

# TANOY.





### **Product Description**

This direct radiating dual 18" subwoofer cabinet is designed to partner Tannoy's VQ Series full range installation loudspeakers, the VNET 218DR is perfect for applications where increased headroom is required for high definition sound reinforcement at low and ultra low frequencies.

Extending the frequency response of the system down to 31Hz makes the VNET 218DR ideal for effects in live music performances in a multitude of environments including open-air, arena and theatres as well as large dance club and concert sound applications. This subwoofer is capable of delivering deep and powerful bass at high sound pressure levels with extremely low distortion and power compression, while all the time maintaining a uniform frequency response throughout its dynamic range. The large port areas ensure minimal turbulence even at high output levels.

This versatile, no compromise, all-purpose subwoofer is designed for the most demanding installed audio applications. The VNET 218DR provides exceptional output, high reliability and outstanding sonic performance providing low and VLF reproduction.

The VNET 218DR is equipped with 16 x unobtrusive recessed carrying handles and 16 x 10mm flying inserts. The cabinet is also fitted with 4 x rubber feet and recessed points are provided on top for secure and safe stacking of multiple subwoofer enclosures.

The modular approach of amplifiers, processing, monitoring and drivers designed into each loudspeaker enables acoustic optimization for the speaker to perform as a unified whole. The intuitive VNET™ software, integrated processing, tuning control, performance diagnostics and protection produces an easy to deploy, exceptionally high performance networkable loudspeaker. System commissioning and ongoing network control, incorporating real time diagnostics of electronics and drive unit, are all managed by the exclusive VNET™ software package. Supplied with each unit, this intuitive Windows tool controls all critical install, commissioning and performance monitoring functions.

The VNET 218DR consists of twin 458mm (18.00"), high efficiency drive units producing 106dB/W, with a 100mm (4.00") voice coil. The twin drivers are mounted in an immensely robust and heavily braced 500-litre cabinet, available in either black or white, which is constructed from 18mm (5/8") multi-ply birch hardwood. Custom colour finishes are also available upon request.

### **VNET™** Network

Each VNET 218DR sub is fully VNET™ compliant. VNET™ supports free network topology so that the loudspeakers can be arranged in a daisy chain, linked in a star configuration or in any combination of both. Implementation of the network between nodes is via high quality rugged Neutrik Ethercon connectors, which are compatible with standard RJ45 plugs, and CAT5 cable. Each speaker has a unique address for auto-location on the network.

An RS485 interface is used for the serial data, with a twisted pair to send and receive information to a high number of nodes over very long distances. Operating a shared bus system, so that a single computer can control any node on that bus, also means that status information can be gathered from any of the devices. The RS-485 differential signal is very robust, while its noise immunity and long-distance capability ensure it is one of the most popular communications methods used in industry. Only data to control setup functions and ongoing system diagnostics is carried over the network.

### | Features

- 2 x 458mm (18.00") bass units with 4" sandwich voice coil
- Triple aluminium demodulating rings for Ultra low distortion
- Deep, powerful bass performance
- VNET™ implementation real-time diagnostic control
- High efficiency (>85%)
- Recessed foot locator points for stable stacking
- · Rugged birch plywood construction
- 16 x integral carrying handles for easy positioning
- Integral flying points

### **Applications**

- Live Music Venues
- Concert Halls
- Theatres
- Nightclubs / Dance Music Venues

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### **TECHNICAL SPECIFICATIONS**

System					
System Type	Subwoofer - Direct Radiator				
Frequency Response (-3dB) (1	<sup>)</sup> 31Hz - 600Hz				
Frequency Range (-10dB) (1)	24Hz - 1.5kHz				
Rated Maximum SPL (2)	137dB (average) 143dB (peak)				
Driver Complement	2 x 458mm (18") Bass driver				
Crossover (DSP Generated)	Variable low pass filter				
Distortion					
<b>10% Full Power (28.3V)</b> 40Hz	2nd Harmonic 0.26%	3rd Harmonic 0.92%			
100Hz	0.29%	0.27%			
<b>1% Full Power (8.94V)</b> 40Hz 100Hz	<b>2nd Harmonic</b> 0.13% 0.16%	<b>3rd Harmonic</b> 0.23% 0.19%			
Construction					
Enclosure	500 litres, 18mm (5/8") birch plywood internally braced.				
Finish	Textured black (custom colours on request). Powder coated steel grille				
Connectors	1 x female XLR (input) 1 x male XLR (link) 1 x RJ45 (network in) 1x RJ45 (netwirk link) 2 x Neutrik Powercon (1 AC Input, 1 AC Loop)				
Controls & Indicators	LED on front of cabinet behind grill. (wink indicator for locating & assigning) Power LED (Blue) Signal LED (Green) Limit LED (Red) User DSP - defeat switch Power Switch				
Fittings	16 x Recessed carrying handles 16 x M10 flying inserts. 4 x Pullback points 4 x Rubber feet				
Dimensions (HxWxD)	700mm x1050mm x 850mm 27.56" x 41.34 " x 33.46"				
	110kg (232 lbs)				

