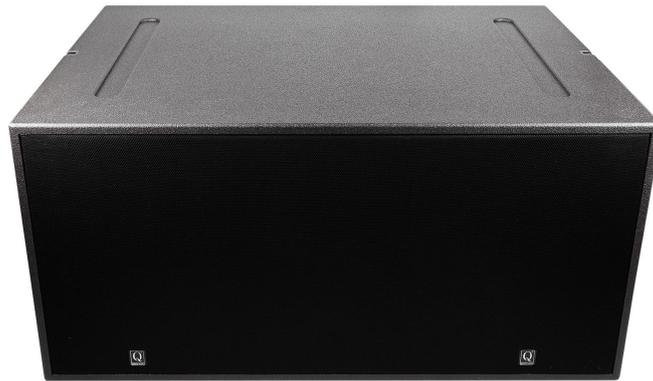




# VS221 Reference Subwoofer



[www.qanon-audio.com](http://www.qanon-audio.com)



# SAFETY INSTRUCTIONS

**1. Read this document**

**2. Pay attention to all safety instructions and hazards and obligatory warnings**

**3. Do not use equipment or accessories that are not approved by QANON AUDIO.**

**4. Attention to Sound Level**

Do not approach the speaker when operating, and consider wearing earplugs.

Speaker system can produce very high sound pressure level (SPL), which can be instantaneous.

It results in permanent hearing impairment to performers, producers and audiences.

Listening can take place for a long time:

8 hours 90 decibels (A-weighted), 30 minutes 110 decibels (A-weighted), less than 4 minutes 130 decibels (A-weighted).

**5. Read the manual before operating the product.**

Use speaker system components described in user manual and follow instructions

**6. Read the rigging manual before installing the product.**

Use the hanging accessories described in the installation manual and follow the relevant procedures.

**7. Before repairing the product, please read the "Maintenance" section of this document.**

**8. Do not expose products to extreme conditions**

Do not expose the product to rain or waves.

Do not expose the product to humidity (fog, steam, humidity, cooling, etc.) or overheating (direct sunlight, radiator...) For a long time

**9. Do not store products on unstable carts, brackets, tripods, brackets or tables.**

**10. Maintain this document as an integral part of the product**

Put this document in a safe place.

Record any services of the product in the maintenance section of this document

Do not resell products without this update document

Thank you for purchasing QANON AUDIO #VS221. The container shall contain - 1#VS221 enclosure. Each QANON AUDIO #product has been tested and inspected before it leaves the factory and should arrive intact. Carefully open the container and check for any apparent damage. If so, inform the transport company or distributor immediately. Only the consignee can claim against the carrier for damage in transit. Cartons and packing materials must be kept for inspection by carriers. Read this document carefully to familiarize yourself with the product and identify external documents that contain basic information on correct and safe installation and operation of the product. All the documents described below can be accessed free of charge on the QANON AUDIO < website ([www.qanon-audio.com](http://www.qanon-audio.com)).

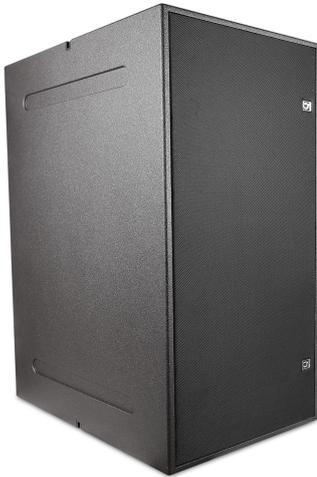
As part of the continuous development of technology and standards, QANON AUDIO reserves the following rights:

**Change product specifications and document contents without prior notice. Please visit the QANON AUDIO website regularly to download the latest updates of documents and software.**



# VS221 Reference Subwoofer

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- Maximum SPL 147dB
- 2 x 21" Neodymium LF driver unit
- 0° horizontal
- Adjust angle: N/C
- Rigging or ground stacking assembly system
- V15 Line Source system integration
- V12 Line Source system integration
- V10 Line Source system integration
- Low frequency limit extend to 23Hz (-10dB)
- C15 or VDA18 power amplifier

## VS221 High Power Subwoofer Loudspeaker

VS221 is a recommended subwoofer for V15 and V12 line arrays and other QANON AUDIO < products. It adds to the sub-low frequency of the system by enhancing the throwing ability of the low frequency. It allows the operating frequency range of the system to be extended to 23Hz.

