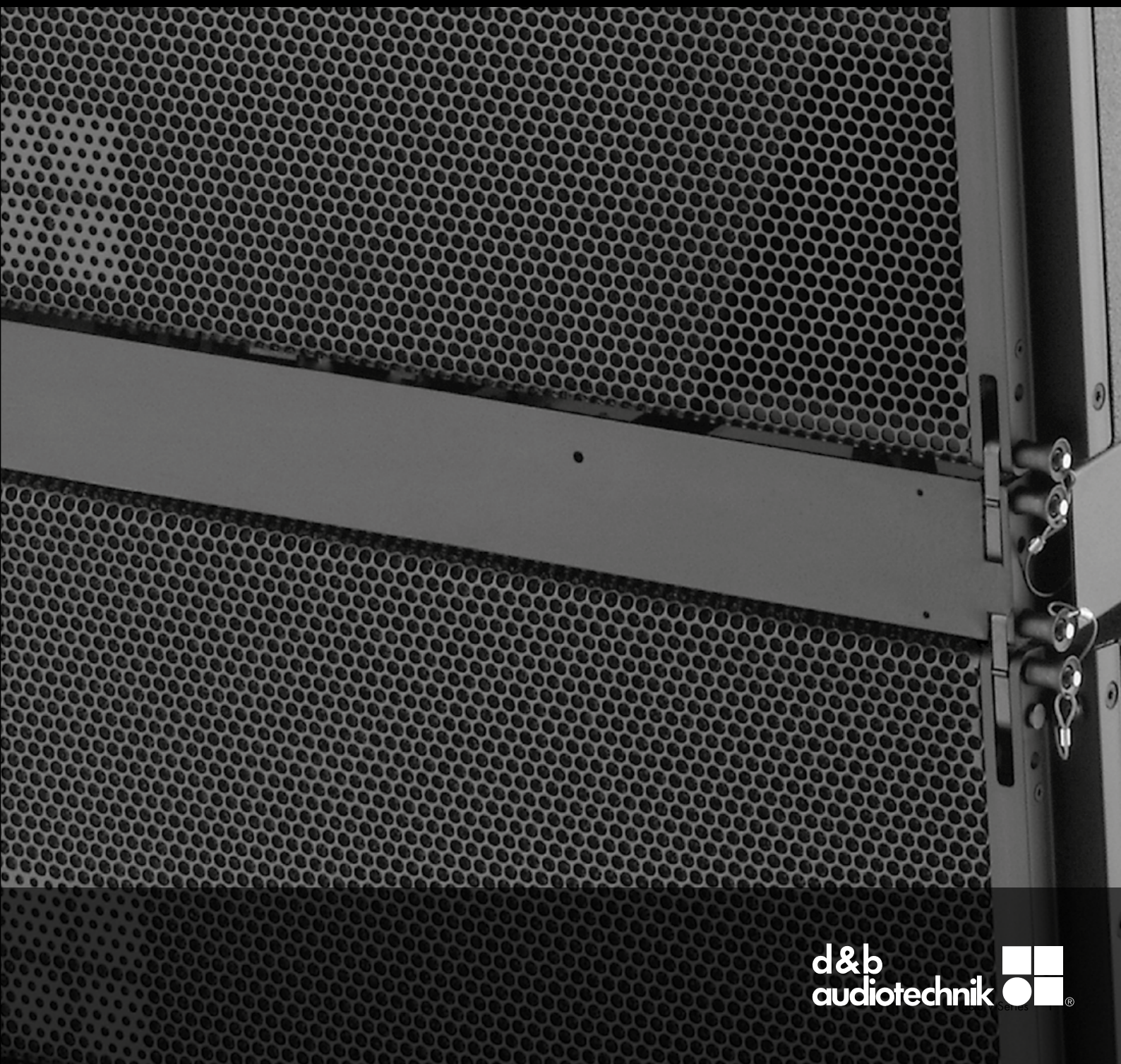
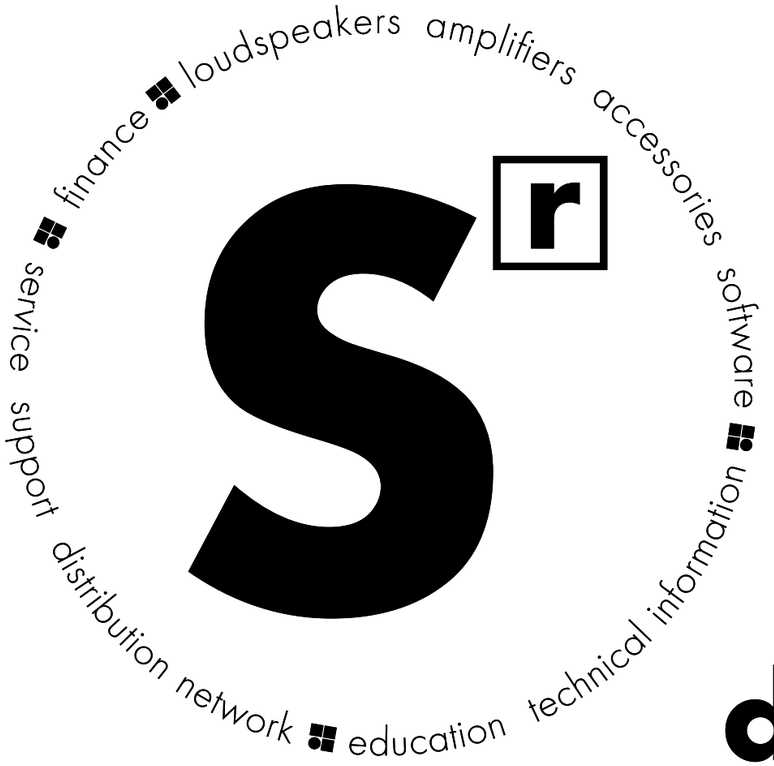
V

V-Series



d&b audiotechnik

Contents



d&b System reality

As the name implies a d&b audiotechnik system is not just a loudspeaker. Nor is it merely a sum of the components: loudspeakers, amplifiers, accessories and software.
Right from the outset the d&b audiotechnik approach was to build integrated sound reinforcement systems that actually are more than the combination of parts: an entirety where each fits all. Every element is tightly specified, precisely aligned and carefully matched to achieve maximum efficiency. For ease of use, all the user-definable parameters are incorporated, allowing the possibility of adjustment, either via remote control surfaces or directly on the amplifiers. Neutral sound characteristics leave the user all the freedom needed to realize whatever the brief.
At the same time d&b offers finance, service and support, a knowledgeable distribution network, education and training as well as technical information, so the same optimal acoustic result is achieved consistently by every system anywhere, at any time.
In reality: the d&b System reality.

The **V-Series** comprises both line array solutions and point source systems; both offer minimal size and weight in combination with outstanding control of dispersion behaviour and convincing high sound pressure levels. With its crystal clear and detailed audio performance, smooth and even frequency response over distance, high dynamic bandwidth and power and headroom capabilities all make the V-Series a good choice for any medium to large sound reinforcement applications, for any sound genre. The line array system features an integrated rigging system ensuring speedy deployment providing a quick and easily configurable array solution for all intended applications. This flexible system can be used stand-alone, or is the ideal complement to the larger J-Series in terms of sound character, headroom, dispersion and arrayability for outfills, as a centre cluster or delays. The high output point source loudspeakers are the answer for any sound reinforcement system that demand high sound pressure levels from a single box solution. The V loudspeakers are designed for a wide range of applications with a clear perspective to provide mobile, flexible, configurable solutions to the most arduous sound reinforcement situations.
The **Vi loudspeakers** differ only slightly in cabinet construction and mounting hardware. They are intended for permanently installed performance spaces where the specification is rider driven. Both the Vi cabinets and mounting hardware can be properly colour matched to interior designs and are weather protected for climatically hostile environments.

The V-Series

The 3-way passive **V7P** and **Vi7P** point source loudspeakers produce a constant directivity dispersion of 75° x 40° (h x v) with exceptional vertical constant directivity dispersion control nominally being maintained down to 350 Hz. This is achieved using a symmetrical dipolar driver arrangement for the two 10" LF neodymium drivers, with a centrally mounted horn-loaded 8" MF driver and a coaxial 1.4" exit HF compression driver mounted on a constant directivity horn. The **V10P** and **Vi10P** point source loudspeakers feature the same driver configuration, but produce a wider 110° horizontal dispersion pattern. Both loudspeakers feature a rotatable HF horn which enables deployment in either orientation. The advanced bass reflex and venting design combined with a large cabinet volume increases the LF performance of these compact cabinets, with a frequency response extending from 59 Hz to 18 kHz.

V7P, V10P loudspeaker

Vi7P,Vi10P loudspeaker

The **V-GSUB** and **Vi-GSUB** are actively driven cardioid subwoofers that require only one amplifier channel. These subwoofers share the same acoustical and visual design as the V-SUB and Vi-SUB, but are intended for ground stacked applications only.

V-GSUB

Vi-GSUB

The **V8** and **Vi8** line array loudspeakers produce an 80° constant directivity dispersion pattern in the horizontal plane. They utilize a passive 3-way design featuring two 10" neodymium LF drivers, one hornloaded 8" MF driver, two 1.4" exit HF compression drivers with 2.5" voicecoils mounted to a dedicated wave shaping device and a passive crossover network. The **V12** and **Vi12** line array modules, which are acoustically and mechanically compatible with the V8 and Vi8 respectively, differ only in the 120° horizontal coverage. All components are arranged symmetrically around the centre axis of the cabinet to produce a perfect symmetrical dispersion pattern. Due to the dipolar arrangement of the LF drivers, a broadband, horizontal dispersion control is maintained down to approximately 250 Hz.

V8, V12 loudspeaker

Vi8, Vi12 loudspeaker

The **V** and **Vi-SUB** are compact high performance cardioid subwoofers powered by a single amplifier channel. They share the same width as the V8/Vi8 and V12/Vi12 loudspeakers and are equipped with compatible flying fittings. The V and Vi-SUB house two long excursion neodymium drivers in an integrated cardioid setup to avoid unwanted energy behind the system.

V subwoofer

Vi subwoofer

All V loudspeakers are finished with a PCP (Polyurea Cabinet Protection) coating that provides mobile systems with protection against impact and resistance to the adverse effects on cabinets caused by changing ambient outdoor conditions. The Vi cabinets feature an impact resistant paint finish; Weather Resistant and Special Colour options are available. A selection of transport solutions are available for the V loudspeakers.

The d&b software offering aids the entire system setup process, from the simulation and planning of the loudspeaker systems, to the remote control and monitoring of the system functions during the event, followed by service functionality to verify system performance prior to de-rigging. The **ArrayCalc** simulation software allows the virtual optimization of loudspeaker line arrays, point source and column loudspeakers as well as subwoofers and their adjustment to venue conditions. The d&b **NoizCalc** software uses international standards to model noise immission from one or more d&b loudspeaker systems. NoizCalc takes data from ArrayCalc and calculates the sound propagation and relative attenuation values towards the far field. The complete system configuration simulated in ArrayCalc is assimilated by the **R1 Remote control software** into an intuitive graphical user interface to manage the amplifiers, and loudspeakers, from anywhere in the venue. Service functions enable firmware updates of the amplifiers as and when these are available.

d&b amplifiers are specifically designed for use with d&b loudspeakers, and are at the heart of the d&b system approach. These devices contain extensive Digital Signal Processing capabilities to provide comprehensive loudspeaker management and specific switchable filter functions to precisely target the system response for a wide variety of applications. The four channel **D80** amplifier is intended for both mobile and installation applications requiring the highest Sound Pressure Levels. The installation specific four channel **30D** amplifier is intended for permanent integration within venues which require medium to high Sound Pressure Levels. These amplifiers all provide extensive user-definable equalization containing two 16-band equalizers with parametric, notch, shelving and asymmetric filters as well as delay capabilities of up to 10 seconds.

The **DS10** Audio network bridge provides 16 AES3 outputs and interfaces between the Dante audio transport protocol and the d&b amplifiers.

D80 amplifier

30D amplifier

DS10 Audio network bridge

The V7P and Vi7P loudspeakers

V7P and Vi7P loudspeakers

The 3-way passive V7P and Vi7P loudspeakers feature two 10" drivers in a dipole arrangement with a horn loaded 8" MF driver and a 1.4" exit compression driver mounted onto a rotatable CD horn. The Vi7P is the installation version of the V7P loudspeaker and differs only in cabinet construction, finish and mounting hardware. The innovative horn design for the centrally mounted 8" MF driver produces a remarkable sensitivity resulting in an exceptional performance in the vocal range. An advanced bass-reflex and venting design delivers an extended LF output with full bandwidth capabilities.

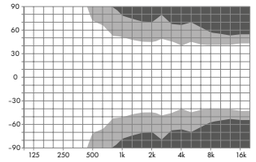
These high performance point source loudspeakers provide a broad variety of deployment possibilities, especially when used as a stand-alone full range system, or combined with other elements from the V-Series, either ground stacked or flown. The HF horn can be rotated by 90° to enable horizontal orientation. The loudspeaker cabinets are constructed from marine plywood, the V7P has an impact and weather protected PCP (Polyurea Cabinet Protection) finish, while the Vi7P has an impact resistant paint finish. The front of the loudspeaker cabinets are protected by a rigid metal grill. The V7P cabinet incorporates a pair of handles. M10 threaded inserts are provided for attaching d&b rigging hardware.

