Versarray™ Pro 218 Powered Enclosure

Product Specifications

The Crest Audio® Versarray™ Pro 218 Sub Powered Subwoofer speaker system consists of a pair of Peavey® 18" Low Rider® woofers combined with a super-solid cabinet with a simple, quick, yet flexible rigging system. Designed to provide modular coverage of any size venue, and intended for use with the companion Versarray™ Pro 112 two-way models, the Versarray™ Pro 218 Sub offers excellent versatility with a very high performance capability. The subwoofer system consists of the following woofer components: a pair of Peavey® 18" Low Rider® series woofers with a very long throw 4" voice coil structure. Capable of over 800W of continuous power handling (AES Std 2-1984) each, these woofers can project a lot of low frequency energy.

The Versarray™ Pro 218 Sub incorporates Peavey's UniVent™ air pumping venting technology. The UniVent™ venting system literally pumps air through the enclosure, exchanging the stale hot air inside the cabinet for the cooler outside air. This helps keep the woofer operating temperatures from getting so high, and increases reliability and reduces power compression under heavy continuous drive conditions. The air pumping action is achieved without excessive turbulence or any significant net asymmetry of total vent air flow.

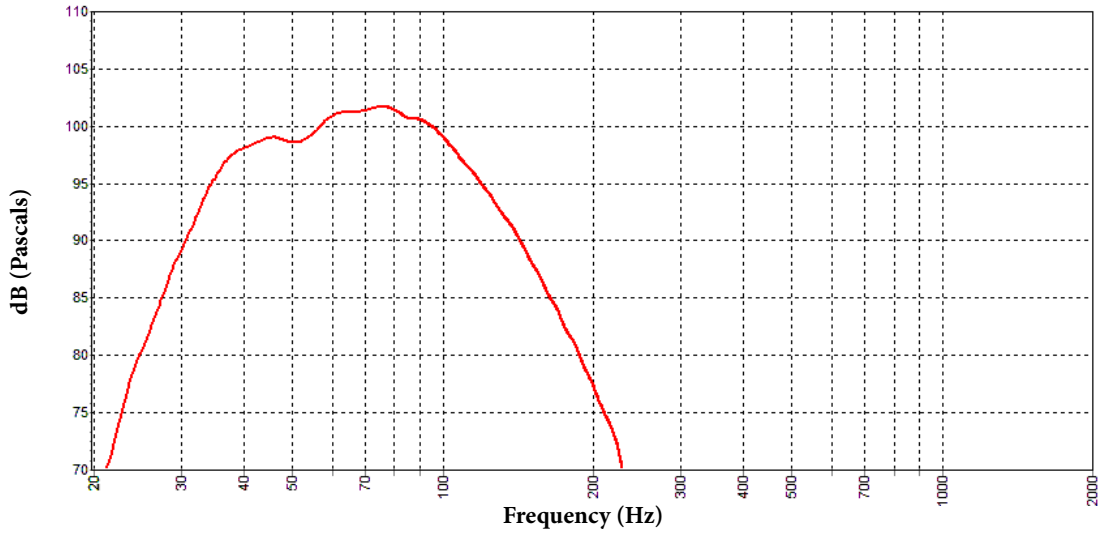
Power for both woofers is supplied by some very efficient power amplifier systems, controlled by a sophisticated and refined DSP operations system with Dante connection capability. Total system power is 3000W total peak power, with 1500W total sine wave power for the woofers. This sheer power is controlled precisely and processed by a high performance DSP system, which provides all the crossover and EQ functions, as well as providing all limiting, compression and driver protection duties with unfailing attention to every detail of the music.

An optional special groundstack bracket set mounts to the Crest Audio® Versarray 218 Pro Sub, and allows up to three of the Crest Audio® Versarray™ Pro 112's to be mounted on top of the Versarray 218 Pro Sub, and angled upward, for use on stage in a stadium seating situation.

Features

- Dual Woofer Subwoofer SR System
- 3000 Total Peak watts of system power
- 18" Low Rider® 4" VC Peavey® Woofer
- Peavey's UniVent™ air pumping venting technology
- Power amp is fan cooled for maximum reliability
- Full complement of DSP based limiting and compression to protect the drivers from overdrive conditions
- Inputs are analog XLR in and/or Dante Ethernet audio network in.
- Analog Output Thru connector is a male XLR
- 18 mm 13 ply Baltic Birch enclosure
- Hammerhead polyurea black finish and black powder-coated cloth lined grilles
- PowerCON TRUE1 TOP Input and Thru AC power connections
- Built-In tilt back casters with 4" wheels
- Optional groundstack bracket set allows up to 3 Crest Audio® Versarray™ 112 Pro 2-Way cabinets to be mounted above the Crest Audio® Versarray™ Pro 218 Sub

Figure 1 - Frequency Response



Frequency Response, 1 meter on-axis, swept-sine in anechoic Environment (-6 dB):
35 Hz – 125 Hz

Useable Low Frequency Limit (-10 dB anechoic): 33 Hz

Power Amp Rating, Total Power Output:
3,000 watts* total peak available power
Sine wave Power: 1,500 watts* total
*Output duration is limiter controlled

