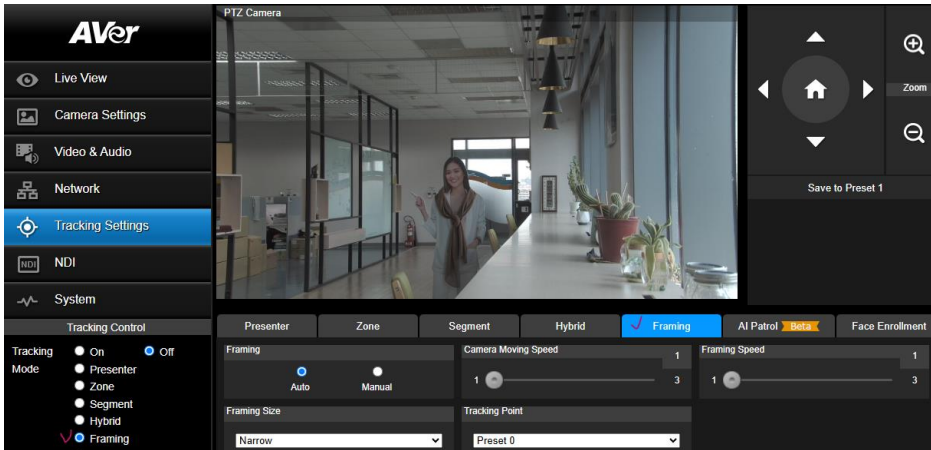
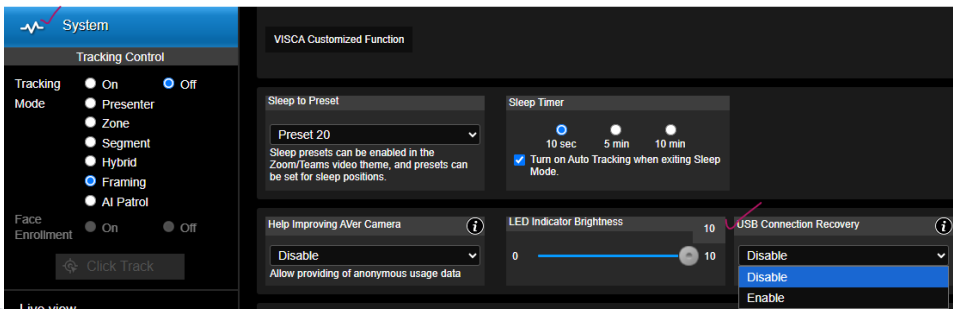
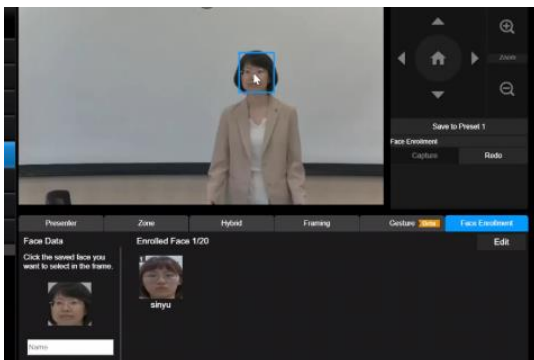
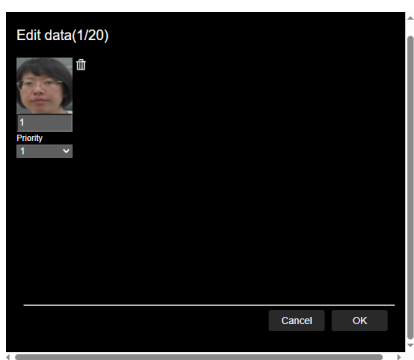
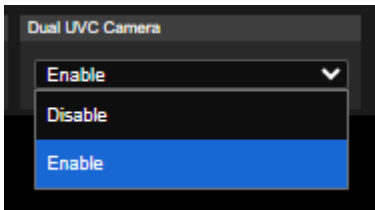