System data

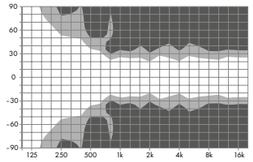
Frequency response (–5 dB standard) ..... 59 Hz - 18 kHz
Frequency response (–5 dB CUT mode) ..... 100 Hz - 18 kHz
Max. sound pressure (1 m, free field)[1] .....
with 30D/D20 ..... 137 dB
with D80 ..... 140 dB
Input level (100 dB SPL/1 m) ..... –17 dBu

Loudspeaker data

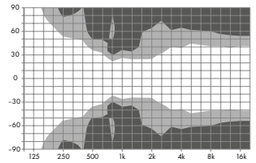
Nominal impedance ..... 8 ohms
Power handling capacity (RMS/peak 10 ms) ..... 500/2000 W
Nominal dispersion angle (h x v) ..... 75° x 40°
Components ..... 2 x 10" driver with neodymium magnet
..... 1 x 8" driver with neodymium magnet
..... 1 x 1.4" exit compression driver
..... passive crossover network
Connections V7P ..... 2 x NLT4 F/M
..... optional 2 x NL4 or 2 x EP5
Connections Vi7P ..... 2 x NL4 and screw terminal block
Weight V7P/Vi7P ..... 33 kg (75 lb)



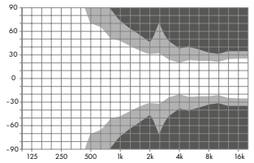
V7P and Vi7P horizontal dispersion characteristics[2]



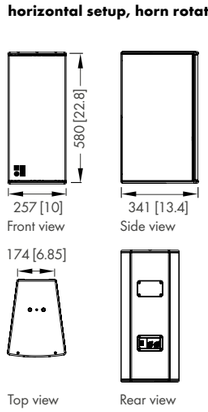
V7P and Vi7P vertical dispersion characteristics[2]



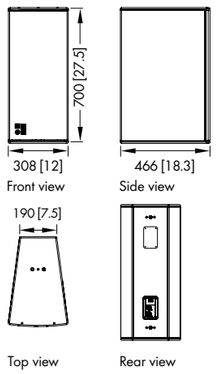
V7P and Vi7P horizontal dispersion characteristics/ horizontal setup, horn rotated[2]



V7P and Yi7P vertical dispersion characteristics/horizontal setup, horn rotated[2]



V7P cabinet dimensions in mm [inch]



V7iP cabinet dimensions in mm [inch]

[1] Broadband measurement, pink noise, crest factor 4, peak measurement, linear weighting
[2] Dispersion angle vs frequency plotted using lines of equal sound pressure (isobars) at –6 dB and –12 dB

The V10P and Vi10P loudspeakers

V10P and Vi10P loudspeakers

The 3-way passive V10P and Vi10P loudspeakers feature two 10" drivers in a dipole arrangement with a horn loaded 8" MF driver and a 1.4" exit compression driver mounted onto a rotatable CD horn. The Vi10P is the installation version of the V10P loudspeaker and differs only in cabinet construction, finish and mounting hardware. The innovative horn design for the centrally mounted 8" MF driver produces a remarkable sensitivity resulting in an exceptional performance in the vocal range. An advanced bass-reflex and venting design delivers an extended LF output with full bandwidth capabilities.

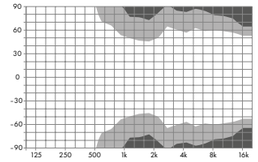
These high performance point source loudspeakers provide a broad variety of deployment possibilities, especially when used as a stand-alone full range system, or combined with other elements from the V-Series, either ground stacked or flown. The HF horn can be rotated by 90° to enable horizontal orientation. The loudspeaker cabinets are constructed from marine plywood, the V10P has an impact and weather protected PCP (Polyurea Cabinet Protection) finish, while the Vi10P has an impact resistant paint finish. The front of the loudspeaker cabinets are protected by a rigid metal grill. The V10P cabinet incorporates a pair of handles. M10 threaded inserts are provided for attaching d&b rigging hardware.

System data

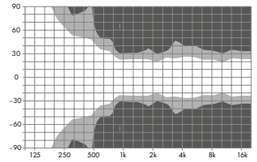
Frequency response (–5 dB standard) ..... 59 Hz - 18 kHz
Frequency response (–5 dB CUT mode) ..... 100 Hz - 18 kHz
Max. sound pressure (1 m, free field)1 .....
with 30D/D20 ..... 136 dB
with D80 ..... 139 dB
Input level (100 dB SPL/1 m) ..... –17 dBu

Loudspeaker data

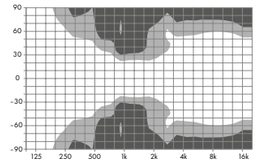
Nominal impedance ..... 8 ohms
Power handling capacity (RMS/peak 10 ms) ..... 500/2000 W
Nominal dispersion angle (h x v) ..... 110° x 40°
Components ..... 2 x 10" driver with neodymium magnet
..... 1 x 8" driver with neodymium magnet
..... 1 x 1.4" exit compression driver
..... passive crossover network
Connections V10P ..... 2 x NLT4 F/M
..... optional 2 x NL4 or 2 x EP5
Connections Vi10P ..... 2 x NL4 and screw terminal block
Weight V10P/Vi10P ..... 33 kg (75 lb)



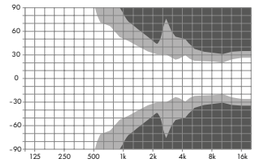
V10P and Vi10P horizontal dispersion characteristics[2]



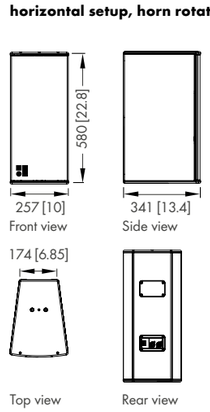
V10P and Vi10P vertical dispersion characteristics[2]



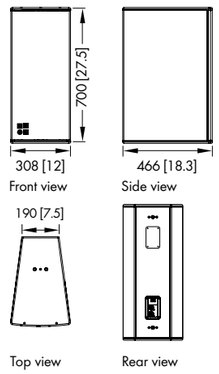
V10P and Vi10P horizontal dispersion characteristics/ horizontal setup, horn rotated[2]



V10P and Vi10P vertical dispersion characteristics/ horizontal setup, horn rotated[2]



V10P cabinet dimensions in mm [inch]



Vi10P cabinet dimensions in mm [inch]

[1] Broadband measurement, pink noise, crest factor 4, peak measurement, linear weighting
[2] Dispersion angle vs frequency plotted using lines of equal sound pressure (isobars) at –6 dB and –12 dB

The V-GSUB and Vi-GSUB

V-GSUB and Vi-GSUB

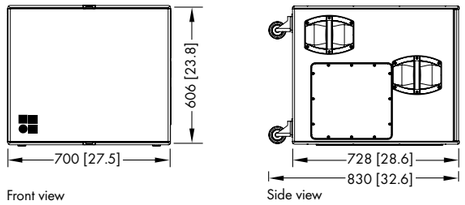
The V-GSUB and Vi-GSUB are actively driven high performance cardioid subwoofers powered by a single amplifier channel. The V-GSUB and Vi-GSUB are intended for ground stacked applications only, and share the same acoustical and visual design as the V-SUB and Vi-SUB, which feature integrated rigging equipment. The Vi-GSUB is the installation version of the V-GSUB. They house two long excursion neodymium drivers, an 18" driver in a bass-reflex design facing to the front and a 12" driver in a two chamber bandpass design radiating to the rear. The cardioid dispersion pattern resulting from this arrangement avoids unwanted energy behind the system that reduces the excitation of the reverberant field at low frequencies and provides the greatest accuracy of low frequency reproduction. The cabinet is constructed from marine plywood and has an impact and weather protected PCP (Polyurea Cabinet Protection) finish. The front of the loudspeaker cabinet is protected by a rigid metal grill backed by an acoustically transparent foam. The V-GSUB top panel has a recess in the form of the footprint of a V7P/V10P enclosure to prevent cabinet movement when stacking one TOP loudspeaker. The enclosure features two runners to protect the bottom panel from scratching. Two correspondingly shaped recesses are incorporated into the top panel of each V-GSUB cabinet to accept these runners, preventing cabinet movement when stacked. Each side of the V-GSUB panel incorporates two handles whilst the top panel has an M20 high stand flange inserted.

System data

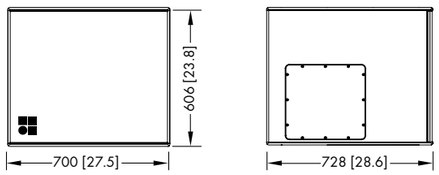
Frequency response (–5 dB standard).....37 Hz - 115 Hz
Frequency response (–5 dB 100 Hz mode).....37 Hz - 95 Hz
Max. sound pressure (1 m, free field)[1] .....
with 30D/D20.....133 dB
with D80 .....137 dB

Loudspeaker data

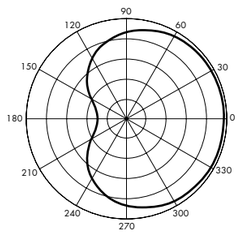
Nominal impedance.....8 ohms
Power handling capacity (RMS/peak 10 msec) .....800/3200 W
Components..... 1 x 18" driver
..... 1 x 12" driver
Connections V-GSUB.....2 x NLT4 F/M
..... optional 2 x NL4 or 2 x EP5
Connections Vi-GSUB..... 2 x NL4 and screw terminal block
Weight V-GSUB/Vi-GSUB.....61/58 kg (135/128 lb)



V-GSUB cabinet dimensions in mm [inch]



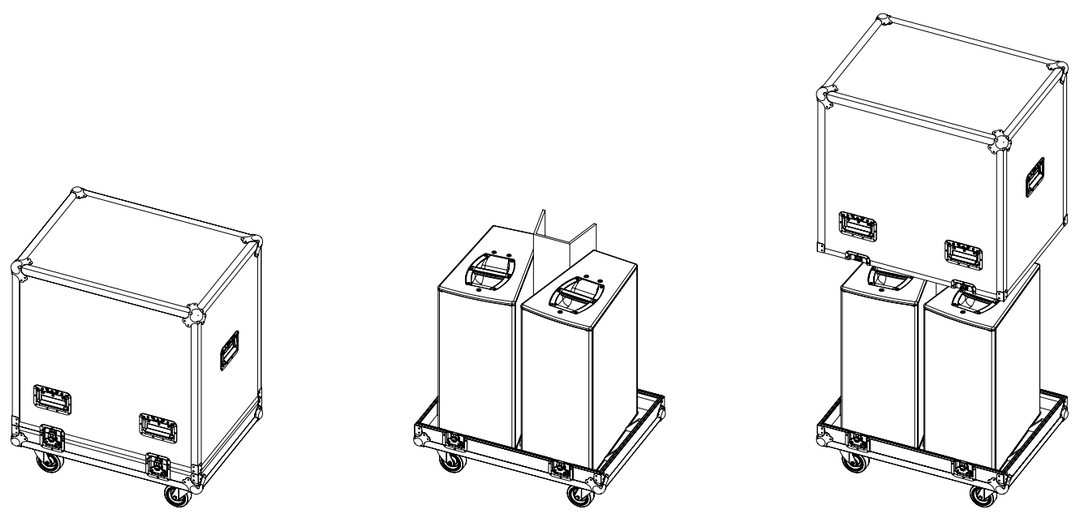
Vi-GSUB cabinet dimensions in mm [inch]



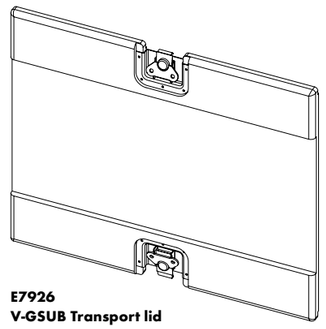
Cardioid polar pattern

[1] Broadband measurement, pink noise, crest factor 4, peak measurement, linear weighting

The V7P, V10P and V-GSUB transport accessories



E7466
Touring case 2 x V7P/V10P
Dimensions (H x W x D):
970 x 800 x 600 mm
38.2 x 31.5 x 23.6 inch
Net weight: 43 kg (94.8 lb)



E7926
V-GSUB Transport lid

The V8 and Vi8 loudspeakers

V8 and Vi8 loudspeakers

The V8 and Vi8 are line array loudspeakers, the Vi8 is the installation version of the V8 loudspeaker. They are 3-way passive designs featuring two 10" LF drivers, one hornloaded 8" MF driver and two 1.4" exit HF compression drivers with 2.5" voicecoils mounted to a dedicated waveshaping device. The symmetrical dipolar arrangement of the neodymium LF drivers around the centrally mounted coaxial MF and HF components allows a smooth overlap of the adjacent frequency bands in the crossover design. This results in an exceptional 80° horizontal constant directivity dispersion control nominally being maintained down to 250 Hz.

The mechanical and acoustical design enables flown vertical arrays of up to twenty four loudspeakers to be suspended using vertical splay angles between 0° to 14° with a 1° resolution. It can be used in columns of purely V8 or Vi8 loudspeakers or combined with V12/Vi12s and/or with V-SUB/Vi-SUBs.

