

Spectra® Professional Series IP Dome System

This document describes the known operational issues for the Spectra Pro Series Pan/Tilt/Zoom High-Speed Dome System. For additional information on the unit (including the latest updates to documentation, product specifications, and software downloads), visit the Pelco website at www.pelco.com.

NOTE: For technical issues, contact Pelco Product Support at 1-800-289-9100 (USA and Canada) or +1-559-292-1981 (international).

Upgrading the Motor Control Firmware

1. The camera firmware must be updated to version 5.10.39 first using any of the methods shown below.
2. After the camera reboots, you must use the camera user interface to upgrade using the MCU FW file: `pelco_mcu_48.ppm`. This update to the MCU firmware is only required to implement fixes in the version 5.10.39 firmware release.

Upgrading Firmware from Device Utility

3. Install Device Utility 2.3 or later, if it is not already installed.
 - a. Download Device Utility 2 from www.pelco.com.
 - b. Run the DU2 installer.
4. Open Device Utility and log on with administrator credentials.
5. Refresh your device lists, if necessary, to identify the cameras you want to upgrade.
6. Select the cameras you want to upgrade.
7. Click the Update Firmware icon or right-click an individual camera and select Update Firmware.
8. Select the firmware file and click Open. The Perform Update dialog appears.
9. Click OK to accept the update.

The camera will install the updated firmware and then restart. The update process takes approximately 15 minutes to complete.

Upgrading Firmware from Endura Utilities

1. Open Endura Utilities and log on. If upgrading cameras on an Endura® network, you must log on with administrative privileges to upgrade camera firmware.
2. Select the camera you want to upgrade in the System Attributes tab. (You can select multiple cameras by pressing and holding the CTRL or SHIFT keys while selecting cameras.) The camera appears in the right pane.
3. Click the Software Packages tab.
4. Click Add, locate the firmware file, and click Open.
5. Return to the System Attributes tab and select the camera to which you added firmware in the previous steps.
6. Right-click the camera, select Device Macros, and then select Update in the right pane.

The camera will install the updated firmware and then restart. The firmware update process takes several minutes to complete.

Upgrading Firmware from Camera User Interface

1. Use a web browser to access the camera via its IP address.

2. Click on the Login link in the upper right corner of the page and then enter credentials for the administrator.
3. Click Settings and then navigate to the Firmware page under the System menu.
4. Click Browse to select the firmware file and then click Upload.

The camera will install the updated firmware and then restart. The firmware update process typically takes up to 5 minutes to complete.

5.10.42 Release

Major Fixes

- Corrected an issue causing some cameras installed in an environment without DHCP and NTP to have duplicate device UUIDs.
- Corrected a problem with the multicast TTL setting not affecting the stream TTL values.
- Corrected an issue where cameras were getting new DHCP assigned addresses before leases were up.
- Corrected an issue where the zoom scroll bar did not recover when tele to the end then going to preset.
- Corrected an issue with the pan limit not working correctly when we Set New Pan Center point.
- Corrected an issue with window blanks created at different zooms level not making the camera come to the center after double-clicking the mouse button.

5.10.39 Release

New Features and Improvements

- Added support for Multicast settings as well as Maximum Transfer Unit (MTU) to be set in the Web user interface.

Major Fixes

- Corrected an issue causing ONVIF event notifications not to be sent correctly.
- Corrected an issue causing the iris not to auto adjust when the camera is moved to a new location.
- Corrected an problem with the Restore Multicast Default Settings failing to restore the correct multicast address.
- Corrected an issue causing some cameras to not adjust correctly from a one-hour time change.
- Corrected an issue causing panning not to be functional in VideoXpert and Endura when the Pan/Tilt speed was set to a low value.
- Corrected a problem with Spectra Professional v.5.10.27 not keeping set presets and drifting after a few days.
- Corrected a problem with the multicast TTL setting not affecting the stream TTL values.
- Corrected a problem with the camera movement locking up during auto-flip.

5.10.34 Release

New Features and Improvements

- Added IPv6 support.
- Added support for all four alarm inputs and the "Go to Preset" event handler.

- You can now require users to log in before viewing video through the camera's web interface by enabling the *Password required for liveview* option from the Users/General page within the Web interface.
- Added support for the GB/T-28181 protocol.
- Added improved motor control, allowing the camera to pan and tilt simultaneously when the camera moves between presets. This update requires a separate Motor Control Firmware update that you must apply directly through the camera interface (not using DU2 or Pelco Utilities) to apply this improvement. See "Upgrading Firmware from Camera User Interface" on page 1 for more information.

