through an easy to use web interface
- Front-to-back cooling system



PRODUCT DATA SHEET

RX380

RECEIVER

VideoSys
Broadcast

Technical Specification:

Connectors

Power DC 12V	4-Pin XLR
RF In 1-8	BNC x 8
ASI In 1-2	BNC x 2
ASI Out 1-2	BNC x 2
Stream / Control	Ethernet RJ45 x 2
AUX	7-Pin Lemo x 1

Demodulation Modes

Single service	1 X 2 / 1 X 4 / 1 X 6 / 1 X 8 way demodulation
Four services	4 X 2 way demodulation
Two services	2 X 4 way demodulation

Streaming

ASI	Transport stream Packets switching via ASI and/or IP
IP Streaming	Streaming formats supported include UDP, RTP and SRT (with pass phrase), steaming to 90Mb/s is included.

Basic Specifications

Dimensions	W 220mm x D 358mm x H 44mm (1RU)
Weight	1.76Kg
Mounting	Side-by-Side mount kit available as an option
DC Input	12VDC nominal
Power consumption	50-80W depending on number of downconverters (up to 8-way)
Temperature range	-10°C to +50°
Humidity	Less than 85% non-condensing

Available accessories & add-ons (optional)

Enable Second, Third and Fourth Demodulator

Downconverters - various bands available

Filter - various bands available

Various frequencies available

Single Unit Rack Kit

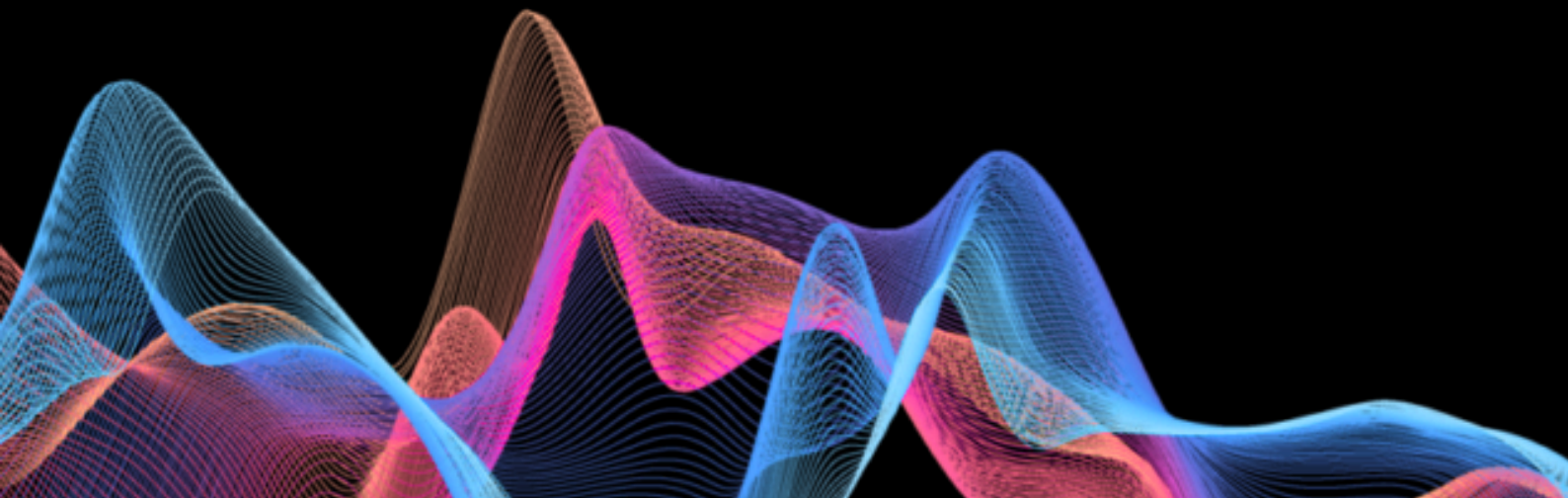
Dual Unit Rack Kit

Add IP Streaming

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MENU STRUCTURE



RX380 Menu Structure

Main Menu

Status Page:

Receiver Main Menu



Menus:

Status

Config

Demodulator 1 Config

Demodulator 2 Config

Demodulator 2 Config

Demodulator 4 Config

Packet Diversity

Controller System

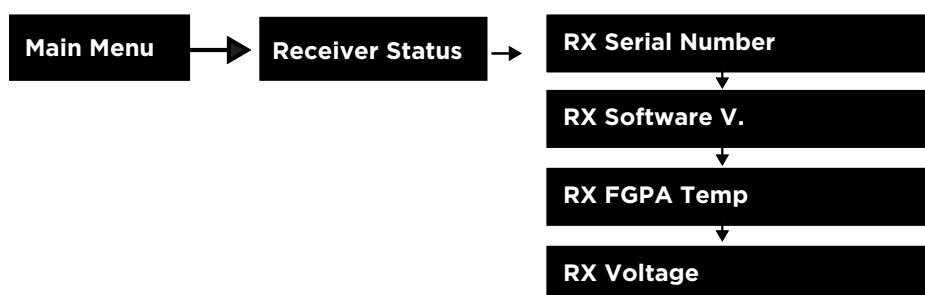
Controller Network

For systems which include a packet diversity license.