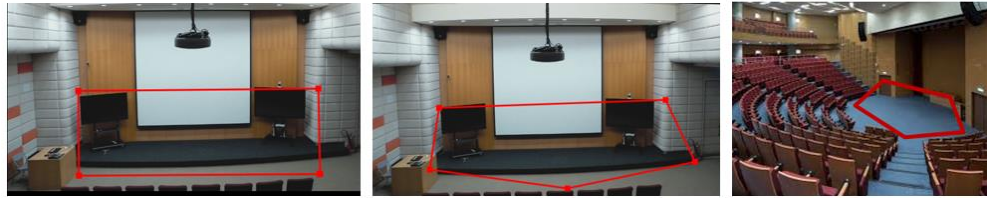
Release note

Product:

Dual Lens Tracking Camera: TR535/ TR535N

FW version	V0.0.0000.46
Release date	2026/08/21
New feature	1. Framing function: Auto Framing frames entire group on screen automatically while Manual Framing frames entire group on screen once. When no one is on screen, the camera returns to the pan-tilt center (default-Home position) or the Tracking Point (optional, selected preset). 
Improvement	1. Added a USB Connection Recovery function to improve USB connection compatibility with USB extenders (INOGENI U-BRIDGE3 USB (HDBASET)). When this function is enabled, the camera optimizes the USB signal connection to help restore the connection after the PC-side USB cable is unplugged and reconnected. 

FW version	V0.0.0000.43
Release date	2026/04/02
New feature	1. Added Face Enrollment feature to preload presenter faces, ensuring the camera only tracks designated professors while skipping students' faces to comply with school privacy rules. Supports preloading up to 20 presenter faces, making classroom tracking more accurate and secure. Note: Face Enrollment – Privacy Notice ➤ Registered face data is stored only inside the camera and will not be transmitted to AVer or third parties. ➤ Data is used only for auto-tracking, not for other purposes. ➤ Users can delete registered face data at any time. ➤ Inform the person before enrollment and obtain consent if required by local law. ➤ Use must comply with applicable privacy and data protection regulations (e.g., GDPR, CCPA).  
Improvement	1. Added web UI option to enable or disable dual UVC streaming for improved video conferencing flexibility. Web page : Video & Audio > Dual UVC Camera  2. Fixed an issue where the “OSD OFF” did not turn off when using the FAST ZOOM in/out function via the remote control. 3. Enhanced the effective tracking area shape from a rectangle (four corners) to a pentagon (five corners), allowing better coverage of round stages and ensuring more accurate presenter tracking.



Note: All five angles of the pentagon must be convex (outward), and none of them can be concave (inward).

✓ **correct setting**



✗ **Incorrect setting**



4. Improved System Recovery Mechanism

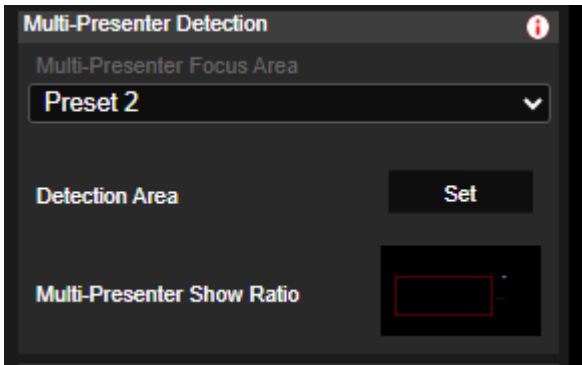
Added VISCA command to restart the HTTP server, allowing remote recovery in cases where web UI or API access becomes unavailable without requiring a full device reboot.