The VS221 subwoofer Loudspeaker contains an 2x21-inch speaker. It has strong impact force, sensitivity and low frequency efficiency. Its internal sides have X-shaped vent progressive shape, allowing laminar flow and reducing turbulent noise. These comprehensive characteristics help to improve the working level.

The VS221 enclosure is made of Baltic birch plywood to ensure maximum acoustic and mechanical integrity.

The VS221 subwoofer can be used as an independent array or fly at the top of a vertical array composed of V15 or V12 V10 line arrays. VS28 is driven and amplified by C15 or VDA18 power controller. Protect and optimize different configurations of loudspeaker systems, including cardioid

Dimensions: Width:1200 mm ,Height: 600 mm , Depth: 800 mm

Weight:108kg (238lbs)

The cabinet shall be fitted with internal hardware and connected via two parallel NL-4 SpeakOn



## VS221 Technical Specification

### VS221 Technical Specification

Type	Subwoofer
Frequency Response(Preset)	23Hz-200Hz(-10dB)
Horizontal	360°
Drivers	LF:2×21" Neodymium
Handling Power (AES)	LF: 4000W
Maximum Peak SPL	147dB/1m
Nominal Impedance	LF:4Ω
Connections	2 x NL4 SpeakOn
Pin Connections	NL4=LF: +1-1
Height Front	600mm
Height Back	600mm
Width	1200mm
Depth	800mm
Weight	108kg / 238lb

### Rigging and Handling

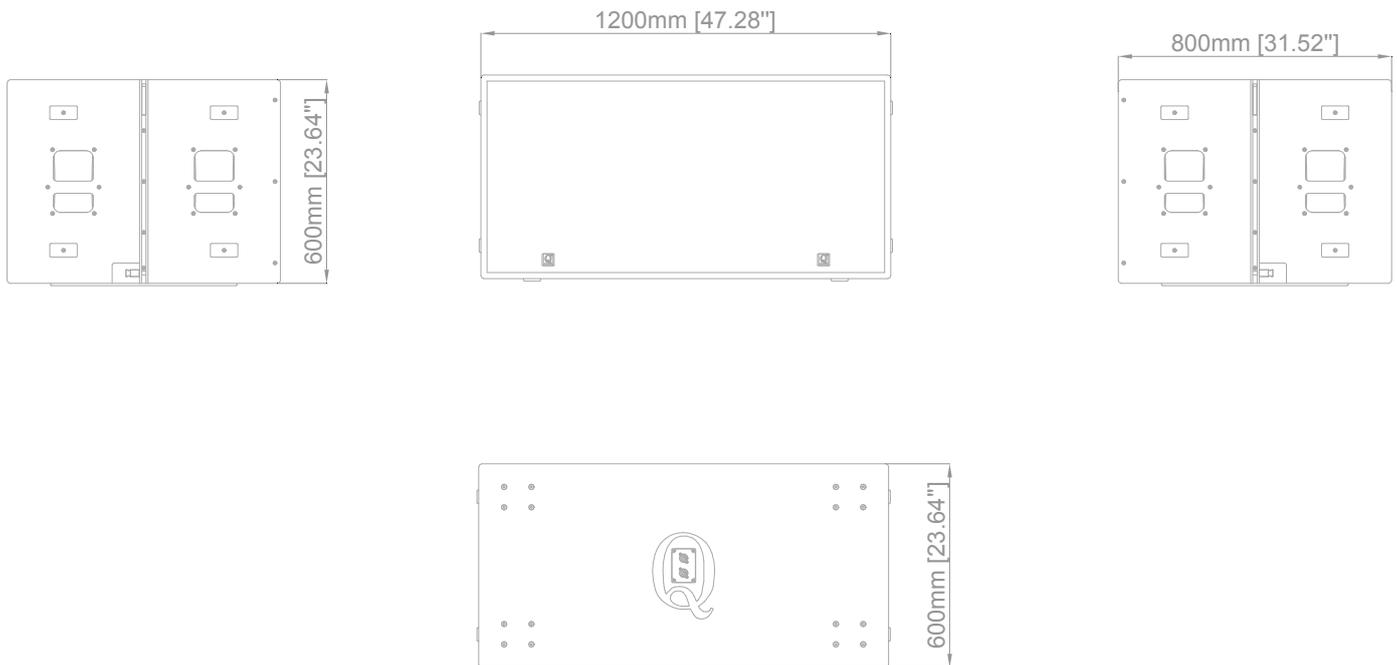
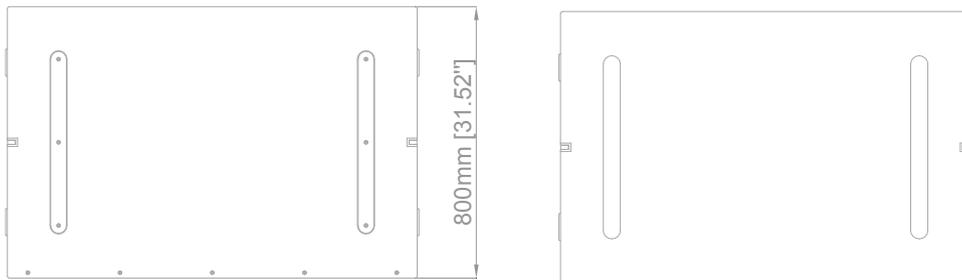
Handle	4 ergonomic handles
Antiskid	2 ground runners
Fastener	2 side fastener

