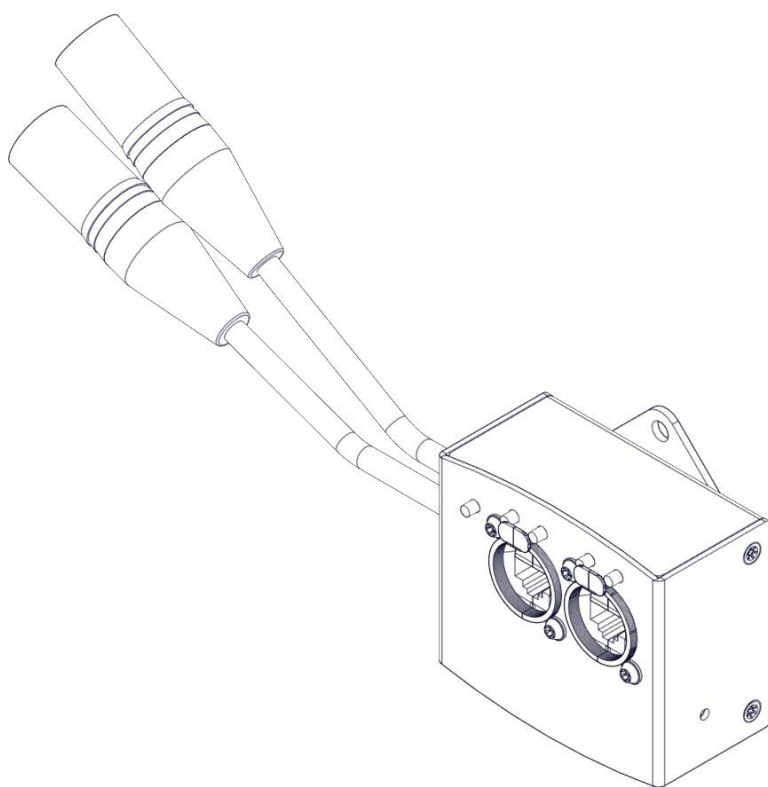




# ***K-DANTE***

## USER GUIDE English



## TABLE OF CONTENTS

1. INTRODUCTION .....	3
2. KEY FEATURES .....	3
3. COMPATIBLE PRODUCTS .....	3
4. INSTALLATION.....	4
4.1 OVERVIEW .....	4
4.2 MOUNTING TO THE AMPLIFIER .....	4
4.3 CONNECTING THE CABLES .....	5
5. NETWORK CONFIGURATIONS.....	6
5.1 DAISY-CHAINING.....	6
5.2 SENDING AUDIO AND DATA .....	7
6. TECHNICAL SPECIFICATIONS .....	9

## 1. INTRODUCTION

Dante is an uncompressed, multi-channel networking technology that allows the transmission of digital audio and data across standard IP networks.

One cable does it all. A single CAT-5e cable can carry the audio signal (two-channel AES/EBU) and the data to manage all the devices in the network. It features two RJ45 ethernet connectors that connects many devices together in the same network without the need of any external ethernet switches.

The K-dante has access to all of the modern capabilities of a router. It claims its own IP address and then broadcasts its presence over the network.

A special cable provided powers the accessory from the 5 volts connector available on K-array amplifier's panels. It can be also powered by any standard USB chargers with a micro-USB connector.

An XLR cable (provided) connects the K-dante to the digital input of the amplifier's panel to transmit two channels in AES/EBU. Another XLR cable (provided) connects the K-dante to the RS485 input on the amplifier's panel to transmit the data to access all the amplifier's functions via the K-framework software.

## 2. KEY FEATURES

- Dante interface is compatible with the K-array Concert Series, KA24 and KA84 amplifiers and all Mark I products
- Only one CAT5e or CAT6 cable needed to carry both audio signal and data
- Two RS45 connectors for daisy-chaining.
- 2 channels AES/EBU audio output
- RS485 tunneling to access all amplifier's function via K-framework software
- Designed to be integrated in K-array products
- 5v micro-USB powered

## 3. COMPATIBLE PRODUCTS

The K-dante accessory has been designed to be integrated in the following K-array products:

