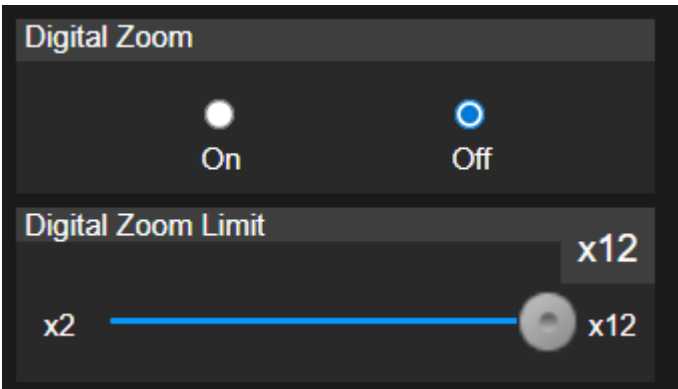# Release note

Product:

Dual Lens Tracking Camera: TR535/TR535N

FW version	**V0.0.0000.32**
Release date	2025/09/02
New Feature	1. **Dante Ready SDK Preloaded in TR535/TR535N** The Dante Ready SDK is now preloaded into the camera, allowing users to enable Dante AV-H through Dante software (Dante Controller). **How to use:** ● Set the Camera theme mode of "Dante" from camera webpage. ● Install Dante Controller to activate "Dante Ready". https://www.getdante.com/products/software-essentials/dante-controller/ (Dante controller is free to download) 2. Added support for Multicast in Dante AV-H, enabling more efficient network bandwidth usage and improved scalability in AV-over-IP deployments. 3. Able to enable digital zoom.
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:
   i. Numeric characters: 0123456789
   ii. Alphabetic characters:
      ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz
   iii. Symbols: %+=,-_^/@.~