Status Menu

Status - Receiver

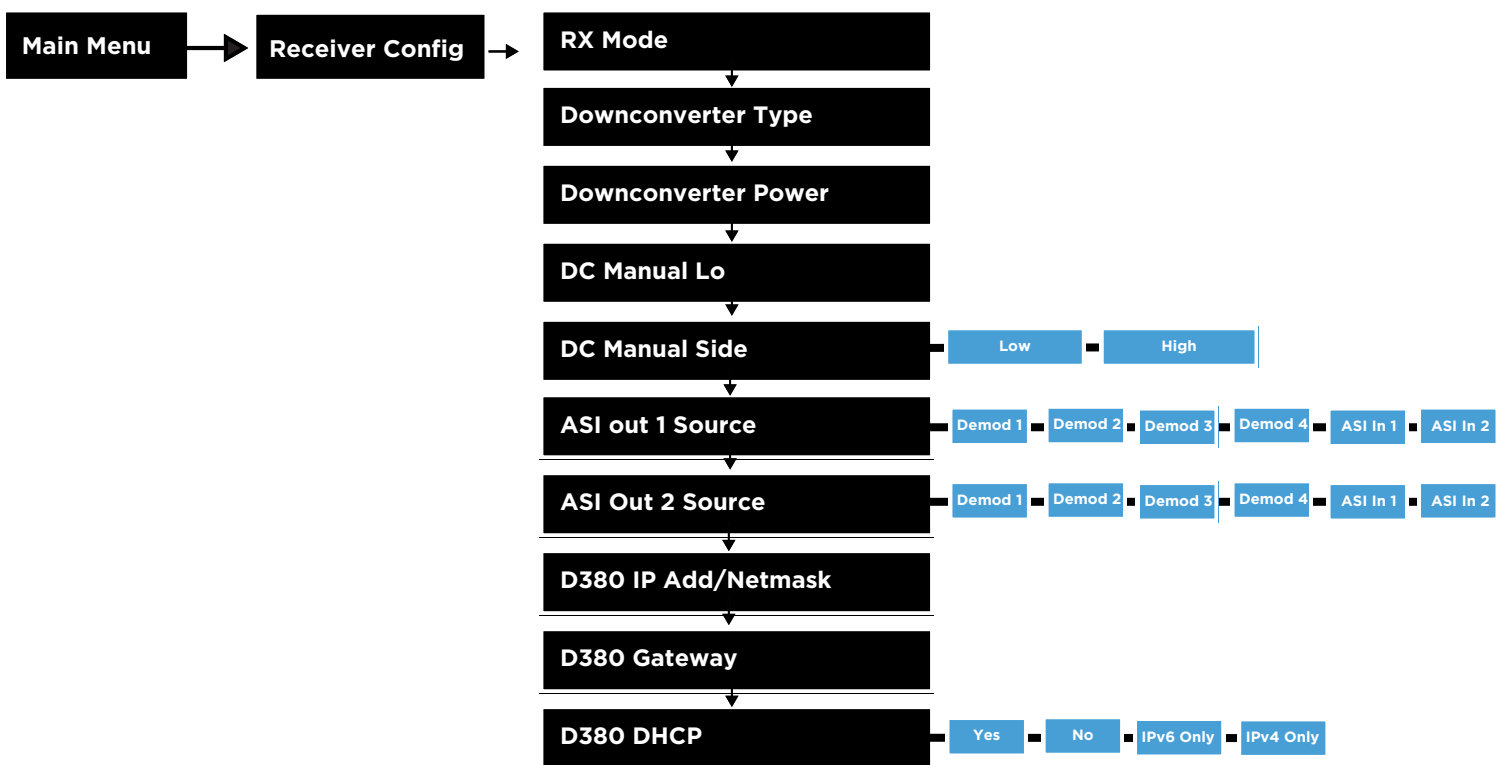
Home Menu



Config Menu

Receiver Config

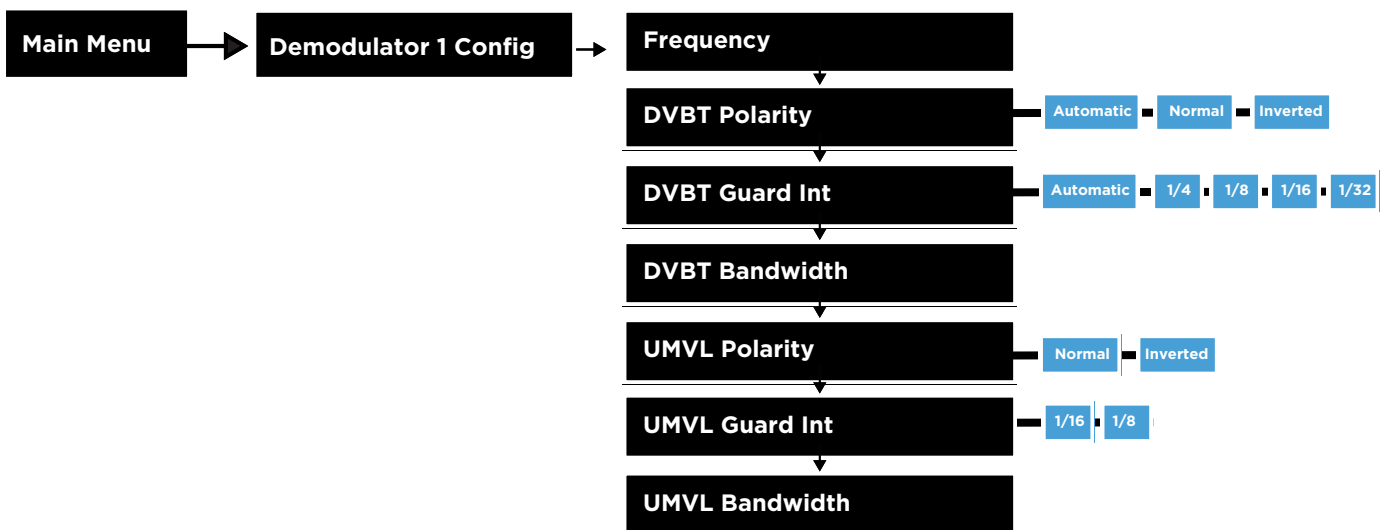
Home Menu



Demodulator 1 Config Menu

Demodulator 1 Config

