Dante Support for ST 2110-30 & AES67: What's New and What's Supported

Update Highlights

At IBC 2025, Dante announced a series of updates to its ST 2110-30 and AES67 implementation, focused on expanding configuration options and simplifying workflows through Dante Controller.

These updates include:

- Ability to 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 mode 96 kHz support.

Which Dante devices support these ST 2110-30 and AES67 updates?

Current support: **Brooklyn 3**–based Dante devices support the above ST 2110-30 and AES67 updates when running **firmware version 4.3.1.8** or later. **Dante Controller version 4.17** or later is required to configure these features.

Future support: Dante IP Core (Zynq 7000/US) will receive both ST 2110-30 and AES67 updates, while Dante Embedded Platform (DEP) and Pro S1 will receive AES67-only updates in future firmware releases, subject to manufacturer support.

Legacy devices: Dante Brooklyn II, IP Core (SkyeHC/SummitHC), Broadway, and Ultimo will retain their current ST 2110-30 and/or AES67 capabilities. These devices will continue to operate as expected within existing networks but will not receive the new enhancements described above.

Note: You can confirm the device type and firmware version in **Dante Controller** by opening **Device View,** selecting the **Status** tab, and checking the **Dante Model** and **Dante Firmware Version** fields under **Dante Information.**

Detailed Feature Overview

- **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, tempoaray 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.
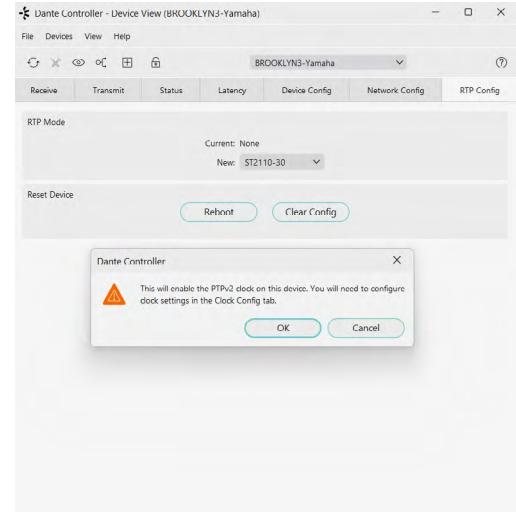
- **Configure ST 2110-30 & AES67 RTP Flow parameters in Dante Controller.**
  - ST 2110-30 RTP Config:
    - **NEW**: Configurable RTP payload ID: Users can now set custom payload type IDs instead of relying solely on the default, improving compatibility with third-party devices and supporting evolving 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
