Camera, NVR, and ClareVision App FAQs

Updated 04/30/2021

Cameras

1. **Are your cameras NDAA compliant?**
   a. Yes, the ClareVision product line is compliant with NDAA regulations.

2. **Are your cameras ETL listed?**
   a. Yes, our cameras are ETL/ETL-C listed.

3. **Are your cameras ONVIF Compliant?**
   a. Yes, ClareVision cameras are compliant with Profile S and T.

4. **What is the difference between the Value Series and the Performance series?**
   a. The Value Series is intended to service accounts with basic surveillance requirements without sacrificing video quality and reliability. You will find the value series in the same high quality IP67 housings as the performance series and the video performance to be outstanding. The Performance Series adds:
      i. True Wide Dynamic Range (120db)
      ii. Smart Events (Intrusion, line crossing, loitering, people gathering)
      iii. Sony® Starvis™ image sensors for improved low light performance
      iv. Higher power on-board processor which will allow new smart event processing features in the future

5. **Do all cameras come with SD Cards?**
   a. No. The 2MP and 4MP Value Series and 4MP Performance series come with pre-installed SD cards. The 8MP and varifocal Performance Series cameras do not come with SD cards. SD Cards are available for purchase should you need to add or upgrade capacity.

6. **What can I store on the SD Card?**
   a. The SD card is intended for event storage, but you can configure normal (full time) record as well. You can only record ONE event type to record on the SD card: basic motion, smart events, OR normal record. NVR's do not have this restriction.

7. **What is the lapse time for the SD Card, and will it loop back?**
    a. The SD card in the 2MP is 16GB and 32GB in the 4MP cameras (both Performance and Value). For the 4MP cameras, if the defaults in the camera are left unchanged, you will be able to record approximately 18 hours of fulltime video or just over 1,000 on minute events. If the compression is changed to H.265, you will be able to store about 36 hours of fulltime video or 2,000 one-minute events. The 2mp will last slightly longer. The default setting for the cameras is loop-back enabled, meaning the camera will overwrite the oldest stored video once it runs out of storage space (FIFO).

8. **Can I use the SD card as a 'backup' to the NVR by storing events locally and fulltime record and events on the NVR?**
    a. Yes. Camera recording can be set up independent from NVR recording.

9. **What are some of the important default settings I should know?**
    a. ClareVision have been configured for best out-of-box settings and experience. The default settings should be 'ready to go' for 90% of applications reducing training and field installation errors. The important settings are as follows:
        i. FPS: 15
        ii. Compression: H.264
        iii. IR: automatic
        iv. WDR (when available): off
        v. Time: NTP time server on, refresh every 10 min, Easter Time Zone, DST on
        vi. Motion Record: enabled, 7 days, 24 hours a day
        vii. Motion Events: enabled, 7 days, 24 hours a day
        viii. Smart Events: disabled

10. **Do any of the ClareVision cameras include built in microphones or I/O connections?**
    a. Yes. These Performance cameras have microphones built in:
        - CLR-V200-4T28W/B
        - CLR-V200-8T28W/B
        - CLR-V200-4B28W/B
        - CLR-V200-8B28W/B
    b. The following cameras have external I/O connections:
        - CLR-V200-4T28W/B
        - CLR-V200-8D28W/B
        - CLR-V200-4B28W/B
        - CLR-V200-4TVFW/B
        - CLR-V200-4D28W/B
        - CLR-V200-4BVFW/B
        - CLR-V200-8T28W/B
        - CLR-V200-4DVFW/B
        - CLR-V200-8B28W/B

11. **What is the password process and what if I lose it?**
    a. The default password is the **first six characters of the UUID**. The first time you log into the camera from the web console you will be prompted to change the password. You will be prompted with setting up security questions and offered to download an encryption key for password recovery. Either those questions or the encryption key can be used to reset the password. If you do not take those steps and store that information, the only way to recover the camera is a physical factory restore. (See manual). When that is done, the camera will restore to factory default settings allowing you to enter the first fix digits of the UUID as the password.

12. **I use Hikvision, is there an 'activation key'?**
    a. There is no 'activation key' for the ClareVision cameras.

