

Titan™ series



Titan™ Series ---

An Ideal Choice For Portable Sound Or Installation Applications

Wharfedale Pro **Titan™** Series of passive and self-powered foreground/back-ground music and sound reinforcement speakers is the ultimate in portability, performance and styling for music, speech, and a variety of sound reinforcement applications. Built around the best components, including a titanium compression driver and heavy-duty cast-frame woofer, **Titan™** Series delivers the high level, even dispersion and sonic integrity usually associated with much more expensive speakers.

The **Titan™** enclosure is created using state of the art, gas assist injection moulding technology, enabling us to mould thicker, hollow core enclosure walls, which

are stronger, sonically superior and much lighter in weight than standard injection moulded enclosures. In addition, internal laminar flow ribs further increase the rigidity of the enclosure. This intelligent enclosure design, along with a custom Wharfedale Pro transducer is essential in the reproduction of punchy low end down to 45Hz.

Designed to perform in portable and fixed installation applications alike, the **Titan™** Series, with an ultra-light-weight composite enclosure, offers a range of mounting options, the optional tripod floor stands, the optional wall mount, or even on its side as a floor monitor.

“Lighten the load and work wonders with Wharfedale’s new PA speaker system. With portability, ease of use and high quality as watchwords, you can’t go far wrong with a pair!”



Features

- 2-way reflex systems
- 3 Passive and 3 Active models + 2 Powered Subs
- Low distortion, high power woofers
- 25.4mm Titanium high frequency compression drivers
- XLR output for connecting to another powered speaker
- RCA inputs for MP3, CD or other inputs
- 90° x 60° degree integral Elliptical Wave Guide for even high frequency dispersion
- Power On LED indicator in horn throat and back panel
- Active signal limiting system with LED indicator
- DTF™ Dynamic Thermal Filament HF driver protection
- Lightweight, high strength Polypropylene cabinet
- Integral 35mm (1-3/8") stand socket
- M6, M8 & M10 hanging points
- Accommodates OmniMount® 30.0 bracket (**Titan™** 8) & 60.0 bracket (**Titan™** 12 & 15)
- Built in, rubberized easy-grip handles for convenient transportation
- Available in grey, white or black



Titan™ Series Front Panel Features

High frequency driver and power on indicator

The high frequency driver is a custom designed titanium compression driver. For Active version, a circular blue power 'ON' indicator is embedded in the throat of the horn. There is an additional power 'ON' LED indicator on the rear panel.

Transducers

The Titan™ Active Series features a custom designed, heavy-duty low frequency driver precisely matched to a high frequency Titanium compression driver with integral bi-amplification. Both drivers are designed for maximum output, wide dispersion and precise audio signal reproduction.



Moisture-proof low frequency driver for wherever you play.

Elliptical Wave Guide™

Our unique EWG™ design is the result of intensive computer modeling of natural acoustic wave propagation. To provide more acoustically transparent high-frequency pattern control, hard edges, corners, and parallel surfaces were eliminated from the design while still enabling 90 x 60 degree high frequency coverage. The smoother, more "organic" shape of the EWG™ design reduces high frequency distortion and diffraction eliminating acoustic artifacts found in other horn design technologies. The result is smoother frequency response, greater driver efficiency, and improved vocal and instrument reproduction.



Proprietary 90° x 60° Elliptical Wave Guide™ horn design.

Ports

There are two ports on front of the Titan™ Series that are reflex tuned to provide enhanced low frequency response from the enclosure.

Enclosure Features

- Lightweight enclosure with rubberized transport handles for easy portability
- Rugged Polypropylene injection moulded cabinets with rubberized over-molded handles
- Trapezoidal shape allows for vertical arrays as well as horizontal stage monitor applications
- Protective metal grille
- Multiple M6, M8 or M10 rigging points including wall mount bracket inserts
- Power 'ON' LED indicators inside of the high frequency horn throat and on the back panel
- Standard 35mm integral speaker stand socket and bottom mounted bracket inserts



Using state of the art, gas assist injection moulding technology, plus an internal laminar flow rib pattern we have increased the enclosures rigidity and reduced its weight compared with standard injection moulded enclosures.

