

Touring Speakers

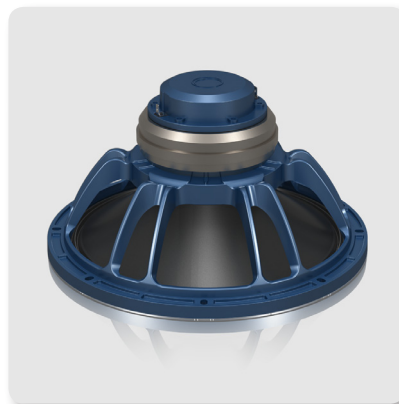
BERLIN TBV118L-AN

18" Powered Subwoofer with
KLARK TEKNIK DSP Technology and
ULTRANET Networking

- Front loaded powered subwoofer for touring, portable and installation applications
- 3,000 Watt power featuring KLARK TEKNIK Class-D technology
- KLARK TEKNIK Digital Signal Processing for total system control
- ULTRANET digital audio networking connects to mixers and other sources
- Carbon fibre loaded 18" neodymium low frequency driver
- Dual voice coil design for high power capacity and extended low frequency output
- Fully featured user interface with LCD display for ease of navigation
- PC remote control software downloadable at turbosound.com
- Low distortion bass reflex port design
- 18 mm (¾") plywood enclosure with hard wearing semi matt black paint finish
- Integral suspension hardware for efficient array configuration and aiming
- Multiple M10 mount points allow eyebolt suspension in any orientation
- Rugged powder coated perforated steel mesh grille
- 20 mm threaded pole mount to support satellite speaker
- Durable handles for easy lifting and carrying



The TBV118L-AN is a compact powered single 18" 3,000-Watt front-loaded subwoofer that is ideally suited for a broad range of speech and music sound reinforcement applications in both fixed, portable and touring audio systems. Designed to work individually without a controller, the TBV118L-AN provides optimal performance for FOH, offstage fill, stereo in-fill or distributed fill applications in a wide range of venues including nightclubs, concert halls, houses of worship, and more.



Custom-Engineered Drivers

TURBOSOUND is recognised the world over for designing and building some of the most iconic loudspeakers and subwoofers. We take meticulous care and pride in maintaining that reputation by utilising only drivers designed specifically for each application – it's what sets us apart from the competition. The TBV118L-AN features a carbon fibre loaded 18" neodymium low frequency driver that utilises a dual voice coil design for high power capacity and extended low frequency output. For its size and operating bandwidth, the TBV118L-AN delivers extremely high and virtually distortion-free output for world-class low frequency performance that will stand the test of time.

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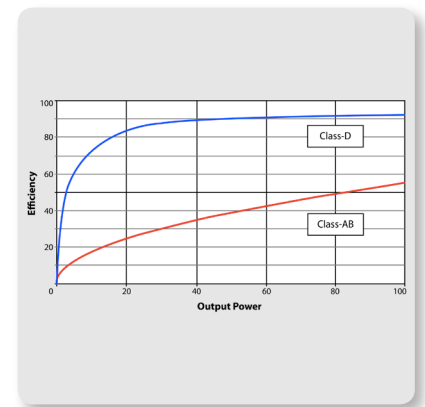
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- Mains input and link output on Neutrik powerCON* connectors
- 3-Year Warranty Program*
- Designed and engineered in the U.K.

Class-D – Massive Power, Perfect Sound

Equipped with a very efficient and lightweight **KLARK TEKNIK** Class-D power amplifier, the TBV118L-AN provides an impressive 3,000 Watts of output power in a highly portable and lightweight package. Class-D amplification makes all the difference, offering the ultimate in energy efficiency and eliminating the need for heavy power supplies and large heat sinks.



Onboard DSP

A high degree of control over the loudspeaker system's performance is managed by a sophisticated, but easy to use **KLARK TEKNIK** Digital Signal Processor (DSP), which provides dynamic EQ and transparent limiting for the utmost punch and definition at high output levels – and long-term reliability.

*All third-party trademarks are the property of their respective owners. Their use neither constitutes a claim of the trademark nor affiliation of the trademark owners with MUSIC Group. Product names are mentioned solely as a reference for compatibility, effects and/or components. Warranty details can be found at music-group.com.