Major Fixes

- Corrected an issue causing poor control through VideoXpert when using the standard or 3D mouse.
- Users can now upload SSL certificates to cameras as expected.
- Corrected an issue preventing the camera from accepting a setting of 2 FPS from Digital Sentry servers.
- Corrected an issue causing the camera to add an additional 5 second delay to the dwell period for preset tours.
- Corrected an issue causing the camera to revert to the factory-set IP address when the camera was powered off and back on again.
- Corrected an issue causing camera services to crash when the user issued changes to settings to the camera after having first configured it with Digital Sentry; when experiencing this issue, the camera would perform the last successful PTZ command until camera services recovered.
Note: After configuring the camera for use with Digital Sentry, you should perform all camera configuration through Digital Sentry.
- Corrected an issue causing an inverted image for a short time after the user changed stream resolution settings.
- ONVIF PTZPreset elements for the camera now always contain PTZPosition elements, as expected by the ONVIF API.
- Corrected an issue preventing changes to the camera's multicast address from persisting through a restart.
- The QueryAllOptions call for the StreamConfiguration service now returns the 960x540 option for the second stream in addition to all other supported resolutions.

5.10.27 Release

Major Fixes

- Corrected an issue preventing the camera from saving changes to MTU (max packet size) through the ONVIF or Pelco APIs.
- Corrected an issue preventing cameras from renewing DHCP leases, which could result in cameras obtaining new addresses when restarting.
- Corrected an issue preventing cameras from reflecting PTZ commands issued through VideoXpert.
- Corrected an issue preventing users from setting multicast address, port, TTL, and continuallyStream parameters using the StreamConfiguration.SaveAllSettings call.
- Corrected an issue preventing cameras from properly adjusting time for daylight savings time in Endura systems.
- Corrected an issue preventing Endura users from silencing motion detection alarms.
- Corrected an issue causing the point of origin for some presets to shift after periods of vigorous PTZ usage.
- Corrected an issue preventing users from streaming multicast video or changing the multicast address using web services.
- Corrected an issue preventing cameras from reflecting changes to the multicast address and port over RTSP; previously, the camera streamed to ports 5000 and 5001 regardless of the user's input.

5.10.26 Release

New Features and Improvements

- Added ONVIF Profile G support. Users can now record video to the camera's local SD storage. Users can also start and stop recording through the camera's web interface.
NOTE: The only SD card presently approved for use with Spectra Pro Series cameras is the 32 GB SanDisk Extreme® PLUS microSDHC™ UHS-I card.
- Added support for PTZ search functionality through the ONVIF API.
- Improved overall PTZ latency and control.
- Added the ability to import an XML file to customize the maximum bit rate settings. To access this feature, click Settings, open the Backup & Restore page, and press Alt+Q to display the custom bitrate settings.
- Added a feature that limits the number of unicast streams depending upon the bit rate, allowing for a minimum of two streams. This prevents users from opening too many concurrent streams, which can negatively impact performance. When the maximum number of unicast streams have been requested, the camera's interface displays a message indicating the current limit.
- Added Endura connectivity functionality, allowing users to specify the IP address of the System Manager (SM). This allows the camera to connect to Endura in situations when the camera cannot communicate with the SM locator service.
- Added Focus Lock feature to store pan, tilt, zoom, and focus positions relative to defined presets.

Major Fixes

- Corrected an issue that caused a wave effect in the video. This issue only occurred when the camera was continuously tilted while at full zoom (20X) and pointed at a long-range scene.

- Corrected an issue causing the three buttons used for the Drag, Resize, and Center functions to stop responding after opening a video stream in a new window.
- Corrected an issue causing the camera to remove the eighth window blank after any other window blank is modified.
- Corrected an issue causing the user to remain logged in after closing the web browser. The camera now automatically logs a user out when the browser is closed.
- Corrected an issue causing the GetMDRegion call to report incorrectly for a full region using Motion Detection. The motion region response now correctly reflects regions set through the Pelco API; it may not necessarily correctly reflect motion regions drawn through the web interface.
- Corrected an issue causing subscription requests for MotionDetection events to fail when the request did not contain the HOST header.
- Corrected an issue that caused the camera to attempt to use the Pelco Media Player (PMP) even when it wasn't installed. The camera now uses QuickTime® if PMP is unavailable.
- Set the timeout parameter for RTSP to 60 seconds, as defined in RFC 2326, Real Time Streaming Protocol.
- Corrected an issue preventing window blanking zones from being resized as needed.
- Corrected an issue causing the camera to retain a tour after the associated preset was deleted through Endura. This only affected presets and tours modified through Endura; presets and tours modified through the camera user interface were not affected.
- Modified SNMP to provide CPU usage, memory usage, up time, and network traffic data.
- Corrected an issue preventing users from disabling auto focus through the camera's interface. Previously, the camera would switch back to continuous mode when the page was refreshed.
- Corrected an issue that allowed changes to the user information while in Remote Mode. This page is now restricted when in Remote Mode and an alert message is displayed in the interface if a user attempts to access it.
- Corrected an issue that caused the camera to return incorrect responses for ONVIF GetNTP requests.
- Corrected an issue that prevented the camera from retaining the Silence Alarm setting when enabled through Endura.
- Corrected an issue that prevented the device name from being updated in the camera user interface after it had been renamed in Endura.
- Corrected an issue preventing Endura from reporting the correct time for the camera after the camera adjusted for daylight savings time.
- Corrected an issue that caused Endura to display Spectra Pro cameras as "Sarix Pro Camera" within the Properties tab.
- VPTZ-243 Corrected an issue preventing the camera from maintaining focus between presets when using Focus Lock.