Concert Series: KH2, KH3, KH5, KS5

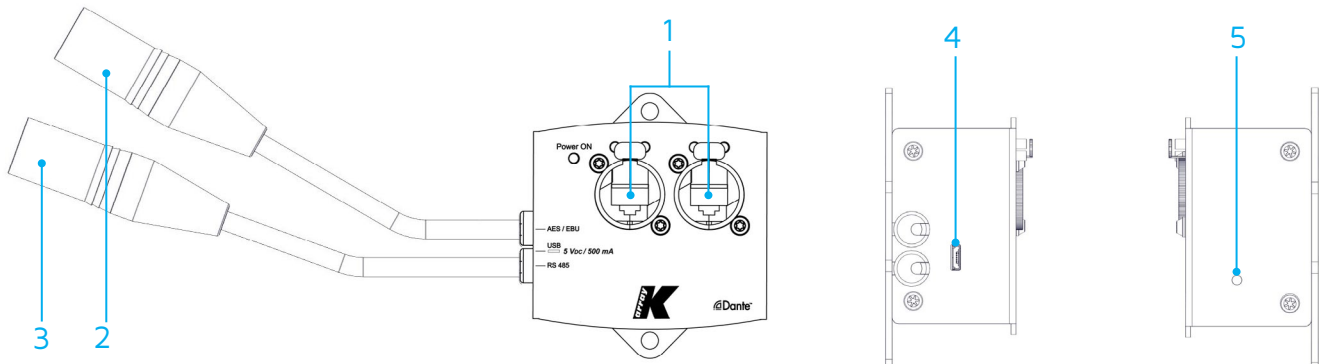
Portable Series: KR102 I, KR202 I, KR402 I, KR802

Install Series: KMT12 I, KMT18 I, KMT21 I, KMT218

Amplifiers: KA24, KA84

## 4. INSTALLATION

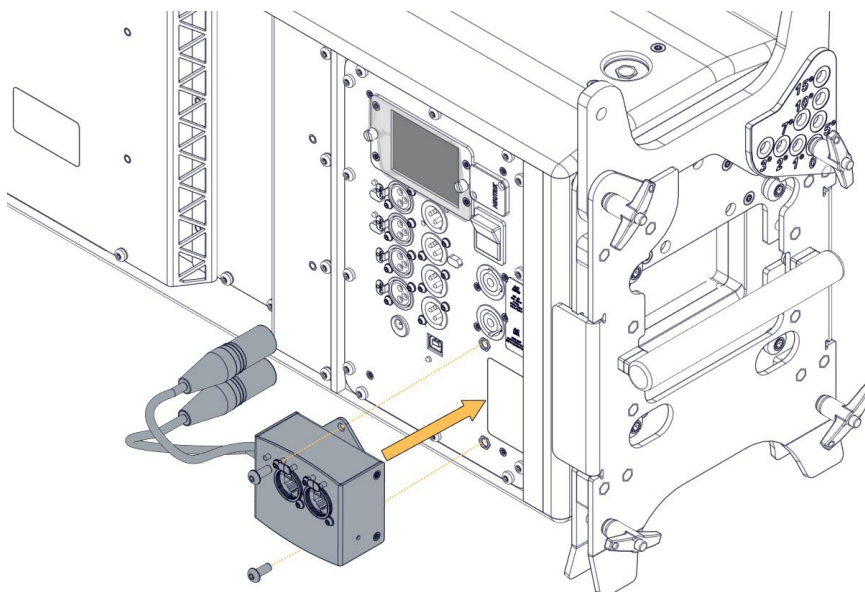
### 4.1 OVERVIEW



- 1) RJ45 connectors. The two connectors allow the daisy-chain of more units without the need of any external switches.
- 2) AES/EBU Output. XLR male connector providing two-channel AES/EBU audio signal.
- 3) RS485 Output. XLR male connector carrying the data to access all the amplifier's functions via K-framework software.
- 4) Power input. Micro-USB connector to power the K-dante with  $5V_{DC} / 500mA$
- 5) Reset button. To reset the device to factory settings, proceed as follow: power off the unit, press the reset button, keep pressing the button and power on the unit, keep pressing the button for 10 seconds. Power off the device. The device is now reset to factory settings.

### 4.2 MOUNTING TO THE AMPLIFIER

Use the screws provided to mount the K-dante accessory onto the amplifier's panel.