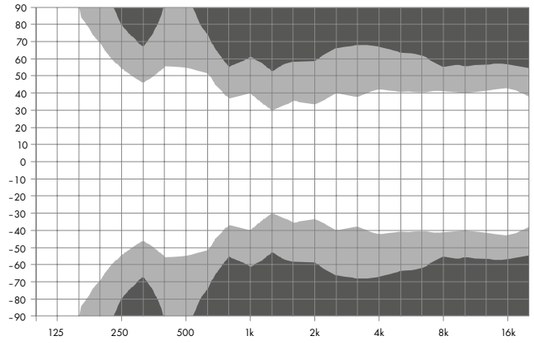
The cabinet is constructed from marine plywood and has an impact and weather protected PCP (Polyurea Cabinet Protection) finish. The front of the loudspeaker cabinet is protected by a rigid metal grill backed by an acoustically transparent foam. Each side panel of the V8 cabinet incorporates a handle while two additional recessed grips are provided at the rear bottom of both the V8 and Vi8.

System data

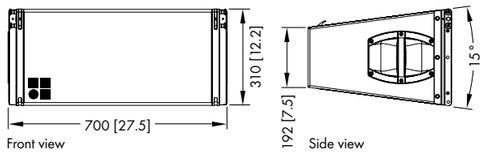
Frequency response (–5 dB standard)..... 67 Hz - 18 kHz
Frequency response (–5 dB CUT mode).....100 Hz - 18 kHz
Max. sound pressure (1 m, free field)[1] .....
with 30D/D20.....139 dB
with D80 .....142 dB

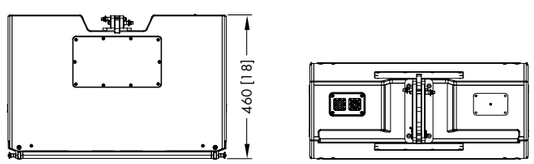
Loudspeaker data

Nominal impedance.....8 ohms
Power handling capacity (RMS/peak 10 msec) .....500/2000 W
Nominal dispersion angle (horizontal).....80°
Splay angle settings .....0° - 14°
.....1° increment
Components..... 2 x 10" driver
.....1 x 8" driver
.....2 x 1.4" exit compression driver
.....passive crossover network
Connections V8 .....2 x NLT4 F/M
..... optional 2 x NL4 or 2 x EP5
Connections Vi8.....2 x NL4
Weight..... 34 kg (75 lb)

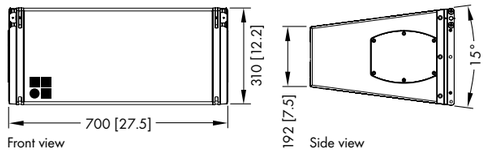


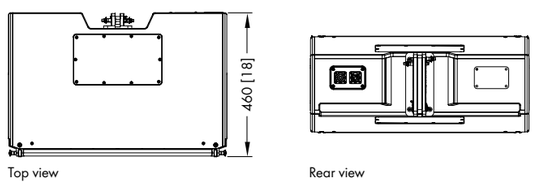
V8 and Vi8 horizontal dispersion characteristics[2]





V8 cabinet dimensions in mm [inch]





Vi8 cabinet dimensions in mm [inch]

[1] Broadband measurement, pink noise, crest factor 4, peak measurement, linear weighting
[2] Dispersion angle vs frequency plotted using lines of equal sound pressure (isobars) at –6 dB and –12 dB

The V12 and Vi12 loudspeakers

V12 and Vi12 loudspeakers

The V12 and Vi12 are line array loudspeakers, the Vi12 is the installation version of the V12 loudspeaker. They are 3-way passive designs featuring two 10" LF drivers, one hornloaded 8" MF driver and two 1.4" exit HF compression drivers with 2.5" voicecoils mounted to a dedicated waveshaping device. The symmetrical dipolar arrangement of the neodymium LF drivers around the centrally mounted coaxial MF and HF components allows a smooth overlap of the adjacent frequency bands in the crossover design. This results in an exceptional 120° horizontal constant directivity dispersion control nominally being maintained down to 250 Hz.

The mechanical and acoustical design enables flown vertical arrays of up to twenty four loudspeakers to be suspended using vertical splay angles between them of 0° to 14° with a 1° resolution. It can be used in columns of purely V12 or Vi12 loudspeakers or combined with V8/Vi8s and/or with V-SUB/Vi-SUBs.

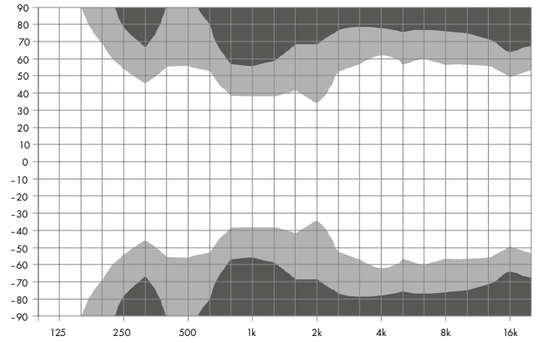
The cabinet is constructed from marine plywood and has an impact and weather protected PCP (Polyurea Cabinet Protection) finish. The front of the loudspeaker cabinet is protected by a rigid metal grill backed by an acoustically transparent foam. Each side panel of the V12 cabinet incorporates a handle while two additional recessed grips are provided at the rear bottom of both the V12 and Vi12.

System data

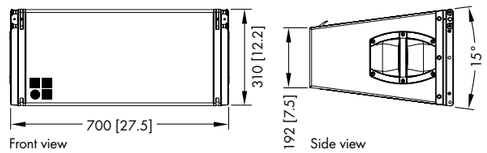
Frequency response (–5 dB standard)..... 67 Hz - 18 kHz
Frequency response (–5 dB CUT mode).....100 Hz - 18 kHz
Max. sound pressure (1 m, free field)[1] .....
with 30D/D20.....139 dB
with D80 .....142 dB

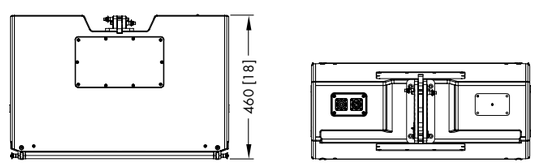
Loudspeaker data

Nominal impedance.....8 ohms
Power handling capacity (RMS/peak 10 msec) .....500/2000 W
Nominal dispersion angle (horizontal)..... 120°
Splay angle settings .....0° - 14°
.....1° increment
Components..... 2 x 10" driver
.....1 x 8" driver
.....2 x 1.4" exit compression driver
.....passive crossover network
Connections V12 .....2 x NLT4 F/M
..... optional 2 x NL4 or 2 x EP5
Connections Vi12 ..... 2 x NL4 .....
Weight..... 34 kg (75 lb)

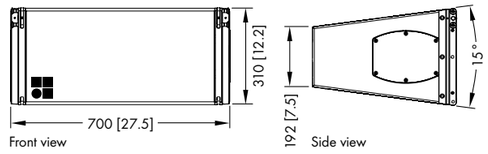


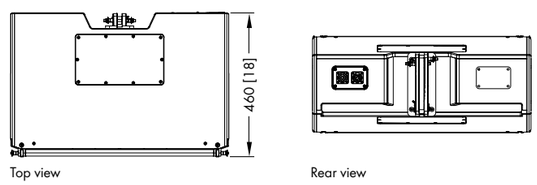
V12 and Vi12 horizontal dispersion characteristics[2]





V12 cabinet dimensions in mm [inch]





Vi12 cabinet dimensions in mm [inch]

[1] Broadband measurement, pink noise, crest factor 4, peak measurement, linear weighting
[2] Dispersion angle vs frequency plotted using lines of equal sound pressure (isobars) at –6 dB and –12 dB

The V and Vi subwoofers

V and Vi subwoofers

The V-SUB and Vi-SUB are actively driven high performance cardioid subwoofers powered by a single amplifier channel. The V-SUB and Vi-SUB feature integrated rigging equipment, and share the same acoustical and visual design as the V-GSUB and Vi-GSUB, which are intended for ground stacked applications only. The Vi-SUB is the installation version of the V subwoofer. They house two long excursion neodymium drivers, an 18" driver in a bass-reflex design facing to the front and a 12" driver in a two chamber bandpass design radiating to the rear. The cardioid dispersion pattern resulting from this arrangement avoids unwanted energy behind the system that reduces the excitation of the reverberant field at low frequencies and provides the greatest accuracy of low frequency reproduction.

The V and Vi subwoofers can be used to supplement V8/Vi8 and V12/Vi12 loudspeakers in various combinations, ground stacked or flown, either integrated on top of a V8/V12 or Vi8/Vi12 array or as a separate column.

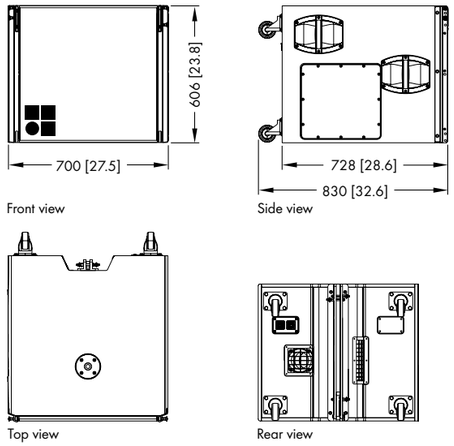
The cabinet is constructed from marine plywood and has an impact and weather protected PCP (Polyurea Cabinet Protection) finish. The front of the loudspeaker cabinet is protected by a rigid metal grill backed by an acoustically transparent foam. Each side of the V-SUB panel incorporates two handles whilst the top panel has an M20 high stand flange inserted.

System data

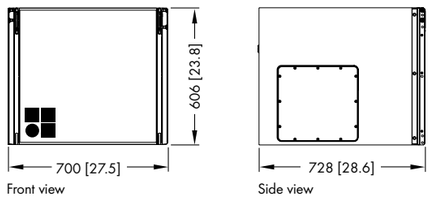
Frequency response (–5 dB standard).....37 - 115 Hz
Frequency response (–5 dB 100 Hz mode).....37 - 95 Hz
Max. sound pressure (1 m, free field)[1] .....
with 30D/D20.....133 dB
with D80.....137 dB

Loudspeaker data

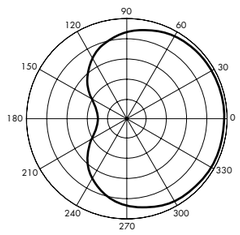
Nominal impedance.....8 ohms
Power handling capacity (RMS/peak 10 msec) .....800/3200 W
Splay angle settings .....0° and 2.5°
Components..... 1 x 18" driver
..... 1 x 12" driver
Connections V-SUB.....2 x NLT4 F/M
..... optional 2 x NL4 or 2 x EP5
Connections Vi-SUB.....2 x NL4
Weight V-SUB/Vi-SUB.....64/62 kg (141/137 lb)



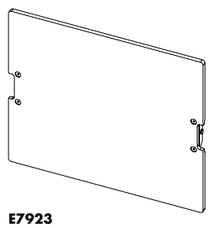
V-SUB cabinet dimensions in mm [inch]



Vi-SUB cabinet dimensions in mm [inch]



Cardioid polar pattern



E7923
V-SUB Wooden lid

[1] Broadband measurement, pink noise, crest factor 4, peak measurement, linear weighting

The Vi Weather Resistant and Special Colour options

The Vi cabinets and appropriate accessories are also available with a Weather Resistant or Special Colour option. Both options can be combined.

Weather Resistant (WR) option

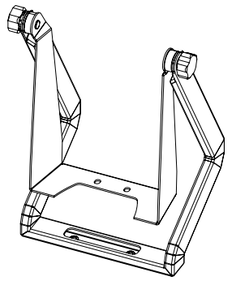
The WR option enables operation of loudspeakers in changing ambient conditions, however it is not intended to enable permanent, unprotected operation of loudspeakers outdoors. Cabinets being used outdoors even with the WR option should always be aimed either horizontally or with a downward tilt. An additional cover should be positioned over the loudspeakers. Vi loudspeakers with the Weather Resistant option are supplied with a fixed cable. PG cable type H-07-RN-F 2 x 2.5 mm^2/ AWG 13 with a length of 5.5 m (18 ft) as standard or length as required.

Special Colour (SC) option

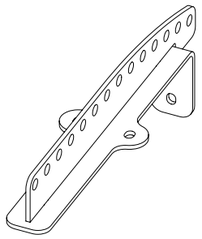
The paint finish of all loudspeaker cabinets and most accessories can be executed in almost all RAL colours in accordance with the RAL colour table. All rigging fittings at the rear of the cabinet, Front links and Locking pins remain in black. Other paint finishes such as metallic are available on request. The acoustically transparent foam fitted behind the rigid metal grill is also painted with the requested RAL colour.

The V7P/Vi7P, V10P/Vi10P and V-GSUB/Vi-GSUB mounting accessories

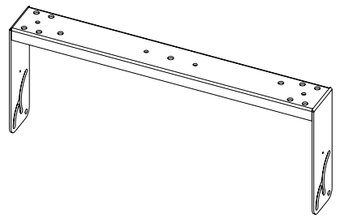
Safety approval
d&b loudspeakers and accessories are designed for setup and use within situations requiring compliance with the provisions and directives of the DGUV regulation 17 (formerly BGV C1).



Z5383
VP Mounting bracket



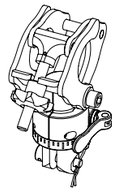
Z5384
VP Flying adapter



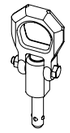
Z5388
VP Horizontal bracket

Z5550
M20 Stand adapter

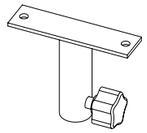
Z5012
Pipe clamp for TV spigot
For a tube diameter up to 70 mm/2.75"



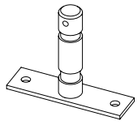
Z5147
Rota clamp
WLL: 500 kg (1100 lb) for a tube diameter up to 51 mm/2"



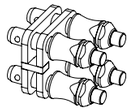
Z5049
Flying pin 8mm[1]



Z5024
Loudspeaker stand adapter



Z5010
TV spigot with fixing plate

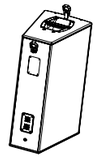


Z5551
VP Flying adapter link

[1] For static loads only. Not intended for attaching secondardy saftey devices.

