

# **VARILINE**

Multifunctional Speaker Line





# VARILINE



## Philosophy

Professional sound reinforcement requires maximum performance and high sound pressure levels for a wide variety of touring and installation applications. Universal loudspeaker functionality is therefore most important to meet the ever changing demands without effort.

Both acoustically and mechanically, VariLine enclosures have been uncompromisingly designed and optimized for multi-functional application. Innovative circuits provide maximum reliability and protection of all loudspeaker components.

**Engineered & made in Germany.** VariLine loudspeakers feature premium components only: lightweight high power neodymium transducers, rotatable CAD optimized CD horns, all-electronic protection circuits and passive true-phase crossovers provide outstanding reliability and linear reproduction even in highly critical applications. Comprehensive mounting and rigging accessories facilitate professional handling and secure, easy installation of VariLine loudspeakers. Visually attractive yet low-key, these enclosures are highly recommended for demanding ambiances.

## ●●●●● Cabinet Design

VariLine enclosures are made from extremely rugged multiply birch wood and two-pot finished to withstand touring and handling stress. The front is protected by a sturdy powder-coated steel grille lined with high quality acoustic foam and, the company logo is 90° rotatable for horizontal use. 12" and 15" models feature asymmetric enclosures to facilitate the use as floor monitors and cluster arrangement.

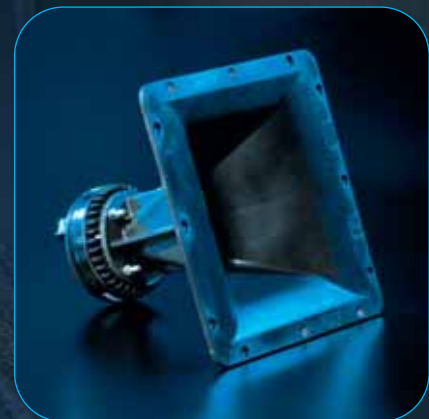


## ●●●●● Transducer

VariLine loudspeakers are equipped with extremely low-distortion state-of-the-art drivers only to provide linear response, wide dynamic range and high power handling. The 6", 12" and 15" transducers feature neodymium magnets significantly contributing to the light weight of VariLine enclosures.

## ●●●●● Horn

The large format VariLine constant directivity HF horns have been optimized with advanced CAD software resulting in exemplary low distortion and directivity way down beyond the MB range. For horizontal applications, they are rotatable by 90°. The smaller enclosures are equipped with Electro-Voice DH3 titanium dome drivers, the VL 122 and larger models feature Electro-Voice ND6 neodymium drivers with 3" voice coils and 1.4" exits. These advantageous horn/driver configurations provide crisp and powerful high-resolution HF reproduction.



## ●●●●● Crossover

VariLine crossovers use selected high-quality components only for signal processing and the innovative DYNACORD protection circuits: the all-electronic VOICE COIL TRACKING PROTECTION and halogen protectors prevent thermal overload. For maximum dynamics, VariLine loudspeakers can be driven by extremely powerful amplifiers without voice coil damage - even when operating errors occur. Thermal overload triggers a 'soft' power reduction without the switching noise of conventional protection circuits. Additionally, 12" and 15" models feature selectable bi-amp operation .



## ●●●●● Drive

With DYNACORD PowerH amplifiers and IRIS-Net, VariLine systems can be networked providing comprehensive remote control and permanent supervision. Fully configured presets are available for a variety of system setups containing loudspeaker monitoring and linear phase FIR (Finite Impulse Response) filtering while others presets provide FIR floor monitor optimizing. Even very large systems require one mouse click only for impedance sweep measuring and loudspeaker connection testing.



Of course, IRIS-Net-controlled systems are also user-configurable. Presets are available for conventional digital controllers as well and, EASE and Ulysses data files facilitate demanding simulations quickly and precisely.

## ●●●●● Flying brackets

Flying brackets are optional accessories for precise loudspeaker aiming at the listening areas. In installation applications, the bracket can be equipped with truss clamps for flying while an adapter enables stand mounting. A TV spigot enables easy changing from truss to stand mounting while additional adapters provide maximum flexibility for a comprehensive range of applications (see pp. 15).



## ●●●●● Installation hardware

A wide range of installation hardware is available for VariLine fullrange cabinets providing classic three-point eyebolt flying, wall or ceiling bracket mounting and, even more convenient, three-level adjustable mounting (see pp. 15).



