

**ANTRICA**



***Web Interface-User Manual***  
***UAV Mini***  
***ANT-1771***

***November 2014***  
***Rev 1.01***

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Neptune

- Streaming
- Network Stream
- Playback
- Info
- Setting
- Control
- About



1. Main menu



2. Status and Navigation- bottom menu.

- Home
- Info
- Settings

## 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

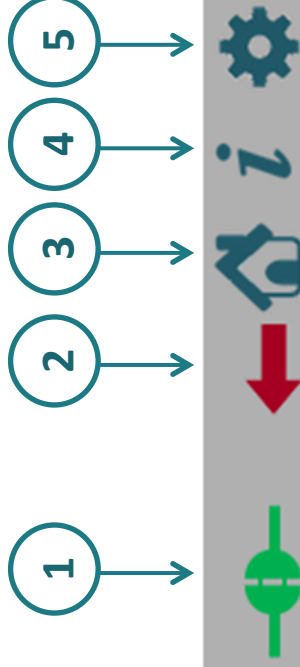
When the board is disconnected

### 2. Last Page

### 3. Home Page

### 4. Info Page


### 5. Setting Page





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

### Streaming Operation

1. If your board is a transmitter, select mux 1, 2, 3 or 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.

### 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.




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

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

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

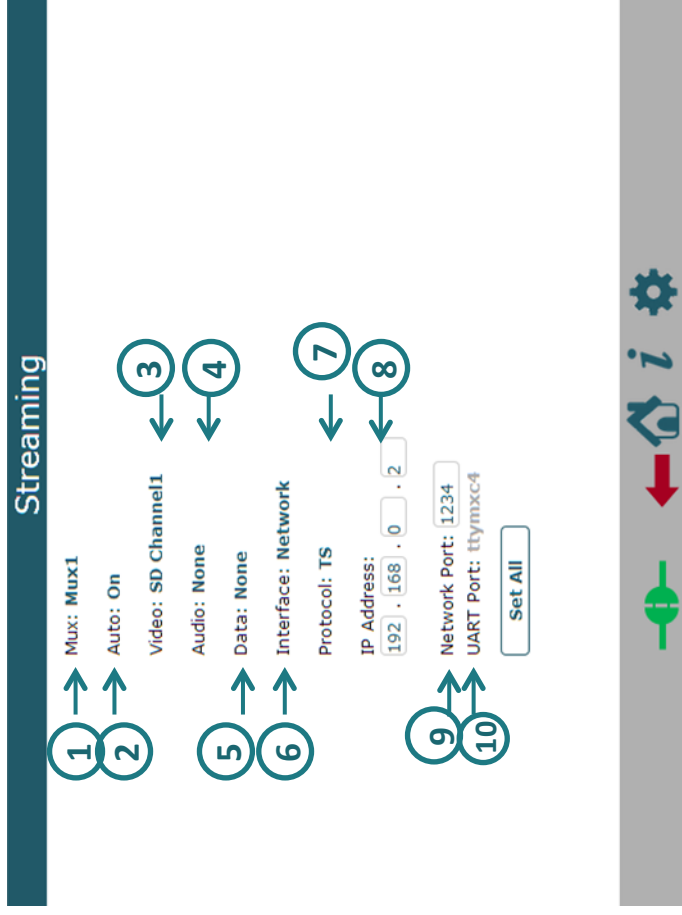
- 3. **Video:** None/video channel/Test

To test the streaming without a camera, select "Test" and then 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

