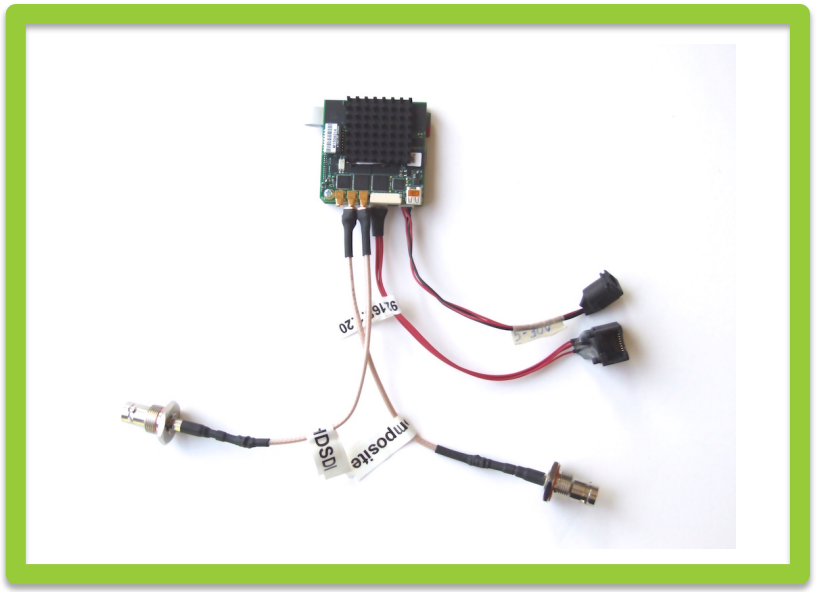


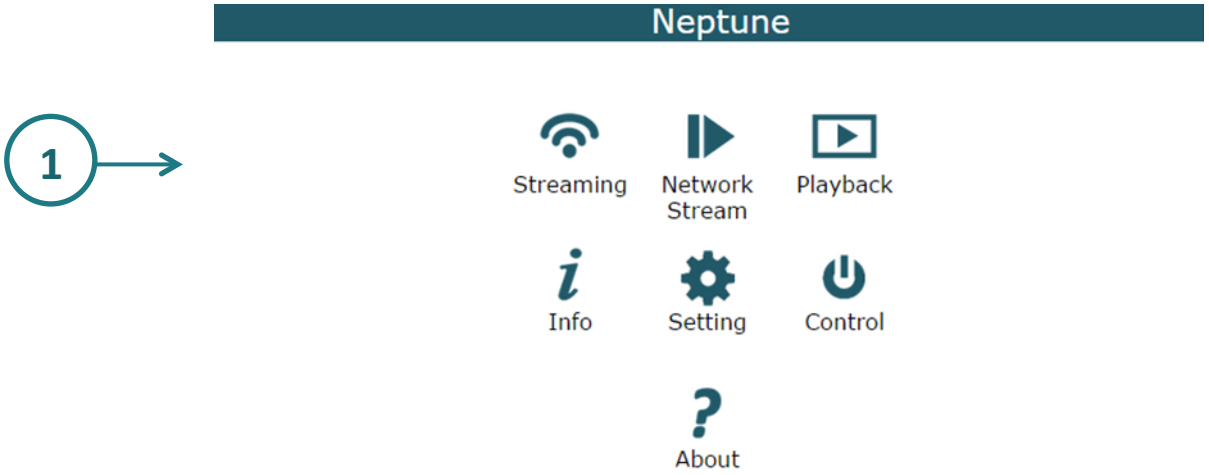
Web Interface-User Manual
UAV Micro
ANT-1772

November 2014
Rev 1.01

Contents

Home Page

1. Main menu



2. Status and Navigation- bottom menu.

Bottom Menu

1. Connection Status

Connected

When the board is connected to the browser and network.

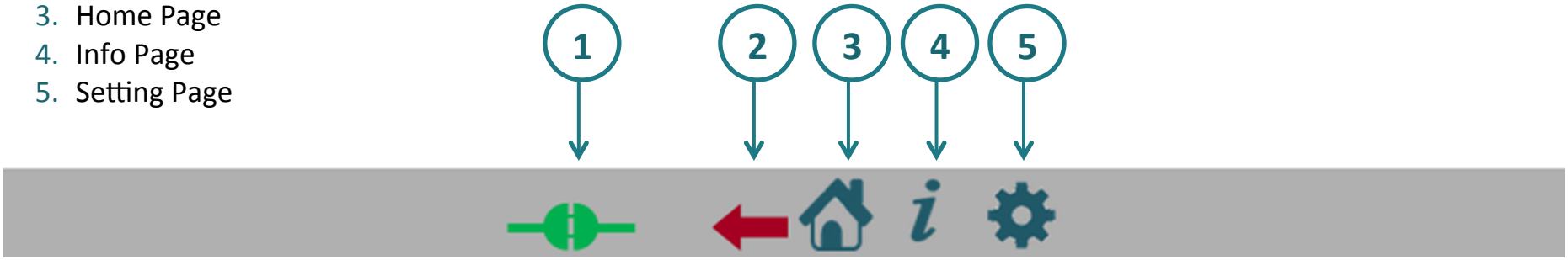
Waiting to Connect

When the board is trying to connect.

