ANT-2200 troubling shooting guide

Contents

Overview

Has your ANT-2200 suddenly stopped working?

Please go through this guide before you contact us as this guide covers the common recoverable failures.

For further help and advice please contact Antrica on:
Email: support@antrica.com
Phone: +44 1628 626098 ext 3

Document info

Version	date	author	Comments
1.0	15-May-20	David M	Initial release for ANT-2200 and ANT-2204
1.1	2-Jun-20	David M	Changes for v2.2.16_20190125_80_1_release
2.0	2-Jun-20	David M	Created ANT-2200 only guide

1. What LEDs are on

Figure 1 : Connectors and LEDs

Ethernet link and activity

Status
Green : Ethernet connected
Yellow : RTMP streaming enabled
Red : Power present

Reset button
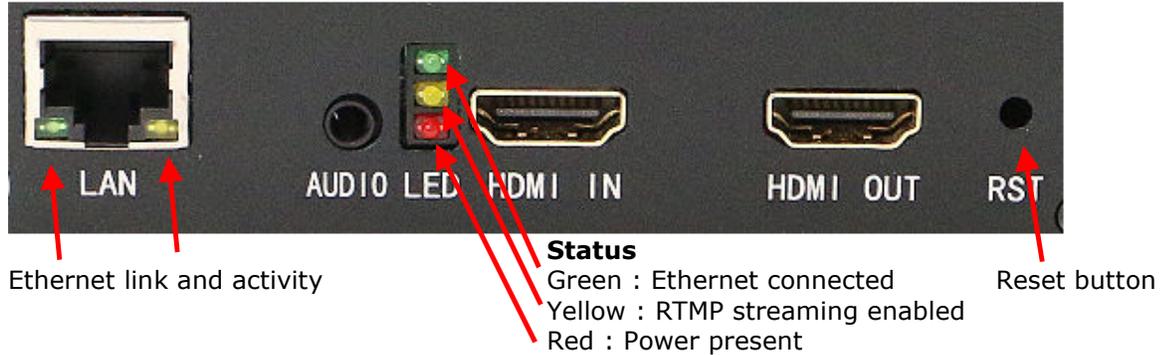
In Table 1, the operation of the encoder verse the LED states is shown. Refer to Figure 1 for LED locations. The Ethernet cable must be connected and the other end must be connected to a suitable network port.

Table 1 : LED functions

Ethernet LEDs	Status			probably issue
	Red	Yellow	Green	
Off	Off	Off	Off	no power or dead card
On &/or blinking	On	Off	On	Normal operation
On &/or blinking	On	blinking	On	Normal operation – RTMP streaming enabled
Off	On	Off or blinking	Off	Ethernet link is down

1.1. If no LED's are on

If no LEDs are on this could mean that either the board is dead or the power supply is not functioning. Either way please try the following steps.

1. Check power supply
   a. Confirm the power supply is providing +12V,
   b. the power plug is centre being positive and the outer being 0V
   c. The power supply is capable of delivery up to 1 Amp.
2. Power up another device, or another ANT-2200, with the power supply and confirm it works.
3. Use the power supply from another device to power up the ANT-2200 encoder, check the voltage (+12V DC) and the power plug polarity (centre positive)

If step 2. causes the other device to function correctly it is likely to be the ANT-2200 which is faulty.

If step 3. causes the ANT-2200 to function then the power supply is faulty. Use this alternative power supply to test the ANT-2200.

2. Has the encoder been "reset"

If the encoder is reset it will revert to it's default IP address which is 192.168.1.168.

If the unit is a ANT-2204 then the 4 channels were pre-configured with the 192.168.1.200 to 192.168.1.203 IP addresses. If 1 channel is reset then it will go to 192.168.1.168 and not it's pre-configured address.

If you have reset more than 1 ANT-2200 and all the Ethernet cables are connect to the network, then there will be an IP conflict, for example see Figure 2. The Auto Search tool mentioned in section 3 can be used to find the encoder channels. See section 4 on how to set IP address.

3. Cannot find IP address of device

If the encoders IP address cannot be found, there is a free to download tool AutoSearchIP(EN).exe to find all the IP address. This tool will only work on a Windows PC. There is not a MACOS or Linux equivalent available.

The search tool is located: Antrica web site -> ANT-2200 product page -> downloads -> software -> "IP finder English" and the file is called AutoSearchIP(EN).rar.

The direct link is https://www.dropbox.com/s/3ifa1lnxsq88x4u/AutoSearchIP%28EN%29.rar?dl=0

Download the "AutoSearchIP(EN).rar" then extract and run the AutoSearchIP(EN).exe, there is no installer it just run from the .exe file.
The tool will list all the functioning ANT-2xxx encoders on the same network. A sample output, shown duplicate IP addresses, is shown in Figure 2.

Figure 2 : "AutoSearch IP" showing ANT-2xxx encoders

4. Recover from Duplicate IP address
To recovery channels with duplicate IP address:

1. Only have one encoder connected to the PC. All other devices are not connected.
2. Using web browser go to relevant IP address
3. Access the web GUI with the required username and password
4. Go to "network" and change the IP address to the required address for that channel
5. You will need to reboot the encoder, this can be done from System -> System settings -> reboot
6. When the encoder reboots its IP address will be the one set in step 4.

