

OSTRICH XD Series Dante Interface Chassis

User Manual

Preface

The purpose of this section is to ensure that the user is able to use the product correctly through this manual in order to avoid danger in operation or property damage. Before using this product, please read the product manual carefully and keep it for future reference.

Outlined

This manual applies to Interface Chassis.

This manual describes the functions and use of the various functional modules of the Interface Chassis, and guides you through the installation and commissioning of the Interface Chassis.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 Note	Provides additional information to emphasize or supplement important points of the main text.
 Caution	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 Danger	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

Safety Instructions

Danger

To ensure reliable use of the equipment and the safety of personnel, please observe the following during installation, use and maintenance:

- During the installation and use of the equipment, all electrical safety regulations of the country and the region of use must be strictly observed.
- When installing the equipment, make sure that the input power of the equipment power adapter is 100V-240V, 50/60Hz AC power.
- Keep the working environment well ventilated so that the heat generated by the equipment during operation can be discharged in time to avoid damage to the equipment due to excessive temperature.

- Always unplug the unit's power adapter from the AC power outlet before: A. Removing or reinstalling any part of the equipment; B. Disconnecting or reconnecting any electrical plug or connection of the equipment. Do not operate with electricity.
- There are AC high-voltage parts in the equipment, non-professionals should not disassemble them without permission to avoid the risk of electric shock. Do not repair the equipment privately to avoid aggravating the damage.
- Do not spill any corrosive chemicals or liquids on or near the equipment.
- If the unit emits smoke, odour or noises, turn off the power immediately and unplug the power cord, and contact your dealer or service centre.
- If the appliance is not working properly, contact the shop where you purchased the appliance or the nearest service centre and do not disassemble or modify the appliance in any way. (We cannot be held responsible for problems caused by unapproved modifications or repairs).

**Caution**

- Do not drop objects on the equipment or vibrate the equipment vigorously, and keep the equipment away from locations with magnetic field interference. Avoid installing the equipment in a place where the surface vibrates or is susceptible to shock (neglecting this may damage the equipment).
- Do not use the equipment in high temperature, low temperature or high humidity environments. Refer to the equipment's data sheet for specific temperature and humidity requirements.
- Use the unit indoors, not in an exposed installation where it may be exposed to rain or extreme humidity.
- When the equipment is not used for a long period of time or in a humid and dewy environment, the main power supply of the equipment should be switched off.
- When cleaning the equipment, please use a sufficiently soft dry cloth or other alternatives to wipe the internal and external surfaces, do not use alkaline detergent to wash, and avoid hard objects to scratch the equipment.
- Please keep all the original packaging materials of the equipment properly, so that in case of problems, use the packaging materials to pack the equipment and send it to the agent or return it to the manufacturer for processing. We will not be responsible for any accidental damage in transit not caused by the original packaging materials.

**Note**

- Requirements for the quality of installation and commissioning personnel
Qualifications or experience in the installation and commissioning of audio and video systems and qualifications to perform related work, in addition to the knowledge and operational skills listed below.
 - Basic knowledge and installation skills of audio and video systems and components.

- Basic knowledge and skills in low voltage cabling and wiring of low voltage electronics.
- Basic audio and networking knowledge and skills and the ability to read and understand the contents of this manual.

TABLE OF CONTENTS

Chapter 1 Product Introduction	1
1.1 Introduction	1
1.2 Functions	1
Chapter 2 Specification	2
Chapter 3 Interface Description	3
3.1 Front Panel	3
3.2 Rear Panel	4
Chapter 4 Instructions for Use	5
4.1 Screen Panel for Use	5
4.1.1 Main Interface	5
4.1.2 Input Channel Interface	5
4.1.3 Output Channel Interface	6
4.1.4 Configuration	6
4.2 Client Network Configuration	7
4.3 Accessing the Web Management	7
4.3.1 Login	7
4.3.2 Control Interface Introduction	7
4.3.3 Setup Interface Introduction	8
4.3.4 Central Control Code Generator	9
4.4 Dante Network Audio Routing	9
Chapter 5 Packing List	10

Chapter 1 Product Introduction

1.1 Introduction

This product is an audio interface device based on the international Dante protocol, capable of converting analog audio signals into digital ones and routing them through the Dante protocol to any Dante audio transmission network device. It offers high-quality, long-distance transmission, low latency, strong anti-interference ability, and convenient networking. It also supports the connection of any Dante network digital audio, converting it into analog audio output for integration with traditional analog audio equipment such as mixing consoles, amplifiers, processors, etc. The device employs high-quality AD/DA signal conversion chips and provides 48V phantom power supply, allowing for the connection of higher-quality condenser microphones.

