

# RoboSHOT 12/30 HD-SDI and RoboSHOT 12E/30E SDI Cameras

---

## Current Release

### RoboSHOT® 12E/30E SDI 3.2.0

### RoboSHOT 12/30 HD-SDI 3.2.0

December 16, 2019

#### New Features

- If you restore factory defaults, the camera now requires an initial setup step to make the administrative controls and other functionality available. In this initial step, you must set the admin password. This is also required for initial access to cameras that ship with this version of firmware. See [Initial Set-Up Procedure](#). After completing the initial setup, you have the option of enabling streaming and other disabled features. At this time, setting the admin password is the only task in the initial setup procedure.

*Note: You can operate the camera with the remote even if no password is set.*

- When static IP addressing is selected, the administrator can specify a DNS server.
- Added support for long press right-clicking on iOS devices.
- Added Telnet command `camera ptz-position {{pan | tilt | zoom} <position> [no_wait]}` to specify multiple-axis movements to absolute positions. The optional `no_wait` parameter allows the command to return the command prompt immediately, while the requested camera movement is still in progress. The command `camera ptz-position get` returns the camera's current pan, tilt, and zoom positions.
- Added Telnet command `camera icr { get | on | off }` to control the camera's IR cut filter. When the filter is on, the video image is black and white.

#### Improvements

- Security improvements include changes to the default settings for:
  - HTTP access is disabled. To connect using HTTPS, type `https://` followed by the IP address. Because Vaddio uses self-signed certificates, your browser will present warning messages indicating that you are trying to access an unsafe website; however, this is a secure connection to the camera and traffic will be encrypted.
  - Streaming is disabled.
  - Telnet access is disabled.
- Disabled TLS v1.1 protocol. More recent protocols continue to be supported.
- The Telnet command `network settings get` now includes the camera's hostname in the information it returns.
- In some cases, the camera reported its zoom position inaccurately after a very small change in zoom level. This has been fixed.
- The top speeds for Global Preset Non-Tri-Sync Speeds have been reduced to provide better control in certain conferencing applications.
- If the camera was rebooted while the LED was disabled, and the LED was subsequently enabled, it could display incorrect status indications. This has been fixed.
- If a custom home preset was stored while the camera was in manual focus mode, and the home preset was subsequently cleared, attempting to select the home preset could generate an error message. This has been fixed.
- Improved out-of-range error messages for Telnet commands specifying movements by absolute position.

- Telnet commands now recognize the appropriate ranges of values for various camera settings, such as iris.
- The RS-232/VISCA-type command CAM\_Freeze now behaves as expected.
- When streaming at resolutions with aspect ratios other than 16:9, the image could be displayed at an incorrect aspect ratio. This has been fixed.
- Exporting data to an Android device now works properly.

#### Notes

- If controlling this camera with any of the following devices, the device may require a firmware update to be able to control the camera via IP.
  - PCC Premier
  - RoboTRAK
  - AV Bridge MATRIX PRO
  - AV Bridge MatrixMIX

## Release History

### **RoboSHOT 12E/30E SDI 3.1.0**

### **RoboSHOT 12/30 HD-SDI 3.1.0**

May 13, 2019

#### New Features

- (RoboSHOT 12E/30E SDI only)The previously unused Position 0 on the rotary switch now enables software control of video output resolution. When the switch is set to software control mode, the administrator sets video resolution via the web interface, on the General tab of the System page.

#### 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.

### **RoboSHOT 12E/30E SDI 3.0.0**

March 15, 2019

- Initial release.

### **RoboSHOT 12/30 HD-SDI 3.0.0**

March 15, 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.

#### Improvements

- Improved handling of HDMI hot-plug events.
- Improved camera behavior during lengthy camera operations.
- 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.
- Improved support for Internet Explorer. Progress/status icons associated with data import and firmware update messages now display as for other browsers.

