

RoboSHOT 12 USB Camera

Current Release

RoboSHOT® 12 USB 3.1.0

May 13, 2019

Improvements

- In the admin web interface, various camera behavior settings have moved from soft DIP switches to the General tab of the System page.
- Some parameters were incorrectly stored in CCU scenes and in presets stored with color information. This has been fixed.
- Executing several pan, tilt, or zoom to absolute position commands in quick succession could generate error messages. This has been fixed.

Release History

RoboSHOT 12 USB 3.0.0

March 29, 2019

New Features

- Added support for RTMP streaming. This is configured in the admin web interface and can be enabled/disabled in both the admin and the user web interface.
- Telnet command to manage IP Streaming Enabled status:
`streaming ip enable {get | on | off | toggle}`
This capability is also available in the web interface.
- Ability to configure MTU setting for IP streaming packets.
- Added codec compatibility mode for Polycom® 3xx/5xx/7xx series codecs.
- Added codec compatibility mode for Cisco® SX-20 and SX-80 series codecs. (For SX-20 codecs, Vaddio recommends the codec's firmware be updated to latest "CE" series firmware for best operation.)
- One Push White Balance can now be executed through the web interface.
- Telnet command to set or get camera module gamma values:
`camera ccu set gamma <value>`
`camera ccu get gamma`
- Added the Manual Standby/USB Standby soft DIP switch to allow the system to automatically stand by when the USB cable is disconnected.
- Telnet command to control the front LED:
`camera led {get | set { on | off }}`
A soft DIP switch in the admin web interface provides the same capability.
- HTTPS access to the camera is now supported and the HTTPS certificate can now be configured from the admin web interface.
- HTTP access to the camera can now be disabled by an admin. When this is disabled, HTTPS must be used to connect to the web interface.
- Added ability for the administrator to disable the camera's Telnet server through the web interface.
- Serial command to retrieve the camera's IP address: [81 09 08 4E 00 00 FF].
- Added initial public REST API.
- Support for DNS Service Discovery.

Improvements

- Configuration settings can now be imported from previous versions of software.
- The front LED can now be turned off during standby.
- Added USB streaming notifications to the web interface.

- Improved the camera's responsiveness to far-end pan and tilt control in conferencing applications.
- Improved IP streaming performance and corrected a number of issues related to IP streaming settings.
- Main navigation bar of the web interface now has tooltips when collapsed.
- The admin web interface now provides the ability to rename the browser tab.
- Telnet commands for pan and tilt now support absolute position control:
`camera pan set <-156.3..151.7>`
`camera tilt set <-30.0..92.5>`
Note that if the camera is inverted and Image Flip is selected, the tilt range is inverted as well: -92.5 to 30. A negative value always represents a downward tilt.
- The `camera zoom set` Telnet command now allows zoom to be specified as a floating-point value, which is then rounded off to two decimal places. Similarly, the `camera zoom get` command returns the current zoom level to two decimal places.
- Enhanced support for USB joystick control.
- When the camera is in standby mode, the web interface no longer permits changes using the soft DIP switches in the admin web interface.
- Soft DIP switches and read-outs of physical switches are now available from the Camera page of the admin web interface, via the Camera Settings button. They are still available on the DIP Switches tab of the System page as well.
- Standardized the DIP switch combination to set the camera to respond to the remote on IR channel 3. The camera is set as Camera 3 when switch 1 is up and switch 2 is down.
- On receiving a reboot instruction, the RoboSHOT camera now ensures your most recent configuration changes have been saved successfully before rebooting.
- Improved camera behavior during lengthy camera operations.
- In the event that IP streaming stops working properly and a reboot is needed, the admin web interface prompts the user to reboot the camera.
- Improved camera behavior when an operator rapidly and repeatedly cancels and restarts camera operations.
- When video is muted, changing from the Pro A/V LED color scheme to the UC LED color scheme now causes the LED to start blinking to indicate video mute is on.
- Improved handling of HDMI hot-plug events.
- Improved support for Microsoft® Internet Explorer®.
- Improved internal firewall settings.
- Discontinued support for DES and 3DES cyphers and TLS v1.0 protocol. More recent cyphers and protocols continue to be supported.
- Corrected an issue that could cause the camera to be left out of focus when under the control of certain third-party codecs.
- Corrected the response syntax for the `network ping count` Telnet command.
- Corrected an issue that occasionally resulted in error messages when updating firmware from a significantly older version.
- Corrected a page loading issue that could affect the web interface when viewed using Chrome.
- After certain operations such as changing HDMI resolution or changing the Super-Wide Mode setting, the camera's zoom position was not reported correctly. This has been fixed.
- When changing camera settings from a connected device, in some cases the camera's web interface did not immediately reflect the change. This has been fixed.
- In some cases, the web interface did not load properly if the computer had recently accessed another Vaddio device at the same IP address. This has been fixed.
- Fix for some serial commands not completing correctly.
- Updated the system time zone table.
- Various improvements to the web interface.