1.2 Functions

- ✧ Based on the Dante international common protocol audio interface device, can realize the analog audio signal input, converted to digital audio signal, through the Dante protocol routing to any Dante audio transmission network equipment;
- ✧ Support any Dante network digital audio access, converted to analog audio signal output, access to traditional analog audio equipment such as mixing consoles, amplifiers, processors and so on;
- ✧ Lossless transmission of audio signals over long distances;
- ✧ Realize point-to-multipoint transmission;
- ✧ Support 16-channel 48V phantom power, can access condenser microphone;
- ✧ High-quality AD/DA signal conversion chip;
- ✧ Input contains phantom power, channel mute, sensitivity adjustment function;
- ✧ Output contains channel mute function;
- ✧ Self-contained TFT screen, embedded GUI software control, can be quickly configured manually, view device network information and help information;
- ✧ The panel provides channel signal indicator, clipping overload indicator phantom power indicator and edit knob, control button, return button;
- ✧ Support web control, browsing, adjustment;
- ✧ Built-in RS232 bidirectional interface, you can receive responses to third-party control commands, configure Dante main and backup RJ45 network interface.

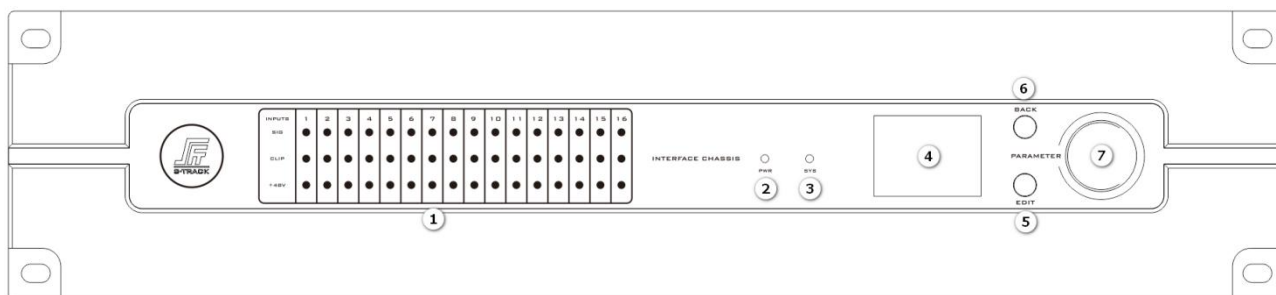
Chapter 2 Specification

Input Interfaces	16 Analog + 16 Dante
Output Interfaces	16 Analog + 16 Dante
Input Gain	0dB~51dB, 3dB per level
Control Interfaces	1 RJ45 interface, 1 RS232 interface
Phantom Power	DC 48V
Sampling Rate	48KHz
Bit Depth	24-bit
Input Impedance	Balanced: 20K Ω
Output Impedance	Balanced: 100 Ω
Common Mode Rejection Ratio	>60dB@50Hz
Input Dynamic Range	110dB
Frequency Response	20Hz~20KHz, ± 0.2 dB
Noise Floor	-90dBu
Signal-to-Noise Ratio	108dB
THD+N	$\leq 0.005\%$ @1kHz, +4dBu
Channel Isolation	>100dB@1kHz
Maximum Output Level	20dBu
Maximum Input Level	20dBu

Analog/Digital Dynamic Range	118dB
Digital/Analog Dynamic Range	118dB
Operating Voltage	AC 100V~240V, 50Hz/60Hz
Maximum Power	26W
Operating Temperature and Humidity	0℃~40℃, 10%~90%RH, No condensation
Chassis	2.5U
Product Dimensions (L×W×H)	486mm×176mm×110mm
Net Weight	4kg
Package Dimensions (L×W×H)	510mm×238mm×172mm
Package Weight	5kg

