

Product release notes

PTZ-12G and PTZ-NDI

ROSS

PRODUCT RELEASE NOTES

Welcome to the PTZ-12G and PTZ-NDI Release Notes. Use this document to find important information on areas that may not be covered in the Technical Manual and Quick Start Guide.

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VERSION HISTORY

VERSION 1.1c – JULY 2024

LOAD LINEUP

- **PTZ-12G: VCB106** (VMG100 _VMF101 _VWN106 _VWO108 _VWP133 _VMK107 _VWR104 _VMN105_VMO107)
- **PTZ-NDI: VCB105** (VMG100 _VMF101 _VWS105 _VWT106 _VWP133 _VMK107 _VWR104 _VMN105_VMO107)

WHAT'S NEW

- HEVC code configuration has changed from BT.601 to BT.709.

BUGS FIXED IN THIS RELEASE

- For PTZ-NDI-BLK: Fixed a potential instability issue with NDI streaming for the PTZ-NDI by modifying the interval between each NDI timestamp and timecode.
- For PTZ-12G-BLK and PTZ-NDI-BLK: Camera firmware was affected by a NetFilter vulnerability CVE-2023-42753. This has now been resolved. (CAM-421)
- For PTZ-12G-BLK and PTZ-NDI-BLK: Improvements to auto focus performance at high zoom ratios.

VERSION 1.1b – MAY 2023

LOAD LINEUP

- **PTZ-12G: VCB104** (VMG100 _VMF101 _VWN104 _VWO106 _VWP130 _VMK107 _VWR103 _VMN105_VMO107)
- **PTZ-NDI: VCB103** (VMG100 _VMF101 _VWS103 _VWT104 _VWP130 _VMK107 _VWR103 _VMN105_VMO107)

WHAT'S NEW

- New white balance options have been added for specific color temperatures (3000 K, 4300 K, 5000 K, 6500 K, 8000 K). These options are available in the Web UI but are unavailable in the DashBoard PTZ Camera Control Plugin.

BUGS FIXED IN THIS RELEASE

- When using 1080i video format, unexpected blurring occurred when viewing a moving object. This has been fixed and 1080i is now fully supported by the camera. (CAM-355)
- One Push auto focus was not using the detection region set in the AF frame setting in the Web UI, which caused it to sometimes focus on the wrong object. This has now been resolved and One Push auto focus behaves the same way as regular auto focus mode. (CAM-374)
- Rebooting or power cycling the camera while the Web UI was open caused unexpected behaviors. After a pause while the camera was rebooting, the Web UI would appear functional and navigational between pages, but was not actually functional and in some cases showed additional options. This has been resolved and the web page will revert to the login screen after a reboot. (CAM-393)
- A change has been made to the implementation of the VISCA over IP protocol. Previously, the camera would respond to the controller on the UDP port that the original command was sent from. This has been changed so that responses are always sent to port 52381 on the controller, enabling consistency with VISCA implementations by other vendors of PTZ Cameras and improving compatibility with third-party controllers.

VERSION 1.1a – OCTOBER 2022

LOAD LINEUP

- **PTZ-12G: VCBD103** (VMG100 _VMF101 _VWN103 _VWO104 _VWP126 _VMK107 _VWR101 _VMN105_VMO107)
- **PTZ-NDI: VCBE102** (VMG100 _VMF101 _VWS102 _VWT102 _VWP127 _VMK107 _VWR101 _VMN105_VMO107)

WHAT'S NEW

- The PTZ-NDI now offers video streaming over RTSP / RTMP / RTMPS / MPEG-TS / SRT using H.265, HEVC or MPEG compression as an alternative to NDI|HX. To enable video streaming, go to the Video tab in the Web UI and turn Off NDI|HX.
- The PTZ-12G and PTZ-NDI (when NDI is disabled) now offer 4K video streaming over MPEG-TS.
- A new overlay function can be used to embed text or a timestamp in the video output. To add an overlay, go to the Configuration tab in the Web UI.

- A new zoom tracking option has been added. When enabled, the camera uses auto focus to maintain focus as the camera zooms in and out. When disabled, the camera uses the existing approach where the focus is automatically corrected based on a calibration curve when the camera zooms. The zoom tracking option can be set in the Camera tab in the Web UI
- The PTZ-NDI has been updated to support NDIv5 and an NDI grouping feature has been added.
- Changes have been made to the configuration of video streaming for the PTZ-12G, and PTZ-NDI when NDI|HX is disabled. RTMP video streaming now includes the ability to set password control and new options have been added to SRT. Go to the network tab in the Web UI to configure video streaming.
- Camera up time is now available in the About tab on the Web UI.
- A new method has been added to allow a hard factory reset using a code sequence from the remote control. The previous ability to perform a hard factory reset from VISCA has been disabled. For more information about factory reset options, see ***Technical_Manual_for_PTZ-12G_and_PTZ-NDI_Cameras_(5000DR-353-xx)***.

BUGS ADDRESSED

- Fixed a bug where in rare circumstances performing a one-push white balance could cause the video output to turn green (CAM-358).

