



# DD2/DD4

User Manual  
Version 2.1



## SAFETY INSTRUCTIONS

1. Read this manual carefully.
2. Follow all instructions and warnings.
3. Only use accessories specified by WORK PRO.
4. Follow the safety instructions of your country.
5. Be careful with sound levels.

## SYMBOLS

The following symbols are used in this document:



This symbol indicates a potential risk of harm to a person or damage to the product. You can also notify the user of the instructions that must be followed strictly to ensure the installation or safe operation of the product.



This symbol notifies the user about the instructions that must be followed strictly to ensure the correct installation or operation of the product.



This symbol notifies the user about additional information or optional instructions.

## WELCOME TO WORK PRO

Thank you for choosing the WORK PRO DD2/ DD4.

This document contains essential information on the use of the system. Read this document carefully to become familiar with the system.

Please check the WORK PRO website regularly to download the latest version of the document and software updates: <https://www.workpro.es/>

## CONTENIDO

1. Introduction .....	3
2. Features .....	3
2.1. Description of the device .....	5
2.1.1. Status LEDs behaviour .....	6
2.1.2. Analog audio inputs.....	7
2.1.3. Analog audio outputs .....	7
2.1.4. LAN Port .....	8
2.1.5. Device main supply .....	8
2.2. Device settings .....	8
2.2.1. Start up.....	9
2.2.2. Using Dante Controller .....	9
2.2.3. Network level configuration.....	10
2.3. Accessories.....	14

## 1. Introduction

The DD2 and DD4 devices are gateways with 2 inputs / 2 outputs and 4 inputs / 4 outputs respectively, between analog audio and the Dante™ AoIP protocol.

The DD2 and DD4 devices have been designed to transmit line signals in a fixed installation, so their connectors are of the 3.5mm euroblock type.

These devices will allow you to send an audio signal from one point of the installation to another using the existing network infrastructure or insert / extract Dante™ signals from third-party devices that use this protocol.

## 2. Features

Características Dante™	
Sample frequencies supported	44.1 / 48 / 88.2 / 96 kHz *DD4 (96 KHz in 2x2 mode, 48 KHz in 4x4 mode)
Cuantificación (Bit depth):	16 / 24 / 32 Bit
Latency	According to configuration (1 ms default).
Ethernet	100BASE-TX
Connector	RJ45

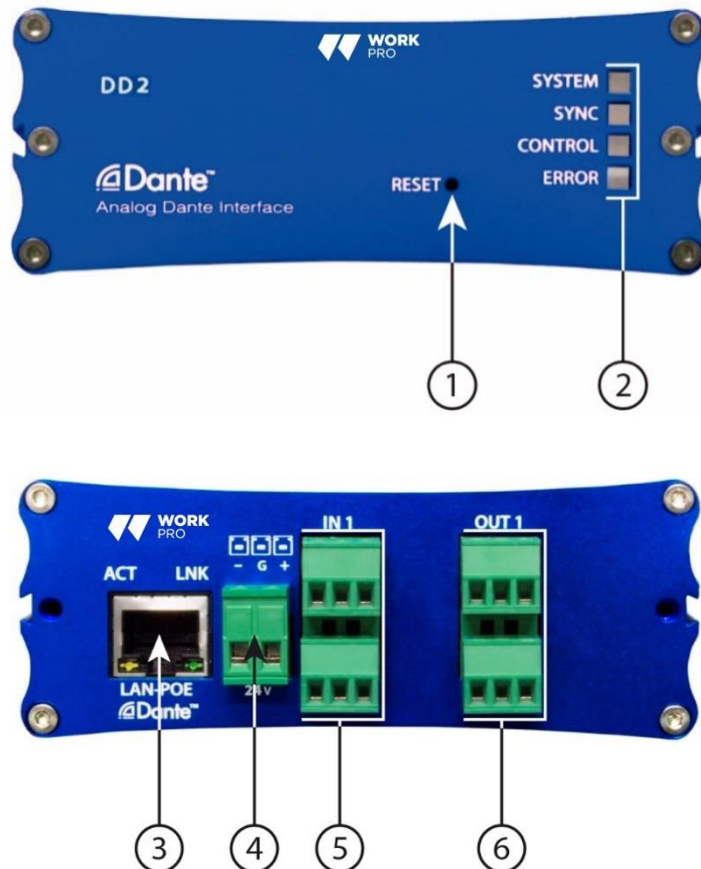
Analog features	
DD2 Inputs/Outputs	2 inputs / 2 outputs
DD4 Inputs/Outputs	4 inputs / 4 outputs
Input type	Balanced. Euroblock 3.5mm connector
Output type	Servo-balanced. Euroblock 3.5mm connector
Input sensitivity	22dBu (balanced)
Max. Output level	22dBu (balanced)