Disconnected

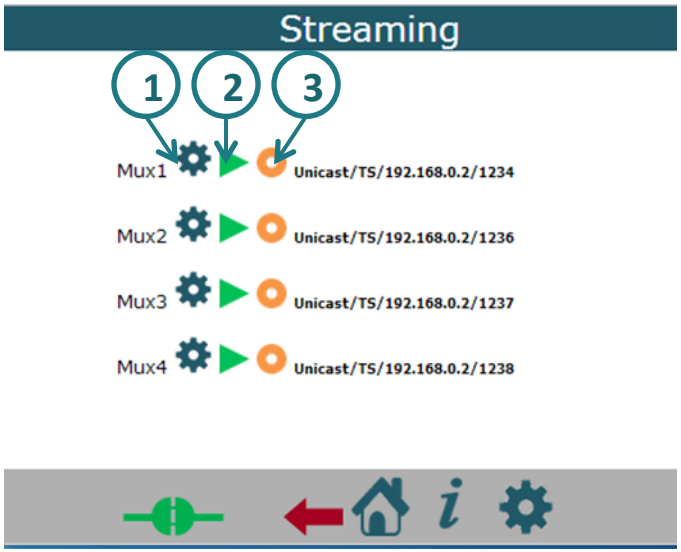
When the board is disconnected

2. Last Page
3. Home Page
4. Info Page
5. Setting Page



Streaming and Recording

On the streaming page you can enable streaming and/or recording.



Streaming Operation

1. If your board is a transmitter, select mux 1,2, 3or 4 and click on play button(2).
2. To stop streaming click on stop button Replaces Green Triangle when streaming

Streaming Configuration

To configure streaming click on setting button(1), (See the next page).
To configure **video** or **audio** see pages 15 and 16.

Recording Operation

1. Select mux 1-4 and click on record button(3), the button will start to flash.
2. To stop recording - click the flashing button.

Notice:
During the recording do not remove the flash device.

Recording Configuration

To configure **video** or **audio** see pages 15 and 16.

Camera

Before you start streaming/recording - make sure the camera is active in the info page (See page 11).
In case the camera is not active or you want to replace a camera, go to the system menu (See page 13) and set Camera CSI1/CSI2.

Streaming Configuration

1. **Mux:** Mux1/Mux2/Mux3/Mux4
2. **Auto:** Off/On

   Select “On” to auto stream when the system is turned on.

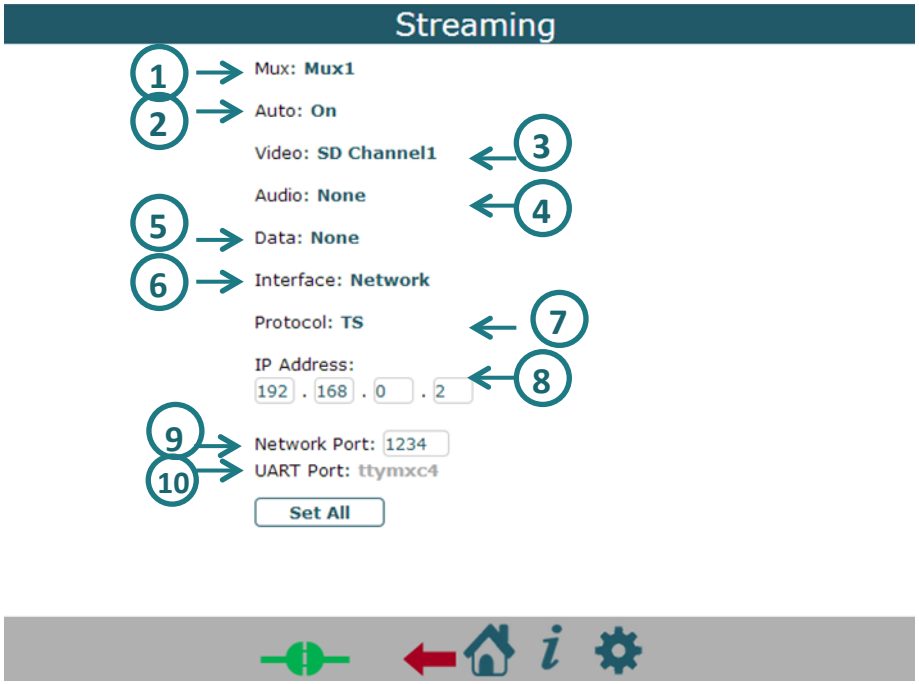
3. **Video:** None/video channel/Test

   To test the streaming without a camera, select “Test” and than click on the streaming play button ▶ Explanation on page 7.