		CS

**Efficiency** >85% typically **Damping Factor** 120 ref 8 Ohms Distortion <0.05% @ 1kHz -3dB output (22kHz bandwidth) 5.6 kOhms unbalanced, Input Impedance 11.2 kOhms balanced **Output Power (Programme)** 2500W Input Sensitivity 1.4V (+5.5dBu) Dual channel Class D (Bridged) Input Sensitivity

#### **DSP System**

Comms Facilities
Firmware updatable and selected pa rameters editable
Communications
Serial - RS485 Proprietary message format
Dynamic Range
DSP
3rd generation SHARC
Sampling Frequency
Format
Format
Firmware updatable and selected pa rameters editable
Serial - RS485 Proprietary message format
112dB(A) typical
3rd generation SHARC
96kHz 24 bit A/D-D/A word length

### **PSU Specifications**

Input Connector Locking Neutrik Powercon Voltage Selection Automatic (115 / 230V, 45 - 65Hz) High current, high freq. switch-mode Type Efficiency >90% typical 100v / 115v / 230v nominal +/-10% Input voltage Mains fuse External Fuse type T10AT Automatic soft-start Other features

#### Notes:

(1) Average over stated bandwidth. Measured at 3 metres on axis, then referred to 1 metre (2) Unweighted pink noise input, measured at 3 metres in an anechoic chamber, then referred to 1 metre

A full range of measurements, performance data, and Ease  $^{\text{TM}}$  Data can be downloaded from www.tannoy.com

Tannoy operates a policy of continuous research and development. The introduction of new materials or manufacturing methods will always equal or exceed the published specifications, which Tannoy reserves the right to alter without prior notification

### **Ordering Information**

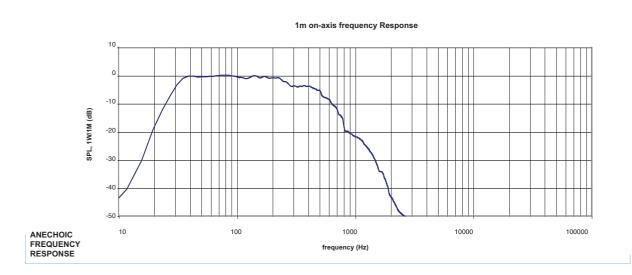
PART NUMBER MODEL NAME COLOUR PACKED QUANTITY 8001 5340 VNET 218DR BLACK 1 WHITE 1

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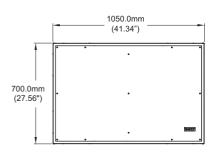


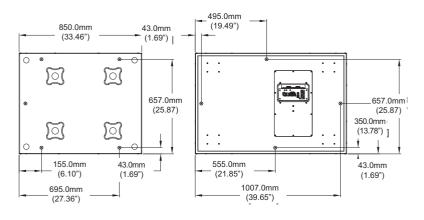


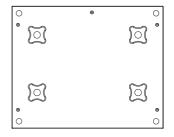
# PERFORMANCE MEASUREMENTS

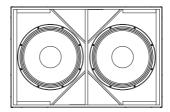


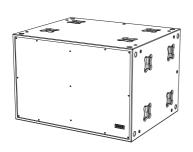
# **DIMENSIONAL SKETCHES**











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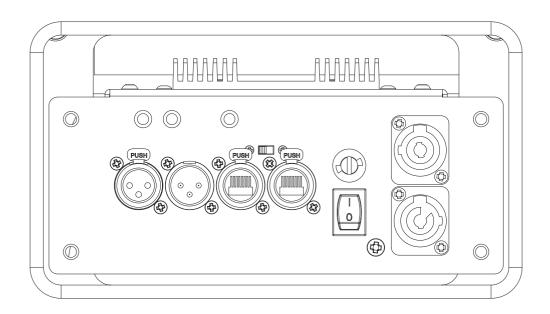
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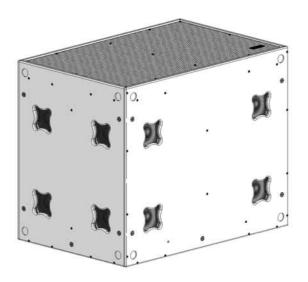


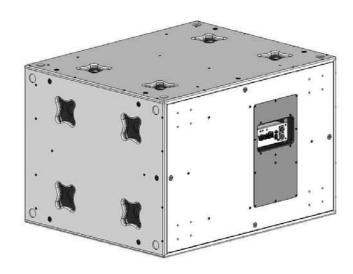
# **TANNOY**

# **INPUT PANEL**



# **DETAIL DRAWINGS**





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