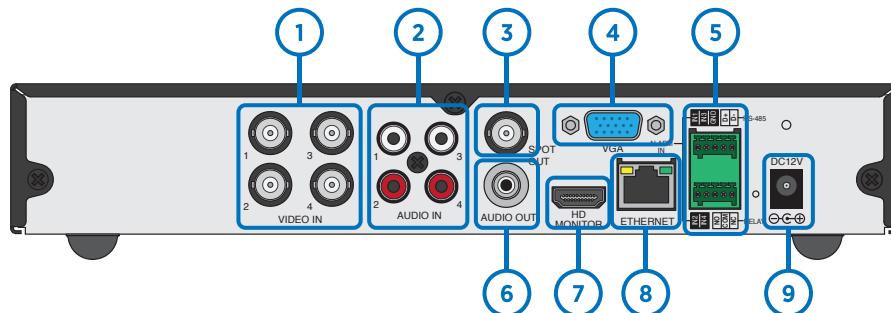
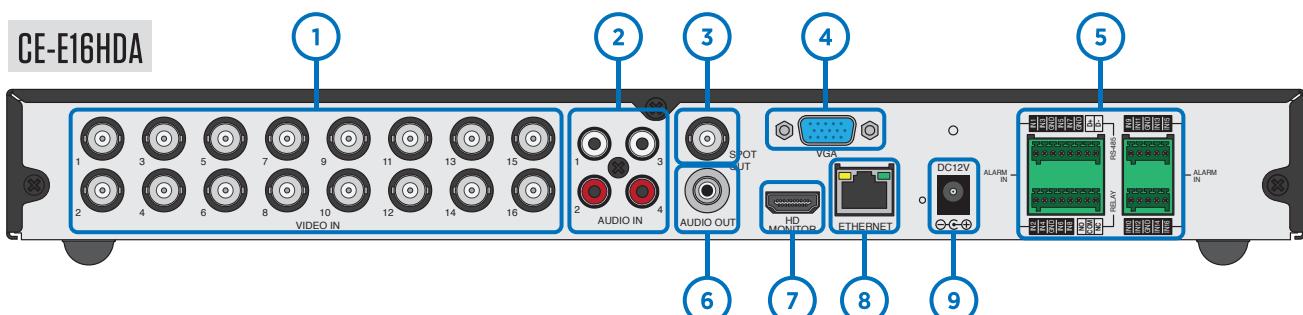


1. Hardware Overview

CE-E04HDA



CE-E16HDA



1. VIDEO INPUTS (Analog/CVBS, AHD, TVI up to 4MP)

2. AUDIO INPUTS

3. SPOT MONITOR OUTPUT (CVBS)

4. VGA MONITOR OUTPUT (1280 x 1024 max)

5. RS485 / RELAY (Alarm Output) / **ALARM IN**

6. AUDIO OUTPUT

7. HDMI MONITOR OUTPUT (UHD 3840 x 2160 max)

8. ETHERNET PORT

9. 12VDC POWER INPUT

2. Basic Connection

1. Connect coaxial cable from Analog/HD Analog cameras to the desired channel on the back of the Encoder.
2. Plug in an ethernet cable to the Ethernet port on the back of the Encoder. This device does not support WiFi and must be directly connected to a Modem/Router for network connection.
3. Connect any RS485, Alarm Inputs/Outputs or Audio Inputs/Output connections.
4. Choose a desired main monitor connection; VGA or HDMI. (VGA connection does not support UHD 4K output)



Ensure there is adequate ventilation around the Encoder and do not cover or block the fan and/cooling vents. The Encoder can over-heat if these are blocked.

5. Plug in USB mouse to front of Encoder.
6. Plug the 12VDC power cord into the back of the Encoder.
7. Plug the cord from the power supply into an appropriate surge protector. Plug the surge protector into main power source.
8. The Encoder will begin to boot up after the power has been connected. Please wait.
9. After initial boot up, proceed to step 3a to create a password for the ADMIN user.

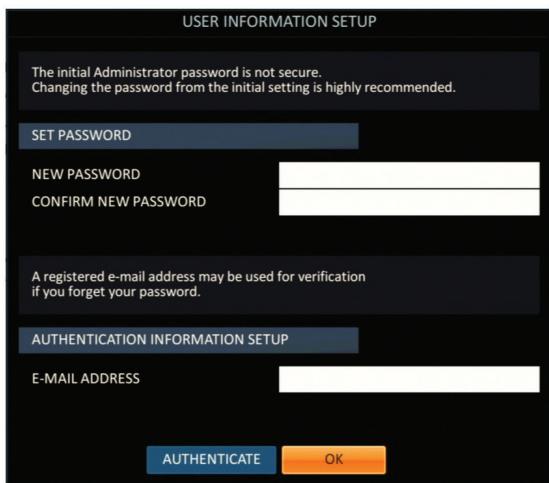


Do not install the Encoder into an environment that is exposed to extreme temperatures; attic/walk-in freezer. Do not install the Encoder on top or near equipment that generates heat.