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ULTRANET Connectivity

ULTRANET connectivity is provided by two locking etherCON* connectors. Up to 16 independent channels of 24-bit digital audio and control data are transmitted via a single CAT5 cable between compatible digital devices – including mixers, I/O stage boxes, powered loudspeakers and personal monitoring systems. Simplified cable routing and ease of setup translate directly into significant time saved during installation.

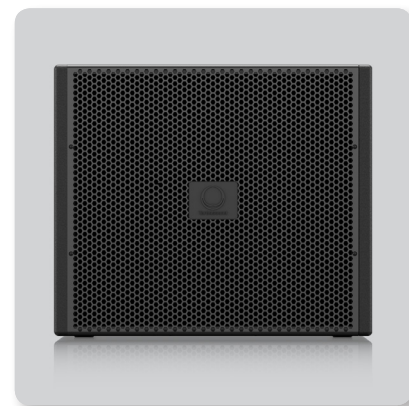


Intuitive User Interface

On the rear panel of the amplifier module, the user interface's LCD display and single rotary encoder provide intuitive access to: position compensation, user EQ control, subwoofer integration and signal routing features. In addition to the balanced XLR input, an XLR output is provided for daisy-chaining more active subwoofers or for use with active loudspeakers. An onboard USB port provides access for remote control of the TBV118L-AN via a free PC computer software download from turbosound.com – as well as convenient DSP firmware updates.

Front Loaded Enclosure Design

Front loaded enclosures provide an optimal combination of low frequency extension, bass articulation and temporal accuracy for high impact sound reinforcement applications. The low distortion bass reflex port design utilised in the TBV118L-AN reinforces the bass musical instrument frequencies and on board DSP processing ensures an effective acoustic transition for use with TBV123-AN active line array elements. For low-frequency bass extension, the recommended cabinet ratio consists of one TBV118L-AN subwoofer per 3 TBV123-AN elements. For reverse cardioid subwoofer configurations, multiples of three TBV118L-AN enclosures are recommended with two front-firing enclosures and one rear-firing enclosure.



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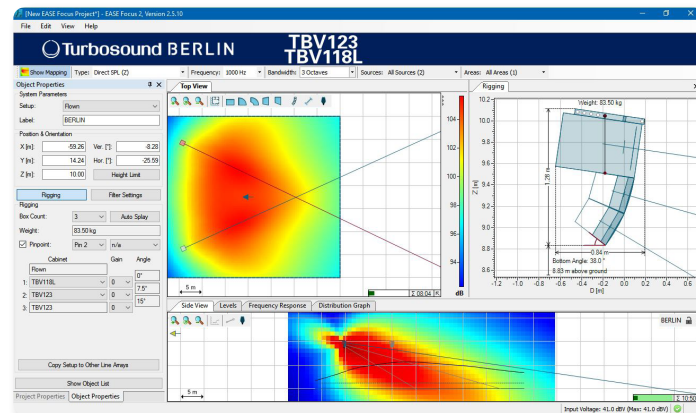
Plywood Construction

Finished in a highly durable semi matt black paint, the cabinet is constructed from 18 mm ($\frac{3}{4}$ ") plywood with a rugged powder coated perforated steel mesh grille backed with reticulated foam, a 20 mm threaded pole mount to support satellite speakers, and a durable handle for easy transport. The TBV118L-AN includes integral suspension hardware for efficient array configuration and aiming, plus multiple internal M10 mount points that allow eyebolt suspension in any orientation.

Mains input and output link power connectors are Neutrik powerCON.

Acoustic Simulation Tools

EASE GLL files are provided for EASE Focus Acoustic Simulation Software, which is available for free download. This allows accurate calculation of both acoustic coverage and suspension pick point selection for tilting and aiming the array at the desired angle.



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You Are Covered

We always strive to provide the best possible Customer Experience. Our products are made in our own MUSIC Group factory using state-of-the-art automation, enhanced production workflows and quality assurance labs with the most sophisticated test equipment available in the world. As a result, we have one of the lowest product failure rates in the industry, and we confidently back it up with a generous 5-Year Warranty program.



