

RAYN Release Notes

RAYN Vision System Camera Firmware

Product Line:	RAYN Vision System
Description:	Camera Firmware Version 1.1.0
Effective Date:	2024-10-01

About This Release

Firmware v1.1.0 is released for the RAYN Vision System Camera. The RAYN Vision System (RVS) Camera is a compact research tool for observing and recording across multiple light wavebands, and includes a variety of connectivity options for remote and automated image capture, processing, and analysis.

For any questions relating to the contents of this release or the behavior of this software/firmware, please contact RAYN Growing Systems via the information provided at the bottom of this page.

Compatibility

This firmware is compatible with the RAYN Vision System Camera.

Availability

The RAYN Vision System Camera ships with current firmware installed. As needed, you may obtain firmware releases from your RAYN Growing Systems provider.

Installation Instructions

RVS Camera firmware can be installed from a compatible computer connected by Wi-Fi to the camera's web interface. Follow the instructions below to update the firmware.

Connect to the RVS Camera

The RVS Camera **Web Interface** must be accessed for initial setup.

1. Connect the camera to mains power using the included 24 V power supply. LEDs illuminate as the camera powers up.
2. On initial power up, the camera will activate in **Access Point** mode, appearing as an available wireless network. Using a computer running Windows® 10 or later, connect to the wireless network with the following credentials:
 - **Name** - RaynCamera-#####, where the six characters are the camera's unique hexadecimal ID.
 - **Password** - Password
3. Open a web browser and enter the default IP address, **10.1.2.1**, in the URL field to access the web interface and begin initial **Setup**. To put the camera in **Wi-Fi** mode, enter the credentials for an existing network on the **Setup > Network** tab, then reboot the camera via **Setup > Factory**, or by cycling power.

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4. Once the camera is in **Wi-Fi** mode connected to an existing network, you may access the camera's web interface by navigating to either of the following addresses:
 - The camera's IP address. This option is not compatible with HTTPS.
 - e.g. <http://192.168.4.119/>
 - The camera's device name and unique hexadecimal ID. This option is not compatible with HTTPS, and may not be compatible with all routers or web browsers.
 - e.g. <http://RaynCamera-CD2AB8/>

Additional cameras may be connected by repeating the steps above.

Update Firmware

1. If the firmware file has been provided in a zipped archive, unzip the file.
2. Navigate to the **Setup** screen of the Camera configuration web interface.
3. Navigate to the **Firmware** tab of **Setup**. This tab displays the currently installed firmware version and the firmware's build date and time. The **Firmware update** button allows you to update the camera firmware to a newer version, if available.
4. Press the **Firmware update** button and locate the unzipped firmware .img file. The camera will reboot during the update process, and connection to the web interface may be interrupted.
5. When the update has completed, reconnect to your camera as described above, reopen the web interface, and navigate to either the **Status** or **Setup > Firmware** screen. Confirm that the installed firmware version is correct.

Resources

For more information about the RVS Camera, see the *RAYN Vision System Camera User Manual*. The *RAYN Vision System Analytics Software User Manual* and *RAYN Vision System Analytics Software Release Notes* are also available for the RVS Analytics software, an open-source Windows® application for the processing and analysis of multispectral image cubes.

User documentation and technical support are available via our website, rayngrowingsystems.com, or by contacting your RAYN Growing Systems provider.