

Product release notes

IGGY-MADI

ROSS



IGGY-MADI RELEASE NOTES

Welcome to the IGGY-MADI v2.2 Release Notes. Please read this document to find important information on areas of the IGGY-MADI that may not be covered in the user documentation.

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VERSION HISTORY

VERSION 2.2 – MAY 2024

WHAT'S NEW

- **SECURITY IMPROVEMENTS – REMOTE UPGRADE CONTROL**

For enhanced security, remote upgrades are now disabled by default. Remote upgrades may optionally be enabled through Dashboard or the webUI.

VERSION 2.1.15 – JANUARY 2024

BUG FIXES

- Improved WebUI experiences on stream managing pages.
- Improved PTP performance during grandmaster switching and loss of master lock situations.
- Improved Ravenna advertisement performance in networks with hundreds of streams.
- Allow 1000us and 250us for LW+ advertisements.

VERSION 2.1.12 – SEPTEMBER 2023

WHAT'S NEW

- **ANEMAN**

Audio Network Manager (ANEMAN) is a cross platform and cross vendor audio connection manager. The ROSS-BACH plugin is downloaded via the plugin manager and enables audio network devices to connect with each other.

- **UPDATED WEB UI USER INTERFACE**

A new web-based control UI makes it easier to configure and make connections on your IGGY-MADI.

- **WELCOME PAGE AND SETUP WIZARD – WEB UI**

The Welcome page and Setup Wizard were added to the Web UI. The wizard runs through the settings a user will need to setup before using the device. It also gives helpful tips along the way. The setup wizard can be skipped.

- **NEW AND IMPROVED INTELLIGENT PTP TRACKING ALGORITHM**

An innovative system to allow IGGY MADI to follow a PTP master with more accuracy in high-jitter networks using predictive modeling and real-time statistical analysis.

- **SOURCE SPECIFIC MULTICAST**

Source Specific Multicast (SSM) allows delivery of multicast packets to a receiver that originates only from a specific source using IGMPv3.

- **DIAGNOSTICS AND METRICS**

Enhanced diagnostic tools include real link bandwidth meters and a graph for PTP (Precision Time Protocol) offset from master in RMS and raw format. DashBoard also has the ability to display CPU statistics which can be enabled in the Diagnostics tab.

- **HETEROGENOUS ADVERTISEMENTS SUPPORT**

IGGY-MADI is now able to recognize multiple advertisement sources (Ravenna, DANTE-SAP) and allow connections to them.

BUG FIXES

- LiveWire+ advertisements will be advertised in 250us packet time mode.

VERSION 2.0.2 – DECEMBER 2022

BUG FIXES

- Check ig mixed mode and NMOS are now enabled.
- Fixed an issue with Mix Mode NMOS coring.
- Linked the JSON API commands for Livewire+.

VERSION 2.0 – OCTOBER 2022

WHAT'S NEW

- **WEB-BASED CONTROL USER INTERFACE**

A new web-based control UI makes it easier to configure and make connections on your IGGY-MADI.

- **SUPPORT FOR HETEROGENOUS ADVERTISEMENTS**

The IGGY-MADI can now recognize multiple advertisement sources (Ravenna, DANTE-SAP) and allow connections to them.

- **FULL FLEXIBLE AUDIO REDUNDANCY**

A pair of redundant receiver streams can have independent multicast transport IP and UDP port, allowing greater flexibility.

- **EXTENDED MULTICAST RANGE**

The sender and receiver streams now allow the entire multicast range from 225.0.0.0 to 239.255.255.255 to be used for multicast streams.

- **SUPPORT FOR UP TO 32 SENDER STREAMS**

The streaming engine now allows up to 32 simultaneous sender streams.

- **NMOS IS04 AND IS05**

NMOS (Network Media Open Specifications) IS-04 is the Discovery and Registration Specification for control and monitoring applications to find resources on a network. NMOS IS-05 is the Device Connection Management Specification for transport-independent connection of media nodes. The One-to-Many mode now enables the connection of one audio network stream to multiple outputs via NMOS.

