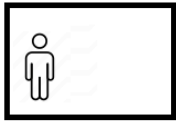

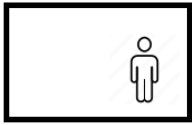


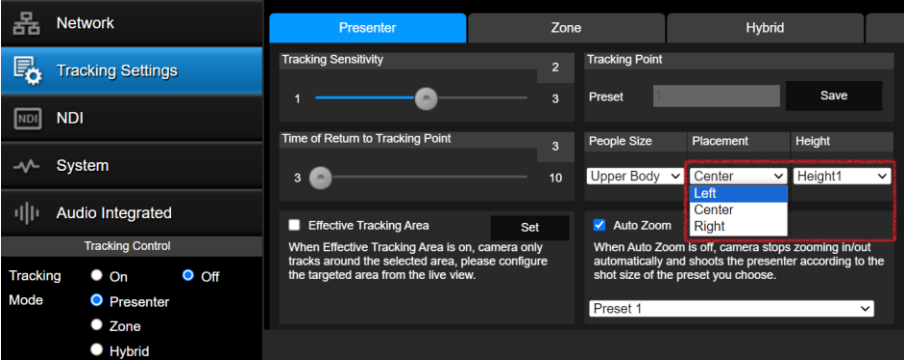


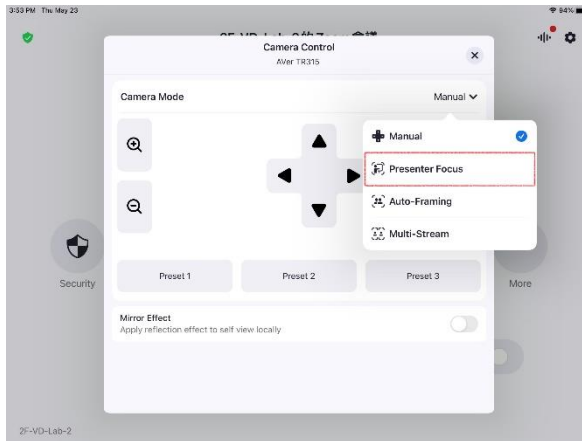
# Release note

**Product:**

**PTZ Camera:** PTZ211/PTZ231/PTZ310UV2/PTZ310UNV2/PTZ330UV2/PTZ330UNV2

**Tracking Camera:** TR211/TR315/TR315N/TR335/TR335N

<b>FW version</b>	<b>V0.0.0000.37</b>
<b>Release date</b>	2024/5/24
<b>New Feature</b>	<p>1. Able to set presenter position and height level on screen of Presenter mode and Hybrid mode.</p> <p>Note: This feature is only supported on TR211, TR315, TR315N, and TR335N.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Left</p>  </div> <div style="text-align: center;"> <p>Center</p>  </div> <div style="text-align: center;"> <p>Riaht</p>  </div> <div style="text-align: center;"> <p>Height1</p>  </div> <div style="text-align: center;"> <p>Height2</p>  </div> </div>  <p>2. Supports Zoom Room's new feature "Presenter Focus." When "Presenter Focus" is enabled, the camera will start auto-tracking; when it is disabled, the camera will stop auto-tracking.</p> <p>Note 1: This feature is only supported on TR211, TR315, TR315N, and TR335N.</p> <p>Note 2: Zoom certification is still in process. This information is not yet listed on the Zoom Rooms Certified Hardware page. The announcement will be made by June. (It is recommended to start using Presenter Focus by June.)</p> <p>Note 3: Zoom Rooms support starts with version 6.0.10</p>



**Improvement**

1. Optimized Camera Setup Webpage Log-In Password Rules:
  1. Password Length: Passwords must be between 8 to 32 characters long.
  2. Mixed Characters: Passwords should include a mix of numbers and English letters.
  3. Password and Account Name: The password must not be the same as the account name.
  4. Supported Characters:
    - ◆ Numeric characters: 0123456789
    - ◆ Alphabetic characters: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz
    - ◆ Symbols: %+=, - \_ ^ / @ . ~

**Known issue**

1. We recommend using the Chrome browser for configuring webpages.
2. When using NDI video theme mode, the USB video stream will be temporarily paused in order to ensure the best possible NDI HX3 video streaming experience.