Chapter 3 Interface Description

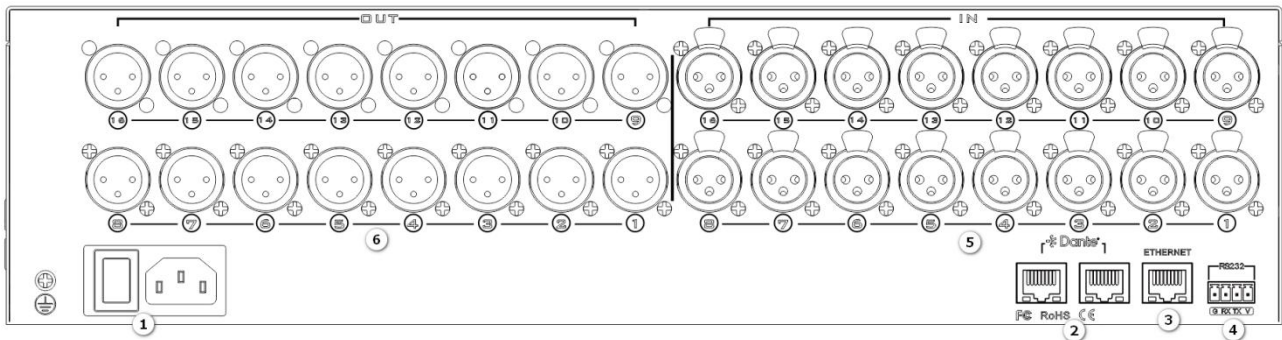
3.1 Front Panel



- ① Signal Indicator, Clipping Indicator, Phantom Power Indicator;
- ② Power Indicator: Light on indicates normal power supply, otherwise abnormal;
- ③ Status Indicator: Flashing light indicates normal operation, otherwise equipment failure;
- ④ TFT Screen: Embedded GUI display;
- ⑤ EDIT: Embedded GUI control, click to enter edit mode;

- ⑥ BACK: Embedded GUI control, back to the previous menu button;
- ⑦ Control Buttons: Embedded GUI control. function selection and parameter control buttons
 - a) Rotating left or right: Function selection, adjusting parameters, double-click to save scene;
 - b) Clicking: Select current function;
 - c) Rotating left or right while in b): Parameter adjustment.

3.2 Rear Panel



- ① POWER: Power supply interface, connect 110V-220V AC power supply, warp switch control processor power;
- ② Dante: Dante network audio transmission interface, equipped with primary and secondary dual network interface, can be used for redundant backup of Dante network signals;
- ③ ETHERNET: Network control interface, by connecting this network port, the client computer can debug and monitor the device;
- ④ RS232 serial interface: Connect to the control terminal or central control device;
- ⑤ INPUT: Signal input interface, can be connected to microphone, PC and other devices;
- ⑥ OUTPUT: Signal output interface, can be connected to the amplifier, active speakers and other devices;
- ⑦ Ground screw: Used to ground the chassis, play accidental leakage safety protection, electrostatic balance and other protective measures.

Note: This manual takes 16-channel device as an example for illustration, please refer to the actual device for details.