NOTE:

- **This is not a recording device!** No HDD Installed, unable to install HDD! Connect to NVR or other network recording device.
- **This device does not support WiFi connection.** A hardwired network connection is required for proper function.
- **This is not a PoE device!** Main power to the encoder must come from included DC12V power supply.
- This Encoder features an on-screen user interface. This Quick Guide details the use of the on-screen menu when using a connected monitor. Setup can also be achieved using a web browser if the IP Address of the encoder is already known.

3a. Initial Setup / Create Password



- After providing power to the encoder, wait for the boot up sequence to finish.
- Set the password for the **ADMIN** user role. Double-click in the password field to display the on-screen keyboard.
- If desired, enter an email address to be emailed a password reset in the event you can not remember the password. (this can be set up later)
- Click **OK** when finished.

NOTE:

- A new, unique password is required to continue with setup. This step can not be skipped. Keep a record of the ADMIN password in a secure place.
- Enter an email address for the ADMIN in the event the password is forgotten. Email authentication requires the connected network have internet access.

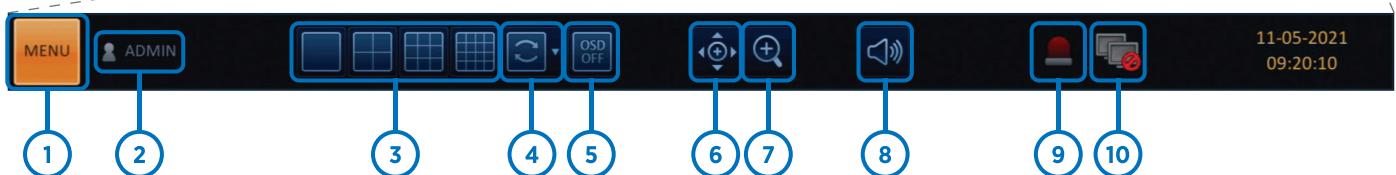
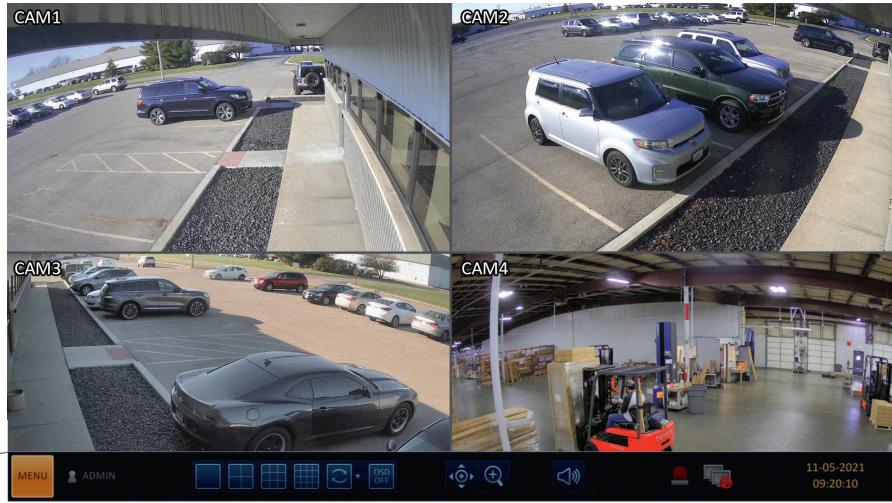
3b. Initial Setup / Network Setup Wizard



- If desired click '**Start Network Setup Wizard**' to configure the network settings. Follow the on-screen prompts to setup the network.
 - Click '**Cancel**' to skip this step. Network settings can be configured manually from **System Setup / Network**.
- i** The Network Setup Wizard can be found in System Setup / System / System Management.

4. Status Bar

- Move the mouse cursor to the bottom of the screen to display the Status Bar.
- Changing the Multi-View Mode and other menu options are disabled when logged out. Log in to adjust.



- 1. MENU**: Click to access System Setup menu and Log Out / Log In
- 2. USER**: Displays current logged in user.
- 3. MULTI-VIEW MODES**: Click desired view icon to manually cycle through cameras, ex: if single camera view selected, clicking the icon again will advance to the next camera.
- 4. AUTO SEQUENCE MODES**: Click to begin single camera sequence. Sequence settings can be adjusted in System Setup / Display /
- 5. OSD ON/OFF**: Toggle OFF to hide the camera names.

