Neptune Web 3.1

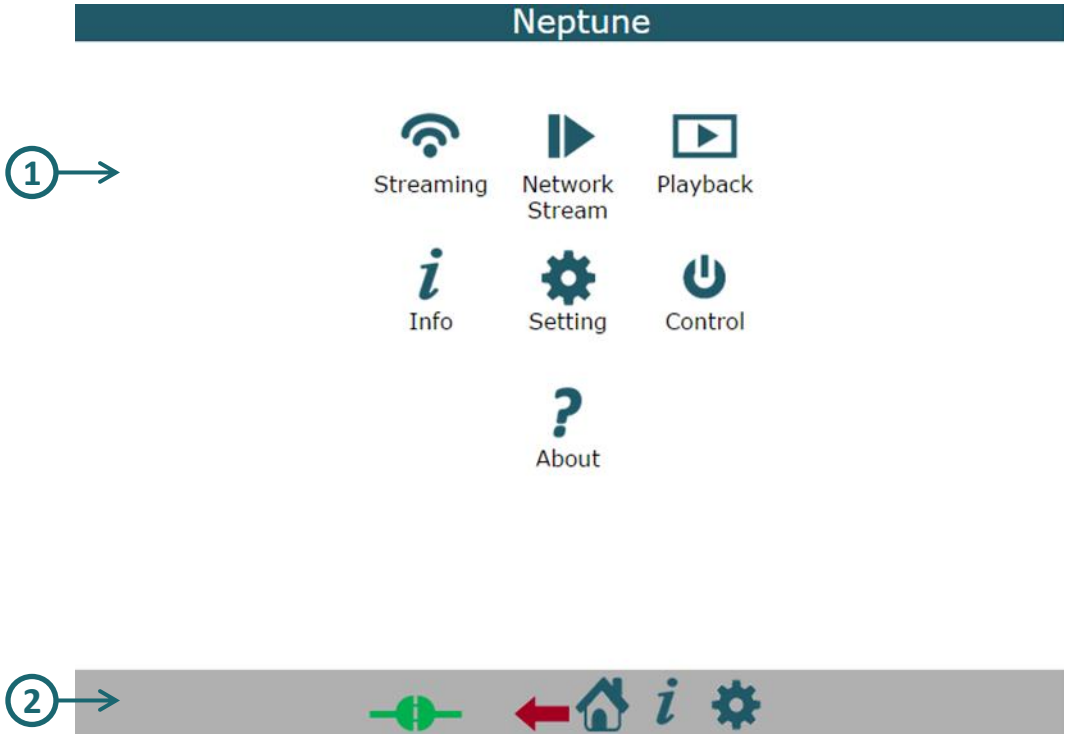
Created Date 01/05/13

Update Date 14/12/15

Content

Home Page

1. Main menu
2. Status and Navigation bottom menu.



Bottom Menu

1. Connection Status

Connected

When the board is connected.

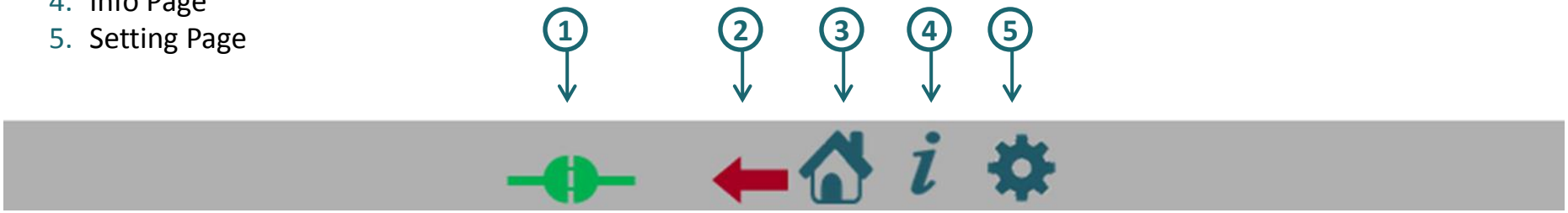
Wait to Connect

When the board is trying to connect.

Disconnected

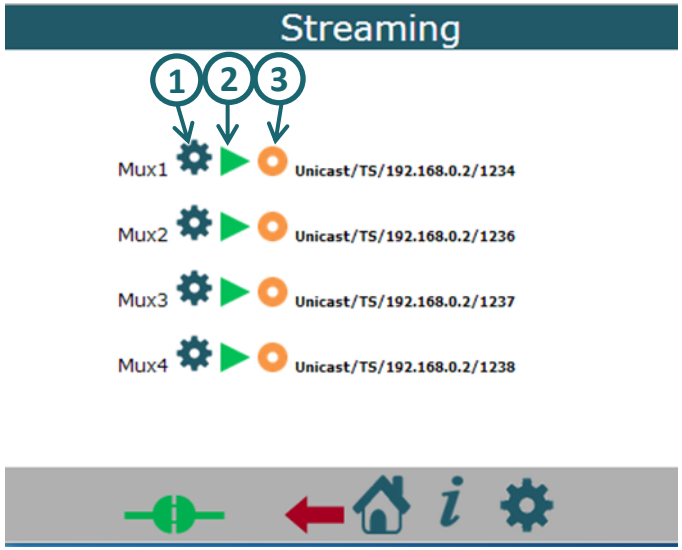
When the board is disconnected

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



Streaming and Recording

In streaming page you can operate streaming and/or recording.