### Physical Data

Material	Baltic Birch Plywood
Finish	Dark Grey
Front	Polyester powder-coated steel grill
Rigging	Steel
Protection rating	IP45



## Dimensions CAD



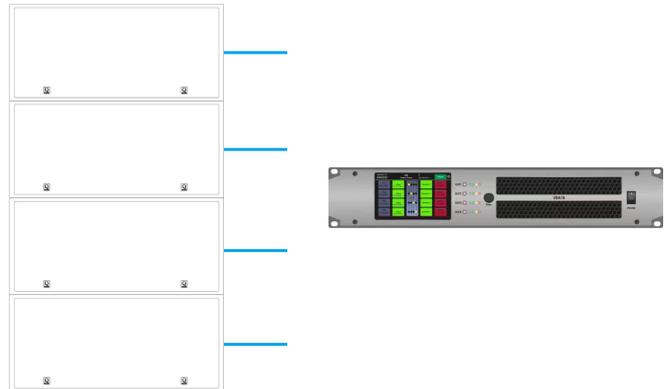


## Application VS221

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### VDA18 DSP controller

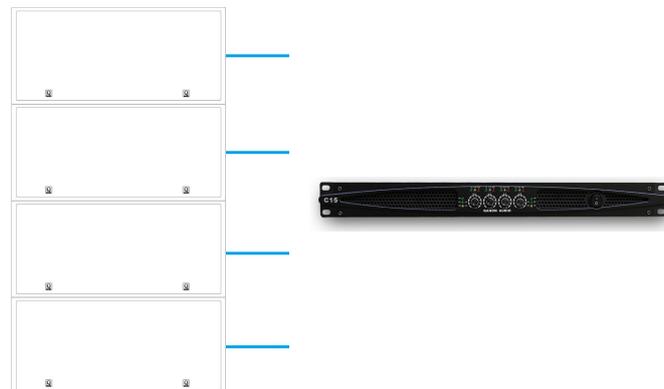
- 4 Input x 4 Output Analog Type
- 2 Input x 2 Output AES3 Digital Type
- 2 x RJ45 etherCON® (IN/OUT)
- 4 x NL4 SpeakOn
- 1 x 8pin PA-Com
- Max 1 enclosure in parallel For V25
- Max 4 enclosure per controller For V25