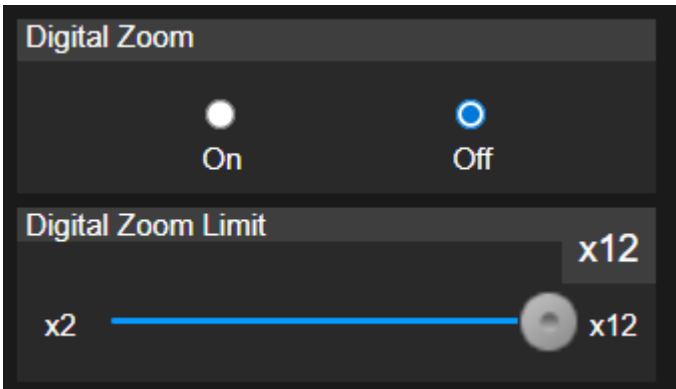
5. Enhanced CGI input handling to mitigate command injection risks and prevent unintended system information disclosure.

6. Network Behavior Optimization

Optimized syslog mechanism to eliminate unnecessary background network packets when the feature is disabled.

Improved system behavior to ensure network traffic aligns with user configuration settings.

FW version	V0.0.0000.39
Release date	2025/12/30
Improvement	2. Camera Focus Improvement for Preset Positions When the camera moves to a preset position, Pan, Tilt, and Focus can operate simultaneously, significantly speeding up the focusing process. Note: If the preset includes a Zoom In or Zoom Out action, the Focus function will be activated only after the zoom operation is completed and cannot run simultaneously with Pan/Tilt. 3. Simultaneous pan and tilt movement when transitioning to a preset position, providing a smoother and more fluid visual experience. 4. Multi-Presenter Detection Improvement. The wide-angle camera is used to detect human presence, enabling the PTZ camera to automatically move to the corresponding Multi-Presenter preset positions.  5. (Bug Fixed) Optimized VISCA command response to improve speed and stability when quickly switching between preset positions. 6. Teams Mode Theme Setting When operating in Teams mode, performing a factory default reset will keep the device in Teams mode to comply with standard Microsoft Teams certification testing requirements.

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. Alphanumeric 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

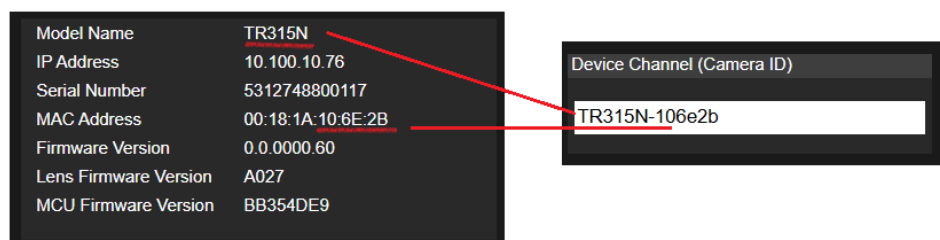
4th and subsequent failed sessions: 30-minute lock

This mechanism helps protect accounts from unauthorized access while giving users multiple opportunities to enter correct credentials.

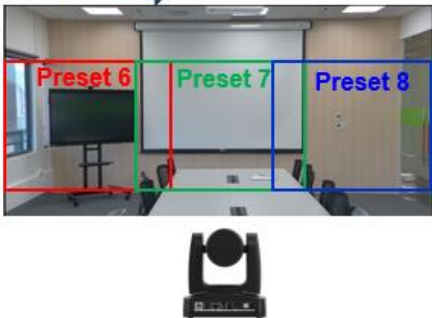
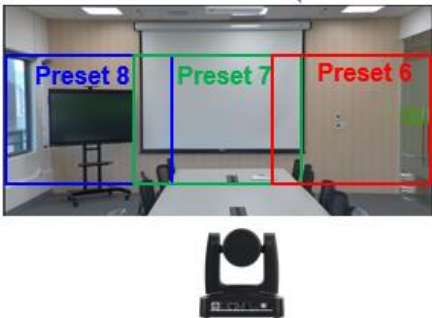
3. Improved image quality with more natural color reproduction for a lifelike appearance and enhanced auto white balance to deliver more stable and balanced video. This provides users with clearer, more true-to-life visuals.