\*Simultaneous outputs in different video theme modes:

Video modes	PTZ310UNV2/PTZ330UNV2 TR315N/TR335N	PTZ310UV2/PTZ330UV2 PTZ211/PTZ231/TR315/TR335
Standard/Teams/Zoom	HDMI/IP/NDI HX2/USB (4KP60) & 3G-SDI (1080P60)	HDMI/IP/USB(4KP60) & 3G-SDI (1080P60)
NDI	HDMI/IP/NDI HX3 (4KP60) & 3G-SDI (1080P60)	NA

3. HTTPS: Enable HTTPS to establish a secure connection between the browser and the camera. To enable HTTPS, please follow the steps below.
  - A. Obtain an SSL certificate in base-64 encoding format for encryption and decryption, and a private key in PKCS#8 format (must be unencrypted).
  - B. Convert the required certificate content into PEM format. The SSL certificate uploaded to the camera must be in PEM format.
  - C. In the HTTPS settings field, select "On", then click "Choose File" to select the certificate file, and then click "Upload".

**Product:**

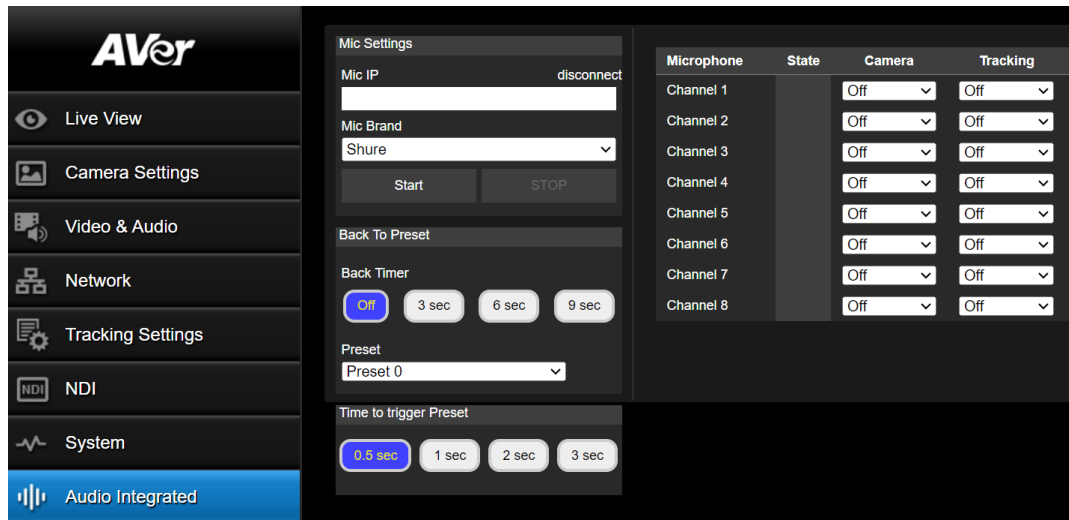
**PTZ Camera:** PTZ211/PTZ231/PTZ310UV2/PTZ310UNV2/PTZ330UV2/PTZ330UNV2

**Tracking Camera:** TR211/TR315/TR315N/TR335/TR335N

<b>FW version</b>	<b>V0.0.0000.32</b>
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<b>Release date</b>	2024/5/17
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**New Feature** 3. Audio partner integration with Shure for Audio tracking function



\*Long press (2 sec) Auto Tracking ON button from remote control to Start Audio tracking function.

\*Long press (2 sec) Auto Tracking OFF button from remote control to Stop Audio tracking function.