Streaming Operation

1. If your board is transmitter, select mux and click on play button(2).
2. To stop streaming click on stop button ■

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

Notice:
During the recording don't remove the device.

Recording Configuration

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

Camera

Before you start streaming/recording - make sure the camera as active in info page (See page 11).
In case the camera is not active or you want to replace a camera, go to 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 streaming when the system is turn on.

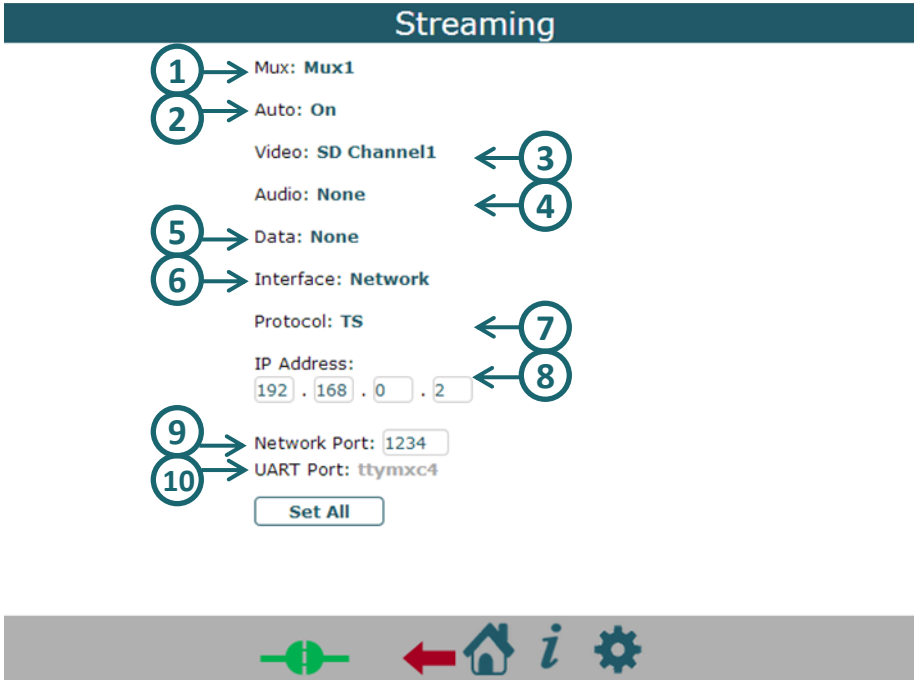
3. **Video:** None/video channel/Test

To test the streaming without camera select “Test” and than click on 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/Split

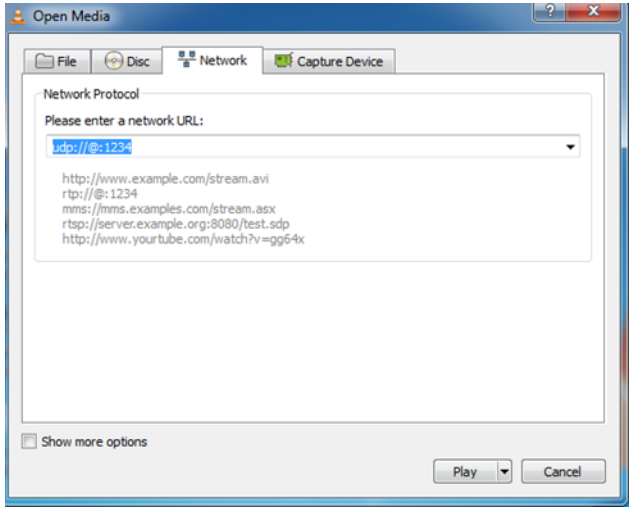
In **RTSP** protocol the user needs to enable the RTSP server, because the transition IP and ports and are selected by the client.

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



Test Streaming

To test the streaming, open VLC and get stream to your URL. If the test is successful – you need to see color bar on VLC screen.



