

Step One Check Equipment and Network

Before you begin, confirm that you have the necessary equipment and are installing your ExpressHD Recorder on a network that meets minimum network and equipment requirements. If this CheckVideo device will be monitored by a central station, please contact the central station for a username and password on their existing CheckVideo account. The central station will add the device to their account.

If this device will be self-monitored, and you do not have a CheckVideo account, you must contact CheckVideo Support at 888-992-8433 to establish service.

Network Requirements

- Active broadband Internet connection with an upload speed of at least 1 Mbps
- If you have an active firewall, it cannot block outbound traffic on ports 123 (used for network timing), 80 (HTTP), or 443 (HTTPS)
- DHCP enabled switch or router
- Access to your router configuration may be necessary

Equipment Requirements

Included:

- ExpressHD Recorder
- ExpressHD power supply
- Mouse

Customer Provided:

- NTSC, AHD or ExpressHD cameras, serving 2MP to 4MP video streams. 5MP+ video streams are not supported.
- Ethernet cable to connect the ExpressHD Recorder to the network
- Computer or laptop with broadband access for setup

Optional:

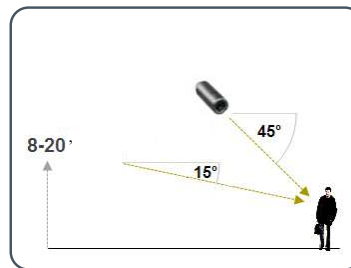
- Monitor for locally viewing live video. This is connected to the HDMI output.
- UPS power supply

Step Two Install Cameras

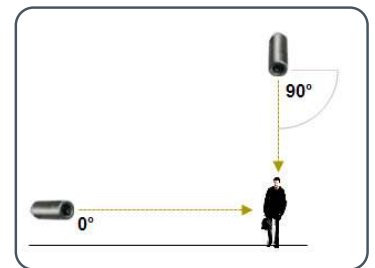
- Select a location for each camera. When placing a camera, try to follow as many of the following guidelines as possible.
 - **Camera Position:** Camera is mounted 8 to 20 feet above the ground and tilts downward at an angle between 15° and 45°.
 - **Target Direction of Motion:** People and vehicles (i.e., “targets”) should mostly travel from left-to-right or right-to-left across the camera view, not directly toward or away from the camera. Targets should remain in full view in the detection zone of the camera view for at least the amount of time specified in the event duration.
 - **Vertical Orientation:** Objects in the camera view appear upright (i.e., the camera body is not rotated clockwise or counter-clockwise with respect to the ground plane).
 - **Adequate, Even Lighting:** Lighting is constant and adequate for the light requirement of your camera.
 - **Cabling Issues:** Confirm that you can see live video from a monitor connected to the Recorder prior to connecting your cameras. Confirm that there is no video split or horizontal bar caused by cable damage, crimping, or extreme length.
 - **Avoid Physical Obstructions or Distractions:** Where possible, avoid physical obstructions and sources of constant motion (e.g., moving doors).
 - **Avoid Reflections, Glare, or other Extreme Lighting:** Where possible, avoid reflective surfaces (e.g., mirrors, window panes, water, or polished floors) or bright lights (e.g., headlight glare, direct sunlight) directed at the camera.

Refer to the *CheckVideo Camera Placement Guide*, available at www.checkvideo.net for more detail and examples.

- Extend the cable from the camera location to your Recorder. Before running cable, make sure that it is of sufficient length and that the appropriate connectors are at each end.
- Make sure that all cameras have required video connections and are powered up.



MORE EFFECTIVE - Cameras are at a 15 to 45 degree downward tilt and are mounted 8 to 20 feet high



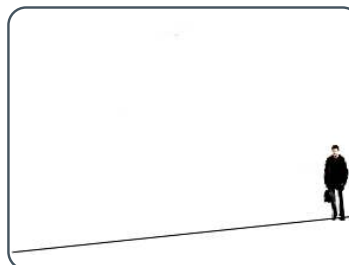
LESS EFFECTIVE - Cameras are directly overhead (90 degrees) or parallel to (0 degrees) the target