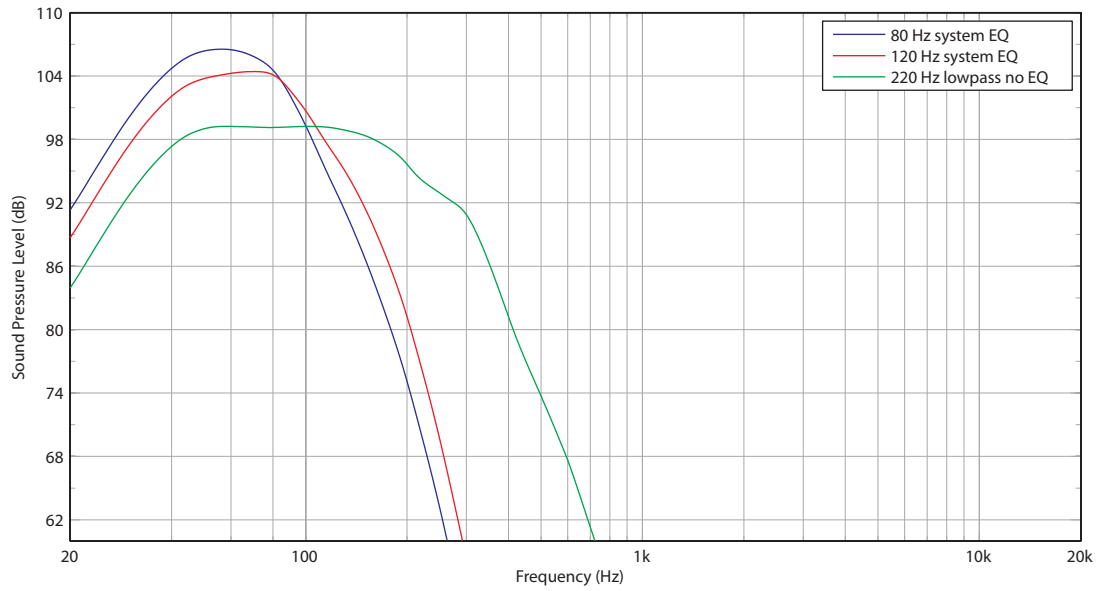
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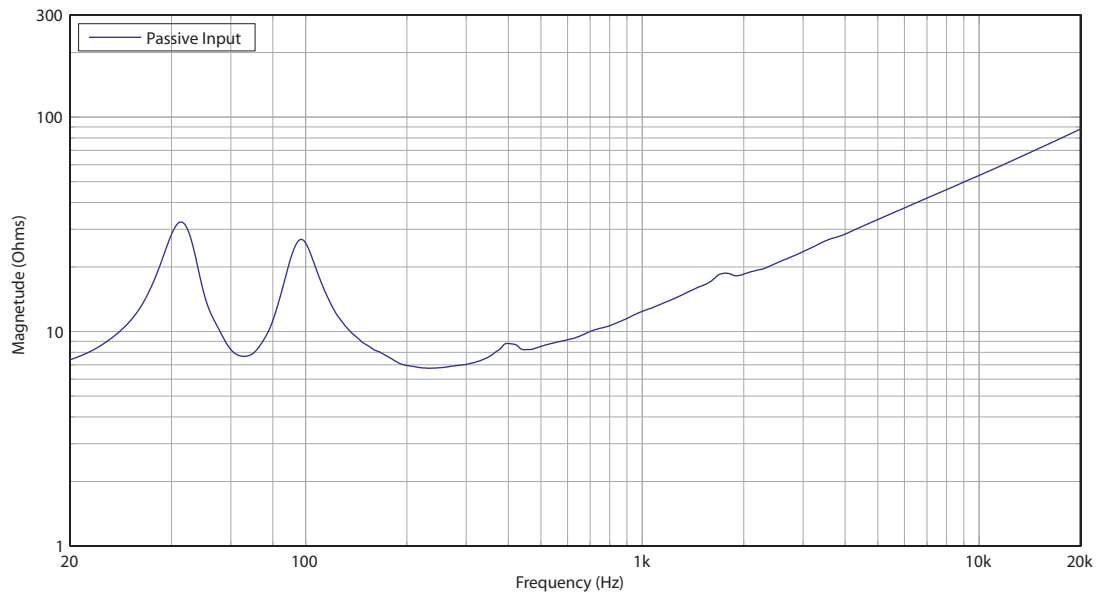
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Frequency Response Sensitivity 1 W / 1 m