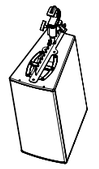
The V7P/Vi7P, V10P/Vi10P and V-GSUB/Vi-GSUB mounting examples

V7P/V10P with
Z5383 VP Mounting bracket
Z5010 TV spigot with fixing plate
Z5012 Pipe clamp

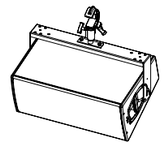


V7P/V10P[1] with
Z5012 Flying pin 8mm

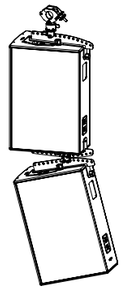
V7P/V10P with
Z5383 VP Mounting bracket
Z5010 TV spigot with fixing plate
Z5024 Loudspeaker
stand adapter



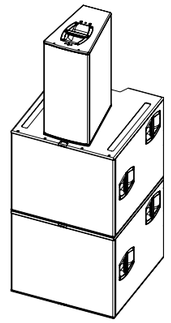
V7P/V10P with
Z5384 VP Flying adapter
Z5015 TV spigot for
Flying adapter 02
Z5012 Pipe clamp



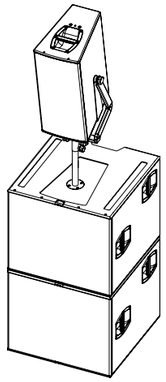
V7P/V10P with
Z5388 VP Horizontal bracket
Z5010 TV spigot with fixing plate
Z5012 Pipe clamp



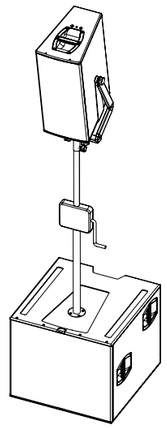
V7P/V10P with
Z5384 VP Flying adapter
Z5015 TV spigot for
Flying adapter 02
Z5147 Rota clamp
Z5551 VP Flying adapter link



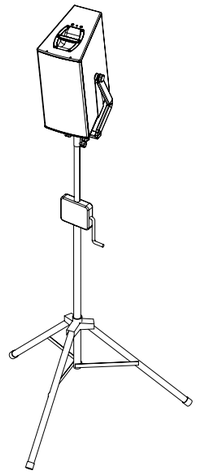
V7P/V10P with V-GSUB



V7P/V10P with
Z5550 M20 Stand adapter



V7P/V10P with
Z5383 VP Mounting bracket
Z5024 Loudspeaker
stand adapter
Z5013 Loudspeaker
stand winder M20

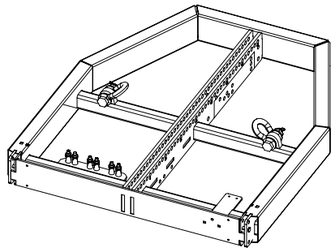


V7P/V10P with
Z5383 VP Mounting bracket
Z5024 Loudspeaker
stand adapter
Z5009 Loudspeaker
stand with winder

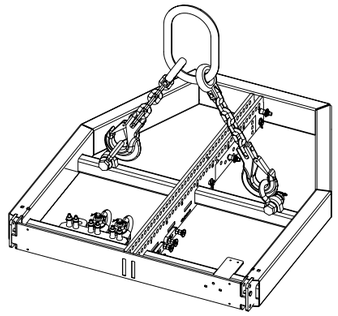
[1] This example is not valid for Vi speakers

The V8, V12 and V-SUB rigging system

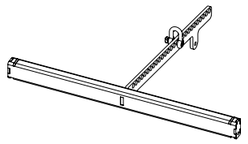
Safety approval
d&b loudspeakers and accessories are designed for setup and use within situations requiring compliance with the provisions and directives of the DGUV regulation 17 (formerly BGV C1).



Z5380
V Flying frame
For a maximum of twenty four V8/V12 loudspeakers or fourteen V subwoofers



Z5380
V Flying frame
Supplied with
1 x 5382 V Safety chainset
2 x V Load adapter
1 x V Load adapter for Rota clamp
2 x Front links



Z5385
V Flying adapter
For a maximum of four V8/V12 loudspeakers; supplied with 1t Shackle

Z5382
V Safety chainset

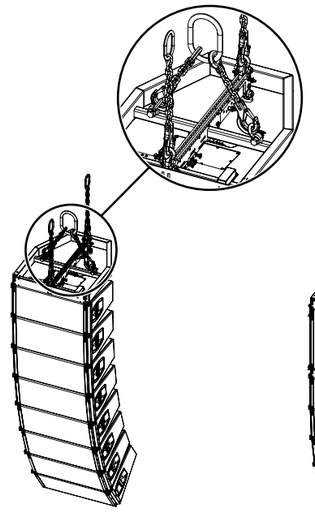
Z5381
V Hoist connector chain

Z5147
Rota clamp
WLL: 500 kg (1100 lb)
for a tube diameter up to 51 mm/2"

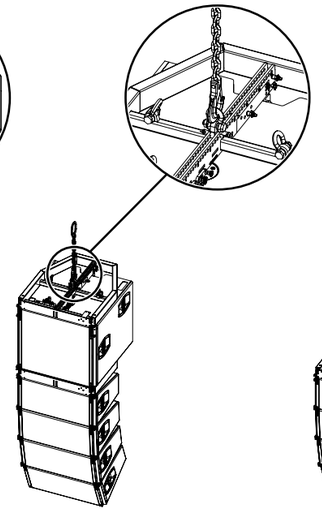
Z5386
V Stack adapter

The V8, V12 and V-SUB rigging examples

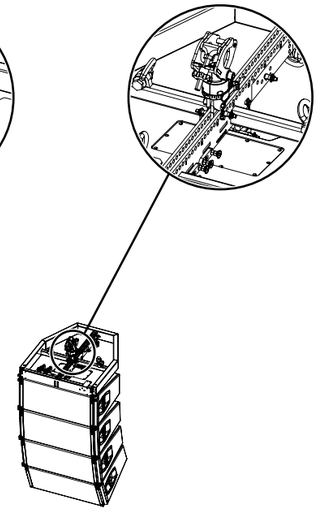
These rigging examples are for illustration only. For further information please resfer to the TI 385 d&b Line array design as well as the V-Series Rigging manual, both of which are available for download at www.dbaudio.com.



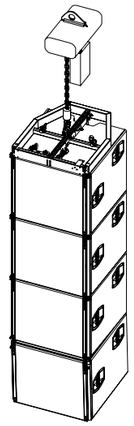
V8/V12 array with
Z5380 V Flying frame
2 x Z5381 V Hoist connector chains
Z5382 V Safety chainset



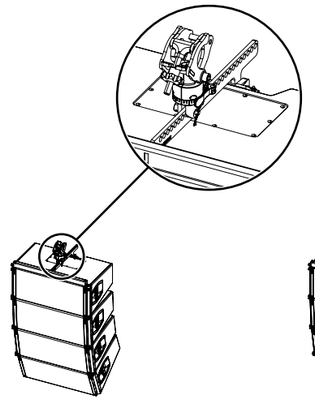
V-Series mixed array with
Z5380 V Flying frame
Z5381 V Hoist connector chain



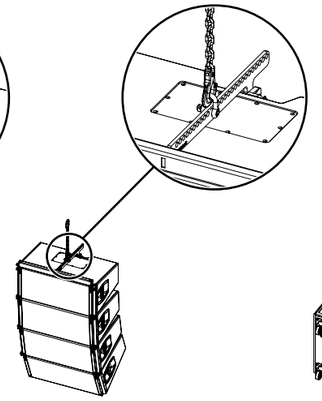
V8/V12 array with
Z5380 V Flying frame
Z5147 Rota clamp



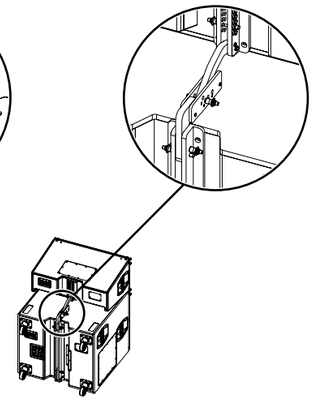
V-SUB column with
Z5380 V Flying frame



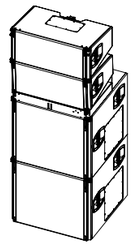
V8/V12 array with
Z5385 V Flying adapter
Z5147 Rota clamp



V8/V12 array with
Z5385 V Flying adapter
E6507 1t Shackle



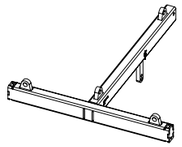
V-Series ground stack with
Z5386 V Stack adapter



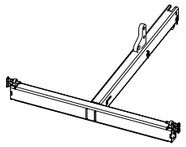
V-Series ground stack with
Z5380 V Flying frame

The Vi8, Vi12 and Vi-SUB rigging accessories and examples

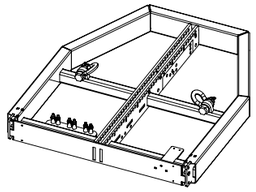
Safety approval
d&b loudspeakers and accessories are designed for setup and use within situations requiring compliance with the provisions and directives of the DGUV regulation 17 (formerly BGV C1).



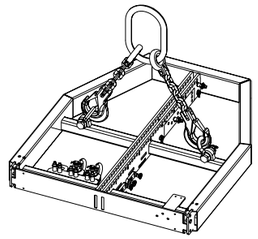
Z5387.000
Vi Mounting frame top
For a maximum load equivalent
to four Vi8/Vi12 loudspeakers
136 kg (300 lb)



Z5387.001
Vi Mounting frame bottom



Z5380
V Flying frame
For a maximum of twenty
four V8/V12/Vi8/Vi12 loudspeakers
or fourteen V/Vi subwoofers

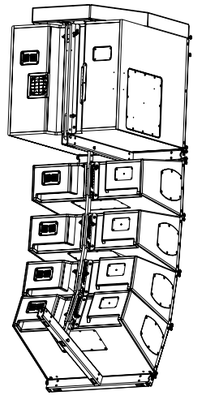


Z5380
V Flying frame
Supplied with
1 x 5382 V Safety chainset
2 x V Load adapter
1 x V Load adapter for Rota clamp
2 x Front links

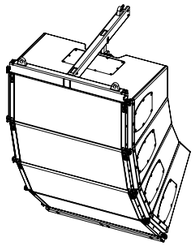
E6507
1t Shackle

Z5381
V Hoist connector chain

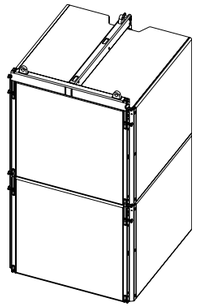
Z5382
V Safety chainset



Vi array with
Z5380
V Flying frame
Z5387.001
Vi Mounting frame bottom (2pcs)

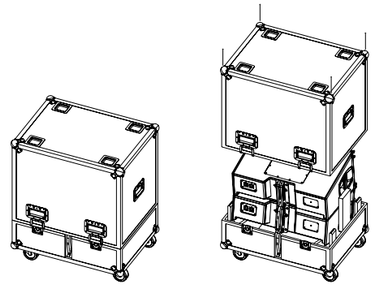


Vi8/Vi12 array with
Z5387.000
Vi Mounting frame top

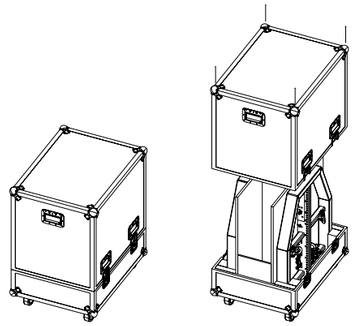


Vi-SUB column with
Z5387.000
Vi Mounting frame top

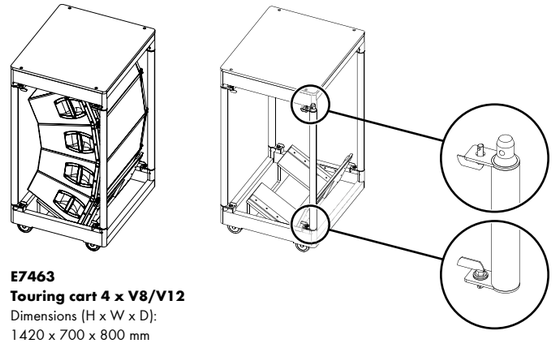
The V8, V12 and V Flying frame cases and carts



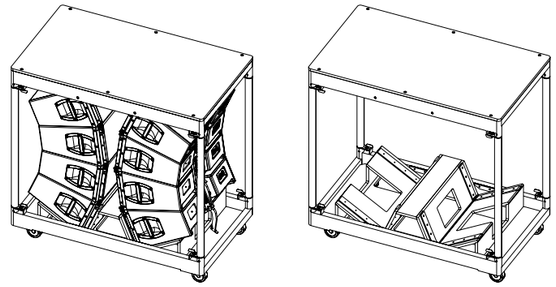
E7462
Touring case 2 x V8/V12
Dimensions (H x W x D):
900 x 800 x 600 mm
35.4 x 31.5 x 23.6 inch
Net weight: 40 kg (88 lb)



E7465
Touring case 2 x V Flying frame
Dimensions (H x W x D):
970 x 800 x 600 mm
38.2 x 31.5 x 23.6 inch
Net weight: 52 kg (120 lb)