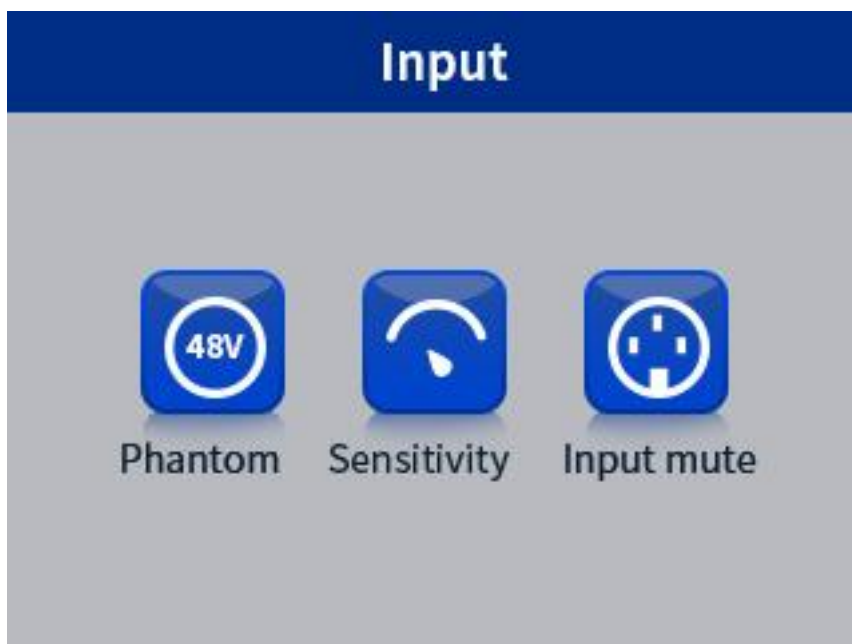
Chapter 4 Instructions for Use

4.1 Screen Panel for Use

4.1.1 Main Interface



4.1.2 Input Channel Interface

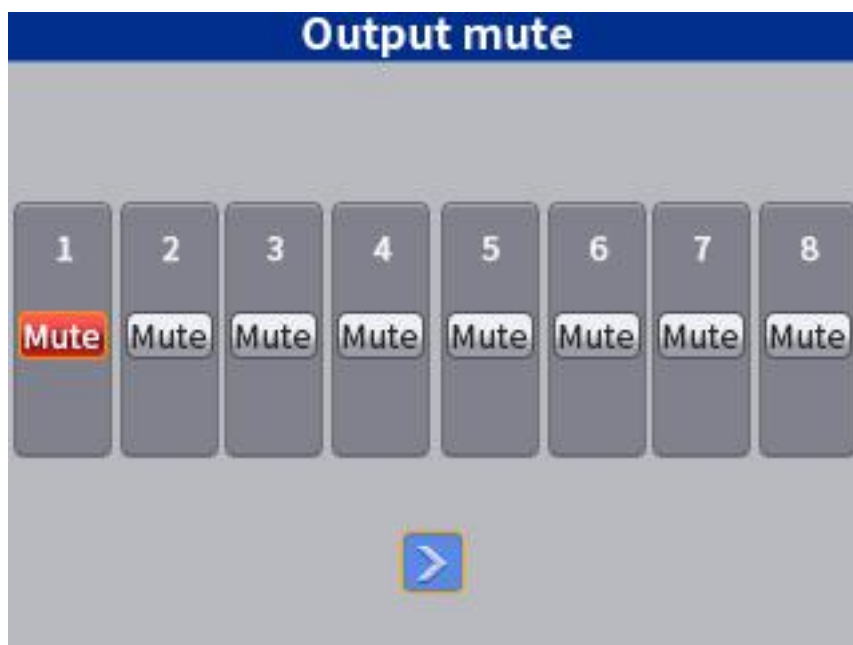


Phantom: For providing 48V voltage to condenser microphones;

Sensitivity: input channel sensitivity adjustment, with steps of 3dBfs per level;

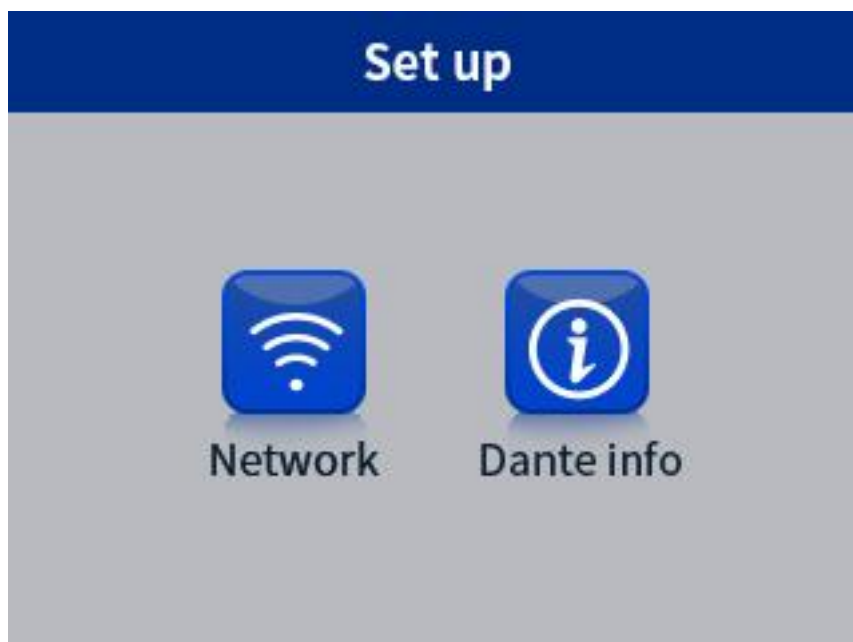
Input mute: For input channel muting configuration.

4.1.3 Output Channel Interface



Output mute: For output channel mute configuration

4.1.4 Configuration



Network: For manually configuring or automatically obtaining network IP addresses;

Dante info: For viewing Dante configuration information.

