Roland XI-DANT DANTE EXPANSION INTERFACE

Setup Guide



Thank you, and congratulations on your choice of the XI-DANTE expansion interface.

Installing this expansion interface in a professional audio device from Roland lets you expand audio input and output of using the Dante audio network standard.

You can transmit audio data on a maximum of 64 channels during 48-kHz/24-bit operation or 32 channels during 96-kHz/24-bit operation. For information on devices on which the XI-DANTE expansion interface can be installed, check the following Roland website. http://proav.roland.com

Features of Dante Networks

Dante is audio network technology developed by Audinate that uses network infrastructure supporting Gigabit Ethernet.

Dante makes it possible to achieve high-performance digital media networks that meet the demands for sound quality and performance needed in professional live performances, audio/visual equipment, broadcasting, and recording systems. The main features of Dante networks are as follows.

- Transmission of up to 512 channels (at 48 kHz/24 bits)
- * XI-DANTE supports a maximum of 64 channels. Low latency
- · Ability to use standard network equipment
- Accurate sample-frequency synchronization
- Support for redundant networks
- If the primary network experiences trouble, operation automatically switches to the secondary network
- Automatic detection of Dante devices on the network, with support for plug and play
- · Ability to make advanced network settings with simplicity by using the Dante Controller software



No.	Name	Explanation		
0	LINK/ACT indicator	This indicates the communication status of the Dante device.		
		Flashing: Data communication with the Dante device has been established.		
		Dark: No connection with the Dante device has been established.		
2	SECONDARY port	This is an RJ45 connector compatible with gigabit Ethernet. You connect a Dante device here.		
		Functioning changes depending on the mode setting. (*1)		
		Setting	Explanation	
		Redundant	You use this when a redundant connection is needed. The same Dante audio is sent to both the PRIMARY and SECONDARY ports, and so audio remains uninterrupted even if the connection to one or the other port is broken.	
		Switched	Operation is as a standard switch port.	
		*1:The mode setting is made using Dante Controller. For details, refer to the Dante Controller User Guide.		
ß	PRIMARY port	This is an RJ45 connector compatible with gigabit Ethernet. Here you connect a Dante device as the main port.		
4	CONTROL port	This is an RJ45 connector compatible with gigabit Ethernet. Here you connect a computer for using Dante Controller to make settings for the Dante network.		
	1G indicator	This lights up when a connection at 1 Gbps is established.		
		This indicates the status of communication with the connected device.		
	LINK/ACT indicator	Lighted: A connection with the connected device has been established. Flashing: Data communication with the connected device is taking place.		
		Dark: No	connection with the connected device has been established.	

* When making connections to the ports, use Ethernet cables rated at Cat 5e (Category 5e) or higher.

Before using this unit, carefully read the leaflet "USING THE UNIT SAFELY." These sections provide important n concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature of your new unit, read Owner's Manual in its entirety. This manual should be saved and kept on hand as a convenient reference.

Installing the Expansion interface

Install the expansion interface on a compatible device

Important Notes on Handling To avoid the risk of damage to internal components that can be caused by static electricity. please carefully observe the following whenever you handle the expansion interface.

- · Before you touch the expansion interface, always first grasp a metal object (such as a water pipe), so you are sure that any static electricity you might have been carrying has been discharged.
- When handling the expansion interface, grasp it only by the panel or the expansion interface's edges. Avoid touching any of the electronic components or connectors.
- · Before you connect any cables, make sure they do not carry a static electricity charge. Such charges can be transmitted, for example, if the other end of the cable has been in contact with a carpet (or other object) where there is a static electricity buildup.
- Save the bag in which the expansion interface was originally shipped, and put the expansion interface back into it whenever you need to store or transport it.

Checking the MAC Address Before you install the expansion interface, make a written note of the MAC address. The MAC address is printed on the body of the expansion interface. (Refer to the figure below.)



MEMO

- · You can use Dante Controller to check the MAC address of an expansion interface on the network
- Default device name

The last six characters of the MAC address are used as the device name. By default, Dante Controller recognizes the name of the device in which the expansion interface is installed as "XI-DANTE-XXXXXX" (where the X's are the last six characters of the MAC address).

You can use Dante Controller to change the device name later.

Installing

NOTE

- · Before installing the expansion interface, you must first always turn off the unit where installing and unplug its power cord from the power outlet.
- When restarting the device with the expansion interface installed, wait several seconds before turning on the power.
- 1. Loosen the EXPANSION SLOT mounting screws (2) on the device where you're installing, and detach the panel cover.

2. Insert the expansion interface into the EXPANSION SLOT.

- * Do not touch any of the expansion interface pathways or connection terminals
- * Never use excessive force when installing a expansion interface. If it doesn't fit properly on the first attempt, remove the expansion interface and try again.
- 3. Secure the expansion interface in place using the mounting screws (2).