Sound Pressure Level, 1 Watt, 1 meter in anechoic environment:
101 dB SPL (Both speakers driven with 1 watt)

Maximum Sound Pressure Level (1 meter):
Anechoic environment: 130 dB SPL continuous
(flown)
133 dB SPL peak
One half space: 136 dB SPL continuous
(on floor)
139 dB SPL peak

Transducer Complement:
Dual 18" Peavey® Low Rider® 4 ohm woofers, 4" voice coil

Box Tuning Frequency:
36 Hz

Electronic Crossover:
DSP based with high precision math and 48 kHz sampling rate
Crossover Frequency: 125 Hz
Low Pass slope: 24 dB/octave

Infrasonic Filter Slope:
36 dB/octave, staggered poles

Transducer Impedance (Z):
Low Frequency Nominal (X2): 4 ohms

Signal Input Connections:
Analog XLR in and/or Dante Ethernet audio network in.

Enclosure Materials & Finish:
18 mm 13 ply Baltic Birch plywood finished in a tough Hammerhead™ polyurea black finish, with a perforated steel grille finished in black powder coat paint and a cloth liner inside. Inner steel frame and backing plates for rigging hardware.

Mounting provisions: **Not designed to be flown, for ground use only!**

Dimensions (H x W x D):
43.38 in. x 25.63 in. x 26.25 in.
832 mm x 638 mm x 540 mm

Net Weight: 187 Lbs. (85.0 kg)

Companion Speaker Models (sold separately):
Crest Audio® Versarray™ 112 Pro Powered Line Array SR System with dual ribbon tweeters, 2-way
Crest Audio® Versarray™ 215 Pro Powered Sub with double 15" Low Rider® woofers subwoofer.

Optional Accessories:
Crest Audio® Versarray™ VR218 Mk III Ground Stack Kit

Additional Power Amp Specifications

THD: Typically less than 0.1%

AC Power Input: Universal power supply 100–240 VAC, 50 to 60 Hz

DSP Section Specifications:
Sampling frequency: 48 kHz
Bit Depth: 24 bits for ADC/DAC
Latency: 3.5 ms typical

Rear Panel Controls and Connections

System Settings Group

Volume Buttons
0 dB to -6 dB in 2 dB increments, controlled by Up and Down buttons.
Status LED's indicate which gain level is currently in effect.

Sensitivity Buttons
Select either +12 dBu or +6 dBu input sensitivity
Status LED's indicate which sensitivity level is currently in effect.

Polarity Button
One button cycles through Normal or Reversed Polarity.
Status LED indicates which polarity is currently in effect.

