



# ANT-1773 QUICK START GUIDE



Applicable to ANT-1773H, 1773S, 1773Q



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The ANT-1773 is a Universal miniature Encoder for UAV and other applications where size is required to be small. Low latency and multiple inputs are supported. The ANT-1773 has 3 variants HDMI(H) HDSDI(S) and Quad Composite(Q) Some of the settings will vary slightly depending on which version and also which firmware. The document applies to Firmware 2.3.7.x and newer FW . Older FW (2.3.6.4 ) will show the (i) information page slightly differently.

## 1.What's in the Box

The ANT-1773x (includes SD card recording module) box contains

- ANT-1773x Encoder, SD card +HDMI or HDSDI or Quad Video
- Cable sets if ordered , ethernet ,power ,RS232 and video cables

## 2. Setting up the ANT-1773x

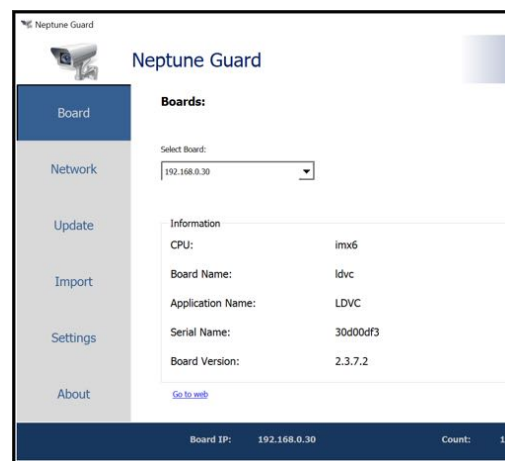
Connect the ANT-1773x to a laptop or PC via an Ethernet switch using standard ethernet cables. Connect appropriate SD Camera or PAL NTSC video source to the composite input and HD 1080P30 or 720P (or Quad SD) video to the mezzanine board input. Connect the 12 volt (4.5v-16v range) power input and switch on.

The ANT-1773x will take less than 1 minutes to boot up. Please visit <https://antrica.com> and browse to the ANT-1773 product page. In the Downloads section navigate to software and download the **Neptune Guard and Player installer**. Neptune Guard utility is used to find the IP address of the board and upgrade FW .

## 3. Configuring the ANT-1773x

The ANT-1773x default IP address is **192.168.0.30** .

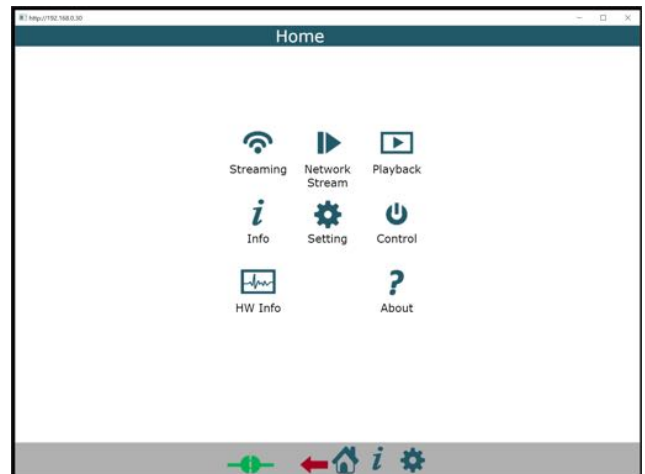
Open Neptune Guard and allow the software to search for boards . Once found, Neptune Guard shows the IP address, how many boards its found and Firmware version (2.3.7.2 in this example) Chrome can be used to browse directly to the IP address or just click **GO TO WEB** on Neptune Guard . Neptune Guard can also be used to save and upload Config files and new Firmware as well as change IP address.