Titan™ Active Series

Wharfedale Pro has also taken the power and reliability of the innovative Titan™ passive models and combined it with on board bi-amplification and active crossovers to make the stunning Titan™ Active Series: Titan™ 8 Active, Titan™ 12 Active and Titan™ 15 Active. These powerhouses are at home almost anywhere, band practice, on stage, in studios, at rehearsals, theaters, even houses of worship.

The Titan™ Active Series is a self-powered, two-way professional loudspeaker system incorporating a high grade Bi-Amp Class D and Class A/B Amplifiers. The model also has intelligent electronics, such as full protection system: DC, overload, short circuit, thermal, On / Off mute and LF / HF Limiters, which protects the system from overload and allows reliable operation right up to the power limit.

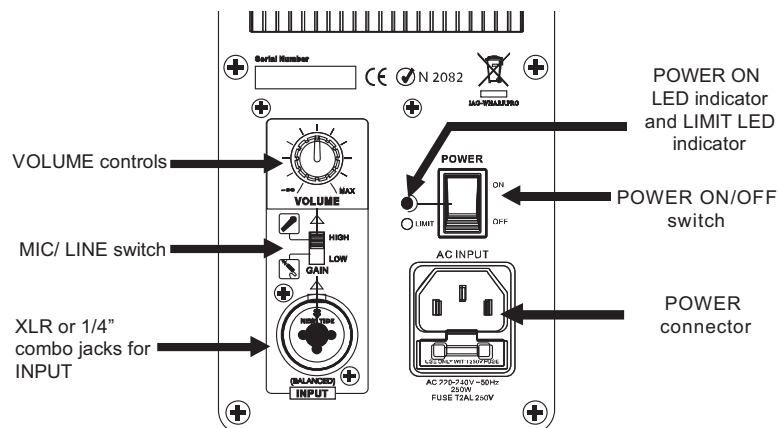


Features

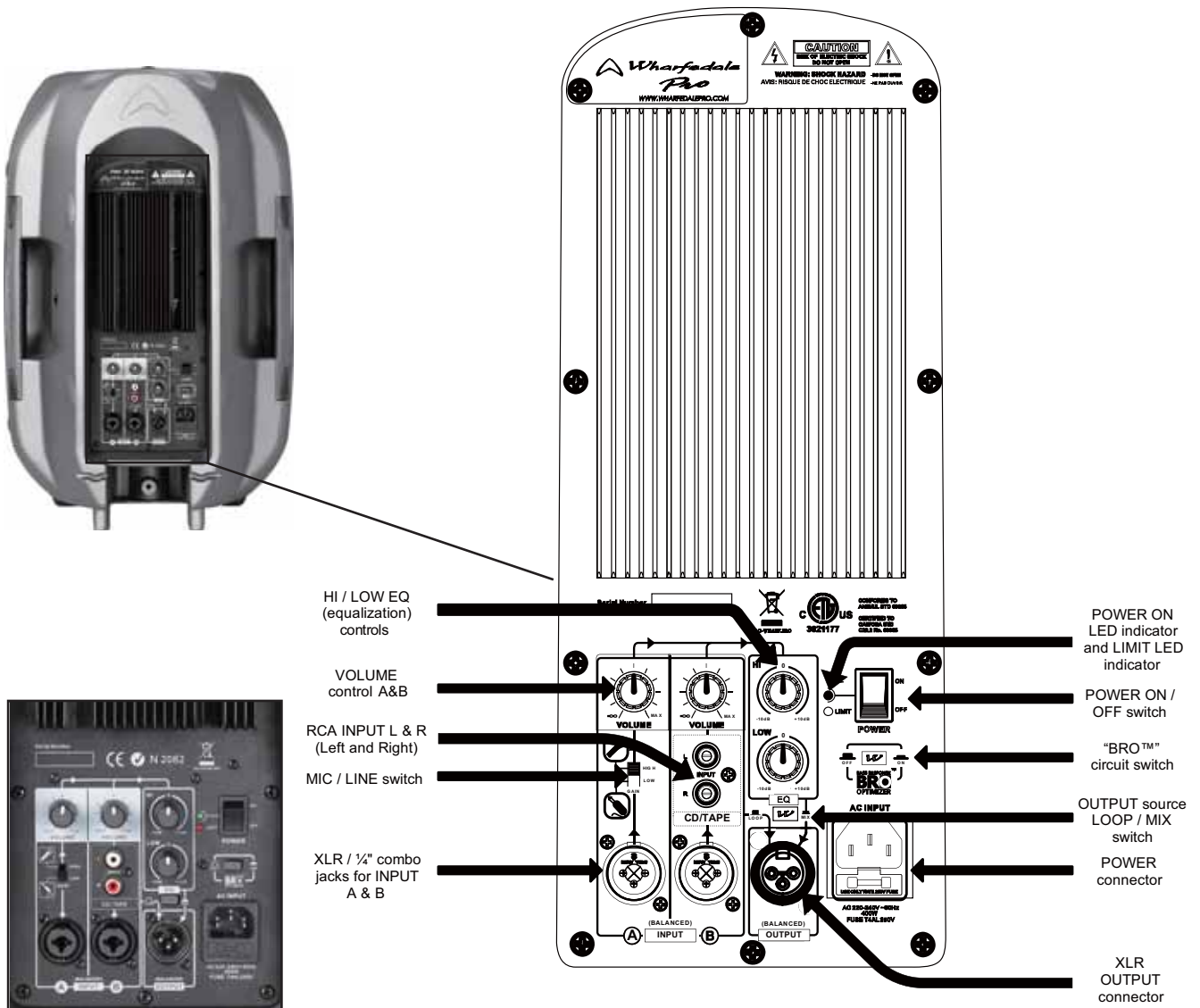
- 2-way, active bi-amplified speaker system
- Custom 8", 12" & 15" Low Frequency driver and Titanium High Frequency compression driver provide exceptional clarity, high power handling capability and maximum efficiency
- State-of-the-art, high efficiency switch mode power supply with a class D low frequency power amplifier and a class A/B or class D high frequency amplifier
- Active signal limiting system with LED indicator on rear panel
- Built in 2 channel mixer with microphone and line level inputs Balanced XLR line output for connections to subwoofers or daisy-chaining units together
- Switchable Bass Response Optimizer (BRO™) circuit (Titan™ 12 & 15 Active)
- Low distortion, high power handling, water resistant woofer
- Professional high frequency compression driver with titanium diaphragm