Notes

- If the currently selected time zone name is not present in the new time zone table, the time zone setting reverts to Universal. The administrator will need to select the appropriate time zone.
- If the home preset takes an extremely long time to execute (over 45 seconds), the camera may not fully exit standby. Storing the Home preset with a faster speed will solve this issue.

RoboSHOT 12 USB 2.2.0

September 1, 2017

New Features

- Initial support for AVBridge MatrixMIX and PCC MatrixMIX.

Improvements

- The custom home position can be successfully stored with or without associated color information.
- Admin access is now required for editing preset and CCU scene labels.
- Custom CCU scenes can now be cleared from the web interface in a similar manner to custom camera presets.
- The camera's Wide Dynamic Range setting can now be changed from a connected device over a serial connection as well as via the device's web interface.
- In some cases, the web interface did not render properly in Chrome. This has been fixed.
- Improved camera performance and behaviors related to USB streaming.
- Reduced the need for camera reboots following changes to streaming settings.
- If the USB stream was disabled while the camera was streaming over USB, the stream was stopped but the web interface did not display streaming status correctly. This has been fixed.
- Improved camera behavior related to entering and returning from standby mode.
- When the camera is in standby mode and receives a command that requires it to be active, the camera now returns a message indicating that it is in standby mode.
- CCU sliders show the correct values after being adjusted when the camera is in standby.
- Restoring factory defaults now resets the admin password as expected.
- Improved alert and error message behavior in the web interface.
- Improved error messages for Telnet commands.
- Hostname changes are now properly handled for DHCP.
- Various cosmetic improvements in the web interface.
- General stability improvements.

RoboSHOT 12 USB 2.1.2

December 9, 2016

New Features

- Camera settings now include Wide Dynamic Range as an option in auto-iris mode. Note that backlight compensation cannot be used in Wide Dynamic Range mode.
- A new soft DIP switch on the System page of the web interface allows UVC-compliant or custom mode to provide more flexibility in supporting web conferencing applications.

Improvements

- Colors now appear more natural.
- The Telnet command streaming settings get now returns USB streaming settings as well as IP streaming settings.
- We have improved the product's performance in applications that comply with the UVC 1.1 specification.
- While using UVC absolute PTZ controls, quick changes of direction could result in the camera stopping at an unexpected position. This has been fixed.

RoboSHOT 12 USB 2.1.0 and 2.1.1

September 28, 2016

New Features

- USB streaming at 1080p/60 is now supported.
- Constant bit rate (CBR) streaming option is now available for IP streaming in the web interface.

Improvements

- The camera has been updated to work with RoboTRAK.
- Default streaming settings have been changed to optimize streaming performance under most conditions.
- Improved pan, tilt, and zoom performance when the camera is controlled by a conferencing application.
- Cameras now reach the full 90° upward tilt stated in the technical specifications.

- In some cases, turning the video output resolution switch, pausing momentarily, and turning it again could cause errors. This has been fixed.
- In some cases, the camera could continue to respond to joystick movements from a camera controller while going into standby mode. This could result in the camera standing by in an unexpected position. This has been fixed. The camera moves to the standby position and does not process any commands during the standby sequence.
- In some cases, custom home presets were not retained properly through firmware updates. This has been fixed.
- The `ccu scene store` command now works as documented.
- In a few instances during testing, using the camera's web interface to enable its IP stream caused an associated PCC Premier to lose the stream for its local video output. This only happened if the camera was in an address book group currently selected as Control A or Control B. This has been fixed..

RoboSHOT 12 USB 2.0.2

June 27, 2016

Improvements

- This release addresses a video issue related to a recent hardware change. On very rare occasions, this issue has also been observed in older hardware.