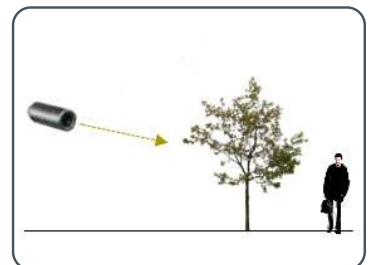
MORE EFFECTIVE - A target traveling from left to right



LESS EFFECTIVE - A target traveling directly toward the camera



LESS EFFECTIVE - Target not upright (vertical orientation); camera body is rotated 5 degrees or more



LESS EFFECTIVE - Physical obstructions between the camera and the target

Step Three Connect ExpressHD Recorder

1. Connect each camera's video cable to the camera connections on the back of the Recorder.
2. Use an Ethernet cable to connect the Recorder to your network.
3. Connect a monitor to the HDMI outlet (optional).
4. Connect the Recorder power supply to the Recorder and plug it in.
5. Wait a few minutes. The cameras will display on the monitor when ready to be added to the CheckVideo portal.

Note: Always attach a camera to the Channel 1 BNC connector.

ExpressHD back panel

Built-in 6TB Hard Drive.
30 Day 24x7 recording of 8 cameras at 2 megapixels

Always use Channel 1 when adding cameras.

Ethernet port for switch or internet router.

Installation Note: It is highly recommended to connect (⏏) to earth ground.
Consult a local electrician for building standards in your area.

Input: Connect to input pin and ground
Output: Connect to common and either - no or nc pin

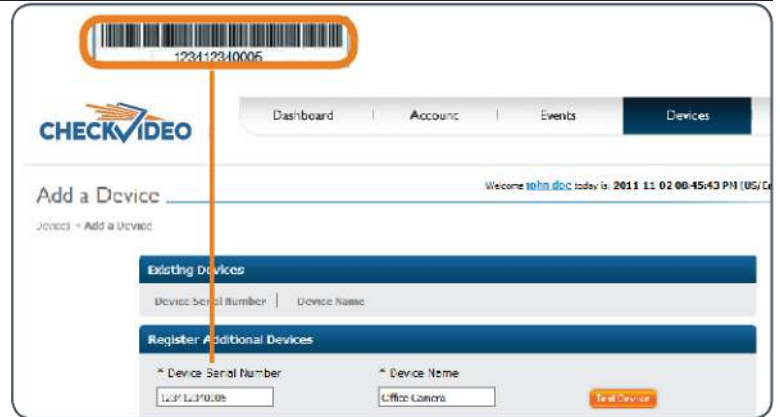
8 channels of input video, BNC connectors. Inputs are terminated, so these should be the last device on the line. Compatible with ol NTSC analog cameras. Auto-sending. Upconverts NTSC to 2MP video.

HDMI output to 1080p monitor. 3x3 matrix display of 8 cameras.

USB port for mouse

Step Four Add Recorder Device

1. If camera will be monitored by a central station, contact them to add the device to their account.
2. If self-monitored:
 - Open a browser and go to your portal, e.g. portal.checkvideo.net
 - On the CheckVideo Dashboard, click on Devices > Add Device.
 - In the Register Device section, enter the MAC ID found on the underside of the camera and a Device Name.
 - Click the Test Device button to make sure the CheckVideo Software Service (CVSS) can communicate with the device.
 - If prompted, update the device firmware.



Enter the serial number from the bottom of the ExpressHD device

Step Five Configure Device

1. On the CheckVideo Dashboard, click on Devices > Configure Device.
2. Select Device: Select the device.
3. Select the cameras. You can name the camera and select video resolutions for event clips and DVR. CheckVideo will default both resolutions to 1080p. You may wish to start with these settings. Your chosen resolution settings will depend upon the upload capacity of your internet provider.
4. Configure Events: Click the Edit button to create a zone for a particular object type. Then use your mouse to draw the zone by clicking the left mouse button wherever you want to define a point of the zone. The zone should cover the entire area where you want to detect an event. Enter a time span, event type, zone, and duration and click Add Event button.

Make sure your browser is set to 100% when drawing your zone.

6. Select Notification Method - Users: Click the checkbox next to any user(s) who should receive notifications from this camera and their method of notification.
7. Click Save.



A zone, defined by eight end points (first point is green; other points are blue)



A completed zone

5. Select Notification Method - Central Stations: Select a Central Station type that should receive alert metadata. This is for monitored video accounts only. Separate charges may apply.