	<ol style="list-style-type: none"> <li>4. NDI HX2 License key code activation feature.</li> <li>5. Able to pan/tilt camera through Onvif command.</li> <li>6. Support Bosch's new version: DICENTIS Conference System 5.0</li> </ol>									
<b>Improvement</b>	<ul style="list-style-type: none"> <li>● Optimized the "Auto Tilt" function while Auto Tracking in Hybrid mode. (this improvement only for Tracking camera TR211/315(N)/335(N))</li> </ul>									
<b>Known issue</b>	<ol style="list-style-type: none"> <li>4. We recommend using the Chrome browser for configuring webpages.</li> <li>5. When using NDI video theme mode, the USB video stream will be temporarily paused in order to ensure the best possible NDI HX3 video streaming experience.</li> </ol> <p>*Simultaneous outputs in different video theme modes:</p> <table border="1" data-bbox="363 721 1327 1115"> <tr> <td>Video modes</td> <td>PTZ310UNV2/PTZ330UNV2 TR315N/TR335N</td> <td>PTZ310UV2/PTZ330UV2 PTZ211/PTZ231/TR315/TR335</td> </tr> <tr> <td>Standard/Teams/Zoom</td> <td>HDMI/IP/NDI HX2/USB (4KP60) &amp; 3G-SDI (1080P60)</td> <td>HDMI/IP/USB(4KP60) &amp; 3G-SDI (1080P60)</td> </tr> <tr> <td>NDI</td> <td>HDMI/IP/NDI HX3 (4KP60) &amp; 3G-SDI (1080P60)</td> <td>NA</td> </tr> </table> <ol style="list-style-type: none"> <li>6. HTTPS: Enable HTTPS to establish a secure connection between the browser and the camera. To enable HTTPS, please follow the steps below.             <ol style="list-style-type: none"> <li>D. Obtain an SSL certificate in base-64 encoding format for encryption and decryption, and a private key in PKCS#8 format (must be unencrypted).</li> <li>E. Convert the required certificate content into PEM format. The SSL certificate uploaded to the camera must be in PEM format.</li> <li>F. In the HTTPS settings field, select "On", then click "Choose File" to select the certificate file, and then click "Upload".</li> </ol> </li> </ol>	Video modes	PTZ310UNV2/PTZ330UNV2 TR315N/TR335N	PTZ310UV2/PTZ330UV2 PTZ211/PTZ231/TR315/TR335	Standard/Teams/Zoom	HDMI/IP/NDI HX2/USB (4KP60) & 3G-SDI (1080P60)	HDMI/IP/USB(4KP60) & 3G-SDI (1080P60)	NDI	HDMI/IP/NDI HX3 (4KP60) & 3G-SDI (1080P60)	NA
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**Product:**