- 6. PTZ CONTROL**: Click to control PTZ camera (requires additional setup for correct operation).
- 7. ZOOM**: Digital zoom in on desired camera.
- 8. AUDIO**: Click to select the desired Audio channel to listen to.
- 9. ALARM STATUS**: Displays current alarm input/output status.
- 10. NETWORK STATUS**: Displays current network status and connected clients.

5a. Network / IP Setup (if not using DHCP)

The screenshot shows the 'IP SETUP' section of the network configuration. Under the 'NETWORK' tab, the 'IP SETUP' option is selected. On the left sidebar, other options like 'DDNS', 'EMAIL', 'NETWORK STATUS', 'SECURITY', and 'RTP' are listed. The main panel shows the 'IPv4' tab selected. In the 'DHCP' section, the IP address is set to 10.1.3.55, gateway to 10.1.3.254, and subnet mask to 255.255.255.0. The '1ST DNS SERVER' is 10.1.3.23 and '2ND DNS SERVER' is 0.0.0.0. The 'AUTO PORT UPDATE' dropdown is set to 'ON'. A message box states 'The router does not support UPnP.' with buttons 'CONFIRM/CONFIRM' and 'DELETE PORT'. Below this are sections for 'RTSP SERVICE PORT' (set to 554) and 'WEB SERVICE PORT' (set to 80), each with 'AUTO PORT FORWARDING' and 'DELETE PORT' buttons. The 'MAX TX SPEED' is set to 'MAX'. At the bottom are 'CANCEL', 'APPLY', and 'CLOSE' buttons.



ATTENTION:

Actual network settings and addresses will vary depending on network configuration/requirements. Use this information as a basic guide in configuring network settings.

5b. Network / DDNS (optional)

The screenshot shows the 'DDNS' section of the network configuration. Under the 'NETWORK' tab, the 'DDNS' option is selected. On the left sidebar, other options like 'IP SETUP', 'EMAIL', 'NETWORK STATUS', 'SECURITY', and 'RTP' are listed. The main panel shows the 'DDNS SETTINGS' tab selected. The 'DDNS' dropdown is set to 'ON'. The 'DDNS SERVER' is set to 'dvrlink.net'. The 'DVR NAME' is '00116f000978'. The 'DVR ADDRESS' is '00116f000978.dvrlink.net'. Buttons for 'DDNS REGISTRATION TEST' and 'DDNS CONNECTION TEST' are present. At the bottom are 'CANCEL', 'APPLY', and 'CLOSE' buttons.

6. Camera / Codec Setup (optional)

The screenshot shows the 'CAMERA' section of the configuration. Under the 'CAMERA' tab, the 'CODEC SETUP' option is selected. On the left sidebar, other options like 'CAMERA TYPE SETUP', 'CAMERA TITLE', 'IMAGE SETUP', 'COVERT SETUP', 'MOTION SENSOR', 'PTZ SETUP', and 'PRIVACY MASK' are listed. The main panel shows the 'CODEC SETUP' tab selected. A dropdown menu 'CH1 - CAM1' is open. The 'PROPERTY' column includes 'CODEC', 'PROFILE', 'RESOLUTION', 'FPS', 'GOP', 'BITRATE CONTROL', and 'BITRATE'. The 'VIDEO STREAM' section shows '1ST STREAM' and '2ND STREAM' for each property. For example, 'CODEC' is H.264 for both streams. Other properties like 'RESOLUTION' (960x480), 'FPS' (30), 'GOP' (30), 'BITRATE CONTROL' (CBR), and 'BITRATE' (4000) are also listed. The 'MJPEG QUALITY' is shown as 40. At the bottom are 'APPLY' and 'CLOSE' buttons.

Check the network address information if using a network environment connected to the same router.

- From the main menu of the Encoder, move to **System Setup / Network / IP Setup**.
- Un-check the DHCP check-box and provide the necessary information manually. (Check the network address information in the network environment settings and enter the correct information)
 - IP Address** : Enter the desired IP address for the encoder
 - Gateway** : Enter the Gateway from the Local Network
 - Subnet Mask** : Enter the Subnet Mask from the Local Network
 - 1st/2nd DNS Server** : Enter the address of the DNS server
- When done, set the port numbers for RTSP and Web Service ports, then click **Auto Port Forwarding** if the router supports UPnP. Some routers do not support UPnP. If there is a failure message, manual port forwarding will need to be performed on the router.
- After the IP Address, RTSP and Web Port information has been configured, click **Apply** to save settings.