Analog Audio Group

Female XLR input jack, Male XLROutput/Thru jack

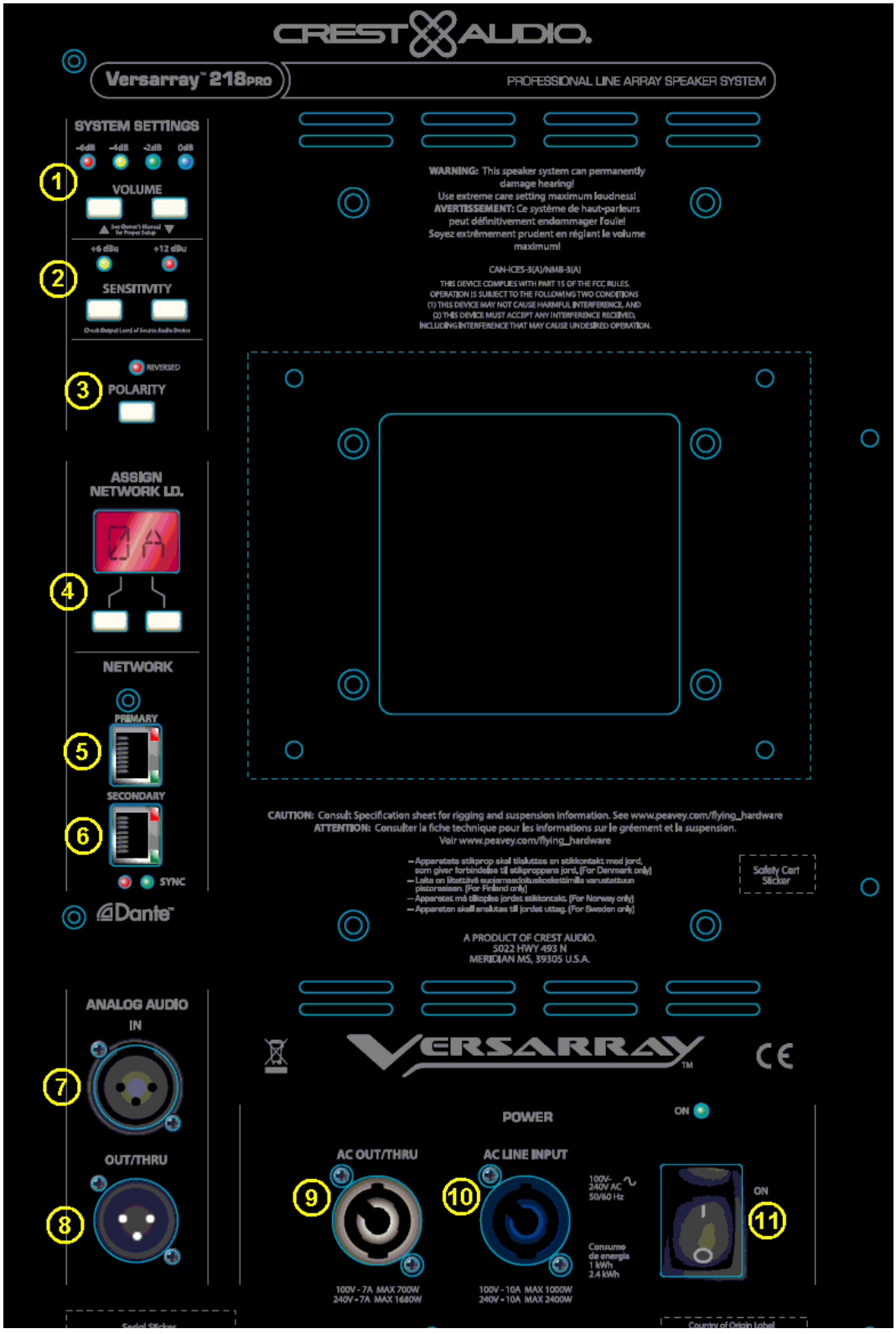
Network Group

Primary Ethernet in
Secondary Ethernet in/out
Both have LED indication of network activity.
Seperate SYNC LED's indicate if the unit is syncd with the control interface.

Assign Network I.D. Buttons

Two push buttons to change the network ID of the unit.

Rear Panel Display



System Settings Group

(1) Volume Buttons
These two buttons are used to change the input signal gain from -6 dB to 0 dB in 2 dB increments, controlled by Up and Down buttons. The status LED's will indicate which gain level is selected.

(2) Sensitivity Buttons
The module input sensitivity can be changed using these two buttons. Either +12 dBu or +6 dBu input sensitivity can be selected, the status LED's will indicate which gain level is currently in effect.

(3) Polarity Switch
Normal Sub Polarity is in the OUT position, with the Red LED unlit.
Reversed Sub Polarity is with the switch in the IN position, and the Red LED is lit. Normal usage of the VR218 Pro Sub positioned within the same plain of the VR112 Pro's has this switch in the OUT position, or Normal Polarity. Other locations of the Sub relative to the VR112 Pro line-array may require a Polarity reversal.

(4)Assign Network I.D. Buttons
The module's network ID is displayed on the two digit, 7-segment display. The two push buttons below the display are used to change the network assignment of the module. Pushing the left button increments the left digit 0 - F, while pushing the right button increments the right digit 0 - F. Push the buttons until the desired assignment is displayed. There are up to 255 different ID's (two digit hex number ID) available.

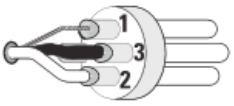
(5) Primary Ethernet IN, RJ45 jack

(6) Secondary Ethernet in/out, RJ45 jack

(7) IN
The audio input consists of a balanced female XLR input jack. The input signal should be a line level signal of sufficient level to drive the speaker system to its maximum levels. The connector is wired as follows; Pin 1 = Ground, Pin 2 = + signal, Pin 3 = - signal

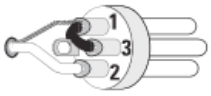
(8) OUT/THRU
The output/thru jack is a balanced male XLR jack wired in parallel with the analog line input jack (6). The connector is wired as follows; Pin 1 = Ground, Pin 2 = + signal, Pin 3 = - signal

Balanced Inputs: Connect to the plug as shown.

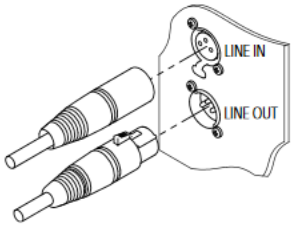


1 = shield (ground)
3 = minus (-)
2 = plus (+)

Unbalanced Inputs: Connect to the plug as shown.



1 = shield (ground)
3 = jumper to pin 1
2 = plus (+)



Power Group

NOTE: The VR112 has an universal power supply, it will work with AC power voltages ranging from 100V to 240VAC at 50/60Hz. Use the proper power cable for your voltage and location.

(9) AC OUT/THRU

The AC power Out/Thru connector is a Neutrik® powerCON TRUE1 TOP premium quality output connector. Using the supplied 3 foot jumper cable, the power can be daisy-chained to power 1 additional box (100V-120V) and up to 3 additional boxes (220V - 240V). This can be achieved by connecting the male end of the jumper cable to the female AC Out/Thru connector (9) on the back of the first speaker. Once this connection is made, the female end of the jumper cable can be connected to the AC Power Line Input (10) connector on the second box. The AC power Out/Thru connector is not controlled by the On/Off Power Switch (11), if power has been supplied to the AC Power Input (10), then the AC Power Out/Thru connector (9) will have power available.

(10) AC LINE INPUT

The AC power inlet is connected via a Neutrik® powerCON TRUE1 TOP connector. This premium quality AC inlet connector is a locking mains connector for professional equipment. The connection is made by firmly inserting and twisting the mating connector on the AC line cord.

