Single Channel Encoder Installation Sheet

Model CV-MENC-1

Hardware overview

Figure 1: Encoder front

Last modified: 09/28/2016

Description

The ClareVision encoder lets you integrate analog cameras into ClareVision (or other) IP video surveillance solutions. The single-channel PoE device supports video encoding at up to 4CIF in a variety of common video standards across multiple network protocols. The encoder streams video from a single camera with or without two-way audio.
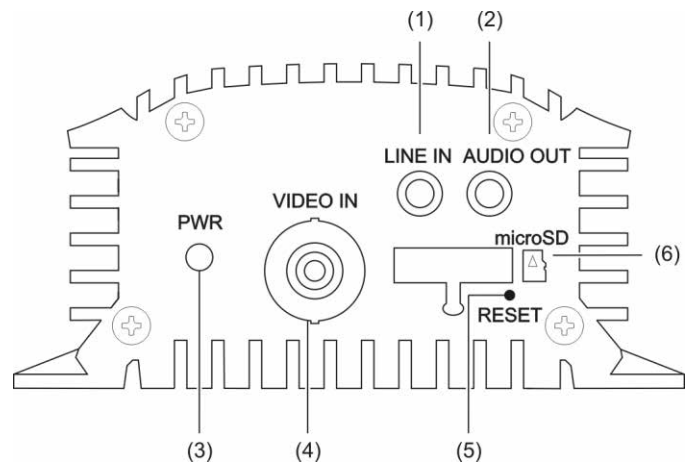
Package contents

Remove all contents from the encoder packaging and ensure you have the following items.

- 1X single-channel encoder
- 1X 12 V power supply
- 1X 6-pin 2.5 mm terminal block
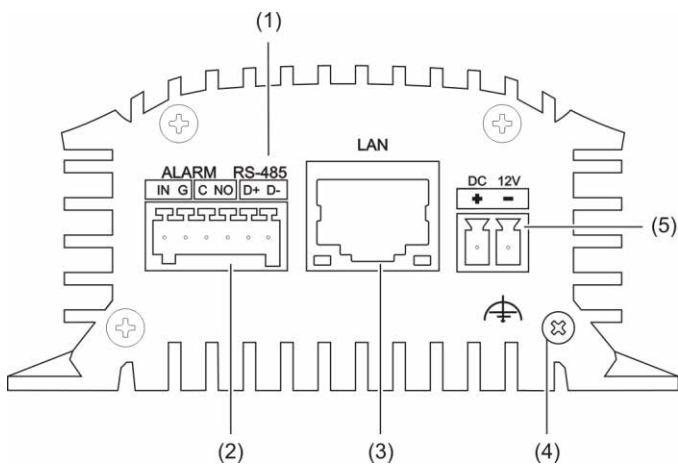- 1X 2-pin 3.5 mm terminal block (for power)
- 4X mounting screws

(1) LINE IN – 3.5 mm interfaced for two-way audio input. Connect to an audio input device, active pick-up, or microphone.
(2) AUDIO OUT – 3.5 mm interface. Connect to an audio output device, such as a loudspeaker.
(3) POWER LED – Illuminates red when the device is powered on. Illuminates in orange when the SD card is inserted.
(4) VIDEO IN – BNC connector for video input.
(5) RESET – Restore the factory default setting by holding the RESET button for more than 15 seconds after power is turned on.
(6) microSD – MicroSD interface for data storage.

Figure 2: Encoder back

(1) RS-485 – RS-485 serial interface. Connect to a pan/tilt unit, speed dome, etc.
(2) ALARM IN/OUT – Relay alarm input/output.
     Note: The alarm output terminal provides no JP2 pin.
(3) LAN – 10/100 Mbps adaptive Ethernet interface (PoE). The right LED indicator illuminates green when the network cable is connected. The left LED indicator blinks orange when data is transmitting or receiving.
(4) GND – Earth ground
(5) DC 12V – 12 VDC power connection.

Mount the encoder

Caution: This encoder is not approved for outdoor use. Only install this product in an indoor environment.

The encoder kit contains four screws for mounting the device to a solid surface.

To mount the encoder:

1. Place the encoder against a solid surface, and then mark the location of the mounting holes.

2. Remove the encoder, and then drill the four mounting holes.

3. Position the encoder, and then attach it to the surface using the screws provided.

Connect the cables

To make the front connections:

1. Connect the camera to the encoder's BNC connection labeled "VIDEO IN".

2. (Optional) Connect an audio input device, such as a microphone, to the port labeled "LINE IN".

3. (Optionally) Connect an audio output device, such as a loudspeaker, to the port labeled "AUDIO OUT."

To make the back connections:

1. Connect one end of a shielded network cable to the encoder port labeled "LAN" and then connect the other end of the cable to one of your router's network ports.

2. Insert the 6-pin terminal block into the port labeled "ALARM" and then optionally connect external input/output devices – for example, alarm devices.

