## Series

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### INTRODUCING VIO SERIES

In the last 10 years, since DVA series' launch on the pro audio market, dBTechnologies has set new standards in the sound reinforcement industry, bringing the benefits of line array technology to a much wider range of users.

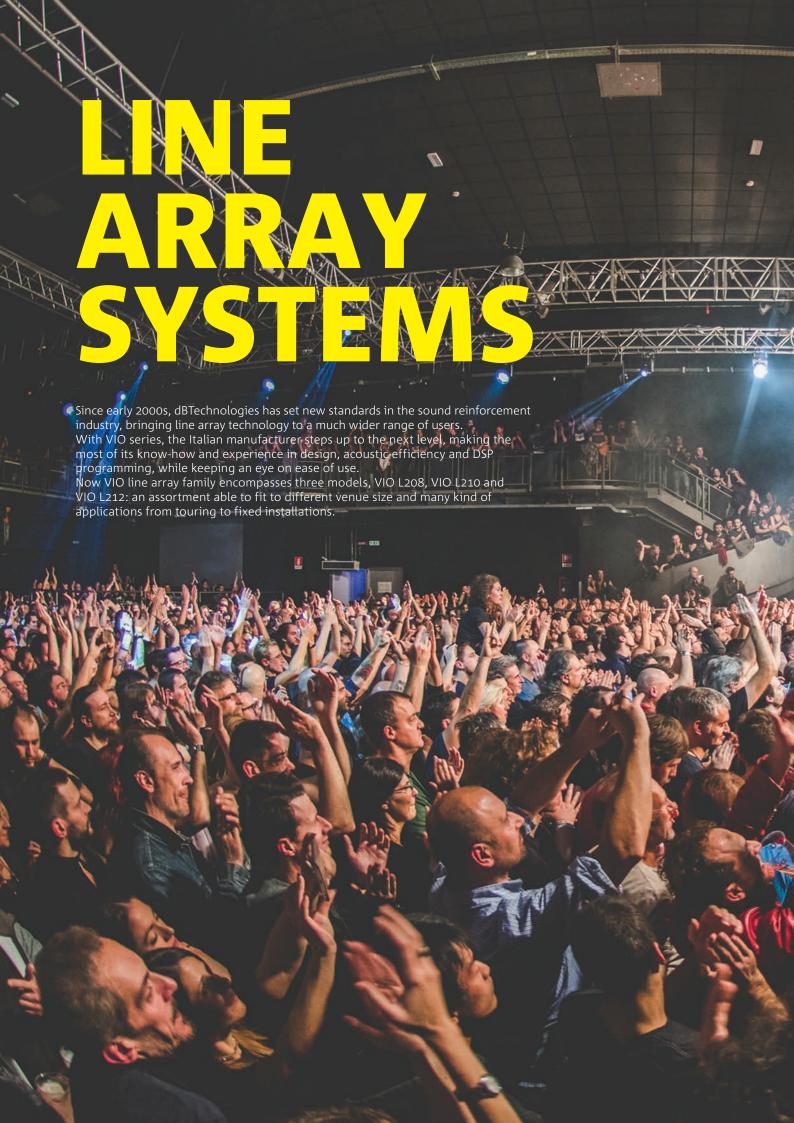
With the new VIO series, dBTechnologies is ready to step up to the next level, presenting a fully powered line array and sub series intended for large sound reinforcement applications.

Making the most of many years experience developing powered speaker systems, alongside with innovative solutions in acoustic design and digital sound processing, dBTechnologies created a line array solution able to face smoothly professional production requirements.

Freshly designed wooden cabinets, premium components, last generation amplifying technology, as well as an advanced DSP programming, come together to deliver imposing sound pressure levels combined with an outstanding control of dispersion and a detailed, clear cut audio performance. In addition to that, all the VIO systems can be remotely controlled via RDNet protocol with Aurora Net. Last but not least, the line array modules features an integrated rigging system and dedicated accessories in order to ensure simple and quick configuration and set up operations.

# SMARIER LIGHTER STRONGER











3-WAY ACTIVE LINE ARRAY SYSTEM

MODULAR SLOT FOR NETWORK AND DIGITAL AUDIO EXPANSION CARDS (RDNET CARD INSTALLED)

3200W RMS DIGIPRO G4 AMP TECHNOLOGY

**NFC™ + FRONT LED IDENTIFICATION SYSTEM** 

**FULL RANGE SMPS WITH PFC** 

SYSTEM TEST FOR QUICK TRANSDUCERS DIAGNOSTICS

HORN-LOADED MIDRANGE FOR IMPROVED
ACOUSTIC EFFICIENCY AND COVERAGE ACCURACY

**IPOS INTELLIGENT POWER-ON SEQUENCE** 

EXCLUSIVELY DESIGNED WAVEGUIDE FOR MAXIMUM HF DIRECTIVITY CONTROL

**RUBBER MAGNETIC RAINCOVER INCLUDED** 

ADVANCED DSP FEATURING LINEAR PHASE FIR FILTERS

**ONLY 52.9 KG PER MODULE** 

ACOUSTIC COMPATIBILITY WITH VIO L210 USED AS DOWN-FILL

**BUILT-IN INCLINOMETER** 

#### **LARGE FORMAT LINE ARRAY MODULE**

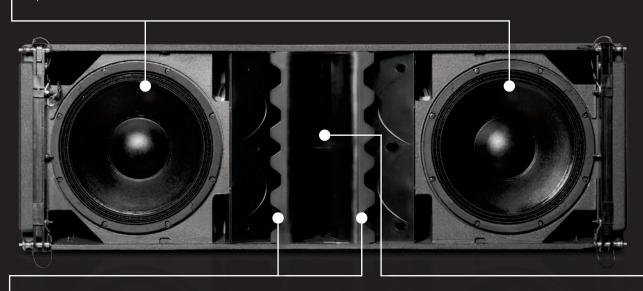
VIO L212 is the first dBTechnologies' full scale line array module designed for large touring sound reinforcement applications, concurrently providing mighty output capability, optimized coverage behaviour, alongside with rapid and easily configurable rigging solutions. dBTechnologies was able to pack great sound pressure levels into one of the most compact and lightest active 2x12" line array systems.

Speaker Type	3-Way Active Line Array Module	
Usable Bandwidth [-6dB]	55 - 18.600 Hz	
Max SPL	One Unit: 142 dB	
HF	2 x 1.4", 3" v.c Neodymium	
MF	4 x 6.5" , 2" v.c Neodymium	
LF	2 x 12", 3" v.c Neodymium	
Horizontal Directivity	90°	
Vertical Directivity	depends on array size and configuration	
Amplifier	3200 W RMS [2x 1600 W RMS Class-D Digipro® G4]	
Cooling	Convection, Internal fan	
Power Supply	Full-range SMPS with PFC (100V~-240V~, 50-60Hz)	
Controller	DSP 32 bit	
AD/DA Converter	24 bit/96 kHz	
Limiter	Dual Active Multiband Peak, RMS, Thermal	
Processing (filters)	FIR Linear phase	
Signal Input	1x XLR female, balanced	
Signal Output	1x XLR male, balanced	
Power Socket	1x PowerCON TRUE1 In 1x PowerCON TRUE1 Out	
Expansion card	RDNet Card (1x RJ45 IN 1x RJ45 Link) Dante Card [Optional]	
Controls	1 x Speaker Coupling (7 presets) 1 x High pass filter Rotary Encoder (8 presets) 1 x HF Compensation (8 presets) 1 x System Test Button	
Special Features	NFC™ and Frontal LED Identification System 380V Resistant SMPS IPOS Intelligent Power-On Sequence Opto-isolated floating pre-amp System Test (transducers diagnostics) Inclinometer	
Housing	Multiplex plywood - Polyurea painting	
Housing Design	Trapezoidal	
Handles	4 x handles (2 on each side)	
Rain cover	Included [Rubber magnetic]	
Rigging Points	3 points rigging hardware	
Width x Height x Depth	1100 x 380 x 450 mm (43.31 x 14.96 x 17.72 in)	
Weight	54.4 kg (119.93 lbs)	

#### 3-WAY **LINE ARRAY**

#### **Premium components** sealed in a unique acoustic design

2x12" neodymium woofers (3" v.c.) placed to the outsides in a dipolar arrangement provide an accurate transient response and an extended and controlled low-end reproduction.



#### Acoustic efficiency

The mid-range section is mounted in the center of the cabinet in a horn-loaded configuration which dramatically contributes to the system's acoustic efficiency. Midrange frequencies are delivered by 4x 6.5" neodymium woofers (voice coil 2").

#### The waveguide

The 2x 1.4" neodymium compression drivers (voice coil 3") have been mounted to a waveguide which contributes to create a cylindrical wavefront, much to the advantage of the system's intelligibility and throw capabilities.

#### Transport & Installation Accessories

#### **DRK-212**



Flybar for VIO L212. For flown and groundstacked configurations.

#### TF-VIO<sub>2</sub>



Transition frame for flying VIO L210 below VIO I 212

#### DT-VIOL212



Touring cart for 4 VIO L212 modules. [EKF-1 accessory for stack configurations not included].

#### DO-VIOL212



Dolly transport for one VIO L212.

#### DT-DRK212



Touring cart for two DRK-212 flybars and cables storage.