- Applications
- ● Highest quality speech and music
  - ●
  - ●
  - ● Theatre front fill
  - ●
  - ● Multimedia
  - ● Satellite and delay systems

● VL 62



● VL 262

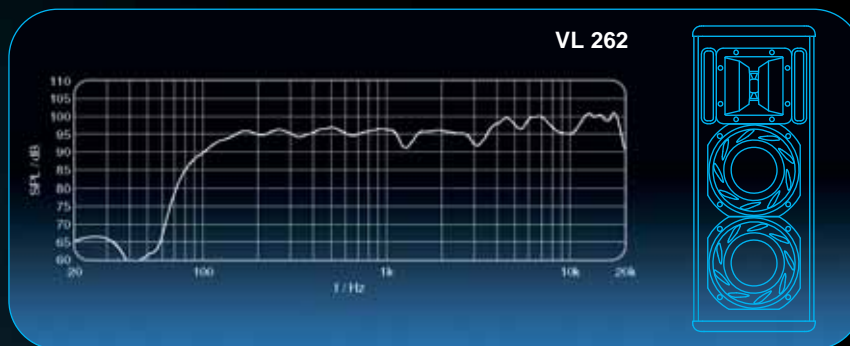
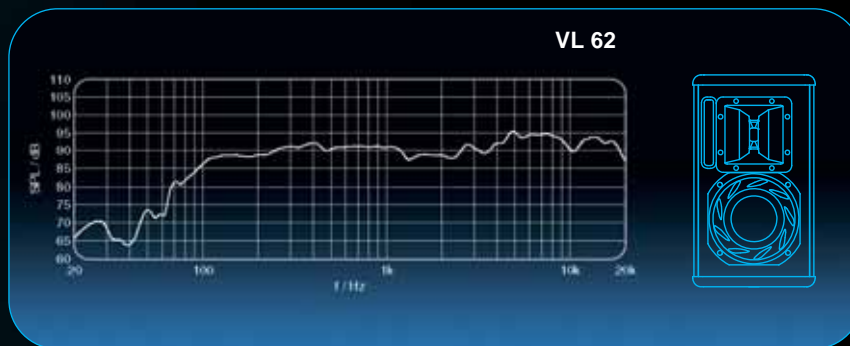
## VL 62 and VL 262

The models VL 62 and VL262 are very compact 2-way full-range high power cabinets for a wide variety of mobile and installation applications. High sensitivity (94dB/97dB @ 1W/1m) and power handling makes them stand out in their class.

Extremely low distortion DND 6130-16 neodymium drivers handle lows and mids while a 90° x 40° HPT94 constant directivity horn radiates the highs. It is driven by the brilliantly clean

Electro-Voice DH3 and easily 90° rotatable for horizontal applications. Recessed SPEAKON connectors enable positioning close to walls, and two lateral M10 inserts are provided for mounting the FB... pivot bracket. MB and MB UMH brackets can be attached to the top or bottom via M10 inserts while four M6 inserts are provided on the back for other wall mount brackets.

A rugged, water-repellent cover is available as accessory.