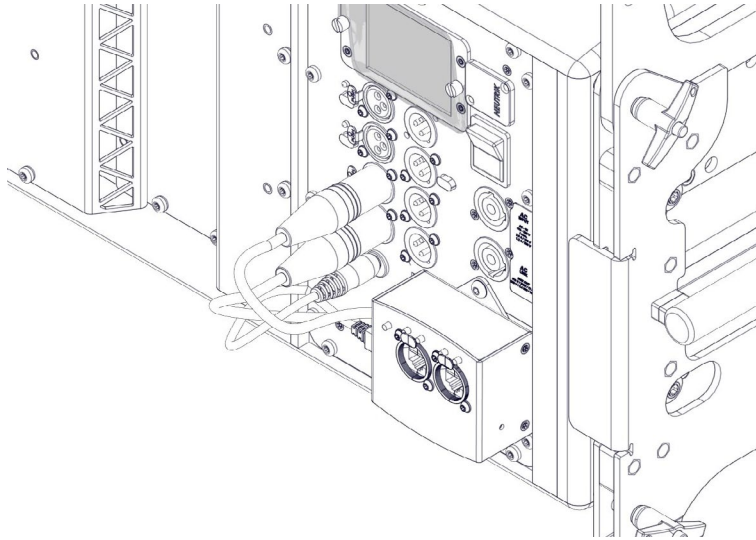


### 4.3 CONNECTING THE CABLES

Plug the AES/EBU XLR connector into the AES/EBU input of the amplifier's panel.

Plug the RS485 XLR connector into the RS485 input of the amplifier's panel.

Use the provided cable to power the K-dante from the DC out connector of the amplifier's panel.



#### NOTE

Please note that the DC Out Connector is not available on the KA24 and KA84 amplifiers. In this case, you can use any standard USB-charger (500 mA amperage minimum) with a micro-USB connector to power the K-dante.

## 5. NETWORK CONFIGURATIONS

### 5.1 DAISY-CHAINING

To connect more than one K-dante accessory in a Dante network, use standard CAT5e or CAT6 ethernet cables as shown in Figure 1. It is also possible to use standard switches in the network (Figure 2). If more devices in the network share the same audio signal (for instance, all the speakers in a cluster), it is possible to use a single K-dante accessory mounted on the first unit. The other units can be linked with standard XLR cables, as shown in Figure 3.