4. **Audio:** None/Channel1/Channel2
5. **Data:** None/Data1/Data2
6. **Interface:** Network/Data Clock/UART
7. **Protocol:** Private/TS/RTP/RTSP

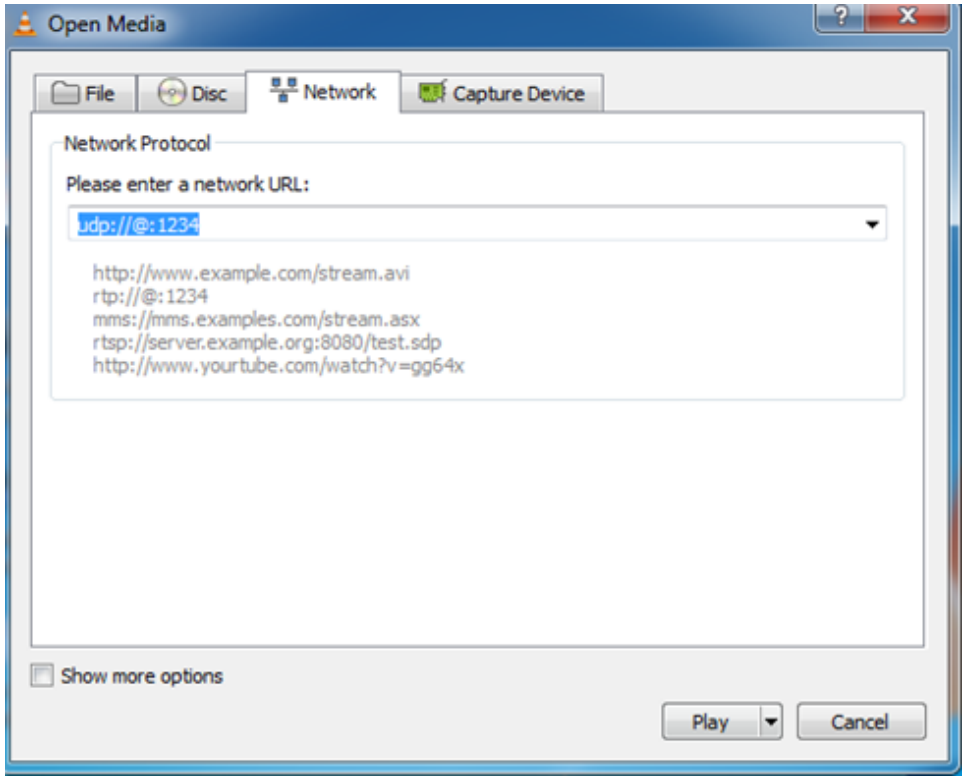
   Using the **RTSP** protocol the user needs to enable the RTSP server, because the transmition IP and ports and are selected by the client.

8. **IP Address** (destination address)
9. **Port** (destination port)
10. **UART Port** (only for audio)



Test Streaming

To test streaming, open VLC and Enter the stream URL in VLCs "Open Network" . If the test is successful – you will see a color bar on the VLC screen.



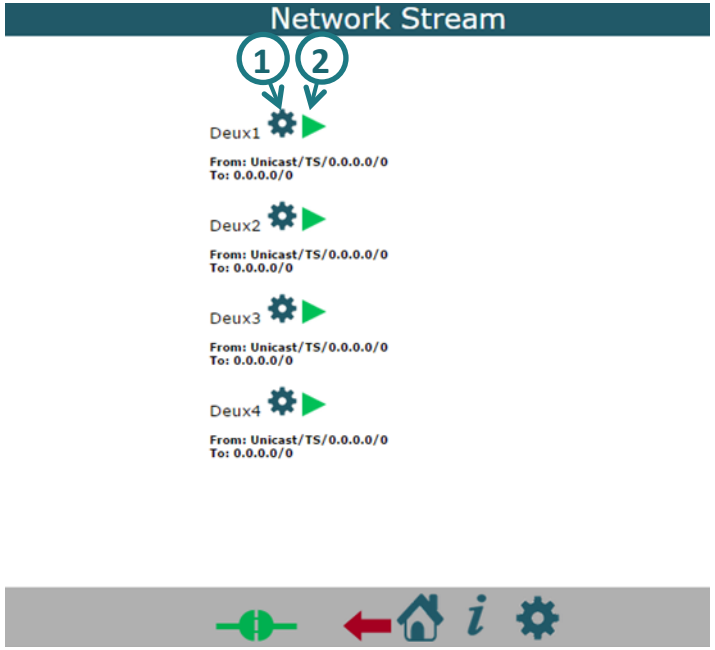
Network Stream

Network Stream Operation

1. If this board is a receiver, in player page select mux 1-4 and click on play button(2) Green Triangle.
2. To stop the player click on stop button ■ Which replaces the green triangle when playing

Network Stream Configuration

To configure the player click on setting button(1), (See the next page for Configuration).



Player Configuration

General:

1. **Demux:** Demux1/Demux2/Demux3/Demux4
2. **Auto**: Off/On
3. **Delay** (0 - 1000 in MS) To create constant bitrate when narrow network.