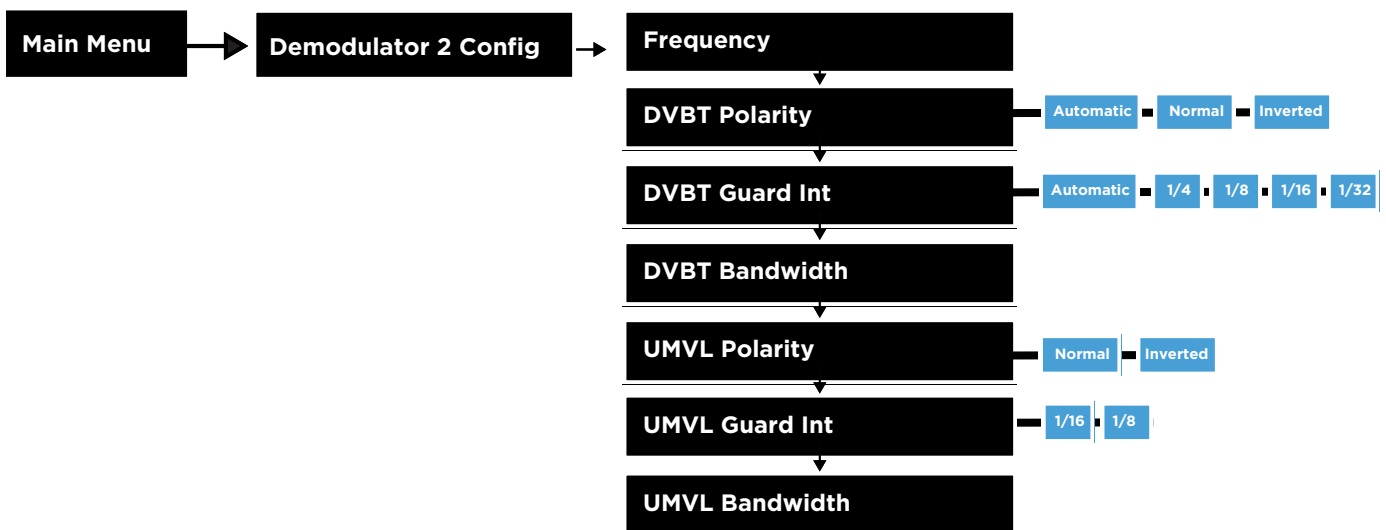
Home Menu



Demodulator 2 Config Menu

Demodulator 2 Config

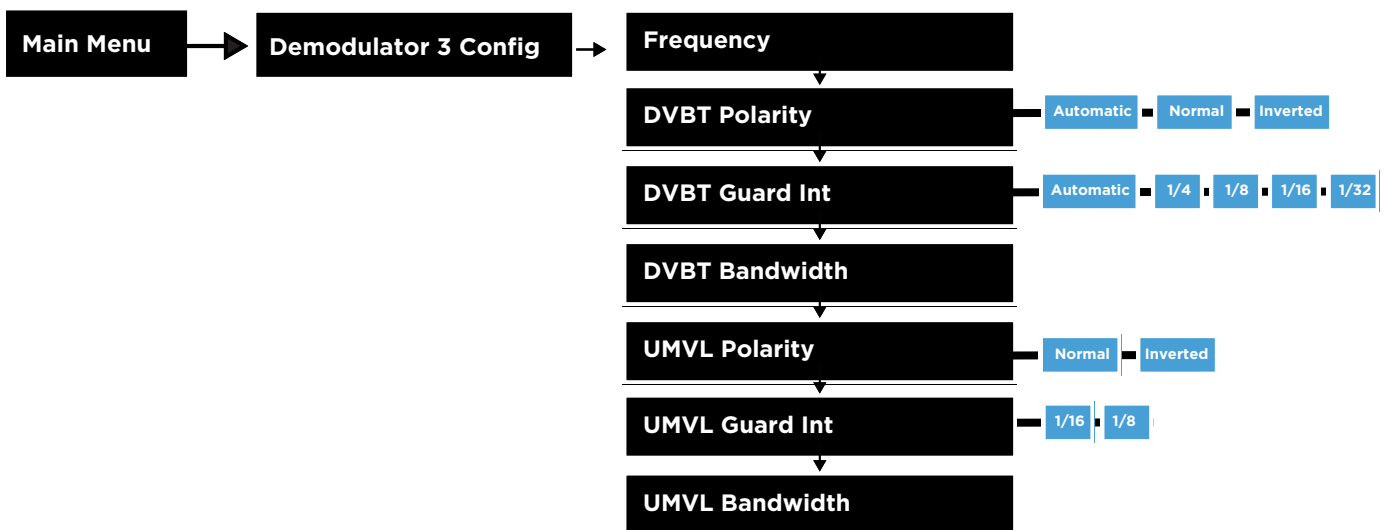
[Home Menu](#)



Demodulator 3 Config Menu