13. **What is the difference between the calendar in the storage settings menu and the calendar in the events menu?**
    a. The events menu is essentially an 'arming' feature. In order to propagate events to the mobile app, linked services (e.g., relays, FTP, email), or to record you need to arm an event type. The configuration of the event along with the event calendar control the CONFIGURATION of the event (e.g., H/M/L sensitivity, motion area) and the time of day / day of week the camera will trigger on an event. The event 'arming' controls when and how an event happens, and no other system or service will receive those events without this feature set up. The record calendar simply controls when events (or normal video) will be recorded <u>provided they are armed at that time.</u>

14. **What do you recommend I do for setup with the two calendars?**
    a. The flexibility of these calendars is virtually endless, but in a majority of use cases we recommend the following:
        i. Set the record calendar to 7x24 record for the event type you wish to record
        ii. Use the event calendar to control when an event will be triggered which will in turn control when it is recorded.

15. **How does all this relate to the mobile app and the user experience?**
    a. The event 'arming' controls the propagation of the event to the mobile app via push notifications. This is INDEPENDENT from whether the event is recorded. The recording under storage management controls what ends up on the SD Card which is where the mobile app goes for the event history. <u>We cannot stress this enough: keep the storage settings calendar set to 7x24 and use the event calendar to control when a motion event (example) is triggered (push notification) and stored to the SD card (event lookup in the mobile app). If you do not do that you risk having a push notification sent to the user with no recording to view when they go to the event log.</u>

16. **Why then are the event arming schedules and record schedules separate?**
    a. There are plenty of use cases where you may want to record on a different schedule than the arming schedule. This can be common in more complex installs where the linkage feature for event arming is used. (see manual for more information).

17. **What are the smart events and how do they work?**
    a. Smart Events are events that require the presence of a human to trigger. They are also specific in nature: intrusion zone, line crossing, loiter, people gather.

18. **What is the difference between a motion event and a smart intrusion event?**
    a. You can essentially use the Smart Intrusion event to reduce false triggers if the primary interest is detecting the presence of a person. Motion events use a typical grid pattern and sensitivity settings to control which areas of the field of view are analyzed for motion and at what sensitivity. A car, dog, or any real motion in the included field of view will trigger an event. A smart intrusion event is set up by drawing a box around the area of interest, setting the sensitivity and detection type. Once configured, a human will have to enter the intrusion zone for the event to trigger.

19. **How do I power the cameras?**
    a. All the ClareVision cameras are PoE AF and do not require PoE+ (PoE AT). You can also power the cameras with a 12V DC 1amp power supply (not included).

20. **Do the cameras support remote access?**
    a. The cameras support remote access via the mobile app via Clare's free P2P service. Additionally, you may use Dynamic DNS or configure the local router to enable remote web access.

21. **How do I predict the storage and bandwidth required for an installation?**
    a. You may use the Clare bandwidth and storage calculator located HERE to calculate your bandwidth and storage requirements for a project.

22. **How do the cameras receive firmware updates?**
    a. All Clare cameras can be updated via the ClareVision OTA server using the mobile app. This is the easiest way to update the cameras. Update notices happen two different ways:
        i. Upon adding the camera to the app, the app will check the OTA server for a firmware update and, if available, require the user to download the update.
        ii. Once added, if the camera is eligible for an update an icon will appear in the live view indicating there is an available update. Updates are in the device configuration dropdown under "Device Information".

23. **Which browsers does Clare support?**
    a. Plug-less browsers (Firefox, Chrome, Edge, Safari) are supported for all features <u>except playback.</u> Playback currently requires Internet Explorer. Playback support for plug-less browsers will be released as a firmware update in late Q2/early Q3 2021.

24. **Is there a Control4 driver for ClareVision cameras?**
    a. Yes. The Control4 driver supports live view and events including motion events and smart events. SDDP is not currently supported but will be released along with OVRC support before the end of 2021.

25. **Is there a ClareOne driver for ClareVision cameras?**
    a. Yes. The ClareVision driver supports live view on the mobile app and ClareOne panel as well as motion and smart event propagation for automation rules and notifications.

26. **Are the ClareVision cameras OVRC enabled?**
    a. No. OVRC support will be released as a firmware update before the end of 2021.

Network Video Recorders (NVR's)

1. **Are your NVR's NDAA compliant?**
    a. Yes, ClareVision products are in full compliance with the NDAA regulations.