2. Login Fail Lockout Mechanism:
   Users are allowed up to **10 consecutive login attempts** per session.
   After 10 failed attempts, the account will be temporarily locked.
   Lockout duration increases with repeated failed sessions:
   1st failed session: 1-minute lock
   2nd failed session: 5-minute lock
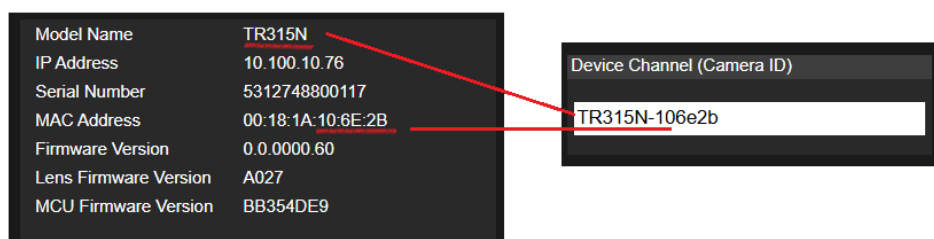   3rd failed session: 10-minute lock
   4th and subsequent failed sessions: 30-minute lock
   This mechanism helps protect accounts from unauthorized access while giving users multiple opportunities to enter correct credentials.
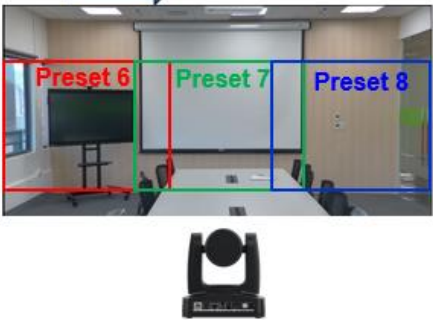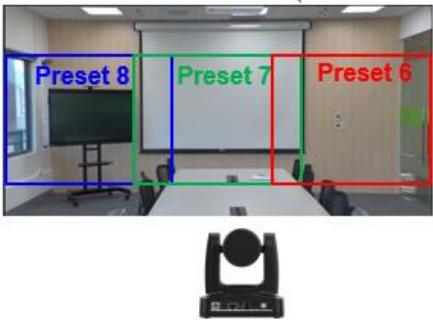
3. Improved image quality with more natural color reproduction for a lifelike appearance and enhanced auto white balance to deliver more stable and balanced video. This provides users with clearer, more true-to-life visuals.
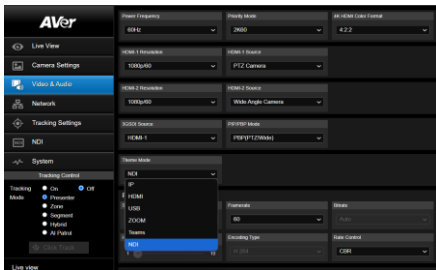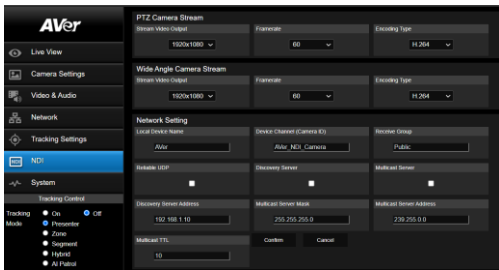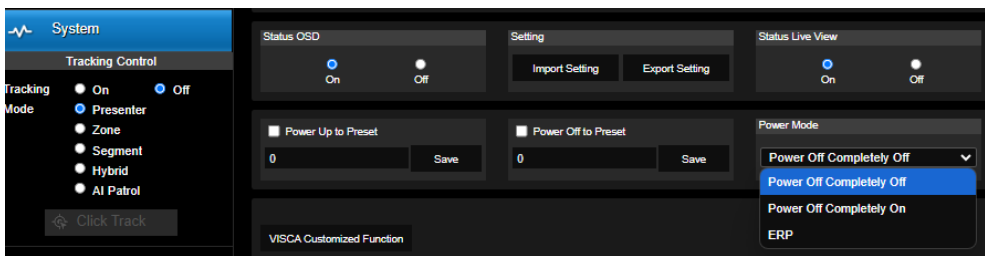
4. Redefine the NDI Camera logic to use the model's name combined with the last 6 digits of the MAC address.
   Note: When upgrading an existing TR535 camera to FW V32, the hostname will remain unchanged. However, once the "Default" option is executed on the OSD, the hostname will update to the model's name combined with the last 6 digits of the MAC address.

5. Added support for setting presets 6/7/8/9 in both directions on Zone Tracking, making it easier for users to configure and reducing the chance of setup errors.

Original: from left to right   Added: from right to left

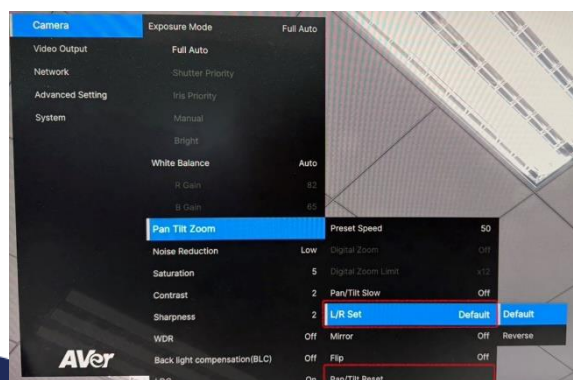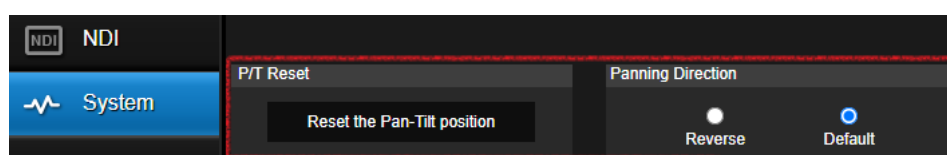|	

Known issue	1. We recommend using the Chrome browser for configuring webpages.
	
	2. 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".
	