#### EFK-1



Extension feet kit for stack configuration on DT-VIOL212



#### Class-D Amplifier with full-range power supply and PFC

Each VIO L212 acoustic engine is driven by 2 Digipro G4® Class-D 1600W amplifiers, providing each system with a total of 3200W RMS. The switched mode power supply is equipped with PFC (Power Factor Corrector) which greatly improves the efficiency of the system. Performances of the amplifier are very stable and consistent, regardless of the quality of the mains and fluctuations. This also grants a worldwide compatibility of the power supply (from 100V to 240V 50/60Hz) and limits power consumption. Furthermore, the power supply is 380V resistant, so the final amplifiers will be switched off in case of an undesired strike of 380V current, saving them from any damage.



#### Advanced pre-amplifier

The amp allows users to run **system-test** on electronics and transducers before and after use and a real time impedance control.

The preamplifier's floating audio input design grants a digital optical isolation between earth ground from the mains and the audio ground flowing into the preamplifier board. This galvanic isolation greatly improves resistance to interferences and any unwanted buzzing and noises.

The USB port allows firmware upgrades and diagnostics analysis, by downloading telemetry data on system performances and failures.

#### IPOS Technology

Exclusive technology of VIO L212 amplifier is IPOS (Intelligent Power-On Sequence), a circuit that controls the sequence in which the main power supplies of all units within an array ramp up. As a result, each module is switched on in a different time frame, keeping the overall system's inrush current low, even in very big PA system deployments.

#### CABLES

DAC-100	XLR-XLR audio cable (100 cm).	
DPTC-100L	PowerCON TRUE1-PowerCON TRUE1 power link cable (100cm).	
DPTC-1000M	Mains PowerCON TRUE1 cable (10m). Different plugs available for several countries.	
DPTC-2000M	Mains PowerCON TRUE1 cable (20m). 16A CekON.	
RDC-45F	RJ45 to XLR 3 poles female conversion cable, 6 cm length. The cable converts from RDNet RJ45 to XLRF.	
RDC-45M	RJ45 to XLR 3 poles male conversion cable, 6 cm lenght. The cable converts from RDNet RJ45 to XLRM.	
RJ45-RJ45-150	RJ45-RJ45 link cable (150cm) for RDNet speakers. EtherCON connectors.	
RJ45-RJ45-75	RJ45-RJ45 link cable (75cm) for RDNet speakers. EtherCON connectors.	
CAT6-CAT6-100	CAT6-CAT6 link cable (100cm) for DANTE™ AoIP and RDNet. EtherCON connectors.	
CAT6-CAT6-500	CAT6-CAT6 link cable (500cm) for DANTE™ AoIP and RDNet. EtherCON connectors.	

## UNPAIRED SOUND QUALITY

#### Audinate Dante™ Ready

The preamplifier is equipped with a modular slot for expansion cards. As a default, VIO L212 is equipped with dBTechnologies RD-Net card, for real time remote control via **Aurora Net** software.

Furthermore, the preamplifier is ready for future upgrades with Audinate Dante $^{\text{TM}}$  AoIP protocol. To help users in this configuration, VIO L212 comes with built-in technologies: **Near Field Communication** (NFC $^{\text{TM}}$ ) proximity sensors are used to determine the position of each box within an array.

This technology, together with a hi-brightness LED bulb on the front of the enclosure, contributes to help the user to recognize, identify and match each box physical position on the remote control software Aurora Net.

## TOUR GRADE ENCLOSURE

VIO L212's cabinet is made of plywood reinforced with a black polyurea finish and provided with 2 handles per side and a rubber magnetic raincover protecting the amp module. dBTechnologies team has been able to contain the overall weight of the box to only 54.4 (119.93 lbs): a feature which can dramatically contribute to simple and lower-cost transport and storage operations.









#### Smart rigging and full compatibility with VIO L210

Just like smaller systems in the VIO family, L212 comes with VIO's peculiar 3-point rigging system allowing a smooth and fast set up of the system. The 2 front links easily connect the modules from every angle. The back central rigging strand is equipped with a hook type link to set the relative splay angles determined via prediction software ranging from 0.5° to 8°. While lifting up the array, the rigging strand will automatically block the systems at the preset angles with no heavy lifting required.

A precise resolution starting from 0.5° steps helps to get smooth aiming at long distances.



Splay angles can be set directly in the dedicated transport cart DT-VIOL212 which houses 4 modules. The same cart also acts as a solid base in case of stacked configurations thanks to accessory feet kit EFK-1.

A single-module wheel-board DO-VIOL212 is also available to ease transport of single cabinets.





The dedicated flying frame DRK-212 features 2 hooks facilitating precise inclination of the array both for positive or negative angles. DT-DRK212 is the dedicated cart allowing to transport and store 2 flying frames and several cables.

TF-VIO2 adaptor allows to rig VIO L210 as down-fill cabinets under VIO L212 arrays in order to create perfectly compatible hybrid systems.







2-WAY ACTIVE LINE ARRAY SYSTEM

NETWORK READY WITH AN INTEGRATED RDNET PORT

**WOODEN ENCLOSURE COATED WITH POLYUREA** 

SMOOTH CONFIGURATION AND SET UP OPERATIONS THANKS TO THE INTEGRATED 3-POINT RIGGING HARDWARE

**UP TO 6 MODULES IN A SINGLE 16A 230V CIRCUIT** 

ALUMINIUM PHASE PLUGS FOR AN EXTREMELY CONSTANT DISPERSION

ADVANCED DSP FEATURING LINEAR PHASE FIR FILTERS FOR IMPROVED INTELLIGIBILITY

EXCLUSIVELY DESIGNED HF WAVEGUIDE FOR IMPRESSIVE THROW DISTANCE AND PHASE COHERENCE

LIGHTWEIGHT NEODYMIUM MAGNETS FOR ALL TRANSDUCERS

ON-BOARD DOUBLE ROTARY EQ CONTROL SYSTEM FOR PRECISE TUNING

**BUILT-IN INCLINOMETER** 

#### **INTRODUCTION TO VIO L210**

As a result of many years' experience developing solutions for powered line array systems, VIO L210 reaches the next level among dBTechnologies' speaker range aimed at larger sound reinforcement applications. The internal acoustic design and sound processing developed by dBTechnologies' R&D department merge to deliver outstanding performances in terms of sound pressure, coverage coherence, intelligibility and sound definition.

Speaker Type	2-Way Active Line Array Module		
Usable Bandwidth [-6dB]	67 - 20.000 Hz		
Frequency Response [+/- 3dB]	78 - 18.100 Hz		
Max SPL	One Unit: 135 dB		
HF	1 x 1.4", 3" v.c Neodymium, Titanium diaphragm		
LF	2 x 10", 2.5" v.c Neodymium		
Phase Correction	Aluminum Phase Plug		
Horizontal Directivity	100°		
Vertical Directivity	depends on array size and configuration		
Amplifier	900 W RMS Class-D Digipro® G3		
Cooling	Convection		
Power Supply	Auto-range SMPS		
Controller	DSP 28/56 bit		
AD/DA Converter	24 bit/48 kHz		
Limiter	Dual Active Multiband Peak, RMS, Thermal		
Processing (filters)	FIR Linear phase		
Signal Input	1x XLR female, balanced		
Signal Output	1x XLR male, balanced		
Network	RDNet remote control RJ45 connector IN/OUT		
Power Socket	1x PowerCON TRUE1 In 1x PowerCON TRUE1 Out		
Controls	1 x Speaker Coupling (7 presets) 1 x HF Compensation (8 presets) 1 x Input Attenuation Rotary Switch		
Special Features	Opto-isolated floating pre-amp Inclinometer		
Housing	Multiplex plywood - Polyurea painting		
Housing Design	Trapezoidal 10°		
Handles	1 x Side, 2 on back		
Rain cover	Included		
Rigging Points	Integrated rigging hardware		
Width x Height x Depth	720 x 320 x 520 mm (28.35 x 12.6 x 20.47 in)		
Weight	28.6 kg (63 lbs)		

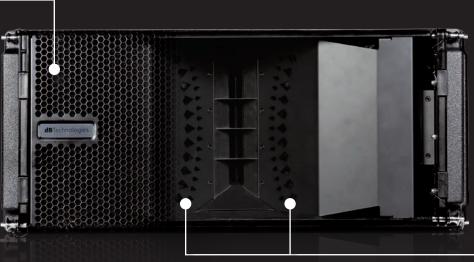
## UNIQUE ACOUSTIC DESIGN

#### Functional yet unobtrusive design

Made of solid multiplex plywood coated with a black polyurea finish, the housing is fronted with a black grille which complete a sober, unobtrusive look which can easily adapt to any scenic design. The speaker's cabinet is easy to tote thanks to its 4 handles, 1 per side and 2 on the back, and its amplifier module is protected with an integrated black raincover.







#### Phase plug

Acoustic enclosure is completed by two massive aluminum phase plugs located in front of both 10" woofers. Their external surface is the prosecution of the constant directivity high-frequency waveguide.

Each phase plug features 26 diamond-shaped holes essential to reduce the interference between the two LF emission points and to improve frequency and transient response.

#### Transport & Installation Accessories

#### DT-VIOL210



Touring cart for 4 VIO L210 modules and a DRK-210 flybar. Including 4 poles and a wooden lid.

#### DRK-210



Flybar for VIO L210. Suitable for fly and stack use.

#### FSA-VIOL210



Adapter to fly VIO L210 down VIO S118.

#### GSA-VIOL210



Adapter to stack VIO L210 above VIO S118.