4.2 Client Network Configuration

To power on the device, connect it to the network switch using an Ethernet cable. The INPUT port is used to connect microphones, mixers, or PCs, while the OUTPUT port is used to connect to amplifiers or active speakers.

To access the device's settings via a web browser, navigate to its default IP address: 192.168.1.200, with a subnet mask of 255.255.255.0. Ensure that the client's IP address is on the same network segment as the device, to allow for proper connectivity.

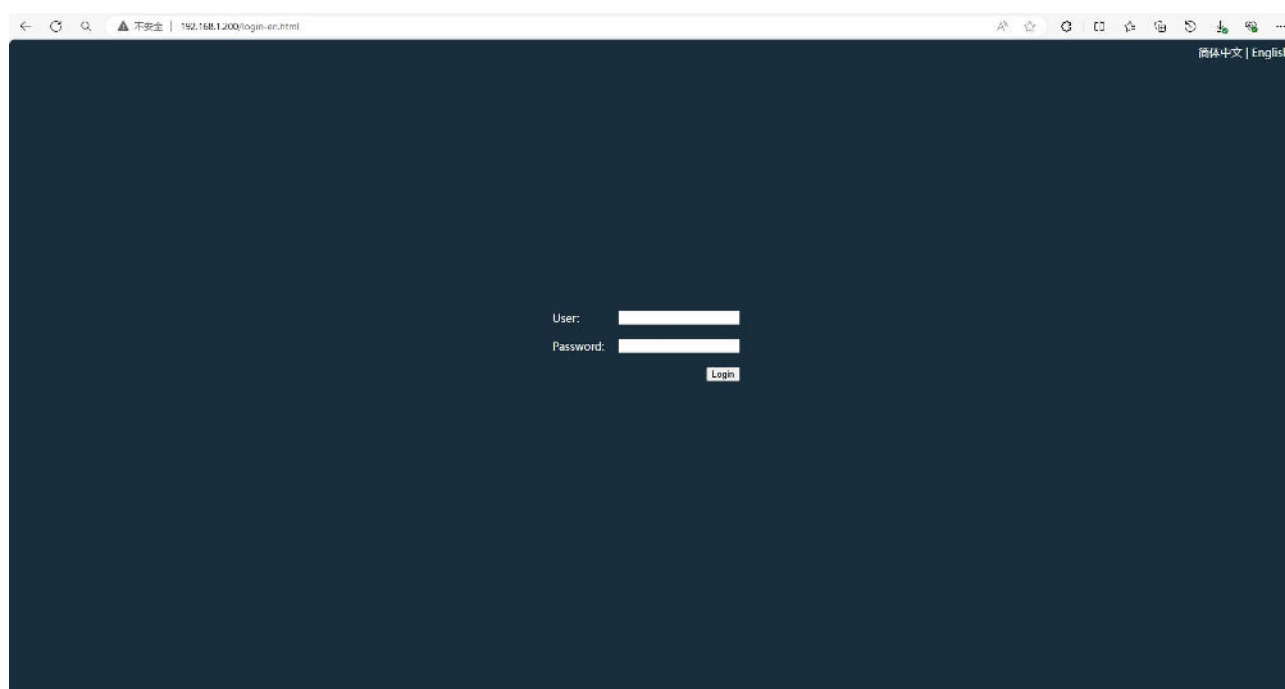
4.3 Accessing the Web Management

4.3.1 Login

Open a browser on Windows, macOS, Linux, iOS, or Android and access the interface device's IP address to enter the control page, as shown below:

