



# Release Notes

October 2021

## Firmware Update for Camera Models V2002B-W313MIR, V2002D-W313MIR, V2002D-W28IR

### General Description

Vicon has released firmware for production for the cameras listed below. The accompanying IP Toolbox discovery tool version 1.9.2.5 is available on Vicon's website

These cameras and firmware versions have been tested and validated with Vicon's Valerus VMS and with ViconNet V8.x.

Camera	Older Firmware	Initial Firmware
V2002B-W313MIR V2002D-W313MIR V2002D-W28IR	VCAM3LM.01.00.1.6.3809	VCAM3LM.01.00.1.6.4684

### Vicon Production

The latest firmware and discovery tool are available on Vicon's website. A link is provided in the installation section of this document. Manufacturing will start using the new firmware for new camera production and update all existing inventory.

Updating is recommended for cameras intended to work with Vicon's Valerus VMS or other ONVIF-based VMS systems. For other applications, please review the release notes to help determine if the fixes included are relevant to your environment.

Please review the upgrade instructions described at the end of this document.

### Important notes:

- It is **strongly recommended** to update cameras to the latest firmware to avoid the issue described below, under "Flash Memory."
- Some fixes will only take effect after the camera is reset to factory defaults. This option can be found under Configuration>System>Initialization in the camera's web interface. (The IP address can be retained.) Alternatively, the IP Toolbox utility can be used to reset one or more cameras.
- To save camera settings, and restore them after a reset, the "Export Settings" and "Import Settings" options can be used to temporarily save the settings to a file. These options can be found under Configuration>System>Initialization in the camera's web interface.



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## New Features

### Stream without audio

An option has been added in audio that enables cameras to request a H.264/H.265 video stream from the camera, but *without* the audio channel, regardless of the audio setting in the camera. The URL is `rtsp://<camera-ip>/stream1_noAudio` for the primary stream and `rtsp://<camera-ip>/stream2_noAudio` for the secondary stream.

## Known Issues

### H264/H265

Under certain circumstances, when the camera is added in Valerus, it is possible that the H265 option is not presented in Valerus. This is a timing issue, where the VMS does not receive information about the camera's codec capabilities. When this happens, the camera needs to be removed from Valerus and re-added after the camera is reset.

### Audio in exacqVision VMS

When the camera is used in exacqVision VMS, and the camera is set to enable audio, then the camera will not stream to the VMS. When audio is disabled, the camera will work OK in the VMS.

### Museum Search and Analytics Bounding Boxes

When Museum Search is disabled in the camera, it will also no longer show the bounding boxes in Valerus that are associated with camera edge analytics.

## Fixed Issues

### ONVIF compliance

Some changes have been made to pass the current ONVIF compliance tests.

### Flash memory

In certain very specific network configurations, the internal logging mechanism could write an excessive number of messages in the flash memory, which could cause the flash memory to fail. The new firmware avoids writing repetitive messages.

### Internal SD card recording

Some improvements have been made in the user interface for the SD recording playback function.

### Audio recording in Milestone VMS

There was an issue with audio recording in Milestone VMS. This has been corrected.

### Quality setting

An issue was fixed where the H.264 quality setting range was not properly represented in Vicon Valerus VMS.



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## Video compression

Some improvements have been implemented in the video compression that improve the images and make the streaming smoother.

## Line Counter

An issue was fixed where the video analytics line counter values were not properly updated in the user interface in Chrome. Also, counting has been made more accurate.

## Camera discovery

An issue was fixed where in some cases the camera was not discovered over the network and must be added manually.

## Pull Point support

An issue was fixed where not all connected clients get a Pull Point feed if there are many clients. This is specifically an issue with the legacy ViconNet VMS.

## Video stutter

An issue was fixed where a slight stutter in the video stream was noticeable when large parts of the scene were changing. Also, excessive compression artifacts were visible when only a very small part of the scene changes.

## Playback events

In the playback event list other events than just "motion" are visible.

## Default after upgrade

An issue was fixed where the camera needs to be factory-defaulted after a firmware update.

## Vicon branding

An issue was fixed where, in the network setting, if the camera network name was changed, the camera would no longer be recognized as a Vicon camera, and thus would need a 3rd party device license in Valerus.

## Memory leaks

An issue was fixed where if many clients were connected simultaneously for a long time, a memory leak can occur, and the camera can run out of memory and become unresponsive.

## Maximum gain level

An issue was fixed where the camera would apply too much gain to the exposure in dark scenes, so that the image would look too grainy.

## NTP server

Under certain situations, the camera would not get a new date and time from a configured NTP server. This has been fixed.

## Red LED

The camera has a red LED that can be seen when the dome is removed. The LED would not behave according to the description in the manual (it stayed on, while it should go off once the camera is started and ready.) This has been corrected.

## TV Format

The TV-Format option has been removed from models where this is not relevant.



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## Exposure setting in Valerus

The Valerus VMS now shows correct exposure settings that correspond with the camera setting.