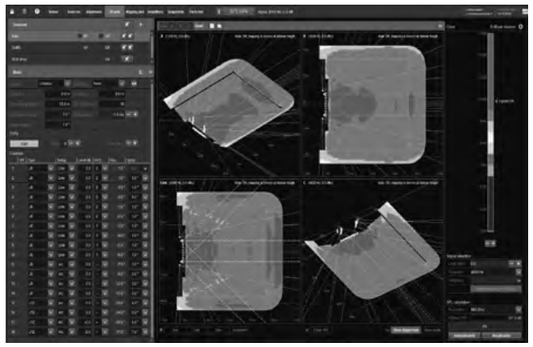
E7463
Touring cart 4 x V8/V12
Dimensions (H x W x D):
1420 x 700 x 800 mm
56 x 27.5 x 31.5 inch
Total weight: 190 kg (420 lb)
Maximum top load: 100 kg (220 lb)



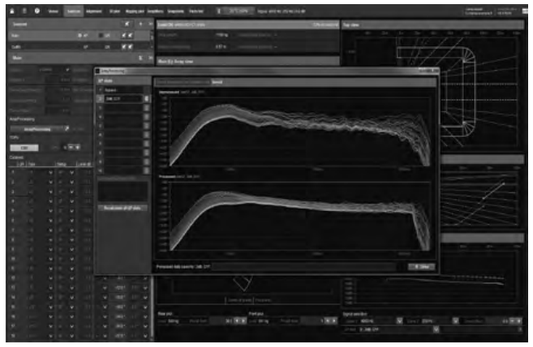
E7464
Touring cart 8 x V8/V12
Dimensions (H x W x D):
1420 x 1400 x 800 mm
56 x 55 x 31.5 inch
Total weight: 360 kg (800 lb)
Maximum top load: 200 kg (440 lb)

The d&b ArrayCalc simulation software
The d&b NoizCalc immission modelling software

The d&b ArrayCalc simulation software is the simulation tool for d&b line arrays, column and point source loudspeakers as well as subwoofers. This is a comprehensive toolbox for all tasks associated with acoustic design, performance prediction, alignment, rigging and safety parameters. d&b ArrayCalc is available as a native stand-alone application for both Microsoft Windows[1] and Mac OS X[2] operating systems. Listening planes can be defined in the venue tab, creating a three dimensional representation of any audience area in a given venue.
All sources can be time aligned, and the phase response of a flown system and a ground stacked SUB array can be aligned at a definable reference point. The level distribution resulting from the interaction of all active sources can be mapped onto the audience areas in a three-dimensional view. The Remote ID for all devices can be managed in the amplifier tab. EASE and DXF data export capabilities are also available.
The ArrayProcessing function applies powerful filter algorithms to optimize the tonal (spectral) and level (spatial) performance of a line array column over the audience area defined by its mechanical vertical coverage angle. Spectral and level performance targets over the listening areas can be defined while specific level drops or offsets can be applied to certain areas using the Reflecting or Level avoidance plane types.
It applies a combination of FIR and IIR filters to each cabinet in an array to achieve the targeted performance, with an additional latency of only 5.9 ms. This significantly improves the linearity of the response over distance as well as seamlessly correcting for air absorption. In addition, it employs the same frequency response targets for all d&b line arrays providing consistent sonic results widely regardless of array lengths or splay settings.
The resulting coverage is enhanced with spectral consistency and defined level distribution, achieving better dispersion and total system directivity to cover listening areas effectively.
A reference point can be defined for the d&b NoizCalc software, which can be used to model the far field noise immission from a d&b sound reinforcement system. NoizCalc uses loudspeaker data from the ArrayCalc simulation file and displays the immission on a terrain map, presenting the calculated Sound Pressure Levels in dB(A) applying the selected frequency spectrum using either the ISO 9613-2 or Nord2000 standards.
The R1 Remote control software uses the data defined in ArrayCalc to generate an intuitive graphical user interface including the complete setup of the simulated system and all configuration information. This workflow removes the need to manually transfer data from one software program to the other.
Further information is provided in the d&b Amplifier and Software brochure which is available for download at www.dbaudio.com.



3D Plot quad



ArrayProcessing

NoizCalc results map

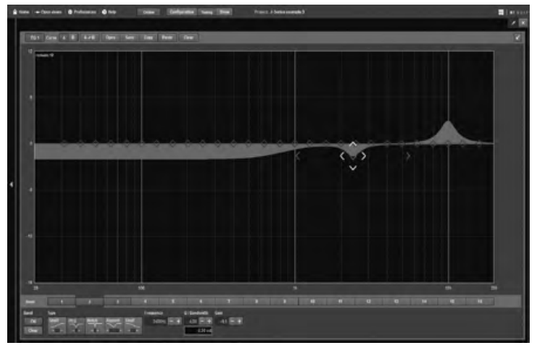
[1] Microsoft Windows is a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries
[2] Mac OS X is a trademark of Apple Inc., registered in the U.S. and other countries

The d&b R1 Remote control software

The remote control capability of the d&b Remote network enables central control and monitoring of a complete d&b loudspeaker system from anywhere in the network, be it from a computer in the control room, at the mix position, or on a wireless tablet in the auditorium. This central access to all functions through the d&b Remote network, to controls as well as detailed system and device diagnostics information, unlocks the full potential of the d&b system approach. In a typical user workflow, the d&b Remote network takes settings optimized in the ArrayCalc simulation software and applies these to all the amplifiers within the network. The importation of settings from ArrayCalc allows the system configuration to be quickly accomplished, providing more time for verification and fine tuning.
All features, functions and controls available on the front panel of d&b amplifiers may be remotely controlled and/or monitored using R1 Remote control software. This allows each channel of the amplifier to be controlled and enables the creation of groups of loudspeakers. When grouped together, a button or fader can control the overall system level, zone level, equalization and delay, power ON/OFF, MUTE, as well as loudspeaker specific function switches such as CUT/HFA/HFC and CPL. An offline mode is provided for preparation in advance of an event, without the amplifiers being present or connected.
For mobile applications, d&b System check verifies that the system performs within a predefined condition. Extensive facilities for storing and recalling system settings are provided allowing these to be repeated, as and when required. Project files can be easily adjusted for use with a different set of equipment at another location.
In installation projects system integrators can configure the d&b Remote network to offer access to different levels of control, tailored to the operational demands. For example, power ON/OFF for daily use, or more complex functionality for detailed control. Password protection is available to restrict access. Input and Load monitoring allow installation operators to ensure optimum performance at all times.
R1 Remote control software enables d&b amplifiers to be remotely controlled using both Ethernet and CAN-Bus in parallel. The software is optimized for use with touch screen, mouse and keyboard and runs on both Microsoft Windows[1] (Win7 or higher) and Mac OS X[2] (10.7 or higher) operating systems.
Further information is provided in the d&b Amplifier and Software brochure which is available for download at www.dbaudio.com.

Home

Remote in Configuration mode



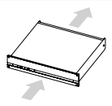
16-band equalizer

[1] Microsoft Windows is a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries
[2] Mac OS X is a trademark of Apple Inc., registered in the U.S. and other countries

The d&b amplifiers

The d&b amplifiers are designed specifically to power d&b loudspeakers and are the beating heart of the d&b System reality. As such, they incorporate Digital Signal Processing for comprehensive loudspeaker management, switchable filter functions, remote capabilities and user-definable controls, to fulfil the exact needs of each application.
Every loudspeaker configuration combines comprehensive system limiting, and equalization and crossover settings to ensure consistent results and optimal performance. d&b amplifiers offer different output configurations for different loudspeaker setups, including Dual Channel mode, for passive setups, Mix TOP/SUB mode, in which two channels are driven through a single output connector, and 2-Way Active mode, which also sends the output of two channels down one connector to drive appropriate loudspeakers actively.
The d&b switch functions provide selected filters to precisely tailor a wide variety of setups to their applications. Examples of these switch functions are the CSA (Cardioid Subwoofer Array) and HFC (High Frequency Compensation) modes. CSA increases low frequency directivity control by minimising energy transmission towards the rear while HFC compensates for air absorption for loudspeakers covering far field listening positions.
In addition to these functions, d&b amplifiers offer a comprehensive set of specific filters such as CUT, a cut mode for TOP loudspeakers when used with d&b subwoofers; CPL, to compensate for the coupling effect between loudspeakers in close proximity to other loudspeakers or hard objects and HFA mode, to attenuate the high frequencies of a loudspeaker to mimic the effect of far field listening.
These devices offer extended, user-definable equalization and delay capabilities, eliminating the need for external processing devices in the signal chain. All d&b amplifiers integrate with the d&b Remote network to enable the remote control and management of systems from anywhere within a network.
Further information is provided in the d&b Amplifier and Software brochure which is available for download at www.dbaudio.com.

Comparison of the d&b amplifiers

	D80	30D	D20
User interface	Encoder/colour TFT touchscreen	LED indicators	Encoder/colour TFT touchscreen
Output channels	4	4	4
Input channels	4 x AES3 or 4 x analog or 2 x AES3 and 2 x analog	4 x AES3 and 4 x analog	4 x AES3 or 4 x analog or 2 x AES3 and 2 x analog
Latency	0.3 msec	0.3 msec	0.3 msec
User equalizers (per channel)	2 x 16-band	2 x 16-band	2 x 16-band
Delay	10 sec/3440 m	10 sec/3440 m	10 sec/3440 m
Maximum output power (THD+N < 0.5%, 12 dB crest factor)	4 x 2000 W into 8 ohms 4 x 4000 W into 4 ohms	4 x 800 W into 8 ohms 4 x 1600 W into 4 ohms	4 x 800 W into 8 ohms 4 x 1600 W into 4 ohms
Output routing	Dual Channel, Mix TOP/SUB 2-Way Active	Dual Channel, Mix TOP/SUB 2-Way Active	Dual Channel, Mix TOP/SUB 2-Way Active
Output connectors	NL4/EP5 plus central NL8	Phoenix Euroblock	NL4 plus central NL8
GPIO connector, 5 ports	No	Phoenix Euroblock	No
Cable compensation	LoadMatch	LoadMatch	LoadMatch
Power supply	Autosensing switched mode power supply with active PFC	Universal range switched mode power supply with active PFC	Universal range switched mode power supply with active PFC
Mains voltage	100 - 127/208 - 240 V, 50 - 60 Hz	100 - 240 V, 50 - 60 Hz	100 - 240 V, 50 - 60 Hz
Weight (kg/lb)	19/42	10.6/23.4	10.8/23.8
Dimensions	2 RU x 19" x 530 mm	2 RU x 19" x 435 mm	2 RU x 19" x 460 mm
Remote	OCA via Ethernet/CAN	OCA via Ethernet/CAN	OCA via Ethernet/CAN
Airflow			

The operation with d&b amplifiers

Amplifier controller setups

Arc and Line mode
The Arc mode is intended for line array loudspeakers when used in curved array sections. The Line mode is used for long throw array sections with three or more consecutive splay settings of 0°, 1° or 2°. Compared to the Arc mode, the mid/high range is reduced to compensate for the extended near field.

CUT mode
Set to CUT, the cabinet low frequency level is reduced and it is now configured for use with the d&b V or J subwoofers.

HFC mode
Selecting the HFC (High Frequency Compensation) mode compensates for loss of high frequency energy due to absorption in air when loudspeakers are used to cover far field listening positions. HFC has two settings which should be used selectively, HFC1 for cabinets covering distances larger than 30 m (100 ft) and HFC2 for those covering distances larger than 60 m (200 ft). This can be used to achieve the correct sound balance between close and remote audience areas allowing all amplifiers driving the array to be fed from the same signal source. Thus the whole array performs with comparable headroom.

HFA mode
In HFA mode (High Frequency Attenuation), the HF response of the system is rolled off. HFA provides a natural, balanced frequency response when a unit is placed close to listeners in near field or delay use. HFA begins gradually at 1 kHz, dropping by approximately 3 dB at 10 kHz. This roll off mimics the decline in frequency response experienced when listening to a system from a distance in a typically reverberant room or auditorium.

CPL function
The CPL (Coupling) function compensates for coupling effects between the cabinets of an array. CPL begins gradually around 2 kHz, with the maximum attenuation below 100 Hz. As coupling effects increase with the length of the line array, the CPL circuit can be set to dB attenuation values between 0 and –9.

100 Hz mode
The 100 Hz mode limits the upper operating frequency of the subwoofer to 100Hz, complementing top cabinets in full range mode.