- XLR and TRS line inputs via convenient 'combo' jacks
- Two band master EQ controls
- Full Protection system: DC, overload, short circuit, thermal, On / Off mute and LF / HF Limiters

“If you’re in a band looking to tour, I would quite happily invest in a pair of these speakers and a however-many channel mixer, and be done with it. You won’t be the least bit dissatisfied.”

Titan™ 8 Active Rear Panel



Titan™ 12 & 15 Active Rear Panel



Titan™ Active Descriptions

Amplifier

The Titan™ Active features a state-of-the-art Class D low frequency amplifier design. Class D amplifiers are known for their extended efficiency, low heat dissipation and lightweight compared to other amplifier classifications. Class D technology allows for unparalleled audio quality in a lightweight, powered speaker system. A high quality, low distortion and highly efficient Class A/B amplifier provide high frequency power.

Mixer and Controls

The Titan™ Active provides basic mixing functions with a variety of input options. Two inputs with separate level controls and a common equalization section allow for overall balance and tonal characteristic control. Easy interfacing to external mixers and processors provide for easy expansion to larger, more sophisticated systems.

Bass Response Optimizer

Designed for flexibility and ease of use, the Titan™ 12 Active and Titan™ 15 Active feature unique BASS RESPONSE OPTIMIZER or "BRO™" circuit that work like the "loudness" controls on vintage stereo systems. With the "BRO™" circuit engaged, low frequency response increases as the overall volume is decreased providing for outstanding low frequency response at lower volume levels.

