



## Neuron NPH1616

### What's new in version 2.7.1

#### Note

- IGMP leave and join timeout need to be set in the switch to minimum of 1 second
- When updating from another product to the NPH1616 software all settings will be defaulted.

#### New Features

#### Solved Issues

- 12G still under construction
  - Problems in conversion to SQD

#### Known issues

- HDR to HDR is not implemented yet
- UHD to UHD is not possible yet
- UHD 2SI on IP is not correct.
- Single wire 2160p50/2SI to 1080i50 and 1080p50 conversions show filtering inconsistency at the first two lines
- The output format 2160p50/2SI has an offset with respect to reference of 92 pixels
- The output format 2160p50/SQD has an offset with respect to reference of 1 line and 1050 pixels
- The output format SD625 has an offset with respect to reference of 222 lines and 378 pixels
- The format 720p50 SDI output has an offset of 170+ lines with respect to reference
- The full bandwidth of 25 Gb/s for a single MAC might not be reached, 21 Gb/s is possible without any problems
- 60Hz formats are not supported
- Spontaneous reboots when reference cables are being removed or applied to the unit
- Configuration of test pattern generator doesn't always work. Reboot board for a reset
- When the reference is instable, processing paths could stall

### Version 2.6.2

#### Note

- IGMP leave and join timeout need to be set in the switch to minimum of 1 second
- When updating from another product to the NPH1616 software all settings will be defaulted.

#### New Features

- 16 paths
- 16 De-embedders, 16 embedders
- 16 Frame synchronizers
- 16 Color Correctors
- 16 Up/down/Cross converters (UHD compatible)
- UHD-SDI single wire 12G in 2SI 50/60Hz support
- Conversion from single wire to four-wire and back
- Conversion from SQD to 2SI and back
- Redundant 16 +16 "talker and listener" (packetizer – depacketizer) for audio and video
- Supports ST2022-6, ST2110-20, ST2110-30
- 16 times Dynamic HDR/SDR conversion
  - 16 HDR<>SDR processors (4 used per UHD channel in HDR to HDR mode)
  - Compatible with BT.2100-PQ, BT.2100-HLG and SLog3
  - Conversion to and from BT.1886/BT.709 SDR
- Optional (implemented)
  - 16 Up/down/Cross converters (UHD compatible)
  - 512 channel audio processing, Delay, gain, phase
  - SDI I/O board

- Bug 3355 - When the Neuron is booted up the S2110-20 stream coming out is shifted both horizontally and vertically within the frame. If you turn the stream on and off it comes back correctly
- Bug 3350 - When receiving an incoming S2022-6 stream and then resending it from the Neuron after processing it has been seen on the Prism that the output was noise occasionally (but OSD was fine so output frame locked) also if the same processing path was sent to the SDI output it was fine

## Known issues

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  - Problems in conversion to SQD
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- Configuration of test pattern generator doesn't always work. Reboot board for a reset
- When the reference is instable, processing paths could stall

Please consult Axon product management for this roadmap.