Technical Specifications

General	
Size	144 mm x 100 mm x 42 mm – regular 1U, 1/3 of 19" rack
Main Power Supply Auxiliary Power Supply	PoE (12W) via "Main" Port +12Vdc ±15% 1A max via 6.4mm lockable DC Jack Plug
Storage: Temp / Humidity	- 5°C to 70°C / 0% to 95% (non-condensing)
Operating: Temp / Humidity	0°C to 40°C / 5% to 90% (non-condensing)
Connectors for version "-AE-" and "-ADE-"	4x, 6x or 8x 3pts Euroblock connectors (3.81mm pitch) for analog or AES/EBU inputs and outputs 1x 6pts Euroblock connectors (3.81mm pitch) for GPIO (-AEG and ADE- versions only) 2x RJ45 Gigabit connectors "Aux" and "Main" with PoE capability on "Main" connector
Connectors for version "-AS-" and "-ADX-"	1x SUBD 25 connector for analog inputs and outputs with Yamaha pin-out DB25-XLR M/F (-AS- version only) 1x SUBD 25 connector for GPIO and AES/EBU inputs and outputs with proprietary pin-out (-ADX- version only) 2x XLR Female + 2x XLR Male connectors for analog inputs and outputs on front face (-ADX- version only) 1x Neutrik EtherCon connector "Main" with PoE capability 2x SFP cages to plug up to 2x Gigabit Media convertors Optical Fibber or RJ45
Audio Inputs/Outputs	
Number of Inputs	2x to 4x analog mic/line or AES/EBU inputs and 4x digital inputs from Dante network
Number of Outputs	2x to 4x analog or AES/EBU outputs and 4x digital outputs to Dante network
MIC / Line Audio Inputs Technical Specifications (All measures at fs=48kHz & 22Khz BW)	
Sampling Frequency	44.1 kHz / 48 kHz
A/D resolution	24 bits
Input specification	Balanced MIC/Line inputs on Euroblock or SUBD connectors
Input maximum level	+12 dBu
Analog Gain Range	0 to +60 dB (20 values, 3dB step)
Input sensibility	+12 dBu to -48 dBu
Input Impedance	3.5 kΩ (balanced)
E.I.N. @Rs=150Ω G=+60dB	-123 dBu
Dynamic Range	> 97 dB A-weighted
THD+N @1KHz, +6dBu, G=0dB	< -82 dB (0.0079%)
Frequency response	20Hz – 20kHz (+0 / -1 dB)
Phantom Power	+48 V (individually controllable for each channel)

Line Audio Outputs Technical Specifications (All measures at fs=48kHz & 22Khz BW)	
Sampling Frequency	44.1 kHz / 48 kHz
A/D resolution	24 bits
Output specification	Balanced analog outputs on Euroblock or SUBD connectors with <100Ω impedance
Output level at 0dBfs	+12dBu
Frequency response	20Hz – 20kHz (+0 / -1 dB)
Dynamic Range	>100dB A-weighted
THD+N @1KHz, -6dBFS, G=0dB	< -88 dB (0.004%)
Remote Control Environment	
OS Supported	Web 2.0 Interface compatible HTML5 (iOS, Android, Mac OS, Windows, Linux, …)

References / Part number	
AVDT-BOB-AE4io	2xRJ45 (1xPOE) and 2x Mic/Line Inputs + 2x Line Outputs on Euroblock
AVDT-BOB-AEG6io	2xRJ45 (1xPOE) and 2x Mic/Line Inputs + 4x Line Outputs + 4xGPIO on Euroblock
AVDT-BOB-AE8io	2xRJ45 (1xPOE) and 4x Mic/Line Inputs + 4x Line Outputs on Euroblock
AVDT-BOB-ADE8io	2xRJ45 (1xPOE) and 2x Mic/Line Inputs + 2x Line Outputs + 4x GPIO + 1x stereo AES3 Input + 1x stereo AES3 Output on Euroblock
AVDT-BOB-AS8io	1xNeutrik EtherCon (PoE) + 2xSFP cages and 4xMic/Line Inputs + 4xLine Outputs on DSub
AVDT-BOB-ADX8io	1xNeutrik EtherCon (PoE) + 2xSFP cages and 1x stereo AES3 Input + 1x stereo AES3 Output + 4xGPIO on DSub on rear side and 2x Mic/Line Inputs + 2x Line Outputs on XLR3 on front side