Click on **Go to Web** and the following page appears showing;

- 1) **Setting:** general board settings
- 2) **Streaming:** setup 4 different streams
- 3) **i Info:** Tells you what video is connected
- 4) **Control:** allows factory reset / reboot

Other settings are in the full manual

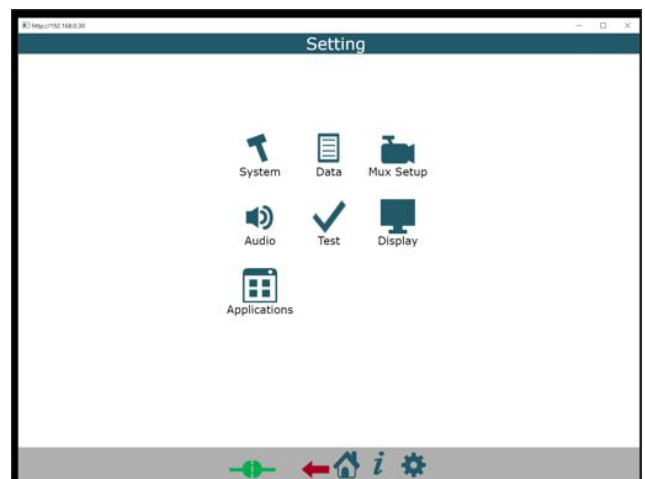


## 3.0 Setting :

This takes you to the Setting page that shows 7 further options

**SYSTEM:** This option takes you to basic video input settings RTSP and ONVIF setup

**MUX SETUP:** This configures the H264 codec  
Other Icons are described in other documents.



## 3.1 Setting / System

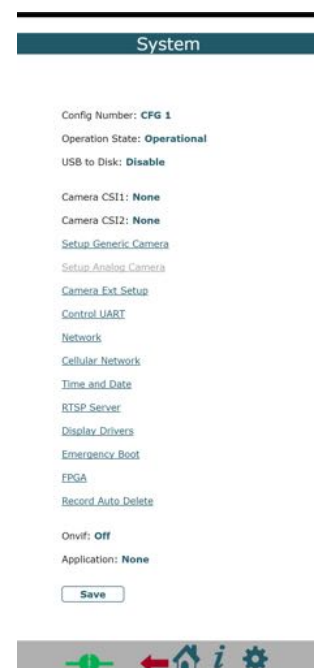
Here **CSI1** and **CSI2** video inputs , **RTSP server** and **ONVIF** settings can be modified.

**CSI1 CSI2:** These are two internal connections to video decoder ICs used for a basic HD + SD connection(ANT-1773H/S) or Quad SD + SD (ANT-1773Q). Further details below section 3.3

**RTSP Server:** Allows the server to be turned on and Port allocated

**ONVIF:** Allows ONVIF discovery to be turned on or off

**Network:** Changes Network settings



### 3.3 Setting/System/ CSI1 or CSI2

CSI1 and CSI2 have to be applied to internal video ICs used to decode Composite video HDSDI HDMI quad Composite etc. TW9910 is a single SD decoder, TVP5150 is a Quad SD decoder, HDMI is an HDMI decoder and HDSDI is an HDSDI decoder. For the ANT-1773x connect CSI1 to TW9910 and CSI2 to HDMI/HDSDI or TVP5150 (quad video option)



To check if the two connections have been successful by clicking the information button (lower case i) CSI-1 CH0 is assigned to the composite video input and shows lock



Camera				
Name	Status	resolution	Interlaced	FPS
CSI-1 CH-0	Lock	PAL	Interlaced	25
CSI-2 CH-0	Lock	1920x1080	Noninterlaced	30

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

CSI2-CH0 is assigned to the HDMI (HDSDI or TVP5150 for quad SD video) input and shows lock. Select the appropriate input depending which module you have Both showing locked means the board is detecting video on these two inputs

