

PC1656 - Pico.net HD4 – Firmware 4.0 Release Notes

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New Features

ONVIF Profile S Certification

Since release 4.0, Pico.net HD4 complies with ONVIF Profile S; it passes the conformance tests as specified by ONVIF Test Specification V12.06. ONVIF functions that were missing in previous releases are now implemented, for example: SetNetworkProtocols, SetSynchronizationPoint...

Security

Since release 4.0, Pico.net HD4 supports security features. In particular user management (CreateUsers, DeleteUsers, GetUsers, SetUser), access validation (default access policy), HTTPS support, and RTSP authentication are now supported. Pico.net HD4 web pages can also be accessed via HTTPS.

MJPEG Streaming

Since release 4.0, Pico.net HD4 supports streaming MJPEG video. Note that the frame rate, bit rate and quality settings of MJPEG video encoders are ignored. The MJPEG video frame rate is low (typically around 1 fps) and mainly depends on the amount of active JPEG encoders and their configured resolutions.

Multicast Streaming

Since release 4.0, Pico.net HD4 supports multicast streaming.

New H.264 Settings

The following new H.264 encoder settings are available since release 4.0:

- H.264 Profile can be Baseline, Main or High. The H.264 level is computed according to the resolution of the video encoder and the frame rate of the video source.
- The rate control mode can be set to CBR or VBR.

Auto Setup Profiles improvement

In release 4.0, the Auto Setup Profiles procedure has been modified as follows:

- The Auto Setup Profiles procedure deletes all existing profiles and creates one profile with typical settings for each connected camera.
- At boot time, if there is no workable media profile in Pico.net HD4 for the connected cameras, the Auto Setup Profiles procedure is executed for these cameras.

New Resolution: 320x240

The scaled-down resolution of 320x240 is available since firmware release 4.0.

Changing NTP Settings without reboot

Since firmware version 4.0, a reboot is not needed anymore after changing the NTP settings.

Solved Issues

Could not handle some Incomplete Requests

Some clients may send ONVIF requests to Pico.net HD4 that contain only a part of the required elements. This caused Pico.net HD4 to stop working properly. This incorrect behavior was fixed in firmware version 4.0.

Erroneous HTTP content length with WSA

When Web Service Addressing (WSA) was enabled, Pico.net HD4 could send its response fitted with incorrect HTTP-content length, causing the response not to be received properly. This incorrect behavior was fixed in firmware version 4.0.

Pelco-D Issues

Pico.net HD4 firmware version 4.0 fixes the following issues in Pelco-D PTZ control:

- "UP" and "DOWN" commands were swapped in the web page interface.
- An invalid command was generated when combining PTZ "UP" and "RIGHT".

Discovery Issue

The Device Discovery feature was not always functional in networks with IGMP snooping switches.

Known Issues

Input Present LED

The HDcctv "Input Present LEDs" are either ON or OFF. ON indicates that a valid HD-SDI video signal is detected, but not necessarily supported by Pico.net HD4. OFF indicates that no signal is detected.

Restore Operation

The System Restore operation is not functional.

Use PTZ buttons always disabled in the PTZ web page

The "Use PTZ" buttons are always disabled in the PTZ web page. As a workaround, the "Use PTZ" button of the Live Media frame on each media profile page can be used instead.

Features Not Available

- Video cropping is not available.
- Privacy mask insertion is not available.
- The audio input and output modules are not available.
- IPv6 is not supported.
- RTP over RTSP over HTTPS streaming is not available.
- The LLA address allocation method cannot be disabled.
- The quality setting for the VideoEncoderConfiguration ONVIF object is not implemented.