**PTZ Camera:** PTZ211/PTZ231/PTZ310UV2/PTZ310UNV2/PTZ330UV2/PTZ330UNV2

**Tracking Camera:** TR211/TR315/TR315N/TR335/TR335N

<b>FW version</b>	<b>V0.0.0000.28</b>										
<b>Release date</b>	2023/12/20										
<b>New Feature</b>	<p>7. Enabled FQDN setting for direct access to the camera webpage using “http://hostname”. If there are two cameras in the LAN pool with identical hostnames, it may be difficult for the user to identify the correct one. Therefore, modifying the hostname before using this function is necessary. e.g. <a href="http://PTZ310UNV2">http://PTZ310UNV2</a></p> <p>8. Updated the NDI SDK to version 5.6 for NDI models in PTZ310UNV2, PTZ330UNV2, TR315N, and TR335N</p>										
<b>Improvement</b>	<ul style="list-style-type: none"> <li>● Optimized the Freed protocol and corrected the terminology from “FreeD” to “Freed”.</li> <li>● Optimized the Onvif protocol for integration with Bosch meeting system.</li> <li>● Optimized the auto operation smoothly movement in AI Auto Tracking function on TR211/TR315(N)/TR335(N) models.</li> <li>● Bug fix: Corrected the VISCA command for the following: CAM_BrightPosInq, CAM_Live Freeze, USB Status, UVC Status</li> <li>● Bug Fix: Corrected the display issue in NDI Studio Monitor where names were not showing correctly for spaces.</li> <li>● Bug Fix: Resolved this issue where RTSP could not be activated when camera was power off.</li> <li>● Bug Fix: Corrected the wording of SmartShoot and SmartFrame in the OSD.</li> <li>● Bug Fix: Corrected bright mode setting in webpage.</li> </ul>										
<b>Known issue</b>	<p>7. We recommend using the Chrome browser for configuring webpages.</p> <p>8. When using NDI video theme mode, the USB video stream will be temporarily paused in order to ensure the best possible NDI HX3 video streaming experience.</p> <p>*Simultaneous outputs in different video theme modes:</p> <table border="1"> <tr> <td>Video modes</td> <td>PTZ310UNV2/PTZ330UNV2 TR315N/TR335N</td> <td>PTZ310UV2/PTZ330UV2 PTZ211/PTZ231/TR315/TR335</td> </tr> <tr> <td>Standard/Teams/Zoom</td> <td>HDMI/IP/NDI HX2/USB (4KP60) &amp; 3G-SDI (1080P60)</td> <td>HDMI/IP/USB(4KP60) &amp; 3G-SDI (1080P60)</td> </tr> <tr> <td>NDI</td> <td>HDMI/IP/NDI HX3 (4KP60) &amp;</td> <td>NA</td> </tr> </table>		Video modes	PTZ310UNV2/PTZ330UNV2 TR315N/TR335N	PTZ310UV2/PTZ330UV2 PTZ211/PTZ231/TR315/TR335	Standard/Teams/Zoom	HDMI/IP/NDI HX2/USB (4KP60) & 3G-SDI (1080P60)	HDMI/IP/USB(4KP60) & 3G-SDI (1080P60)	NDI	HDMI/IP/NDI HX3 (4KP60) &	NA
Video modes	PTZ310UNV2/PTZ330UNV2 TR315N/TR335N	PTZ310UV2/PTZ330UV2 PTZ211/PTZ231/TR315/TR335									
Standard/Teams/Zoom	HDMI/IP/NDI HX2/USB (4KP60) & 3G-SDI (1080P60)	HDMI/IP/USB(4KP60) & 3G-SDI (1080P60)									
NDI	HDMI/IP/NDI HX3 (4KP60) &	NA									

	3G-SDI (1080P60)	
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9. HTTPS: Enable HTTPS to establish a secure connection between the browser and the camera. To enable HTTPS, please follow the steps below.
  - G. Obtain an SSL certificate in base-64 encoding format for encryption and decryption, and a private key in PKCS#8 format (must be unencrypted).
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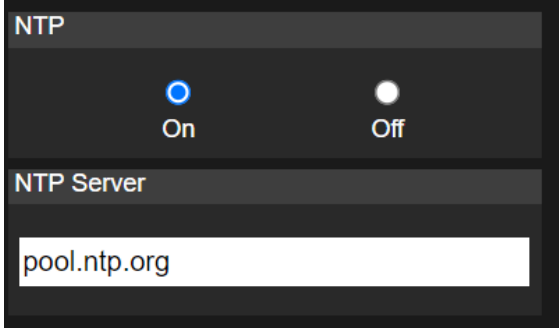
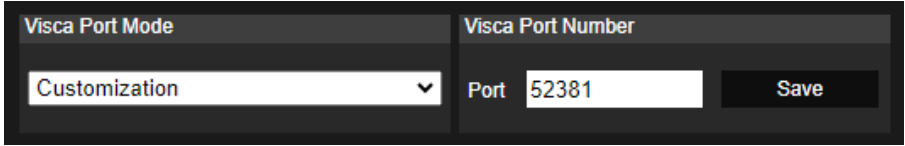
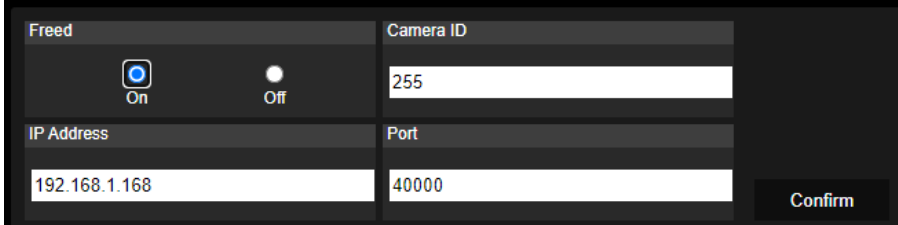
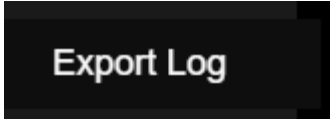
**Product:**