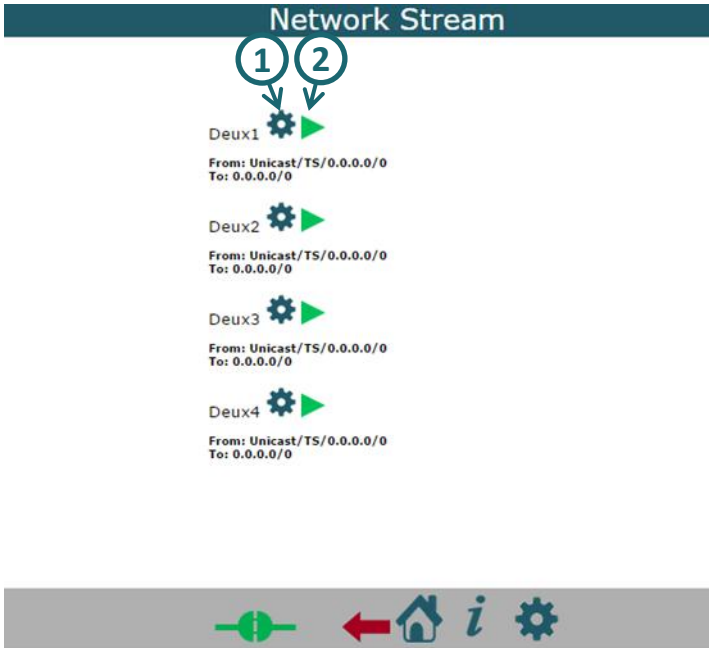
Network Stream

Network Stream Operation

1. If this board is receiver, in player page select mux and click on play button(2).
2. To stop player click on stop button ■.

Network Stream Configuration

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



Network Stream 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

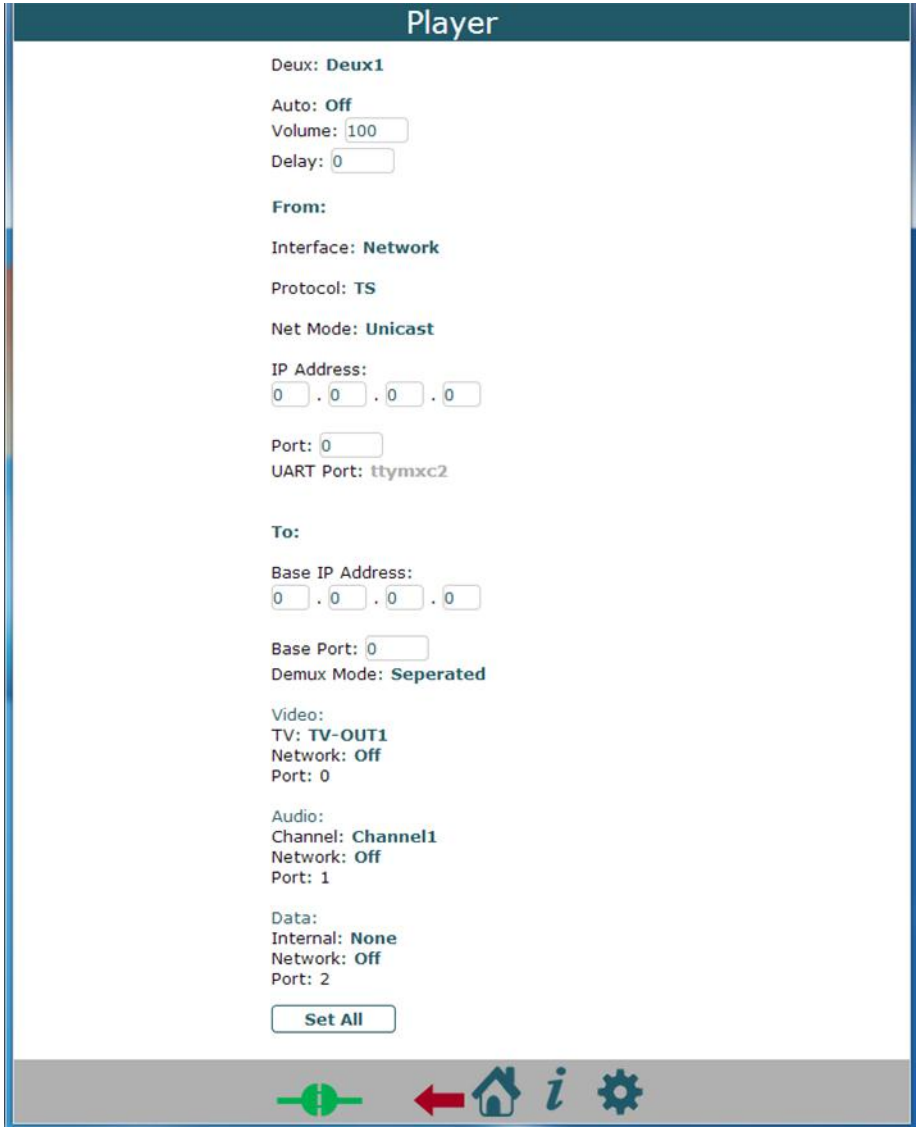
13. **TV:** TV-Out1/ TV-Out2/HD-Out1/HD-Out2
14. **Network:** Off/On
15. **Port**