Titan™ Passive Series

Compact and lightweight, **Titan™ 8**, **Titan™ 12** and **Titan™ 15** provide high output, punchy low end and extended high frequency response that is equally at home with music and speech. Compact, lightweight and affordable, the **Titan™** Passive Series still packs professional drivers that deliver unmatched performance.

“With great clarity at the top end, they allowed me to reinforce speech at a conference in a low-level, natural way, whilst maintaining intelligibility. But they are certainly capable of much more...”

June 2008, Performing Musician

Features

- 2-way, passive speaker system
- Custom Heavy duty moisture-proof 8, 12" or 15" LF driver
- Proprietary 90 x 60 Elliptical Wave Guide Horn design
- High-end Titanium HF Compression Driver
- Tough Polypropylene molded cabinet with rubber padded handles
- Multiple M6, M8 & M10 rigging points and integral tripod stand adapter
- Rugged protective grille and top-stacking receptacles
- Trapezoid shape for arrays as well as stage monitor applications
- Bulb - High-Frequency Driver Overload protection (**Titan™ 8**)
- DTF™ - High-Frequency Driver Overload protection (**Titan™ 12 & 15**)
- Sophisticated Linkwitz-Riley 24dB/octave crossover design
- High-Frequency EQ switch (boost/flat) for long-throw applications
- Both 1/4" and NL4 connectors provided
- Available in grey, white & black



Both **Titan™** Passive and Active series are available in the full choice colors: grey, white and black.

Titan™ Sub-A12 and Sub-A15 Subwoofers

Titan™ Sub-A12

The **Titan™** Sub-A12 is powerful 12 inches reflex subwoofer designed to provide bass extension for **Titan™** 8A for an incredibly portable sound reinforcement setup. A built-in 250 watt (continuous), 500 watt (peak) amplifier conveniently accepts stereo or mono line level inputs via dual, balanced, XLR-¼" "combo" connectors.



Features

- 12" active reflex subwoofer
- Low-frequency power amplifier (class d) 250w rms, 500w peak
- Preset integral peak limiter prevents signal distortion and amplifier clipping
- Integral phase switch with 0° and 180° selections
- Adjustable crossover frequency: 80hz/100hz/120hz/150hz/180hz/200hz
- High pass frequency selection:150hz
- Thermal, dc fault and short circuit protection
- Xlr / ¼ " combo jack inputs plus dual summed rca jacks on channel 2
- Balanced line level output
- Preset limiter prevents signal clipping
- Integral pole mount adapter

Titan™ Sub-A15

The **Titan™** Sub-A15 is powerful 15 inches band pass active subwoofer. A built-in 400 watt (continuous) 600 watt (peak) amplifier conveniently accepts stereo or mono line level inputs via dual, balanced, XLR-¼" "combo" connectors as well as a unique single channel 4Ω speaker level input via a ¼" phone jack which allows for use with a standard sound reinforcement amplifier (when the internal amplifier is not used).

A custom designed, down-firing, aluminium cast frame 15" woofer, with a 3" voice coil, is utilized as the heart of the **Titan™** Sub-A15's complementary low frequency enhancement system.



Features

- 15" band pass active subwoofer
- Built-in 600 watt (peak), 400 watt (continuous) amplifier
- 0°, 180° PHASE switch
- High pass frequency selection: 100Hz
- Crossover frequency: 150Hz
- Thermal, DC fault and short circuit protection
- Power on and system AGC protect LED indicators
- Integral preset limiter prevents clipping and distortion
- Summed, stereo line level inputs combine the left and right signals to a single, mono signal, which is routed to the **Titan™** Sub-A15's internal amplifier
- A pair of an integral crossovers send a high-pass, balanced, line-level, stereo signal to a pair of powered satellite full-range speakers or an external amplifier for passive satellite speakers
- A speaker-level, 1/4" TS phone jack input is provided

Pole Mount Socket and Bracket Attachment

A top stacking feature is provided for multi-loudspeaker applications and the **Titan™** Series can be used on its side as a stage monitor. The speaker stand receptacle features a locking screw to ensure stability and rubber-padded carry handles make the job of transporting the enclosure easier than ever.