Information, contact and support

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Production information:
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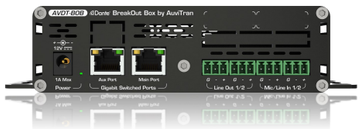
phone: +33 4 76 04 70 69

Technical support:
support@auvitran.com

SCAN ME

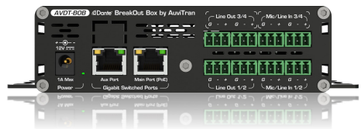
Compact… Smart… Multipurpose !

AVDT-BOB-AE4io



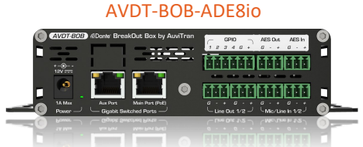
AVDT-BOB-AEG6io

AVDT-BOB-AE8io



AVDT-BOB-AS8io

AVDT-BOB-ADE8io



AVDT-BOB-ADX8io (Front)

AVDT-BOB-ADX8io (Rear)

Dante™

AVDT-BOB by AuviTran

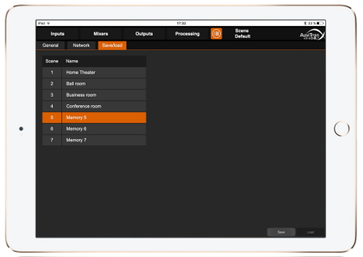
Smart Compact Dante™ BreakOut Box

MicLine/AES inputs and analog/AES outputs with Remote Digital Mixing

High pass filter and equalizations

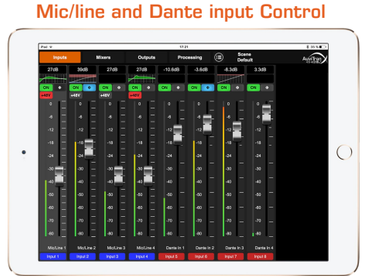
Limiter Compressor Noise gate

Scene Load/Save



Embedded Mixing and Processing remotely controlled by any device: PC, Mac, Tablet or Smartphone

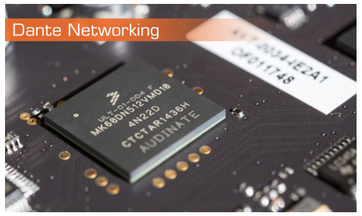
Mic/line and Dante input Control



Mixing processing

Analog and Dante Outputs Settings

AVDT-BOB Overview



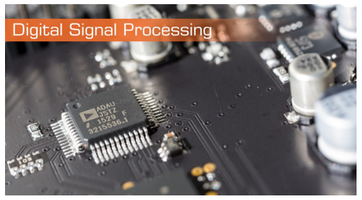
The AVDT-BOB is a compact multipurpose Dante™ break out box.

The AVDT-BOB has, depending on the version, 2 or 4 mic / line and 2 or 4 analog outputs and 4 input channels and 4 output channels over Dante.

Embedded Ultimo Dante processor allows to receive from / send to up to 4 channels on a Dante Network. Its network connectivity allows to remotely control, monitor any Dante parameters and to be compatible with any Dante software and tools.

State-of-the-art analog microphone preamplifiers gives to the AVDT-BOB a very high audio dynamic and quality at a very contained price.