Audio

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

Data

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



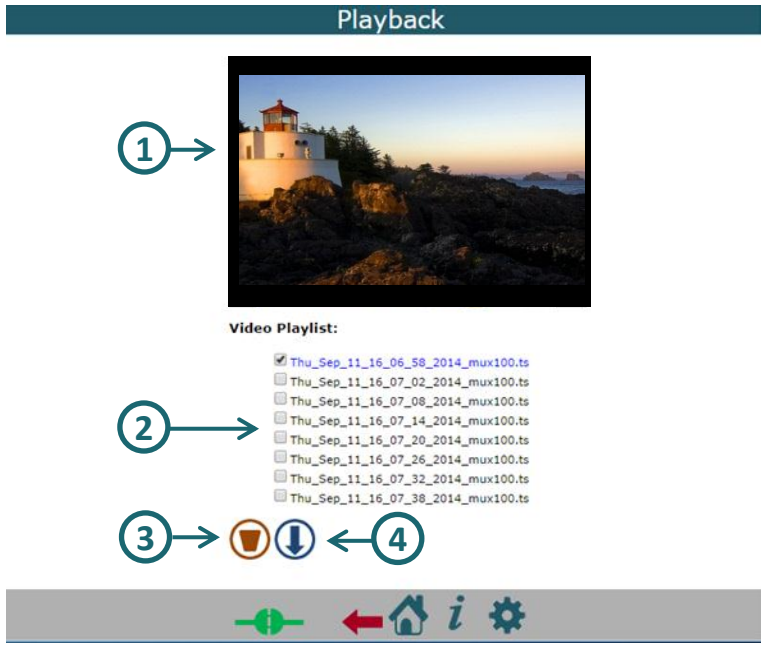
Playback

In playback page you can play, delete or download the recorded files.
The recorded files in 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:
Check file or some files and click on delete button(3).

Download:
Check file or some files and click on download button(4).



Information

In info page will see the information about the board:

1. **Board**

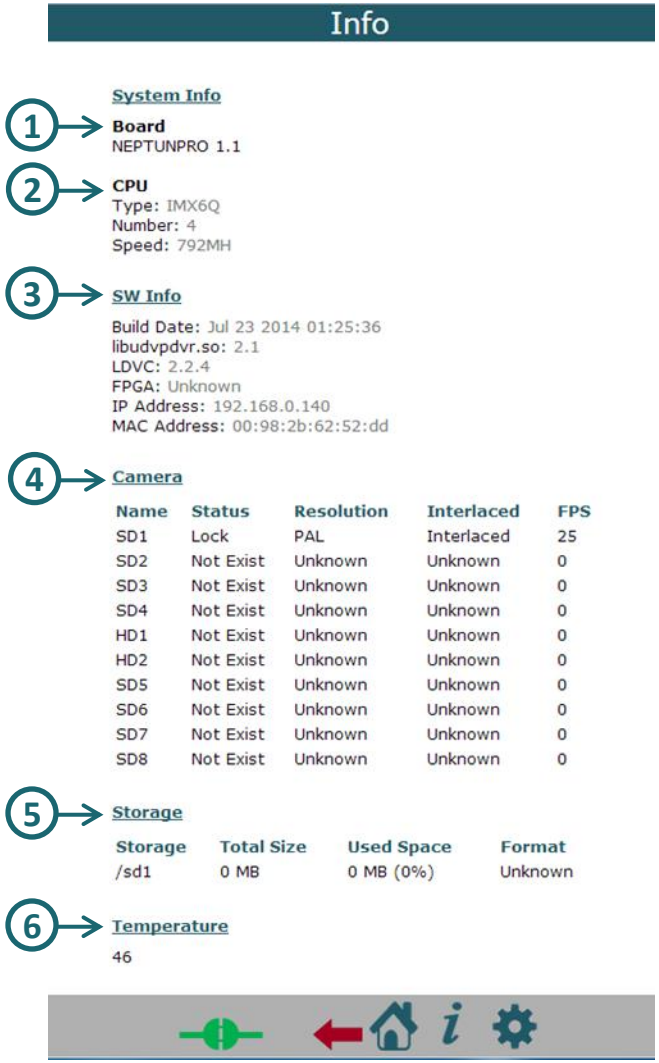
2. **CPU**
   Type
   Number
   Speed

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)

