FRENETIK

Dante™ PoE+ Audio Solutions

EDITION
02

La Cervoiserie, Reims - France

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Who we are ?

Frenetik was created in 2017 by a French team of audio enthousiasts who believed in highly reliable and versatile products compatible with the latest network technologies.

The concept and our brand DNA lies in all our products :

- Use the latest available technology for audio solutions
- Bring original solutions and complementary tools
- Make innovation accessible by offering exceptionnal value for money

At Frenetik, we believe that the convergence between audio-visual and IT will transform the audio industry, just like telecommunication and IT did a decade ago.

equiPOWER

Unlike most similar products on the market designed for computer applications, FRENETIK PoE+ power distributors are able to deliver the full power to each port simultaneously.

noLOGO

We have made the conscious choice not to put a brand logo on the front of FRENETIK wall mounted and ceiling speakers, which are often installed in places requiring great visual discretion.
By doing so, we meet the demands of architects who want the least intrusive installed technology.

optiZONE

The internal DSP of FRENETIK loudspeakers, via the Adjust software, is optimised to give priority to intelligibility and coherence, allowing adaptability to the places for which they are intended: transit areas, bars, offices, halls, restaurants...

Dante®

Dante™ (Digital Audio Network Through Ethernet) is a combination of software, hardware, and network protocols that provide uncompressed, multichannel, low-latency, synchronized digital audio over a standard Ethernet network using Layer 3 IP packets.

Here are a few points to keep in mind:

Uncompromising audio quality
The digitally transmitted audio signal is uncompressed and can be sampled at 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz or 192 kHz in 16-bit, 24-bit or 32-bit mode. In addition, the problems of conventional analog signals simply do not exist: no interference from other electrical equipment, no crosstalk between cables or signal degradation over long cable distances.

Controlled latency
The latency is determined by the number of switches on the network and is known in advance:
- 1 switch (very small network): 0.15ms
- 3 switches (small network): 0.25ms
- 5 switches (average network): 0.5ms
- 10 switches (wide area network): 1ms
- +10 switches (very large network): 5ms

In addition, the audio signals are transmitted synchronously, so all receiving devices in the same audio stream will receive it at the same time.

Full interoperability
Based on industry standards, Audinate has created the Dante™ technology which has been adopted by a large number of manufacturers of pro-audio audiovisual solutions, notably thanks to its total interoperability. Hundreds of Dante-compatible products are available from the world's leading manufacturers, making it possible to combine devices from multiple manufacturers without any hassle.

Economical and Versatile
Dante™ technology eliminates the need for costly and heavy analog or multi-pair cabling, replacing it with a simple, low-cost and readily available CAT5e, CAT6 or optic fibre cable for a simple, lightweight and cost-effective solution. Dante™ integrates media and control for your entire system on a single standard IP network.
Dante™ systems can be as simple as linking a computer to a speaker, or as advanced as hundreds of audio channels on the same Ethernet network. Being a packet-based (IP) technology, a Dante™ system can be expanded or reconfigured at any time with a few mouse clicks, unlike analog point-to-point links.

Easy to install
The configuration of Dante's networks is simple, even for someone with little or no knowledge of computer networking. Even the most complex networks can be configured quickly and easily with Dante™ technology, which simplifies system integration. Dante™ automatically manages the technical complexities for you.

Dante™ signal routing and system configuration is fast, simple and flexible. Dante Controller is a powerful software application that manages devices on the network. Configuring a Dante™ network typically involves plugging devices into an Ethernet switch(s) and connecting a computer to that network. All Dante™ devices are automatically detected and displayed in the Dante Controller software. You can be up and running in seconds.

Easy to use
With Dante Controller, you can easily change channel device names, control sample rates, and set device latencies. Once the Dante™ system is set up, the computer running the Dante Controller software can be removed and reconnected only if changes are required or system monitoring is desired. Signal routing and other system parameters are securely stored in each of the Dante™ devices themselves. They are therefore automatically restored if a device is turned off and then turned back on again.
• Health and network management
Real-time information about the health of the network is essential to understand and maintain network performance. Audinate has developed a comprehensive suite of diagnostic tools within Dante Controller, providing visibility into the state of the network through features such as latency monitoring, clock monitoring, packet error reporting and bandwidth usage.