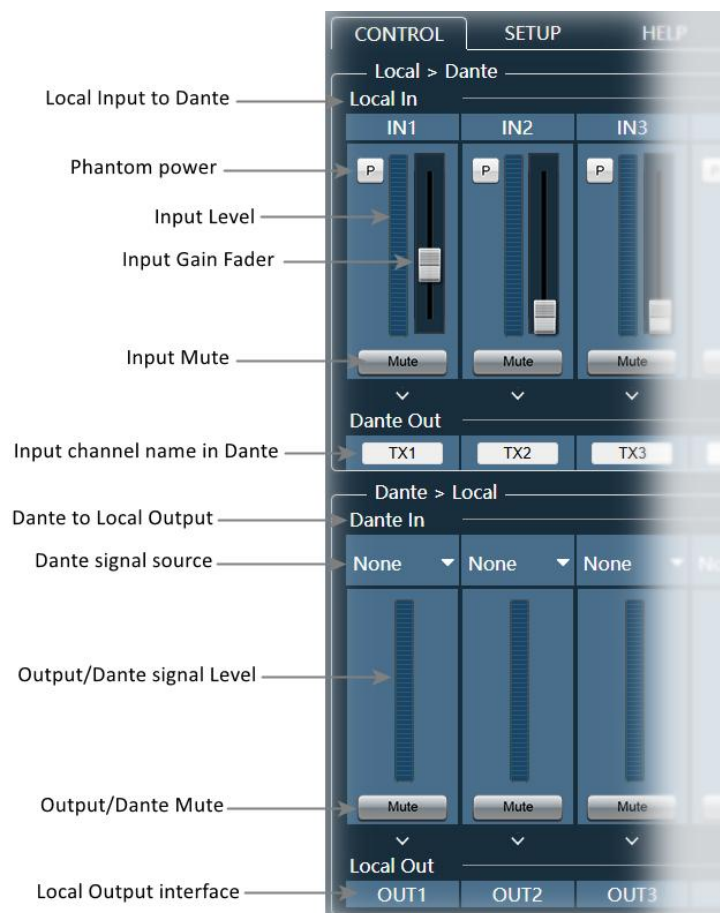
Username: admin

Password: 123456



4.3.2 Control Interface Introduction

In the control interface's "Local > Dante" section, use the fader to adjust the gain of the local input signals; set their mute status; when enabling phantom power, ensure that the connected pickup supports 48V DC voltage. Then you can edit the Dante channel names for easy identification of the corresponding input terminal devices by other Dante devices connecting to this unit.



4.3.3 Setup Interface Introduction

The setup interface allows you to configure the network latency of this interface machine within Dante, as well as perform resets and other functions.

The RS232 interface permits control over the interface machine by third-party central control devices and panels. RS232 Interface Parameter Configuration Explanation: Baud rate (configurable in the setup interface), Data bits - 8, Stop bits - 1, Parity - None, Flow control - None.

CONTROL SETUP HELP 简体中文 | English Logout

DACO

Software Version: 1.1.13
Firmware Version: 1.1.13

Dante

Device Name: Ostrich U68
Software Version: 1.0.16
Firmware Version: 1.1.14
Network Latency: 1 msec
Serial Baud Rate: 115200

Redundancy

Dante Redundancy: ☒ Switched ☐ Redundant

Dante Network

☒ Dynamic IP ☒ Static IP

IP Address: 192.168.1.200
Netmask: 255.255.255.0
Gateway: 192.168.1.1
DNS Server: 0.0.0.0 Apply

Modify Password

Current Password:
New Password:
Confirm New Password: Apply

Dante Reset

Clear Config Clear Config But Keep Network Configuration Reboot

4.3.4 Central Control Code Generator

The central control code is in hexadecimal format.

CONTROL SETUP HELP 简体中文 | English Logout

This device is mainly used for transmitting local audio to Dante network or receiving Dante network audio to local. Currently supports two way 16 channel, 8 channel switching.

After audio signal such as a microphone, DVD, etc. connected to the local input interface, which means the audio signals from these devices can be searched in a Dante network and be connected. Also, the control interface can adjust the gain of the input signal, monitoring level, mute, and rename anyone channel's label.

Such as amplifiers, active speakers connect to the local output interface, which can select one signal at Dante input drop-down list as the source. Also, we can mute and monitor their level for anyone channel.

Instructions for use:

1. Power on the device, using a network cable to connect the device's P1 network port and switches, an input interface (INPUT1) to connect devices such as a microphone or a DVD; the output interface (OUTPUT1) connected amplifier or powered speakers and other equipments.
2. With over browser to access the interface's IP address, automatic IP acquisition by default.
3. In the control interface "Local- Dante" column, with the fader gain local input signal; a mute; when phantom power turn on, please make sure the connected device such as microphone supporting 48V DC voltage. You can then edit the channel name which other Dante devices browsing and connecting to this channel.

other instructions:

1. You can modify the network latency, and reset for this device.
2. RS232 interface allows third party in control equipment, control panel and other machine control interfaces.
3. RS232 interface parameters Description: Baud rate (setup interface configurable), data bits is 8, stop bit is 1, parity is none, flow control is none.
4. The control code generator (the control code in hexadecimal format).