**PTZ Camera: PTZ310UV2/PTZ310UNV2/PTZ330UV2/PTZ330UNV2**

**Tracking Camera: TR315/TR315N/TR335/TR335N**

<b>FW version</b>	<b>V0.0.0000.24</b>									
<b>Release date</b>	2023/11/14									
<b>New Feature</b>	None									
<b>Improvement</b>	<ul style="list-style-type: none"> <li>● Resolved NDI function disable issue of V22. Users can now enjoy the original NDI HX3 functionality.</li> <li>● Improved switch presenter functionality through click tracking on the webpage for a more optimized experience.</li> </ul>									
<b>Known issue</b>	<p>10. We recommend using the Chrome browser for configuring webpages.</p> <p>11. When using NDI video theme mode, the USB video stream will be temporarily paused in order to ensure the best possible NDI HX3 video streaming experience.</p> <p>*Simultaneous outputs in different video theme modes:</p> <table border="1"> <thead> <tr> <th>Video modes</th> <th>PTZ310UNV2</th> <th>PTZ310UV2</th> </tr> </thead> <tbody> <tr> <td>Standard/Teams/Zoom</td> <td>HDMI/IP/NDI HX2/USB (4KP60) &amp; 3G-SDI (1080P60)</td> <td>HDMI/IP/USB(4KP60) &amp; 3G-SDI (1080P60)</td> </tr> <tr> <td>NDI</td> <td>HDMI/IP/NDI HX3 (4KP60) &amp; 3G-SDI (1080P60)</td> <td>NA</td> </tr> </tbody> </table> <p>12. HTTPS: Enable HTTPS to establish a secure connection between the browser and the camera. To enable HTTPS, please follow the steps below.</p> <p>J. Obtain an SSL certificate in base-64 encoding format for encryption and decryption, and a private key in PKCS#8 format (must be unencrypted).</p> <p>K. Convert the required certificate content into PEM format. The SSL certificate uploaded to the camera must be in PEM format.</p> <p>L. In the HTTPS settings field, select "On", then click "Choose File" to select the certificate file, and then click "Upload".</p>	Video modes	PTZ310UNV2	PTZ310UV2	Standard/Teams/Zoom	HDMI/IP/NDI HX2/USB (4KP60) & 3G-SDI (1080P60)	HDMI/IP/USB(4KP60) & 3G-SDI (1080P60)	NDI	HDMI/IP/NDI HX3 (4KP60) & 3G-SDI (1080P60)	NA
Video modes	PTZ310UNV2	PTZ310UV2								
Standard/Teams/Zoom	HDMI/IP/NDI HX2/USB (4KP60) & 3G-SDI (1080P60)	HDMI/IP/USB(4KP60) & 3G-SDI (1080P60)								
NDI	HDMI/IP/NDI HX3 (4KP60) & 3G-SDI (1080P60)	NA								



<b>FW version</b>	<b>V0.0.0000.22</b>
<b>Release date</b>	2023/09/06
<b>New Feature</b>	<p>1. Able utilize the NTP function directly from the webpage under System &gt; Network &gt; NTP.</p>  <p>2. Able configure the VISCA Port Mode function through the webpage by going to Network &gt; VISCA Port Mode.</p>  <p>3. Able utilize the FreeD function directly from the webpage by accessing Network &gt; FreeD.</p>  <p>4. Able to export Log from the webpage by accessing System &gt; Export Log.</p> 