Security through redundancy without signal interruption
Many Dante™ devices support the redundancy feature, allowing a secondary physical network to be provided, duplicating audio traffic from the primary network. This automatically prevents audio loss or interruption in the event of a connection problem on the primary network.

Unicast or Multicast
Dante's audio channels can be configured in unicast or multicast mode, as required, to optimize the use of available bandwidth. Unicast provides direct point-to-point streaming for channels, while multicast sends an audio stream to multiple devices simultaneously.

Fully integrated with Windows and Mac OS X
With the «Dante™ Virtual Soundcard" your computer becomes a Dante™ audio interface for multitrack recording and multimedia playback, using the computer's existing Ethernet port. No additional hardware is required. Digital audio workstations, software media players, Skype, iTunes, Deezer, Spotify and other applications integrate easily into your network with the Dante Virtual Soundcard.

PoE+

The Power over Ethernet (PoE) cable power supply allows a voltage of 48 V, up to 13 watts of electrical power, in addition to 100 Mbit/s or 1 Gbit/s data. This technology is defined by the IEEE 802.3af standard, part of the IEEE 802.3 (Ethernet) standard ratified on 11 June 2003 and published on 11 July 2003.

An Ethernet cable consists of four pairs of wires. When the connection is established at 100 Mbit/s, data is transmitted over only two pairs, namely wires 1, 2, 3 and 6. The other two unused pairs, namely wires 4, 5, 7 and 8, can be used to carry electrical current. PoE can «pass» through the wires of the data pairs, this mode of operation is then called «end-point» or through the wires of the unused pairs in 100 Mbit/s in «mid-span» mode.

When the connection is established at 1 Gbit/s, all four wire pairs are used for data.

This technology has evolved to provide more power and is called PoE+.

- PoE vs PoE+ :

IEEE 802.3af (PoE): The power supply provided by the equipment (switch, injector) is a maximum of 15.4 W for a maximum power of 12.9 W at the device. The nominal voltage is 48V, and can vary from 44V to 57V in transmission.

IEEE 802.3at (PoE+): If both the equipment providing the power and the device meet this standard, then a maximum power of 25.5 W at the device can be used for a maximum emission of 30 W, always for a nominal voltage of 48V.
An Ethernet cable consists of four pairs of wires. When the connection is established at 100 Mbit/s, the data is transmitted on only two pairs, namely wires 1, 2, 3 and 6. The other two unused pairs, namely wires 4, 5, 7 and 8, can be used to carry electrical current. PoE can «pass» through the wires of the data pairs, this mode of operation is then called «end-point» or through the wires of the unused pairs in 100 Mbit/s in «mid-span» mode.

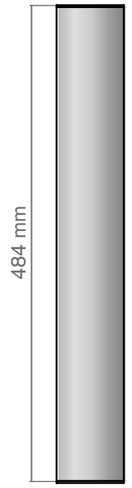
When the connection is established at 1 Gbit/s, all four wire pairs are used for data.

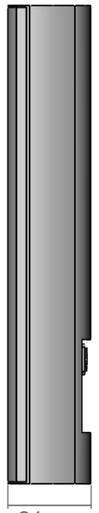
Spik 2c

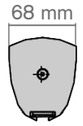
8 x 2" powered column speaker Dante™ PoE+

- Ultra-thin powered aluminium column speaker
- 60W class D amplifier card with integrated DSP
- Fixed Directivity 100° x 12
- Remote control of volume and EQs via FRENETIK Adjust software
- No logo on front panel
- Available in black or white
- 3 years warranty







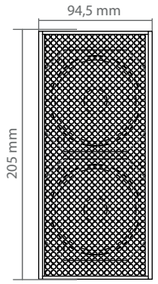
Reference	SPC20DP / SPC20DPW
Type	Fixed directivity Column speaker
Amplification	60W (class D)
Dante™ Receiver	1 (16 / 24 / 32 bit - 44,1 à 48kHz)
Transducer	8 x 2" fullrange
Peak SPL Capacity (1 m)	117 dB (wide range mode)
Peak SPL Capacity (1 m)	120 dB (long throw mode)
Bandwidth (-10 dB)	120Hz - 20kHz
Directivity (H x V)	110° x 12°
	@500 Hz : 360° x 127° *@1000 Hz : 220° x 52°* *@2000 Hz : 191° x 26°* *@4000Hz : 110° x 8°* *@8000Hz : 64° x 8°*
Input connector	1 x RJ45
Insert	2 x M6
Dimensions (H x W x D)	484 x 68 x 84 mm
Weight	2,5 kg
Power supply	PoE+ (IEEE 802.3 at)
Accessory	2 axis wall mount (included)
Certification	CE