3. Attach a grounding wire to the encoder using the grounding screw, and then attach the other end to your rack or other ground.

Insert the memory card

You can store video directly to a microSD memory card inside the encoder.

To install a microSD card:

1. Insert a microSD card (not included) into the port labeled "microSD" on the front of the encoder.

2. Check to be sure the card is in the correct orientation.

Connect power

A 2-pin 3.5 mm terminal block is used for power input.

To connect power:

1. Insert the 2-pin terminal block into the outlet marked "DC12V", making sure that it is seated properly. See Figure 2, item 5.

2. Insert the power cable wire marked "DC12V+" into the connector hole marked "+."

3. Inset the power cable wire marked "GND" into the connector hole marked "-."

4. Attach the other end of the power adapter to and AC outlet.

5. Check that the indicator LEDs to verify the correct conditions.

Resetting to the factory default

This will reset all parameters, including the IP address, to the factory default settings.

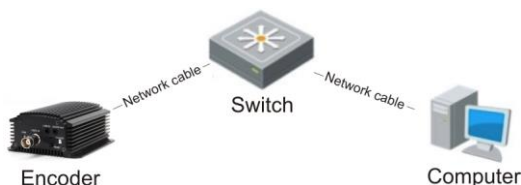**To reset the encoder to the factory default:**

1. Ensure the encoder is powered off.

2. Insert a rigid object, such as the end of a paper clip, into the Reset hole, and then press in and hold the button for 15 seconds. See Figure 1, item 5.

Setting the encoder over the LAN

To view and configure the encoder via LAN (Local Area Network), you need to connect the encoder in the same subnet with your PC. Then, install the SADP software to search and change the IP of encoder.

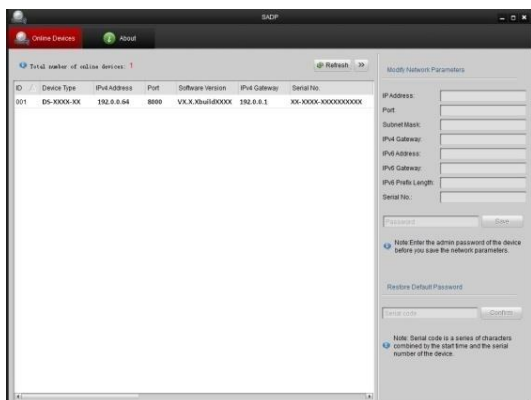The following figure shows the cable connection of encoder and PC:

Figure 3: Wiring over LAN

To set the IP address of the encoder for accessing via LAN:

1. To get the IP address, use the SADP, a software tool that can automatically detect encoder in the LAN and list the device information like IP address, subnet mask, port number, device serial number, device version, etc., shown in the figure below.

2. Change the IP address and subnet mask to the same subnet as of your PC.

   After launching the SADP software, it automatically searches the online devices every 15 seconds from the subnet where your computer is located. It displays the total number and information of the searched devices in the Online Devices interface. The interface displays the device type, IP address, port number, and gateway.
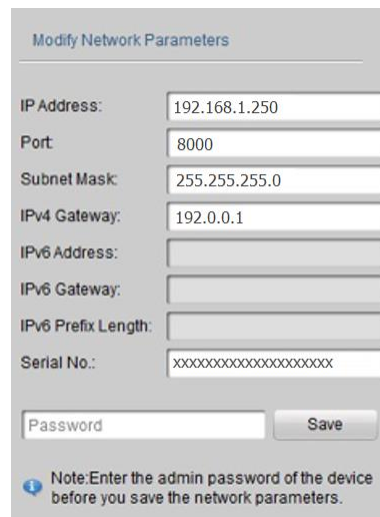

Notes

- The camera takes 15 seconds to show up online, and 45 seconds to show offline when it is removed.

- Click Refresh Every 15s to refresh the online device list manually.

- Click △ or ▽ on each column heading to change the order of the displayed information.

- Click » to show the device table and hide the network parameter panel, or click « to show the network parameter panel.

To modify device information:

1. Select the device to be modified from the device list as shown below.

2. The network parameters of the device will be displayed in the Modify Network Parameters panel on the right side as shown below.

3. Edit the modifiable network parameters – for example, IP address and port number.

4. Enter the password of the admin account of the device in the Password field and click Save to save the changes.

5. Enter the IP address of encoder in the address field of the web browser to view the live video.

Notes

- The default value of the IP address is 192.168.1.250. The default user name is "clareadmin," and password is "secure7."

- When accessing the encoder from different subnets, set the gateway for the encoder after you log in.