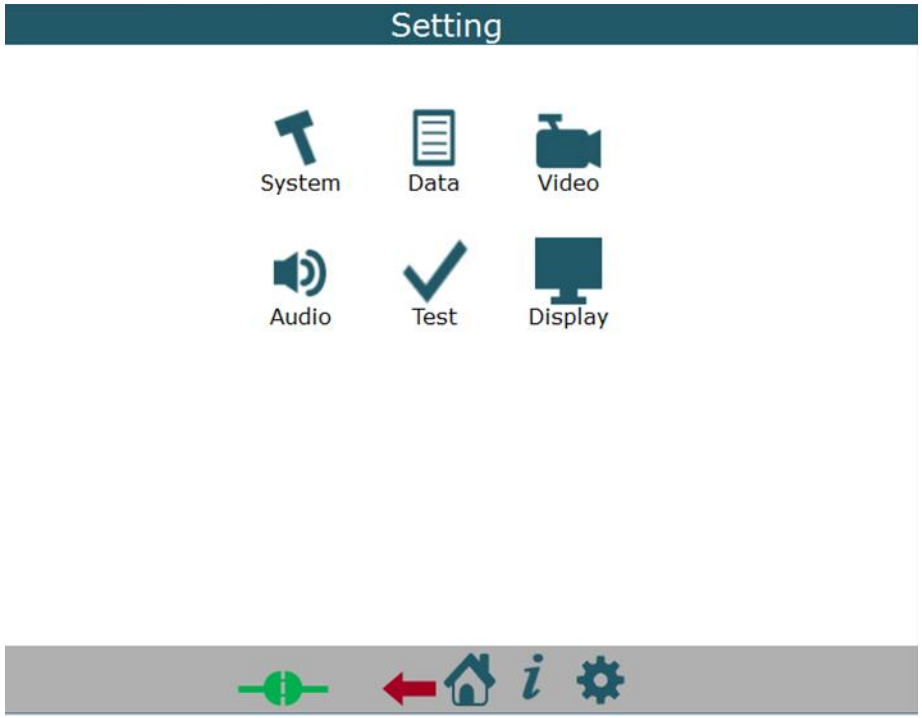
5. **Storage**
   This menu show the storage information of every device:
   Total Size, Used Space and format.

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



Setting

In setting page you have links to the settings pages.