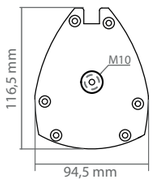
Spik 3

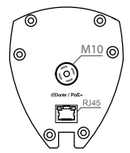
2-way 3" powered speaker

- Amplified speaker system, 2-way 3", Dante™ PoE+ Ultra compact 2-way powered aluminium speaker system - Dante™ and PoE+
- 60W class D amplifier card with integrated programmed DSP
- Wide and homogeneous directivity 95° x 85°
- Remote control of volume and EQs via FRENETIK Adjust software
- Temperature monitoring of the card
- No logo on front panel
- Available in black or white
- 3 years warranty.







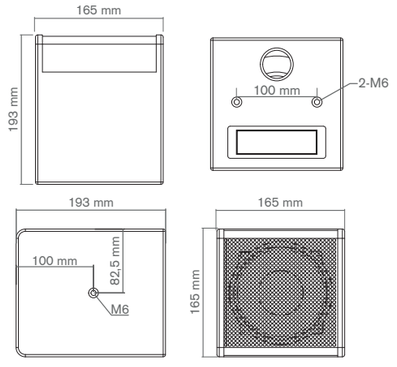


Reference	SPCX30DP - SPCX30DP-W
Type	2-way amplified speaker
Amplification	60W (class D)
Dante™ Receiver	1 (16 / 24 / 32 bit - 44,1 à 48 kHz)
Transducer	1 x 3" woofer 1 x 3" tweeter
Peak SPL capacity (1 m)	109 dB
Bandwidth (-10 dB)	125Hz - 20kHz
Directivity (H x V)	95° x 85°
Input connector	1 x RJ45
Insert	2 x M10 (can be mounted on micro stand)
Dimensions (H x W x D)	205 x 95 x 117 mm
Weight	2.4kg
Power supply	PoE+ (IEEE 802.3 at)
Accessories	Spik Mount included Custom Grille with fabrics (optional)
Certification	CE

Spik 5

5" coaxial 2-way powered speaker Dante™ PoE+

- Compact 2-way coaxial amplified speaker, Dante™ PoE+
- 60W class D amplifier card with integrated latest generation DSP
- Wide and homogeneous directivity 95° x 95°
- Wooden cabinet
- Euroblock connector for use for external amplification
- Remote control of volume and EQs via FRENETIK Adjust software
- Board temperature monitoring
- No logo on front panel
- 3 years warranty

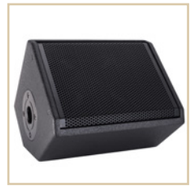


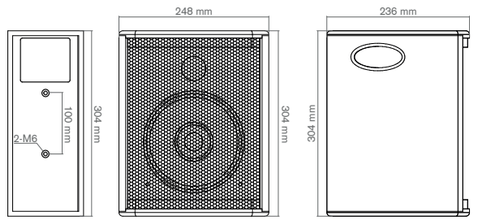
Reference	SPCX50DP
Type	2-way coaxial speaker
Power (passive mode)	60W (8ohm)
Amplification	60W (class D)
Dante™ Receiver	1 (16 / 24 / 32 bit - 44.1 à 48 kHz)
Transducers	1 x 5" woofer 1x 1" tweeter
Peak SPL capacity (1 m)	112 dB
Bandwidth (-10 dB)	90Hz - 20kHz
Directivity (H x V)	95° x 95°
Input connectors	1 x RJ45 + Euroblock connector
Insert	4 x M6
Dimensions (H x W x D)	165 x 165 x 193 mm
Weight	2.5 kg
Power supply	PoE+ (IEEE 802.3 at)
Accessories	Spik mount
Certification	CE