(11) ON/OFF POWER SWITCH with BLUE LED

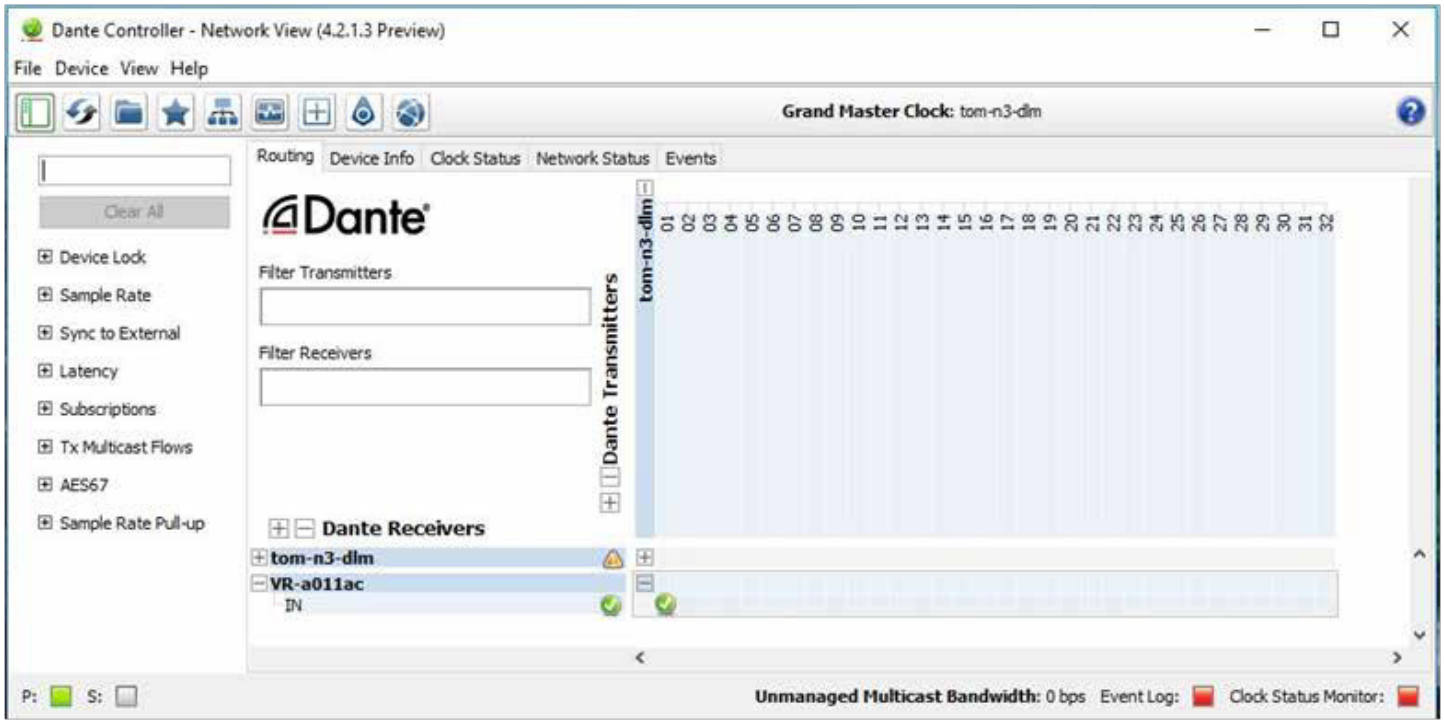
This rocker switch supplies AC power to the VR Pro 218 Sub when switched to the ON position. The ON position is with the top side of the switch pushed "in" or nearly flush with the rear panel. Once the switch is in the ON position, the blue power LED will illuminate.

Dante Operation

The Dante interface allows digital audio to be used as the input source and can be selected in the VR-Pro Series control application. The transmit and receive routings for all connected Dante devices are set using Dante Controller software. The VR-Pro system does not transmit and only receives digital audio.
The Dante interface on the VR is 1000 BT Ethernet, requiring standard Category 5e or Cat 6 wiring. It has an internal network switch to allow daisy chaining to another unit. Too many switches in the path will cause latency problems, so it is best to use a multi-port gigabit network switch to feed the units. (For more information on the Dante network speed and switch requirements, go to www.Audinate.com).