#### TF-VIO1



Transition frame for flying VIO L208 below VIO L210.

#### AF-VIO1

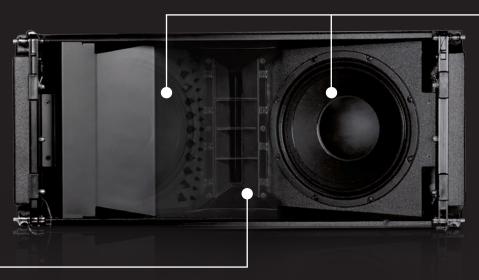


Adapter frame for flying VIO L208 below VIO S118 / VIO L210 and groundstacking VIO L208/L210 above any VIO sub.



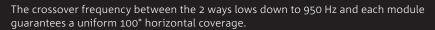
#### Woofers

The two premium 10" neodymium transducers, positioned in a V form and sealed in a bass reflex enclosure, have been custom-designed to improve efficiency. In facts, their voice coils, made of copper plus aluminum coating, are designed to last even in the most demanding conditions, providing an accurate transient response and an extended low-end reproduction. Furthermore, these transducers have been specifically designed for the VIO in order to make the most of the system.



#### **High-frequency**

One single 3" voice coil compression driver (1.4" exit throat) accurately delivers high frequencies. The waveguide contributes to create a cylindrical wavefront, allowing a very precise high-frequency directivity control, much to the advantage of the system's throwdistance.





#### BAGS & COVERS

#### CABLES

#### TC-VIOL210





Transport cover for DT-VIOL210. Waterproof.

DAC-70	XLR-XLR audio cable (70 cm).
DCK-27T	Cable-Set containing 2x DAC-70 and 2x DPTC-70L.
DPTC-70L	PowerCON TRUE1-PowerCON TRUE1 power link cable (70cm).
DPTC-1000M	Mains PowerCON TRUE1 cable (10m). Different plugs available for several countries.
DPTC-2000M	Mains PowerCON TRUE1 cable (20m). 16A CekON
RDC-45F	RJ45 to XLR 3 poles female conversion cable, 6 cm length. The cable converts from RDNet RJ45 to XLRF.
RDC-45M	RJ45 to XLR 3 poles male conversion cable, 6 cm lenght. The cable converts from RDNet RJ45 to XLRM.
RJ45-RJ45-150	RJ45-RJ45 link cable (150cm) for RDNet speakers. EtherCON connectors.
RJ45-RJ45-75	RJ45-RJ45 link cable (75cm) for RDNet speakers. EtherCON connectors.

#### **ADVANCED DSP**

#### Advanced DSP paired with notable efficiency

The module features a 900W RMS Class D Digipro G3 highly efficient amplifier allowing the system to achieve up to 135 dB SPL. High efficiency is a key feature of the VIO L210: it is actually possible to connect up to 6 modules on a single 16A 230V circuit.

The amplifier also features an auto-range circuit and is fed via PowerCON TRUE1 waterproof connectors.

A perfectly coherent coverage is granted even at a long distance thanks to advanced sound processing with FIR filters. The pre-amp module is also equipped with a digital optical isolation on the signal input stage, which makes the system more resistant to any interference.



#### FLYING HARDWARE

#### Smart rigging hardware & accessories

The VIO L210 comes with a built-in 3-point rigging system allowing a smooth and fast set up of the system. The 2 front links easily connect the modules from any angle.

The back central rigging strand is equipped with a hook type link to set the relative splay angles, determined via the prediction software dBTechnologies Composer.

While lifting up the array, the rigging strand will automatically block the system at the preset angles. Splay angles can be set directly while the system is still located on the transport cart DT-VIOL210, which houses up to 4 modules.











#### Flying and stacking cabinets

The dedicated flying frame DRK 210 comes with 2 hooks whose design allows to set a more precise inclination of the array. The DRK 210 can also serve as a groundstacking accessory to secure VIO L210 cabinets on a VIO S318 subwoofer. When not in use, the flying frame can be fixed and stored on the top lid of DT-VIOL210 transport cart. Even details like cables mounts, or the attachment of a laser inclinometer are included in the design.



#### Complete EQ controls

VIO L210 features a double rotary user interface to process the system manually. The first rotary is dedicated to low frequency adjustments in order to control coupling effects depending on the array dimensions. The second rotary helps to compensate for the high frequencies loss due to throw distance.

Both rotaries features several accurate presets, while the prediction software dBTechnologies Composer provides for more precise configurations. Any preset can be easily changed remotely via dBTechnologies Network.



#### Rotary 1 - Speaker coupling presets

Depending on the dimension of the array, the coupling effect affects frequency response. This dedicated "speaker coupling" control allows the user to attenuate the mid-low frequency according to the total number of line array cabinets.

	SPEAKER COUPLING				
	2 → 6	Α			
ETS	7 → 8	В			
BIN	9 → 10	С			
NUMBER OF CABINETS	11 → 12	D			
	13 → 14	Е			
/BE	more than 15	F			
١	Bass boost	G			
	service				

#### Rotary 2 - High Freq. compensation presets

Being a considerable longthrow system, VIO L210 is capable to provide incredibly flat response all over the target area also thanks to the high frequencies compensation control. Choosing among the different presets, allows the user to compensate high frequencies loss due to air absorption in each cabinet.

HIGH FREQ. COMPENSATION			
FLAT 1			
Œ	front fill 0 → 5 [16]	2	
HROW DISTANCE m	6 [17] → 20 [66]	3	
	21 [67] <b>→</b> 30 [98]	4	
	31 [99] → 40 [131]	5	
	41 [132] <b>→</b> 50 [164]	6	
	51 [165] <b>→</b> 60 [197]	7	
Ӗ┃	more than 61 [198]	8	





2-WAY ACTIVE LINE ARRAY SYSTEM

FULL COMPLIANCE WITH AURORA NET REMOTE CONTROL SOFTWARE

DESIGNED FOR OPTIMIZED ACOUSTIC AND MECHANICAL COMPATIBILITY WITH VIO L210

DSP PRESETS FOR MAXIMUM ACOUSTIC CUSTOMIZATION

NEW ACOUSTIC DESIGN FEATURING ALL-IN-ONE PHASE PLUG AND HF HORN FRONT PANEL

BUILT-IN FLYING HARDWARE ALLOWING FAST & EASY SET UP AND FLYING OPERATIONS

LOW-LATENCY PROCESSING THANKS TO POWERFUL DSP WITH LINEAR-PHASE FIR FILTERS

**BUILT-IN INCLINOMETER** 

#### **VIO GOES COMPACT WITH L208**

Offering lighter and faster rigging elements, featuring an unique acoustic design, combining long throw and detailed audio performance, the new VIO L208 is both a powerful yet compact stand-alone line array system, and a fully compatible down-fill for VIO L210 + VIOL208 hybrid systems, completed by VIO S Active subwoofers.

	T
Speaker Type	2-Way Active Line Array Module
Usable Bandwidth [-6dB]	75 - 20.000 Hz
Frequency Response [+/- 3dB]	85 - 18.100 Hz
Max SPL	One Unit: 133.5 dB
HF	1 x 1.4", 3" v.c Neodymium
LF	2 x 8", 2" v.c Neodymium
Phase Correction	All-in-one panel with phase corrector
Horizontal Directivity	100°
Vertical Directivity	depends on array size and configuration
Amplifier	900 W RMS Class-D Digipro® G3
Cooling	Convection
Power Supply	Auto-range SMPS
Controller	DSP 28/56 bit
AD/DA Converter	24 bit/48 kHz
Limiter	Dual Active Multiband Peak, RMS, Thermal
Processing (filters)	FIR Linear phase
Signal Input	1x XLR female, balanced
Signal Output	1x XLR male, balanced
Network	RDNet remote control RJ45 connector IN/OUT
Power Socket	1x PowerCON TRUE1 In 1x PowerCON TRUE1 Out
Controls	1 x Speaker Coupling (7 presets) 1 x HF Compensation (8 presets) 1 x Input Attenuation Rotary Switch
Special Features	Opto-isolated floating pre-amp Inclinometer
Housing	Multiplex plywood - Polyurea painting
Handles	1 x Side, 2 on back
Rain cover	Included
Rigging Points	Integrated 3-point flying hardware
Width x Height x Depth	600 x 260 x 390 mm (25.98 x 10.23 x 15.35 in)
Weight	18.1 kg (39.9 lbs)

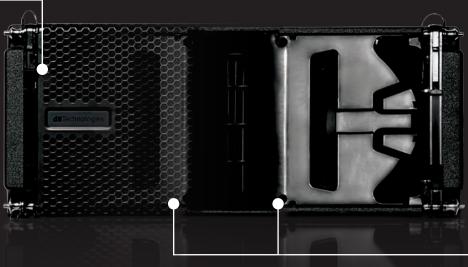
## ULTRA-EFFECTIVE ACOUSTIC DEISGN

#### **Compact & Lightweight**

VIO L208 is a 2-way active line array system equipped with 2x 8" neodymium woofers and 1x 1.4" neodymium compression driver (3" voice coil). Everything enclosed in a sturdy wooden cabinet.









#### The front panel

The transducers are positioned behind an all-in-one panel which acts as a phase-plug and a HF horn. The waveguide behind this panel contributes to the creation of a cylindrical wavefront, much to the advantage of hi-freq throw distance

#### TRANSPORT & INSTALLATION ACCESSORIES

#### DT-VIOL208



Touring cart for 4 VIC L208 modules and a DRK-208 flybar.