Select Function...
Select Param1... Select Param2... Select Param3...
The control codes

5. Click to download Dante Controller.

4.4 Dante Network Audio Routing

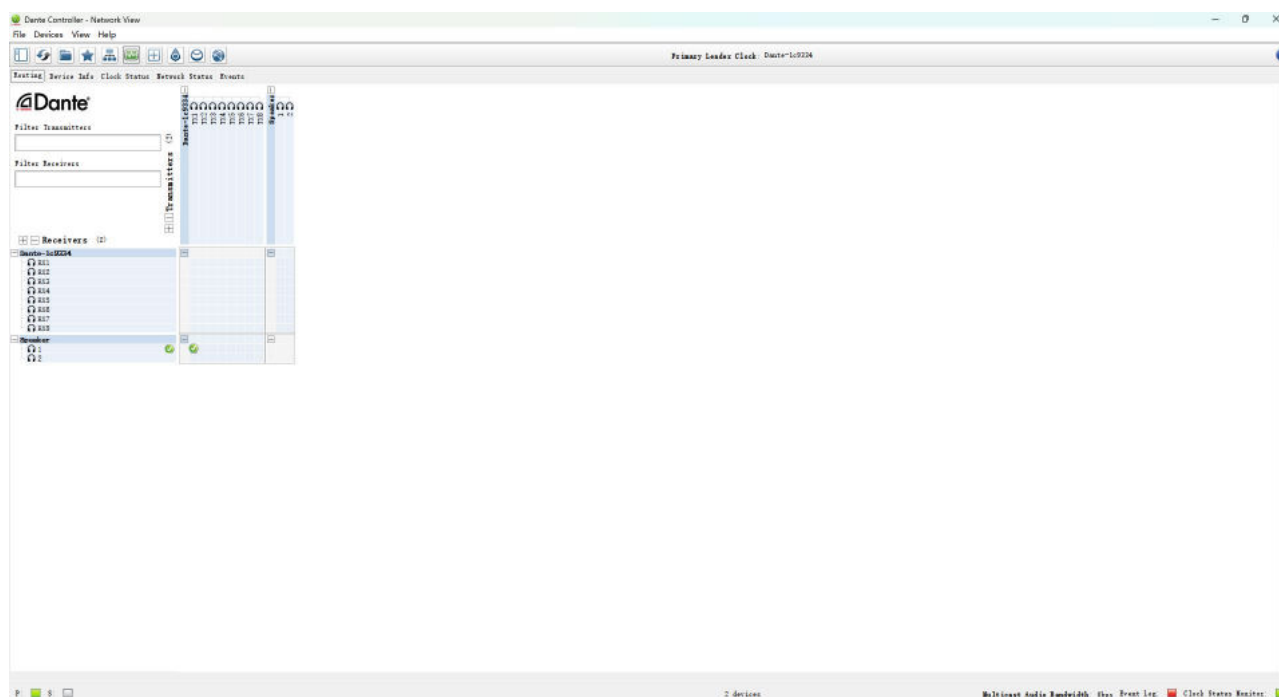
In a Dante audio network, the Dante Controller software is required to set up the routing of the various signals accessing the processor. It can realize 1-to-1, 1-to-N mapping operation from input to output within Dante network.

Note: 1, Dante can not run in the Wi-Fi wireless connection environment, is dependent on a reliable and secure wired network environment to transmit perfect audio;

2, Dante Controller software corresponds to the platform of Windows 7, Windows 10, Windows 11, macOS, please select the appropriate software version according to your system platform.

[Click to download the official Dante Controller software Dante Controller](https://www.audinate.com/products/software/dante-controller)

(<https://www.audinate.com/products/software/dante-controller>)



Chapter 5 Packing List

Device	Power Cable	Quick Guide
1PCS	1PCS	1PCS

Warranty Regulations

The warranty period of this product is 1 year.

In the warranty period of non-man-made damage caused by the product performance failure can enjoy three packages of service.

Warranty card by the sales unit stamped after the effective. The alteration is invalid!

The following conditions (including, but not limited to, this) are not covered by the three-package service:

1. No warranty card or missing valid invoice or the date has exceeded the validity period of the three packages of services;
2. Not in accordance with the requirements of the product instructions for use, maintenance, management and damage caused;
3. The product model or code on the warranty voucher does not match the physical goods;
4. Damage caused by the dismantling and repair of non-authorized service providers;
5. Normal discolouration, wear and tear and consumption during the use of the product are not covered by the warranty;
6. The product cannot be used due to the user's own network reasons, please consult customer service staff.



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