RoboSHOT 12 USB 2.0.1

May 19, 2016

Improvements

- Changing the IP streaming settings no longer requires the camera to reboot. However, if the camera is connected to a PCC Premier camera controller, the camera controller will not respond properly to the change of settings until you reboot the camera manually. The upcoming release of 1.1.1 firmware for PCC Premier will address this.
- This release also includes other improvements to the process of saving IP streaming settings.
- For RoboSHOT USB cameras connected to a Chromebox, power-cycling or rebooting the Chromebox caused issues in the camera's USB stream, sometimes requiring the camera to be rebooted. This has been addressed.
- In some installations where RoboSHOT cameras were connected to an AV Bridge MATRIX PRO, occasionally camera or video errors occurred, sometimes in connection with RS-232 camera control issues. Performance has been improved, but requires the MATRIX PRO to be at 1.0.4 and all connected cameras to be at the related version (2.0.2 for RoboSHOT / RoboSHOT HDMI, 2.0.1 for RoboSHOT USB / RoboSHOT HD-SDI).

Notes

- In installations where RoboSHOT cameras are connected to an AV Bridge MATRIX PRO, flooding the MATRIX PRO with large numbers of camera commands in a very short time – for example, when sending numerous commands via Telnet or web interface – occasionally causes the attached cameras' tally indications stop functioning properly. When this happens, the diagnostic log shows errors stating that the tally command is not executable.

RoboSHOT 12 USB 2.0.0

January 15, 2016

New Features

- Added real-time IP-based control for the PCC Premier.
- Enabled control over the USB connection. This is disabled by default, but can be enabled under the Streaming tab in the Web UI.
- Default starting position preset and CCU scene has been replaced with a customizable home preset. This can be set like any other preset.

Improvements

- Added ability to import/export configurations for camera settings. This feature will only work when importing to the same firmware version as the exported file.

- Addition of two Telnet Commands for focus mode and standby state inquiry. Commands are:
camera focus mode get
camera standby get
- Visual indication on Web UI of unsaved parameter which requires saving.

Notes

- Some Apple computers with OSX 10.9.x have issues handling USB 3.0 video, including video freezing. The issues seen in OSX 10.9.x have not been seen in OSX 10.10 or 10.11.

RoboSHOT 12 USB 1.0.2

November 13, 2015

Improvements

- Under certain circumstances, sustained fast motion in the field of view could cause USB streaming to freeze. This has been resolved..

Notes

- When recalling a tri-sync preset stored with CCU Scene information ProductionVIEW Controllers and Switchers can incorrectly report Auto White Balance and Auto Iris status, this will be addressed in an upcoming ProductionVIEW Controller release, along with additional enhancements.
- Some Apple computers with OSX 10.9.x have issues handling USB 3.0 video, including video freezing. The issues seen in OSX 10.9.x have not been seen in OSX 10.10.

RoboSHOT 12 USB 1.0.1

September 11, 2015

New Features

- USB gamepad support has been added. See the Application Note for more information.

Improvements

- Pan and Tilt controls fully support inverted operation.
- Increased web session timeout from 10 to 30 minutes – gives users more flexibility when configuring or operating RoboSHOT via Web UI.
- Additional streaming resolutions – Allows users to select different easy and custom IP streaming configurations beyond 1080p, for maximum flexibility and greater control network bandwidth usage.
- Adjusted iris gain values – range of acceptable Iris Gain values is now 0-11. Previously it was 0-15.
- Streaming resolutions with 4:3 aspect ratios are now handled properly.
- RoboSHOT 12 USB ends the USB stream as expected when a Mac-based application is done with the USB stream.

Notes

- When recalling a Tri-Synchronous Motion preset stored with CCU scene information ProductionVIEW controllers and switchers can incorrectly report Auto White Balance and Auto Iris status, this will be addressed in an upcoming ProductionVIEW controller release, along with additional enhancements.
- Some Apple computers with OSX 10.9.x have issues handling USB 3.0 video, including video freezing. The issues seen in OSX 10.9.x have not been seen in OSX 10.10.

RoboSHOT 12 USB 1.0.0

June 28, 2015

- Initial release.