#### **DRK-208**



Flybar for VIO L208.

#### DSA-VIOL208



Groundstack adapter for VIO L208 on VIO S118 and S118R.

#### TF-VIO1



Transition frame for flying VIO L208 below VIO L210.

#### AF-VIO1

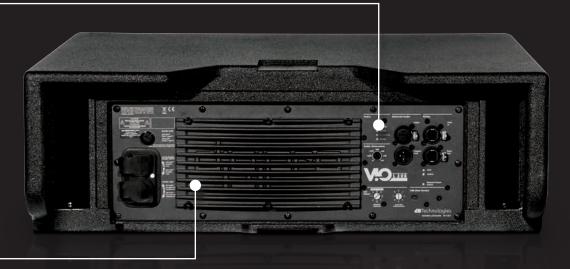


Adapter frame for flying VIO L208 below VIO S118 / VIO L210 and groundstacking VIO L208/L210 above any VIO sub.



#### **FIR Filters**

A perfectly coherent emission is granted thanks to advanced sound processing with FIR filters. The pre-amp module is also equipped with a digital optical isolation, guaranteeing interference-free input signal. VIO L210 features on board presets allowing users to process the system manually. Any preset can be easily changed remotely via Aurora Net control software.



#### Amplifier

Each module of VIO L208 is driven by a Class-D Digipro G3 900W amp module with auto-range PSU.

#### Raincover included

The amp module is always protected from rain thanks to the integrated raincover.



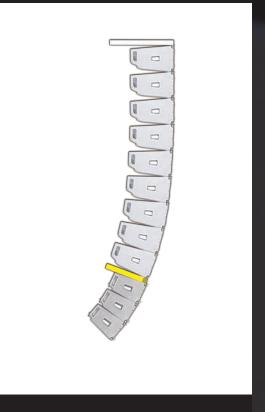
#### **C**ABLES

DAC-70	XLR-XLR audio cable (70 cm).
DCK-27T	Cable-Set containing 2x DAC-70 and 2x DPTC-70L.
DPTC-70L	PowerCON TRUE1-PowerCON TRUE1 power link cable (70cm).
DPTC-1000M	Mains PowerCON TRUE1 cable (10m). Different plugs available for several countries.
DPTC-2000M	Mains PowerCON TRUE1 cable (20m). 16A CekON
RDC-45F	RJ45 to XLR 3 poles female conversion cable, 6 cm length. The cable converts from RDNet RJ45 to XLRF.
RDC-45M	RJ45 to XLR 3 poles male conversion cable, 6 cm lenght. The cable converts from RDNet RJ45 to XLRM.
RJ45-RJ45-150	RJ45-RJ45 link cable (150cm) for RDNet speakers. EtherCON connectors.
RJ45-RJ45-75	RJ45-RJ45 link cable (75cm) for RDNet speakers. EtherCON connectors.

#### **EASY RIGGING**

The dedicated 3-point flying frame DRK-208 allows to set a precise inclination of the array and is ready to carry an optional inclinometer laser pointer. When not in use, the flybar can be easily stored in the transport cart.





## HARDWARE & ACCESSORIES

AF-VIO1 accessory allows you to rig the module under a VIO S118 flyable subwoofer or, alternatively, to use VIO L208 as downfill in larger VIO L210 systems. The same accessory also serves as safety interface in stacked configuration on VIO subs.

A lighter accessory transition frame TF-VIO1 allows the installation of VIO L208 under flown VIO L210 only.



## A COMPlete range of line arrays system requests multiple solutions to deliver lower frequencies in accordance with the characteristics of the venue and application. dBTechnologies R&D developed 4 different active subwoofers for VIO family to cover different acoustic requirements.







2x 18" NEODYMIUM WOOFERS

ON BOARD DELAY UP TO 9.9MS

3200W RMS DIGIPRO G4 AMP TECHNOLOGY

**CARDIOID STACK PRESET BUTTON** 

**FULL RANGE SMPS WITH PFC** 

**NFC™ + FRONT LED IDENTIFICATION SYSTEM** 

**SMPS 380V RESISTANT** 

**AUDIO EXPANSION CARDS** 

SYSTEM TEST FOR QUICK TRANSDUCERS
DIAGNOSTICS

Ω

FREQUENCY RANGE EXTENDING DOWN TO 28 HZ (-6DB)

**IPOS INTELLIGENT POWER-ON SEQUENCE** 

**OPTO-ISOLATED FLOATING PREAMP BOARD** 

**FULL COMPATIBILITY WITH VIO S318** 

MODULAR SLOT FOR NETWORK AND DIGITAL

ACCESSORIES

RDNET CARD INSTALLED

#### **BASS-REFLEX POWER**

The perfect partner for VIO L212 in larger sound reinforcement applications.

A simple, effective dual sub configuration designed to enhance the reproduction of the lowest frequencies, boosted by an advanced DSP control and complete network capability.

Speaker Type	Active Bassreflex subwoofer		
Usable Bandwidth [-10dB]	27 Hz (HPF)		
Frequency Response [-6dB]	28 Hz to cut frequency (Xover dependent)		
Max SPL	143 dB		
LF	2x18" Neodymium		
Voice Coil LF	4"		
Directivity	Omnidirectional		
Amplifier	3200 W RMS [2x 1600 W RMS Class-D Digipro® G4]		
Cooling	Passive convection, internal fan		
Power Supply	Full-range SMPS with PFC (100V~-240V~, 50-60Hz)		
Controller	DSP 32 bit		
AD/DA Converter	24 bit/96 kHz		
Limiter	Peak, RMS, Thermal		
Delay Option	0 - 9.9 ms internal   steps of 0.1 ms [on-board]		
Xover Frequency LF-Xover out	Selectable 60-110 Hz + Full Range (8 steps)		
LF-Xover out slope	24 dB/Octave		
Signal Input	1 x XLR balanced, 1 x RJ45 Link (RDNet)		
Signal Output	1x XLR balanced, 1 x RJ45 Link (RDNet)		
Power Socket	1x PowerCON TRUE1 In 1x PowerCON TRUE1 Out		
Controls  1x Input Attenuation Rotary Encoder 2x Delay Rotary Encoder (0-9.9 ms) 1x Polarity Inversion Switch (0° or 180°) 1x Cardioid mode Switch 1x X-Over Frequency Rotary Encoder (8 steps)			
NFC™ and Frontal LED Identification System 380V Resistant SMPS IPOS Intelligent Power-On Sequence Opto-isolated floating pre-amp System Test (transducers diagnostics)			
Housing	Multiplex plywood - Polyurea painting		
Additional Features	4x Eyelets for ratchet straps		
Handles	4x Side. Aluminium		
Rain cover	ver Included		
Rigging Points   2x Pick Points on top for DRK-210 rigging frame			
Width x Height x Depth	1300 x 520 x 800 mm (51.18 x 20.47 x 31.5 in)		
Weight	85.6 kg (188.72 lbs)		

## ULTRA-LOW FREQUENCY PUNCH

Featuring a dual 18" subwoofer pairing in a voluminous bass-reflex housing, VIO S218 encompasses a vigorous audio performance and a ultra low frequency punch, extending down to 28 Hz: the perfect bottom end addition to large VIO L212 sound reinforcement systems.

The system's acoustical potential is driven by 2 Digipro G4® Class-D amplifiers delivering a total amount of 3200 W RMS and making this sub the perfect low-end extension of VIO arrays in larger sound reinforcement applications.

The switched mode power supply is equipped with PFC (Power Factor Corrector) which greatly improves the efficiency of the system. This also grants a worldwide compatibility of the power supply (from 100V to 240V 50/60Hz) and limits power consumption. Furthermore, the power supply is 380V resistant, so the final amplifiers will be switched off in case of an undesired strike of 380V current, saving them from any damage.



#### TRANSPORT & INSTALLATION ACCESSORIES

#### BAGS & COVERS

#### DO-VIOS318





SWK-18 KIT





Kit consisting of 4 wheels for VIO S318 / VIO S218 back panel.

#### FC-VIOS<sub>2</sub>





Functional Cover for 2 subs VIO S318 / VIO S218.





Exclusive technology of VIO S318 amplifier is IPOS (Intelligent Power-On Sequence), a circuit that controls the sequence in which the main power supplies of all units within an array ramp up.

The preamplifier is equipped with a modular slot for expansion cards: as a default, VIO S218 is equipped with dBTechnologies RDNet card, for real time remote control via Aurora Net software.

The system is ready for future upgrades with Audinate Dante<sup>™</sup> AoIP protocol.

VIO S218 comes with built-in technologies: Near Field Communication (NFC™) proximity sensors are used to determine the position of each box within an array. A LED bulb on the front of the enclosure contributes to help the user to recognize, identify and match each box on the remote control software Aurora Net.

Users can run system-test on transducers and a real time impedance control. The on-board delay module allows VIO S218 to reach a max 9.9ms delay with 0.1 ms steps. A cardioid stack preset button automatically process the sound of the backward sub in gradient inverted stack configurations, in order to reach maximum cancellation on the rear side.

The preamplifier's floating audio input design grants a digital optical isolation between earth ground from the mains and the audio ground flowing into the preamplifier board. This galvanic isolation greatly improves resistance to interferences and any unwanted buzzing and noises.

Thanks to the integrated USB port, the user will perform firmware upgrades and diagnostics analysis, by downloading telemetry data on system performance and failures.