From:

4. **Interface:** Network/Data Clock/UART
5. **Protocol:** Private/TS/RTP/RTSP
6. **Net Mode:** Unicast/Multicast
7. **IP Address**
8. **Port**
9. **UART Port** (if the interface is UART)

To:

10. **Base IP Address**
11. **Base Port**
12. **Demux Mode:** Separated/Combined

Video

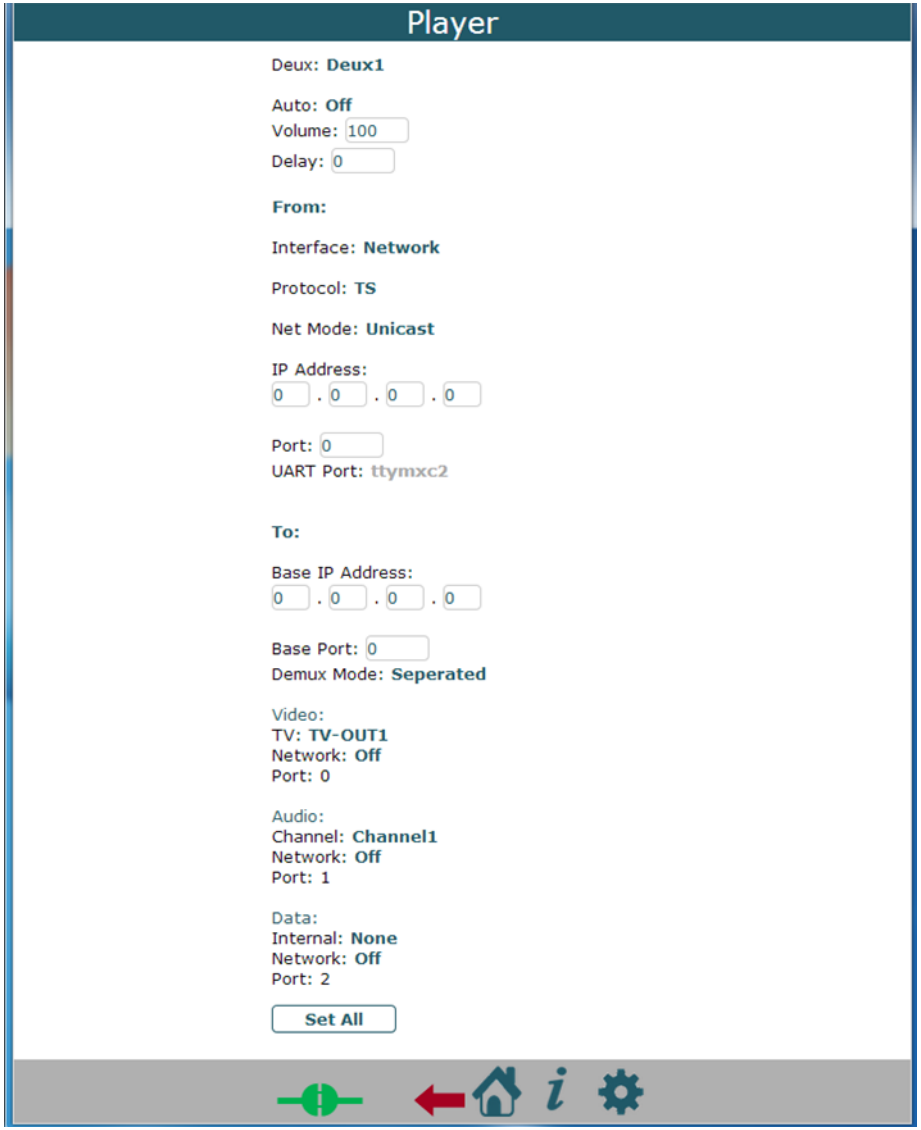
13. **TV:** TV-Out1/ TV-Out2/HD-Out1/HD-Out2
14. **Network:** Off/On
15. **Port**

Audio

16. **Channel:** Channel1/Channel2
17. **Network:** Off/On
18. **Port**

Data

19. **Internal:** None/Data0/Data1
20. **Network:** Off/On
21. **Port**



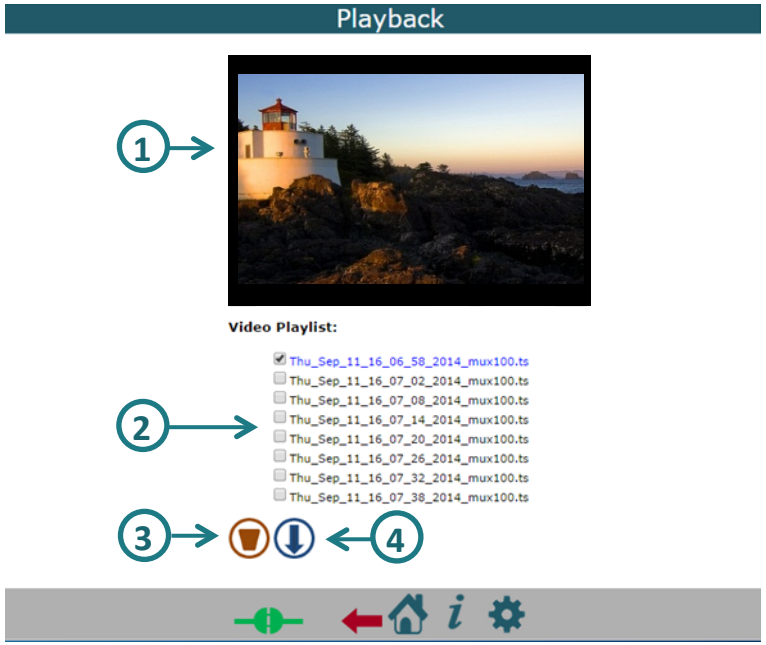
Playback

In the playback page you can play, delete or download recorded files.
The recorded files on this board will appear in Video Playlist (2).