VERSION 1.0b – FEBRUARY 2022

LOAD LINEUP

- **PTZ-12G: VCBD102** (VMG100 _VMF101 _VWN102 _VWO103 _VWP124 _VMK107 _VWR100 _VMN105_VMO107)
- **PTZ-NDI: VCBE101** (VMG100 _VMF101 _VWS101 _VWT101 _VWP124 _VMK107 _VWR100 _VMN105_VMO107)

BUGS ADDRESSED

- **Fixed a bug where "About" tab showed incorrect firmware version after firmware upgrade failed.**
If an operator attempts to load incorrect firmware to the camera through the Web UI (for example loading firmware for the PTZ-12G to the PTZ-NDI), the upgrade fails with the error "Firmware Upgrade Failed" and the camera will continue to operate normally with the previous firmware load

which will be reflected in the Firmware Version in the About tab of the Web UI. (CAM-338).

VERSION 1.0a – JANUARY 2022

WHAT'S NEW

This is the first release of firmware for the Ross PTZ-12G and PTZ-NDI cameras.



- **4K/60 PTZ Camera with 30x Optical Zoom**

Perfect for live broadcasts in houses of worship, corporate board rooms, auditoriums, classrooms and TV studios, the Ross PTZ-12G and PTZ-NDI deliver all the high-end features of a UHD pan-tilt-zoom (PTZ) camera within your production budget. The result is a high performance PTZ camera that is easier to deploy, integrate and operate than anything before in its class.

- **Simple installation and upgrade**

The PTZ-12G supports IP control, streaming video, audio, and power-over-ethernet (PoE++) over a single Cat6 cable, with the PTZ-NDI adding native NDI|HX2 to that list. Firmware can be easily upgraded over the Web UI with no physical access to the camera required.

- **Endless output possibilities**

Both models support 720p, 1080p, 2160p resolutions at 25 / 29.97 / 50 / 59.94 fps. Video can be output over 12G-SDI, HDMI 2.0, Ethernet, or USB 3.0. The PTZ-12G supports streaming over RTSP / RTMP / RTMPS / MPEG-TS / SRT using H.265, HEVC or MJPEG compression, while the PTZ-NDI offers NDI|HX2 streaming, (H.264 or HEVC compression).

- **Stored On-board**

Up to 256 user defined preset modes can be stored on the camera, allowing the quick and easy recall of Pan, Tilt, Zoom, Focus.,kjj, and paint settings. Presets stored on the camera are available for recall by any control system connected to the camera, including Dashboard, video switchers, or third-party controllers.

- **Stay Focused**

Auto focus keeps the subject in focus even as they move around within the frame. Settings allow adjustment of the sensitivity and the region of the frame that is used for focusing.

- **Perfectly Exposed**

Choose from four exposure modes, from fully manual to fully automatic, with iris priority and shutter priority in between. In addition, Wide Dynamic Range (WDR) provides superior images when lighting conditions vary widely across the frame.

- **Paint a pretty picture**

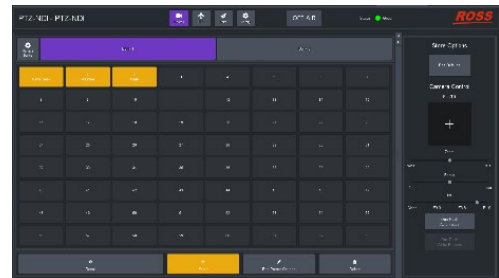
Comprehensive suite of color and picture controls allows fine tuning of the camera image, including seven white balance modes, manual red and blue settings, sharpness, 2D and 3D noise reduction, and hue, saturation and gamma settings.

- **Integrated Tally**

The PTZ includes an integrated tally light that can be illuminated red, green or orange, as set by the external controller to reflect the various tally states for the camera.

- **Flexible control options**

The PTZ-12G and PTZ-NDI can be controlled from DashBoard via VISCA over IP. A Web UI interface is also available, as well as an on-screen display which can be controlled directly with a remote-control unit or from a DashBoard client. SmartShell control can be enabled using the Furio gateway, which forms part of the DashBoard controller.



Note: The NDI video output by the PTZ-NDI camera uses the NDI|HX2 protocol which is not supported by all video viewers (including Ross DashBoard).

LOAD LINEUP

- **PTZ-12G: VCB^D101** (VMG100 _VMF101 _VWS100 _VWT100 _VWP122 _VMK107 _VWR100 _VMN105_VMO107)
- **PTZ-NDI: VCBE100** (VMG100 _VMF101 _VWN101 _VWO102 _VWP122 _VMK107 _VWR100 _VMN105_VMO107)

KNOWN ISSUES

There are no known issues recorded at this time.

GETTING HELP

- Our 24-hour hotline service provides access to technical expertise around the clock. After-sales service and technical support is provided directly by Ross Video personnel.
- During business hours (Eastern Standard Time), technical support personnel are available by telephone.
- After hours and on weekends, emergency technical support is available. A telephone-answering device will provide the names and phone numbers of technical support and field service personnel who are on call. These people are available to react to any problem and to do whatever is necessary to ensure customer satisfaction. For serious issue which need urgent attention and tracking, please ensure you are given a ticket number and refer to this in future communications.
 - **Technical Support: (+1) 613-652-4886**
 - **After Hours Emergency: (+1) 613-349-0006**