Welcome to the RAPTOR-IPG v4.1.0 Release Notes. Please read this document to find important information on areas of the RAPTOR-IPG that may not be covered in the user documentation.

CONTENTS

RAPTOR-IPG RELEASE NOTES......................................................................................................................... 1

VERSION HISTORY......................................................................................................................................... 2

VERSION 4.1.0 – APRIL 2022 ......................................................................................................................... 2
VERSION 3.1.4 – FEBRUARY 2022 ............................................................................................................... 3
VERSION 3.1.3 – JUNE 2021......................................................................................................................... 3
VERSION 3.1.2 – FEBRUARY 2021 ............................................................................................................... 4
VERSION 3.1.1 – SEPTEMBER 2020 .......................................................................................................... 5
VERSION 3.1.0 – APRIL 2020 ..................................................................................................................... 5

GETTING HELP........................................................................................................................................ 7
VERSION HISTORY

VERSION 4.1.0 – APRIL 2022

WHAT’S NEW

• ENHANCED NMOS CONFIGURATION OPTIONS
  Updated the options for configuring NMOS IS-04 and NMOS IS-05. Added configurable NMOS Registry fields that allow the user to register the RAPTOR-IPG in a specific RDS on their network.

BUGS ADDRESSED

• Fixed an issue where the incorrect Receiver groups and Transmitter groups for Ember+ were displayed.
• The packet capture option for SFP2 now works correctly.
• Fixed an issue where a user could not create a video stream if 32 audio streams existed.
• Miscellaneous NMOS bug fixes and improvements.

KNOWN ISSUES

• When changing two or more global settings in the DashBoard Device Setup tab at once, sometimes one or more of the settings will not change successfully on reboot. It is recommended that after changing a setting in the Device Setup tab, follow the prompts to "Apply" after each change before executing the reboot.
• When SMPTE 2022-7 / Seamless protection switching is enabled, there can sometimes be audio channel loss when using 1 or 2-channel audio streams and a secondary link is disabled. It is recommended to reboot the receiver RAPTOR-IPG if the audio channels do not recover during protection switching.
• When 1-channel audio count mode is enabled, RAVENNA advertisements do not always advertise correctly. It is recommended to create network stream groups manually for DashBoard connections or use Ember+ or NMOS for connections.
• The RAPTOR-IPG does not provide clear feedback if there is a problem with the SD card. If you lose the DashBoard connection to your RAPTOR-IPG, ensure the SD card is properly seated.
VERSION 3.1.4 – FEBRUARY 2022

NOTE: Once the version 3.1.4 is installed, the card can not be downgraded to a previous version/build. Contact Ross Technical Support if the card needs to return to a version prior to version 3.1.4.

WHAT’S NEW

• ENHANCED PERFORMANCE
  This version provides enhanced performance maintenance updates.

VERSION 3.1.3 – JUNE 2021

BUGS ADDRESSED

• Removed the IGMPv2 join on video Sender streams. This addressed a bandwidth allocation issue for layer 3 switch configurations using a non-blocking multicast (NBM) process.

• Addressed two Ember+ issues which caused the Ember process to sometimes fail upon stream connections.

KNOWN ISSUES

• An error status message “Advertisement Used is No Longer Available” displays when the RAPTOR-IPG detects a stream connection defined outside of DashBoard, (e.g. Ember+). This does not affect stream quality, and can be ignored for non-DashBoard stream connections.

• When changing two or more global settings in the DashBoard Device Setup tab at once, sometimes one or more of the settings will not change successfully on reboot. It is recommended that after changing a setting in the Device Setup tab, follow the prompts to "Apply" after each change before executing the reboot.

• When SMPTE 2022-7 / Seamless protection switching is enabled, there can sometimes be audio channel loss when using 1 or 2-channel audio streams and a secondary link is disabled. It is recommended to reboot the receiver RAPTOR-IPG if the audio channels do not recover during protection switching.

• When 1-channel audio count mode is enabled, RAVENNA advertisements do not always advertise correctly. It is recommended to create network stream groups manually for DashBoard connections or use Ember+ for connections.

• In Ember+, the RAPTOR-IPG will display 8 Receiver groups and 8 Transmitter groups, however, only the first 6 should be used of each.

• RAPTOR-IPG does not provide clear feedback if there is a problem with the SD card. If you lose Dashboard connection to your RAPTOR-IPG, ensure the SD card is properly seated.

• Pausing/Resuming a video Sender can result in the stream's RTP timestamps losing alignment. The Sender must by removed and recreated to recover.
VERSION 3.1.2 – FEBRUARY 2021

BUGS ADDRESSED

- Addressed an interoperability issue that occurred when the RAPTOR-IPG was video/audio sourced by an XPression device.
- Fixed an issue where the SDI Link Offset values would revert to the default after Ember+ connections.
- Addressed an issue where the SDI audio offset defaulted to 20000us without taking the audio packet time setting into account. Now, when the audio packet time setting is 125us, the default audio offset per SDI is 2000us. When the audio packet time setting is 1ms, the default audio offset is 20000us.