Playback:
Click on the file you want to playback. The file will play on the screen (1).

Delete:
Select a file or multiple files and click on the delete button(3).

Download:
Select a file or multiple files and click on the download button(4).



Information

In the info page you will see details about this board:

1. **Board**

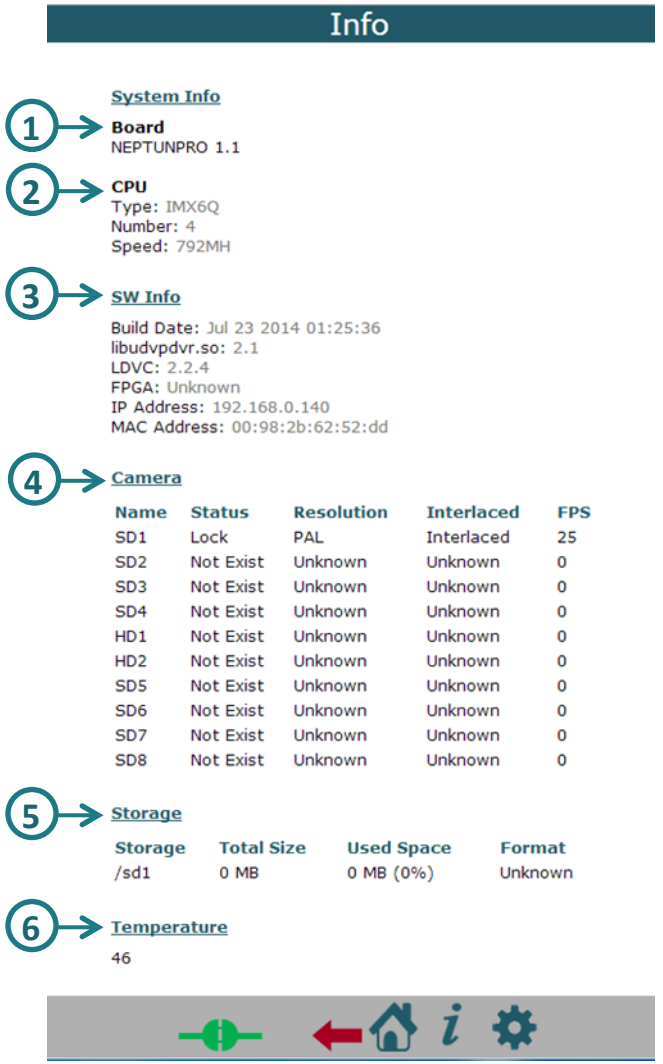
2. **CPU**
   Type
   Number
   Speed

3. **SW Info**
   Built Date (date & time)
   libudvpdvr.so (version)
   LDVC (version)
   FPGA
   IP Address
   MAC Address

4. **Camera**
   This menu show the status of every camera:
   Status: Not Exist/Unlock/Lock
   Resolution: Unknown/PAL/NTSC/1920X1080/1280X720/1440X487/1440X507
   Interlaced: Unknown/Noninterlaced/Interlaced
   FPS(value)

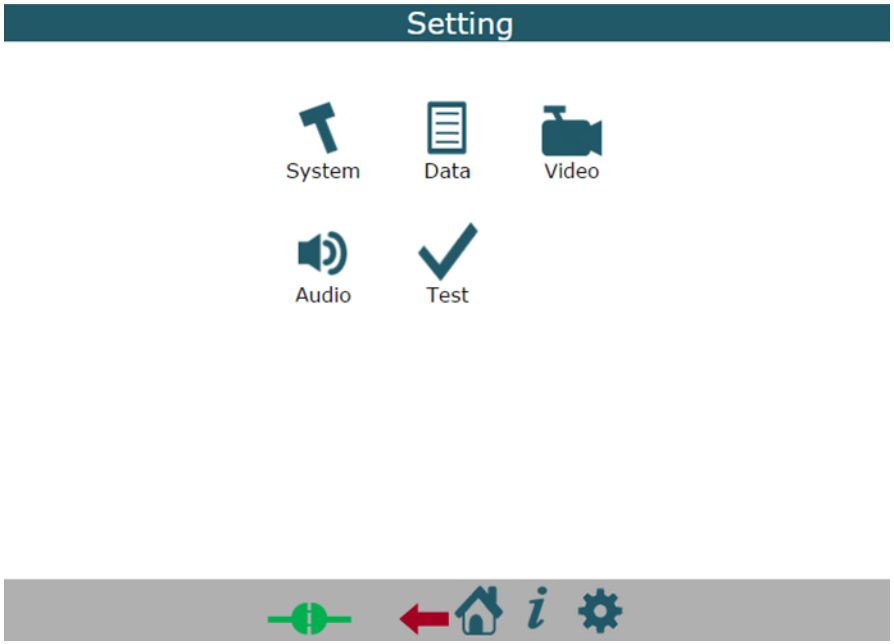
5. **Storage**
   This menu show the storage information of every device:
   Total Size, Used Space and format.