System Configuration

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

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

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

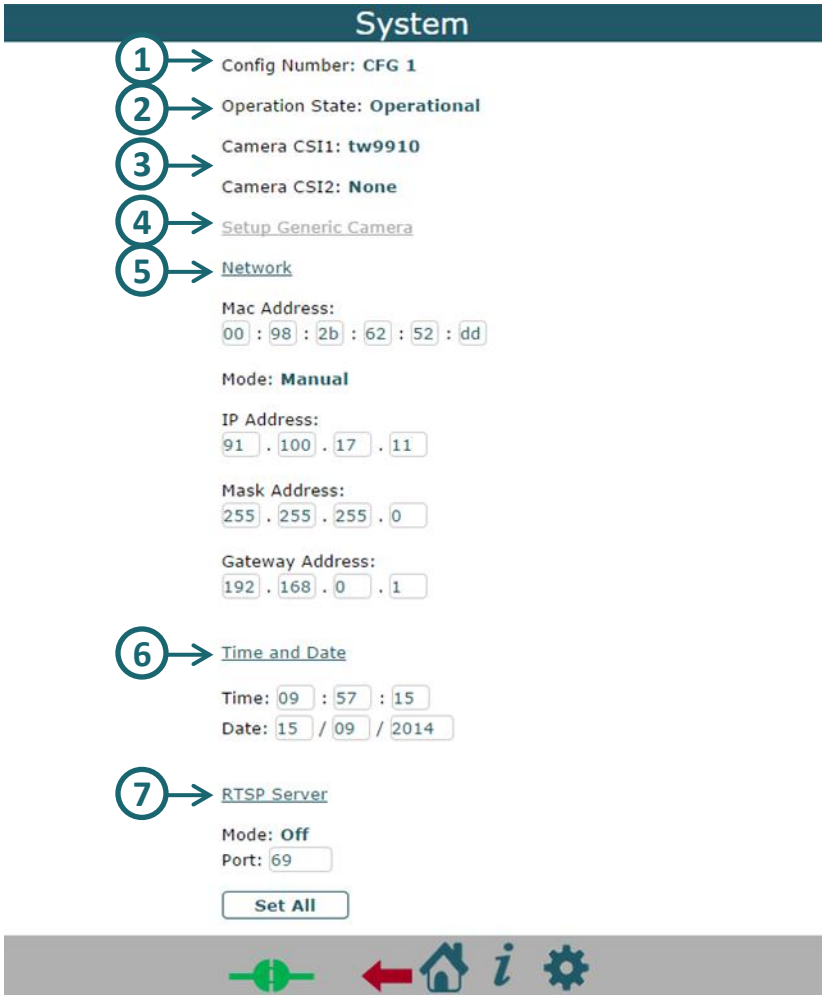
- Only for generic camera-

4. 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

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

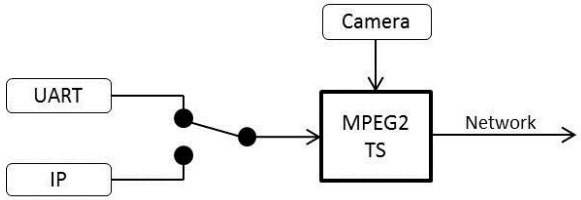
6. **Time and Date**

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



Data Configuration

1. Data Source

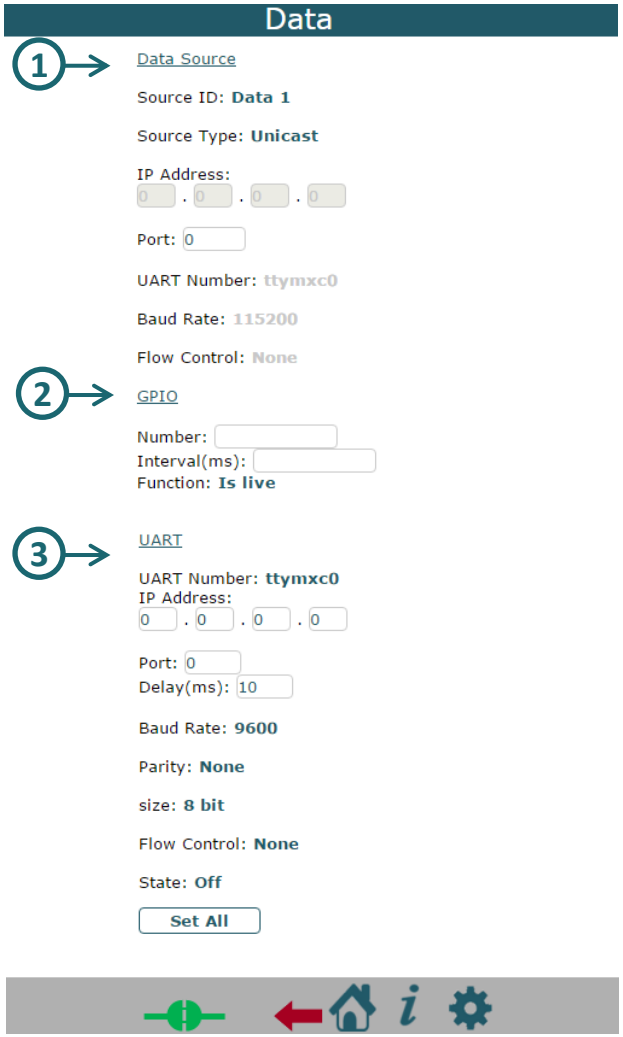


Source ID: Data 1/Data2
Source Type: Unicast/Multicast/UART
IP Address
Port
UART Number
Baud Rate: 2400/4800/9600/19200/38400/57600/115200/230400
Flow Control: None/Hardware

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

3. UART

UART (Number)
Port
Delay
Baud Rate: 9600/19200/38400/57600/115200
Flow Control: None/Hardware
State: Off/On



Video Configuration 1/2

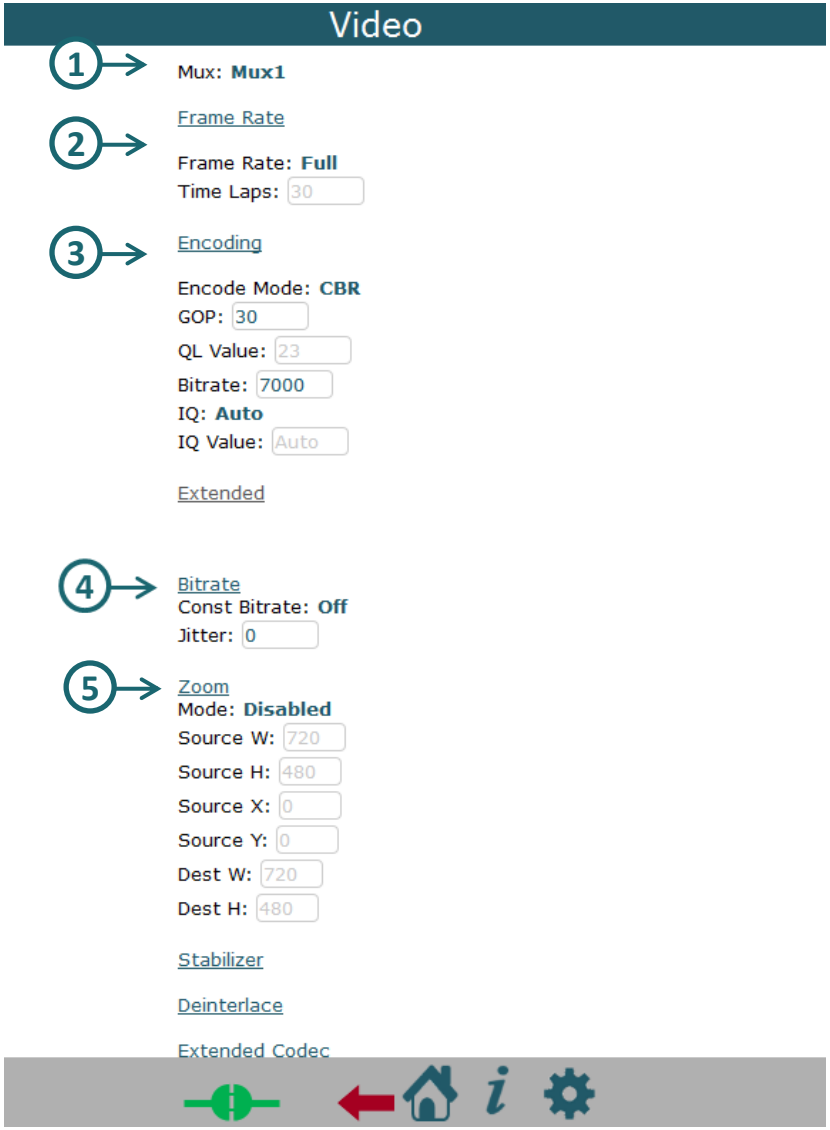
1. **Mux:** Mux1/Mux2/Mux3/Mux4

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. Zoom
   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