Demodulator 3 Config

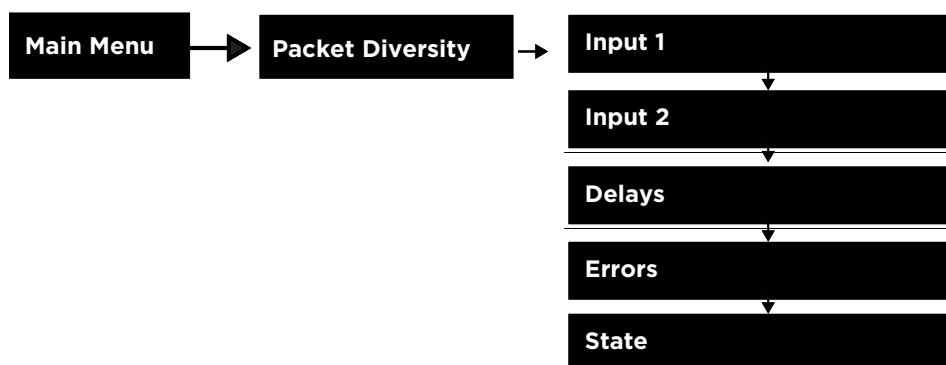
[Home Menu](#)



Packet Diversity Menu

Packet Diversity

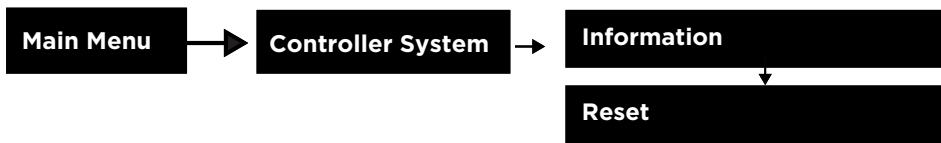
For systems which include a packet diversity license.