General	
SNR	> 100 dB
THD+N	< 0.01%
Crosstalk	< -80 dB (20 kHz)
Frequency response	20 Hz - 20 kHz
Dimensions	109mm×133.75mm×40.45mm
Peso	326 g

Main supply	
External power supply	24 VDC / 500 mA
PoE supply	Class 0 802.3af
DD2 consumption	2.4W
DD4 consumption	3.85W

## 2.1. Description of the device

The features of the DD2 device, which are identical to the DD4 device, are described below, and only the number of inputs and outputs vary.



1. **Reset button.** Take the device to its factory settings. Turn on the device with this button pressed to make it effective.
2. **LEDs of state.** System information LEDs (**See section 2.1.1 for additional information**).
3. **LAN Port.** Connection port to local network, RJ45.
4. **Main power supply input.** 24 Vdc, 500mA minimum.
5. **Analog audio inputs.** 3-pin Euroblock, 3.5 mm.
6. **Analog audio outputs.** 3-pin Euroblock, 3.5 mm.



Check the current polarity before connecting the main supply



The external power supply is not provided with the device.

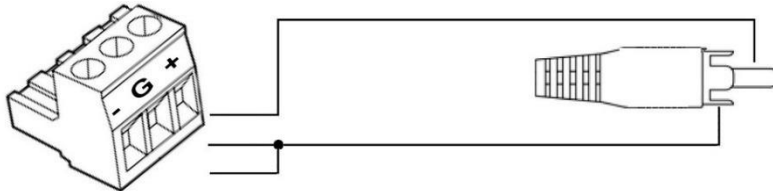
### 2.1.1. Status LEDs behaviour

- **SYSTEM:**
  - **Red.** The system is starting.
  - **Green.** The system is ready to operate.
- **SYNC:**
  - **Red.** Synchrony error.
  - **Yellow.** The system is being synchronized.
  - **Green fixed.** The system is synchronized and operating as Slave (configured through DANTE™ Controller).
  - **Green flickering:** The system is synchronized and operating as Master (configured through DANTE™ Controller).
- **CONTROL:**
  - Reserved for internal use.
- **ERROR:**
  - **Red.** System fault.

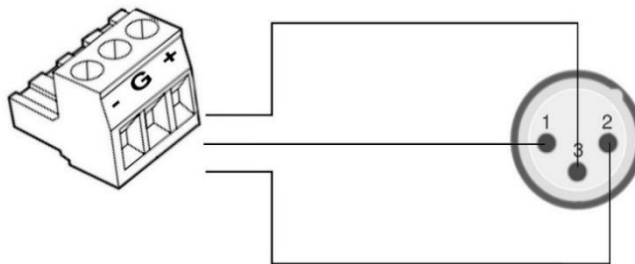
### 2.1.2. Analog audio inputs

The connection of the input signal to the device can be balanced or unbalanced.

