# DENON

Line array speaker system

DN-VT20 DN-VS18





Before connecting and using this product, please read this manual carefully for proper operation.

This manual is an integral part of this product

#### FLYING OR MOUNTING THE DN ENCLOSURE

CAUTION: Before attempting to suspend this speaker, consult with a certified structural engineer. Speaker can fall from improper suspension, resulting in serious injury and property damage. Do not suspend or mount any other product or device from this enclosure! Use only the correct mating hardware. All associated rigging is the responsibility of others.

This DENON<sup>®</sup> loudspeaker should be suspended overhead only in accordance with the procedures and limitations specified in the User's Manual and possible manual update notices. This system should be suspended with certified rigging hardware by an authorized rigging professional and in compliance with local, provincial or national suspension ordinances.

Before you fly the array, be sure to inspect the rigging and flying hardware to insure that it is mechanically sound and has not been damaged. There should be no significant distortion of the shape of the Halo coupling ears, cabinet straps, Angle Slider bracket or Rail, Pivot Bar or a fly bar, and the hardware should be checked for tightness.

#### DN-VT20

DENON<sup>®</sup> DN-VT20 line array speaker system consists of two 10" neodymium magnet woofers and a 1.4" neodymium magnet compression driver with a highly flexible rigging system. Designed to provide modular coverage of small to medium venues and intended for use with the companion DN-VS18 sub , the DN-VT20 offers extreme versatility and high performance.

The adjustable rigging system provides for a classic straight line array configuration, or a number of different angling options, providing easy aiming of the system. Angles between the array modules is adjustable from 0° (straight), to 10°. Total maximum angle between two cabinets is 10°.

Quick release pins are supplied with the rigging hardware to couple the DN-VT20 modules together and set the angles between them for quick and easy field adjustments or re-configurations of a line array.

#### DN-VS18

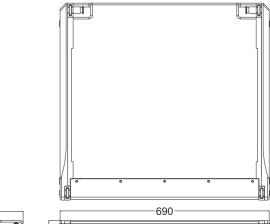
The DENON®DN-VS18 Sub incorporates the ultra-high power 18" neodymium magnet woofer into a new compact cabinet design. DN-VS18 can provide a rated power of 800W, and a program of 1600W. DN-VS18 input connections are made using two Neutrik®Speakon 4-pin jacks in parallel.

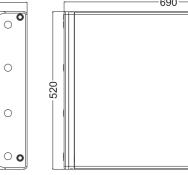
DN-VT20 line array system with DN-VS18 subwoofer combination lifting, suitable for permanent fixed installation of small lecture halls, small bars and other places.

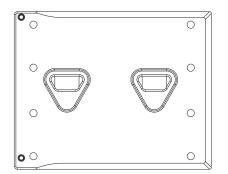


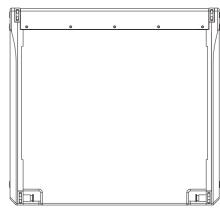
#### DN-VS18

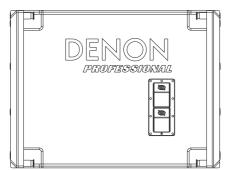
**DIMENSIONS** (Unit: mm)













#### DN-VS18

#### **FEATURES**

- 1x18" neodymium magnet woofer
- Compact design
- Ergonomic handles are designed on both sides
- 800 wat continuous, 1600 watt program, 3200 watt peak power handling
- Inputs are two Neutrik<sup>®</sup>Speakon<sup>®</sup>4-pin jacks in parallel
- 18mm birch plywood construction

#### **SPECIFICATION**

• Type: 18 inch subwoofer

Continuous power: 800WProgram power: 1600W

• Impedance: 8 OHMS

• Sensitivity (1W@1m): 98 dB

• Maximum sound pressure level (1 meter): 127 dB @800W (130 dB @1600W Program)

• Frequency response (-10dB): 35 Hz—300Hz

• Transducer complement: 1 x 18" woofer 4" VC (100mm)

• Input connections: NI4 4-pin jack × 2 PIN 1+2+ = (+) POSITIVE

PIN 1-2- = (-) NEGATIVE

PINS 1±/2± PARALLEL

• Cabinet material: 18mm (0.7") plywood

• Surface treatment: Black polyurea paint

• Dimensions: H 520mm x W 690mm x D 650mm H 20.47" x W 27.17" x D 25.59"

Packing size:
 H 600mm x W 760mm x D 720mm

H 23.62" x W 29.92" x D 28.35"

• Net Weight: 51.6kg (113.76lbs)

\* Specifications subject to change without notice.

