ANT-2551 / ANT-2554 troubling shooting guide

Contents

Overview

Has your ANT-2551 or ANT-2554 suddenly stopped working?

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

Document info

Version	date	author	Comments
1.0	2-Jun-20	David M	Initial release – version is v4.1.3_20191129_F60_1_release

1. What LEDs are on

In Figure 1 shows two channels of a ANT-2554, the area encircled by the red line would be the connectors and LEDs for a ANT-2551, single channel encoder.

Figure 1 : Connectors and LEDs

Ethernet link and activity

Status
Green : RTMP streaming enable   Reset button
Yellow : Ethernet connected
Red : Power present
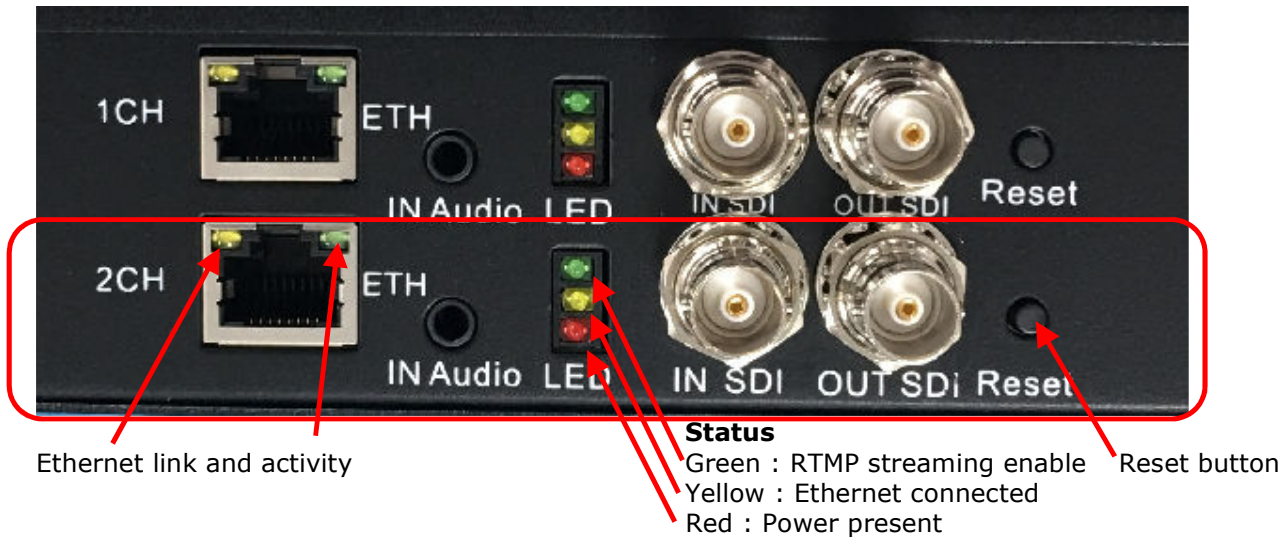
In Table 1, the operation of the encoder versus the LED states is shown. Refer to Figure 1 for LED locations. The Ethernet cable must be connected and the other end must be connected to a suitable network port.

Table 1 : LED functions

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

1.1.   If no LED's are on – ANT-2551

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-2551, with the power supply and confirm it works.
3. Use the power supply from another device to power up the ANT-2551 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-2551 which is faulty.

If step 3. causes the ANT-2551 to function then the power supply is faulty. Use this alternative power supply to test the ANT-2551.

1.2. If no LED's are on – ANT-2554

If no LEDs are on this could mean that either the board is dead, the internal power connector has come lose, the internal power supply is not functioning or fuses have blown. Either way please try the following steps.

1. Is only one channel not showing any LED's?
2. Do all channels have no LEDs on?
3. Does the rocker switch on the back of the encoder glow red when power is applied and the switch is in the "1" position? As shown in Figure 2.

Figure 2 : Power switch and fuse holder location

AC power   Slide out
rocker switch   fuse holder

If step 1. then either:
    1.1 the encoder card is dead
    1.2 the power to that encoder card is not present.

If step 2. then either:
    2.1 there is internal power supply issue
    2.2 the incoming mains power is not getting to the internal power supply
    2.3 the internal wiring has failed

In step 3. if rocker switch does not glow then
    3.1 check power is coming from the mains socket
    3.2 check / change the power lead
    3.3 check the fuses in the mains lead and the encoder, see Figure 2 for fuse holder location

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-2554 then the 4 channels were pre-configured with the 192.168.1.200 to 192.168.1.203 IP addresses. If one 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 one channel on a ANT-2554 and all the Ethernet cables are connect to the network, then there will be an IP conflict, for example see Figure 3. The Auto Search tool mentioned in section 0 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 encoder (ANT-2551) or a encoder channel (ANT-2554) 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-2551 or ANT-2554 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 runs from the .exe file.
The tool will list all the functioning ANT-2xxx encoders on the network. A sample output, shown duplicate IP addresses, is shown in Figure 3.

Figure 3 : "AutoSearch IP" showing ANT-2xxx encoders

4. Recover from Duplicate IP address

To recovery channels with duplicate IP address:

1. Only have one channel / device connected to the PC. All other channels / devices do not have Ethernet cables 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.
7. Repeat from step 1. As many times as necessary to set all the channels / devices to the correct IP address

5. Failed firmware upgrade / firmware failure

The ANT-2551 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-2551 has 3 distinct identifiers, these are shown in Table 2, in this case the code version is: v4.1.3_20191129_F60_1_release

Table 2 : installed version identifiers

identifiers	comments
v4.1.3	code can be V4.x.x or V3.x.x, V3 hardware is different from V4. V4 code will not install on V3 hardware, and V3 code cannot be installed on V4 hardware.
20191129	this is date stamp for the code, in this case 29 November 2019
F60_1	this indicates HD0SDI 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.