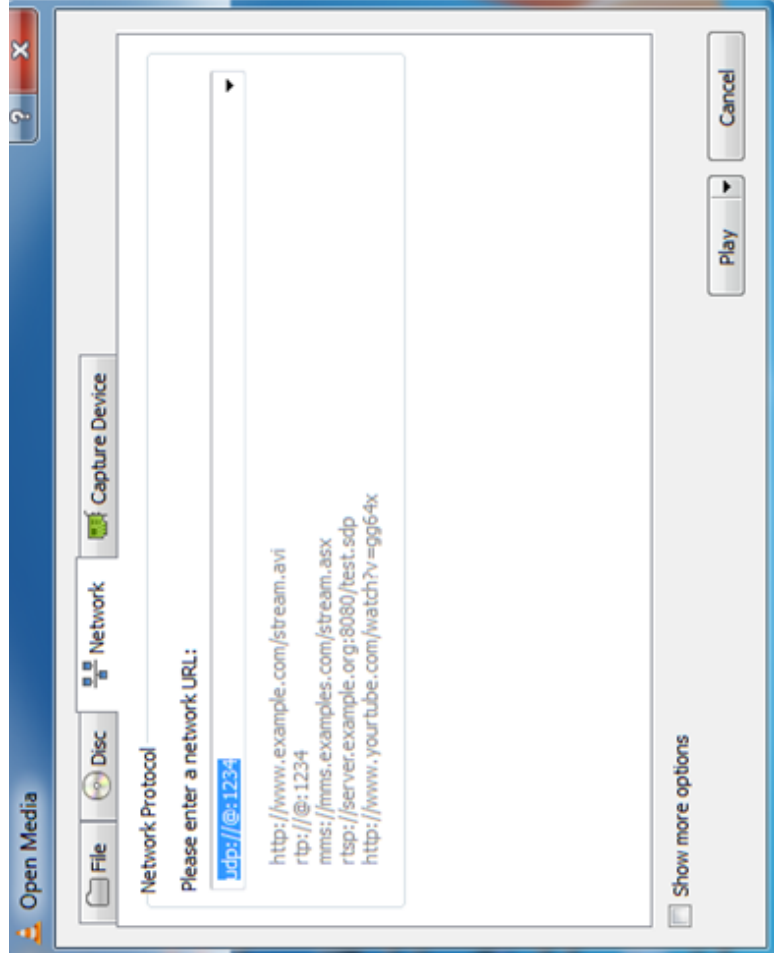
Using the **RTSP** protocol the user needs to enable the RTSP server, because the transmission IP and ports are selected by the client.

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






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

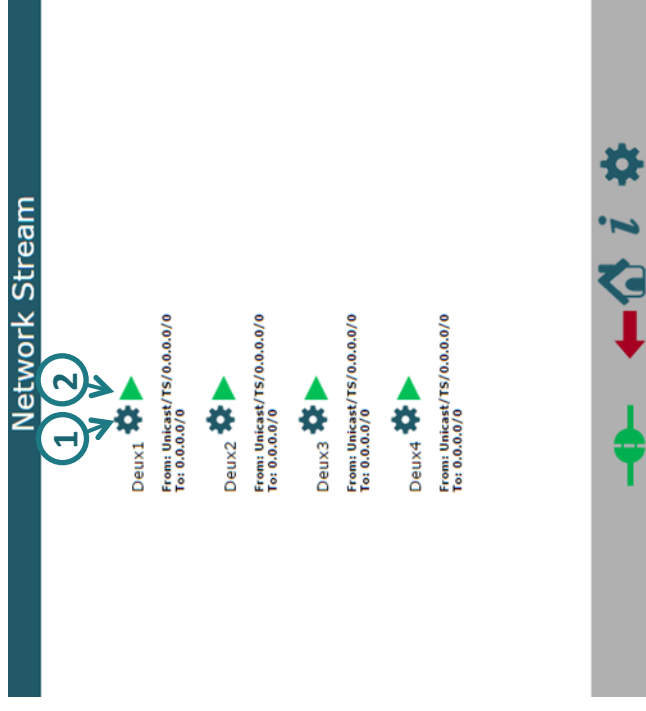


### Network Stream Operation

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**

### Player

**Deux:** Deux1

**Auto:** Off  
**Volume:** 100  
**Delay:** 0

**From:**  
**Interface:** Network  
**Protocol:** TS  
**Net Mode:** Unicast

**IP Address:**  
 0 . 0 . 0 . 0

**Port:** 0  
**UART Port:** ttyMXC2



**To:**  
**Base IP Address:**  
 0 . 0 . 0 . 0

**Base Port:** 0  
**Demux Mode:** Separated

**Video:**  
**TV:** TV-OUT1  
**Network:** Off  
**Port:** 0

**Audio:**  
**Channel:** Channel1  
**Network:** Off  
**Port:** 1

**Data:**  
**Internal:** None  
**Network:** Off  
**Port:** 2



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)  
libudvdrv.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.