#### DN-VT20 DN-VS18 ATTACHMENT LIST

Item/No.	NAME	QTY(pcs)
1	Owner manual	1
2	Warranty card	1



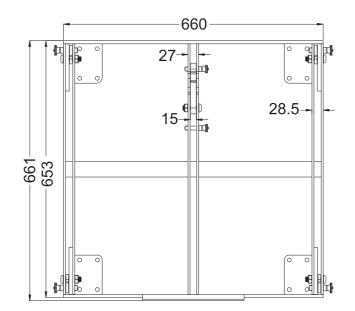
#### DN-VT20 DN-VS18 ARRAY FRAME

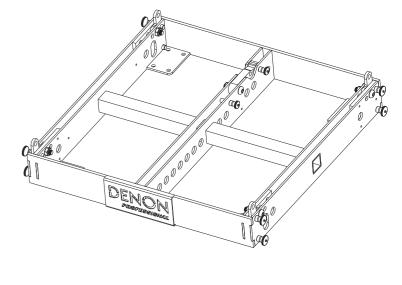
#### SPECIFICATIONS:

Halo Only Dimensions H x W x D:

3.54" x 25.98" x 21.89" (90mm x 660mm x 661mm)

Weight: 59.66lbs./27.06kg





Brand	Model	Weight	10:1 safety ratio test Number of hanging speakers	Tensile test standard 10:1 safety ratio	Result	Normal application, the maximum number of hanging speakers
DENO	DN-VT20	33.9kg	12	4.068T	PASS 1. The frame has no obvious deformation and damage; 2. The hardware on the speaker is not deformed, The speaker cabinet is not damaged; 3. All fixed pins have no obvious deformation and bending, and can be pulled out normally.	11
DENO	DN-VS18	51.6kg	1	4.068T		7

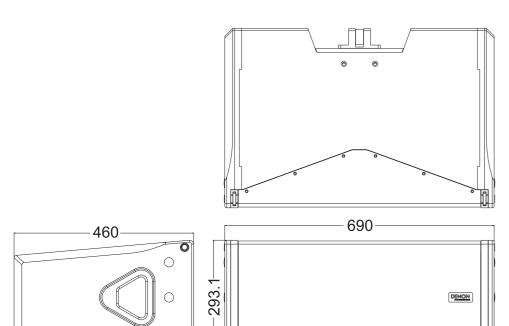
Maximum Combined Number of DN-VT20 and DN-VS18 Sub cabinets: MIX OF SUBS VERSUS 2-Ways

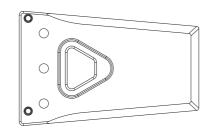
Subs	2-Ways
0	11
1	9
2	8
3	6
4	5
5	3
6	2
7	0

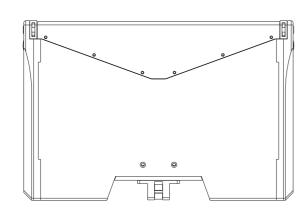
### DENON

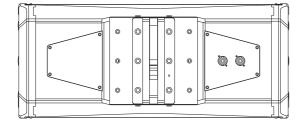
#### DN-VT20

**DIMENSIONS** (Unit: mm)









## DENON

#### DN-VT20

#### **FEATURES:**

- 2-way Bi-Amp Line Source Array System
- 2x10"neodymium magnet woofers
- 600 watt continuous,1200 watt program, 2400 watt peak power handling
- 110° H by 10° V coverage pattern (per one cabinet)
- Easy aiming angle adjustment rigging system
- Inputs are two Neutrik<sup>®</sup>Speakon<sup>®</sup>4-pin jacks in parallel
- 15mm birch plywood construction

#### **SPECIFICATIONS**

#### system acoustic perfomance

Impedance:	8 Ohms
Continuous power:	600W
Max SPL Long-term:	127dB
Max SPL Peak:	133dB
• -10dB Response (Full Range mode):	65Hz to 18kHz