#### CABLES

DAC-70	XLR-XLR audio cable (70 cm).	RDC-45F	RJ45 to XLR 3 poles female conversion cable, 6 cm length. The cable converts from RDNet RJ45 to XLRF.
DCK-27T	Cable-Set containing 2x DAC-70 and 2x DPTC-70L.		cable converts from KDNet K345 to XEKT.
DPTC-70L	PowerCON TRUE1-PowerCON TRUE1 power link cable (70cm).	RDC-45M	RJ45 to XLR 3 poles male conversion cable, 6 cm lenght. The cable converts from RDNet RJ45 to XLRM.
DPTC-160L	PowerCON TRUE1-PowerCON TRUE1 power link cable (160cm).	RJ45-RJ45-150	RJ45-RJ45 link cable (150cm) for RDNet speakers. EtherCON connectors.
DPTC-500L	PowerCON TRUE1-PowerCON TRUE1 power link cable (500cm).	RJ45-RJ45-75	RJ45-RJ45 link cable (75cm) for RDNet speakers. EtherCON connectors.
DPTC-1000M	Mains PowerCON TRUE1 cable (10m). Different plugs available for several countries.	CAT6-CAT6-100	CAT6-CAT6 link cable (100cm) for DANTE™ AoIP and RDNet. EtherCON connectors.
DPTC-2000M	Mains PowerCON TRUE1 cable (20m). 16A CekON	CAT6-CAT6-500	CAT6-CAT6 link cable (500cm) for DANTE™ AoIP and RDNet. EtherCON connectors.





ACTIVE TRI-AMPED 3x 18" BASSREFLEX SEMI-HORN LOADED SUBWOOFER

FREQUENCY RANGE EXTENDING DOWN TO 35HZ

INTERNAL DESIGN TO MAXIMIZE IN-PHASE FRONTAL EMISSION

NETWORK READY WITH AN INTEGRATED RDNET PORT

ON-BOARD DELAY FOR PERFECT TIME ALIGNMENT

POLYUREA PAINTING ON A ROAD-RESISTANT WOODEN ENCLOSURE

ON-BOARD CARDIOID ARRAY CONFIGURATION PRESET

#### **TRI-AMPED ACTIVE SUBWOOFER**

VIO S318 subwoofer, a one of a kind system both for its acoustic configuration and majestic output. Indeed, dBTechnologies succeded in designing an extraordinary powerful triple 18" woofer system while maximizing in-phase frontal emission and extending lower frequencies down to 35 Hz.

	I a. a
Speaker Type	Active Bassreflex, semi-horn loaded subwoofer
Usable Bandwidth [-10dB]	35 Hz (HPF)
Frequency Response [-6dB]	39 Hz to cut frequency (Xover dependent)
Max SPL	143 dB
LF	3x18"
Voice Coil LF	4"
Directivity	Omnidirectional
Amplifier	2700 W RMS Class-D Digipro® G3
Cooling	Convection
Power Supply	Auto-range SMPS
Controller	DSP 32 bit
AD/DA Converter	24 bit/96 kHz
Limiter	Peak, RMS, Thermal
Delay Option	0-9.9 ms internal   steps of 0.1 ms
Xover Frequency LF-Xover out	Selectable 70-105 Hz + Full Range (8 steps)
LF-Xover out slope	24 dB/Octave
Signal Input	1 x XLR balanced, 1 x RJ45 Link (RDNet)
Signal Output	1x XLR balanced, 1 x RJ45 Link (RDNet)
Power Socket	1x PowerCON TRUE1 In 1x PowerCON TRUE1 Out
Controls	1x Input Attenuation Rotary Encoder 2x Rotary Encoder (Delay 9.9 ms) 1x Polarity Inversion Switch (0° or 180°) 1x Cardioid mode Switch 1x X-Over Frequency Switch (70-105 Hz + Full-Range   steps of 5 Hz)
Special Features	Opto-isolated floating pre-amp
Housing	Multiplex plywood - Polyurea painting
Additional Features	4x Eyelets for ratchet straps
Handles	4x Side. Aluminium
Rain cover	Included
Rigging Points	2x Pick Points on top for DRK-210 rigging frame
Width x Height x Depth	1300 x 520 x 800 mm (51.18 x 20.47 x 31.5 in)
Weight	103.9 kg (229.06 lbs)

#### **OUTSTANDING PERFORMANCE**

VIO S318 is equipped with 3x18" woofers, 2 of which are half horn loaded, while the third one is a direct radiation woofer. This way, the sub combines the contribution of two different configurations.

The 3 woofers are aligned in order to achieve a perfect phase response. Its innovative acoustic design contributes in creating an unprecedented performance/dimension ratio for a triple woofer powered system.

The high quality multiplex housing is reinforced with a robust polyurea finish and equipped with 4 aluminium handles per side. The eyelets on the top of the cabinet allow to fix the DRK-210 flybar, while 4 additional eyelets allow to fasten the load during transport using ratchet straps.





The internal configuration of the 3 woofers maximizes the acoustic radiant surface, delivering a solid sound performance.



#### TRANSPORT & INSTALLATION ACCESSORIES

#### BAGS & COVERS

#### DO-VIOS318



horizontally (wheels included).

Dolly for up to 3x VIO S318 / VIO S218 Stacked



SWK-18 KIT





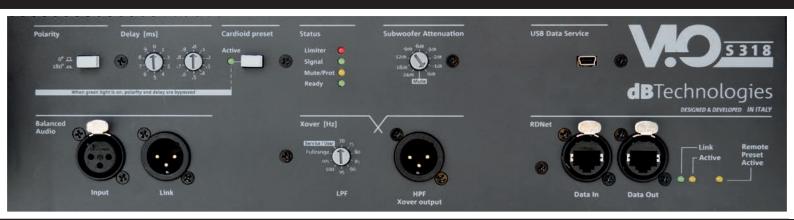
Kit consisting of 4 wheels for VIO S318 / VIO S218 back panel.

#### FC-VIOS2





Functional Cover for 2 subs VIO S318 / VIO S218.





The 3 DIGIPRO G3 amplifiers deliver a total 2700 W RMS power, allowing the system to reach up to 143dB SPL. A solution combining resolute power, compact design and ease of use.

The system features an integrated delay module achieving up to 9.9 ms delay with 0.1 ms steps (a further delay can be set via RDNet remote control software). The crossover module sets both the low pass filter and the highpass filter for the integrated crossover output. The system also features an attenuation control, a polarity

switch and an RDNet port for remote control.

In cardioid configurations with 3 subs, the 'cardioid' button allows to process automatically the sub facing backwards, in order to achieve the maximum cancellation. The recessions on the top of the sub facilitates the passage of the cables between the cabinets.

VIO series' simulation models for Ease Focus 3 are available at dbtechnologies.com, as well as the proprietary prediction software dBTechnologies Composer.

#### **C**ABLES

DAC-70	XLR-XLR audio cable (70 cm).
DCK-27T	Cable-Set containing 2x DAC-70 and 2x DPTC-70L.
DPTC-70L	PowerCON TRUE1-PowerCON TRUE1 power link cable (70cm).
DPTC-160L	PowerCON TRUE1-PowerCON TRUE1 power link cable (160cm).
DPTC-500L	PowerCON TRUE1-PowerCON TRUE1 power link cable (500cm).
DPTC-1000M	Mains PowerCON TRUE1 cable (10m). Different plugs available for several countries.
DPTC-2000M	Mains PowerCON TRUE1 cable (20m). 16A CekON
RDC-45F	RJ45 to XLR 3 poles female conversion cable, 6 cm length. The cable converts from RDNet RJ45 to XLRF.
RDC-45M	RJ45 to XLR 3 poles male conversion cable, 6 cm lenght. The cable converts from RDNet RJ45 to XLRM.
RJ45-RJ45-150	RJ45-RJ45 link cable (150cm) for RDNet speakers. EtherCON connectors.
RJ45-RJ45-75	RJ45-RJ45 link cable (75cm) for RDNet speakers. EtherCON connectors.









**ACTIVE 1x 18" BASS REFLEX SUBWOOFER** 

FLYABLE ACTIVE 1x 18" HORN LOADED SUBWOOFER

LAST GENERATION DIGIPRO G4 AMP TECHNOLOGY

1600 W RMS SMPS AMPLIFIERS

**SMPS WITH PFC** 

**SYSTEM-TEST FOR QUICK DIAGNOSTICS** 

INTEGRATED FLYING HARDWARE ON VIO S118 (COMPATIBLE WITH VIO L210)

**DESIGNED FOR MAXIMUM EFFICIENCY IN THE LOWER END** 

ON BOARD DELAY FOR PERFECT TIME ALIGNMENT

ON BOARD CARDIOID ARRAY CONFIGURATION PRESET

MODULAR SLOT FOR NETWORK AND DIGITAL AUDIO EXPANSION CARDS (RDNET CARD INSTALLED)

# **SINGLE ACTIVE SUBWOOFERS**

Two single 18" subwoofers featuring premium components and complete networkability, both designed to integrate dBTechnologies's top-range line array family with a compact solution. Horn loaded in a cabinet ready for flying applications, VIO S118 is the perfect low-end extension of VIO arrays whenever a particularly long-throw is needed, while Bass reflex VIO S118 R encompasses a powerful punch in impressively small dimensions.