6. **Temperature**
   This menu show the temperature of the board.



Setting

In the setting page you have links to the settings pages for various functions.



System

Data

Video

Audio

Test

Descriptions are on the following pages

System Configuration

1. **Config Number:** CFG1/CFG2/CFG3/CFG4

2. **Mode:** Idle/Transmitter/Receiver

3. **Operation State:** Idle/Operational/Test Mode

4. **Camera CSI1/CSI2** (list of cameras)

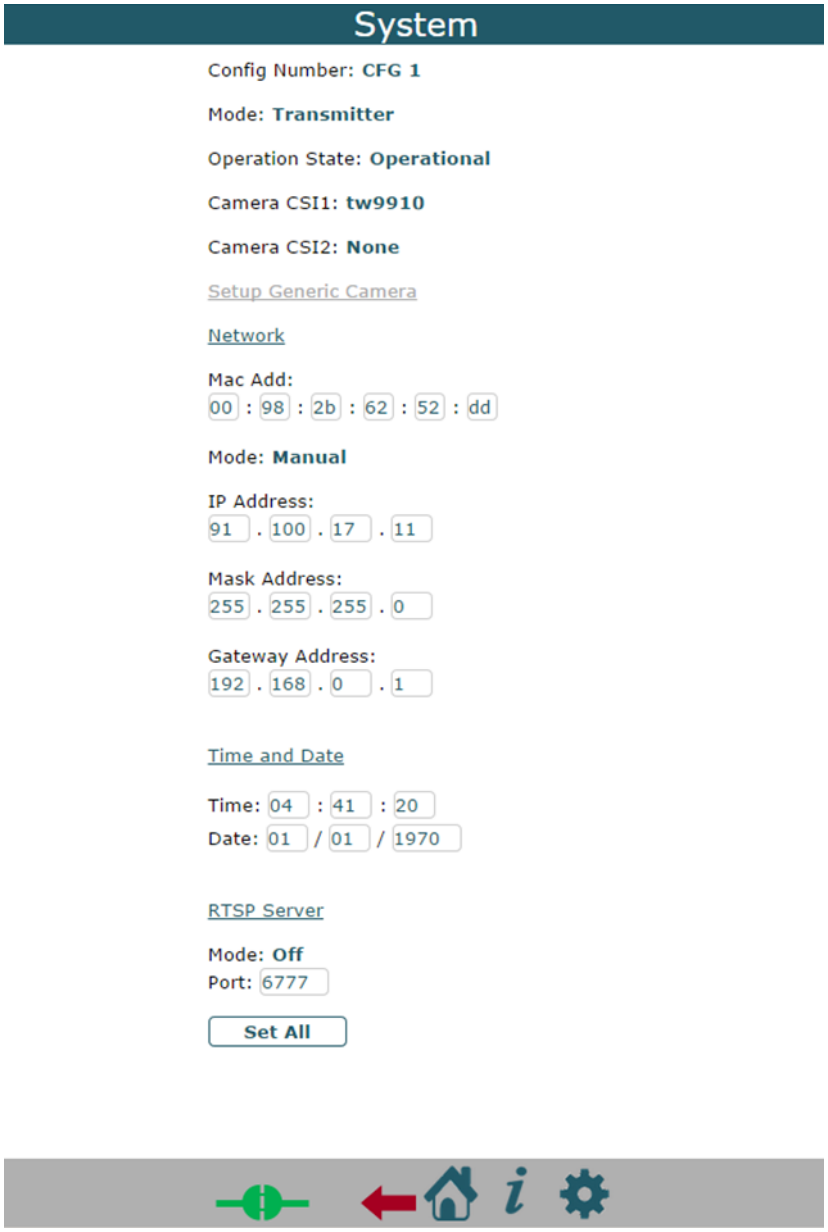
- Only for generic camera-

5. Setup Generic Camera
   CSI: CSI1/CSI2
   X (1 - 255)
   Y (1 - 255)
   w (1 - 255)
   H (1 - 255)
   Field Mode: Progressive/Interlaced 0/Interlaced 1
   Interface: bt.656/bt.1120/External Sync
   Bus Width: 8 bits/16 bits
   Pixel Format: UYVY/VYUY/YVYU/YUYV

