

Enhancements to Dante's ST 2110-30 & AES67 Implementation

What's Driving These Updates?

These enhancements to Dante's implementation of ST 2110-30 and AES67 improve integration with third-party systems, support more flexible network designs, and keep broadcast workflows aligned with evolving needs. In doing so, they make Dante easier to adopt in a wide range of broadcast environments, from small mobile units to large, multi-facility networks.

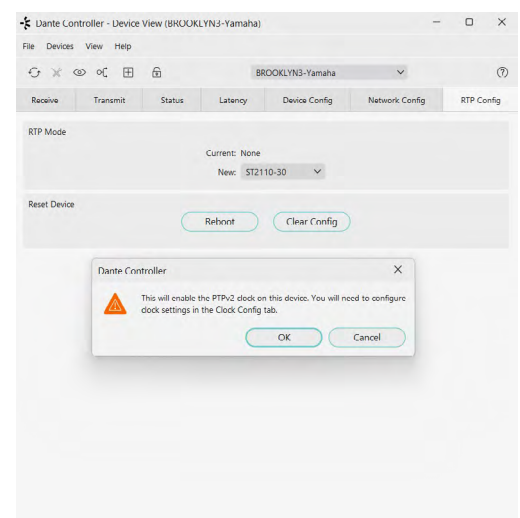
Update Highlights

- Set devices to ST 2110-30 mode and configure ST 2110-30 RTP and PTPv2 parameters directly in Dante Controller, removing the previous requirement for Dante Domain Manager.
- Configure ST 2110-30 RTP flow parameters in Dante Controller, including configurable RTP payload ID, encoding, and latency. Configurable encoding and latency settings are also now available for AES67.
- Import third-party SDP text directly into Dante Controller.
- Configure PTP clock settings in Dante Controller, including PTP DSCP values for AES67 and ST 2110-30. In unmanaged AES67 mode, new options include enabling/disabling PTPv1 multicast, setting PTPv2 Priority 1 and 2 values, and adjusting PTPv2 multicast TTL.
- Expanded multicast address range support (224.0.0.0–239.255.255.255) for ST 2110-30 flows.
- Support for ST 2110-30 AX, BX, and CX conformance levels, enabling 96 kHz sample rates (with AX profile aligned for AES67 96 kHz support).

Feature Walkthrough

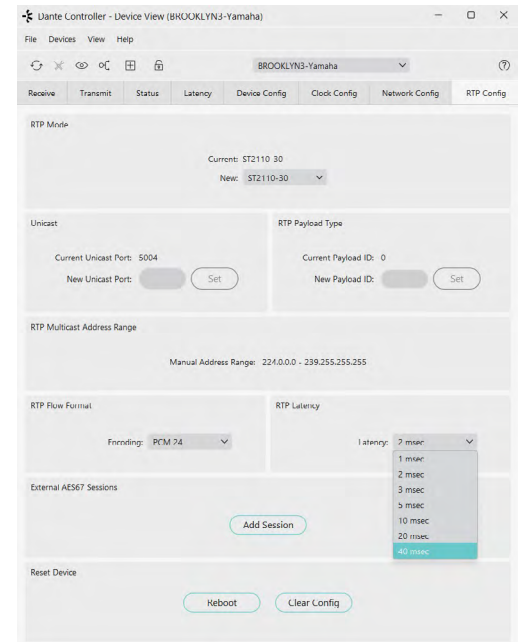
- **Enable ST 2110 mode for a device in Dante Controller**
Unmanaged support for ST 2110-30 means users can now both enable ST 2110-30 mode and create RTP flows directly in Dante Controller. This removes the requirement for Dante Domain Manager in smaller-scale or fast-moving environments such as OB trucks, temporary setups or rapid-response scenarios where server or cloud resources may not be practical.

At the same time, managed Dante remains an important option for larger systems. For multi-subnet or facility-wide deployments, broadcasters can continue using Dante Domain Manager to automate configuration, apply global policies, and coordinate settings at scale.