	3. The TR535 is not compatible with Mac O.S 11

FW version	V0.0.0000.26
Release date	2025/03/25
New Feature	1. NDI is now built into the TR535 with this firmware update. After updating the firmware, if the NDI page is not visible on the webpage, please log out and log back in to access the NDI configuration settings. 2. Power Mode add one more feature "ERP" to let camera under 0.5W at standby mode, this is for ESG strategy.

Power Off Completely	Power on (Plug on)	Ways to power up
Off (default)	Auto boot up	IP(VISCA/CGI) RS232/422 Remote control
On	Auto boot up	IP(VISCA) RS232/422 Remote control
ERP	N/A When plug on and need to press "power button" on remote control to boot up.	Remote control

Improvement	1. Improvement: add VISCA command for the functions below. HDMI1 source, HDMI2 source, PIP, PBP

Command Set	Command	Command Packet	Comments
HDMI 1 source	PTZ Camera	8x 01 36 69 07 01 00 FF	

	Wide Angle Camera	8x 01 36 69 07 01 01 FF	
	PIP/PBP	8x 01 36 69 07 01 02 FF	
	PTZ Camera	8x 01 36 69 07 02 00 FF	
	Wide Angle Camera	8x 01 36 69 07 02 01 FF	
HDMI2 source	PIP/PBP	8x 01 36 69 07 02 02 FF	
PIP/PBP Mode	Set	8x 01 36 69 08 mm FF	mm: 0x01 To 0x08 pip/pbp mode select

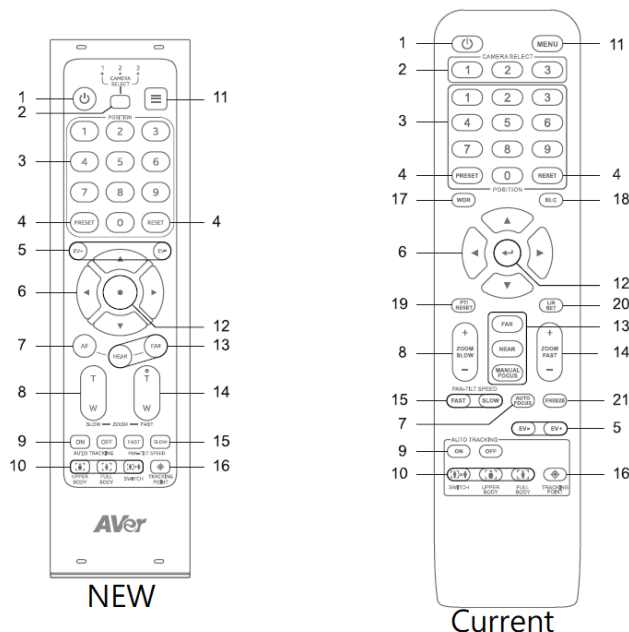| Inquiry Command	Command Packet	Reply Packet	Comments
		y0 50 00 FF	PTZ Camera
		y0 50 01 FF	Wide Angle Camera
HDMI 1 source	8x 09 36 69 07 01 FF	y0 50 02 FF	PIP/PBP
		y0 50 00 FF	PTZ Camera
		y0 50 01 FF	Wide Angle Camera
HDMI 2 source	8x 09 36 69 07 02 FF	y0 50 02 FF	PIP/PBP
PIP/PBP Mode	8x 09 36 69 08 FF	y0 50 mm FF	mm: 0x01 To 0x08 pip/pbp mode select

2. Added "P/T Reset" and "Panning Direction (L/R Set)" to the Web Interface and OSD Manual to prepare for the new remote control rollout in Q2, we have added the "P/T Reset" and "Panning Direction (L/R Set)" options to the web interface and OSD manual. The new remote control features a simpler design, removing two buttons and relocating their functions to the web interface and OSD manual.