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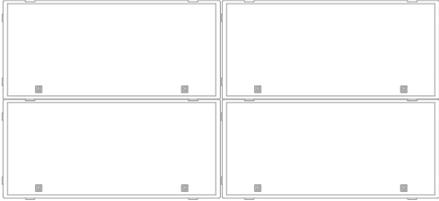
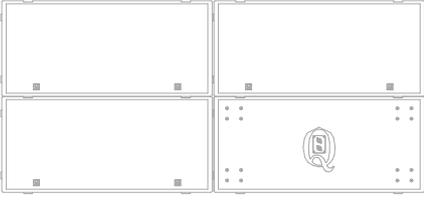
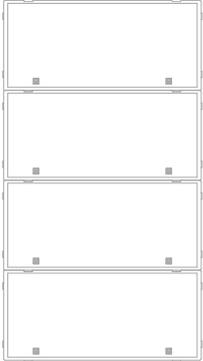
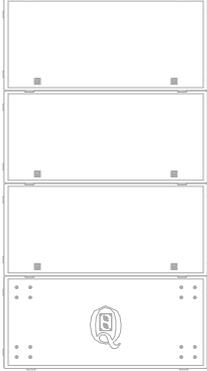
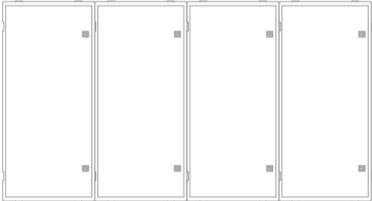
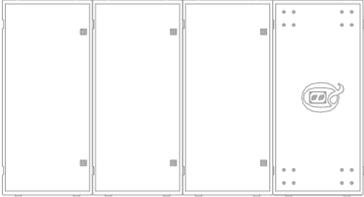
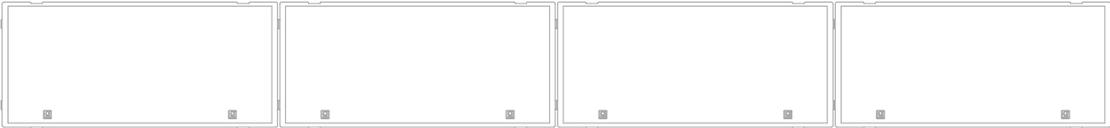
### C15 ClassD controller

- 4 Input Analog Type
- 4 x NL4 SpeakOn
- 1 x 8pin PA-Com
- Max 2 enclosure in parallel For V18
- Max 8 enclosure per controller For V18





## Applications VS221 horizontal/vertical or cardioid

	Standard	Cardioid
vertical		
vertical		
Horizontal		
Horizontal		



## TRANSPORTATION ACCESSORIES

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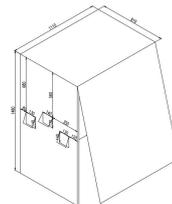
### VS221-Touring case:

removable front case on wheels (one VS221)



### VS221-Chariot: chariot for up to 2-3pcs VS221

VS221-Chariot Cover: Protective cover for  
2-3pcs VS221 on VS221-Chariot



### Rigging Frame Accessories

VS28 / VS221-U Shackle (3' 5/8) 4t



### Rigging Frame with Extender Beam for VS28 / VS221

VS28 / VS221-Rigging Bar



### Speaker Cable

PA-COM 8Pin 8 x 4 mm<sup>2</sup> (20cm)

NL4 4Pin 4 x 4 mm<sup>2</sup> (20m)

NL4 2Pin 2 x 4 mm<sup>2</sup> (20m)





## Maximum number of enclosures per Amp / Impedance load

Enclosure	Max enclosure in parallel	Max enclosure per controller
V15	2	2
V12	3	3
V10	3	6
V8	3	6
V18	2	8
V25	1	4
VS28	1	4
VS221	1	4

Enclosure	1	2	3
V15	LF 8 Ω / MF 8 Ω / HF 8 Ω	LF 4 Ω / MF 4 Ω / HF 4 Ω	None
V12	LF 8 Ω / MF 8 Ω / HF 8 Ω	LF 4 Ω / MF 4 Ω / HF 4 Ω	LF 2.7 Ω / MF 2.7 Ω / HF 2.7 Ω
V10	LF 8 Ω / HF 8 Ω	LF 4 Ω / HF 4 Ω	LF 2.7 Ω / HF 2.7 Ω
V8	LF 8 Ω / HF 16 Ω	LF 4 Ω / HF 8 Ω	LF 2.7 Ω / HF 5.3Ω
V18	LF 8 Ω	LF 4 Ω	None
V25	LF 4 Ω	None	None
VS28	LF 4 Ω	None	None
VS221	LF 4 Ω	None	None