#### **High Frequency Section**

8 Ohms
0 Omins
110W
Horn Loaded
110° x 10°
1 x 1.4"
800Hz to 18kHz

#### **Mid-Bass Section**

Impedance:	8 Ohms
Continuous power:	500W
<ul> <li>-10dB Response (Full Range mode):</li> </ul>	65Hz to 2.2kHz
Woofer Size :	2x 10"
Magnet Type:	Neodymium

### Speaker Input

Speaker Input:

### **Speaker Output**

Speaker Output:

#### **Cabinet**

- Cabinet Material:
- Color:

#### Physical Dimensions

• Dimensions:

#### Net Weight:

\* Specifications subject to change without notice.

2x 10" Neodymium

Speakon NI4x2 Pin 1+ LF+/1- LF-Speakon NI4x2 Pin 2+ HF+/2- HF-

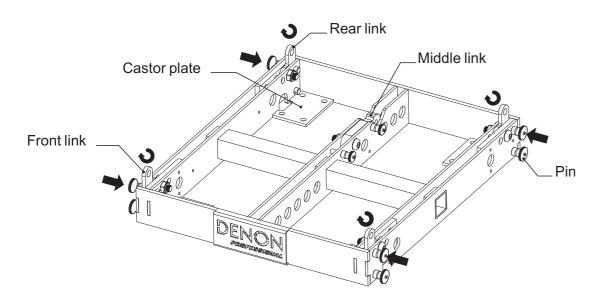
Speakon NI4x2 Pin 1+ LF+/1- LF-Speakon NI4x2 Pin 2+ HF+/2- HF-

15mm (0.6") plywood Black polyurea paint

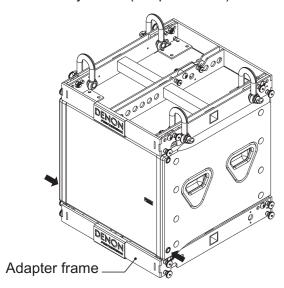
H 293mm x W 690mm x D 460mm H 11.54" x W 27.17" x D 18.11"

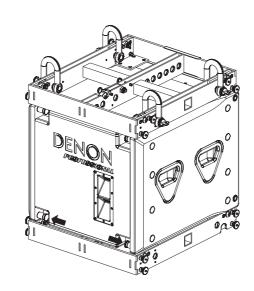
33.9kg (74.7lbs)

5. Raise each of the four corner links on the array frame (adapter frame) by removing the pins as shown

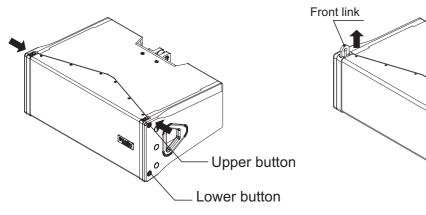


6. Attach the array frame (adapter frame) to the subwoofer



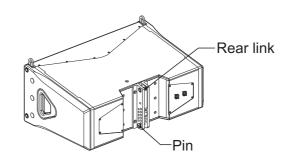


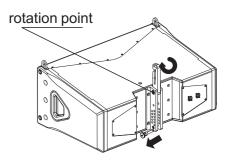
7. Press down the buttons on each side of the full-range speaker to eject the front link