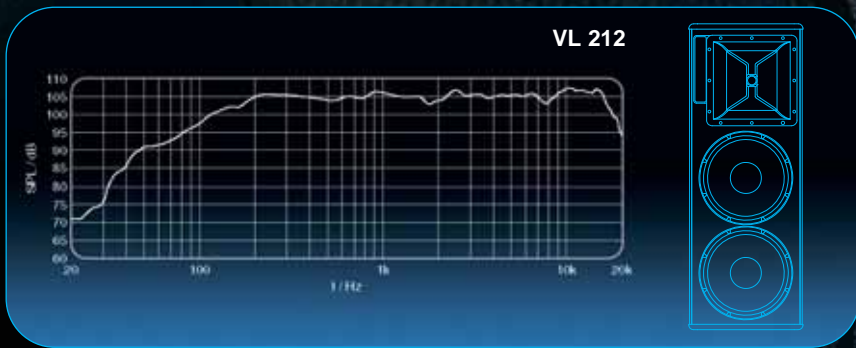
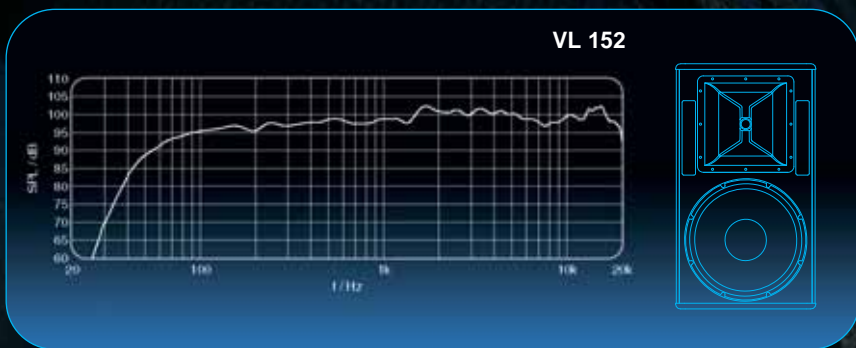
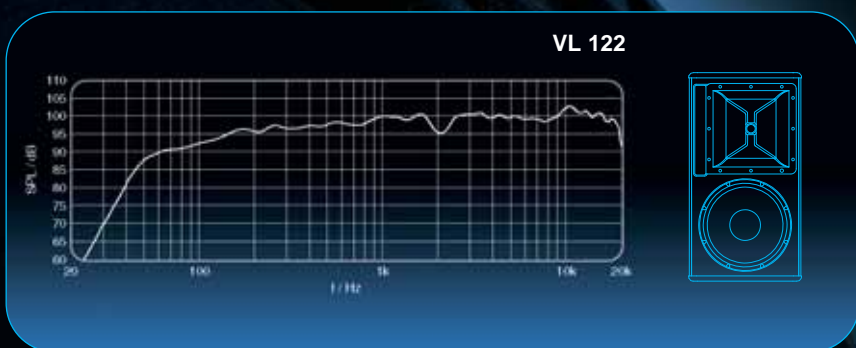
## VL 122, VL 152 and VL 212

The 12" and 15" VariLine models are high power 2-way cabinets exclusively equipped with high-quality neodymium components. These lightweight champs feature impressively high power handling for superior sound pressure levels.

Large format HF horns coupled to Electro-Voice ND6 drivers provide balanced directivity well below the crossover frequency and clear, detailed HF reproduction. In horizontal applications –

especially when used as monitor and in high-quality installations – mid and high frequency radiation can be optimized by horn rotation. The 12" and 15" models are switchable from full-range mode to bi-amp operation. Their asymmetrical enclosure design is ideal for floor monitor use and cluster arrangements.

For the range of mounting and flying hardware refer to page 15.





● VL 122



Applications

- ● Highest quality speech and music
- ● High power monitoring
- ● Front and side fill
- ● Club systems with subwoofers
- ● Delay systems

● VL 152



● VL 212



## ●●●●● SUB 18 and SUB 28

The vented SUB 18 and SUB 28 direct radiators have been designed for subwoofer use in active multiway systems. The superior transient response of the classic bass reflex construction is also well suited for medium to large bass arrays.

The premium 700W RMS long excursion woofers feature extremely low THD, and the reliable, all-electronic Voice Coil Tracking Protection prevents thermal overload of the 100mm sandwich voice coils.

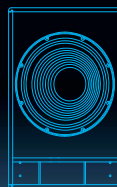
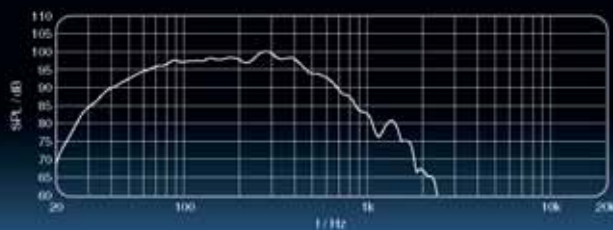
For maximum dynamics, the SUB models can be driven by extremely powerful amplifiers; thermal overload triggers a virtually inaudible 'soft' power reduction. The 18mm multiply birch wood enclosures feature a rugged two-pot structured finish.

The woofers are damage and weather protected by a sturdy powder-coated steel grille lined with high quality acoustic foam. Wheel kits with four 100mm factory assembled 'Blue Wheels' are optionally available. These are mounted to the back to provide easy and convenient transport .