## True WDR vs. digital WDR

The user interface has been improved so that True WDR control is more prominent in the UI, so it can't be confused with digital WDR.

## False Tamper alarm

An issue has been corrected where the camera would generate a Tamper alarm every time it switches from day mode to night mode and vice-versa.

## TLS vulnerability.

Older TLS protocols would appear in security scans as vulnerability. These older versions have been removed.

## ViconNet and microphones.

An issue was corrected where the microphones (of relevant camera models) would not appear in ViconNet.

## WDR and BLC

Some improvements were implemented in the UI in the combination of WDR (Wide Dynamic Range) and BLC (Backlight Compensation).

## WDR levels in Valerus.

An issue was fixed where the WDR levels in Valerus would not match the WDR levels in the camera itself.

## Analytics rules

An issue was fixed where too many video analytics rules can be enabled simultaneously, which caused inaccuracy in these rules.

## Reboot mechanism

If for some reason the imager would stop sending images, there is now a mechanism that would detect and restart the camera. Also, an issue was fixed where the ONVIF service can get in a loop.



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## Installing the Updated Firmware

The latest firmware is available on Vicon's website from the Software Downloads page. A link is provided below.

<http://www.vicon-security.com/software-downloads-library/vicon-camera-software/>

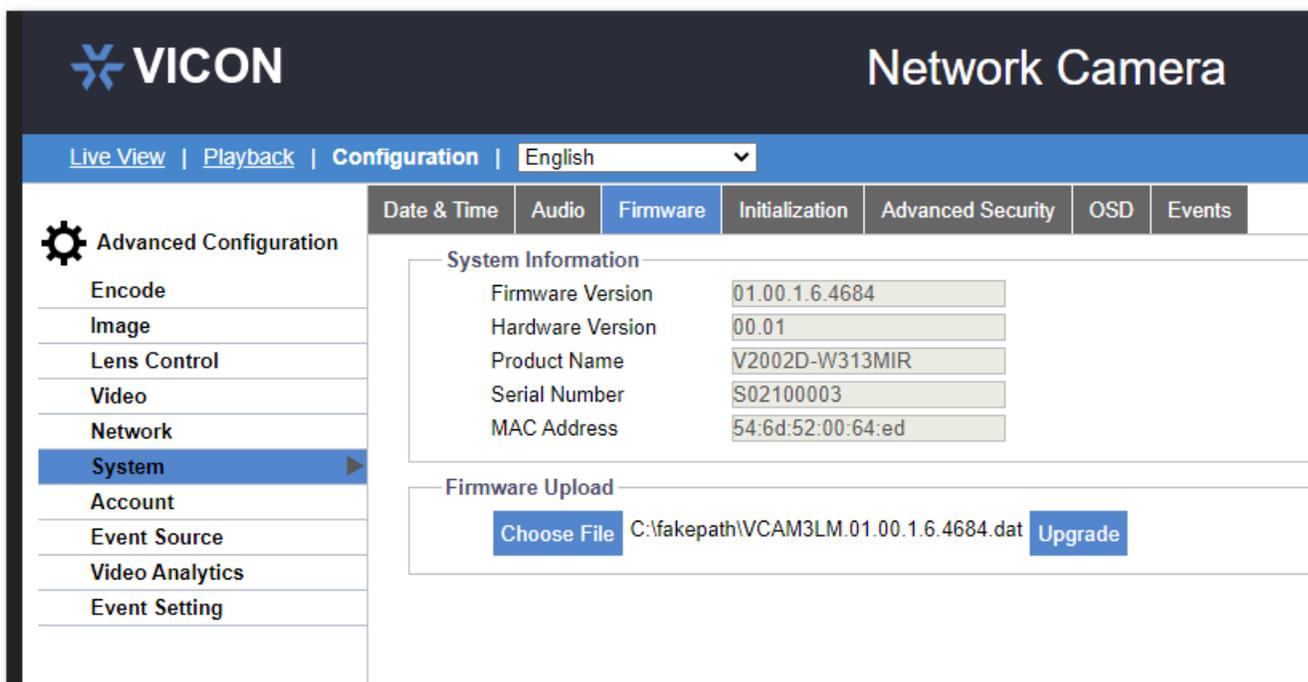
Download the firmware to your PC.

There are two options to install the new firmware in the camera:

- Using web interface of the camera, uploading the firmware directly into the device.
- With the camera discovery utility IP Toolbox installed on a PC.

## Camera web interface

In the camera web interface, under Configuration > System > Firmware, press "Choose File" and select the downloaded firmware file. Then press "Upgrade" to start the update. The camera will install the update and reboot with the new firmware version:



The screenshot shows the Vicon Network Camera web interface. The top navigation bar includes 'Live View', 'Playback', 'Configuration', and a language dropdown set to 'English'. The left sidebar shows 'Advanced Configuration' with a gear icon and a list of menu items: Encode, Image, Lens Control, Video, Network, System (highlighted), Account, Event Source, Video Analytics, and Event Setting. The main content area has tabs for 'Date & Time', 'Audio', 'Firmware', 'Initialization', 'Advanced Security', 'OSD', and 'Events'. Under the 'Firmware' tab, there are two sections: 'System Information' and 'Firmware Upload'. The 'System Information' section displays the following details:

System Information	
Firmware Version	01.00.1.6.4684
Hardware Version	00.01
Product Name	V2002D-W313MIR
Serial Number	S02100003
MAC Address	54:6d:52:00:64:ed

The 'Firmware Upload' section contains a 'Choose File' button, a text input field with the path 'C:\fakepath\VCAM3LM.01.00.1.6.4684.dat', and an 'Upgrade' button.