6. Network
   Mac Address
   mode: DHCP/Manual
   - Only for Manual-
   IP Address
   Mask Address
   Gateway Address

7. **Time and Date**

8. **RTSP Server**
   Mode: Off/On
   Port

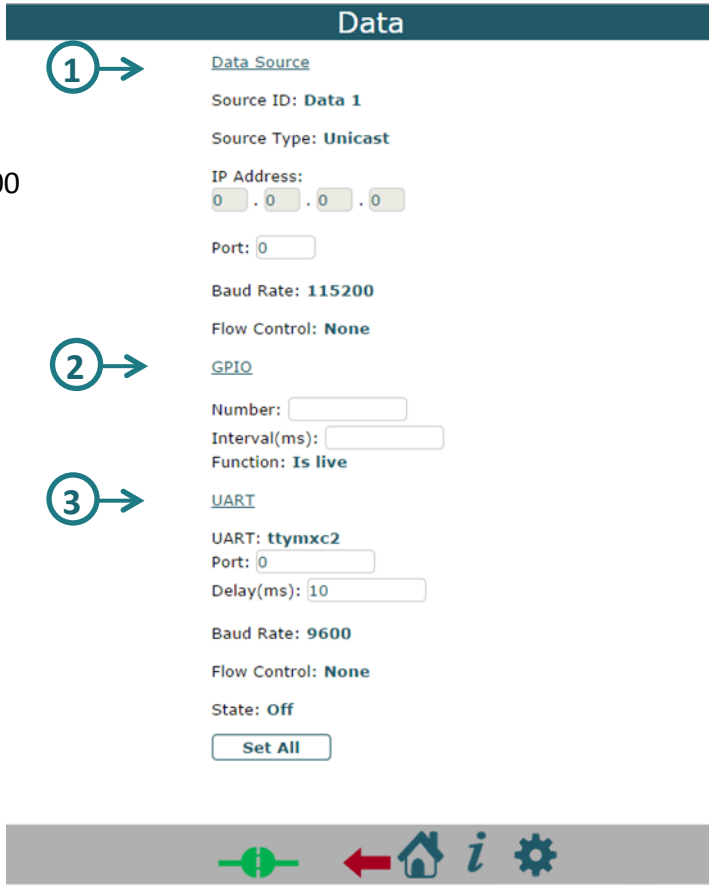


Data Configuration

1. Data Source
   Source ID: Data 1/Data2
   Source Type: Unicast/Multicast/UART
   IP Address
   Port
   Baud Rate: 2400/4800/9600/19200/38400/57600/115200/230400
   Flow Control: None/Hardware

2. GPIO
   Number - According to the hw
   Interval
   Function (from list)

3. UART
   UART
   Port
   Delay
   Baud Rate: 9600/19200/38400/57600/115200
   Flow Control: None/Hardware
   State: Off/On



Video Configuration

1. **Mux:** Mux1/Mux2/Mux3/Mux4

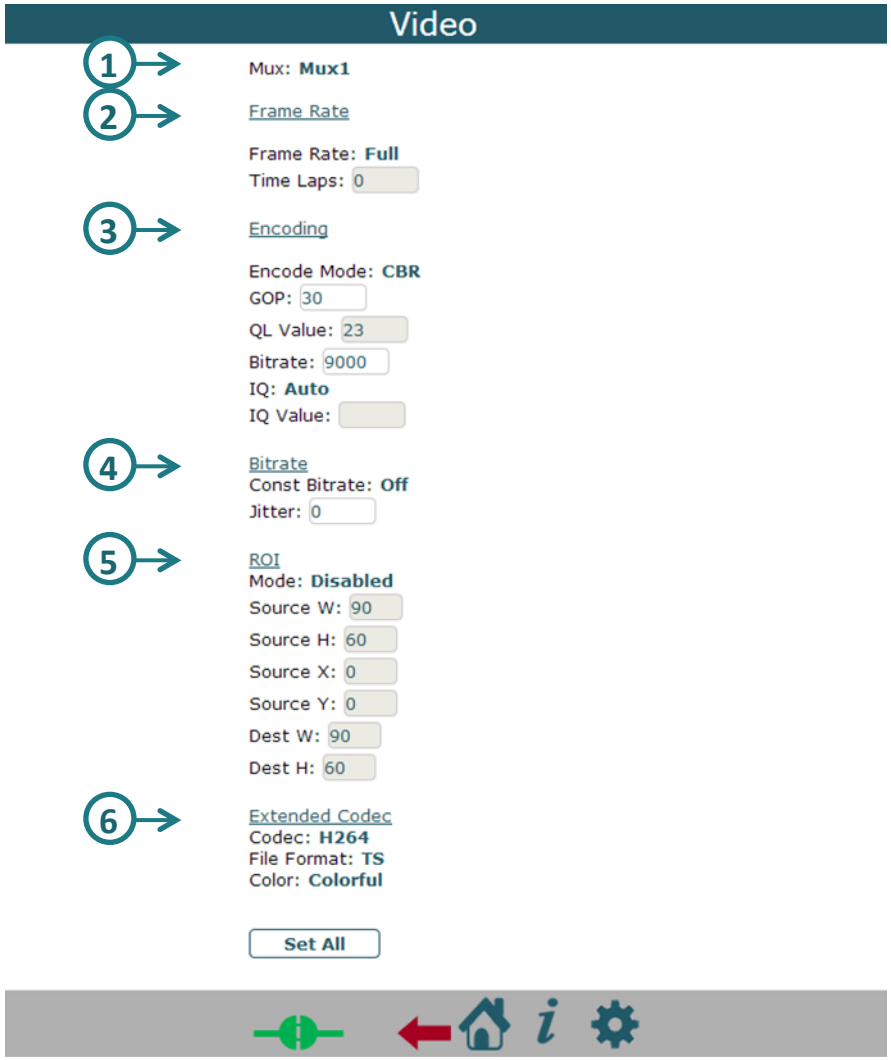
2. Frame Rate
   Frame Rate: Full/Time Laps
   Time Laps(1 - max camera frame rate)