Recommended amplifiers for mobile applications

	V7P	V10P	V-GSUB	V8	V12	V-SUB
D80	x	x	x	x	x	x

Recommended amplifiers for installation applications

	Vi7P	Vi10P	Vi-GSUB	Vi8	Vi12	Vi-SUB
	x	x	x	x	x	x
30D	x	x	x	x	x	x

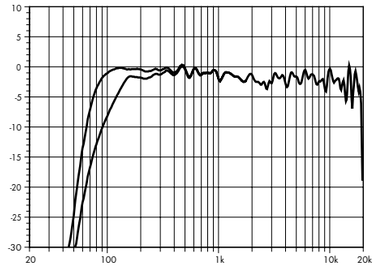
Maximum loudspeakers per amplifier channel

	V7P Vi7P	V10P Vi10P	V-GSUB Vi-GSUB	V8 Vi8	V12 Vi12	V-SUB Vi-SUB
	2	2	2	2	2	2

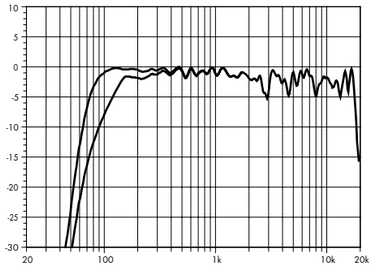
Available controller settings

	V7P Vi7P	V10P Vi10P	V-GSUB Vi-GSUB	V8 Vi8	V12 Vi12	V-SUB Vi-SUB
Arc/Line				x	x	
CUT	x	x		x	x	
HFC				x	x	
HFA	x	x				
CPL	x	x		x	x	
100 Hz			x			x

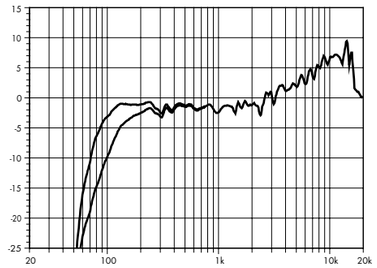
The V-Series frequency responses



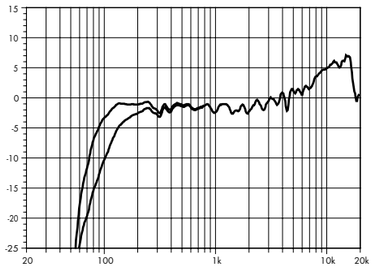
V7/Vi7P standard and CUT (single cabinet)



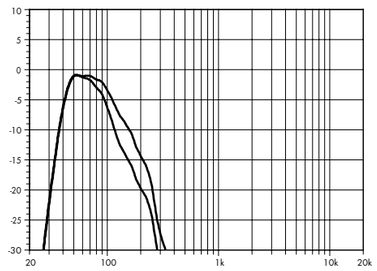
V10/Vi10P standard and CUT (single cabinet)



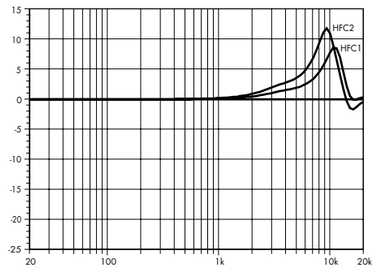
V8/Vi8 standard and CUT (single cabinet)



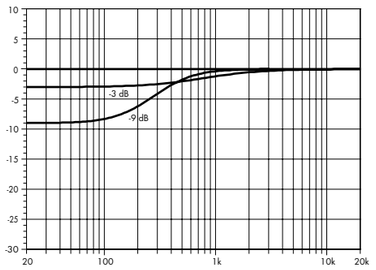
V12/Vi12 standard and CUT (single cabinet)



V-SUB/Vi-SUB and V-GSUB/Vi-GSUB standard and 100 Hz

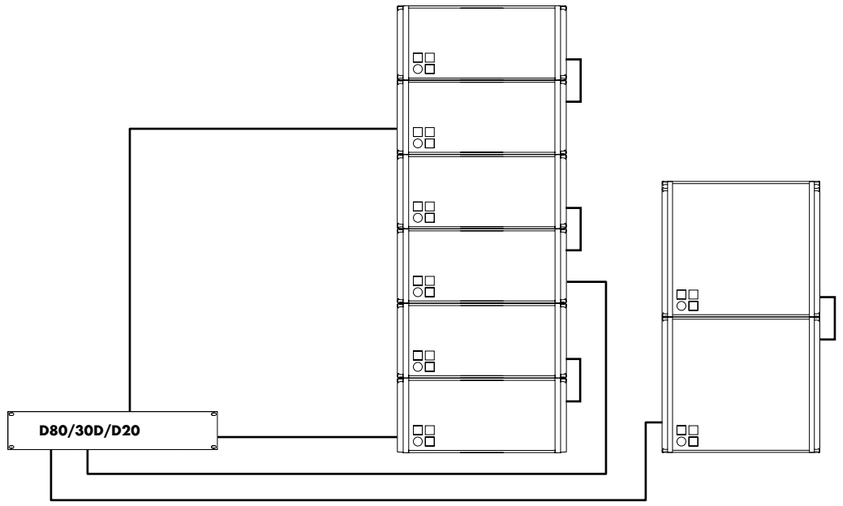


Correction of HFC



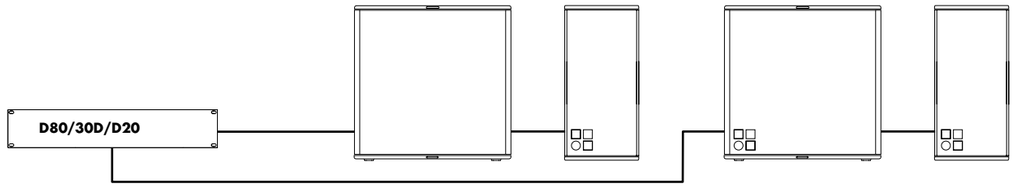
Correction of CPL

The d&b amplifier output modes

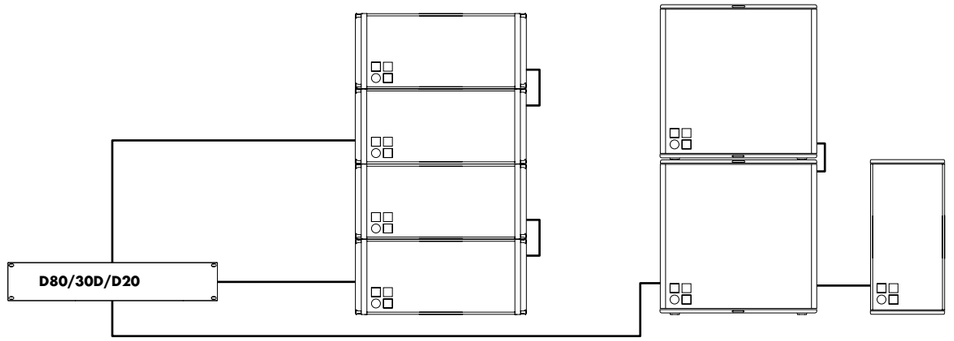


D80/30D/D20 amplifier in Dual Channel mode for V7P, V10P, Vi7P, Vi10P, V8, Vi8, V12, Vi12 as well as V-GSUB, Vi-GSUB, V-SUB and Vi-SUB

D80/30D/D20 amplifier in Dual Channel mode for V7P, V10P, Vi7P, Vi10P, V8, Vi8, V12, Vi12 as well as V-GSUB, Vi-GSUB, V-SUB and Vi-SUB



D80/30D/D20 amplifier in Mix TOP/SUB mode for V7P, V10P, Vi7P, Vi10P, V8, V12, Vi8, Vi12 as well as V-GSUB, Vi-GSUB, V-SUB and Vi-SUB as well as V-GSUB, Vi-GSUB, V-SUB and Vi-SUB



D80/30D/D20 amplifier in a mixed configuration of Dual Channel and Mix TOP/SUB mode for V7P, V10P, Vi7P, Vi10P, V8, V12, Vi8, Vi12 as well as V-GSUB, Vi-GSUB, V-SUB and Vi-SUB

The DS10 Audio network bridge

The DS10 Audio network bridge interfaces between Dante networks and AES3 digital audio signals, while also providing distribution of Ethernet control data. Positioned within the signal chain in front of the amplifiers, this 1 RU device expands the d&b system approach in both mobile and installation environments. Each unit can deliver up to sixteen Dante network channels via AES3 digital signal outputs. The AES3 channel streams from the DS10 carry meta data with Dante channel labels and cabling information to the four channel d&b amplifiers. Additionally, four AES3 input channels provide access to the Dante audio network for applications such as a break-in from a Front of House console. The DS10 incorporates an integrated 5-port switch, offering a primary and redundant network for the Dante protocol, as well as advanced functions such as Multicast Filtering and VLAN modes. This extensive switch flexibility provides extended connectivity for a laptop to control the d&b amplifiers using the R1 Remote control software via the OCA (Open Control Architecture) protocol. Using the DS10 Audio network bridge, audio signals and remote control data can be combined using a single Ethernet cable.
The DS10 features a power supply suitable for mains voltages 100 V – 240 V, 50 – 60 Hz, with Overvoltage protection of up to 400 V.

Control and indicators

BYPASS/NETWORK..... Toggle switch
Switch port modes/Audio loss..... LED indicators
SYNC ERROR .....Red LED indicator
SUBSCRIBED (RX Subscription) ..... Green LED indicator

Connectors

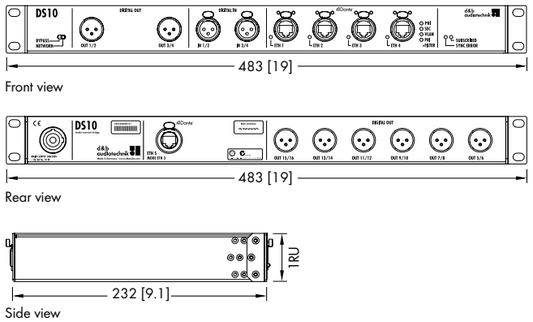
DIGITAL IN.....3 pin XLR female AES3
Input sampling .....32 - 192 kHz
Input synchronization.....Sample Rate Converter (SRC)
DIGITAL OUT .....3 pin XLR male AES3
Output sampling ..... 48/96 kHz
Output synchronization .....Dante network
Network .....etherCON[1]
..... built-in 5-port Ethernet switch
..... 100/1000 Mbit

Power supply

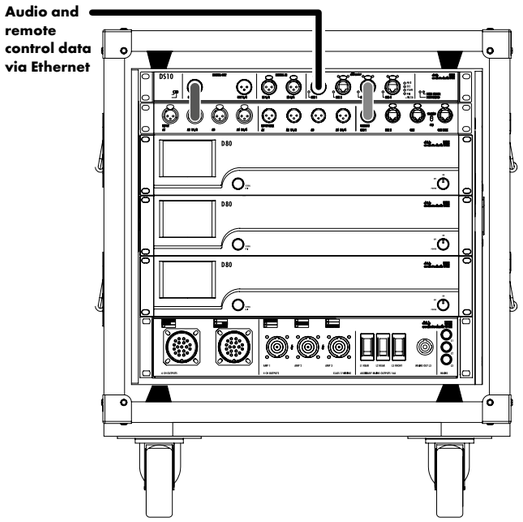
Mains connector.....powerCON[1]
Rated mains voltage..... 100 - 240 V, 50 - 60 Hz

Dimensions, weight

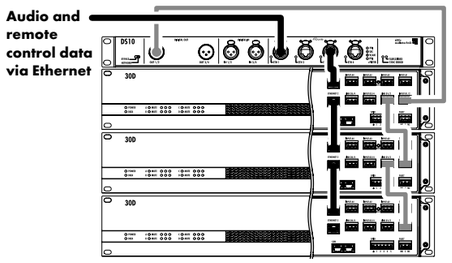
Height x width x depth.....1 RU x 19" x 232 mm
Weight..... 3.75 kg (8.26 lb)



DS10 Audio network bridge dimensions mm [inch]



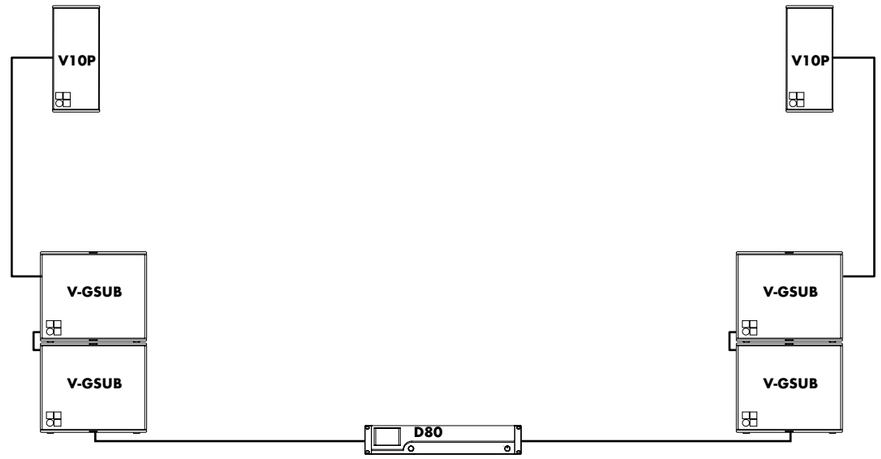
DS10 sending audio and remote control data to D80 amplifiers



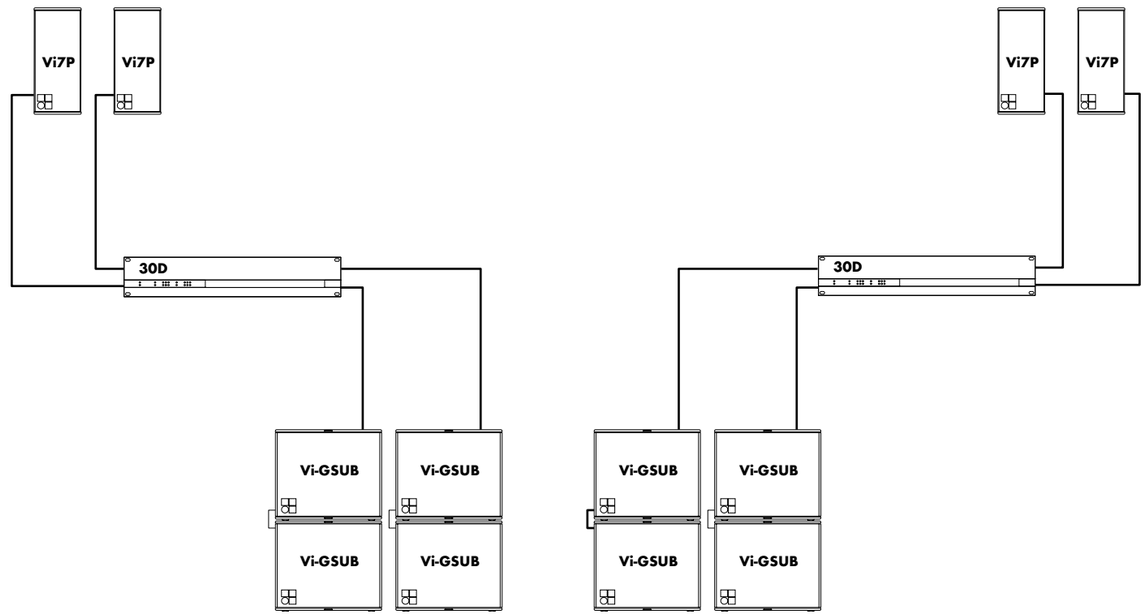
DS10 sending audio and remote control data to 30D amplifiers