Accessing via a web browser

System requirements

- Operating System: Microsoft Windows XP SP1 and above version / Vista / Win7 / Server 2003 / Server 2008 32bits

- CPU: Intel Pentium IV 3.0 GHz or higher

- RAM: 1G or higher

- Display: 1024 x 768 resolution or higher

- Web browser: Internet Explorer 7.0 and above, Apple Safari 5.02 and above, Mozilla Firefox 3.5 and above, and Google Chrome8 and above

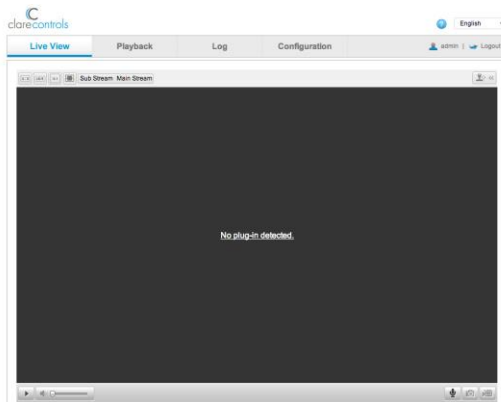**To access via a web browser:**

1. Open the web browser.

2. In the browser address bar, enter the IP address of the encoder – for example, 192.168.1.250 and press Enter to display the login interface.

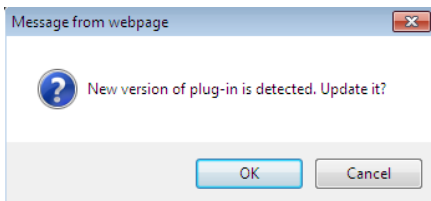3. Enter the user name and password, and then click Login.

4. Install the plug-in before viewing the live video and managing the encoder. Follow the installation prompts to install the plug-in.
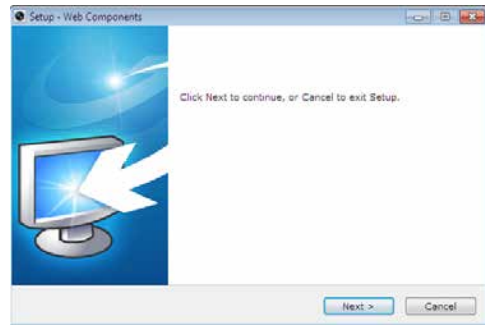
   Notes

   - You may need to close the web browser to finish the installation of the plug-in.

   - Mac's require the plug-in to be downloaded manually. See the [Clare Controls ClareVision IP CCTV Dashboard](#) to download the plug-in.
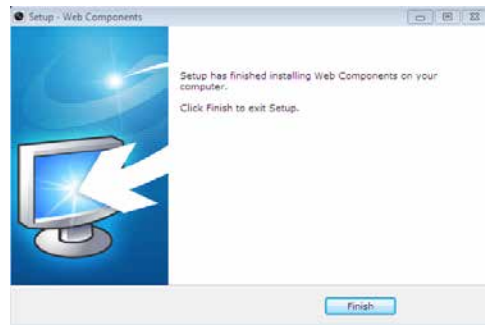

5. Click OK.

6. Click Next.

7. Click **Finish**.

8. Reopen the web browser after the installation of the plug-in and repeat steps 2 and 3 to login.

Specifications

Video Compression	H.264 / MPEG4 / MPEG2 / MJPEG
Video input	1-ch, BNC (1.0 Vp-p, 75 Ω)
Audio Compression	G.711u
Audio input	1 ch, 3.5mm interface (2.0 Vp-p, 1 kΩ) (LINE IN)
Two-way audio input	1 ch, 3.5mm interface (2.0 Vp-p, 1 kΩ) (LINE IN)
Audio output	1 ch, 3.5mm interface (Linear, 600 Ω)
Recording resolution	DS-6700HFI(-SATA): 4CIF / 2CIF / CIF / QCIF
Frame rate	25 fps (P) / 30 fps/N
Video bit rate	32 Kbps ~ 3072 Kbps, or user defined (Max. 8192 Mbps)
Audio bit rate	64 Kbps
Dual-stream	Support
Stream type	Video, Video & Audio
Network interface	1 RJ-45 10 M / 100 Mbps adaptive Ethernet interface (PoE)
Serial interface	1 half-duplex RS-485 interface
Alarm	1 in, 1 out
Power supply	12 VDC
Consumption	≤ 5W
Operating environment temperature humidity	14 to 131°F (-10 to +55°C) 10 to 90%, noncondensing
Dimensions (W × H × D)	3.15 × 1.5 × 3.5 in. (8.0 × 3.8 × 8.9 cm)
Weight	≤ 0.5 Kg

Regulatory information

FCC compliance	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
EU compliance	**CE** This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the Low Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EC, the RoHS Directive 2011/65/EU.
European Union directives	1999/5/EC (R&TTE directive): Hereby, UTC Fire & Security declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
	2002/96/EC (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.
	2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info.

Warranty information

Clare Controls offers a three (3) year limited warranty on original Clare Controls components, from the date of shipment from Clare Controls. To view complete limited warranty details, including limitations and exclusions, www.clarecontrols.com/warranty.

 Scan the code to view product warranty details.

Contact information

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