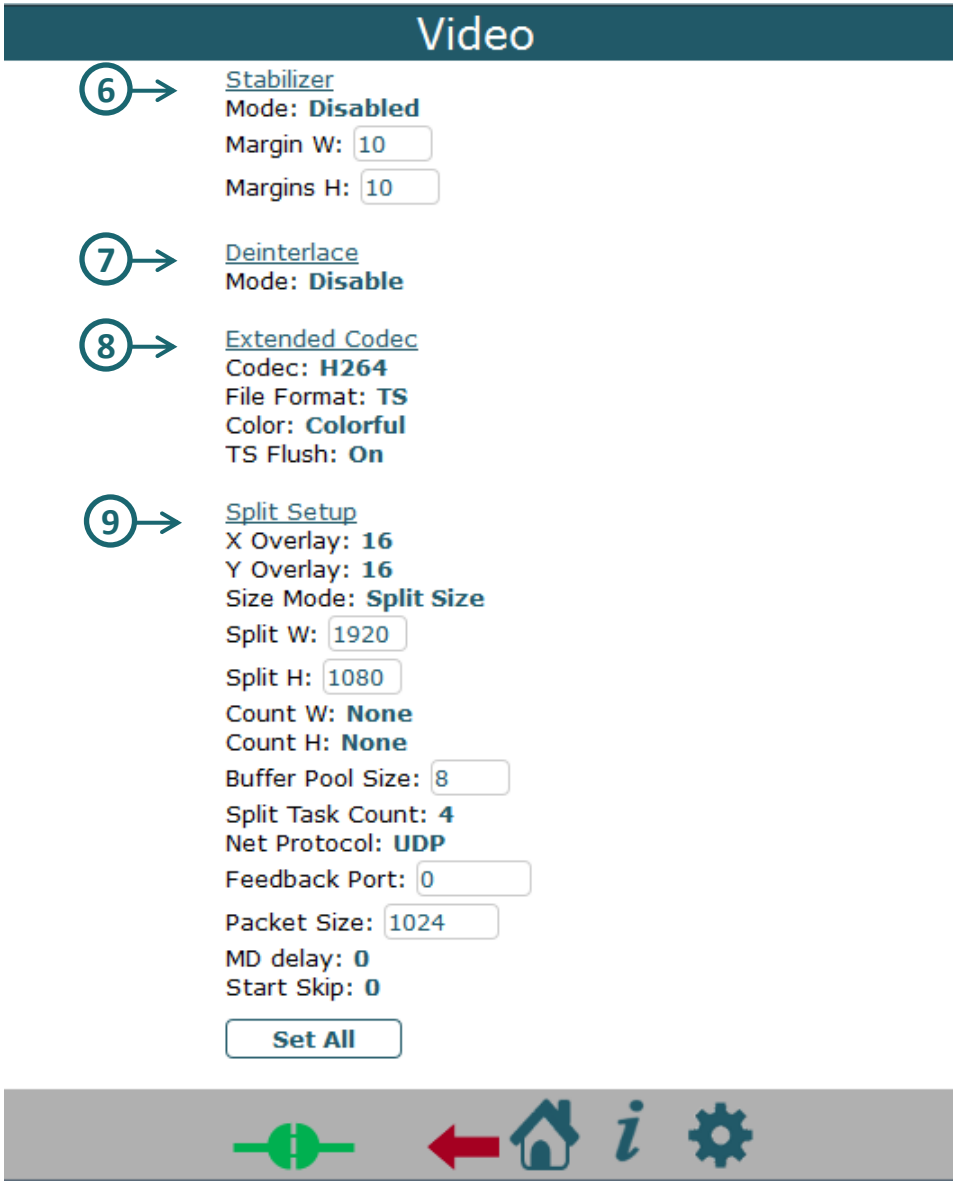
Video Configuration 2/2

6. Stabilizer
   Mode: Disable/Enable
   Margin W (value)
   Margin H (value)

7. Deinterlaced
   Mode: Disable/Enable

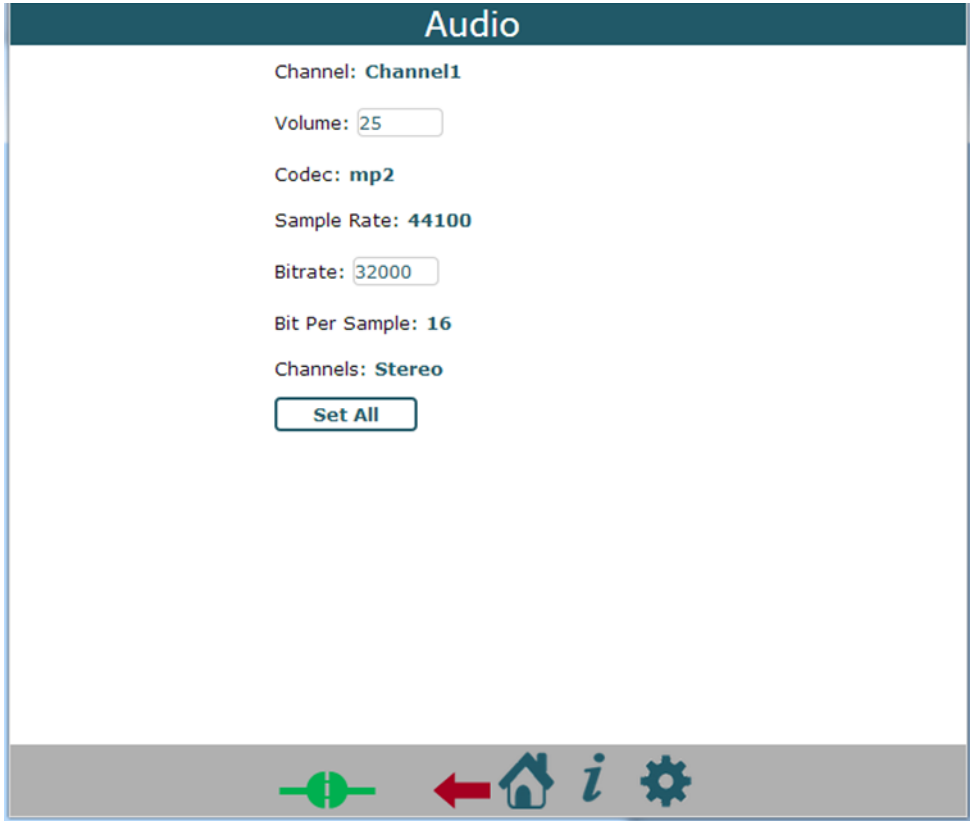
8. Extended Codec
   Codec: H264/MPEG
   File Format: TS/MP4
   Color: Colorful/Gray-Level

9. Split Setup
   X Overlay (Value)
   Y Overlay (Value)
   Size Mode: Split Size/Count Size
   Split W(Value)
   Split H(Value)