Theses preamplifiers are coupled to high quality analog ladder-step gain controllers that allows to achieve a 60dB gain range, 3dB step, with an Equivalent Input Noise (EIN) as low as -125dBu.



The AVDT-BOB has a DSP to process and mix audio signal at the source and at the output.

A powerful embedded Digital Signal Processor gives to the user the power of high pass filters, parametric equalizations, dynamic compressions and fine-pitch digital gain adjustments.

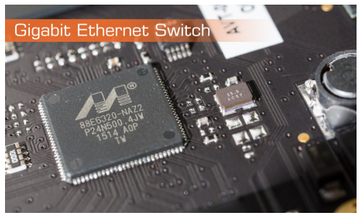
It also contains a digital mixing matrix that allows to mix analog and Dante channels and route them to any output.

The AVDT-BOB features a dual core ARM processor associated with a large amount of flash memory for a universal and multiplatform remote control over IP (iOS, Android, Windows, Mac OS, Linux).

This RISC processor ARM Cortex M4 M0 runs in the AVDT-BOB a Web 2.0 server for a remote control and monitoring efficient, customizable and user friendly.

The interface uses open standards HTML5 and JavaScript for multi OS compatibility.

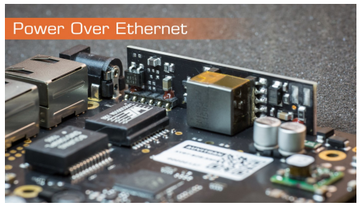
This universal interface drives mic/line preamps, digital processing (DSP) and storages / reload of scenes.



The AVDT-BOB integrates an internal 5 ports Gigabit switch to ease the cabling, to increase the throughputs and to reduce the latencies.

This gigabit switch links the external Gigabit ports (i.e. 2x RJ45 or 2x SFP modules and an EtherCon depending of part number) with the Dante Ultimo chip and the embedded double core ARM Cortex M4+M0 microcontroller.

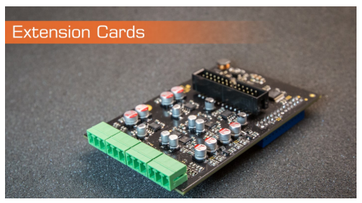
This switch guaranties a very low latency between the Dante chip and other Dante devices and allows to Daisy Chained the AVDT-BOB together with other Dante devices without necessarily requesting any external switch devices.



The AVDT-BOB embeds an internal PoE module for power and communication with a single Ethernet cable.

This PoE module provides up to 12W power through the port Gigabit "Main" of AVDT-BOB suppresses the need of feeding locally external power supply and allows a single Ethernet cable for communication and power supply.

The AVDT-BOB additionally incorporates a redundant power management and features a lockable 6.4mm Jack connector for a standard 12V DC external power supply.



Native extension connectors on the AVDT-BOB Mother Board allows to add various functionalities thanks to a panel of Daughter Boards.

Extension boards are available to extend the AVDT-BOB capabilities. Existing extension cards are: 2x analog cards with 2x Mic/Line and 2x analog out on EuroBlock or on SubD connectors and 2x digital cards with AES/EBU and GPIOs The hardware is ready for quick design of new interfaces or for specific requests.

The AVDT-BOB box is made of a very lightweight, robust and smart extruded aluminum.

This box was designed to bring to the user many mounting options, thanks to side rails that allows to attach any type of fixations.

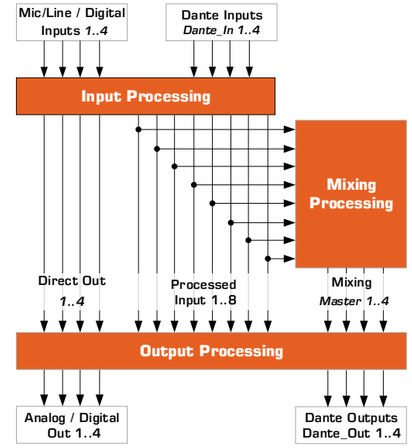
The AVDT-BOB is delivered with side ears that can be mounted in any positions.