Impedance



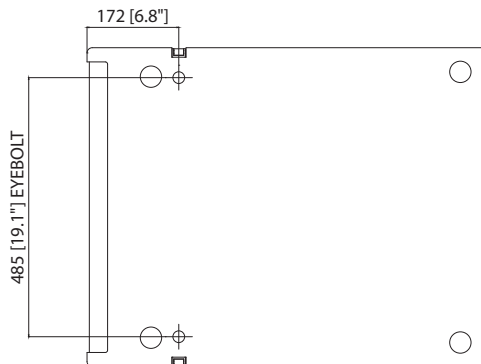
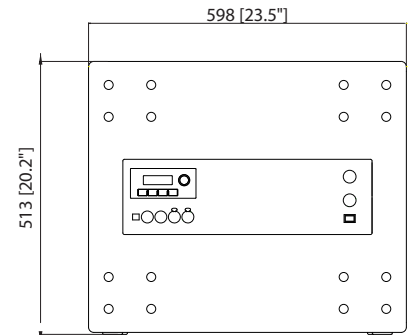
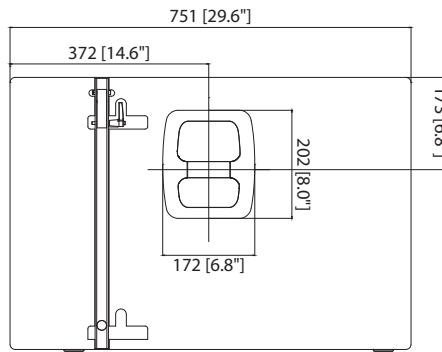
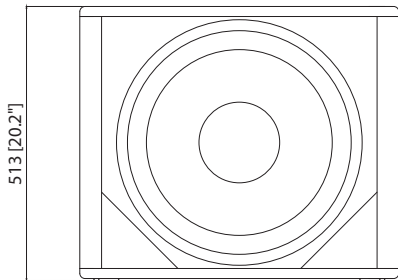
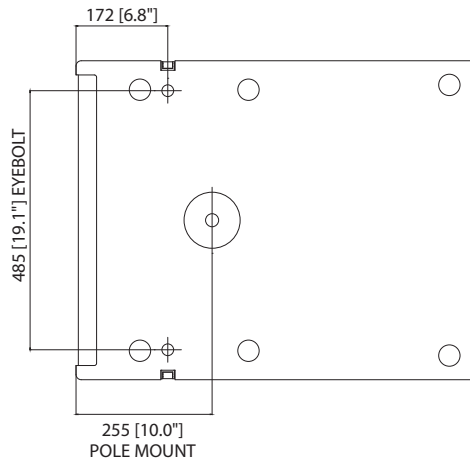
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Dimensions



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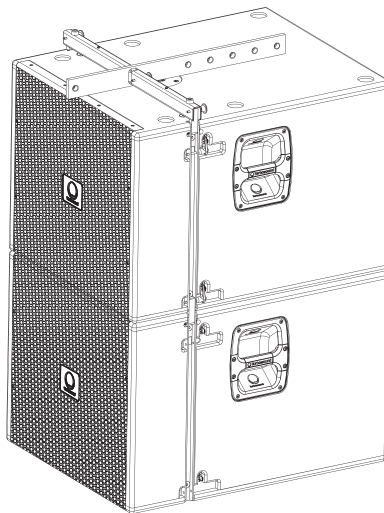
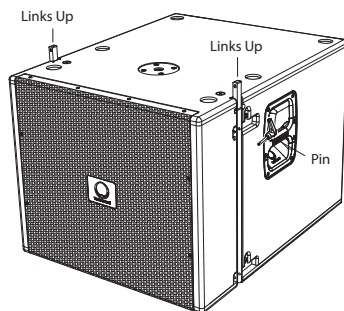
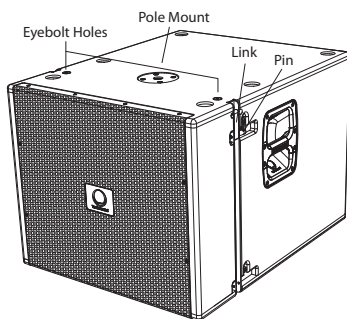
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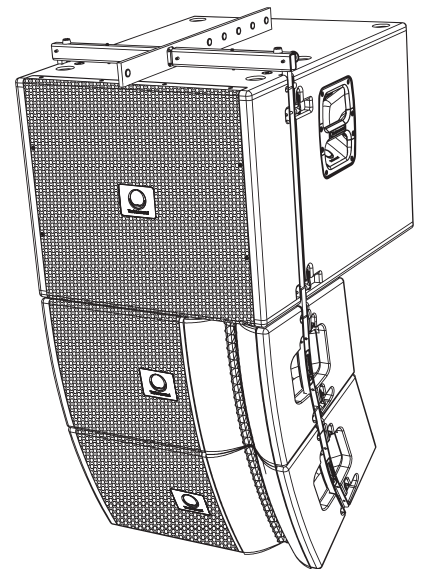
Mounting and Rigging