Controller System Menu

Controller System

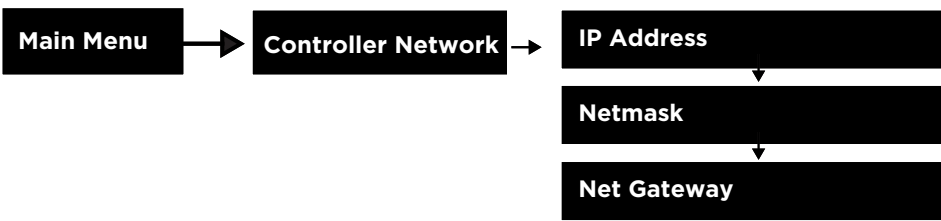
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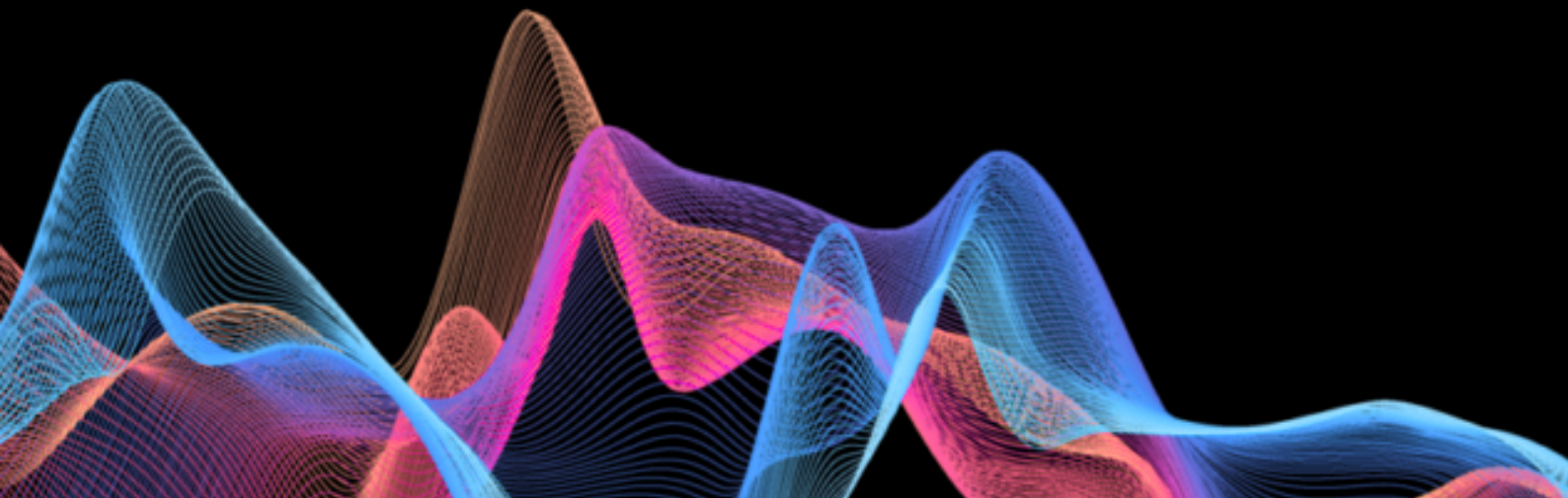
Controller Network Menu

Controller Network

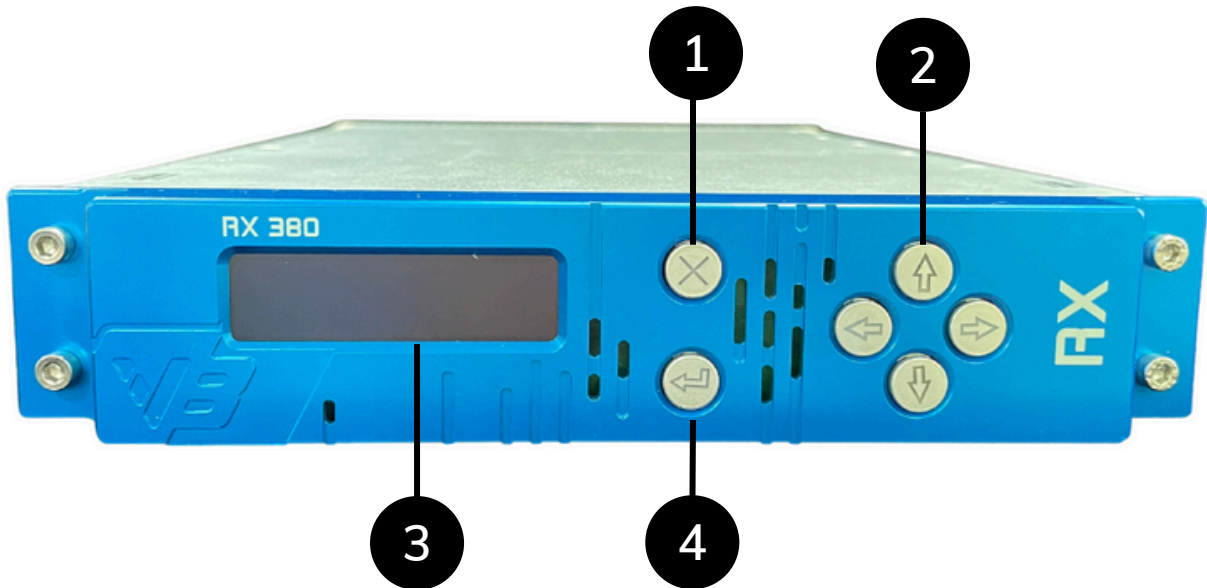
[Home Menu](#)