[1] etherCON® and powerCON® are registered trademarks of Neutrik AG, Liechtenstein

The V-Series configuration examples

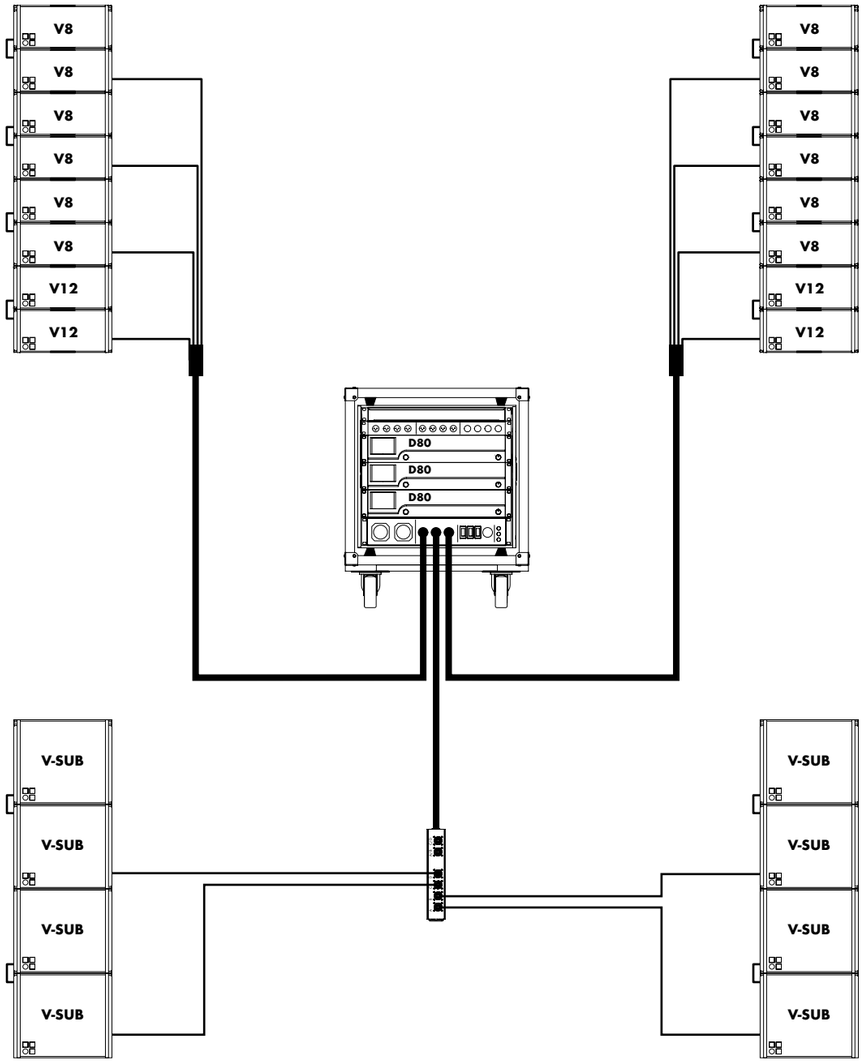


V-Series L/R configuration comprising V10Ps and V-GSUBs with a D80 amplifier in Mix TOP/SUB mode

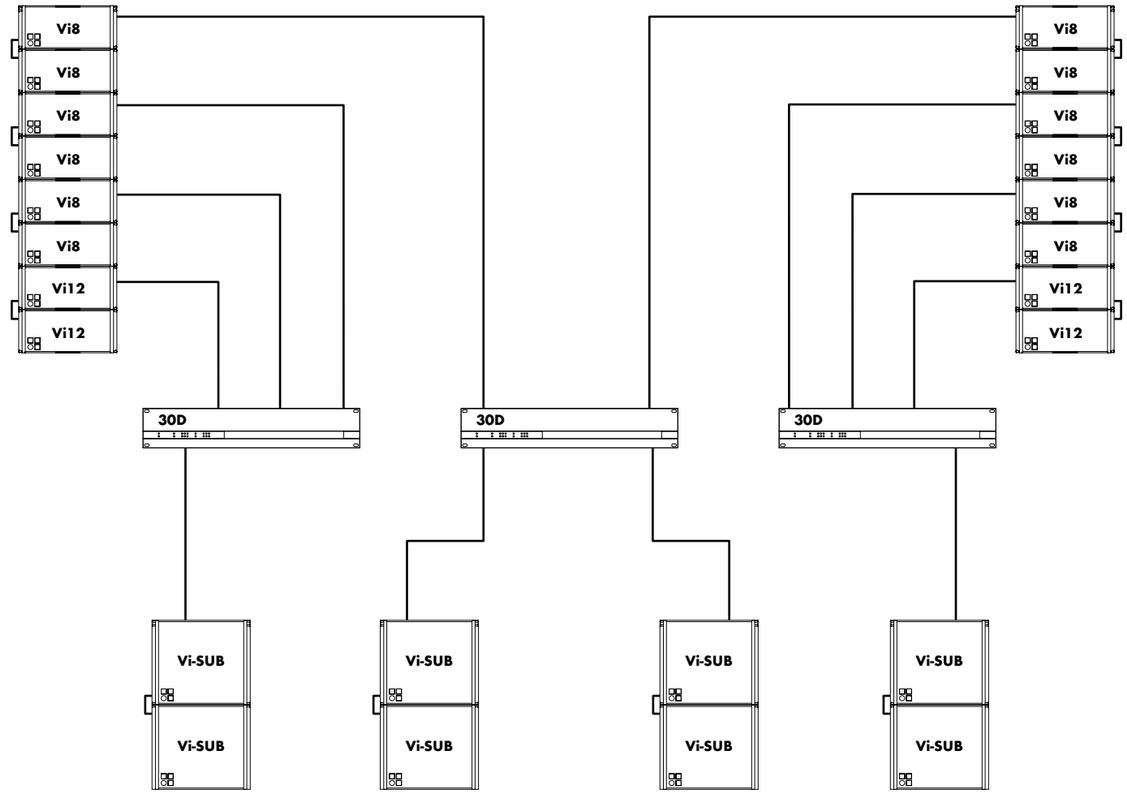


Vi7P loudspeakers in a distributed point source system and ground stacked Vi-GSUBs, with 30D amplifiers in Dual Channel mode

The V-Series configuration examples

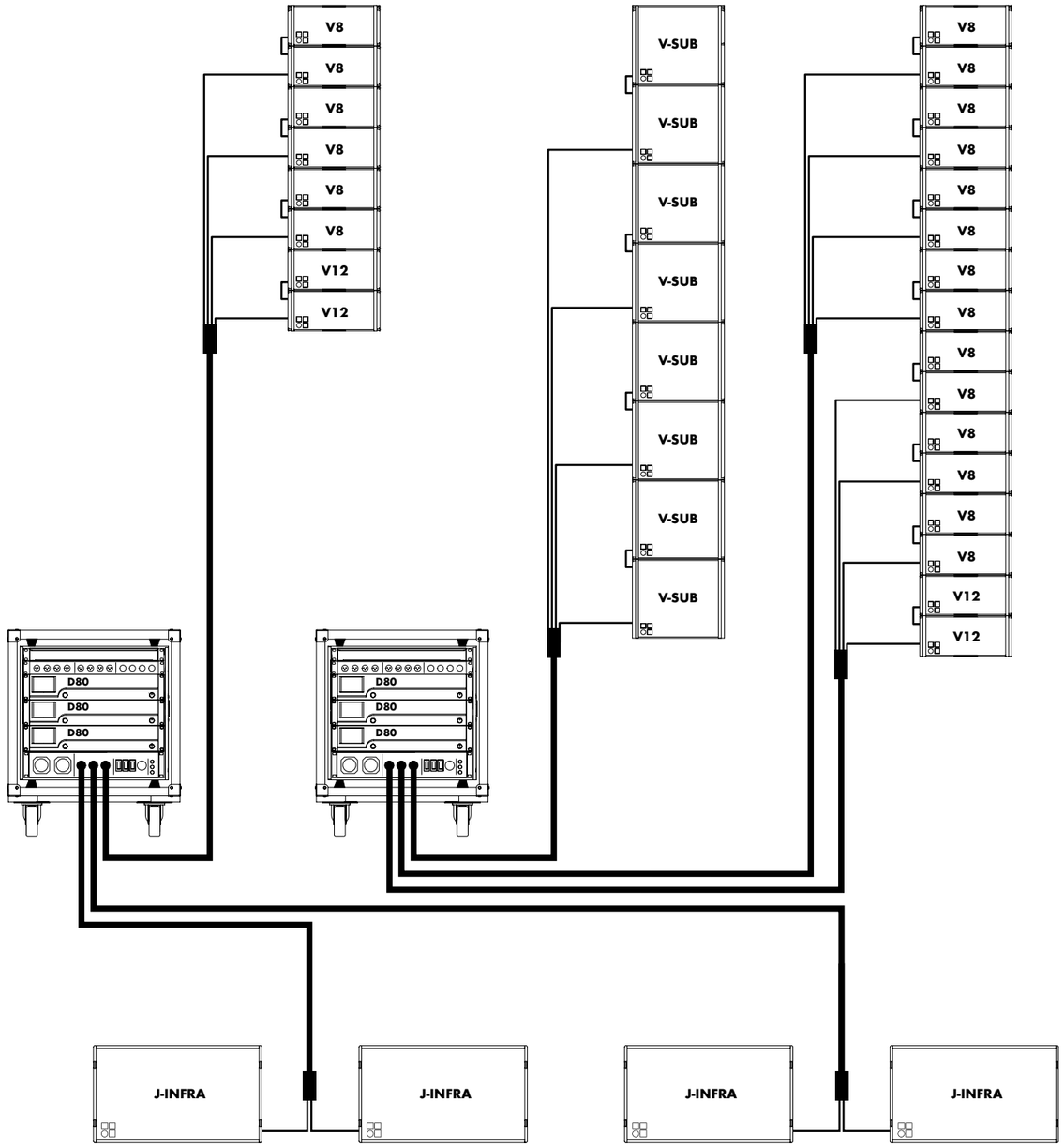


V-Series L/R configuration with V8/V12 flown line array and ground stacked V-SUBs with D80 Touring rack

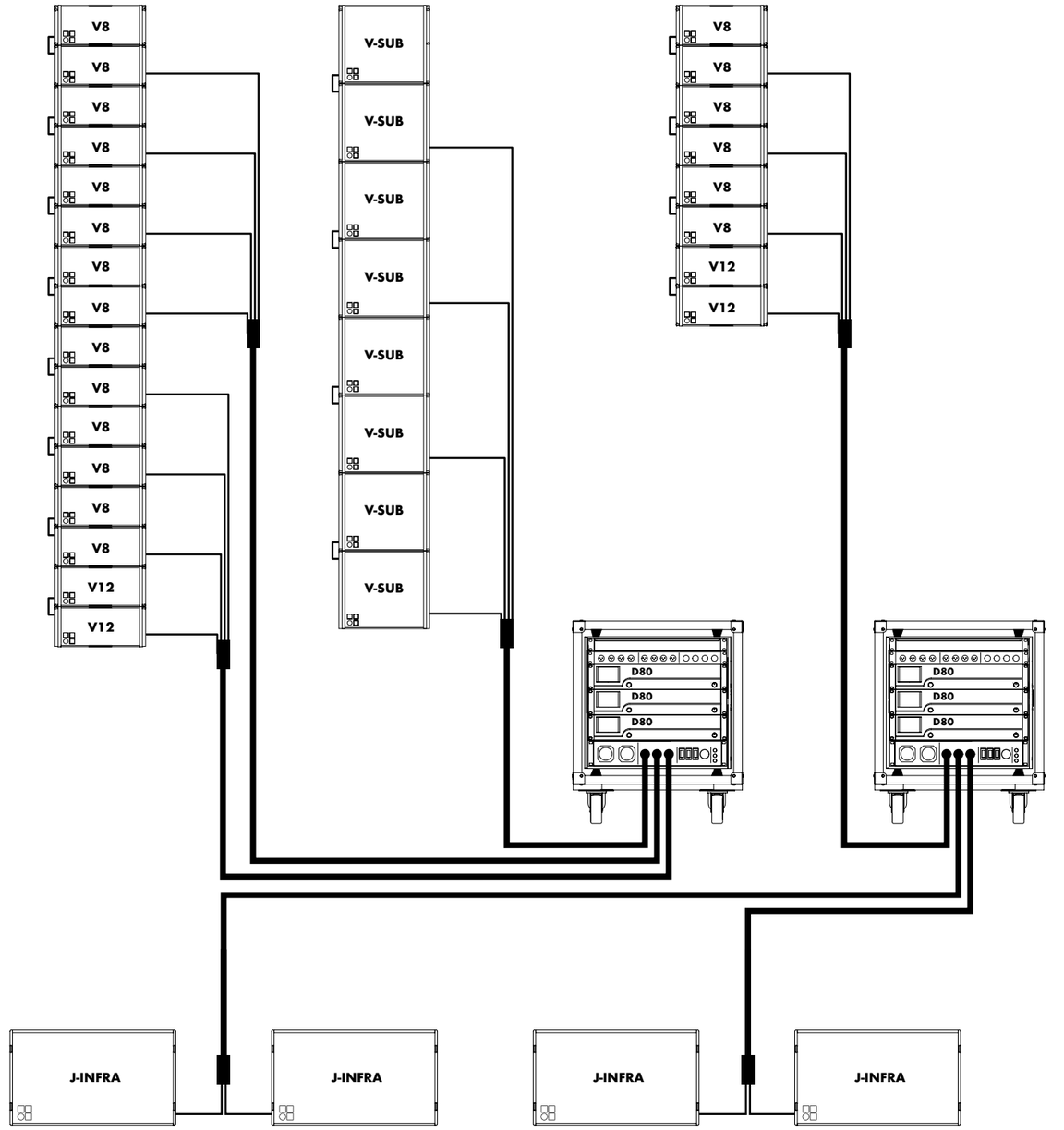


Vi line array in L/R configuration with flown Vi8/Vi12s with ground stacked Vi-SUBs with 30D amplifiers in Dual Channel mode