The SUB 28 is switchable from 1 x 4 ohms to 2 x 8 ohms mode where woofer A is connected to the Speakon pins 1+/1- and B to pins 2+/2-.

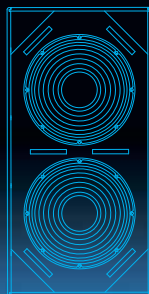
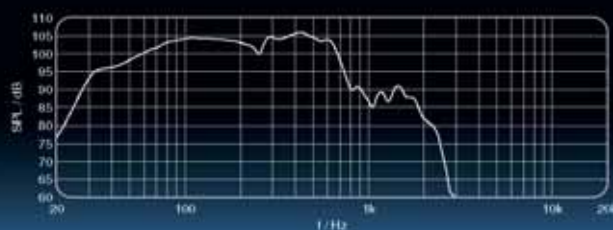
When driven by DYNACORD CL, LX or Power-H series amplifiers a single 4-conductor loudspeaker cable is required to feed both woofers from amplifier channel A (channel B output is also present at channel A pins 2+/2-).

**SUB 18**



**WK 500** # D113150 for SUB 18  
**WK 600** # D113149 for SUB 28

**SUB 28**





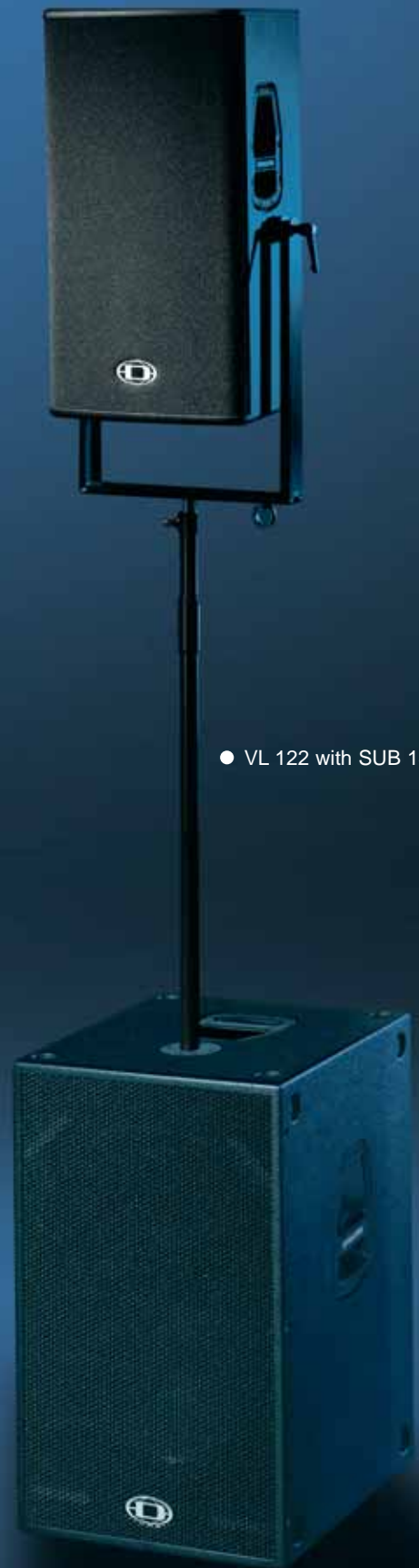
● SUB 18



● SUB 28

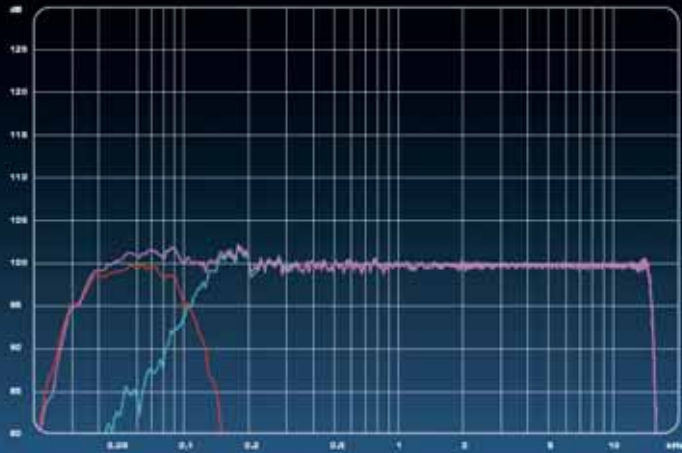


● VL 212 with SUB 28



● VL 122 with SUB 18

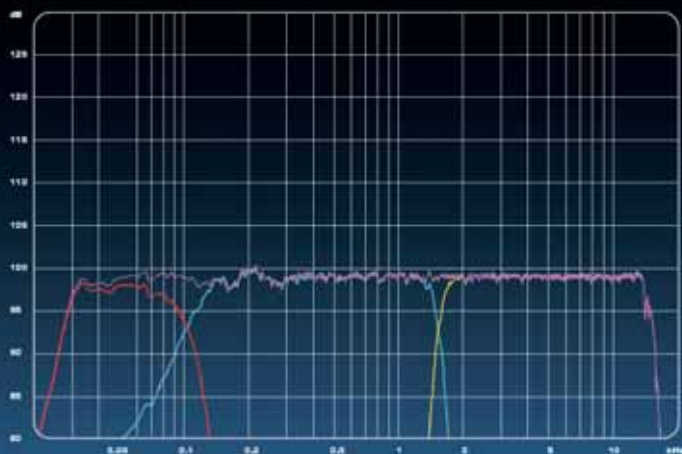
VL 122 / SUB 18 with FIR-Filter



## VL 122 and SUB 18

Active high power 2 or 3-way combination for small to medium bistro and club sound reinforcement. With FB-VL122 flying brackets, the satellites can be conveniently pole-mounted on the subwoofers and precisely aimed at the target areas. High-performance CL and LX series amplifiers and the DSP 244 controller and / or Power-H amplifiers with RCM 26 module are recommended as drive units.

VL 212 / SUB 28 with FIR-Filter



## VL 212 and SUB 28

Active high power 2 or 3-way combination with maximum low-mid sound pressure levels for medium FOH applications. Individual all-electronic Voice-Coil-Tracking Protections prevent thermal overload of the transducers permitting the use of the high-performance DYNACORD Power-H series H 2500 and H 5000 amplifiers for maximum dynamics.



● VL 62 with WMK-10



● VL 262 with FB-VL 262, FB-TV and TC-TV