CONNECTOR GUIDE

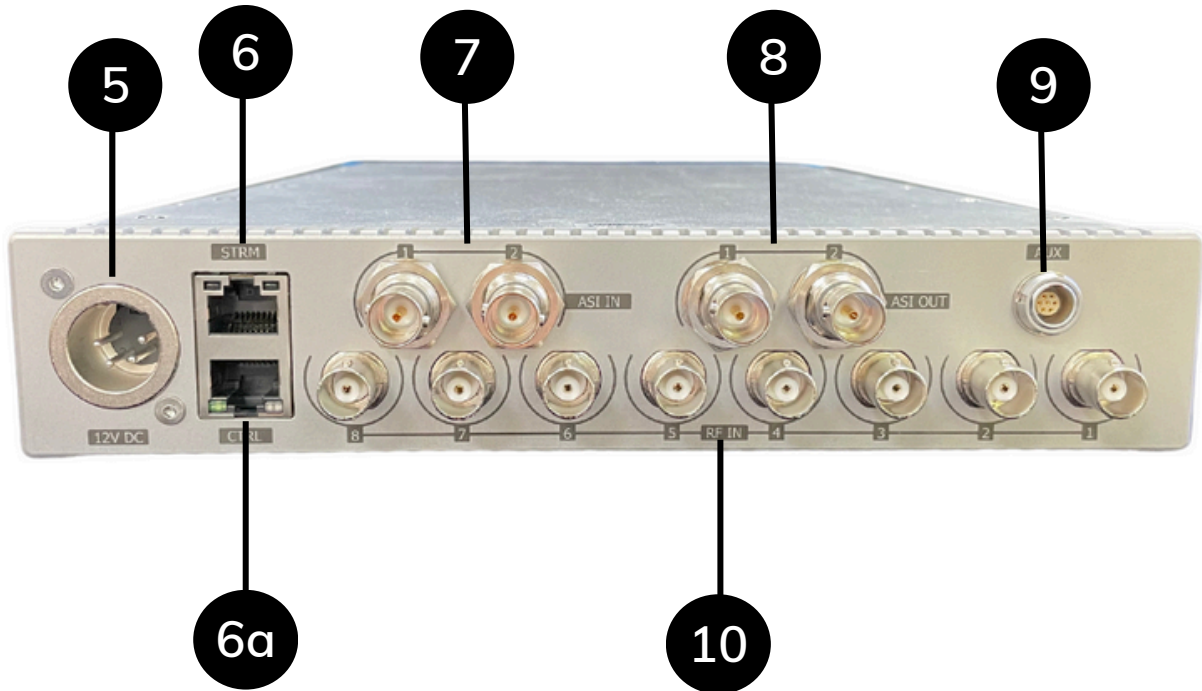


BROADCAST SYSTEM - RX-380 RECEIVER - FRONT PANEL



No	Item	Used for
1	OLED Display x 1	Displaying Fibre Level and Unit menus
2	Cancel Button x 1	The Up, Down, Left, Right, Enter and Cancel buttons can be used to navigate through the menus
3	Enter Button x 1	
4	Navigation x 4	