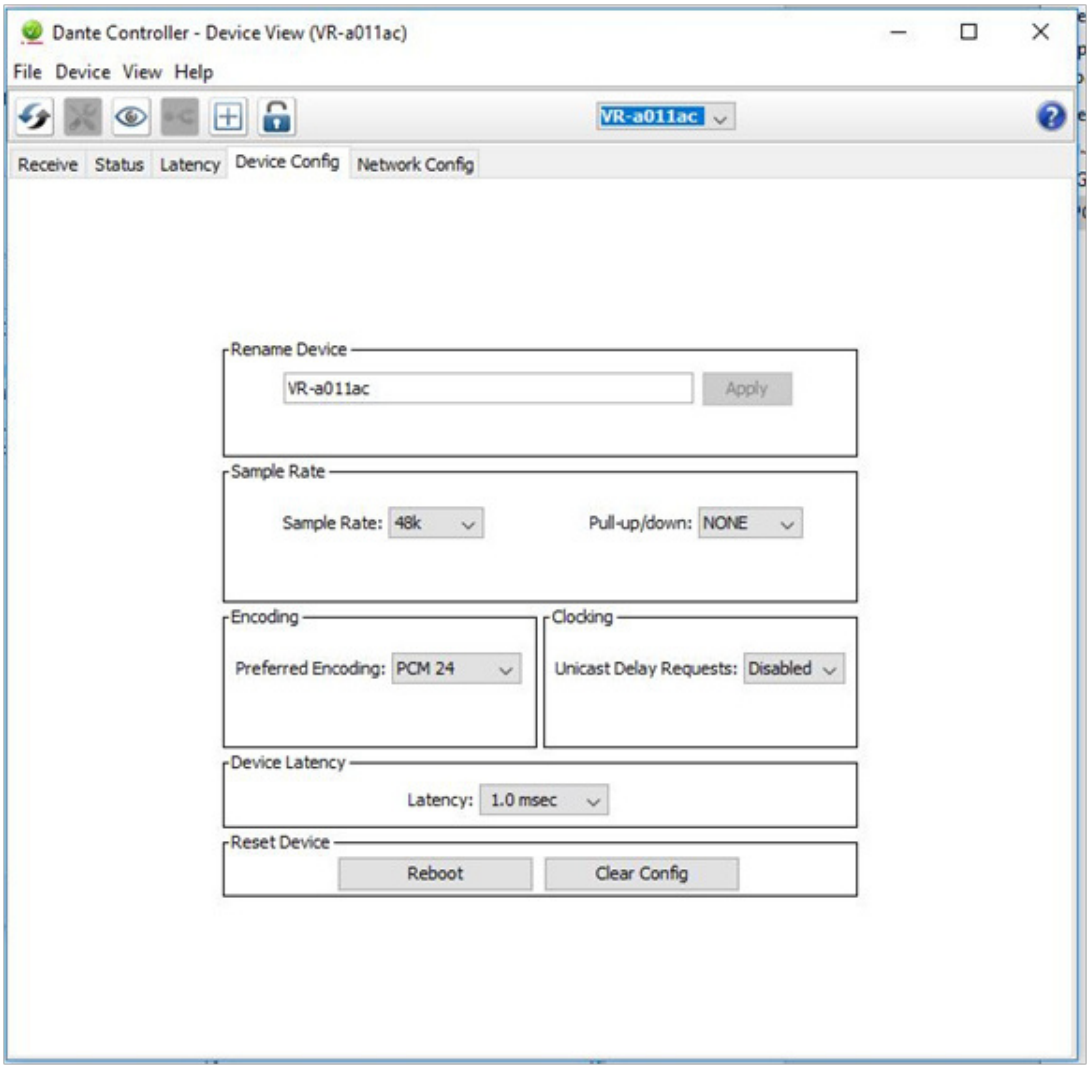
Dante Controller is the software program that is essential for configuring your network and is available as a free download at the Audinate web site. Dante Controller is used to route signals between devices on the network and change device settings. These are then stored in the Dante devices. Once configured, the transmitting device sends to the receiving device, which in this case is the VR-Pro. The interface supports sample rates of 48 kHz (Default), and 96 kHz.

Below is an example of a Dante network. Digital audio is routed from a Nion to the VR-Pro. The vertical columns are transmitter channels, the horizontal rows are receiver channels. In this example Nion channel 01 is sending to VR-Pro receive IN. Any transmit channel on any device can send to a receive channel on any device as long as it is not to itself. Multiple receivers can be connected to a single transmitter. All devices on the network must have the same sample rate settings.



*Tom-n3-dlm is a Media Matrix Nion N3, VR-a011ac is the VR-Pro speaker.

To name a device, go to the Device menu pull down and select Device View (or Ctrl+ D). Here is where you select the Dante device you are interested in editing. This is where information about this device is found. The Device Config tab will give you access to settings that can be changed, including the name and sample rate.