2. **Which browsers does Clare support?**
    a. ClareVision NVR's currently support Internet Explorer. Support for plug-less browsers will be released as a firmware update in late Q2/early Q3 2021.

3. **Can I record normal video (full time), smart events and motion events on independent schedules?**
    a. Yes. Recording schedules are controlled under storage management.

4. **How much storage is on an NVR?**
    a. The 4-Channel has 1TB, the 8-Channel has 2TB and the 16-channel (upcoming) has 4TB of HDD storage on-board. The 4-channel and 8-channel support one HDD up to 8TB's. The 16-channel supports up to 2 HDD or 16TB's of total capacity

5. **Do your NVR's support outboard storage?**
    a. Yes. They support USB drives and NAS drives.

6. **I see you list your NVR's as 4, 8 and 16 channel but the camera support figures are higher, please explain?**
    a. The model ID for the NVR (e.g., 4-channel) is the number of PoE ports on-board. The channel support listed in the data sheet is the actual number of cameras the NVR will support. The four channel will support 9 cameras, the 8 channel will support 16 cameras and the 16 channel will support 25 cameras. **Keep in mind the cameras supported number is a license number and is not an absolute support figure. The incoming and outgoing bandwidth of the NVR will dictate the number of cameras the NVR can support in a real application. The bandwidth calculations are impacted by VBR settings, compression settings, framerate settings, motion in the field of view among other factors.**

7. **Does your NVR support 4K?**
    a. Yes. The NVR output is 4K. If the camera is not a 4K camera, the NVR will up-sample the video to 4K as it passes video to the HDMI port. The NVR will record up to 4k (8MP) camera streams.

8. **Do your NVR's have sensor inputs and relay outputs?**
    a. Yes. There are 16 sensor inputs and 4 relay outputs on the 16 channel NVR.

9. **Does the NVR expose the camera settings for easy setup?**
    a. Yes, the NVR provides access to nearly all camera settings via the NVR web UI.

10. **Is there a Control4 driver for the NVR?**
    a. Yes, the Control4 driver supports live view. If you would like events from a camera on the NVR, connect the camera to the NVR on the general LAN and not the PoE ports. When that is done, the camera driver can be used to directly access the cameras.

11. **Is there a ClareOne Driver for the NVR?**
    a. Yes, the ClareOne driver supports live view. If you would like events from a camera on the NVR, connect the camera to the NVR on the general LAN and not the PoE ports. When that is done, the camera driver can be used to directly access the cameras.

12. **Are the ClareVision NVR's OVRC enabled?**
    a. No. We expect to enable ClareVision NVR's on OVRC by the end of 2021.

13. **Do the ClareVision NVR's work with legacy ClareVision Plus cameras?**
    a. Yes. We have tested all ClareVision Plus cameras on the ClareVision NVR's. They will add as 'ONFIV' cameras.

14. **Do the ClareVision NVR's work with Luma cameras?**
    a. Yes. We have tested products from each Luma category on the ClareVision NVR's. They will add as 'ONVIF' cameras.

15. **When a ClareVision Plus camera or Luma camera are connected to a ClareVision NVR, which app do I use?**
    a. Connecting a ClareVision Plus camera, Luma camera (or ONVIF camera) to a ClareVision NVR enables the ClareVision app to gain access to the cameras for purposes of live view and event playback. The live view NVR integration to ClareOne and Control4 will also function. In effect, the ClareVision NVR 'adapts' a ClareVision Plus or third party ONVIF camera to the ClareVision cloud. You can use this technique to take over camera systems that are ONVIF compliant and bring them to the Clare Cloud!

16. **Can I add or change a ClareVision NVR hard disk drive?**
    a. Yes, the four, eight and sixteen channel NVR's have 1TB, 2TB and 4TB hard disk drives pre-installed. The four and eight channel NVR's can support one hard disk drive up to 8TB. The sixteen channel NVR has four drive bays total and ships with 1 4TB HDD pre-installed. The sixteen channel NVR can be equipped with up to four 8TB internal hard disk drives, or 32TB's total storage. Additionally, the sixteen channel NVR has an external SATA port for connection to external hard disk arrays. The warranty is not voided when you change or upgrade hard disk drives.