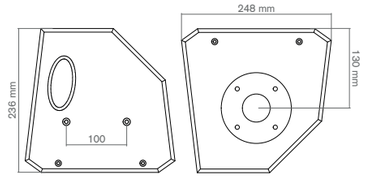
Spik 6

6" coaxial 2-way powered speaker Dante™ PoE+

- Compact coaxial wide-aperture speaker, Dante™ processed, PoE+
- Last generation 60W class D amplifier card with integrated DSP
- Wide and homogeneous directivity 85° x 85°
- Wooden cabinet
- Euroblock connector for use with external amplification
- Cut-out cabinet for wedge applications
- Well for coupling with SPIK SUB (with SMP tube)
- Remote control of volume and EQs via FRENETIK Adjust software
- Board temperature monitoring
- No logo on front panel
- 3 years warranty







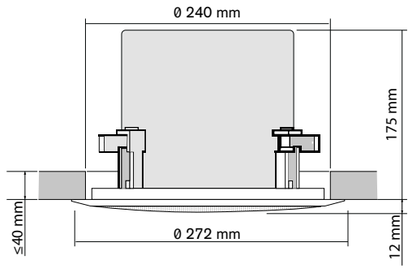
Reference	SPCX60DP
Type	2-way coaxial loudspeaker
Power (passive mode)	100W (8 ohms)
Amplification	60W (class D)
Dante™ Receiver	1 (16 / 24 / 32 bit - 44,1 à 48 kHz)
Transducer	1 x 6" woofer 1 x 3" tweeter
Peak SPL capacity (1 m)	114 dB
Bandwidth (-10 dB)	75 Hz - 18 kHz
Directivity (H x V)	85° x 85°
Input connector	1 x RJ45 + Euroblock connector
Retourn function	Yes
Pole mount	Yes
Insert	4 x M6
Dimensions (H x W x D)	304 x 248 x 236 mm
Weight	6 kg
Power supply	PoE+ (IEEE 802.3 at)
Accessories	SMP Telescopic coupling tube
Certification	CE

Spik Up

Dante™PoE+ 8 " 2-way amplified ceiling speaker

- 8" coaxial ceiling speaker, Dante™ PoE+.2 way 8» coaxial ceiling speaker, Dante™ PoE+
- last generation 60W class D amplifier card with integrated DSP
- Allows powering of another passive ceiling Spik Up P
- Wide and homogeneous directivity 100° x 100°
- Euroblock connector for use with external amplification
- Remote control of volume and EQs via FRENETIK Adjust software
- Temperature monitoring
- No logo on front panel
- 3 years warranty

Dante™ PoE+ optiZONE noLOGO

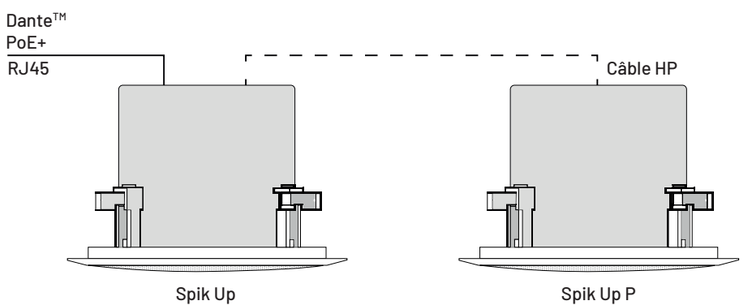


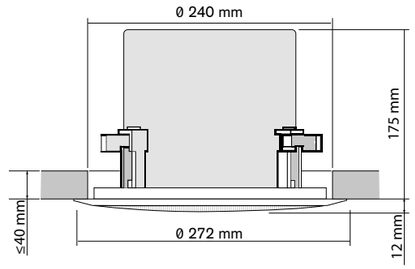
Reference	CS80DP-W
Type	2-way coaxial ceiling speaker
Power (passive mode)	40W (8 ohm)
Amplification	60W (class D)
Dante™ Receiver	1 (16 / 24 / 32 bit - 44.1 à 48 kHz)
Transducer	1 x 8" woofer 1 x 1" tweeter
Peak SPL capacity (1 m)	110dB
Bandwidth (-10 dB)	100Hz - 16kHz
Directivity (H x V)	100° x 100°
Input connector	1 x RJ45 + 1 Euroblock connector
Dimensions	Ø 272 x P 187mm
Cut out diameter	Ø 240mm
Built-in depth	175mm
Weight	3.1 kg
Power supply	PoE+ (IEEE 802.3 at)

Spik Up P

8" passive 2-way ceiling speaker with transformer

- 8" 2-way coaxial passive in-ceiling speaker
- Passive version with Spik Up loudspeaker transformer for use in slave mode
- Operates at low impedance or 100 V
- No logo on front panel
- 3 years warranty