5. Failed firmware upgrade / firmware failure
The ANT-2200 firmware version for the Antrica encoder is specific to the type of encoder you have. Just because the case looks the same does not mean the same code can be installed. The firmware for the ANT-2200 has 3 distinct identifiers, these are shown in Table 2, in this case the code version is : v2.2.16_20190125_80_1_release

Table 2 : installed version identifiers

identifiers	comments
V2.2.16	code can be V1.x.x or V2.x.x, V2 hardware is different from V1. V2 code will not install on V1 hardware, and V1 code cannot be installed on V2 hardware.
20190125	this is date stamp for the code, in this case 25 January 2019
80_1	this indicates HDMI input and h.265 & h.264 encoding. The code for a h.264 only encoder will not install on this hardware

If the encoder has been upgraded with the incorrect firmware, or the upgrade has failed, or the firmware has become corrupt, there is fail safe access method.

Go to the last know IP address. If this is not known reset the encoder by inserting a small screwdriver or paper clip in the reset button hole – see Figure 1 – and press and hold for 10 seconds until the green LED goes out, then use the IP address 192.168.1.168. Then add :90 to end of the IP address in the web browser, see Figure 3 for example.

Figure 3 : port 90 access
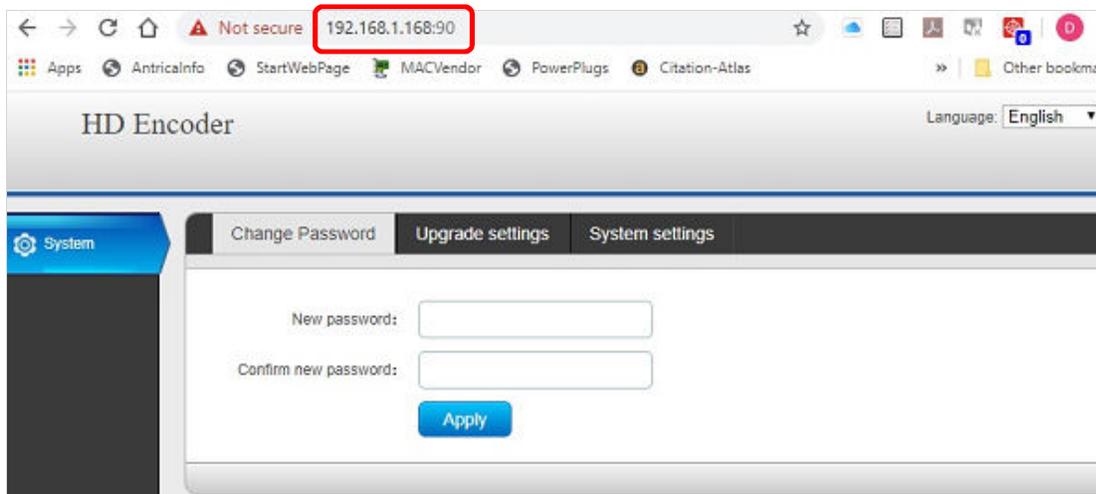
A limited function web page will be present. If the encoder is functioning correctly this port 90 access web page is not present. This web page will allow you install the correct version of code to recover the encoder.

Please contact Antrica via support@antrica.com or by phone +44 1628 626098 ext 3 to inquire about the correct upgrade file. Please ensure you have access to the Antrica serial number label, or if you have a capture of the version and onvif version details, see Figure 4, from when the encoder was functional.

The image in Figure 4 is for indication only. The firmware shown is V1.1.0_20170725_80_0_release is for the now obsolete ANT-2000 h.264 HDMI encoder. The ANT-2200 is a h.265 / h.264 HDMI encoder and currently the version id will look like V2.x.x_yyyymmdd_80_1_release.

Figure 4 : Version information
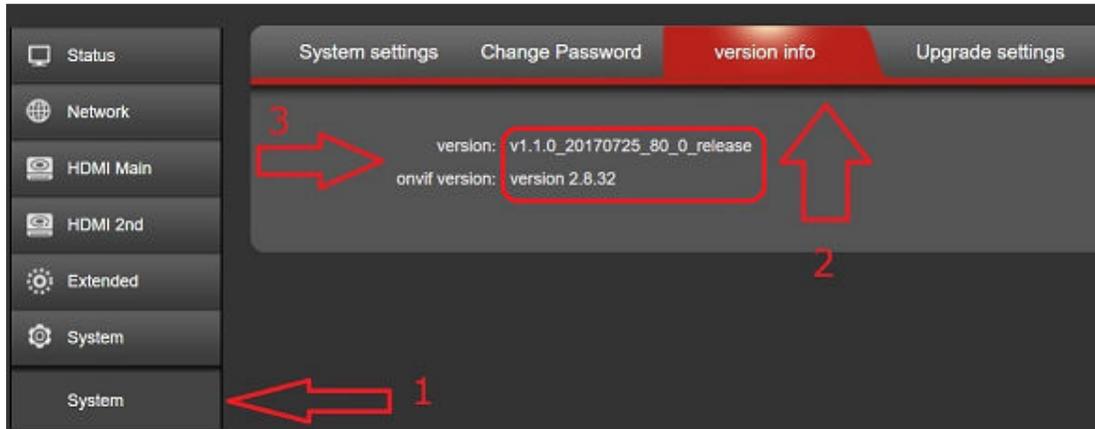
6. Force reset to recover to know IP address

An alternative way to try and recover the encoder is to manually reset it:

1. The PC / MAC needs to be on the 192.168.1.xxx subnet range and not on 192.168.1.168.
2. Only have one encoder connected to the PC / MAC.
3. press and hold the reset button for 10 seconds until the green LED goes out
4. Wait for the encoder to boot
5. Using web browser go to default IP address 192.168.1.168
6. Access the web GUI, username and password is admin & admin
7. Go to "network" and change the IP address to the required address for that channel
8. You will need to reboot the encoder, this can be done from System -> System settings -> reboot
9. When the encoder reboots its IP address will be the one set in step 6.

7. Still need help?

Please contact Antrica via support@antrica.com or by phone on +44 1628 626098 ext 3