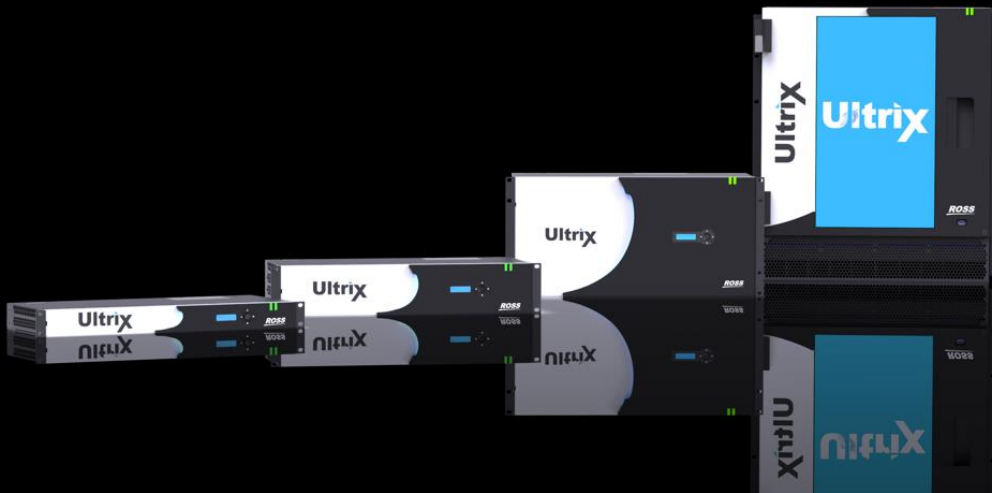# Ultrix

## Ultrimix-Dante
# Dante Networked Audio I/O

Ultrimix-Dante integrates Ultrix with Dante audio networks, enabling efficient exchange of audio between Ultrix and other Dante-enabled devices. Dante delivers uncompressed, multi-channel audio over standard Ethernet networks with sample-accurate synchronization and near-zero latency. Its user-friendly software simplifies audio network setup and allows flexible routing, easily connecting Dante-enabled audio sources and destinations.  With Ultrimix-Dante, Ultrix taps into Dante's capabilities directly, simplifying workflows and eliminating the need for external converters.

## Features

- Dante I/O fully integrated within Ultrix, eliminating the need for external Dante converters
- All Dante audio I/O is available to Ultrix' powerful Ultrimix audio matrix and processing capabilities
- With the use of traditional IP GbE networks and user-friendly control software, Dante vastly simplifies the conveyance and routing of discrete audio without compromising quality
- Compatible with Ultrix FR1-NS, FR2-NS, FR5, FR5-NS and FR12, provided they are equipped with ULTRIX-HDX-IO and/or ULTRIX-MODX-IO cards along with Ultrimix-Dante licenses
- Enables 64 channels of Dante I/O per ULTRIX-HDX-IO or ULTRIX-MODX-IO card utilizing GbE copper physical interface via RJ45 SFP+ installed in AUX-C port
- Included SRC sync functionality – Ultrix and the Dante audio network can be asynchronous

## Licensing and Hardware Requirements

Each ULTRIX-MODX-IO or ULTRIX-HDX-IO card can support one Ultrimix-Dante License for 64 channels of Dante audio I/O.   Ultrimix-Dante utilizes the AUX-C SFP+ port on the selected card, which must be equipped with an SFP.  When activated, the Ultrimix-Dante license reserves AUX port D and utilizes the 64 channels of audio from AUX port B.  This allows AUX-A, AUX-B and AUX-D to be used as follows:

- Video I/O with embedded audio or one 64 channel MADI I/O using AUX-A

- Video I/O without embedded audio support using AUX-B

- Reserved for future use: AUX-D

## Configuration and Control

Get Ultrimix-Dante up and running quickly using DashBoard.  Simply configure the Ethernet settings as per your network requirements and the enabled Ultrimix-Dante port will be accessible in the Dante Controller application for network-wide audio routing.

Within Ultrix, Dante audio I/O is controlled utilizing the Ultrimix audio matrix functionality. Dante I/O from all enabled cards integrates as a flexible set of inputs and outputs within Ultrimix, giving you the advanced audio management tools Ultrimix provides. Embed or de-embed audio from any SDI input or output or transport audio via ST2110 networks. Process, swap, sum, mute, or route individual Dante, MADI, or embedded audio sources to any output with complete flexibility.

| Technical Info |
| --- |
| **Supported Hardware** |
| <ul><li>Ultrix Frames: FR1-NS, FR2-NS, FR5, FR5-NS, FR12</li><li>Cards: ULTRIX-HDX-IO, ULTRIX-MODX-IO</li></ul> |
| **Interfaces** |
| <ul><li>1x GigE via SFP+ Copper module in AUX-C port</li></ul> |
| **Sample Rate and Channel Support** |
| <ul><li>64 inputs and 64 outputs via Dante at 48 kHz</li><li>Dante network and Ultrix do not require a shared reference</li></ul> |
| **Network** |
| <ul><li>Static IP and DHCP support</li></ul> |
| **Maximum Ultrimix-Dante Licenses per Card** |
| <ul><li>ULTRIX-HDX-IO: 1</li><li>ULTRIX-MODX-IO: 1</li></ul> |
| **Maximum Ultrimix-Dante Licenses per Frame** |
| <ul><li>FR1-NS: 1</li><li>FR2-NS: 3</li><li>FR5, FR5-NS: 9</li><li>FR12: 16</li></ul> |

| Ordering | |
| --- | --- |
| **Ultrimix-Dante** | Software license to enable 64 channels of Dante I/O on ULTRIX-HDX-IO or ULTRIX-MODX-IO cards. Maximum 1 license per card. |
| **SFP-RJ45-1G** | 1G Copper/RJ45 GbE SFP |