⚠ Safety Warning: Only authorised and certified personnel shall design and install suspended or ground stack configurations, following the instructions and procedures in the TBV123-FB rigging manual supplied with the TBV123-FB flybar, or downloaded from turbosound.com. Failure to follow these instructions may lead to death or permanent injury. For maximum array sizes, weights and working load limits, please consult the TBV123-FB rigging manual.

The TBV118L-AN cabinet has two retractable mounting links at the top, that allow it to be attached to a TBV123-FB flybar, or to another TBV118L-AN subwoofer. Rigging pins are provided to secure the TBV118L-AN subwoofer, TBV123-AN cabinets and TBV123-FB flybar together. Threaded eyebolt holes and pole mount holes are also present for more mounting options.



2 TBV118L-AN subwoofers with a TBV123-FB flybar



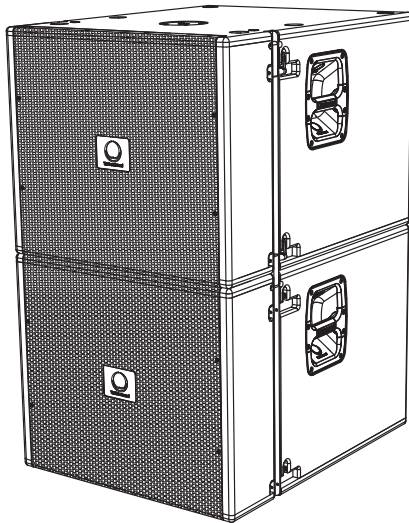
Mixed array with a TBV123-FB flybar,
TBV118L-AN subwoofer, and 2 TBV123-AN cabinets

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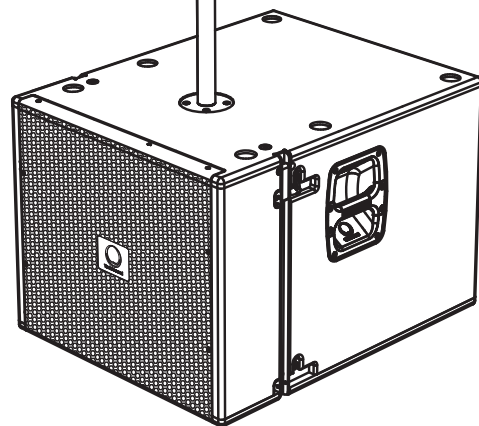
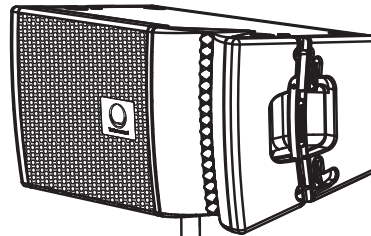
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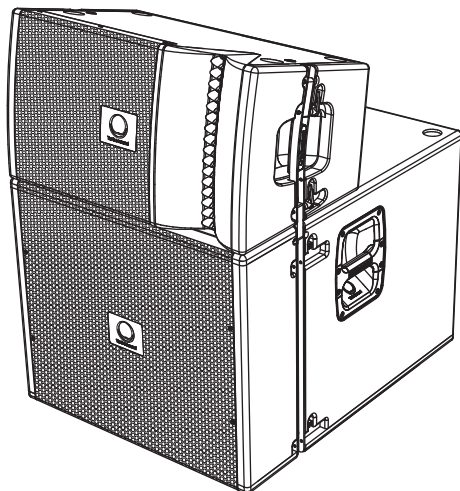
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TBV118L-AN ground stack