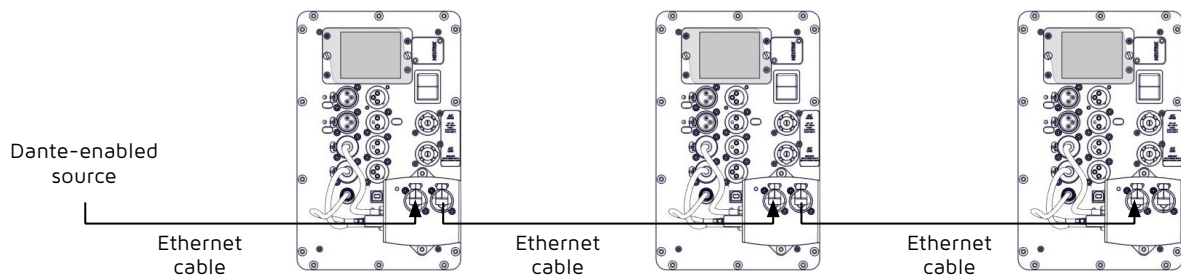


Figure 1

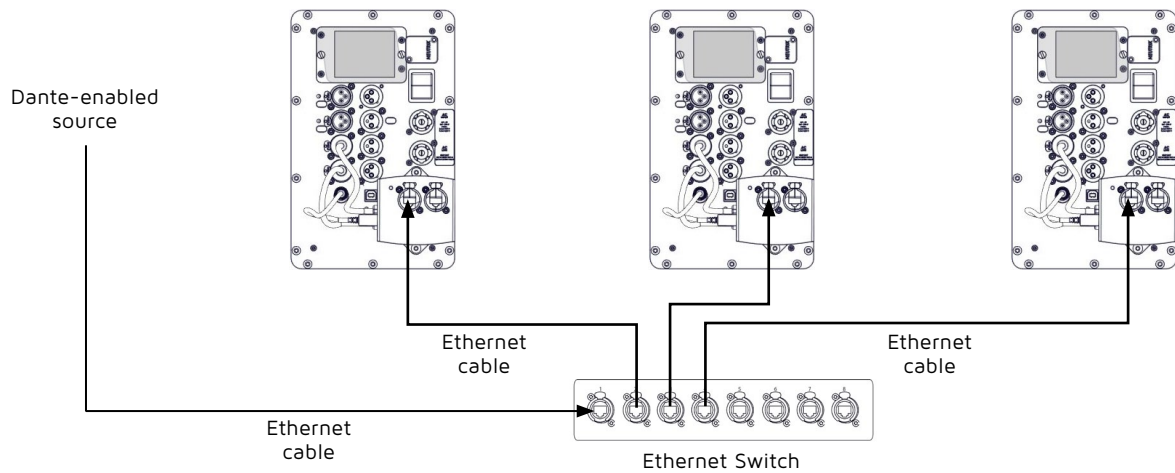


Figure 2

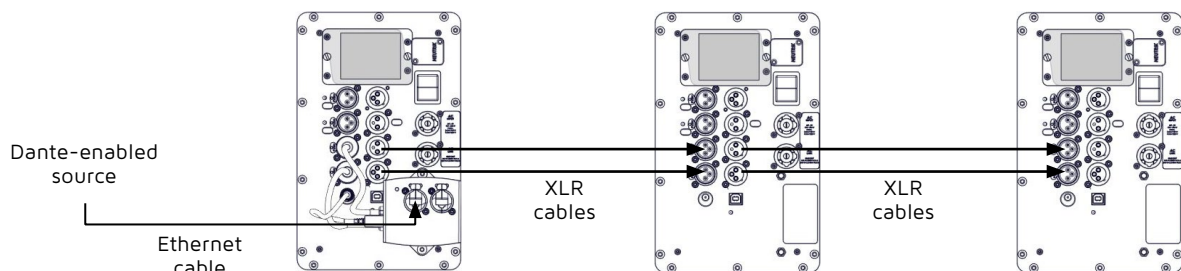
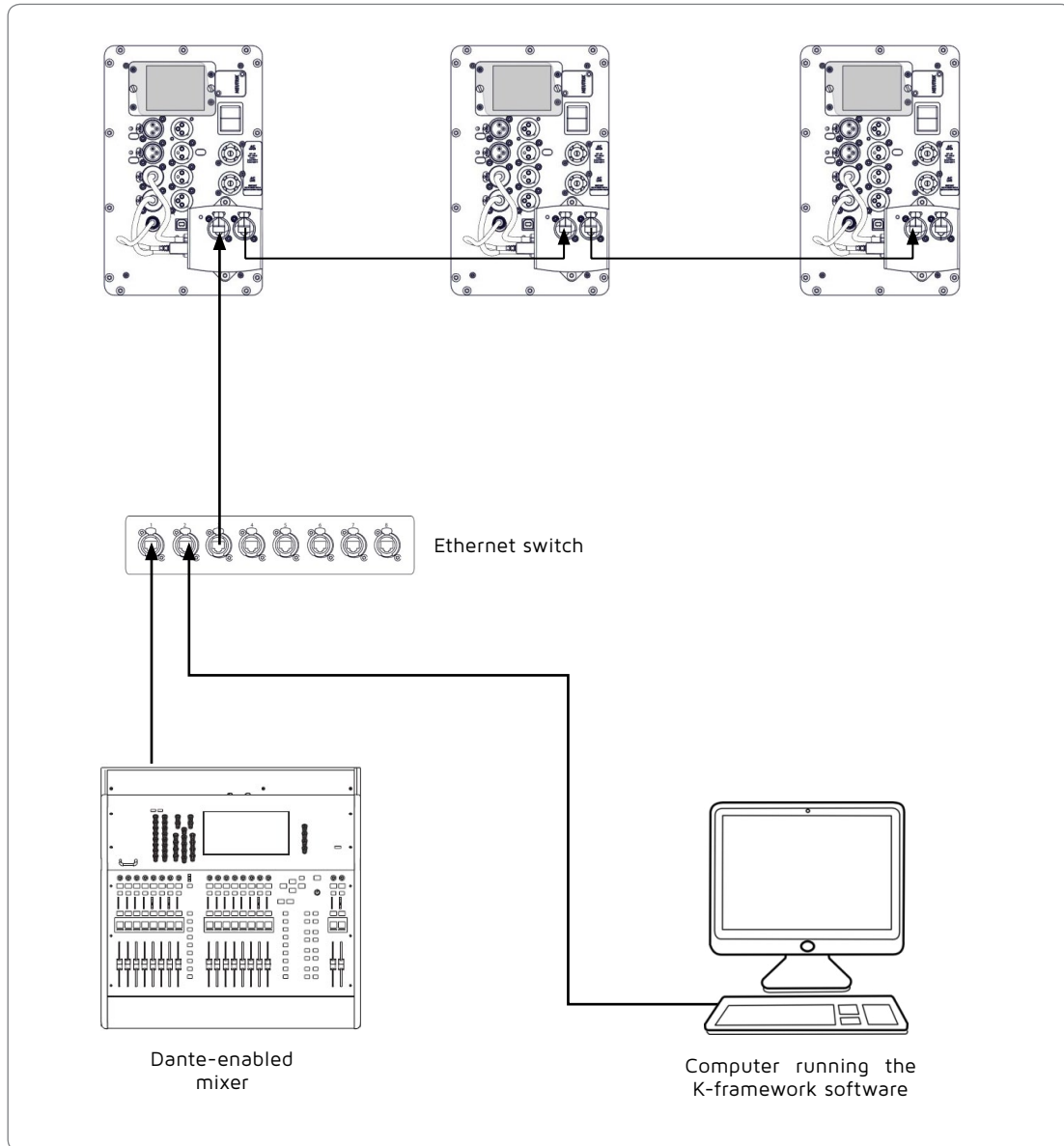