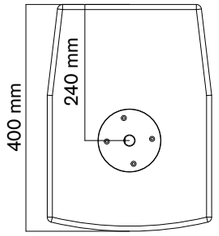


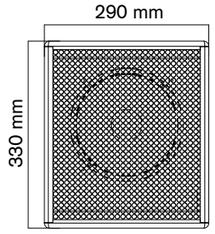
Reference	CS80T-W
Type	2-way coaxial in-ceiling speaker
Power	40W (8 ohm) or 5 W / 10 W / 20 W / 40W 100 V
Transducer	1 x 8" woofer 1 x 1" tweeter
Peak SPL capacity (1 m)	112 dB
Bandwidth (-10 dB)	100Hz - 16kHz
Directivity (H x V)	100° x 100°
Input connector	Euroblock
Dimensions	Ø 272 x P 187mm
Cut out diameter	Ø 240mm
Built-in depth	175mm
Weight	3.1 kg

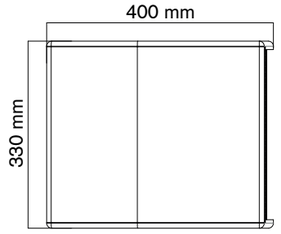
Spik Sub

Dante™ PoE+ 8" Amplified Subwoofer

- Compact amplified subwoofer, Dante™ processed, PoE+
- Latest generation 60 W class D amplifier board with integrated DSP
- Omnidirectional
- Wooden cabinet - Euroblock connector for use with external amplification
- Base plate for coupling with SPIK 6 (with SMP tube)
- Remote control of volume and EQs via FRENETIK Adjust software
- Board temperature monitoring
- No logo on front panel
- 3 years warranty





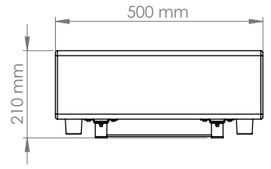


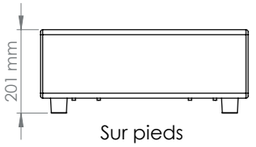
Reference	SB80DP
Type	Sub
Power (passive mode)	150W (8ohm)
Amplification	60W (class D)
Dante™ Receiver	1 (16 / 24 / 32 bit - 44.1 à 48 kHz)
Transducer	1 x 8" woofer
Peak SPL capacity (1 m)	119dB
Bandwidth (-10 dB)	40Hz - 100HzW
Directivity (H x V)	-
Input connector	1 x RJ45 + Euroblock connector
Top plate	for SMP tube
Insert	No
Dimensions	330 x 290 x 400 mm
Weight	12 kg
Power supply	PoE+ (IEEE 802.3 at)
Accessories	SMP Telescopic coupling tube
Certification	CE

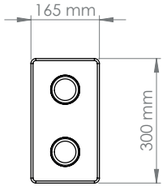
Wall Sub

Dante™ PoE+ installation amplified sub

- Compact amplified subwoofer, Dante™ processed, PoE+
- Latest generation 60 W class D amplifier board with integrated DSP
- Omnidirectional
- Wooden cabinet
- Mounting bracket for smart wall integration
- 4 plastic feet for floor installation
- Remote control of volume and EQs via FRENETIK Adjust software
- Board temperature monitoring
- No logo on front panel
- Available in black or white
- 3 years warranty







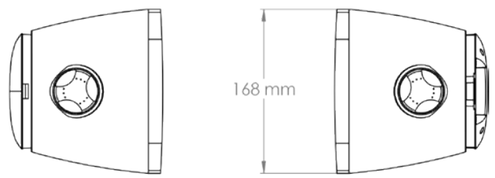
Reference	SBI80DP / SBI80DPW
Type	Sub
Power (passive mode)	No
Amplification	60W (class D)
Dante™ Receiver	1 (16 / 24 / 32 bit - 44.1 à 96kHz)
Transducer	1 x 8" woofer
Peak SPL capacity (1 m)	119dB
Bandwidth (-10 dB)	40Hz - 150HzW
Connector	1 x RJ45
Suspension Hardware	Mounting bracket 4 plastic feet
Dimensions	300 x 500 x 201 (165 without mounting feet) mm
Weight	8,80 kg
Power supply	PoE+ (IEEE 802.3 at)
Certification	CE