# **VIO 5118R**

# VIO 5118

Speaker Type	Active Bassreflex subwoofer	Active Horn-Loaded Flyable Subwoofer	
Usable Bandwidth [-10dB]	32 Hz (HPF)	33 Hz (HPF)	
Frequency Response [-6dB]	35 Hz to cut frequency (Xover dependent)	36 Hz to cut frequency (X-Over Dependent)	
Max SPL	139 dB	139 dB	
LF	1x 18"	1x 18", Neodymium	
Voice Coil LF	4"	4"	
Directivity	Omnidirectional	Omnidirectional	
Amplifier	1600 W RMS Class-D Digipro® G4	1600 W RMS Class-D Digipro® G4	
Cooling	Convection, internal fan	Convection, internal fan	
Power Supply	Full-range SMPS with PFC (100V~-240V~, 50-60Hz)	Full-range SMPS with PFC (100V~-240V~, 50-60Hz)	
Controller	DSP 32 Bit	DSP 32 Bit	
AD/DA Converter	24 bit 96 kHz	24 bit 96 kHz	
Limiter	Peak, RMS, Thermal	Peak, RMS, Thermal	
Delay Option	0 - 9.9 ms internal   steps of 0.1 ms [on-board]	0 - 9.9 ms internal   steps of 0.1 ms [on-board]	
Xover Frequency LF-Xover out	Selectable 60-110 Hz + Full Range (8 steps)	Selectable 60-110 Hz + Full Range (8 steps)	
LF-Xover out slope	24 dB/Octave	24 dB/Octave	
Signal Input	1 x XLR balanced	1 x XLR balanced	
Signal Output	1 x XLR balanced (link or X-over)	1x XLR balanced (link or X-over)	
Power Socket	1x PowerCON TRUE1 In	1x PowerCON TRUE1 In	
	1x PowerCON TRUE1 Out	1x PowerCON TRUE1 Out	
Expansion Card	RDNet Card (1x RJ45 IN 1x RJ45 Link) Dante Card [Optional]	RDNet Card (1x RJ45 IN 1x RJ45 Link) Dante Card [Optional]	
Controls	1x Input Attenuation Rotary Switch 2x Delay Rotary Encoder (9.9 ms) 1x Polarity Inversion Switch (0° or 180°) 1x Cardioid Mode Switch 1x X-Over Freq Rotary Encoder (8 steps) 1x System Auto-test	1x Input Attenuation Rotary Switch 1x Rotary Encoder (Delay 9.9 ms) 1x Polarity Inversion Switch (0° or 180°) 1x Cardioid Mode Switch 1x X-Over Freq Rotary Encoder (8 steps) 1x System Auto-test	
Special Features	380V Resistant SMPS IPOS Intelligent Power-On Sequence Opto-isolated floating pre-amp System Test (transducers diagnostics)	380V Resistant SMPS IPOS Intelligent Power-On Sequence Opto-isolated floating pre-amp System Test (transducers diagnostics) NFC™ and Frontal LED Identification System	
Housing	Multiplex plywood - Polyurea painting	Multiplex plywood - Polyurea painting	
Handles	2x per Side, Aluminium	2x per Side, Aluminium	
Pole Mount	M20 Thread	M20 Thread	
Rain cover	Included	Included	
Rigging Points	2x Pick Points on top to stack DRK-210	2x Pick Points on top to stack DRK-210 8x Flying Hardware (4x on top, 4x on bottom)	
Width x Height x Depth	720 x 530 x 700 mm (28.34 x 20.86 x 27.56 in)	720 x 520 x 700 mm (28.34 x 20.47 x 27.56 in)	
Weight	47 kg (103.62 lbs)	45.1 kg (99.42 lbs)	



Equipped with a 18" neodymium woofer (4" voice coil), the bass reflex sub has been crafted to complete with impressive lowend VIO line array systems.

The front-loaded bass-reflex configuration ensures excellent performance at both close and mid-distance. While the ideal use is groundstacked in indoor venues it still can be used as a powerful stand-alone low-frequency extension for main VIO Line Array Systems for large audiences outdoor.



# RDNet (Pulled) **dB**Technologies

# Latest generation amplifier

Both VIO S118 & VIO S118R system's acoustic engine is driven by a Digipro G4® 1600W Class D amplifier. The switched mode power supply is equipped with PFC (Power Factor Corrector) which greatly improves the efficiency of the system. This also grants a worldwide compatibility of the power supply (from 90V to 265V 50/60Hz) and limits power consumption. Furthermore, the power supply is 380V resistant, so the final amplifiers will be switched off in case of an undesired strike of 380V current, saving them from any damage.

Digipro G4 preamplifier features a slot module, equipped with a RDNet expansion card as default, allowing system monitoring and control via Aurora Net. Furthermore, the system is ready for Audinate Dante™ Expansion Card allowing integration in a digital audio network. The amplifier also allows users to run a real-time test on transducers, both remotely via Aurora Net, or directly on the amplifier module.

The amp module features an on board attenuation control and a delay module allowing to reach a max 9.9 ms delay with 0.1 ms steps. The on board cardioid preset process the sound of the backward sub in cardioid configurations.

# TRANSPORT & INSTALLATION ACCESSORIES

# DO-VIOS118



Dolly for up to 3x VIO S118 / S118R

# SWK-12 KIT



Kit consisting of 4 wheels for VIO S118R back panel.

# **DSA-VIOL208**



Groundstack adapter for VIO I 208 on VIO S118 and S118R

# AF-VIO1



Adapter frame for flying VIO L208 under VIO S118 / VIO L210 and groundstacking VIO I 208/I 210 above any VIO sub.

# FSA-VIOL210



Adapter to fly VIO L210 under flown VIO \$118.

# **GSA-VIOL210**



Adapter to stack VIO L210 on VIO \$118.





This flyable active subwoofer, equipped with a 18" neodymium transducer, has been crafted to complete the accurate and phase coherent wave front of VIO Line Arrays with impressive low-end frequencies and vigorous SPLs.

VIO S118 also features a NFC™ system and a LED on the front grille.

dBTechnologies developed a horn loaded design, while maintaining the size of a front-loaded sub cabinet, resulting in a double advantage: smaller dimension (and weight – only 45,1 kg) and a remarkable lower frequencies response even at a long distance. This makes this sub the perfect low-end extension of VIO arrays whenever a particularly long-throw is needed.

S118's cabinet is equipped with integrated hardware allowing 1 or more subs to be flown in a sub array or on the top of a VIO L210 array. Furthermore the subwoofer can be flown with DRK-210 flybar in inverted orientation to create flown cardioid arrays. With FSA-VIOL210 adapter it is possible to attach VIO L210, or alternatively VIO L208 with AF-VIO1 adapter frame.

Groundstacking line arrays on VIO S118 is possible thanks to dedicated accessories.





# CABLES

XLR-XLR audio cable (100 cm).	RDC-45F	cable converts
XLR-XLR audio cable (70 cm).	PDC-4EM	RJ45 to XLR 3 p
Cable-Set containing 2x DAC-70 and 2x DPTC-70L.		cable converts
PowerCON TRUE1-PowerCON TRUE1 power link cable (70cm).	RJ45-RJ45-150	RJ45-RJ45 link connectors.
PowerCON TRUE1-PowerCON TRUE1 power link cable (160cm).	•••••	RJ45-RJ45 link
PowerCON TRUE1-PowerCON TRUE1 power link cable (500cm).	RJ45-RJ45-75	connectors.
Mains PowerCON TRUE1 cable (10m). Different plugs available for several countries.	CAT6-CAT6-100	CAT6-CAT6 link EtherCON conr
Mains PowerCON TRUE1 cable (20m). 16A CekON	CAT6-CAT6-500	CAT6-CAT6 linl EtherCON con
	XLR-XLR audio cable (70 cm).  Cable-Set containing 2x DAC-70 and 2x DPTC-70L.  PowerCON TRUE1-PowerCON TRUE1 power link cable (70cm).  PowerCON TRUE1-PowerCON TRUE1 power link cable (160cm).  PowerCON TRUE1-PowerCON TRUE1 power link cable (500cm).  Mains PowerCON TRUE1 cable (10m). Different plugs available for several countries.	XLR-XLR audio cable (70 cm).  Cable-Set containing 2x DAC-70 and 2x DPTC-70L.  PowerCON TRUE1-PowerCON TRUE1 power link cable (70cm).  PowerCON TRUE1-PowerCON TRUE1 power link cable (160cm).  PowerCON TRUE1-PowerCON TRUE1 power link cable (500cm).  Mains PowerCON TRUE1 cable (10m). Different plugs available for several countries.  CAT6-CAT6-100

RDC-45F	RJ45 to XLR 3 poles female conversion cable, 6 cm length. The cable converts from RDNet RJ45 to XLRF.
RDC-45M	RJ45 to XLR 3 poles male conversion cable, 6 cm lenght. The cable converts from RDNet RJ45 to XLRM.
RJ45-RJ45-150	RJ45-RJ45 link cable (150cm) for RDNet speakers. EtherCON connectors.
RJ45-RJ45-75	RJ45-RJ45 link cable (75cm) for RDNet speakers. EtherCON connectors.
CAT6-CAT6-100	CAT6-CAT6 link cable (100cm) for DANTE™ AoIP and RDNet. EtherCON connectors.
CAT6-CAT6-500	CAT6-CAT6 link cable (500cm) for DANTE™ AoIP and RDNet. EtherCON connectors.