Figure 3

## 5.2 SENDING AUDIO AND DATA

The K-dante accessory allows users to send both a digital audio signal and data to the amplifier. In the scheme below, both a sound source and a computer running the K-framework are connected to the network. The amplifiers are daisy-chained with ethernet cables, but other options are possible (see previous paragraph).

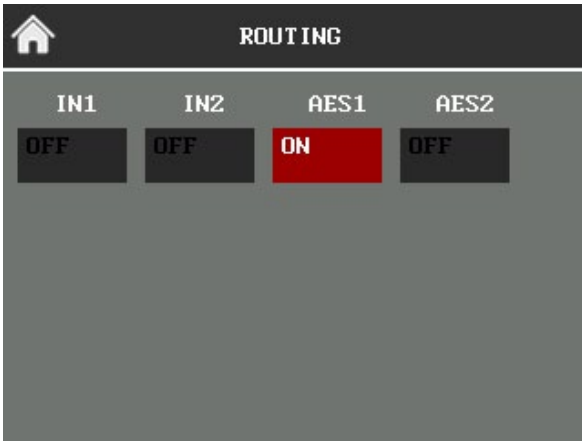


### NOTE:

Always check that all K-array devices in the network have different ID numbers, otherwise the communication with the K-framework will not function. To change the ID of a device, go to the Info page available on the touchscreen of the amplifier panel. More details are available in your device's User Guide.

Each K-dante accepts a two-channel AES/EBU incoming signal with a sample rate of up to 96kHz (by default it is set at 48 kHz).

Use the matrix page available on the amplifier’s touchscreen to manage the routing of the two digital channels. Below some examples:



This is the Matrix page available on the amplifier’s panel of all products of the Concert Series. With these settings the device will reproduce the audio signal carried by the first AES/EBU channel (called often “Channel A” or “Channel Left”).



This is the Matrix page available on the amplifier’s panel of the KA24 and KA84 amplifiers. With these settings, the audio signal carried by the first AES/EBU channel (called often “Channel A” or “Channel Left”) is routed to the A1 and A2 outputs, while the second AES/EBU channel (called often “Channel B” or “Channel Right”) is routed to the B1 and B2 outputs.

To control all of the amplifier’s functions via the K-framework, please follow the instruction found in the “K-framework User Guide”. The K-framework software and User Guide can be downloaded from our website at [http://www.k-array.com/software\\_download](http://www.k-array.com/software_download).