An optional mounting kit allow to interconnect up to 3x AVDT-BOB devices and so to build a Dante unit with 12x Mic/Line inputs and 12 analog outputs in the only space of a 1U 19" rack.

AVDT-BOB Digital Signal Processing Overview

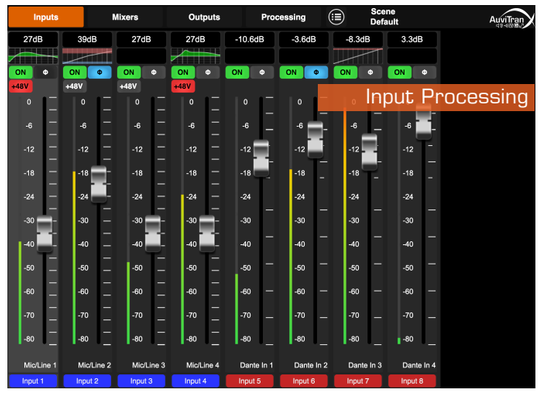
The AVDT-BOB manages 2 kinds of inputs and 2 kinds of outputs:

- 2 to 4 inputs "Mic/Line" or "Digital" are coming from the **Mic/Line** In or **AES/EBU** connectors
- 4 Dante network inputs are available through the Gigabit Ethernet **Main** or **Aux** ports.
- 2 to 4 outputs "Analog" or "Digital" are sent to the **Line Out** or **AES/EBU** connectors.
- 4 Dante network outputs are sent through the Gigabit Ethernet **Main** or **Aux** ports.



The AVDT-BOB DSP is divided in 3 main processing blocks interconnected:

- The Input processing block
- The Mixing processing block
- The Output Processing block



The Input Processing block manages up to 4 Mic/Line or digital inputs and 4 Dante inputs. It delivers 4 Direct Out (just after preamp gain or phase inverter process) and 8 processed inputs that are sent to the Mixing Processing and to the Output Processing:

4x Equalizations plus Limiter Compressor plus Noise gate processing can be assigned to 4 inputs (i.e. Mic/Line or Dante inputs).

8x faders allow to manage the Mic/Line preamp gains or digital Dante input gains.

Each input can be enabled or muted and inverted.

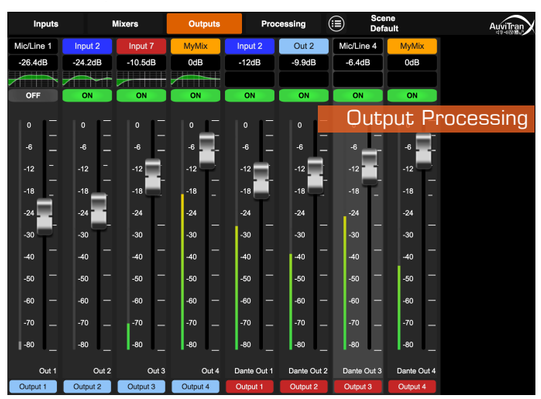
48V Phantom power can be set individually to any Mic/Line input.

The Mixing Processing block manages 4 independent Master mixers that are sent to the Output Processing Block.

Each Master mixer can mix up to 8 inputs (i.e. the Mic/Line or Digital and the Dante processed inputs) via individual faders controlling the input mixing gains.

Each input of a Master mixer can be enabled or muted.

Each mixer has an Master fader controlling the Master mixer output level.



The Output processing block manages up to 4 analog or digital outputs and the 4 Dante outputs.

The source of any output can be selected between one of the 4 DirectOut or the 4 processed inputs (Mic/line, AES/EBU or Dante) or the 4 Master mixers.

4x Equalizations plus Limiter Compressor plus Noise gate processing are available on the 4 analog outputs.

8x faders allow to manage the output gains.

Each output can be enabled or muted.