Boasting an impressive feature set comprising premium neodymium components, impressive SPL, advanced DSP featuring Linear Phase FIR filters, complete networkability via RDNet protocol, multifunctional multiplex housings equipped with rigging points and rails, VIO X is the perfect point source completion for VIO family in a wide range of applications.







2-WAY ACTIVE LOUDSPEAKER SERIES

ADVANCED DSP FEATURING LINEAR PHASE FIR FILTERS

3 MODELS: 10, 12 AND 15"

**FULLY NETWORKABLE VIA AURORA NET** 

**NEODYMIUM COMPONENTS** 

ON BOARD HQ AND HPF DSP PRESETS

**DIGIPRO G3 AMP 900W RMS** 

# POINT-SOURCE COMPLETION

dBTechnologies presents VIO X, an original series of professional active 2-way speakers combining impressive output, advanced DSP features and complete networkability via Aurora Net software.

Conceived as a point-source completion for the VIO family, the new VIO X series provides in facts a broad spectrum of professional applications as well as flexible configuration options.

	VIO X10	VIO X12	VIO X15
Speaker Type	2 Way Active Loudspeaker	2 Way Active Loudspeaker	2 Way Active Loudspeaker
Usable bandwidth [-10dB]	73 - 21.400 Hz	62 - 22.000 Hz	55 - 22.000 Hz
Frequency Response [-6dB]	82 - 20.000 Hz	79 - 21.000 Hz	72 - 21.000 Hz
Max SPL	130 dB	132 dB	133.5 dB
HF	1x 1"	1 ×1.4"	1x 1.4"
Voice Coil HF	1.75"	3" Neodymium	3" Neodymium
LF	1x 10"	1x 12"	1x 15"
Voice Coil LF	2.5" Neodymium	3" Neodymium	3" Neodymium
Directivity (HxV)	90° x 40°	60° x 40°	60° x 40°
Horn	Rotatable Horn	Rotatable Horn	Rotatable Horn
Amplifier	900 W RMS Class-D Digipro® G3	900 W RMS Class-D Digipro® G3	900 W RMS Class-D Digipro® G3
Cooling	Convection	Convection	Convection
Power Supply	Auto-range SMPS	Auto-range SMPS	Auto-range SMPS
Controller	DSP 28/56 bit	DSP 28/56 bit	DSP 28/56 bit
AD/DA Converter	24 bit/48 kHz	24 bit/48 kHz	24 bit/48 kHz
Limiter	Peak, RMS, Thermal	Peak, RMS, Thermal Peak, RMS, Thermal	
Processing	FIR Linear Phase Filters	FIR Linear Phase Filters	FIR Linear Phase Filters
Signal Input	1x XLR balanced, 1x RJ45 Link (RDNet)	1x XLR balanced, 1x RJ45 Link (RDNet)	1x XLR balanced, 1x RJ45 Link (RDNet)
Signal Output	1x XLR balanced, 1x RJ45 Link (RDNet)	1x XLR balanced, 1x RJ45 Link (RDNet)	1x XLR balanced, 1x RJ45 Link (RDNet)
Power Socket	1x PowerCON TRUE1 In 1x PowerCON TRUE1 Out	1x PowerCON TRUE1 In 1x PowerCON TRUE1 Out	1x PowerCON TRUE1 In 1x PowerCON TRUE1 Out
Controls	1x Rotary Encoder (8x EQ, HPF presets) 1x Input sensitivity potentiometer 1x Mic / line switch	1x Rotary Encoder (8x EQ, HPF presets) 1x Input sensitivity potentiometer 1x Mic / line switch	1x Rotary Encoder (8x EQ, HPF presets) 1x Input sensitivity potentiometer 1x Mic / line switch
Special Features	Opto-isolated floating pre-amp	Opto-isolated floating pre-amp	Opto-isolated floating pre-amp
Housing	Wooden Cabinet, Polyurea painting	Wooden Cabinet, Polyurea painting	Wooden Cabinet, Polyurea painting
Handles	1x (top)	1x (top), 2x (side)	1x (top), 2x (side)
Wedge Angle	Monitor use 50°	Monitor use 50°	Monitor use 50°
Rigging points	12x M10 Thread + 4x Fast lock pins	12x M10 Thread + 4x Fast lock pins	12x M10 Thread + 4x Fast lock pins
Pole Mount	Ø36 mm	Ø36 mm	Ø36 mm
Width x Height x Depth	280 x 550 x 375 mm (11.02 x 21.65 x 14.76 in)	340 x 650 x 445 mm (13.38 x 25.5 x 17.51 in)	400 x 750 x 475 mm (15.74 x 29.52 x 18.7 in)
Weight	16.6 kg (36.59 lbs)	20.7 kg (45.63 lbs)	25.4 kg (55.99 lbs)

# PROFESSIONAL & FLEXIBLE

The series encompasses 3 models: all equipped with a specially designed rotatable horn facilitating a clear and constant directivity.



All cabinets are powered by on board Digipro G3 900 W RMS providing majestic sound pressure levels in compact size and very limited weight. Advanced sound processing featuring Linear Phase FIR Filters allows VIO Xs to deliver an extremely coherent audio performance, standing out for its intelligibility and clarity from every listening position.







A feature-mix boosting high-end audio performance as well as advanced versatility. As a matter of facts, VIO X cabinets serve impressively as a stand alone PA system that can be stacked, flown or wall-mounted, as a full range PA or in combination with VIO S118 and VIO 118R subwoofers, but also act as the perfect side-fill, delay or stage monitoring system in larger VIO sound reinforcement applications.

The robust wooden enclosure allows horizontal use for monitoring purposes and is provided with a 36mm pole mount, and rigging points facilitating fixed installations with dedicated vertical and horizontal brackets.



# Accessories

# WB-VIOX10H



Horizontal wall bracket for VIO X10.

# WB-VIOX12H



Horizontal wall bracket for VIO X12.

# WB-VIOX15H



Horizontal wall bracket for VIO X15.

# WB-VIOX10V



Vertical wall bracket for VIO X10. 36mm Pole mount included.

# WB-VIOX12V



Vertical wall bracket for VIO X12. 36mm Pole mount included.

# WB-VIOX15V



Vertical wall bracket for VIO X15. 36mm Pole mount included.

# RC-M1



Amplifier magnetic rain cover.

# **TECHNOLOGIES**

# SYSTEM TEST

# SMPS WITH PFC

# **380V RESISTANT SMPS**

# **IPOS**

# NFC™ AND LED











A built-in measurement system can read the transducers impedance in real time and provide an instant feedback on the health of your system. This controls is performed constantly or it can be forced by the user at any time, remotely or from the amplifier panel.

The Power Factor Corrector greatly improves the efficiency of the system. Performances of the amplifier are very stable and consistent, regardless of the quality of the mains. This also grants a worldwide compatibility of the power supply - from 90V to 26SV so/60Hz - and limits power consumption.

The final amplifiers will be switched off in case of an undesired strike of 380V current, saving them from any damage. The auxiliary power supply - 380V tolerant - determines a safe range of operability for the man power supply.

The Intelligent Power-On sequence circuit controls the sequence in which the main power supplies of all units within an array ramp up. As a result, each module is switched on in a different time frame, keeping the overall system's inrush current low.

Near Field Communication proximity sensors are used to determine the position of each box within an array. This technology, together with a hi-brightness LED bulb on the front of the enclosure, contributes to help the user to recognize and match each box with their position on the remote control software.

# LINE ARRAY MODULES

# Subwoofers

## **VIO L208**

**VIO L210** 

**VIO L212** 

# **VIO S118R**

**VIO S118** 

































Speaker Type	2-Way Active Line Array Module	2-Way Active Line Array Modul
Usable Bandwidth [- 6dB]	75 - 20.000 Hz	67 - 20.000 Hz
Max SPL	One Unit: 133.5 dB	One Unit: 135 dB
HF	1x 1.4", 3" v.c Neodymium	1x 1.4", 3" v.c Neodymium
MF		
LF	2x 8", 2" v.c Neodymium	2x 10", 2.5" v.c Neodymium
Directivity	100° (horizontal)	100° (horizontal)

18.

8", 2" v.c Neodymium	2x 10", 2.5" v.c Neodymium
o° (horizontal)	100° (horizontal)
o W RMS Digipro® G3	900 W RMS Digipro® G3
0 x 260 x 390 mm 98 x 10.23 x 15.35 in	720 x 320 x 520 mm 28.35 x 12.6 x 20.47 in
.1 kg - 39.9 lbs	28.6 kg - 63 lbs

ay Module	2-Way Active Line Array Module	3-Way Active Line Array Module
	67 - 20.000 Hz	55 - 18.600 Hz
	One Unit: 135 dB	One Unit: 142 dB
dymium	1x 1.4", 3" v.c Neodymium	2x 1.4", 3" v.c Neodymium
		4x 6.5" , 2" v.c Neodymium
mium	2x 10", 2.5" v.c Neodymium	2x 12", 3" v.c Neodymium

3200 W RMS [2x 1600 W RMS Digipro

90° (horizontal)

1100 x 380 x 450 mm 43.31 x 14.96 x 17.72 in

54.4 kg - 119.93 lbs

	1x 18", 4" v.c.
	Omnidirectional
® G4]	1600 W RMS Digipro® G4
	720 x 530 x 700 mm 28.34 x 20.86 x 27.56 in
	47 kg - 103.62 lbs



Omnidirectional 1600 W RMS Digipro® G4 720 x 520 x 700 mm 28.34 x 20.47 x 27.56 in 45.1 kg - 99.42 lbs

Width x Height x Depth

Amplifier

Weiaht

# **TECHNOLOGIES**

# **OPTO-ISOLATED** PREAMP



The floating audio input design grants a digital optical isolation between earth ground from the mains and the audio ground flowing into the Preamplifier board. This galvanic isolation greatly improves resistance to interferences and any unwanted buzzing and noises.