BROADCAST SYSTEM - RX-380 RECEIVER - BACK PANEL

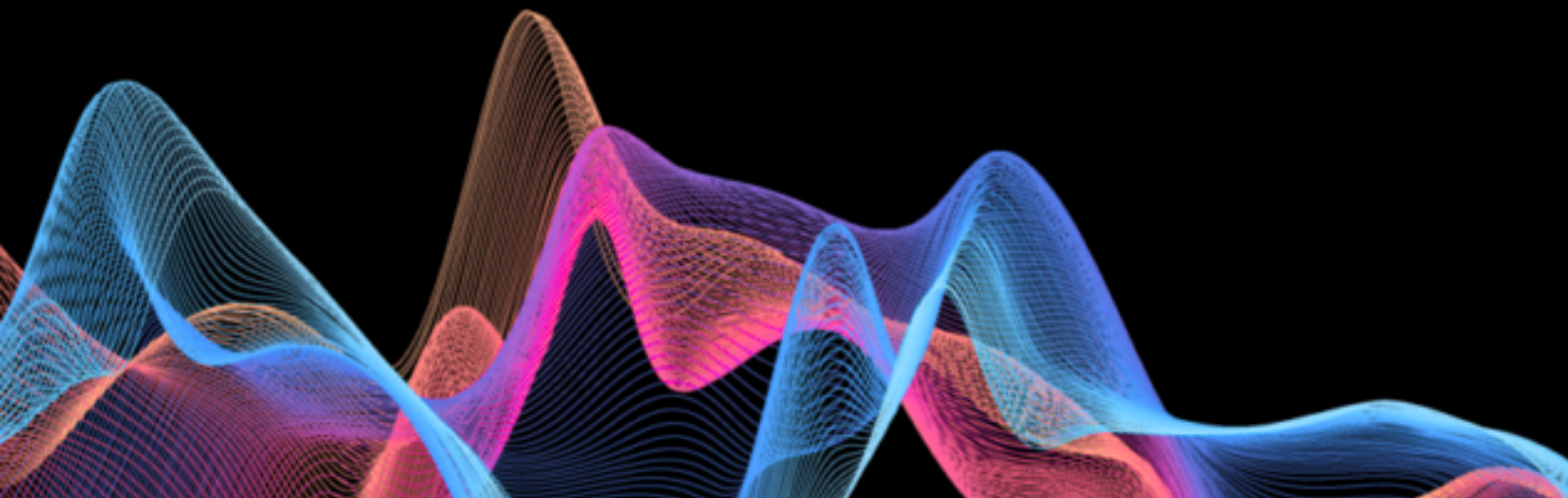


No	Item	Used for
5	4-Pin XLR labelled 12V DC	Local 12V power
6	RJ45 x 1 labelled STRM	Ethernet Connector for IP Streaming
6a	RJ45 x 1 labelled CTRL	Ethernet Connector for IP Streaming
7	BNC x 2 labelled ASI IN 1/2	ASI IN and ASI OUT Transport stream Packets switching via ASI
8	BNC x 2 labelled ASI OUT 1/2	

BROADCAST SYSTEM - RX-380 RECEIVER - BACK PANEL

No	Item	Used for
9	7-Pin Lemo x 1 labelled AUX	Auxiliary serial data RS232/RS485
10	BNC x 8 labelled RF IN 1 – 8	Connect the downconverter/antenna assembly

WEB PAGES



RX 380 Controller Web Page

1. RF status

VideoSys Broadcast Version: 1.0.RC1

RF Status | ASI Status | Configuration | Unit Info | Controller

Demodulator 1

Locked
2340.0 MHz

Demodulator 2

Disabled

Demodulator 3

Disabled

Demodulator 4

Disabled

Temperature

48.2°C

Demodulators								
Name	Freq (MHz)	Const.	FEC	Guard	Bitrate (bps)	Pre-Viterbi	Post-Viterbi	Lock
demodulator1	2340.0	16QAM	1/2	1/32	12064171	5595	0	yes

RF Inputs				
Port	Signal Level	SNR	SNR Status	
1	-64.0 dBm	24.0 dB	<div style="width: 100%; height: 10px; background-color: green;"></div>	
2	-64.0 dBm	18.1 dB	<div style="width: 100%; height: 10px; background-color: green;"></div>	
3	-100.0 dBm	0.0 dB	<div style="width: 0%; height: 10px; background-color: red;"></div>	
4	-100.0 dBm	0.0 dB	<div style="width: 0%; height: 10px; background-color: red;"></div>	
5	-99.0 dBm	0.0 dB	<div style="width: 0%; height: 10px; background-color: red;"></div>	
6	-100.0 dBm	0.0 dB	<div style="width: 0%; height: 10px; background-color: red;"></div>	
7	-100.0 dBm	0.0 dB	<div style="width: 0%; height: 10px; background-color: red;"></div>	
8	-100.0 dBm	0.0 dB	<div style="width: 0%; height: 10px; background-color: red;"></div>	

Default Controller(CTRL) IP Address
192.168.1.240

Default D360 board(STRM) IP Address
192.168.1.30

Note: The PC network adapter needs to be configured to manual IP config or the DHCP disabled and should add IP address within the broadcast domain of the units.