With only one encoder / channel on the network, go to the last know IP address. If this is not known reset the encoder by pressing in the reset button – see Figure 1 – and press and hold for 10 seconds until the yellow 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 4 for example.

Figure 4 : port 90 access
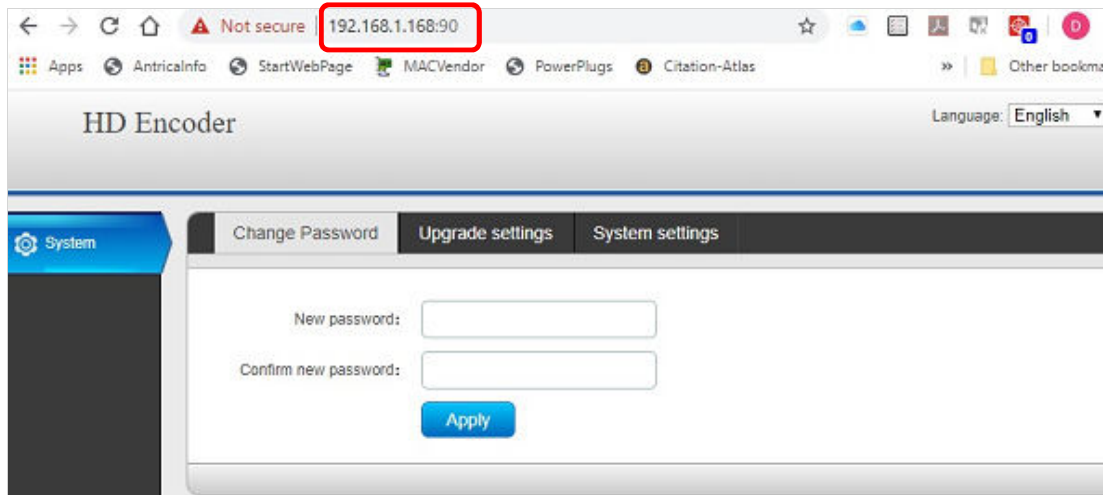
A limited function web page will be present. If the encoder is functioning correctly this port 90 access web page is not present. This web page will allow you install the correct version of code to recover the encoder.

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 in the case of the ANT-2554 one of the other channels to get its version and onvif version details, see Figure 5.

Figure 5 : Version information
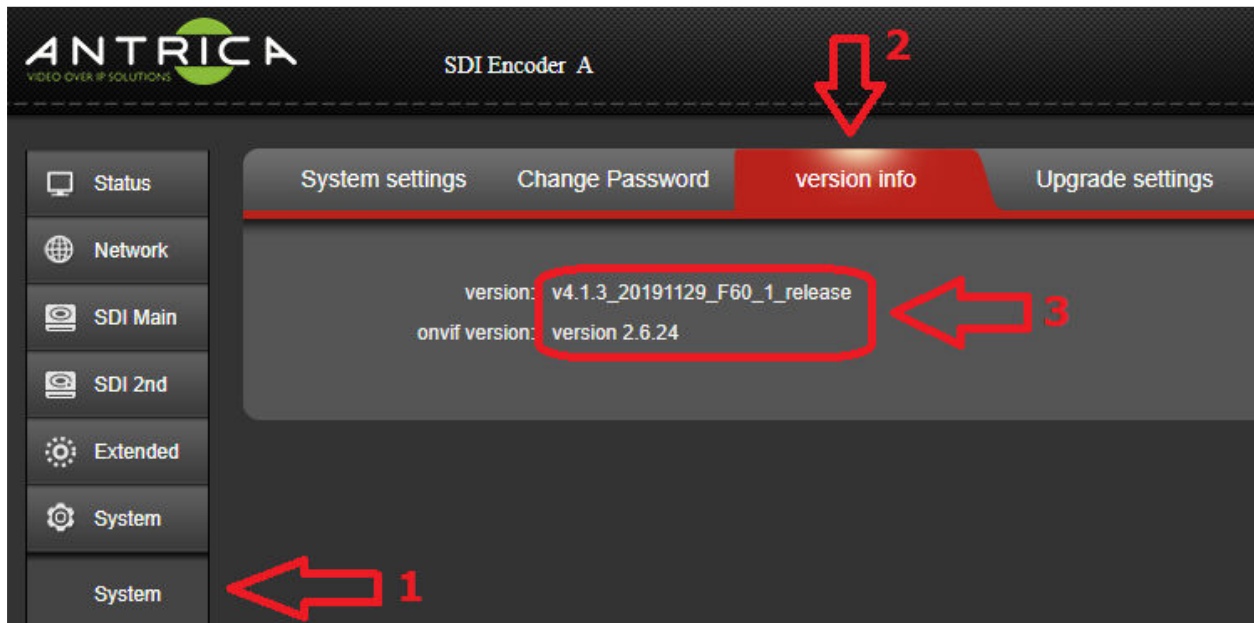
6. Force reset to recover to know IP address

An alternative way to try and recover the channels of the encoder is to manually reset them all one at a time:

1. The PC / MAC needs to be on the 192.168.1.xxx subnet range and not on 192.168.1.168, and in the case of a ANT-2554 also do not use the IP addresses 192.168.1.200, 192.168.1.201, 192.168.1.202 or 192.168.1.203.
2. Only have one channel / device connected to the PC / MAC. Ensure all other channel / device do not have Ethernet cables connected.
3. For that channel press and hold the reset button for 10 seconds until the yellow 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 / device
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.
10. Repeat from step 2. for all other channels / devices

7. Still need help?

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