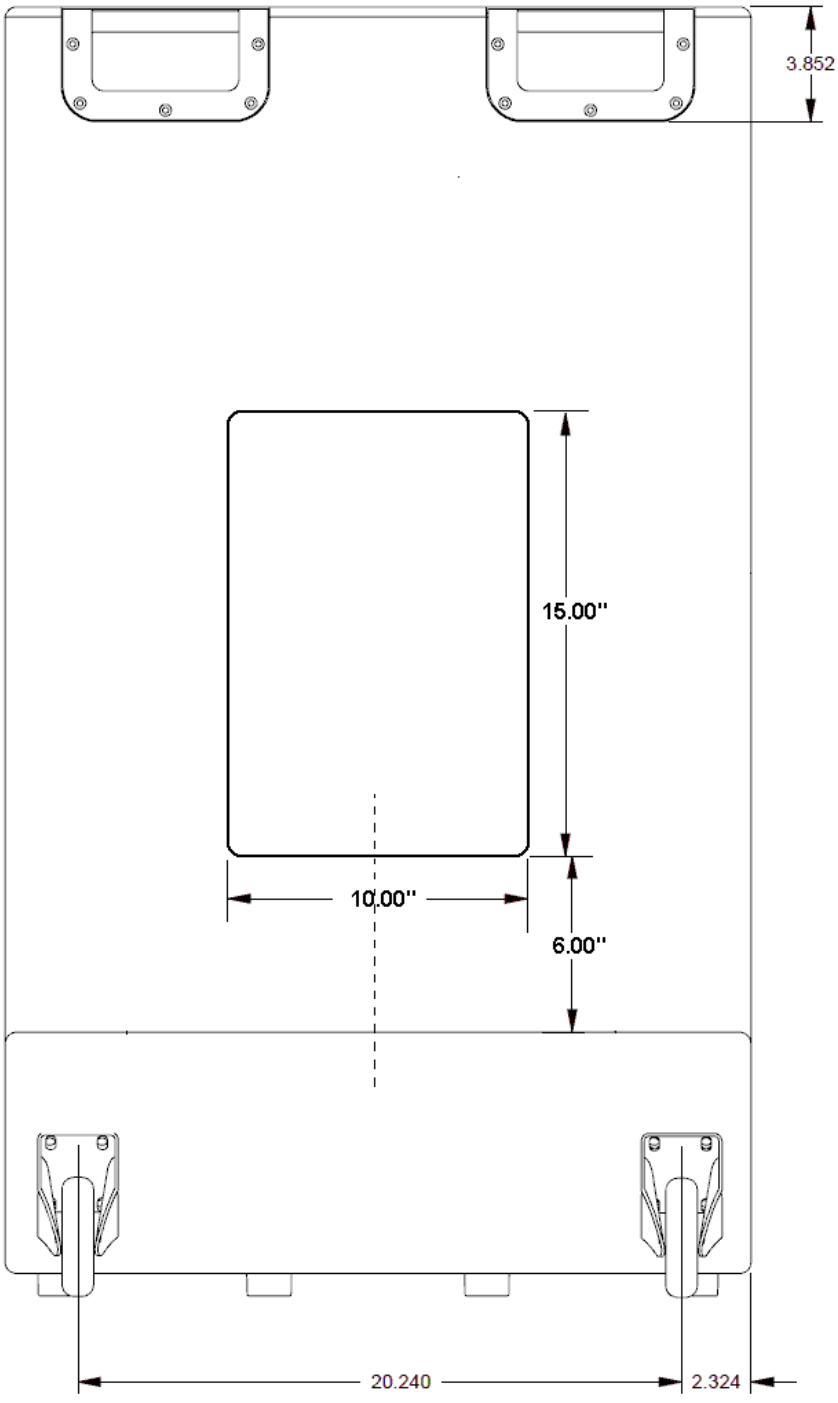


Note: Crest Audio® can not provide all the necessary information and data to operate and interface Dante® with the Versarray™ Pro 218 system in the Owner's Manual.
Please visit www.audinate.com for the detailed information needed. Primers, FAQ's and other basic information on the details of the Dante® audio networking system are available.

Using Multiple Versarray™ 112's mounted over a Versarray™ Pro 218 Sub

The rigging hardware on the Versarray™ Pro 218 Sub allows up to 3 coupled Versarray™ 112 units mounted over the top of a Versarray™ Pro 218 Sub with the use of an optional Ground Stack Kit mounting bracket set.