The V-Series configuration examples

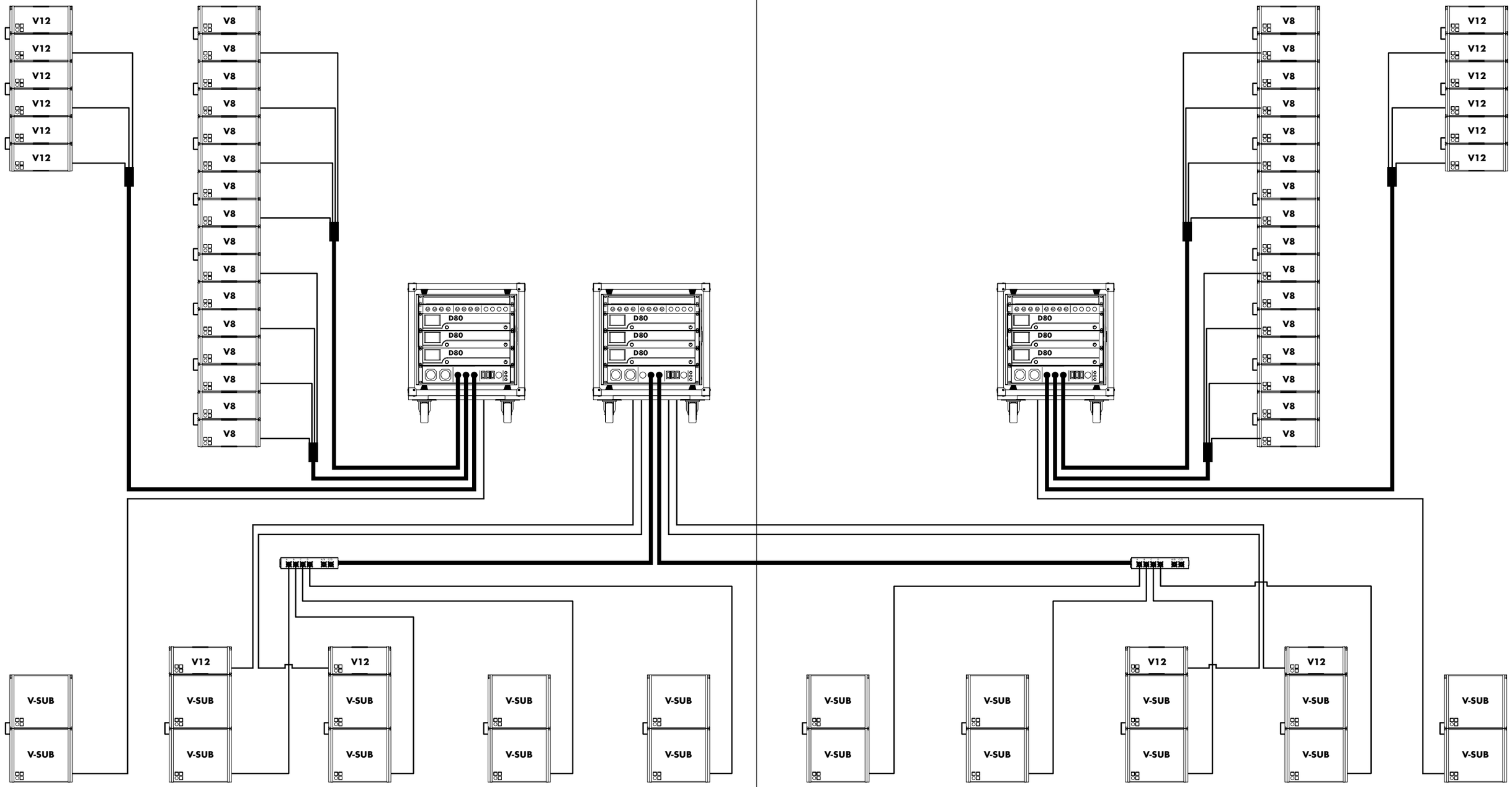


V8/V12 and V-SUB main arrays, V8/V12 outfills and ground stacked J-INFRAs with D80 Touring racks[1]



[1] These configurations are also valid for Vi loudspeakers

The V-Series configuration examples

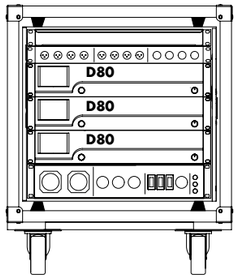


V-Series configuration comprising V8 mains and V12 outfill arrays along with ground stacked V-SUBs and V12 as nearfills with D80 Touring racks[1]

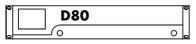
[1] These configurations are also valid for Vi loudspeakers

The V-Series cables and adapters

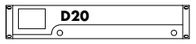
Amplifiers in Dual Channel mode



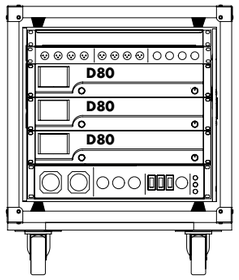
Z5330.xxx
D80 Touring rack assembly
OUT: 3 x NL8



1 x D80 amplifier
OUT: NL8

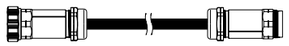


1 x D20 amplifier
OUT: NL8



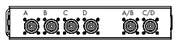
Z5330.xxx
D80 Touring rack assembly
OUT: 2 x LKS19

Z5343.xxx
MC8 Cable NLT8 F/M



Z5320.xxx
MC12SD Cable LKS19 F/M

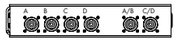
Z5344.002
Adapter NLT8F to 4 x NLT4M



Z5347.001
Breakoutbox NLT8 F/M
to 6 x NL4

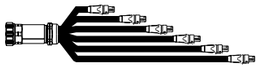
Z5344.001
Adapter NLT8F to 4 x NL4

Z5344.000
Adapter NLT8F to 4 x EP5



Z5347.000
Breakoutbox NLT8 F/M
to 6 x EP5

Z5341.002
Adapter LKS19M to 6 x NLT4M



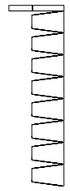
Z5341.001
Adapter LKS19M to 6 x NL4

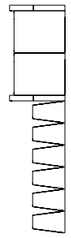
Z5341.000
Adapter LKS19M to 6 x EP5F passive

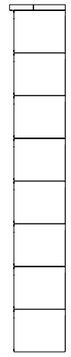
Z5340.xxx
MC4 Cable NLT4 F/M

Z2299.xxx
MC2.5 Cable NL4

Z2297.xxx
MC4SD Cable EP5







The V-Series product overview

V loudspeakers	Z0704.xxx	**V7P Loudspeaker**
	Z0705.xxx	**V10P Loudspeaker**
	Z0515.xxx	**V8 Loudspeaker**
	Z0516.xxx	**V12 Loudspeaker**
	Z0518.xxx	**V Subwoofer**
	Z0519.xxx	**V-GSUB**
Loudspeaker connector options	Zxxxx.000	**EP5** connector
	Zxxxx.001	**NL4** connector
	Zxxxx.002	**NLT4 F/M** connector
Vi loudspeakers	Z0724.001	**Vi7P Loudspeaker NL4** connector
	Z0725.001	**Vi10P Loudspeaker NL4** connector
	Z0535.001	**Vi8 Loudspeaker NL4** connector
	Z0536.001	**Vi12 Loudspeaker NL4** connector
	Z0538.001	**Vi Subwoofer NL4** connector
	Z0520.001	**Vi-GSUB NL4** connector
		WR Weather Resistant option[1]
		SC Special Colour option[2]
Loudspeaker cases	E7462.000	**Touring case 2 x V8/V12**
	E7465.000	**Touring case 2 x V Flying frame**
	E7466.000	**Touring case 2 x V7P/V10P**
Loudspeaker carts	E7463.000	**Touring cart 4 x V8/V12**
	E7464.000	**Touring cart 8 x V8/V12**
Lids	E7923.000	**V-SUB Wooden lid**
	E7926.000	**V-GSUB Wooden lid**
V/Vi accessories	Z5380.000	**V Flying frame**[3] (supplied with Z5382 V Safety chainset)
	Z5381.000	**V Hoist connector chain**
	Z5382.000	**V Safety chainset**
V accessories	Z5385.000	**V Flying adapter**
	Z5386.000	**V Stack adapter**
	Z5147.000	**Rota clamp**
Vi accessories	Z5387.000	**Vi Mounting frame top**[3]
	Z5387.001	**Vi Mounting frame bottom**[3]
	E6507.000	**1t Shackle**
VP accessories	Z5383.000	**VP Mounting bracket**[3]
	Z5384.000	**VP Flying adapter**[3]
	Z5388.000	**VP Horizontal bracket**[3]
	Z5551.000	**VP Flying adapter link**
	Z5550.000	**M20 Stand adapter**
	Z5010.000	**TV spigot with fixing plate**
	Z5012.500	**Pipe clamp for TV spigot**
	Z5049.000	**Flying pin 8mm**
	Z5013.000	**Loudspeaker stand winder M20**
	Z5009.000	**Loudspeaker stand with winder**
	Z5024.000	**Loudspeaker stand adapter**
Remote network	Z3010.000	**R1 Remote control software**[4]
	Z6118.000	**R60 USB to CAN interface**
	Z6124.000	**R70 Ethernet to CAN interface**
	Z6116.000	**RJ 45 M Terminator**
	Z6122.000	**Bopla mounting clamp**
	Z6123.000	**Bopla mounting clamp upright**
Amplifiers	Z2710.xxx	**D80 Amplifier**[5]
	Z2770.xxx	**30D Amplifier**[6]
	Z2750.xxx	**D20 Amplifier**[5]
Audio networking	Z4010.000	**DS10 Audio network bridge**
	Z5563.000	**DS10 Rack upgrade kit**
	Z5339.000	**Multichannel extension cable**
Amplifier rack assemblies	Z5560.000	**D20 Touring rack assembly CEE 32A 5P, NL4**[7]
	Z5561.000	**D20 Touring rack assembly CEE 32A 5P, NL4, DS10**[7]
	Z5330.001	**D80 Touring rack assembly, CEE 32A 5P, NL4**[7]
	Z5562.001	**D80 Touring rack assembly, CEE 32 A 5P, NL4, DS10**[7]
	Z5330.xxx	**D80 Touring rack assembly, Nema L21-30 (120V devices)** on request[7]
Amplifier racks	E7480.000	**D20 Touring rack 2 RU 19"** SD, shock mounted, handles
	E7468.000	**D80 Touring rack 2 RU, 19"** SD, shock mounted, handles
Cables and adapters	Z5343.xxx	**MC8 Cable NLT8 F/M**
	Z5346.000	**Adapter 4 x EP5M to NLT8M**
	Z5345.001	**Adapter 4 x NL4 to NLT8M**
	Z5320.xxx	**MC12SD Cable LKS19 F/M**
	Z5344.002	**Adapter NLT8F to 4 x NLT4M**
	Z5344.001	**Adapter NLT8F to 4 x NL4**
	Z5344.000	**Adapter NLT8F to 4 x EP5**
	Z5347.001	**Breakoutbox NLT8 F/M to 6 x NL4**
	Z5347.000	**Breakoutbox NLT8 F/M to 6 x EP5**
	Z5340.xxx	**MC4 Cable NLT4 F/M**
	Z2299.xxx	**MC2.5 Cable NL4**
	Z2297.xxx	**MC4SD Cable EP5**
	Z5341.002	**Adapter LKS19 M to 6 x NLT4M**
	Z5341.001	**Adapter LKS19 M to 6 x NL4**
	Z5341.000	**Adapter LKS19M to 6 x EP5**

1 WR only for Vi loudspeakers, on request
2 SC only for Vi loudspeakers, on request
3 SC on request
4 Available as a download at www.dbaudio.com
5 The complete list of mobile amplifier versions is available in the D Amplifier and Software brochure
6 The complete list of installation amplifier versions is available in the xD Installation Amplifier and Software brochure
7 Further information is available in the D Amplifier and Software brochure

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