   - *Only for Split Size*
   Count W:1/2/3/4/5
   Count H:1/2/3/4/5
   - *Only for Split Count*
   Buffer Pool Size(Value)
   Split Task Count:1/2/3/4/5/6
   Net Protocol:UDP/TCP
   Packet Size (Value)
   MD Delay 0/1//2/3/4/5/6
   Start Skip 0/1//2/3/4/5



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

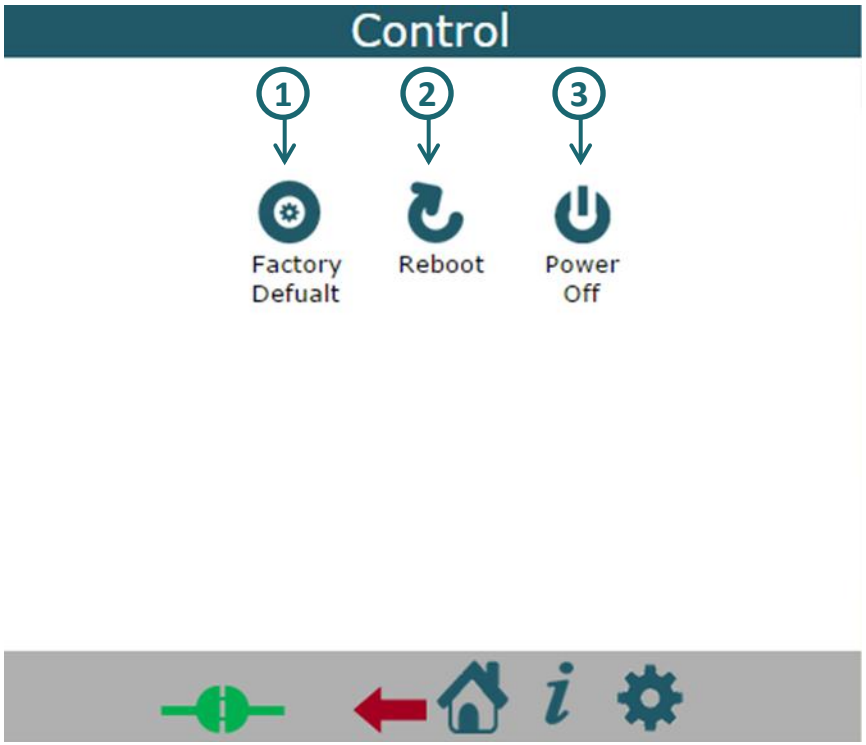
Control

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



About

? Details about the web