# **EXPANSION CARD SLOT**



The preamplifier comes with a RDNet card installed. The user will be able to upgrade the system by replacing the RDNet card with an Audinate™ Dante™ card for audio over Ethernet and remote control on a single cable solution - sold separately.

# **USB DATA PORT**



Thanks to this universal data port, the user will be able to perform firmware upgrades and diagnostics analisys, by downloading telemetry data on system performance and failures.

# **INCLINOMETER**



# LINEAR PHASE FIR FILTERS



Inside every array of VIO low-latency sound series, you can find a sensor processing featuring Linear that allows you to check Phase FIR filters allows immediately the absolute VIO cabinets to deliver an inclination in degrees of extremely coherent audio flown speaker through performance, standing out for its intelligibility and Aurora Net software. This clarity from every listening turns out to be very useful position. This is also achieved by making the when you need to verify the correct installation of phase response as linear flown speakers. as possible, avoiding any distortion.

# Subwoofers

# **VIO S318**





# **VIO S218**





# VIO X10





# POINT SOURCES









Active Bassreflex, Semi-horn Loaded Subwoofer	Active Bassreflex subwoofer		2 Way Active Loudspeaker		Speaker Type
39 Hz to cut frequency (Xover dependent)	28 Hz to cut frequency (Xover dependent)	82 - 20.000 Hz	79 - 21.000 Hz	72 - 21.000 Hz	Usable Bandwidth [- 6dB]
143 dB	143 dB	130 dB	132 dB	133.5 dB	Max SPL
		1x 1", 1.75" v.c.	1x 1.4", 3" v.c Neodymium	1x 1.4", 3" v.c Neodymium	HF
					MF
3x 18", 4" v.c.	2x 18", 4" v.c.	1x 10", 2.5" v.c Neodymium	1x 12", 3" v.c Neodymium	1x 15", 3" v.c Neodymium	LF
Omnidirectional	Omnidirectional	90° x 40° (H x V)	60° x 40° (H x V)	60° x 40° (H x V)	Directivity
2700 W RMS Digipro® G3	3200 W RMS [2x 1600 W RMS Digipro® G4]		900 W RMS Digipro® G3		Amplifier
1300 x 520 x 800 mm 51.18 x 20.47 x 31.5 in	1300 x 520 x 800 mm 51.18 x 20.47 x 31.5 in	280 x 550 x 375 mm 11.02 x 21.65 x 14.76 in	340 x 650 x 445 mm 13.38 x 25.5 x 17.51 in	400 x 750 x 475 mm 15.74 x 29.52 x 18.7 in	Width x Height x Depth
103.9 kg - 229.06 lbs	85.6 kg - 188.72 lbs	16.6 kg - 36.59 lbs	20.7 kg - 45.63 lbs	25.4 kg - 55.99 lbs	Weight

# PBS-63EU POWER BOX

63A CEKON POWER INPUT WITH 5 M CABLE INCLUDED

4x LKS 19 MULTIPIN OUTPUTS (24x POWERCON TRUE)

1x 32A CEKON LINK OUTPUT

6x POWERCON TRUE AUXILIARY OUTPUTS

1x 16A CEKON AUXILIARY OUTPUT

BUILT-IN DIGITAL AC MULTIMETER

TOUR GRADE LKS19 MULTI-PIN CONNECTORS

ROAD READY FLIGHT CASE





dBTechnologies PBS-63EU represents the most professional solution to provide power distribution for mid to large dBTechnologies sound reinforcement systems, including flown arrays, ground-stacked sub arrays, fills and stage monitoring. This power rack has been designed to meet the highest standards in reliability and performance, in order to serve as a excellent tool for touring applications.

From a single 63-Ampere three-phase Cekon connector

(5meters cable included), PBS-63EU distributes the power in 4x LKS19 multipin outputs (IP 67 rated), 1x 32A Cekon service link for chain motor controls or aux output, 1x 16A Service output and 6x PowerconTrue link outputs.

All outputs are equipped with individual RCBOs (Residual Current-operated Circuit-Breaker with Overcurrent protection) so in case of damage, only the faulty output is missed while the rest of the system continues to function seamlessly.

# CABLES

LK\$19-1000L	LKS19 Socapex Link Cable (10m).
LKS19-2000L	LKS19 Socapex Link Cable (20m).
LKS19-6PT	LKS19 Cable to 6x PowerCONTrue FanOUT Cable.

# **AC 26N - DIGITAL AUDIO CONTROLLER**

28/56 BIT DSP PROCESSING

PARAMETRIC EQ, DELAY, PHASE, COMPRESSOR/ LIMITER, LEVEL CONTROL

24 BIT - 96 KHZ AD/DA CONVERTERS

2x AES/EBU INS AND 2x AES/EBU OUTS

**2 BALANCED INS X 6 BALANCED OUTS** WITH FLEXIBLE ROUTING

RDNET HARDWARE INTERFACE

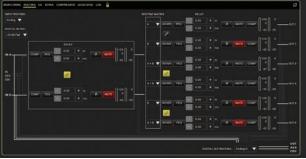
FRONT PANEL OR USB / RDNET REMOTABLE USING **DBTECHNOLOGIES SOFTWARE** 





AC26N, audio digital processor, has been designed for fixed and touring installations, and allows you to control any professional audio system, both active and passive.

Equipped with two inputs and six outputs balanced analogically, two in/out digital AES/ EBU and an RDNet control, this processor allows a perfect control in a simple and complete way. Each output possesses a parametric equalizer, delay, phase and level control, completely run by a powerful 28/56 Bit DSP, unique in its kind. This processor control may be directed by the front control panel or through an RDNet connected computer.



# CABLES

RJ45-RJ45-75	RJ45-RJ45 link cable (75cm) for RDNet-equipped devices.
RJ45-RJ45-150	RJ45-RJ45 link cable (150cm) for RDNet-equipped devices.
RDC-45F	RJ45 to XLR 3 poles female conversion cable (6 cm).
RDC-45M	RJ45 to XLR 3 poles male conversion cable (6 cm).

# **SOFTWARE**

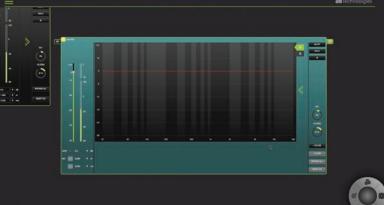


**CROSS PLATFORM WIN AND MAC OSX** 

**FAST WORK VIA ETHERNET OR USB** 

**REAL TIME MONITORING & CONTROL** 

ADVANCED SELF-TAILORED DSP MANAGEMENT



Aurora Net allows a complete real time monitoring and control of dBTechnologies' RDNetable sound reinforcement systems at a glance. Cross-platform developed (Win, Mac OSX) by dBTechnologies Software Department in order to guarantee maximum reliability, Aurora Net is more than an evolution of previous dBTechnologies Network.

Working via Ethernet cable (or alternatively via XLR) the software allows both an advanced, completely customizable DSP control and DIGITAL Audio management (via Dante™ protocol) on the same cable.

The intuitive layout has been designed for maximum usability and allows a touch-oriented management on portable devices, and,

SMART AUTO-GROUPING FUNCTIONS
INTUITIVE DESIGN & USER INTERFACE
TOUCH ORIENTED MANAGEMENT ON PORTABLE DEVICES
ZOOM-IN / ZOOM OUT FEATURE (WYSIWYG)

Aurora Net is the new software developed by dBTechnologies that brings the management and monitoring of sound reinforcement systems to a whole new level. Thanks to the introduction of unique features and a totally new architecture, Aurora Net is a stand-alone platform that integrates and improves the functionality of its predecessors.



last but not least, allows a smooth and intuitive workflow. The workspace is designed to show all the main functions at a glance, and allows users to operate through a single-click workflow.

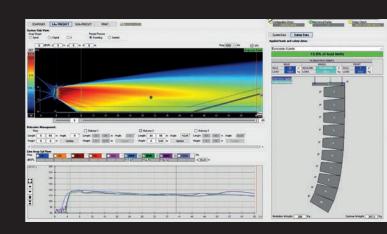
Users can check the complete PA system in use at a glance or manage each single element thanks to a fast and detailed zoom-in/zoom out incremental display feature.



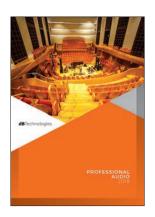
# dBTechnologies COMPOSER

dBTechnologies Composer is a line array configuration software which has been especially developed to optimize VIO and DVA systems alignment and acoustic performance. It is possible to simulate system reinforcement physics in order to set up a system in a fast and easy way according to your needs and the safety precautions.

Furthermore the software allows the user to predict acoustic coverage of both tops and subs, splay angles and it automatically checks the set up presets in order to evaluate the efficiency of the system and its nominal coverage.







See also the **Rental & Installation 2018** catalogue and the **Professional Audio 2018** catalogue

Find all products datasheets on www.dbtechnologies.com

# SMARTER LIGHTER FASTER STRONGER

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