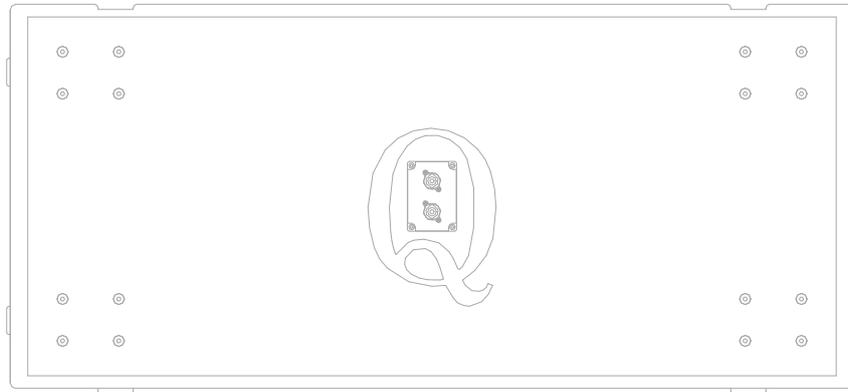
<b>PA-COM 8-Pin 8*4<sup>2</sup></b>	<b>V15</b>	<b>V12</b>
Transducer connectors	A / B = LF +1-1 C / D = MF +2-2 E / F = MF +3-3 G / H = HF +4-4	A / B = LF +1-1 C / D = MF +2-2 E / F = MF +3-3 G / H = HF +4-4
<b>NL4 4-Pin 4*4<sup>2</sup></b>	<b>V10</b>	<b>V8</b>
Transducer connectors	LF = +1-1 HF = +2-2	LF = +1-1 HF = +2-2
<b>NL4 4-Pin 2*4<sup>2</sup></b>	<b>V18</b>	<b>V25</b>
Transducer connectors	LF = +1-1	LF = +1-1
<b>NL4 4-Pin 2*4<sup>2</sup></b>	<b>VS28</b>	<b>VS221</b>
Transducer connectors	LF = +1-1	LF = +1-1



## Speaker Connect VS28

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**VS28 is equipped with two 4-point NL-4 SpeakOn connectors.**

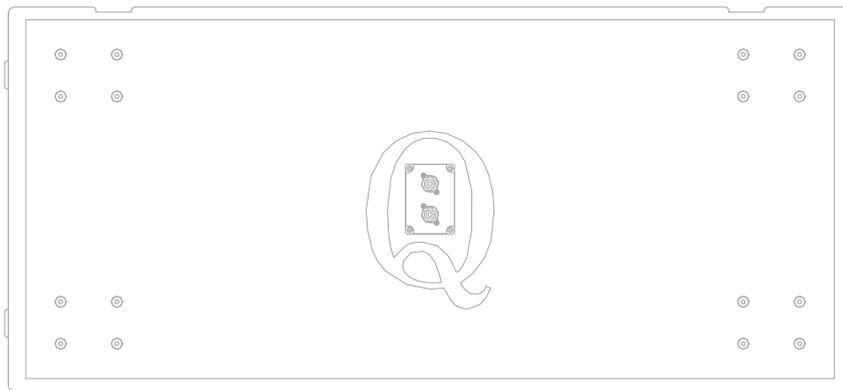


## Speaker Connect VS221

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**VS221 is equipped with two 4-point NL-4 SpeakOn connectors.**

**VS221**



NL-4 SpeakOn 4 points	1+	1-	2+	2-
Transducer connectors	LF+	LF-	Not Linked	Not Linked



## VDA Rack

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**VDA-Rack**



**VDA-Rack2**



**VDA18**

## C15 AMPLIFIED CONTROLLER with Processor

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## C15 Rack



## ASSOCIATED ENCLOSURES

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**V15/V12**



**V10/V8**



**VS221/VS28/V25**



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