## RoboSHOT 12/30 HD-SDI 2.4.0

November 16, 2018

### Improvements

- Added one-push white balance function to the web UI.
- Telnet command to allow Streaming Enabled status to be toggled: `streaming ip enable toggle`

## RoboSHOT 12/30 HD-SDI 2.3.0

August 30, 2018

### New Features

- 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 codec's firmware be updated to latest "CE" series firmware for best operation)
- Advanced streaming settings for enhanced compatibility with VPN environments.
- 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 support for DNS Service Discovery.
- 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.
- Telnet command to set or get camera module gamma values:  
`camera ccu set gamma <value>`  
`camera ccu get gamma`
- Telnet command to control the front LED: `camera led set off | on | get`
- Added public REST API.
- Serial command to retrieve the camera's IP address: [81 09 08 4E 00 00 FF].

### Improvements

- Configuration settings can now be imported from previous versions of software.
- When the camera is in standby mode, the web interface no longer permits configuration changes using the soft DIP switches.
- The front LED can now be turned off during standby, or disabled entirely.
- Discontinued support for DES and 3DES cyphers and TLS v1.0 protocol. More recent cyphers and protocols continue to be supported.
- Enhanced support for USB joystick control.
- Improved firewall settings.
- Updated syntax for `network ping count` Telnet command.
- Updated system time zone data.
- Fix for incorrect behavior when switching LED color scheme during video mute.
- Improved browser compatibility with Internet Explorer® 9 through IE11.
- IP streaming improvements.
- Web interface improvements.

### **RoboSHOT 12/30 HD-SDI 2.2.0**

September 1, 2017

#### Improvements

- Improved color handling for a more natural appearance.
- Added support for wide dynamic range mode.
- Restoring factory defaults now resets the admin password.
- Custom home position is now stored correctly whether its is stored with the associated CCU information or not.
- If a custom home position is set, the camera always moves to that position when coming out of standby.
- Preset and CCU scene labels can now be edited only when logged in as admin.
- Custom CCU scenes can now be cleared from the web interface.
- CCU sliders now show the correct values when the camera is in standby.
- Corrected an issue that could cause the camera to “get stuck” when attempting to enter or exit standby.
- DHCP hostname changes are now handled properly.
- Various improvements to the web interface.

### **RoboSHOT 12/30 HD-SDI 2.1.2**

November 8, 2016

#### Improvements

- Internal code improvements.

### **RoboSHOT 12/30 HD-SDI 2.1.1**

September 28, 2016

#### New Features

- Constant bit rate (CBR) streaming option is now available in the web interface.
- The RoboSHOT HD-SDI cameras now support both Level A and Level B SDI; this is configurable in the web interface. Level A is the default.
- The RoboSHOT HD-SDI cameras have been updated to work with RoboTRAK.

#### Improvements

- Changed default streaming settings to optimize streaming performance under most conditions.
- Cameras now reach the full 90° upward tilt stated in the technical specifications.
- Turning the video output resolution switch, pausing momentarily, and turning it again no longer causes errors.
- When the camera starts the standby sequence, it now stops processing commands to prevent standing by in an unexpected position.
- Custom home presets are retained properly through firmware updates.
- The `ccu scene store` command now works as documented.
- Fix for rarely observed situation where 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.
- The `streaming settings get` command no longer returns error messages indicating "stream/1 list id not found."

### **RoboSHOT 12/30 2.0.2**

June 27, 2016

#### Improvements

- Addresses a video issue related to a recent hardware change.

### **RoboSHOT 12/30 HD-SDI 2.0.1**

May 19, 2016

#### Improvements

- Improvements in saving changes to IP streaming settings.
- Improved performance with AV Bridge MATRIX PRO.

### **RoboSHOT 12/30 HD-SDI 2.0.0**

January 15, 2016

#### New Features

- 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.
- Added two Telnet commands for focus mode and standby state inquiry:
  - camera focus mode get
  - camera standby get

#### Improvements

- Added real-time IP-based control for the PCC Premier.
- Visual indication on Web UI of unsaved parameter which requires saving.
- Removed default start-up location preset and CCU scene, replacing with the ability to set a custom home position. This custom home preset can be set like any other preset.

### **RoboSHOT 12/30 HD-SDI 1.0.1**

September 30, 2015

#### Notes

- Initial release.

## Initial Set-Up Procedure

Recent security improvements to Vaddio products have changed the way you interact with this product when you set it up for the first time.