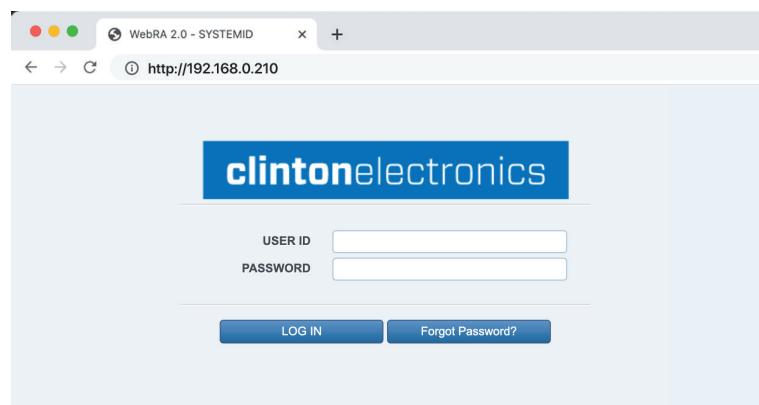
Once the network configuration is complete, proceed with the DDNS settings (if desired) to allow access to the Encoder from outside the network.

- From the main menu of the Encoder, move to **System Setup / Network / DDNS**.
- Set DDNS from OFF to **ON**.
- Select the DDNS server and enter a unique name for the Encoder. The default name is the MAC Address of the Encoder.
- Click **DDNS Registration Test** to check if the name is available and register. Then click **DDNS Connection Test**. If both tests are good, then click **Apply** to save changes.
- From the router, check that the Encoder's IP Address and Web port is accessible from the outside.
- The remote address for the Encoder will be the name assigned in step 3. For example, if the name assigned in step 3 is: *MyEncoder* — the address will be: <http://MyEncoder.dvrlink.net:80> (if the web port is set to 80).

Adjust the individual network stream properties of each camera.

- From the main menu of the Encoder, move to **System Setup / Camera / Codec Setup**.
- Select the desired channel/camera from the drop-down menu.
- Set the desired codec, resolution, FPS, and other stream options. For best performance, these parameters may need to match those of additional connected network NVR or other device.
- Once complete with making adjustments to the camera stream properties, click the **Apply** button to save changes.

7. Web Viewer



The Encoder can be accessed through most web browsers (Google Chrome, Safari, Fire Fox, Microsoft Edge) to view individual live camera feeds or make adjustments to the Encoder.

1. Open the desired web browser and enter either the IP Address of the Encoder or the URL from the DDNS Address.
2. Log into the encoder as ADMIN with the unique password created in step 3a. (the fields are case sensitive)
3. If the User ID & Password were correct the live camera feed will display. If it fails to connect, re-enter the password or click the Forgot Password button. The account will be locked out for a few minutes if there are multiple failed login attempts.

- 1. VIEW SELECTION** : Click 'LIVE' to display the camera view, or click 'SETUP' to make adjustments to the Encoder settings.
- 2. PTZ CONTROL PANEL*** : Control PTZ cameras. Requires additional setup (matching Baudrate, Protocol, ID, etc) for proper function.
- 3. PTZ CONTROL EXPAND/COLLAPSE** : Click to collapse or expand the PTZ Control panel.
- 4. VIDEO QUALITY** : Indicates the quality of the camera preview. This is not the actual quality of the stream setting. The camera preview will only be a low-res MJPEG regardless of the camera's stream profile settings.
- 5. CAMERA SELECTOR** : Use the drop-down box to select the desired camera to preview.
- 6. FULL SCREEN** : Click to expand the window to full screen. Hit the Full Screen button again, or the Esc key on the keyboard to return to the standard view.

- 7. ALARM STATUS** : Click to display information about the current state of connected Alarm inputs/outputs, Motion Detection and Video Loss.
- 8. NETWORK STATUS** : Click to display network information about the encoder.
- 9. ALARM & NETWORK EXPAND/COLLAPSE** : Click to collapse or expand the Alarm & Network Status panel.
- 10. ALARM & NETWORK PANEL** : Displays current network status and connected clients.
- 11. DATE & TIME** : Displays the current date/time at the encoder.
- 12. WEB VIEWER SETTINGS** : Settings for the web viewer display, most settings, besides Language, are not user adjustable.
- 13. USER** : Displays the currently logged in user name.
- 14. LOG OUT** : Click to end the session and log out.

***PTZ CONTROL NOTE:** Depending on the camera type, camera adjustments can be made remotely via coaxial control. The Protocol setting should be set to Coaxitron in the PTZ Setup menu (Camera / PTZ Setup). This function not supported on all cameras.

- a. Click the Home icon to enter the camera's OSD menu. Click the Up/Down arrows to navigate. Click the Home button to enter a sub-menu.
- b. If the camera supports motorized zoom, click the Zoom +/- buttons to adjust the zoom of the lens.