Both the current and new remote controls will be fully compatible with the camera. Please see the new remote control design below.
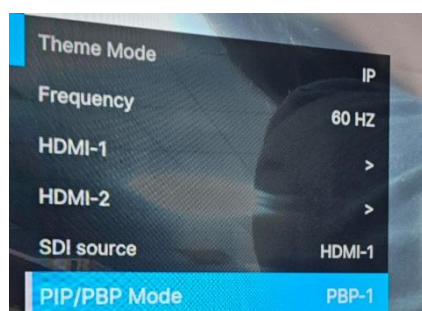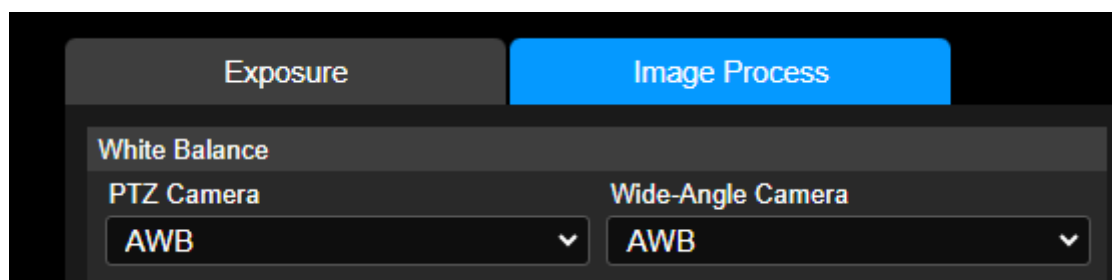
Remote Control

Your device may come with one of the following remote controls.

NEW

Current

3. Bug fix: Correct the feature name from PIP to "PIP/PBP" on OSD menu.
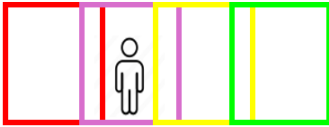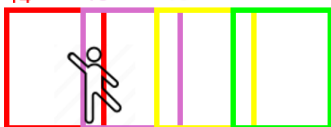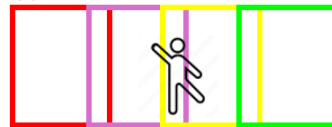

4. Improvement: The camera will slightly zoom out to relocate the presenter when tracking is lost.

5. Improvement: Ensure consistent live white balance between the PTZ and wide-angle cameras. When the white balance settings are the same, the PTZ camera follows the wide-angle camera's style. If the settings differ, the PTZ camera maintains its own white balance.
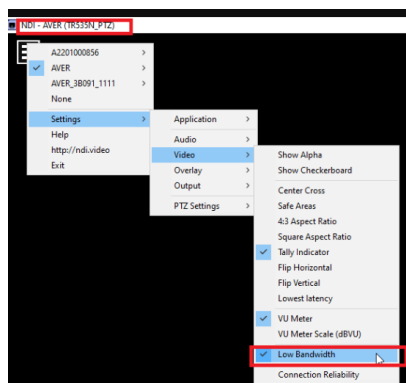

Note: The wide-angle camera captures most of the environment, including the ceiling, floor, and furniture, resulting in a more balanced white balance similar to human perception. In contrast, the PTZ camera zooms in to frame the presenter, adjusting its white balance specifically for them, which differs significantly from the wide-angle camera. To maintain a consistent image

	style, we ensure that the PTZ camera always follows the wide-angle camera's white balance settings.

Known issue	1. We recommend using the Chrome browser for configuring webpages.
	2. HTTPS: Enable HTTPS to establish a secure connection between the browser and the camera. To enable HTTPS, please follow the steps below.
	    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).
	    E. Convert the required certificate content into PEM format. The SSL certificate uploaded to the camera must be in PEM format.
	    F. In the HTTPS settings field, select "On", then click "Choose File" to select the certificate file, and then click "Upload".
	3. The TR535 is not compatible with Mac O.S 11

FW version	**V0.0.0000.22**
Release date	2024/10/18
New Feature	1. Enable the ability to import and export the settings of the TR535N through the webpage.
Improvement	1. Bug fix: When the presenter moves to a new area boundary, the camera follows accordingly.