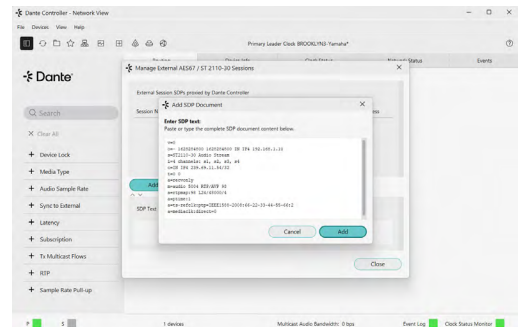
- **Configure ST 2110-30 & AES67 RTP Flow parameters in Dante Controller.**

- **ST 2110-30 RTP Config:**
 - **NEW:** Configurable RTP payload ID: Users can now set custom payload type IDs instead of relying solely on the default, improving compatibility with third-party devices and supporting evolving broadcast workflows.
 - **NEW:** RTP Flow Format (Encoding)
 - **NEW:** RTP Flow Latency
- **AES67 RTP Flow Parameters:**
 - RTP Multicast Address Prefix
 - **NEW:** RTP Flow Format (Encoding)
 - **NEW:** RTP Flow Latency



- **Import External ST 2110-30 & AES67 Sessions**

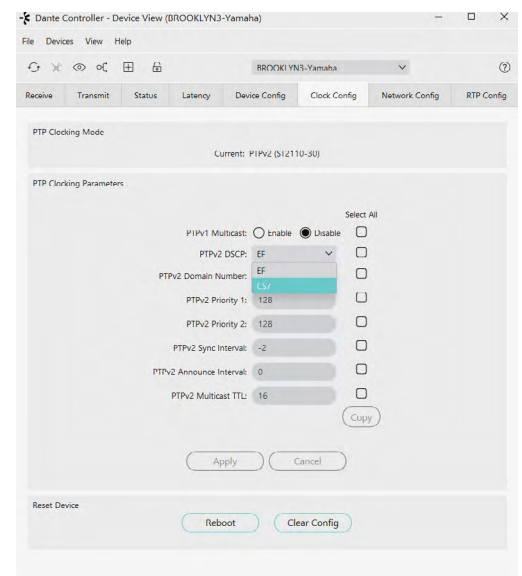
Users can now bring third-party RTP sessions directly into Dante Controller using SDP text. This makes it easier to route audio between Dante and non-Dante devices without relying on SAP support or external utilities like RAV2SAP. Devices that do advertise via SAP will still be auto-discovered in Dante Controller.



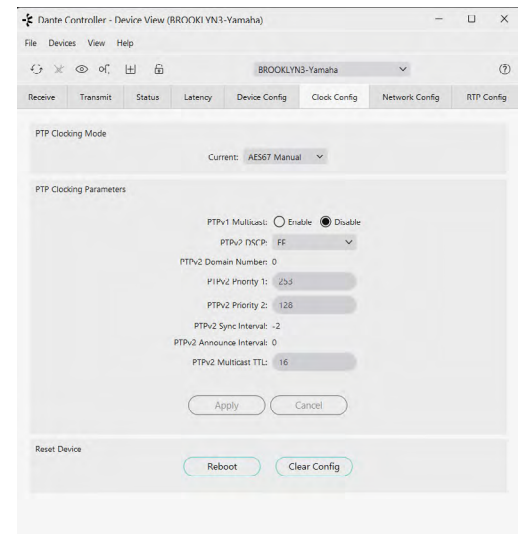
- **Configure PTPv2 Clock Settings in Dante Controller**

When ST 2110-30 or AES67 mode is enabled the Clock Config tab appears. New settings give users greater control over PTPv2 behavior for ST 2110-30 and AES67, improving sync reliability in large, mixed-vendor networks. These updates align with broadcast timing practices and make it easier to match Dante devices to existing clocking strategies.