Known Issues

- Continuous local recording does not function if there is no SD card inserted into the camera before the feature is enabled or if the SD card is removed and reinserted after continuous local recording is enabled. There is no issue with the SD card handler or ONVIF Profile G recording; both function normally.
- Pan limit stops do not function correctly when using a custom pan center point.
- When digital zoom is enabled, there might be a decrease in focus quality in some scenes.
- When setting up preset tours, the transition speed feature is not operational. All tours will move from one preset to another at a standard speed regardless of transition speed settings.

- When audio is enabled, there might be up to 1.5 seconds of web interface latency. This issue does not occur when accessing the video through an Endura system.
- 802.1x security is currently only functional when used with the EAP-MD5 protocol.

5.10.18 Release

Operation Notes

- The camera dome, while designed for both maximum impact resistance and field of view near the horizon, can occasionally result in a slight “ghosting” effect: a double-image near the edge of the field of view. This can occur when the tilt angle is in the fully upward (horizontal) range between approximately –3 to 2 degrees. Increasing the installation height relative to the target scene, or adjusting the pitch angle of the camera, may help address the issue.
- There is currently no constraint on the number of streams users can request from the camera. Opening too many concurrent streams can negatively impact performance. This is especially true for higher resolutions and bit rates.
- After clicking the “Open stream in new window” icon in the lower-right corner of Live View mode in the web interface, the new window is opened as requested, but the three buttons that are used for Drag, Resize, and Center functions are not operational in the new window. This issue will be fixed in the next firmware release.
- Minimum system requirements for the Pelco Media Player are:
 - Windows® 7 and Windows Vista® (32- and 64-bit) OS
 - Internet Explorer® 9+, Firefox® 4.0+, and Chrome™ 10+
 - Intel® Core™ i5 2500 3.3GHz or faster (recommended)
- QuickTime® will not run unless the Pelco Media Plugin has been installed. Users should allow the Pelco Media Plugin option to run even if they intend to use QuickTime to view video.
- In very monochromatic scenes, the automatic white balance functionality may become confused. An example is orange color being presented in a plain, off-white scene. Adding in some color, such as a color chart, will normally resolve this issue.
- After renaming the device in Endura®, the new name does not immediately appear in the camera user interface. Changes are effective in Endura when the device is renamed from the camera user interface. This issue is expected to be resolved in a future firmware release.
- When the Freeze Frame option is enabled, the blue border that indicates that the camera is transitioning between presets is not visible. This issue is expected to be corrected in a future firmware release.
- Depending on the web browser being used, the camera may remain in a logged-in state after shutting down and restarting the browser. Where security is of concern, use the Logout link in the upper-right corner of the screen when logged in through the camera user interface.
- When using Endura to configure camera presets, deleting a preset that is included in a Tour deletes only the specific preset. When using the camera user interface for configuration of presets, deleting a Preset that is part of a Tour causes the entire Tour to be deleted.
- Window blanking zones cannot be resized using the camera user interface. Delete and recreate the blanking zones.
- Accessing the Properties tab for a Spectra Pro PTZ camera when using Endura will incorrectly display the Model description as “Sarix Pro Camera.” The device identity should be “Spectra Pro PTZ Camera” and will be resolved in a forthcoming release.
- The Remote Mode option in the Users General Settings in the camera user interface should present an alert message and not allow changes to user information. This will be corrected in a future release.

- When using the camera user interface to change the ports on the Network General Settings web page, the acceptable port ranges are:
 - http: 80, 1025~65534
 - https: 443, 1025~65534
 - rtsp: 554, 1025~65534
- An incorrect default Bit Rate occurs when the High preset is first selected, the Preset option is changed to Custom, and the Rate Control option is changed to CBR. Using a Bit Rate that is too high can result in performance issues. Adjusting the Bit Rate to 4000 will provide acceptable Image Quality without affecting PTZ drivability. This issue will be resolved in a future firmware release.
- Although a preset can be created and saved using special characters (# % & "), it cannot be accessed or deleted. A "Restore all camera defaults" will clear any presets that include these special characters, along with all other camera settings. This issue will be resolved in a future firmware release.

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Document Revision History

Document #	Date	Comments
C1073RN	11/14	Original version.
C1073RN-A	1/15	Updated for version 5.10.26.
C1073RN-B	4/15	Updated to reflect version 5.10.27.
C1073RN-C	3/16	Updated to reflect version 5.10.34.
C1073RN-D	1/17	Updated to reflect version 5.10.39.
C1073RN-E	7/17	Updated to reflect version 5.10.42.

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