2. Bug fix: Adjust the pan speed in Hybrid mode so that when the presenter moves out of a preset area, the pan speed adapts to follow the presenter's movement accordingly.

3. Bug fix: Improve shield zone performance.

4. Redefine the hostname logic to use the model's name combined with the last 6 digits of the MAC address.

   Note: When upgrading an existing TR535 camera to FW V22, the hostname will remain unchanged. However, once the "Default" option is executed on the OSD, the hostname will update to the model name combined with the last 6 digits of the MAC address.

Model Name	TR535
IP Address	10.100.105.53
Serial Number	5100464400027
MAC Address	00:18:1A:10:49:14
Firmware Version	0.0.0000.22
Lens Firmware Version	A120
MCU Firmware Version	A21BAE9E

5. **Stream Video Output**: Change the default Bitrate setting from 4Mbps to "Auto" to improve video quality.

   Note1: When upgrading an existing TR535 camera to FW V22, the Bitrate setting will remain unchanged. However, once the "Default" option is executed on the OSD, the Bitrate will be updated to "Auto."

   Note2: The default "Auto" Bitrate will be configured according to different resolutions as shown in the following table.

	Non-NDI Theme mode			NDI Theme mode		
Resolution	60FPS	30FPS	<30FPS	60FPS	30FPS	<30FPS

2160p	**H265:32M** **H264:64M**	**H265:16M** **H264:32M**	H265:8M H264:8M	H265:56M H264:56M	H265:56M H264:56M	H265:56M H264:56M
1080p	H265:16M H264:16M	H265:8M H264:8M	H265:4M H264:4M	H265:40M H264:40M	H265:40M H264:40M	H265:40M H264:40M
720p	H265:8M H264:8M	H265:4M H264:4M	H265:2M H264:2M	H265:24M H264:24M	H265:24M H264:24M	H265:24M H264:24M
540p	H265:8M H264:8M	H265:4M H264:4M	H265:2M H264:2M	H265:20M H264:20M	H265:20M H264:20M	H265:20M H264:20M
480p	H265:4M H264:4M	H265:2M H264:2M	H265:1M H264:1M	H265:12M H264:12M	H265:12M H264:12M	H265:12M H264:12M
360p	H265:2M H264:2M	H265:1M H264:1M	H265:512K H264:512K	H265:12M H264:12M	H265:12M H264:12M	H265:12M H264:12M

6. Support Low Bandwidth (640X360) of NDI Studio Monitor.

Known issue	1. We recommend using the Chrome browser for configuring webpages.
	2. 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).
	    H. Convert the required certificate content into PEM format. The SSL certificate uploaded to the camera must be in PEM format.
	    I. In the HTTPS settings field, select "On", then click "Choose File" to select the certificate file, and then click "Upload".
	3. The TR535 is not compatible with Mac O.S 11

FW version	**V0.0.0000.18**
Release date	2024/8/5
New Feature	None. (this is 1st FW release of TR535/ TR535N)
Improvement	1. ZONE mode AI tracking will be more accurate if the AI tracking target crosses the zone boundary, causing the camera to move to that zone. This is an improvement over single lens tracking cameras, where if someone crosses the zone boundary, the camera follows the target to the new zone. In the TR535, the AI camera only follows the AI target into the new zone.

Known issue	1. We recommend using the Chrome browser for configuring webpages.
	
	2. HTTPS: Enable HTTPS to establish a secure connection between the browser and the camera. To enable HTTPS, please follow the steps below.
	    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).
	    K. Convert the required certificate content into PEM format. The SSL certificate uploaded to the camera must be in PEM format.
	    L. In the HTTPS settings field, select "On", then click "Choose File" to select the certificate file, and then click "Upload".
	
	3. The TR535 is not compatible with Mac O.S 11