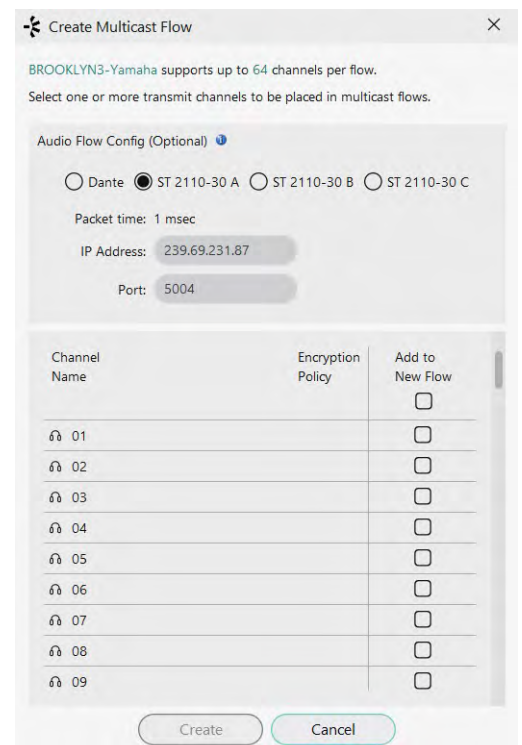
- **ST 2110-30 Clock Config:**
 - Enable/Disable PTPv1 Multicast
 - **NEW:** PTPv2 DSCP Value
 - PTPv2 Domain Number
 - PTPv2 Priority 1 and 2
 - PTPv2 Sync Interval
 - PTPv2 Announce Interval
 - PTPv2 Multicast TTL
 - **NEW:** Ability to copy settings to Multiple Devices



- AES67 Clock Config (Manual):
 - **NEW in unmanaged mode:** Enable/Disable PTPv1 Multicast
 - **NEW:** PTPv2 DSCP Value
 - **NEW in unmanaged mode:** PTPv2 Priority 1 and 2
 - **NEW in unmanaged mode:** PTPv2 Multicast TTL
 - As per the Standard devices in AES67 mode use PTPv2 Domain 0



- **Create & Configure ST 2110-30/AES67 Multicast Flows in Dante Controller**
 - **NEW:** Expanded multicast address range (224.0.0.0–239.255.255.255) is now supported for ST 2110-30 flows, enabling more flexible address planning and compatibility in large-scale broadcast networks.

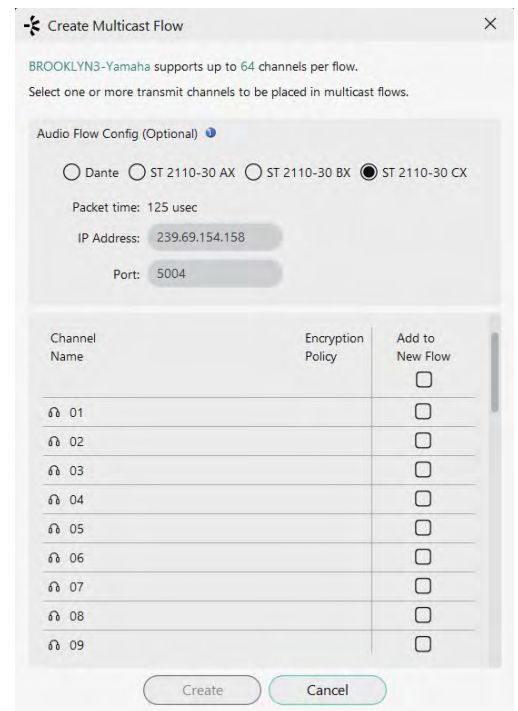


96 kHz Sample Rate Support

ST 2110-30 AX, BX, and CX conformance levels are now supported when devices are set to a 96 kHz sample rate, enabling high-resolution audio across AES67 and ST 2110 workflows. This ensures compatibility with equipment and workflows that require 96 kHz operation and meets evolving needs in live event broadcast, music production, and immersive audio.