Firmware Update Instructions – RoboSHOT 12 USB

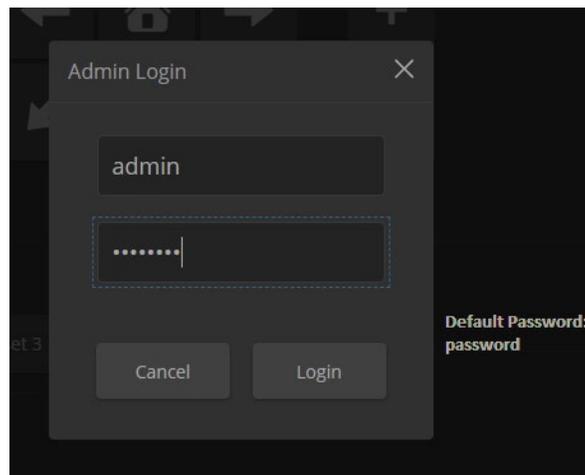
Requirements

- Network access to the camera.
- The web interface's admin password, if it has been changed from factory default.
- The .p7m firmware file for the camera (found on the RoboSHOT 12 USB product page's firmware tab), downloaded and saved to your local drive.

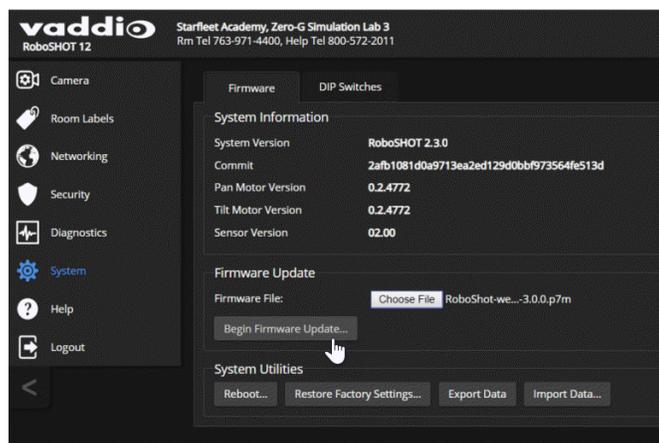
Step-By-Step Process

Note: Your camera's web interface will display different model and firmware information from the screen shots in this document. The process for updating firmware is the same for all cameras in the RoboSHOT family.

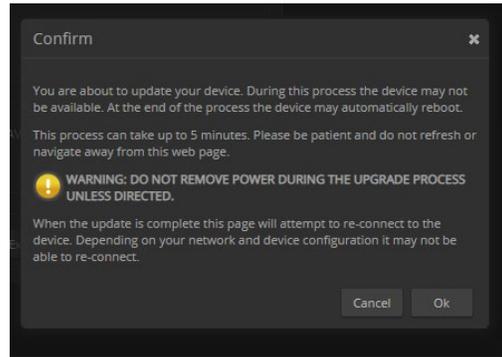
1. Enter the IP address for the RoboSHOT 12 USB camera into the address bar of a web browser.
 - You can obtain the IP address for the camera using the Vaddio IR Remote Commander. Aim at the camera and press the Data Screen button. The connected display shows the camera's IP address.
2. Log in as admin. The default password is password.



3. Navigate to the System page.
4. Select Choose File, then browse to the downloaded firmware and select it. The filename ends with .p7m.
5. Select Begin Firmware Update.



6. Read and understand the information in the Confirm dialog box. It's dull, but it could save you some time and aggravation.



7. Select Continue. A progress message box opens and the indicator light on the front of the camera turns yellow. If the update process presents warnings or error messages, read them carefully.
8. The camera reboots when the update is complete.

Caution

The camera must remain connected to power and to the network during the update. Interrupting the update could make the camera unusable.

This update can take up to 5 minutes to complete; the pop-up message window will identify the progress of the update.

While you're waiting, you could try the following:

- Think about weather. If you could design a new weather phenomenon, what would it be?
- Make a list of words that are fun to say or write. ("Sublunary" is on my list.)
- Make up a new superstition. (If a striped cat crosses your path, you'll have an ordinary day.)

After the update is complete, the System page will display the new firmware version under System Information. Enjoy that 'New Firmware Smell'!

If the update procedure is interrupted for any reason the product may need to be returned to Vaddio for updating. If the update does not seem to run, DO NOT TURN OFF THE PRODUCT OR UNPLUG IT. CALL TECH SUPPORT IMMEDIATELY.

If you have any questions call Tech Support at Vaddio. 763.971.4428 or 1-800-572-2011

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