#### **UNBALANCED**



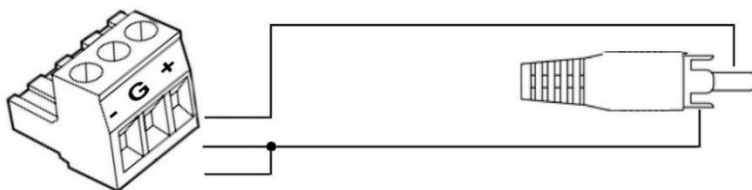
#### **BALANCED**



### 2.1.3. Analog audio outputs

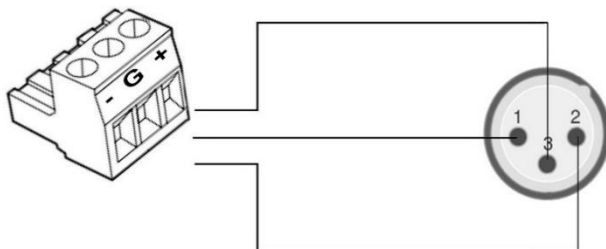
The analog audio output of the device can be balanced or unbalanced. To do this, keep in mind the following connection types:

#### **UNBALANCED**





## BALANCED

**2.1.4. LAN Port**

RJ45 port for LAN connection. Allows PoE (Class 0 802.3af).

Next to the RJ45 connector you will find two LEDs indicating the status of the device:

<b>LINK (green)</b>	The device is connected to the local network (LAN).
<b>ACT (orange)</b>	Sending and receiving packages.

**2.1.5. Device main supply**

- **PoE 802.3af.** The power of the device is immediate and through the Ethernet cable itself. A switch or PoE injector is necessary.
- **External power supply.** If we do not have a switch or PoE injector, we can use an external power supply. The required voltage is 24 Vdc, at least 500mA of current is required.

**2.2. Device settings**

The device configuration will be done using the DANTE™ Controller application. This is a free application available on the Audinate website ([www.audinate.com](http://www.audinate.com)).

Through this application we can:

- Route the audio signals present in the DANTE™ network.
- Identify the DANTE™ devices present in the network automatically.

- Edit features of these devices.
- Label the signals.

To make use of all the Dante Controller functionalities, we recommend that you go to its manual, which you can download from the Audinate page.


<https://dev.audinate.com/GA/dante-controller/userguide/pdf/latest/AUD-MAN-DanteController-4.1.x-v1.0.pdf>

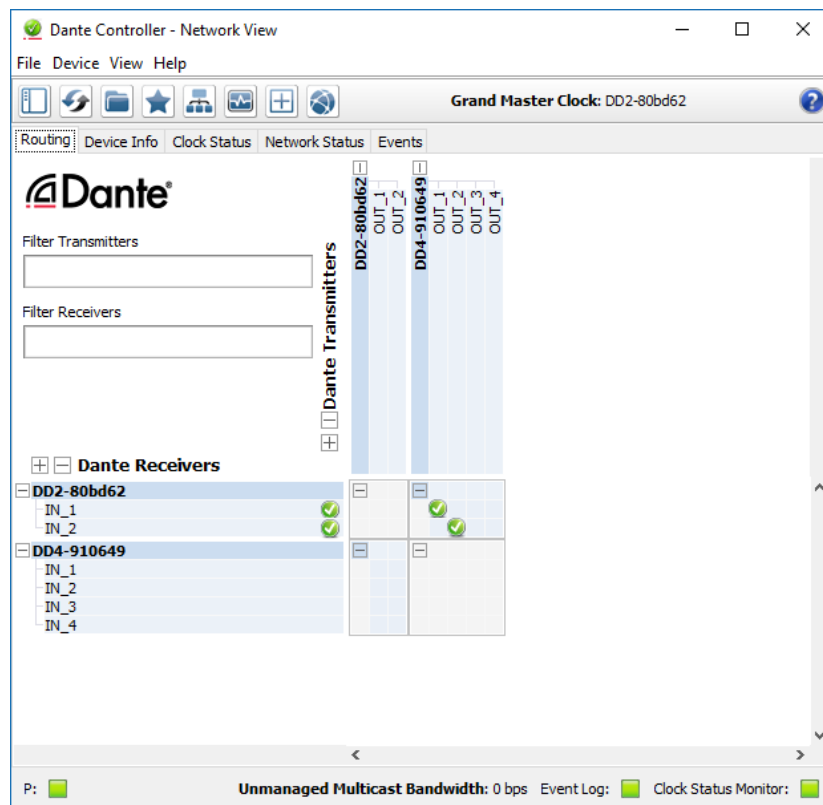
### **2.2.1. Start up**

1. Connect the analog audio signals to the emitting and receiving devices according to your needs.
2. Connect the devices via Cat5e or higher cables to the local network (LAN). Remember that if you do not use PoE switches you will have to power the devices with an external source.
3. Perform signal routing through the Dante Controller application

### **2.2.2. Using Dante Controller**

When you open Dante Controller you will find the "Routing" view. In the upper part will appear the devices that can act as transmitters and the left part those that can act as receivers.