ST 2110-30 Conformance Levels	
A	48kHz, 1-8 channels, 1ms packet times
B	A + 1-8 channels 125µs packet times
C	A + 1-64 channels 125µs packet times
AX	A + 96kHz 1-4 channels, 1ms packet times*
BX	B & AX + 1-8 channels 125µs packet times
CX	C & AX + 1-32 channels 125µs packet times.

* Conformance level AX is aligned with the AES67 recommendation for 96 kHz packet setup



What Products Will Be Supported?

Unmanaged and enhanced ST 2110-30 support will be available on next-generation Dante Ultra audio platforms, beginning with Brooklyn 3 followed by IP Core-Zynq, and will extend to future Ultra audio solutions. Pro-tier solutions such as Pro S1 and Dante Embedded Platform will receive AES67 enhancements only. Dante Controller will also be updated to support configuration of these new capabilities.

Legacy products (e.g. Brooklyn II, Broadway, Ultimo) will retain their existing RTP audio functionality to ensure compatibility in current networks.

AES67 (2018)	AES67 (2025 Revision)	Managed ST 2110-30 (DDM Required)	Unmanaged ST 2110-30
Brooklyn 3 Brooklyn II Broadway Pro S1 Ultimo IP Core Zynq IP Core Skye/Summit DEP	Brooklyn 3 Pro S1 (with license) IP Core Zynq DEP Future Audio Solutions	Brooklyn 3 Brooklyn 2 Broadway IP Core Zynq IP Core Skye/Summit	Brooklyn 3 IP Core Zynq (with license) Future Ultra Audio Solutions

Frequently Asked Questions

Q: Is Dante Domain Manager required for ST 2110-30?

A: No. All required ST 2110-30 RTP and PTPv2 settings can be configured directly in Dante Controller for devices with the enhanced firmware. Centralized configuration through Dante Domain Manager remains supported for users who need it or for larger or multi-subnet systems.

Q: Will we be including support for NMOS?

A: Not in the initial release. “NMOS support” can cover a wide range of functionality. We are evaluating potential NMOS use cases and plan to support specific capabilities where there is clear demand.

Q: What Dante solutions will support unmanaged/enhanced ST 2110-30/AES67?

A: See table on page 4 for more details. Short answer:

- ST 2110-30 & AES67: Brooklyn 3, IP Core-Zynq, and future Ultra audio solutions
- AES67 Only: DEP, Pro S1

Q: What about devices that currently support ST 2110-30 and/or AES67 but do not support the enhanced feature set (i.e. Brooklyn II, IP Core (non-Zynq), Ultimo)?

A: Devices that are not eligible for firmware updates will maintain their existing ST 2110-30 and AES67 functionality:

- ST 2110-30 flows and clocking parameters will continue to require configuration via Dante Domain Manager.
- AES67 operation remains available in unmanaged mode

These devices will not support the expanded ST 2110-30 profiles, multicast range configuration, or other new capabilities introduced with the enhanced firmware. Systems may include a mix of devices that support the enhanced features and those that do not.

Q: How and why do Dante devices use both PTPv1 & PTPv2 for synchronization?

A: Dante devices support both PTPv1 and PTPv2 for clock synchronization to ensure reliable timing across a wide range of deployments. PTPv1 is retained for backward compatibility with millions of Dante devices already in the field. Dante systems manage both versions through boundary clocks.

All Dante devices with AES67 or ST 2110 mode engaged will prefer to use PTPv2 as the primary clock source. Of those devices, one will be elevated in the Dante clock election process to become a boundary clock for redistribution of PTPv1 in a separate clocking domain (unless PTPv1 multicast is disabled). This approach enables Dante to support legacy systems while also meeting the synchronization requirements of modern broadcast workflows.

Q: Will ST 2110-30 unicast RTP flows be supported?

A: Not in the initial release, but this is being considered for future updates.

Q: Will source specific multicast be supported?

A: Not in the initial release. We are continuing to evaluate support for source-specific multicast and welcome feedback from broadcasters on how it could best serve their workflows.