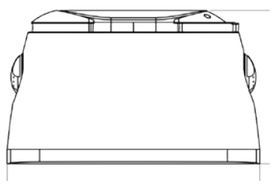
Resist 5

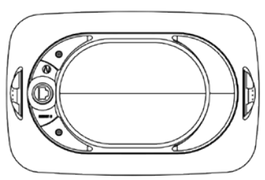
Weatherproof loudspeaker Dante™ PoE+ 5" Two-way with Passive Radiator

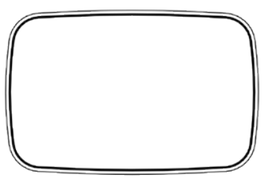
- Outdoor 5" two-way outdoor Dante™ PoE+ speaker
- 60W class D amplifier card with integrated DSP
- UV resistant ABS cabinet
- Integrated passive radiator
- Extended low-frequency range
- IP65 rating. Included cable gland + weatherproof seals
- Compatible with standard RJ45 cables
- Remote control of volume and EQs via FRENETIK Adjust softwareBoard temperature monitoring
- No logo on front panel
- Available in black or white
- 3 years warranty

Dante™ PoE+ optiZONE noLOGO









Reference	SPWP50DP - SPWP50DPW
Type	2-way with Passive Radiator
Amplification	60W (class D)
Dante™ Receiver	1 (16 / 24 / 32 bit - 44.1 à 48 kHz)
Transducers	5" woofer + 1" tweeter
Peak SPL capacity (1 m)	110 dB
Brandwidth (-10 dB)	50 Hz - 18 kHz
Directivity (H x V)	90° x 90°
Input connectors	1 x RJ45
Insert	2 x M6
Dimensions (H x W x D)	258 x 169 x 168 mm
Weight	2.4 kg
Power supply	PoE+ (IEEE 802.3 at)
Accessories	Bracket and cable gland included
Ingress Protection Code	IP65
Certification	CE

TV Studio Set sound reinforcement MVS / Doigby Prod

Plateau Webedia

Galerie Bourbon, Paris, France

Core 1

PoE+ injector

• PoE+ injector Enables PoE+ power to a networked device, Dante™ or other
• 3 years warranty

Dante PoE+

Core 4

Dante™ PoE+ 4 x 30W Mid-Span Distributor

• Dante™ Distributor PoE+ 1 input and 4 outputs.Allows distribution of the Dante network and supply of PoE+ to 4 FRENETIK speakers simultaneously
• PoE+ power supply disconnectable on each port
• Maximum power permanently available on each port
• Also allows distribution to any IP network protocol and supply to all other devices with PoE
• 3 years warranty

Dante PoE+ equiPOWER

Core 8

Dante™ PoE+ 8 x 30W Mid-Span Distributor

• Dante™ Distributor PoE+ 1 input, 1 copy and 8 outputs.Allows distribution of the Dante network and supply of PoE+ to 8 FRENETIK speakers simultaneously
• PoE+ power supply disconnectable on each port
• Maximum power permanently available on each port
• Also allows distribution to any IP network protocol and supply to all other devices with PoE
• 3 years warranty

Dante PoE+ equiPOWER

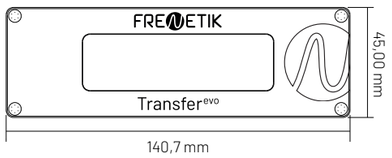
Product	Core 1	Core 4	Core 8
Reference	PS110DP	PS410DP	PS820DP
Standards	-	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.3x Flow ControlIEEE 802.3at/af PoE midspan PoE	IEEE 802.3/u 10/100/1000BaseT/TX IEEE 802.3x Flow Control IEEE 802.3at/af PoE midspan PoE
Nomber of ports	2	5	10
Ports poE	1	4	8
PoE enable (On/off)		Dip-Switches	Dip-Switches
Ethernet switch features		MAC Address: 1K Buffer Memory: 48KB Store and Forward Auto MDIX Auto Negotiation Non-Blocking	MAC Address: 8K Buffer Memory: 128KB Store and Forward
Packet filtering/ transmission speeds		100Mbps port - 148,800pps 10Mbps port - 14,880pps	1000Mbps port - 1488,000pps 100Mbps port - 148,800pps 10Mbps port - 14,880pps
Network cables	100BaseTx Cat. 5 UTP/ STP 10BaseT Cat. 3, 4, 5 UTP/STP	100BaseTx Cat. 5 UTP/STP 10BaseT Cat. 3, 4, 5 UTP/STP	100/1000BaseTx Cat. 5 UTP/STP 10BaseT Cat. 3, 4, 5 UTP/STP
Standard PoE wiring	4,5,7,8	4, 5, 7 ,8	4, 5, 7, 8
LED Indicators	-	Per port: Activity / link with 10/100M, PoE ON/OFF (except Uplink) For the device: Power	Ports Link 1 to 8: 10/100 Mbits/s, PoE ON/ OFF Ports Uplink 9 et10: 100/1000 Mbits/s For the device: Power
Power	PoE input 30W	Input: 100-240 VAC, 50~60 Hz Outpouts: 56 VDC 2.14 A (120 W)	Input: 100-240 VAC, 50~60 Hz Outpouts: 56 VDC 4.46 A (250 W)
PoE power on each port	30W	30W	30W
Dimensions (H x W X D)	42 x 64 x 145 mm	44 x 160 x 122 mm	40 × 480 × 118 mm
Weight	0.18kg	0.80kg	1.7kg