Do not mount more than 3 cabinets above a Versarray™ Pro 218 Sub using the Ground Stack Kit mounting bracket set. Full instructions for connecting and adjusting the Versarray™ 112 cabinets that mount above the Versarray™ Pro 218 Sub will be provided in the Ground Stack Kit Owner's Manual.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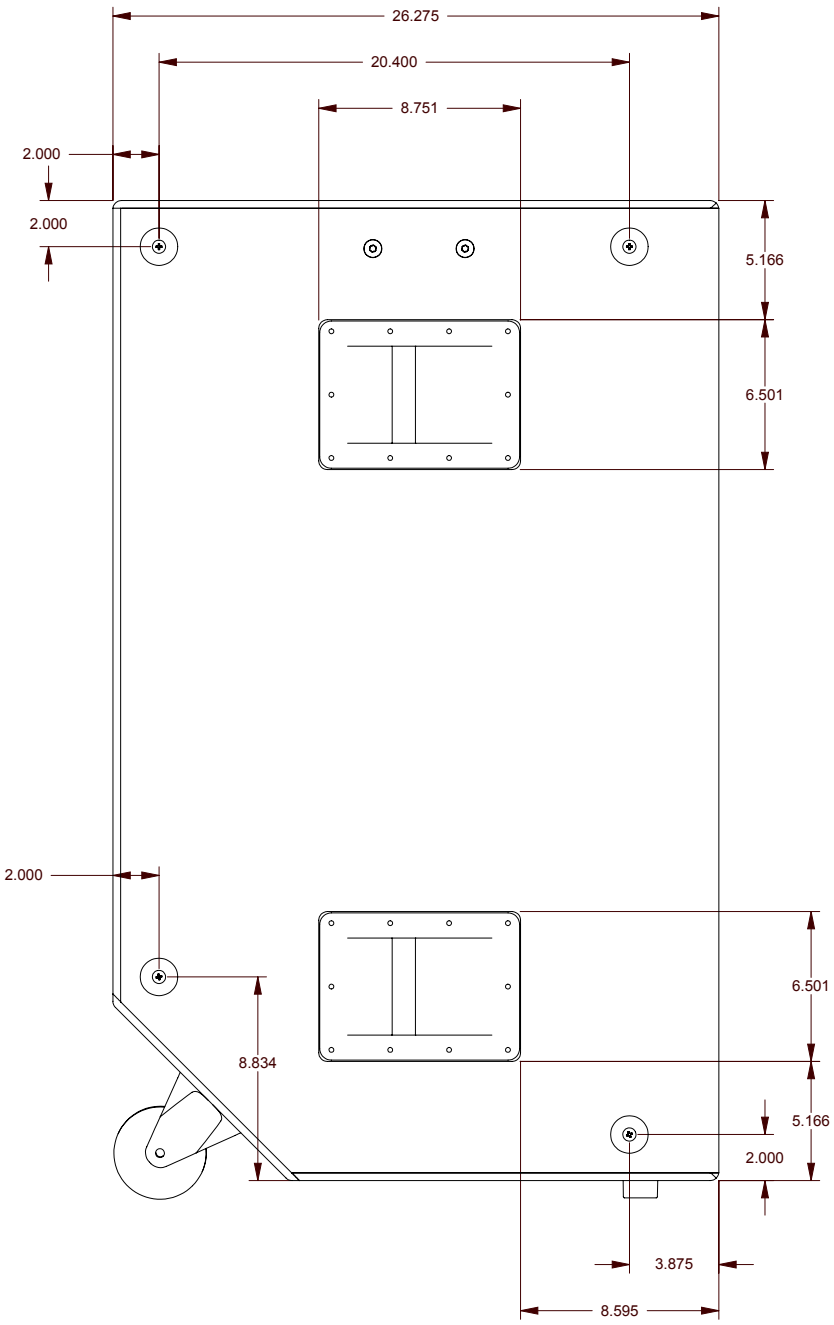
6.00''
20.240
2.324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20.400
8.751
2.000
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2.000
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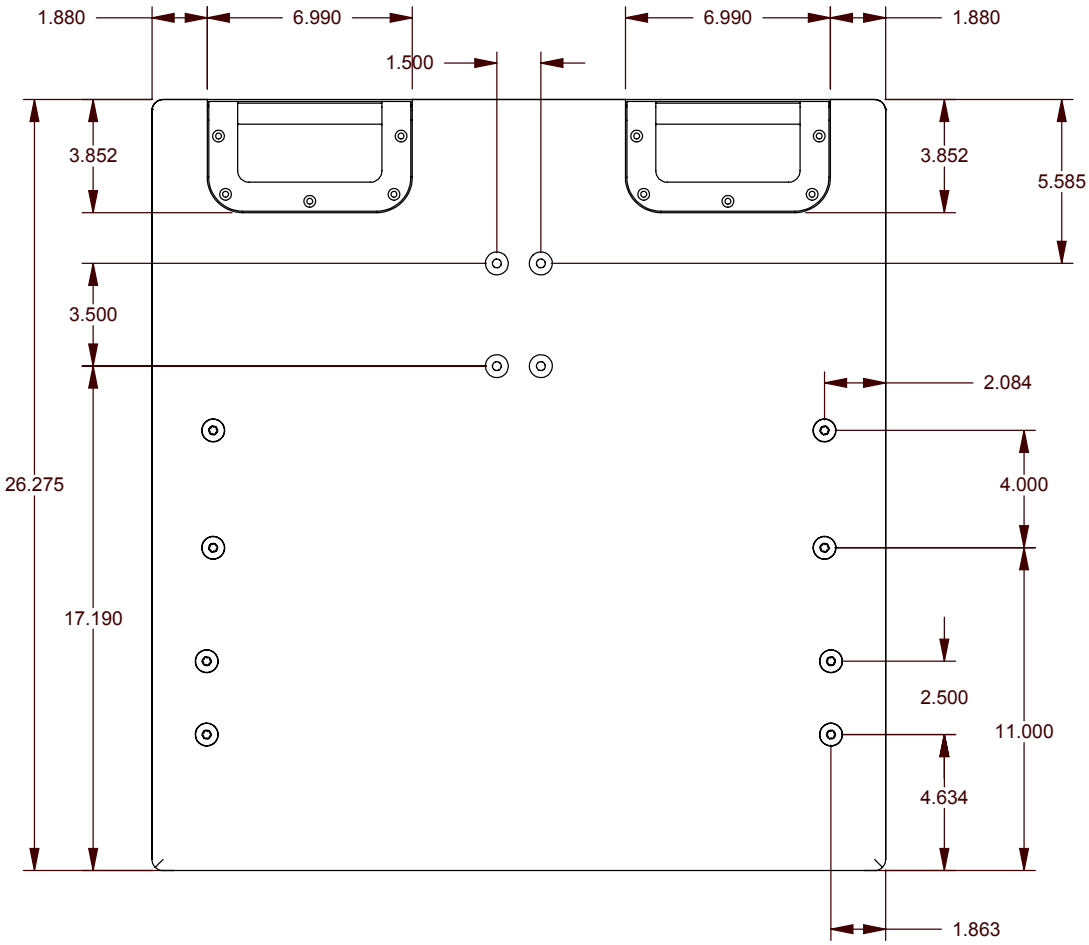
8.595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6.990
1.500
6.990
1.880
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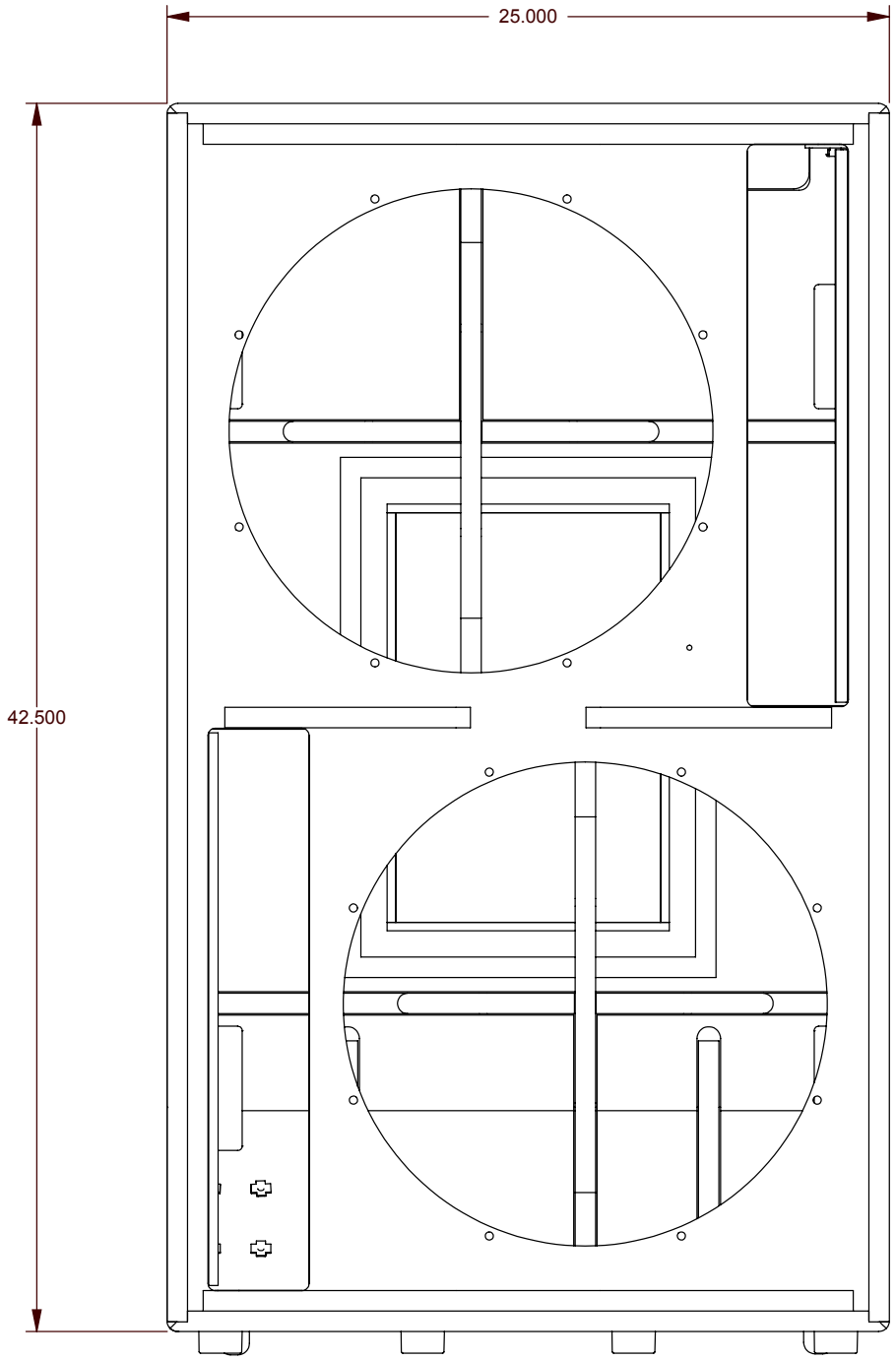
1.863


25.000
42.500

FCC/ICES Compliancy Statement

This device complies with Part 15 of the FCC. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Warning: Changes or modifications to the equipment not approved by Peavey Electronics Corp. can void the user's authority to use the equipment.

Note – This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their expense.

CREST AUDIO®

www.peaveycommercialaudio.com

Warranty registration and information for U.S. customers available online at
www.peaveycommercialaudio.com/warranty
or use the QR tag below

Features and specifications subject to change without notice.

Crest Audio 5022 HWY 493 N. Meridian, MS 39305 (601) 483-5365 FAX (601) 486-1278

Logo referenced in Directive 2002/96/EC Annex IV
(OJ(L)37/38,13.02.03 and defined in EN 50419: 2005
The bar is the symbol for marking of new waste and
is applied only to equipment manufactured after
13 August 2005