17. **What manufacturer and model hard drives are recommended?**
    a. Clare installs and recommends Toshiba DT series hard disk drives designed for surveillance applications.

Mobile Application and ClareVision Account

1. **Which operating systems is the app available on?**
   a. The ClareVision App is available on the Google Play store for Android and Apple App store for iOS.

2. **Does the mobile app support NVR's and cameras?**
   a. Yes. There is a different view for NVR's (grid view) than cameras. The features and actions are nearly identical other than the device presentation.

3. **How do I add cameras to the mobile app?**
   a. Adding cameras is extremely simple in ClareVision. Tap the "+" sign on the home page, tap 'device is on the network' if you are on the same network as the camera (e.g., home LAN), the app will scan the local network for all unattached cameras and NVR's and

produce a list of cameras for inclusion. Select the camera you would like to add and enter the password. You can now access the camera for live view and view all stored events on the camera or NVR.

4. **How do I configure the mobile app or cameras for remote viewing?**
   a. No configuration required. Once you add the device to the mobile app, the Camera is enabled in the ClareVision cloud automatically.

5. **Can I add a camera remotely?**
   a. Yes. Tap the "+" button on the home screen and either scan the UUID or enter it by hand, enter the password and done.

6. **I have noticed there are very few configuration options for camera events in the mobile app. Why is that?**
   a. That was intentional. Most pro-style apps do not provide configuration features in the end user mobile app. We did not want the user to inadvertently alter the configuration you enabled thereby causing a service visit. We will gradually enable end user configuration when that feature (e.g., motion) can be completely displayed to the end user and you can remotely view the changes and correct them in the event a user configured something incorrectly.

7. **Which events are supported by the mobile app at launch?**
   a. <u>Motion events are supported at launch. Smart events are not. We expect to release smart events support before the end of Q2 2021.</u>

8. **Can I search for a recording or event by date/time?**
   a. Yes, tap 'Filter' in the event log to filter by event type and/or date/time.

9. **I see you still have ClareHome/ClareOne and now ClareVision. What do I need to do to enable the best consumer experience?**
   a. While there are several ways to configure a ClareOne/ClareVision system, we recommend the following sequence as a guide to best practices:
      i. During the setup of the ClareOne panel via FusionPro, go to the "Add Devices" tab and select Cameras. When in that screen FusionPro/ClareOne will scan the local network for ClareVision Cameras and produce a list of devices you may add. In that screen, each camera discovered on the network includes a configuration web console link. Use that link to connect to the ClareVision Camera(s) or NVR web interface.
      ii. Use the web console for the cameras or NVR to set the password and configure the camera/NVR including event arming and recording schedules
      iii. Once complete, enter the new device username (default admin) and the new;y changed password in FusionPro to enable the camera(s) and NVR in ClareOne.

iv. Once the cameras are installed, have the user download the ClarOne/ClareHome app and the ClareVision app. Once the user has signed into the ClarHome app and added the desired cameras to the ClareVision app the two apps will <u>deep link</u>.

A deep link action happens when a user taps the ClareHome camera icon on the favorites page. Doing so will automatically take the user to the ClareVision app to that camera's live feed. Tapping the back arrow in Android or the app name in the upper left corner of an iOS device will return the user to ClareHome/ClareOne.

10. **Why did you release ClareVision on a second app?**
   a. After a great deal of deliberation, we determined that the stand-alone use cases for the camera line did not need the burden of the entire ClareHome application, and that through deep linking we could create a near 'single app' experience for the user when both systems are present.

11. **Where else is deep linking used?**
   a. Everywhere. Any app you use where you touch an icon or hyperlink uses deep linking to take you to the destination app/web site. The most well-known example of deep linking is Facebook and Facebook Messenger. The messaging app is an independent app from the base Facebook app and uses deep linking to provide a seamless user experience.

12. **Will there be a single account in the future for users with ClareOne and ClareVision?**
   a. Yes. We are working hard to provide a single-sign-on experience for the Clare Ecosystem. You can expect that to be completed in 2021.

13. **Is there a monthly fee for ClareVision services?**
   a. No. The P2P service and all cloud services are free of charge. We encourage dealers to charge for this service as part of your recurring monthly fee however making 100% of your service fee drop to your bottom line!

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