2. ASI status

VideoSys Broadcast Version: 1.0.RC1

RF Status | ASI Status | Configuration | Unit Info | Controller

ASI Input 1

No Lock
0 bps

ASI Input 2

No Lock
0 bps

ASI Output 1

Source: Demod 1
12065088 bps

ASI Output 2

Source: Demod 1
12065088 bps

3. Configuration Tab

Version: 1.0.RC1

RF Status ASI Status Configuration Unit Info Controller

Demodulator 1: 2340.0 MHz

Demodulator 2: Not licenced

Demodulator 3: Not licenced

Demodulator 4: Not licenced

DVB-T Settings: Polarity (Auto), Guard Interval (Auto), Bandwidth (8.0 MHz)

UMLV Settings: Polarity (Normal), Guard Interval (1/16), Bandwidth (8.0 MHz)

Unit Mode: DVB-T 1x8

ASI Out Source: Output 1 (Demod 1), Output 2 (Demod 1)

Downconverters: DCBGS-203255, DC Power (9.0V)

Manual LOs: LO Frequency (0), LO Side (Low)

Individual LOs:

Port	LO Frequency	LO Side	Invert
1	0 MHz	Low	No
2	0 MHz	Low	No
3	0 MHz	Low	No
4	0 MHz	Low	No
5	0 MHz	Low	No
6	0 MHz	Low	No
7	0 MHz	Low	No
8	0 MHz	Low	No

Apply & Save

In this section, you can set the type of downconverter, frequency, single or dual pedestal mode(according to the TX settings), and the ASI out settings.

Unit mode configuration is used to change from single to dual pedestal mode or vice versa. Make sure in dual pedestal config the downconverter1 is plugged into any of ports 1-4 and the downconverter2 into any ports 5-8.

4. Unit info

Version: 1.0.RC1

RF Status ASI Status Configuration Unit Info Controller

Licences:

4 Way Diversity	licenced
8 Way Diversity	licenced
Demodulator 1	licenced
Demodulator 2	unlicenced
Demodulator 3	unlicenced
Demodulator 4	unlicenced
IP Serial	unlicenced
Recording	unlicenced
IP Streaming	unlicenced

Receiver Information:

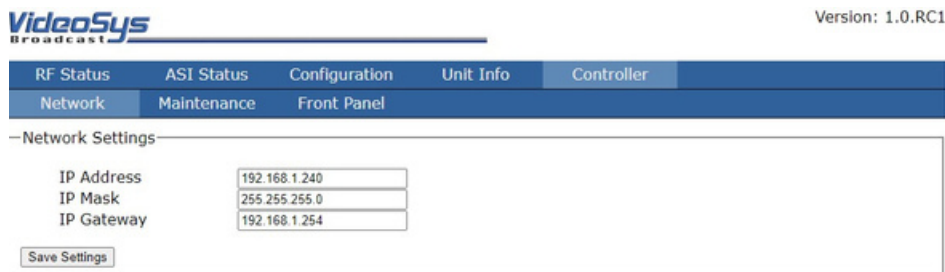
Software Version: onyx-d380_4.13.1
 Temperature: 48.7°C
 Voltage (V): 12.0
 Serial Number: 400200000171424604e222c5

Receiver Network Settings:

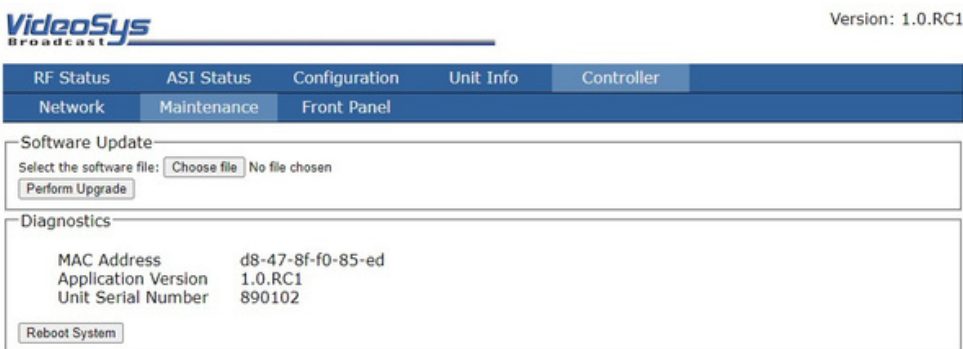
IP Addr/Netmask: 192.168.1.30/24
 IP Gateway:
 DHCP:
 Yes
 IPv6 Only
 IPv4 Only
 No

System information of the unit and D380 network settings.

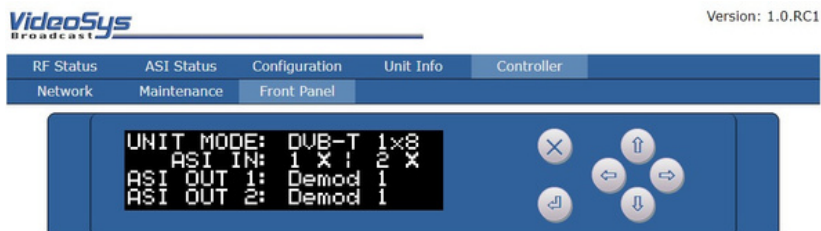
5.1 Controller Network Tab



5.2 Controller Maintenance Tab



5.3 Controller Front Panel Tab



This is the virtual front panel and can also use to configure the unit.

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