To see the channels of each device, click on the + symbol next to each device. To do the signal routing you only have to click on the intersection between sender and receiver. Once routing has been performed the symbol will appear  at the intersection.

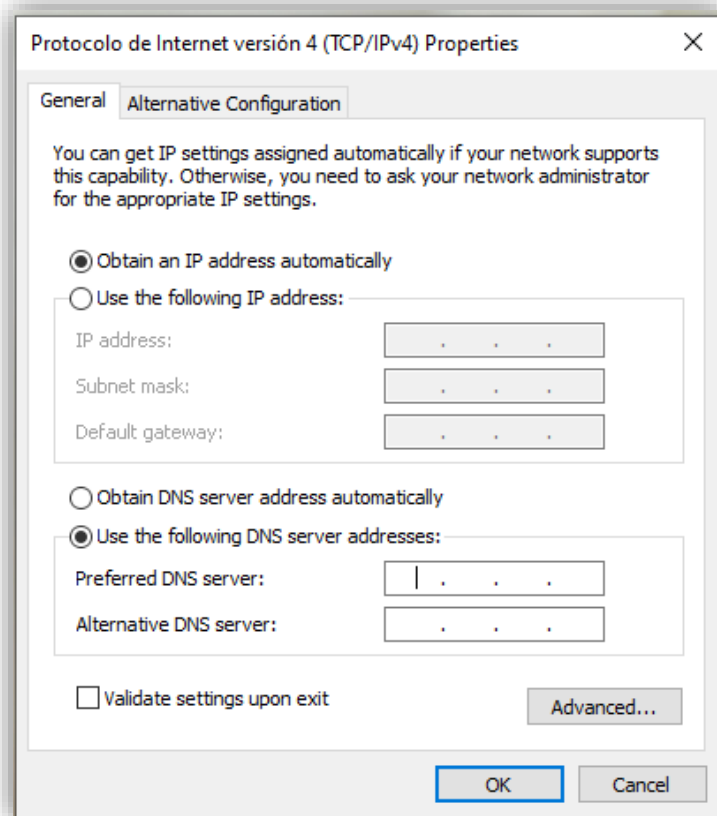


### 2.2.3. Network level configuration

#### Automatic IP

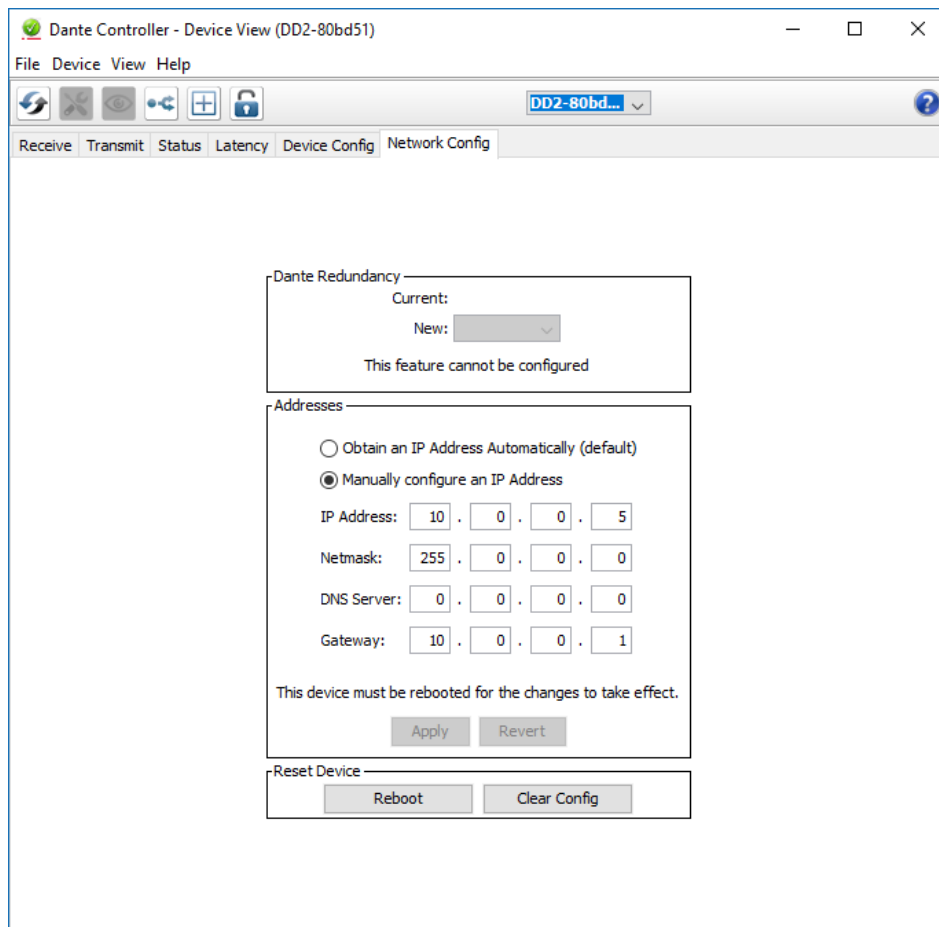
By default, DD2 / DD4 devices come with the automatic IP option selected. This means that if you have a DHCP server in your local network, it will distribute IPs to all devices with the automatic IP option enabled, including your PC. In case of not having a DHCP server, the devices will auto-assign an IP belonging to subnet 169.254.0.0.

To activate the automatic IP option in your Windows PC go to the Network and Sharing Center / Connection: Ethernet / Internet Protocol 4 Properties (TCP / IPv4) and configure the IP address of your PC as automatic.