3. Encoding
   Encode Mode: VBR/CBR/VBR Block
   GOP (0-255)
   QL Value (15 (better)-45(worst),
   work only in VBR mode)
   Bitrate (values in KBPS)
   IQ: Auto/Manual (work only in CBR mode)
   IQ Value (0 (highest) – 51(lowset))

4. Bitrate
   Const Bitrate: Off/On
   Jitter (In MS, Values between 0 – 200) it create delay buffer to solve jitter problem in network.

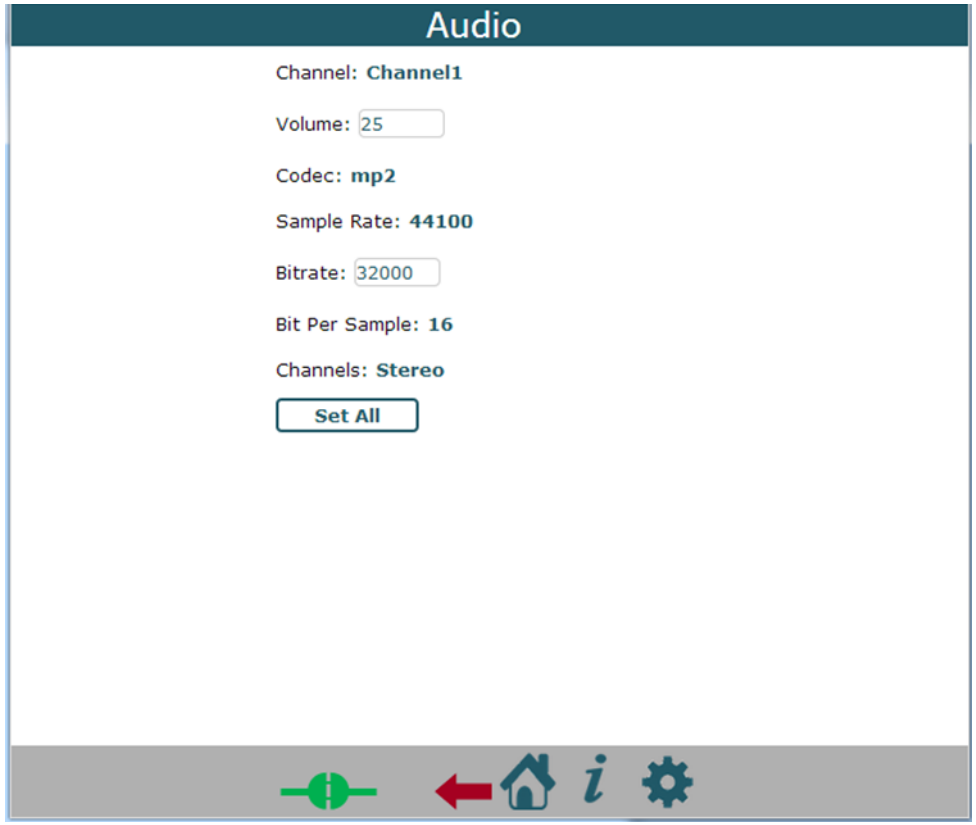
5. ROI
   Mode: Disabled/Manual/Auto Full D1/Auto 4CIF/Auto CIF
   Source W (value)
   Source H (value)
   Source X (value)
   Source Y (value)
   Dest W (value)
   Dest H (value)
   Region of interest, auto resize

6. Extended Codec
   Codec: H264/MPEG
   File Format: TS/MP4
   Color: Colorful/Gray-Level



Audio Configuration

1. **Channel:** Channel1/Channel2
2. **Volume** (0 - 100)
3. **Codec:** List of possible codecs.
4. **Sample Rate:** 8000/44100/48000 (See the table below)
5. **Bitrate** (See the table below)
6. **Bit per Sample:** 8/16
7. **Channels:** Mono/Stereo



Codec	Sample Rate	Bitrate	Comment
PCM8 PCM16	8000/44100/48000	____	____
mp2	44100	32000/64000	____
mp3	8000	8000	____
aac	____	____	Not implemented
amrnb amrwb	8000	4750/ 5150/ 5900/ 6700/ 7400/ 7950/ 10200/ 12200	____
G.729	____	____	Not implemented

Control

Control Command:

1. **Factory Default**
   Delete the current config and use default setting.

2. **Reboot**
   Reboot the system.

3. **Power Off**
   Power off the system