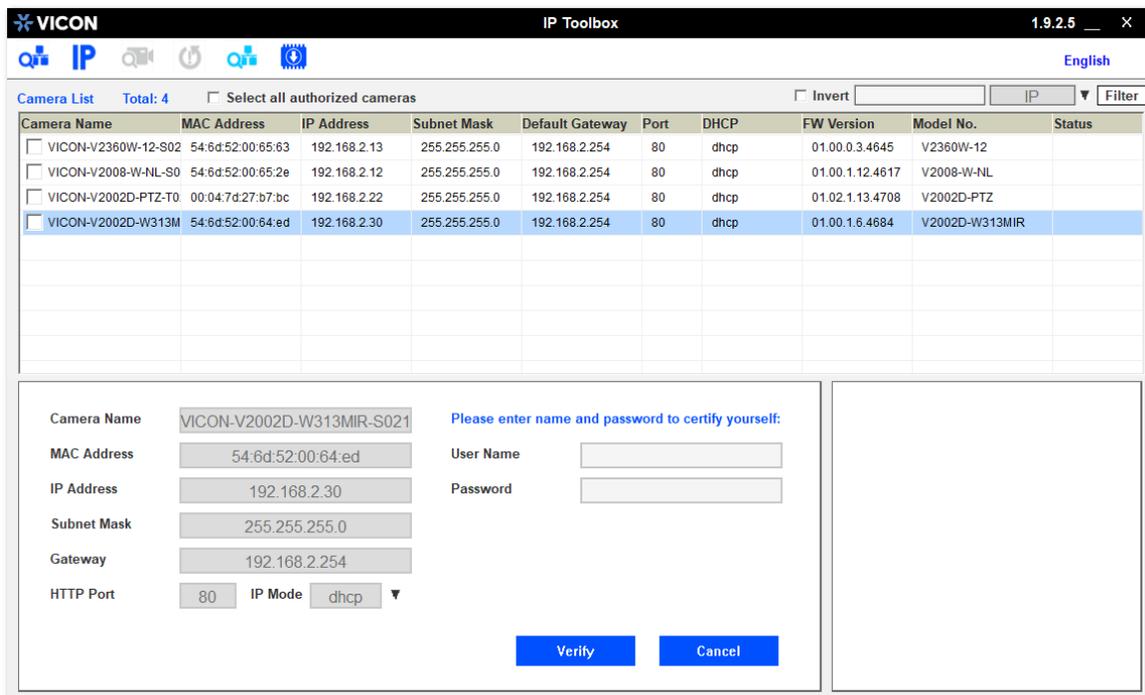


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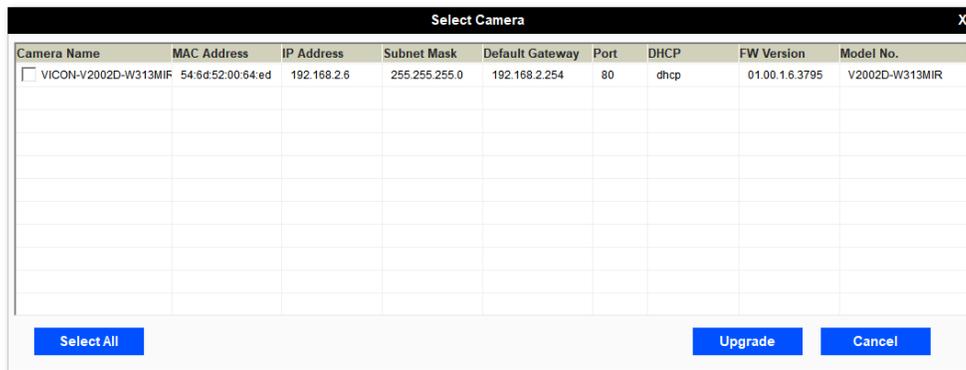
## Using the IP Toolbox utility

Download and install the IP Toolbox utility from the Vicon webpage:

<http://www.vicon-security.com/software-downloads-library/vicon-camera-software/>



Scan the network to discover the applicable cameras on the local network. Press the firmware update button, select the downloaded firmware and fill in the camera credentials. Press the "+" button, and the list of cameras will appear that are suitable for the selected firmware. (Note that the cameras must have the same credentials, if more than one camera is updated.)



Select the cameras to be updated or just press "Select All" to update all cameras. Now press "Update." The camera will install the update and reboot with the new firmware version.