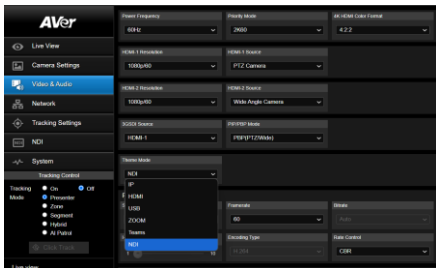
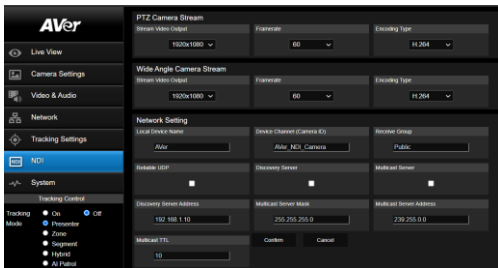
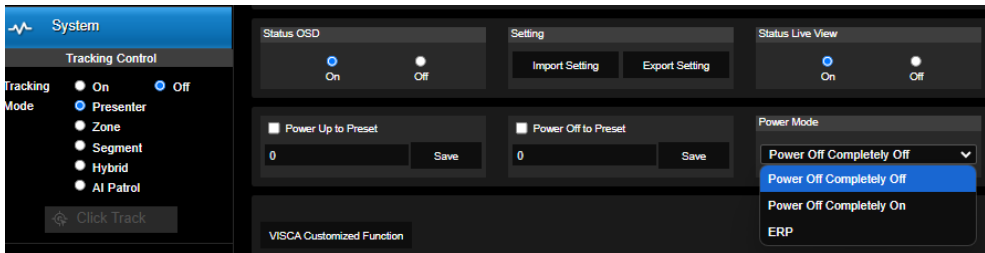
4. Redefine the NDI Camera logic to use the model's name combined with the last 6 digits of the MAC address.

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

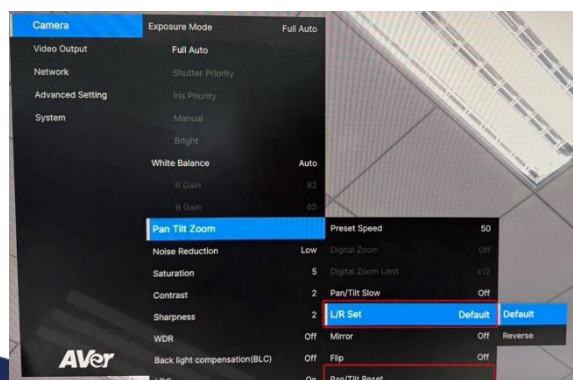
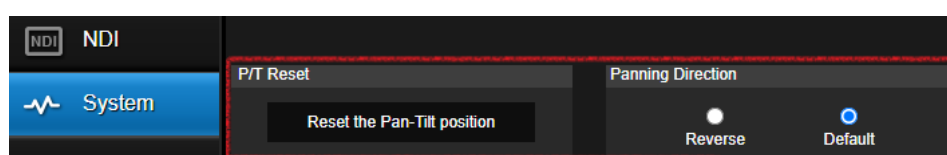
FW version	V0.0.0000.26												
Release date	2025/03/25												
New Feature	1. NDI is now built into the TR535 with this firmware update. After updating the firmware, if the NDI page is not visible on the webpage, please log out and log back in to access the NDI configuration settings.   2. Power Mode add one more feature "ERP" to let camera under 0.5W at standby mode, this is for ESG strategy.  <table><tr><th>Power Off Completely</th><th>Power on (Plug on)</th><th>Ways to power up</th></tr><tr><td>Off (default)</td><td>Auto boot up</td><td>IP(VISCA/CGI) RS232/422 Remote control</td></tr><tr><td>On</td><td>Auto boot up</td><td>IP(VISCA) RS232/422 Remote control</td></tr><tr><td>ERP</td><td>N/A When plug on and need to press "power button" on remote control to boot up.</td><td>Remote control</td></tr></table>	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
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 <table><tr><th>Command Set</th><th>Command</th><th>Command Packet</th><th>Comments</th></tr><tr><td>HDMI 1 source</td><td>PTZ Camera</td><td>8x 01 36 69 07 01 00 FF</td><td></td></tr></table>	Command Set	Command	Command Packet	Comments	HDMI 1 source	PTZ Camera	8x 01 36 69 07 01 00 FF					
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	
HDMI2 source	PTZ Camera	8x 01 36 69 07 02 00 FF	
	Wide Angle Camera	8x 01 36 69 07 02 01 FF	
	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
HDMI 1 source	8x 09 36 69 07 01 FF	y0 50 00 FF	PTZ Camera
		y0 50 01 FF	Wide Angle Camera
		y0 50 02 FF	PIP/PBP
HDMI 2 source	8x 09 36 69 07 02 FF	y0 50 00 FF	PTZ Camera
		y0 50 01 FF	Wide Angle Camera
		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