TBV123-AN cabinet pole-mounted with a TBV118L-AN subwoofer



TBV123-AN ground stack with a TBV118L-AN subwoofer

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Technical Specifications

System

Frequency Response	45 Hz - 200 Hz \pm 3 dB 31 Hz - 300 Hz -10 dB
Nominal Dispersion	Half Space
Maximum SPL	133 dB peak
Crossover Type	Active
Transducers	1 x 18" (460 mm) LF driver
Limiter	Peak and rms

Amplifier

Maximum output power*	3000 W
Type	Class-D
Protection	Short circuit, thermal

Connectors

Input A / B Sensitivity	1 x combo jack/XLR, 1 x XLR +1 dBu
Input impedance	40 k Ω balanced
Maximum input level	+18 dBu
Ultranet input/link	2 x RJ45/Neutrik etherCON
Mains Supply	Neutrik powerCON† 20A and Link 15A

Controls

DSP	Rotary push-encoder and level control Buttons for Process, Setup, Exit, Enter
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User DSP Functions

Factory EQ Presets	Positioning, FBQ
Display	LCD 128 x 32, blue, backlit
Delay	0 - 300 ms
Equalisation	High and low shelving EQ 2 x parametric EQ
Limiter	Zero attack input limiter
Presets	20 total presets, 19 user-definable
Crossover	Low pass L-R 24 dB/oct
Protection	Lock-out function for all settings

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Technical Specifications

Ultranet Digital Network

Digital processing A/D conversion	24-bit, 44.1 / 48 kHz sample rate
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System Signal, Latency	16 channels < 0.9 ms
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Cabling Cables	Shielded CAT5
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Cable length	max. 246 ft / 75 m recommended
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Power Supply

Current consumption	Input: 20A Max, Link output: 15A Max
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Power consumption	180 W @ 1/8 max power for individual product
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Voltage USA / Canada / Japan	100-120 V~, 50/60 Hz
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UK / Australia / Europe / Korea / China	220-240 V~, 50/60 Hz
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Enclosure

Dimensions (H x W x D)	513 x 598 x 751 mm (20.2 x 23.5 x 29.6")
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Net weight	38.5 kg (84.9 lbs)
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Construction	18 mm (¾") plywood
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Finish	Semi matt black paint
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Grille	Powder coated perforated steel
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Suspension hardware	Integral Suspension System and M10 x 4 points
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Accessories

TBV123-FB	Fly Bar
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TBV118L-RC1	Road case for 1x TBV118L-AN
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TS-PC18B-3	Protective cover for 1x TBV118L-AN
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TPOLE 60-20	60 cm Lightweight Steel Pole with M20 Screw Attachment
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TPOLE 90-20	90 cm Lightweight Steel Pole with M20 Screw Attachment
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TPOLE 120-20	120 cm Lightweight Steel Pole with M20 Screw Attachment
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*Independent of limiters and driver protection circuits

†Neutrik and powerCON speakON are registered trademarks of Neutrik AG.

‡Only qualified personnel are allowed to modify the AC-Main cord and to adhere to all applicable national standards.

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Architecture & Engineering Specifications

The loudspeaker shall be of the powered subwoofer type, consisting of one 18" (460 mm) LF driver. Performance specifications of a typical production unit shall meet or exceed the following: frequency response, measured with swept sine wave input, shall be flat within ± 3 dB from 45 Hz to 200 Hz and within -10 dB from 31 Hz to 300 Hz. Maximum power output shall be 3,000 Watts. Maximum SPL (peak), measured at 1 metre with music program, shall be 133 dB. Dimensions: 513 mm high x 598 mm wide x 751 mm deep (20.2 x 23.5 x 29.6"). Net weight: 38.5 kg (84.9 lbs). The loudspeaker system shall be the TURBOSOUND TBV118L-AN. No other loudspeaker shall be acceptable unless submitted data from an independent test laboratory verifies that the above combined performance / size specifications are equaled or exceeded.

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