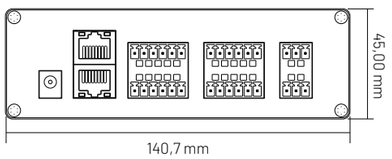
Transfer^{evo}

Dante™ interface 4x4

- Allows the conversion and distribution of 4 analog sources on Dante™ network
- Detachable euroblock input/output connectors
- Embedded software for I/O configuration
- Input level management
- Phantom power supply activatable on all ports
- PoE or 12V power supply
- 3 years warranty

Dante™ PoE+





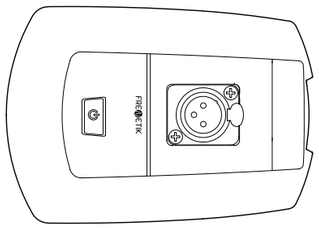
Ref.	CV442DP
Input Connectors	4 detachable euroblock input
Output Connectors	4 detachable euroblock output
Dante™ ports	2 RJ45 (primary and secondary)
THD	≤ 0,005% (@4 dBu)
Frequency response	20 Hz - 20kHz (+/- 0,5 dB)
Power supply	PoE or 12 V external
Power consumption	7,5 W
Dimensions (H x W x D)	45 x 140 x 160 mm
Weight	690g (excluding accessories)
Input characteristics:	
Impedance	20 kohms
Gains	-6 dB / 0 dB / 6 dB / 12 dB / 18 dB / 24 dB /30 dB / 36 dB
Maximum level	+10 dBu
THD	≤ 0,005% (@4 dBu)
Frequency response	20 Hz - 20kHz (+/- 0,5 dB)
Output characteristics:	
Impedance	100 ohms
Maximum level	+14 dBu
THD	<0.005%(@4dBu)
Frequency response	10Hz – 20 kHz (+/- 0.5dB)

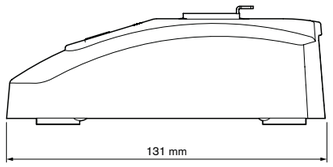
Mik

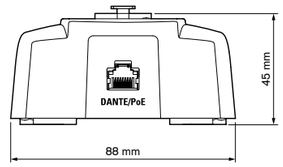
Shock-resistant Dante™ micro base

- Heavy micro base Dante™ POE
- Allows a gooseneck microphone to be connected directly to a Dante network
- PoE power supply
- 3 years warranty

Dante™ PoE







Reference	MB10DP
Type	Dante™ Heavy base
Input connector	XLR3M
Output connector	RJ45
Phantom powering	24V
Filter	high-pass 80 Hz, 18 dB/octave switchable
Gains	+ 20dB / + 30 dB / + 40 dB / + 50 dB
Operating modes	PTM - PTT - ON/OFF - OFF/ON
Alimentation	PoE 802.3 af
Dimensions (H x Wx D)	45 x 90 x 131 mm
Weight	600 g
Certification	CE

Galerie Bourbon - Paris, France

FRENETIK

1, allée d'Effiat
Le Parc de l'Événement - Bâtiment D
91160 Longjumeau - France

+33 (0)1 69 10 50 81
info@frenetik.fr
www.frenetik.fr