● VL 122 with PCL 1500 and SUB 18



● VL 152 with MB 152 UMH

## Accessories

								
Cabinet Order #	Dust-Cover	Eyebolt-Kit 3pcs	Wall-Mount	U-Mount Bracket	UMH-Mount Bracket	Tilt-Angle	Rotor Plate	Bracket > Truss
VL 62 D113127	SH-VL 62 D113145	EBK M10 D113155	WMK-10 D113137	MB 62 D113138	---	---	---	TC-02 D112808
VL 262 D113101	SH-VL 262 D113117	EBK M10 D113155	WMK-10 D113137	---	MB 262 UMH D113113	TMA D112815	RMA D112807	TC-02 D112808
VL 122 D113103	SH-VL 122 D113118	EBK M10 D113155	---	---	MB 122 UMH D113114	TMA D112815	RMA D112807	TC-02 D112808
VL 152 D113104	SH-VL 152 D113119	EBK M10 D113155	---	---	MB 152 UMH D113115	TMA D112815	RMA D112807	TC-02 D112808
VL 212 D113133	SH-VL 212 D113147	EBK M10 D113155	---	MB VL 212 D113153	---	---	---	---

								
Cabinet Order #	FB > fix Truss	Truss Clamp	FB > fix Stand	Stand Adapter	FB > variable Truss / Stand	FB-TV	FB > Truss	FB > Stand
VL 62 D113127	FB-VL 62 D113140	TC-02 D112808	FB-VL 62 D113140	PCL M10 D113116	FB-VL 62 D113140	FB-TV D113142	TC-TV D112941	PM-TV D112942
VL 262 D113101	FB-VL 262 D113101	TC-02 D112808	FB-VL 262 D113110	PCL M10 D113116	FB-VL 262 D113110	FB-TV D113142	TC-TV D112941	PM-TV D112942
VL 122 D113103	FB-VL 122 D113111	TC-02 D112808	FB-VL 122 D113111	PCL M10 D113116	FB-VL 122 D113111	FB-TV D113142	TC-TV D112941	PM-TV D112942
VL 152 D113104	FB-VL 152 D113112	TC-02 D112808	FB-VL 152 D113112	PCL M10 D113116	FB-VL 152 D113112	FB-TV D113142	TC-TV D112941	PM-TV D112942
VL 212 D113133	FB-VL 212 D113152	TC-02 D112808	FB-VL 212 D113152	PCL M10 D113116	FB-VL 212 D113152	FB-TV D113142	TC-TV D112941	PM-TV D112942