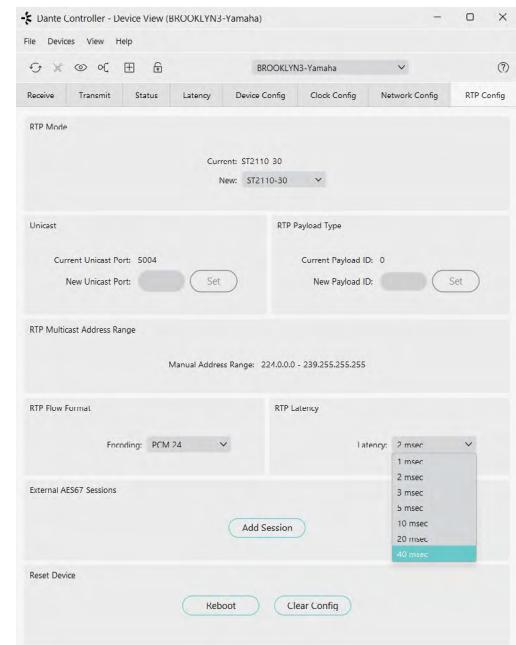
- **Import External ST 2110-30 & AES67 Sessions**
Users can now bring third-party RTP sessions directly into Dante Controller using SDP text. This makes it easier to route audio between Dante and non-Dante devices without relying on SAP support or external utilities like RAV2SAP. Devices that do advertise via SAP will still be auto-discovered in Dante Controller.
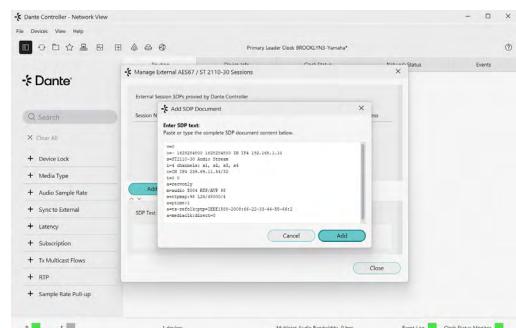
- **Configure PTPv2 Clock Settings in Dante Controller**
  When ST 2110-30 or AES67 mode is enabled the Clock Config tab appears. New settings give users greater control over PTPv2 behavior for ST 2110-30 and AES67, improving sync reliability in large, mixed-vendor networks. These updates align with 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
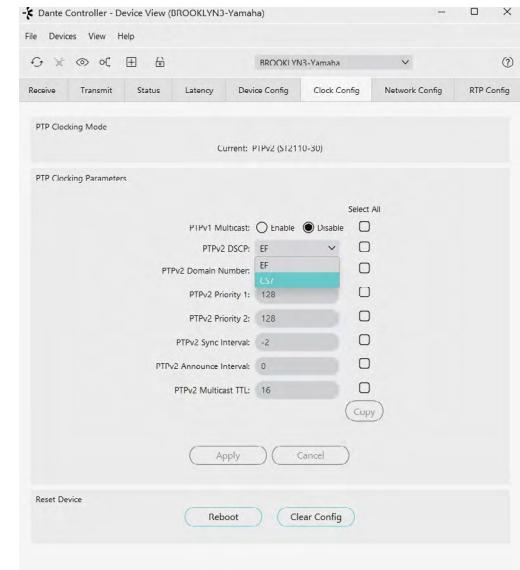
    - AES67 Clock Config (Manual):
      - NEW in unmanaged mode: Enable/Disable PTPv1 Multicast
      - NEW: PTPv2 DSCP Value
      - NEW in unmanaged mode: PTPv2 Priority 1 and 2
      - NEW in unmanaged mode: PTPv2 Multicast TTL
      - As per the Standard devices in AES67 mode use PTPv2 Domain 0
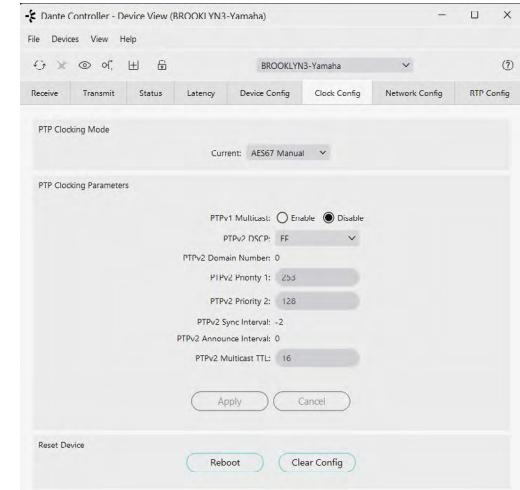
- **Create & Configure ST 2110-30 & AES67 Multicast Flows in Dante Controller**
  - **NEW:** Expanded multicast address range (224.0.0.0– 239.255.255.255) is now supported for ST 2110-30 flows, enabling more flexible address planning and compatibility in large-scale broadcast networks.
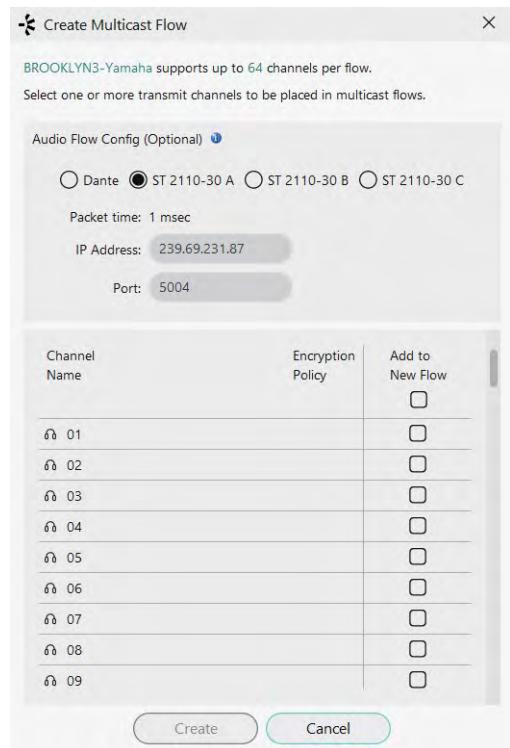
- **96 kHz Sample Rate Support**
  ST 2110-30 AX, BX, and CX conformance levels are now supported when devices are set to a 96 kHz sample rate, enabling high-resolution audio across ST 2110-30 and AES67 workflows. This ensures compatibility with equipment and workflows that require 96 kHz operation and 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
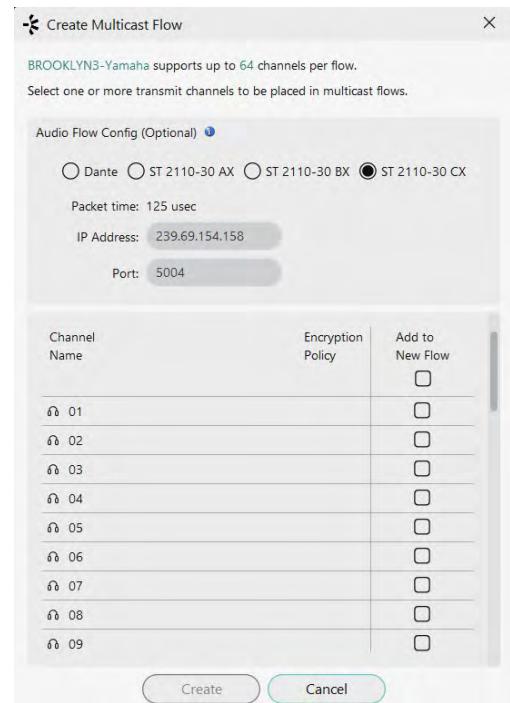
Frequently Asked Questions