## Info

**System Info**

**Board**  
NEPTUNPRO 1.1

**CPU**  
Type: IMX6Q  
Number: 4  
Speed: 792MH

**SW\_Info**  
Build Date: Jul 23 2014 01:25:36  
libudvdrv.so: 2.1  
LDVC: 2.2.4  
FPGA: Unknown  
IP Address: 192.168.0.140  
MAC Address: 00:98:2b:62:52:dd

**Camera**

Name	Status	Resolution	Interlaced	FPS
SD1	Lock	PAL	Interlaced	25
SD2	Not Exist	Unknown	Unknown	0
SD3	Not Exist	Unknown	Unknown	0
SD4	Not Exist	Unknown	Unknown	0
HD1	Not Exist	Unknown	Unknown	0
HD2	Not Exist	Unknown	Unknown	0
SD5	Not Exist	Unknown	Unknown	0
SD6	Not Exist	Unknown	Unknown	0
SD7	Not Exist	Unknown	Unknown	0
SD8	Not Exist	Unknown	Unknown	0


**Storage**

Storage	Total Size	Used Space	Format
/sd1	0 MB	0 MB (0%)	Unknown

**Temperature**  
46




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

## Setting

 System

 Data

 Video

 Audio

 Test











# T System Configuration

## System

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/YUYU/YUYU/YUYV

Config Number: CFG 1  
 Mode: Transmitter  
 Operation State: Operational  
 Camera CSI1: tw9910  
 Camera CSI2: None

Setup Generic Camera

Network

Mac Add:  
 00 : 98 : 2b : 62 : 52 : dd

Mode: Manual

IP Address:  
 91 . 100 . 17 . 11

Mask Address:  
 255 . 255 . 255 . 0

Gateway Address:  
 192 . 168 . 0 . 1

Time and Date

Time: 04 : 41 : 20  
 Date: 01 / 01 / 1970

RTSP Server

Mode: Off  
 Port: 6777

Set All

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

### Data

**Data Source**

Source ID: **Data 1**

Source Type: Unicast

IP Address: 0 . 0 . 0 . 0

Port: 0

Baud Rate: 115200

Flow Control: None

**GPIO**

Number:

Interval(ms):

Function: Is live

**UART**

UART: ttymxc2

Port:

Delay(ms): 10

Baud Rate: 9600

Flow Control: None

State: Off



## Video Configuration



- Mux:** Mux1/Mux2/Mux3/Mux4
- Frame Rate**  
**Frame Rate:** Full/Time Laps  
**Time Laps**(1 - max camera frame rate)
- 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))
- Bitrate**  
**Const Bitrate:** Off/On  
**Jitter** (In MS, Values between 0 – 200) it create delay buffer to solve jitter problem in network.
- 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
- Extended Codec**  
**Codec:** H264/MPEG  
**File Format:** TS/MP4  
**Color:** Colorful/Gray-Level

Video

1

Mux: **Mux1**

Frame Rate

Frame Rate: **Full**

Time Laps:

2

Encoding

Encode Mode: **CBR**

GOP:

QL Value:

Bitrate:

IQ: **Auto**

IQ Value:

3

Bitrate

Const Bitrate: **Off**

Jitter:

4

ROI

Mode: **Disabled**

Source W:

Source H:

Source X:

Source Y:

Dest W:

Dest H:

5

Extended Codec

Codec: **H264**

File Format: **TS**

Color: **Colorful**

## 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

### Audio

Channel: Channel1

Volume:

Codec: mp2

Sample Rate: 44100

Bitrate:




Bit Per Sample: 16

Channels: Stereo

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



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