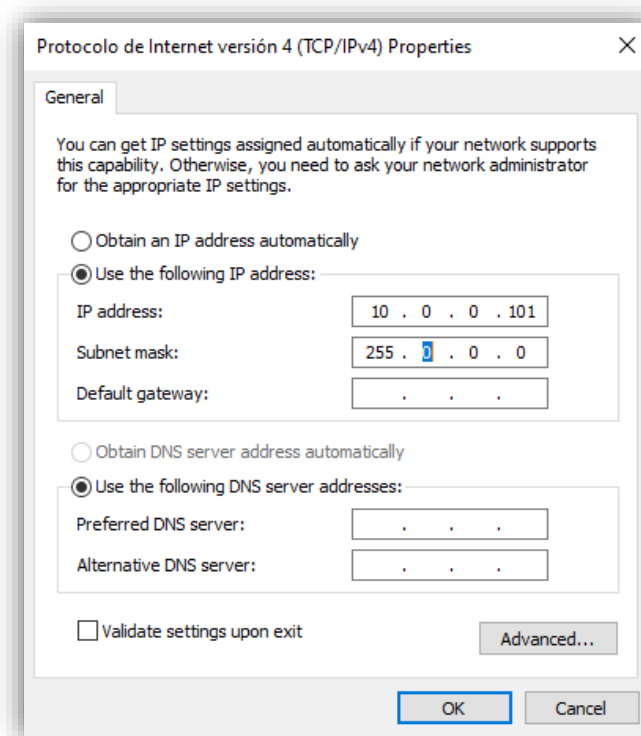
### **Static IP**

On the other hand, DD2 / DD4 devices also offer the possibility of working with static IP. To select this IP address mode, having your PC in the same subnet as the devices, and through Dante Controller, double click on the device to be modified in the "Routing" window. In the pop-up window "Device View" go to "Network Config" and select "Manually configure IP Address", fill in the appropriate fields.



Apply and restart the device for the changes to take effect.

To change the IP address of your PC (Windows) to static, go to Network and Sharing Center / Connection: Ethernet / Internet Protocol 4 Properties (TCP / IPv4) and configure the static IP of your PC.





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