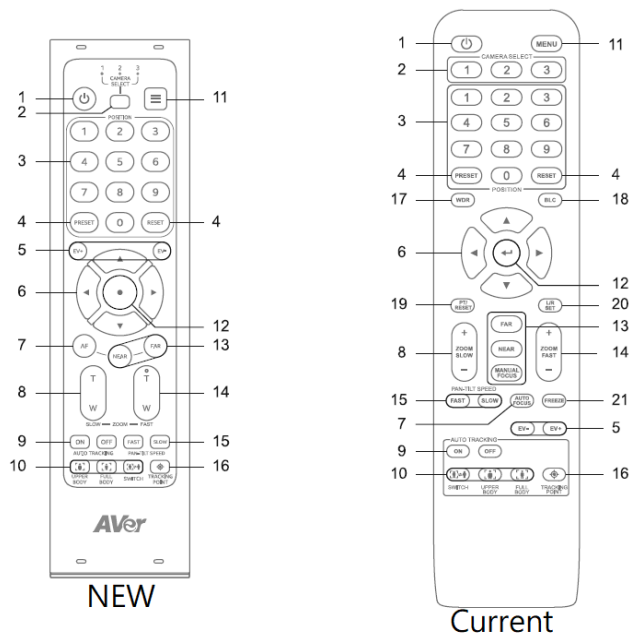
- Added "P/T Reset" and "Panning Direction (L/R Set)" to the Web Interface and OSD Manual to prepare for the new remote control rollout in Q2, we have added the "P/T Reset" and "Panning Direction (L/R Set)" options to the web interface and OSD manual. The new remote control features a simpler design,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

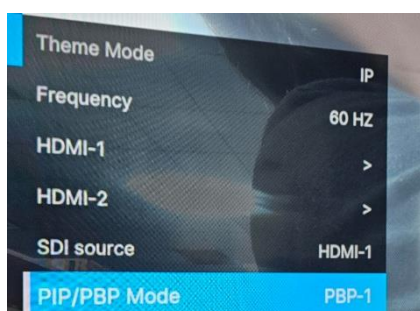


Remote Control

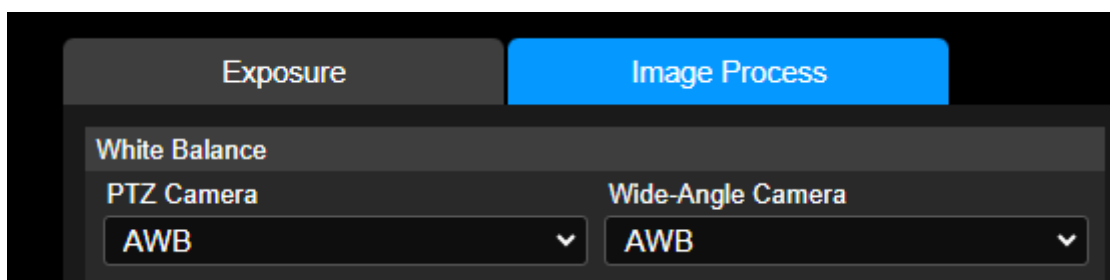
Your device may come with one of the following remote controls.