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Downloading Dante Controller and Making the Minimum Settings

After you install the expansion interface, the following operations must be performed. • Download Dante Controller (gratis), and install and set it up on your computer.

- Use Dante Controller to make the following settings.
- Adjust the sampling frequency for each Dante device so that they match. - Make the settings for audio routing.

Detaching the Connector Caps

By default, the PRIMARY/SECONDARY ports are fitted with connector caps. Remove these connector caps when you use the PRIMARY/SECONDARY ports.

Be careful to keep removed connector caps from becoming lost.



Attaching the Connector Covers

If you are using commercially available Ethernet cables at the PRIMARY and SECONDARY ports, attach the included connector covers.

* Be sure to use shielded LAN cables (STP).

MEMO

If you're using XLR-type RJ45 Ethernet cables, detach the connector covers. Be careful to keep removed connector covers from becoming lost.



Attaching the Ferrite Cores

Attach a ferrite core to each Ethernet cable connected to the ports. The ferrite cores are needed to prevent electromagnetic noise. Be sure to attach a ferrite core to each of the cables connected to the ports.

1. Open an included ferrite core by spreading apart the tabs at two places.





2. Attach the ferrite core at a location near the plug base.

Close the ferrite core by pressing down on each tab until it clicks into place.



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Connect the plug at the end where the ferrite core is attached to one of the ports on the expansion interface

About Ethernet Cables

Connections between Dante devices are made using Ethernet cables, so they are easy to make. These Ethernet cables are ordinarily used to make computer network connections.

* When making connections to ports on this expansion interface, use Ethernet cables rated at Cat 5e (Category 5e) or higher.

Ethernet Cable Types

Crossover cable

The cable's internal wiring crosses over at each RJ45 plug. This means that the connections of the RJ45 plugs at either end of the signal cable are different

Straight cable

The cable's internal wiring is arranged identically at each end.

* With this expansion interface, you can use either crossover cables or straight cables.

Important Notes on Handling Ethernet Cables

- Never apply strong force to Ethernet cables.
- Never wind (bend) an Ethernet cable using a coil radius of 25 millimeters or less, or bend the cable sharply enough to kink it.
- Never bind bundled Ethernet cables too tightly.
- Never run lengths of multiple Ethernet cables in parallel over long distances.
- Keep Ethernet cables away from sources of noise (such as power cords, motors, and fluorescent lights).

RJ45 Plugs Ethernet cables use RJ45 plugs.

When conducting communications of high importance, protecting the RJ45 plugs and connectors is sometimes desirable. In such cases, use rugged XLR RJ45 plugs. Using XLR RJ45 plugs lets you make latching connections.





About the Audinate Programs

Dante Controller Dante Controller is a program from Audinate for managing a Dante network and performing tasks such as making audio-routing settings. It is available for Windows and Macintosh.

You can download Dante Controller (at no charge) from the following Audinate website.

For detailed information on how to use Dante Controller, refer to the Dante Controller User Guide (PDF) available for download at the following Audinate website. https://www.audinate.com/

Dante Virtual Soundcard Dante Virtual Soundcard is a program from Audinate for operating a computer on a Dante network as a Dante device. It is available for Windows and Macintosh.

Using Dante Virtual Soundcard makes it possible to use programs compatible with standard Macintosh Core Audio or ASIO audio interfaces to transmit audio data direct between computers and Dante devices on the network.

You can download Dante Virtual Soundcard (purchase required) from the following Audinate website.

https://www.audinate.com/

Main Specifications

Channels	Up to 64 channels input			
	Up to 64 channels output			
	* The number of available channels will be changed by Sampling Frequency or the attached device.			
Signal Processing	Sampling Frequency 96 kHz, 48 kHz, 44.1 kHz			
Data Length	24 bits			
Connectors	PRIMARY port	RJ-45 XLR type		
	SECONDARY port	RJ-45 XLR type		
	CONTROL port	RJ-45 type		
	USB COMPUTER port	USB type B (inside of the panel, updates only)		
Indicators	LINK/ACT x 3			
	1G x 1			
Power Consumption	5.0 W			
Dimensions	120 (W) x 185 (D) x 40 (H) mm			
	4-3/4 (W) x 7-5/16 (D) x 1-5/8 (H) inches			
	* Protruding parts not included.			
Weight	192 g			
	7 oz			
Operation	+5 to +40 degrees Celsius			
Temperature	+41 to +104 degrees Fahrenheit			
Accessories	Setup Guide, Connector cap x 2, Connector cover x 2, Ferrite core x 3			

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.