KNOWN ISSUES

- An error status message “Advertisement Used is No Longer Available” displays when the RAPTOR-IPG detects a stream connection defined outside of DashBoard, (e.g. Ember+). This does not affect stream quality, and can be ignored for non-DashBoard stream connections.
- When changing two or more global settings in the DashBoard Device Setup tab at once, sometimes one or more of the settings will not change successfully on reboot. It is recommended that after changing a setting in the Device Setup tab, follow the prompts to “Apply” after each change before executing the reboot.
- When SMPTE 2022-7 / Seamless protection switching is enabled, there can sometimes be audio channel loss when using 1 or 2-channel audio streams and a secondary link is disabled. It is recommended to reboot the receiver RAPTOR-IPG if the audio channels do not recover during protection switching.
- When 1-channel audio count mode is enabled, RAVENNA advertisements do not always advertise correctly. It is recommended to create network stream groups manually for DashBoard connections or use Ember+ for connections.
- In Ember+, the RAPTOR-IPG will display 8 Receiver groups and 8 Transmitter groups, however, only the first 6 should be used of each.
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.getVersion 4.1.0  April 2022

Version 3.1.1 – September 2020

What's New

• Dashboard 9 Support
  Support for the Aura UI theme in DashBoard v9.

• Define a Link Offset for Ember+ Connections
  Added the ability to configure the link offset when making a connection through Ember+.
  The user can set the link offsets per SDI in the Advanced > Timing tab in DashBoard. These offsets will be used for connections made through DashBoard, Ember+, and JSON API.

Bugs Addressed

• Removed the Advanced > Device Setup > Change Transport Control menu that previously enabled a user to select between SMPTE 2110 and SMPTE 2022-6 modes. The RAPTOR-IPG does not support SMPTE 2022-6.

Known Issues

• The RAPTOR-IPG does not interop with Xpression.

• When upgrading the RAPTOR-IPG from v3.1.0 to v3.1.1, the Link Offset values will automatically change to 20000us, and the Default Delay option will automatically be deselected for each SDI in DashBoard. After the upgrade is complete, we recommend to navigate to the Advanced>Timing>Outputs tab in DashBoard and configure the offsets for each SDI.

• In Ember+, the RAPTOR-IPG will display 8 Receiver groups and 8 Transmitter groups, however, only the first 6 should be used of each.

• RAPTOR-IPG does not provide clear feedback if there is a problem with the SD card. If you lose Dashboard connection to your RAPTOR-IPG, ensure the SD card is properly seated.

• Pausing/Resuming a video Sender can result in the stream's RTP timestamps losing alignment. The Sender must be removed and recreated to recover.

Version 3.1.0 – April 2020

What's New

• Available Interfaces
  Provides six SDI outputs, six SDI inputs, two 10GbE connections, and one 1GbE management interface (via the openGear frame).

• Device Management/Configuration
  The following management and configuration features are provided:
- DashBoard Control for device configuration and connection management
- Ember+ BESS v1.1 connection management
- NMOS IS-04 and IS-05 basic support
- Basic Ultritouch support for connection management
- Support for mapping a single audio/video stream to multiple physical interfaces
  (Ember+ and DashBoard)

**SUPPORTS SMPTE ST2110-20 VIDEO TRANSPORT**
Support for SMPTE ST2100-20 in the following formats: 720p 50/59.94/60, 1080i 50/59.94/60, and 1080p 50/59.94/60. Also provides support for mapping a single audio/video stream to multiple physical interfaces (Ember+ and DashBoard)

**SUPPORTS SMPTE ST2110-30 AUDIO TRANSPORT**
Support for SMPTE ST2100-30 while providing 1ms and 125us audio packet times, 48kHz samples (with 1, 2, 4, 8, or 16 channels per video stream via Ember+ and DashBoard). Full audio shuffling is also available for senders and receivers via DashBoard. Also provides support for mapping a single audio/video stream to multiple physical interfaces (Ember+ and DashBoard)

**SUPPORTS SMPTE ST2022-7 SEAMLESS PROTECTION SWITCHING**
Support for unique IP and UDP ports for primary/secondary audio and video streams. Dual 10GbE bandwidth aggregation mode is also supported.

**PROVIDES A WIDE MULTICAST RANGE FOR SENDERS AND RECEIVERS**
Supports destination IP multicast addresses in the range of 225.0.0.0 to 239.255.255.255 for audio and video network streams.

**EASE OF USE**
An Initial Setup Wizard in DashBoard enables you to easily configure your RAPTOR-IPG. Quickly troubleshoot network issues via the Diagnostics tab in DashBoard.

**KNOWN ISSUES**
- RAPTOR-IPG does not provide clear feedback if there is a problem with the SD card. If you lose Dashboard connection to your RAPTOR-IPG, ensure the SD card is properly seated.
- Pausing/Resuming a video Sender can result in the stream's RTP timestamps losing alignment. The Sender must by removed and recreated to recover.
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