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

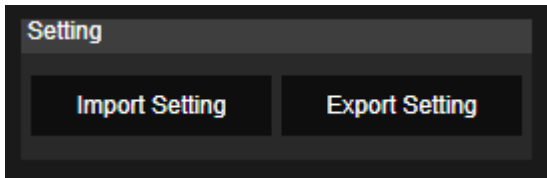
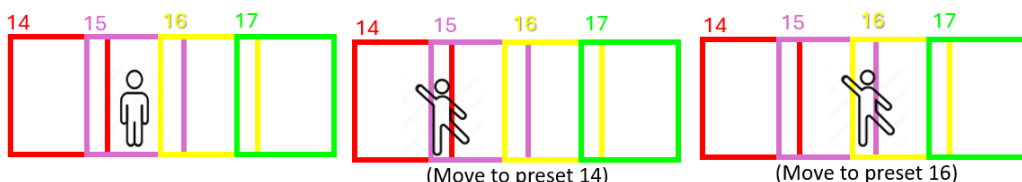
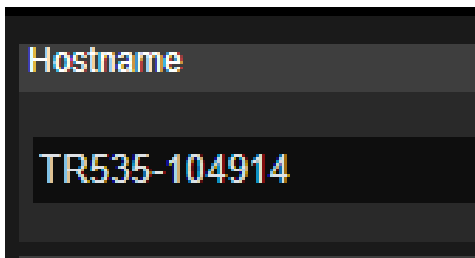


4. Improvement: The camera will slightly zoom out to relocate the presenter when tracking is lost.
5. Improvement: Ensure consistent live white balance between the PTZ and wide-angle cameras. When the white balance settings are the same, the PTZ camera follows the wide-angle camera’s style. If the settings differ, the PTZ camera maintains its own white balance.



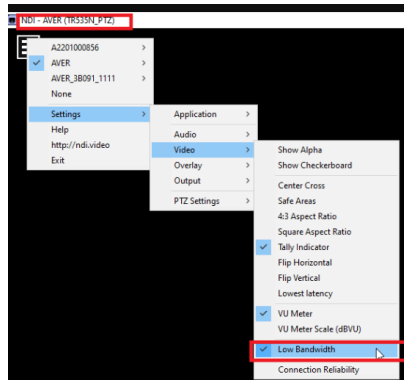
Note: The wide-angle camera captures most of the environment, including the ceiling, floor, and furniture, resulting in a more balanced white balance similar to human perception. In contrast, the PTZ camera zooms in to frame the presenter, adjusting its white balance specifically for them, which differs 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.  <table><tr><td>Model Name</td><td>TR535</td></tr><tr><td>IP Address</td><td>10.100.105.53</td></tr><tr><td>Serial Number</td><td>5100464400027</td></tr><tr><td>MAC Address</td><td>00:18:1A:10:49:14</td></tr><tr><td>Firmware Version</td><td>0.0.0000.22</td></tr><tr><td>Lens Firmware Version</td><td>A120</td></tr><tr><td>MCU Firmware Version</td><td>A21BAE9E</td></tr></table> 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. <table><tr><td></td><td colspan="3">Non-NDI Theme mode</td><td colspan="3">NDI Theme mode</td></tr><tr><td>Resolution</td><td>60FPS</td><td>30FPS</td><td><30FPS</td><td>60FPS</td><td>30FPS</td><td><30FPS</td></tr></table>	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		Non-NDI Theme mode			NDI Theme mode			Resolution	60FPS	30FPS	<30FPS	60FPS	30FPS	<30FPS
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																												
	Non-NDI Theme mode			NDI Theme mode																									
Resolution	60FPS	30FPS	<30FPS	60FPS	30FPS	<30FPS																							

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