5. Able to continuously export logs to a selected IP and Port directly from the webpage under System > Export Log..

6. Able to configure and set the date and time from the webpage by accessing System > set Date/Time.

7. Able to schedule the Power-up time from the webpage by accessing System > Power Schedule.

Day/Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sunday	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Monday	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Tuesday	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
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Thursday	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Friday	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Saturday	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue

<b>Improvement</b>	<ol style="list-style-type: none"> <li>Optimizing USB video for a seamless Zoom Room video streaming experience.</li> <li>Users can now utilize symbols (%+=, -_^/@.~) when creating their login names and passwords.</li> <li>Enhancements to the username and password fields now include the ability to toggle password visibility using an eye icon.</li> </ol>									
<b>Known issue</b>	<ol style="list-style-type: none"> <li>We recommend using the Chrome browser for configuring webpages.</li> <li>When using NDI video theme mode, the USB video stream will be temporarily paused in order to ensure the best possible NDI HX3 video streaming experience.</li> </ol> <p>*Simultaneous outputs in different video theme modes:</p> <table border="1" data-bbox="434 768 1399 1113"> <thead> <tr> <th>Video modes</th> <th>PTZ310UNV2/PTZ330UNV2</th> <th>PTZ310UV2/PTZ330UV2</th> </tr> </thead> <tbody> <tr> <td>Standard/Teams/Zoom</td> <td>HDMI/IP/NDI HX2/USB (4KP60) &amp; 3G-SDI (1080P60)</td> <td>HDMI/IP/USB(4KP60) &amp; 3G-SDI (1080P60)</td> </tr> <tr> <td>NDI</td> <td>HDMI/IP/NDI HX3 (4KP60) &amp; 3G-SDI (1080P60)</td> <td>NA</td> </tr> </tbody> </table> <ol style="list-style-type: none"> <li>HTTPS: Enable HTTPS to establish a secure connection between the browser and the camera. To enable HTTPS, please follow the steps below.             <ol style="list-style-type: none"> <li>Obtain an SSL certificate in base-64 encoding format for encryption and decryption, and a private key in PKCS#8 format (must be unencrypted).</li> <li>Convert the required certificate content into PEM format. The SSL certificate uploaded to the camera must be in PEM format.</li> <li>In the HTTPS settings field, select "On", then click "Choose File" to select the certificate file, and then click "Upload".</li> </ol> </li> </ol>	Video modes	PTZ310UNV2/PTZ330UNV2	PTZ310UV2/PTZ330UV2	Standard/Teams/Zoom	HDMI/IP/NDI HX2/USB (4KP60) & 3G-SDI (1080P60)	HDMI/IP/USB(4KP60) & 3G-SDI (1080P60)	NDI	HDMI/IP/NDI HX3 (4KP60) & 3G-SDI (1080P60)	NA
Video modes	PTZ310UNV2/PTZ330UNV2	PTZ310UV2/PTZ330UV2								
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NDI	HDMI/IP/NDI HX3 (4KP60) & 3G-SDI (1080P60)	NA								