- **SUPPORT FOR ANEMAN (AUDIO NETWORK MANAGER)**

The Audio Network Manager (ANEMAN) is a cross platform and cross vendor audio connection manager. The ROSS-BACH plugin is downloaded via the plugin manager and enables audio network devices to connect with each other.

- **SUPPORT FOR SOURCE SPECIFIC MULTICAST**

Source Specific Multicast (SSM) allows delivery of multicast packets to a receiver that originates only from a specific source using IGMPv3.

- **NEW AND IMPROVED INTELLIGENT PTP TRACKING ALGORITHM**

An innovative system to allow IGGY-MADI to follow a PTP master with more accuracy in high-jitter networks using predictive modeling and real-time statistical analysis.

- **NEW API FUNCTIONS**

New API functions allow channels (WebUI only) and destination groups to be named. Other API functions are added allowing bulk sender creation. A global default link offset function allows to set a global multiple value of the packet time to be used as the link offset. The global channels per stream now also allows 64 channels.

- **DIAGNOSTIC TOOLS**

Enhanced diagnostic tools include real link bandwidth meters and a graph for PTP (Precision Time Protocol) offset from master in RMS and raw format.

KNOWN ISSUES

- Device can sometimes remain in an uncalibrated state when undergoing a follower-master-follower transition in the event of a Grandmaster failure.

Workaround: A secondary passive Grandmaster in the network allows a seamless Grandmaster switchover thereby reducing the need for the board to act as master.

- An advertisement session may show “in-use” even after the destination session has been deleted if the source session is deleted on a remote device before the local destination.

VERSION 1.0 – JUNE 2019

This release is the first generally available version of IGGY-MADI. This section communicates the baseline features of this release.

BASELINE FEATURE LIST

The 1.0.0 release includes the following feature set:

- **ST2110-30 Audio Transport (AES67)**

Conformance Levels: A, B, C

Audio Sample Formats: L32, L24, L16, AM824 (Transparent and non-transparent)

Sample Rates: 44.1/48kHz

Packet Times: 1ms, 125us, 250us

Up to 16 different Audio Streams (Talker) with 1, 2, 8, 16, or 64 channels per stream

Up to 32 different Audio Streams (Listener) with 1, 2, 8, 16, or 64 channels per stream

- **Asynchronous Sample Rate Converter on MADI RX Input**

Converts MADI sample rate to PTP time

- **Asynchronous Sample Rate Converter on MADI TX Output**

Converts PTP time sample rate to word clock reference input or MADI RX sample rate

- **Synchronization Modes**

Free-Running PTP Master

PTP Slave

Word Clock Reference PTP Master

Lock PTP Timing to external word clock input

- **Control Protocols**

Discovery and Registration with:

- RAVENNA
- NMOS IS-04
- Dante/SAP

Connection Management via:

- Ember+
- JSON API
- NMOS IS-05
- DashBoard

Configuration via:

- DashBoard
- JSON API

- **SMPTE 2022-7 Redundancy**

2x 1GE Interfaces

- **Full Flexibility of Audio I/O Routing through DashBoard**

Full Listener Cross-Connect (One-to-Many and shuffling support)

- **Talker Cross-Connect (shuffling support, but no One-to-Many)**

- **MADI SFP Interface**

64 Channels

- **Support for the following SFPs (only non-MSA SFPs):**

SFP-MADI-850MM: Fiber 850nm Multi Mode MADI Transceiver

SFP-MADI-COAX: MADI Transceiver

SFP-MADI-1310SM: Fiber 1310nm Single Mode MADI Transceiver

- **Flexible DashBoard MADI Destinations**

User can break down 64-channel MADI interface into segments of 1, 2, 8, 16, or 64 channels.

- **GPIOs**

DashBoard Control only for this release (RossTalk available as Beta feature)

- DB25 connector
- 8x 5V TTL GPIOs
- 4x Isolated Outputs

- **MADI Reference Word Clock**

Reference Output locked to PTP

Reference Output frequency matches global audio sample frequency (48kHz or 44.1kHz)

- **Reference Input**

Lock out PTP Clock to a 48kHz reference input

ASRC to convert from PTP clock to word clock

- **Ultritouch support**

GETTING HELP

- Product's Online Help system opens in your default web browser.
- 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**