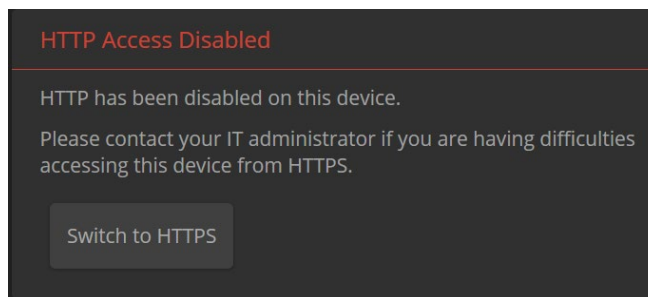
### What's new

- The product now defaults to the more secure HTTPS protocol, rather than HTTP. HTTPS was previously an option. You can still enable HTTP after completing the initial setup.
- You must set the admin password using the web interface. Until the admin password is set and any other initial tasks are completed, the control and administrative interfaces are not available.
- You will not be able to open a Telnet session to this product until you set the password using the web interface.
- You will need to set the admin password again if you restore factory defaults.

**Refer to the product's manual for specific instructions to discover its IP address and access its web interface.**

### Connect using HTTPS

Before the product is configured, HTTP access is disabled. To access the web interface, type `https://` followed by the IP address. Otherwise, you may encounter this message:



Switch to HTTPS if you see this message.

### Expect a security warning from your browser

Different browsers will respond with different messages and options. Your browser will probably present a message indicating one of these things:

- The connection is not private
- The site is not secure
- The site is not trusted
- The site poses a security threat

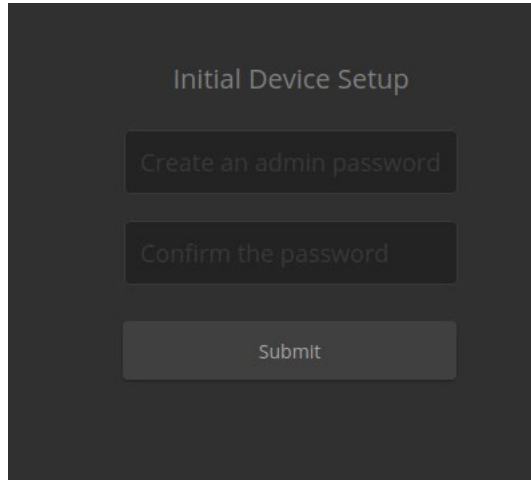
This is because the certificate (the product's website security credential) is self-signed rather than being issued by an external certificate authority. Despite the security warning, this is a secure connection to the camera and traffic will be encrypted.

*To proceed to the product's web interface, you will need to make the selections that your browser's security message discourages.* The security warning page may present an option to learn more, view details, or go to the "Advanced" page. When you select the applicable option, your browser provides a button or link to continue to the IP address you entered, with a reminder that it may be unsafe. Select this option.

After you have accessed the product's web interface once, your browser remembers its IP address and will not present the security message again.

## Device set-up

The first time the product's web interface is accessed, it presents a landing page for initial set-up tasks. You will also encounter this page after restoring factory defaults. After you complete the initial set-up, you will be able to work with the product.



The image shows a dark-themed web interface for 'Initial Device Setup'. It contains three input fields: 'Create an admin password', 'Confirm the password', and a 'Submit' button.

Create and confirm the admin password, and complete any other required tasks such as accepting agreements. Then select Submit. The main administrative web interface opens.

In the administrative web interface, you can configure product security features to conform to the IT policies for your environment. Except where otherwise noted, these settings are on the Security page.

- Create a user password – Allow password-protected, non-administrative access to the operator's web interface.
- Enable guest access – Allow non-administrative access to the operator's web interface without requiring a login.
- Choose whether to expire idle sessions – By default, the web interface automatically logs you out after 30 minutes of inactivity.
- Enable HTTP access – Enable connections to the product's web interface using the less-secure HTTP protocol.
- Enable Telnet access – This is disabled by default.
- Enable streaming – This is disabled by default. You can enable it on the Streaming page.