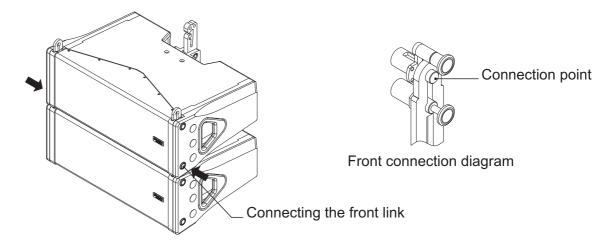


8. Raise the rear link on the speaker by removing the pin.

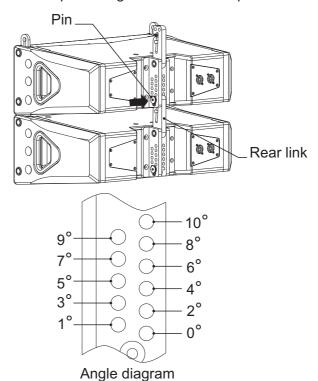


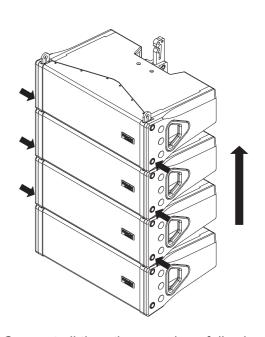


9. Press down the lower button on each side to attach two speakers



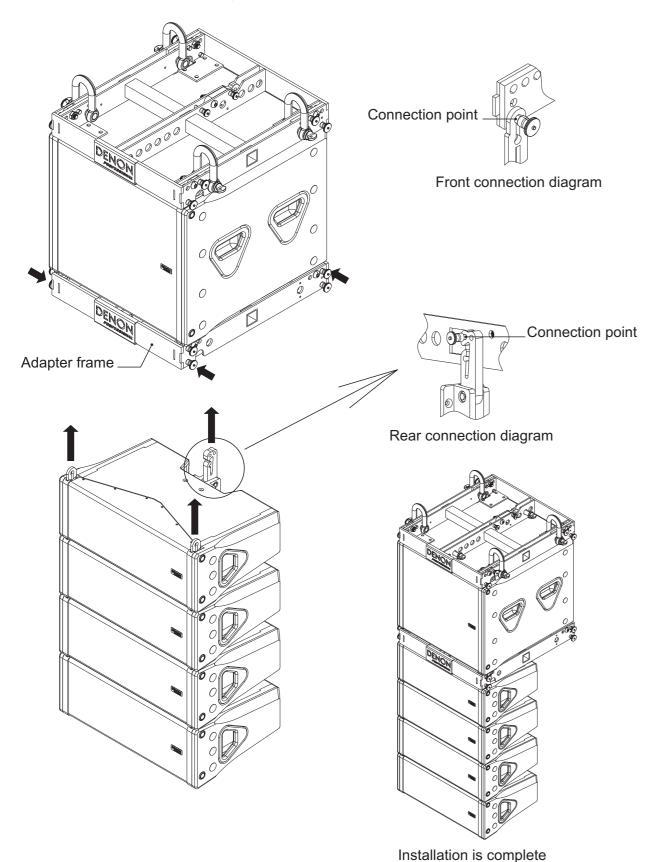
10. Adjust the required angle then insert the pin to fix the rear link





Connect all the other speakers following the same procedure

11. Connect the subwoofer to the full-range speakers

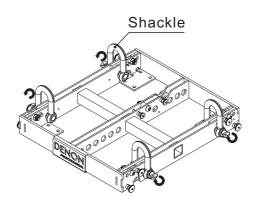


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#### INSTALLATION DIAGRAM OF DN SERIES LINEAR ARRAY SPEAKER SYSTEM

1. Array frame

Installation method of the shackle (Two ways to fix the shackle according to practical application)

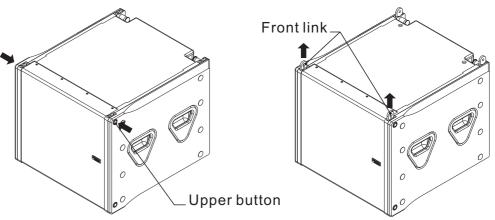


Shackle

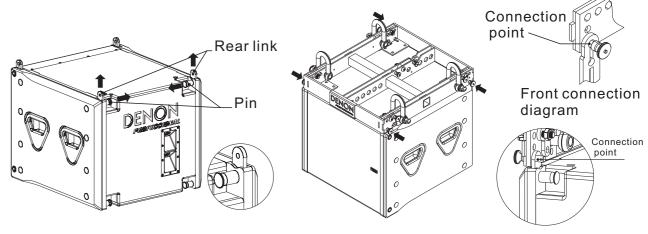
Figure 1: four-point flying

Figure 2: two-point flying

2. Press down the button on each side of the subwoofer to eject the front link



- 3. Pull out the rear pins to eject the rear links
- 4. Insert the pins to attach the subwoofer to the frame



Rear connection diagram