

NEWT RELEASE NOTES

October 02, 2019

Ross Part Number: 1000DR-010-04

Version 3.0

This release provides the Quad Split/SQD feature along with PTP improvements (Grandmaster switchover) and expanding the multicast range.

New Features

- SQD receiver for UHD network streams
- Quad split mode for viewing four independent videos at once on single HDMI 2.0 output
- Wider supported multicast range for media streams (225.0.0.0 to 239.255.255.255).
- Glitchless handling of PTP Grandmaster switchovers
- DashBoard control for HDMI pattern generator

Bug Fixes Since 2.20.0

- Payload Type Settings in DashBoard are not saved across a reboot
- Video streams are not re-aligned to proper link offset following a reboot
- "No Packets Received" Alarm always on for 2SI stream
- It is unclear in DashBoard that the Payload ID control fields relate only to Senders

Version 2.20.0

This release provides a general release of the One-to-Many mode as well smaller scale features and bug fixes.

New Features Since 2.3.0

- Added Walkabout support for auto-discovery of multiple Newt modules by DashBoard regardless of IP address settings
- One-to-Many (video and audio) mode that enables the connection of one network stream to multiple outputs
- Cross-connect representation of connected audio streams available in DashBoard
- Single-stream UHD traffic support (up to 2160p50)
- DashBoard support for different sized audio streams (1, 2, 8, 16, or mixed channel modes) on Sender and Receivers
- Payload ID of video and audio Senders is now configurable through DashBoard
- Full audio shuffling on Sender and Receivers through DashBoard
- In-band Ember+ control (assumes NET ports are on different subnets)
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- Ember+ support for 1, 2, 8, and 16-channel network streams (mixed mode is not supported)
- Ember+ stream restoration after reboot
- Added a PI controller to reduce fan speed
- Added a feature that reports the fan speed
- Added support for HDMI hot-plug for UHD traffic
- Simplified the basic workflow by adding Advertisements to the Connections tab in DashBoard

Bug Fixes Since 2.3.0

- PTP profile settings are now captured before a reboot
- Timing Announce interval no longer is reset to default values during a loss of signal on the SFP ports
- Video format configuration is now saved
- Magellan controller can connect to NEWT
- Removed the black dots on the NEWT output video when receiving a SMPTE ST2110-20 stream using a continuation bit
- Licenses are now applied correctly after a reboot
- Newt now registers with Sony® NMOS RDS

Version 2.3.0

This release is the first generally available version of NEWT to include the Bi-directional operational mode.

New Features Since 2.2.0

- Full release of the Bi-directional (2 SDI In/2 SDI Out) operational mode
- Added the Pattern tab in DashBoard for enabling SDI pattern generators
- Added support in DashBoard for downloading software log files and generating packet captures

Bug Fixes Since v2.2.0

- The 4 streams from a 2SI stream will now always come up aligned for all link offset values
- NMOS now functional for HDMI and Bi-directional operational modes

Version 2.2.0

The 2.2 release is the first generally available version of NEWT, the compact IP, SDI, and HDMI Signal Converter by Ross Video. This section communicates the baseline features of this release as well as the incremental changes since the previous 2.1 BETA release.

Baseline Feature List

The 2.2 release includes the following feature set:

Media Interfaces

- 4 x 3G SDI TX
- 1 x HDMI 2.0 TX

Network Interfaces

- 2 x 10GE

Hardware Interfaces

- Power Status LED
- Status LED
- 1GE Management Interface
- Factory Reset Button
- SD Card

Operational Features

- Ross Keys Licensing (per Operational Mode)
- SMPTE ST2110-20 Video Transport
- SMPTE ST2110-30 Audio Transport
 - 1ms and 125us audio packet times
 - 48kHz samples
 - 8 channels per stream
- SMPTE ST2022-7 Seamless Protection Switching
- Dual 10GE Bandwidth Aggregation Mode
- DashBoard control for device configuration and connection management
- BESS v.1.1 connection management
- NMOS IS-04 and IS-05 basic support

Supported Video Formats

- SDI Video Format Support: 720p50/59.94/60, 1080i50/59.94/60, 1080p50/59.95/60
- HDMI Video format Support (2SI): same as SDI formats plus UHD formats 2160p25/29.94/30/50/59.94/60

New Feature Since 2.1 BETA Release

- Initial Setup Wizard in DashBoard to assist user with configuring their NEWT device

- DashBoard support for configuring 125us and 1ms audio packet time (previously, only 1ms packet time was available)
- DashBoard SLP discovery for automatically finding NEWTs in the network

Bug Fixes Since 2.1 BETA Release

- Eliminated the possibility of "bricking" a NEWT during upgrade or Operational Mode setup
- Users can now switch directly between streams when using VSM (BESS 1.1) instead of having to disconnect then reconnect
- When using VSM, a NEWT does not require SDPs without any space/newlines
- Audio data path will no longer lock up in Redundancy mode when cables are pulled
- Fixed system crash that resulted in DashBoard connectivity not always established after a reboot or power cycle