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

A: No. For devices that support the unmanaged/enhanced ST 2110-30 and AES67 updates, all required ST 2110-30 RTP and PTPv2 settings can be configured directly in Dante Controller.

Dante Domain Manager remains supported for users who require centralized configuration, such as in larger or multi-subnet systems or when working with devices that do not support the enhanced firmware.

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

A: See page 1 "Which Dante devices support these ST 2110-30 & AES67 updates?" for more details. Short answer:

- Current support for unmanaged/enhanced ST 2110-30 & AES67: Brooklyn 3
- Future support for unmanaged/enhanced ST 2110-30 & AES67: IP Core (Zynq 7000/US)
- Future support for enhanced AES67 only: Dante Embedded Platform (DEP), Pro S1

Q: What about devices that currently support ST 2110-30 and/or AES67 but do not support firmware updates to the unmanaged/enhanced feature set (Brooklyn II, IP Core (SkyeHC/SummitHC), Broadway, Ultimo)?

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

- ST 2110-30 mode, 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 96 kHz operation in ST 2110-30 or AES67 mode, expanded multicast address range configuration, or other 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 2110-30 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: Is support for NMOS included?

A: No. NMOS support is not included in this initial release. Future support is under evaluation.

Q: Are ST 2110-30 unicast RTP flows or source-specific multicast supported?

A: No. Support for ST 2110-30 unicast RTP flows and source-specific multicast are not included in this initial release.