Type / Name	VL62	VL262	VL122	VL152	VL212	Sub18	Sub28
<b>Order-#</b>	D113127	D113101	D113103	D113104	D113133	D113129	D113130
<b>Cabinet</b>	Full-Range	Full-Range	Full-Range	Full-Range	Full-Range	Subwoofer	Subwoofer
<b>Configuration</b>	passive 2-Way	passive 2-Way	passive 2-Way or Biamped Mode	passive 2-Way or Biamped Mode	passive 2-Way or Biamped Mode	Vented Direct Radiator	Vented Direct Radiator
<b>Nominal Impedance</b>	16 ohms	8 ohms	8 ohms	8 ohms	4 ohms	8 ohms	4 ohms**
<b>Rated Power RMS</b>	150 watts	300 watts	400 watts	500 watts	800 watts	700 watts	1400 watts
<b>Program Power</b>	300 watts	600 watts	800 watts	1000 watts	1600 watts	1400 watts	2800 watts
<b>Peak Power</b>	600 watts	1200 watts	1600 watts	2000 watts	3200 watts	2800 watts	5600 watts
<b>SPL 2,83 V/1m</b>	94 dB*	97 dB	99 dB	100 dB	105 dB	98 dB	104 dB
<b>max. SPL 1m (calc. with Peak)</b>	122 dB	125 dB	131 dB	133 dB	137 dB	132 dB	138 dB
<b>Freq. Range (-10 dB)</b>	90Hz - 20Hz	90Hz - 20Hz	60Hz - 20Hz	50Hz - 20Hz	80Hz - 20Hz	35Hz - 700Hz	35Hz - 700Hz
<b>Coverage Angle nom.</b>	90° x 40°	90° x 40°	90° x 45°	90° x 45°	90° x 45°	---	---
<b>Passive</b>							
<b>X-Over Frequency</b>	2,2 kHz	2,2 kHz	1,5 kHz	1,5 kHz	1,5 kHz	Hi-Cut	Hi-Cut
<b>VCT Protections</b>	Halogen	Halogen	yes	yes	yes	yes	yes
<b>Components HIGH</b>	Ev DH 3	Ev DH 3	Ev ND6-8	Ev ND6-8	Ev ND6-8	---	---
<b>Order-#</b>	D353078	D353078	D361493	D361493	D361493	---	---
<b>Components LOW</b>	DND 6130-16	2x DND 6130-16	DND 12350	DND 15400	2x DND 12350	LFS 18700	2x LFS 18700
<b>Order-#</b>	D366420	D366420	D366559	D366303	D366559	D366304	D366304
<b>Connectors SPEAKON</b>	2x NL 4MPR	2x NL 4MPR	2x NL 4MPR	2x NL 4MPR	2x NL 4MPR	2x NL 4MPR	2x NL 4MPR
<b>Pin Wiring</b>							
<b>Normal/Fullrange</b>	1+/1-	1+/1-	1+/1-	1+/1-	1+/1-	1+/1-	1+/1-
<b>Pin Wiring Biamped HF</b>	---	---	2+/2-	2+/2-	2+/2-	---	Speaker A 1+/1-
<b>Pin Wiring Biamped LF</b>	---	---	1+/1-	1+/1-	1+/1-	---	Speaker B 2+/2-
<b>Dimensions</b>							
<b>(WxHxD) mm</b>	217x 379x 230	217x 543x 230	385x 715x 374	441x 780x 407	385x 1035x 374	505x 805x 570	605x 1205x 675
<b>Net Weight</b>	8 kg	10 kg	24 kg	26 kg	34 kg	49 kg	82 kg
<b>Enclosure Material</b>						<b>Birch Plywood</b>	
<b>Finish</b>						<b>Black 2-Component Structure Paint</b>	
<b>Grille</b>						<b>Powder Coated Steel, Acoustic Foam</b>	
<b>Warranty</b>						<b>36 months</b>	

\* 4,0 V = 1W @ 16 ohms

\*\*switchable 1x 4 ohms / 2x 8 ohms

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