## Firmware Update Instructions – RoboSHOT HDBT

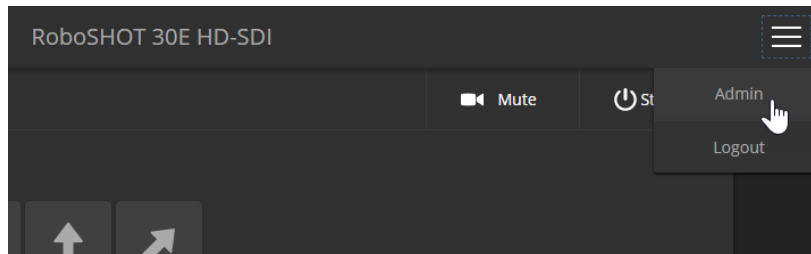
### Requirements

- Network access to the camera.
- The web interface's admin password.
- The .p7m firmware file for the camera – download this from <https://www.legrandav.com/>. It is available on the product page's Resources tab.

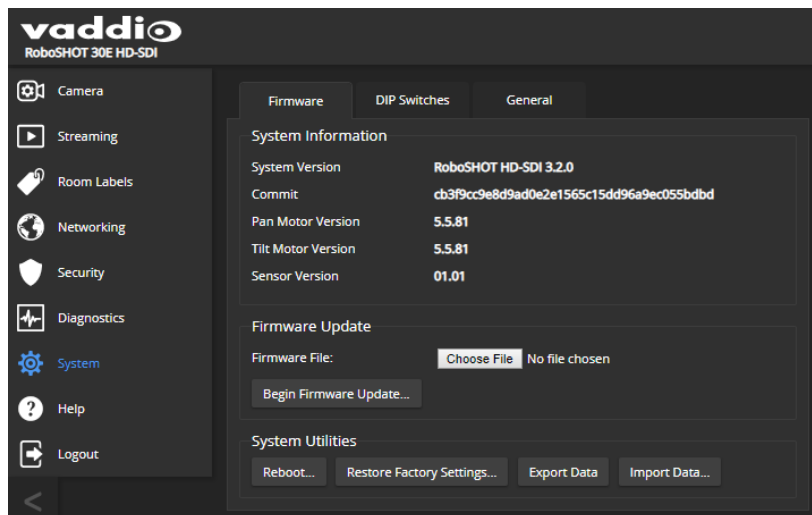
### Step-By-Step Process

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 camera into the address bar of a web browser.  
*You can obtain the IP address for the camera using the remote. Aim at the camera and press the Data Screen button. The connected display shows the camera's IP address.*
2. Log in as admin.

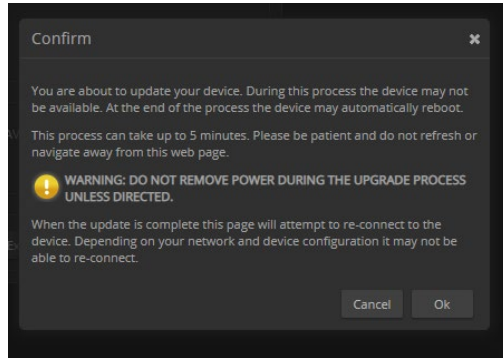


3. Navigate to the System page. Your camera's System page may present different information than shown in the screen shot.
4. Select Choose File, then browse to the downloaded firmware and select it. The filename ends with .p7m.
5. Select Begin Firmware Update.





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:

- Imagine a new kind of furniture. How and when do you use it?
- Decide which kind of plant most resembles your favorite celebrity. Or your least favorite one.
- If you were featured on the news, what would you want the news story to be about?

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 Vaddio Technical Support: (+1) 763-971-4428 or 1-800-572-2011**

Vaddio is a brand of Legrand AV Inc. · [www.legrandav.com](http://www.legrandav.com) · Phone 800.572.2011 / +1.763.971.4400 · Fax +1.763.971.4464  
Email – Europe, Middle East, Africa: [av.emea.vaddio.support@legrand.com](mailto:av.emea.vaddio.support@legrand.com) | All other regions: [av.vaddio.support@legrand.com](mailto:av.vaddio.support@legrand.com)

Visit us at [www.legrandav.com](http://www.legrandav.com) for firmware updates, specifications, drawings, manuals, and technical support information, and more.

Vaddio is a registered trademark of Legrand AV Inc. All other brand names or marks are used for identification purposes and are trademarks of their respective owners. All patents are protected under existing designations. Other patents pending.

©2019 Legrand AV Inc.

A brand of  **legrand**