<b>FW version</b>	<b>V0.0.0000.14</b>									
<b>Release date</b>	2023/03/31									
<b>New Feature</b>	None									
<b>Improvement</b>	<ul style="list-style-type: none"> <li>● Enhanced the firmware upgrade progress experience.</li> <li>● Enabled the LDC function on the web page.</li> <li>● Added RTC (Real-Time Clock) check.</li> </ul>									
<b>Known issue</b>	<p>16. We recommend using the Chrome browser for configuring webpages.</p> <p>17. When using NDI video theme mode, the USB video stream will be temporarily paused in order to ensure the best possible NDI HX3 video streaming experience.</p> <p>*Simultaneous outputs in different video theme modes:</p> <table border="1"> <thead> <tr> <th>Video modes</th> <th>PTZ310UNV2</th> <th>PTZ310UV2</th> </tr> </thead> <tbody> <tr> <td>Standard/Teams/Zoom</td> <td>HDMI/IP/NDI HX2/USB (4KP60) &amp; 3G-SDI (1080P60)</td> <td>HDMI/IP/USB(4KP60) &amp; 3G-SDI (1080P60)</td> </tr> <tr> <td>NDI</td> <td>HDMI/IP/NDI HX3 (4KP60) &amp; 3G-SDI (1080P60)</td> <td>NA</td> </tr> </tbody> </table> <p>18. HTTPS: Enable HTTPS to establish a secure connection between the browser and the camera. To enable HTTPS, please follow the steps below.</p> <p>P. Obtain an SSL certificate in base-64 encoding format for encryption and decryption, and a private key in PKCS#8 format (must be unencrypted).</p> <p>Q. Convert the required certificate content into PEM format. The SSL certificate uploaded to the camera must be in PEM format.</p> <p>R. In the HTTPS settings field, select "On", then click "Choose File" to select the certificate file, and then click "Upload".</p>	Video modes	PTZ310UNV2	PTZ310UV2	Standard/Teams/Zoom	HDMI/IP/NDI HX2/USB (4KP60) & 3G-SDI (1080P60)	HDMI/IP/USB(4KP60) & 3G-SDI (1080P60)	NDI	HDMI/IP/NDI HX3 (4KP60) & 3G-SDI (1080P60)	NA
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NDI	HDMI/IP/NDI HX3 (4KP60) & 3G-SDI (1080P60)	NA								

<b>FW version</b>	<b>V0.0.0000.12</b>									
<b>Release date</b>	2023/03/17									
<b>New Feature</b>	None									
<b>Improvement</b>	1. Optimizing USB video for a seamless Zoom Room video streaming experience.									
<b>Known issue</b>	<p>2. We recommend using the Chrome browser for configuring webpages.</p> <p>3. When using NDI video theme mode, the USB video stream will be temporarily paused in order to ensure the best possible NDI HX3 video streaming experience.</p> <p>*Simultaneous outputs in different video theme modes:</p> <table border="1"> <thead> <tr> <th>Video modes</th> <th>PTZ310UNV2</th> <th>PTZ310UV2</th> </tr> </thead> <tbody> <tr> <td>Standard/Teams/Zoom</td> <td>HDMI/IP/NDI HX2/USB (4KP60) &amp; 3G-SDI (1080P60)</td> <td>HDMI/IP/USB(4KP60) &amp; 3G-SDI (1080P60)</td> </tr> <tr> <td>NDI</td> <td>HDMI/IP/NDI HX3 (4KP60) &amp; 3G-SDI (1080P60)</td> <td>NA</td> </tr> </tbody> </table> <p>4. HTTPS: Enable HTTPS to establish a secure connection between the browser and the camera. To enable HTTPS, please follow the steps below.</p> <p>A. Obtain an SSL certificate in base-64 encoding format for encryption and decryption, and a private key in PKCS#8 format (must be unencrypted).</p> <p>B. Convert the required certificate content into PEM format. The SSL certificate uploaded to the camera must be in PEM format.</p> <p>C. In the HTTPS settings field, select "On", then click "Choose File" to select the certificate file, and then click "Upload".</p>	Video modes	PTZ310UNV2	PTZ310UV2	Standard/Teams/Zoom	HDMI/IP/NDI HX2/USB (4KP60) & 3G-SDI (1080P60)	HDMI/IP/USB(4KP60) & 3G-SDI (1080P60)	NDI	HDMI/IP/NDI HX3 (4KP60) & 3G-SDI (1080P60)	NA
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Standard/Teams/Zoom	HDMI/IP/NDI HX2/USB (4KP60) & 3G-SDI (1080P60)	HDMI/IP/USB(4KP60) & 3G-SDI (1080P60)								
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