

Installation Guide

1. Introduction

Thank you for purchasing this SAM-3104 encoder.

This guide provides basic information for the installation, connection and configuration of the encoder. For more detailed information please contact your supplier or refer to the detailed product documentation.

Disclaimer: While Cathexis has made every effort to ensure the accuracy of this document, there is no guarantee of accuracy, neither explicit, nor implied. Specifications are subject to change without notice.

2. Product Warranty

This product is subject to the Cathexis standard warranty terms and conditions

3. Software Compatibility

The SAM3104 is compatible with Cathexis catVision 5043a1 and upwards (with recording only on NetBSD 161)

4. Product Features

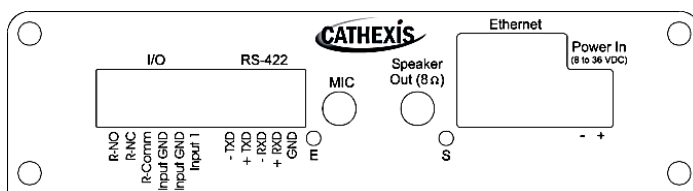
- Power Supply

POE Class 3	or	DC 8-36 Volts. 5.5 Watt max
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- Optimized H.264 video compression algorithm to facilitate transmission of High Quality video over low network bandwidth
- Built in monitoring function
- Supports PAL/NTSC
- Provides RS422/RS485 serial port²
- 12V DC, 5.5W, Output (if PoE is active)
- Audio input (1x Microphone input with differential Microphone Amplifier via 3.5 mm Audio Jack)¹
- Audio Output (200-300mW into 8 Ohms)
- Dual streaming – unicast and multicast
- Fully integrated within the Cathexis Network Video Recorder (Encoder software included with all catVision software installations)
- Hardware watchdog and Built-in-tests
- Opto-isolated inputs and relay output

5. Encoder dimensions



6. Connections



1 Audio input will only sync with video input on Video Channel 1
 2 PTZ control will only work with a camera attached to Video Channel 1

Ethernet	Power In	Mic In
100BaseT RJ45 Poe Ethernet port POE Input Power” 12VDC, 5.5Watt Max	8 to 36 VDC 5.5Watt Max	Differential Mic input

I/O Relays		
R-NO (normally open)		1
R-NC (normally closed)		2
R-Comm (common)		3
Input GND		4
Input GND		5
Input 1		6

RS422 Serial Port	
- TXD	1
+TXD	2
-RXD	3
+RXD	4
GND	5

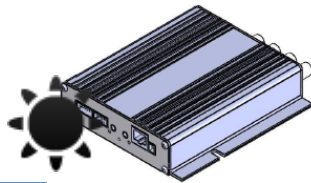
Audio Jack connections		
	Audio Out: Sleeve = GND Ring = Signal	Audio in (mic): Sleeve = GND Ring = Signal
	NOTE: Only stereo jack must be used	NOTE: Only stereo jack must be used

7. Audio connections

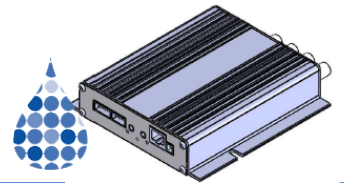
- The Audio Output of the SAM3104 encoders is designed to drive an 8Ω loudspeaker.
- From serial numbers 000051 – 150 onwards modifications have been done to enable the unit to be connected to an Audio Amplifier as well.
- On all units:
 - when connecting to an Amplifier, connect the cable shield to the Jack-plug sleeve
 - when connecting to a loudspeaker, do NOT connect the cable shield to the Jack-plug sleeve

8. Warnings

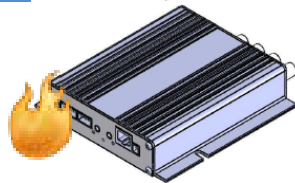
Don't install the encoder in direct sunlight



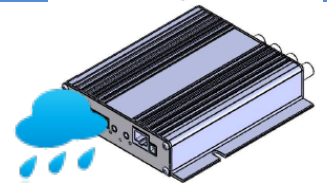
Do not install the product in a damp area, or where it may be exposed to flammable liquids and/or gas



Do not install the product in a location where it may be exposed to extreme heat or cold (SPEC: -10 to +55 degC)



Do not install the product where it may be exposed to rain, water and/or radioactivity



9. Setting IP address

IP address can be changed via the Cathexis IP utility, which is installed with all versions of catVision software .



The utility can be run from any of these interfaces:

- CatEncoderSetup icon on Fedora Desktop.
- On a Fedora unit:
/usr/nvr/nvr_encoderssetup.
- Windows Start Menu Start → Programs → Cathexis → CatEncoderSetup.
- On the Windows NVR:
“C:\Program Files (x86)\Cathexis CatVisionSuite NVR\nvr_encoderssetup.exe”.
- On the Windows Viewing Station:
“C:\Program Files (x86)\Cathexis CatVisionSuite WRV\cat_encoderssetup.exe”.

- Right-click the listed encoder or click on the File menu, and select “Set IP”, to display the “Single IP” window:

Unit IP:	192.168.34.88
Subnet:	255.255.240.0
Gateway:	192.168.34.8
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

- Change the “Unit IP” to the new IP address.
- If necessary, also modify the “Subnet” and “Gateway” fields.
- Click “OK”.
- The list refreshes itself approximately every 2 seconds – once refreshed, check that the encoder is now displaying the new details.

Note:

- If you attempt to change IP Address during a firmware upgrade, the IP address will not change
- The Cathexis IP Encoder Utility requires Administrator access to function correctly. For most systems the utility will automatically elevate its access rights, but on some Windows installations, the user may be required to select the 'Run as Administrator' option when invoking the utility. If encoders do not appear in the utility, first try Run as Administrator before contacting support.

For assistance please contact your supplier or Cathexis support at support@cat.co.za