### 3.4 Setting/System/RTSPServer

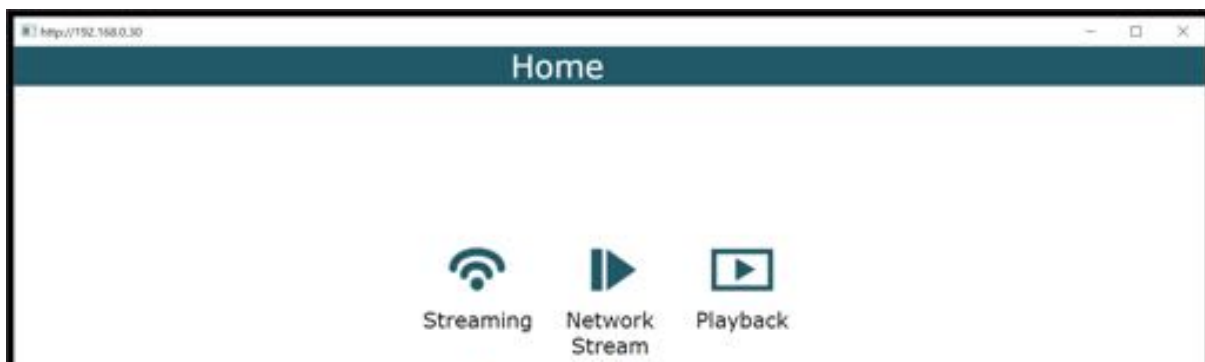
Enable RTSP server and select port 554 or whatever you need

### 3.5 Setting / Mux Setup

**MUX SETUP** is used to setup 4 individual streams & H264 codec functions, like bit rate, frame rate, GOP etc. Select MUX1 2,3 or 4 for each of the 4 streams as these settings can be different for each stream.



### 4.0 Home/ Streaming



The **Home button** takes you back to main menu where we now select **Streaming** to setup the video stream settings . These can use either of the video inputs or just one and can be RTSP or MPEG-TS, Unicast or multicast.



Each stream is called a **MUX**. Mux1 Mux2 etc and can be configured independently with either video source, RTSP or MPEG-TS and then unicast or multicast.

The icons above control (from left to right):

**Settings:** round cog configures each mux setting

**Green Triangle:** Turns to red square if stream is streaming. Click triangle to start stream or auto start it in the individual MUX settings page.

**Orange circle:** start /stop recording video if SD card fitted.

**Red Camera:** Take snapshot JPEG if SD card fitted

**Monitor Icon:** Not used

CSI-2-CH0 (channel zero) in this example (see below) is assigned to the HDMI/ HDSDI or Quad SD input. To check this, click the information i button. The example here shows RTSP streaming using CSI-2 CH0 as video source (The IP address and



port are not used in this case as RTSP port was already set to 554 and IP is always IP of the board **rtsp://192.168.0.30:554/mux4.sdp**

If setting MPEG-TS Unicast you would enter a port and the IP address of the receiver . If setting MPEG-TS multicast you set the port and a multicast IP address. RTSP urls refer to the mux number e.g mux3.sdp whilst in MPEG-TS mode only the port and IP address is used.

## 4.1 VLC URLs for RTSP and MPEG-TS

- A) **UDP://@:1234** unicast MPEG TS stream
- B) **UDP://@227.2.2.7:1234** Multicast MPEG-TS stream
- C) **rtsp://192.168.0.30:554/mux3.sdp** rtsp stream setting for MUX 3 example.

## 5.0 Help and Further Support

### 5.1 ONVIF Support

The ANT-1773x series supports ONVIF Profile Discovery and Streaming Only. It is NOT fully ONVIF S or G compliant but can discover ONVIF devices.

### 5.2 Other Information

Please visit our website [www.antrica.com](http://www.antrica.com) and browse to the product page (e.g ANT-1773x) where you can find a DOWNLOADS SECTION :

- NEPTUNE PLAYER : Low latency player for the ANT-177X series free to use
- application notes
- Full User manuals
- FAQs
- Firmware
- Other useful information
- More help Open up a Technical Support Ticket from the support page.
- RS232 is supported both ways please refer to [support@antrica.com](mailto:support@antrica.com) for further details.

**Contact: [support@antrica.com](mailto:support@antrica.com) Call : +44 1628 626098 x3**