Designed to work as a floor monitor too



Trapezoid shape for arrays as well as stage monitor applications



Ultra-light weight for maximum portability

Mounting Socket and Bracket Attachment

The bottom of the **Titan™** Series provides a convenient built in pole mount socket that is used for easy mounting on a standard 35mm diameter speaker stand pole. Cord wrap and cable anchor features are also moulded into the enclosure. M6, M8 or M10 threaded rigging points are provided for a variety of safe flying configurations with four of these inserts available, bottom-mounted, in an OmniMount® 30.0 bracket footprint (**Titan™** 8) or in an OmniMount® 60.0 bracket footprint (**Titan™** 12 & 15).



Rigging inserts for several hand-mount options



Optional wall-mount bracket for installation



Integral stand mount for optional stands

Optional Accessories

Titan™ TOUR BAG – Ballistic nylon zippered carry bag protects your **Titan™** and features a storage pocket for cables.



Optional travel bag

Titan™ Active Series Specification

Model Name	Titan™ 8 Active	Titan™ 12 Active	Titan™ 15 Active
System Type	Active 8" 2-way Bi-Amplified	Active 12" 2-way Bi-Amplified	Active 15" 2-way Bi-Amplified
Frequency Response (+/-3dB)	70Hz-20kHz	55-20kHz	50-20kHz
Low Frequency Transducer			
Size (mm / inches)	205mm / 8"	305mm / 12"	381mm / 15"
Impedance	4 Ω	4 Ω	4 Ω
High Frequency Transducer			
Type	Titanium Compression Driver	Titanium Compression Driver	Titanium Compression Driver
Exit Size (mm / inches)	30mm / 1.2"	25mm / 1"	25mm / 1"
High Frequency Coverage (H x V)	90° x 60°	90° x 60°	90° x 60°
Amplifiers			
Low-Frequency (Class D)	Rated 150W RMS, 300W Peak	Rated 250W RMS, 500W Peak	Rated 350W RMS, 700W Peak
High-Frequency (Class A/B)	Rated 30W RMS, 60W Peak	Rated 50W RMS, 100W Peak	Rated 70W RMS, 140W Peak
Electronic Crossover:	24dB/octave Linkwitz-Riley	24dB/octave Linkwitz-Riley	24dB/octave Linkwitz-Riley
Crossover Frequency	2.4kHz	2.3kHz	1.8kHz
Controls			
Equalization:	-	High (±10dB) 10kHz Shelving Low (±10dB) 100Hz Shelving	High (±10dB) 10kHz Shelving Low (±10dB) 100Hz Shelving
Bass Response Optimizer ("BRO™") circuit	-	+5dB at 60Hz	+5dB at 60Hz
Subsonic Filter	30Hz, Second-order filter	30Hz, Second-order filter	30Hz, Second-order filter
Amplifier Protection			
Power On Protection	Power switch on / off mute	Power switch on / off mute	Power switch on / off mute
Thermal Protection	Amplifier shutdown, auto reset	Amplifier shutdown, auto reset	Amplifier shutdown, auto reset
Low Line Voltage Shut Down	60% Nominal line voltage	60% Nominal line voltage	60% Nominal line voltage
Driver Protection	Independent LF and HF limiters	Independent LF and HF limiters	Independent LF and HF limiters
DC Protection	Yes	Yes	Yes
Short Protection	Yes	Yes	Yes
Clip Limiter:	Turns on approx 150W output	Turns on approx 250W output	Turns on approx 350W output
Limiter Indicator	Red LED	Red LED	Red LED
Power Indicator	Blue LED	Blue LED	Blue LED
Inputs			
Input A – type	Switchable balanced mic or line level input	Switchable balanced mic or line level input	Switchable balanced mic or line level input
Input Sensitivity	Mic: -36dBu (-38.2dBv or 12.28mVrms) Line: +4dBu (1.78dBv or 1.228Vrms)	Mic: -36dBu (-38.2dBv or 12.28mVrms) Line: +4dBu (1.78dBv or 1.228Vrms)	Mic: -36dBu (-38.2dBv or 12.28mVrms) Line: +4dBu (1.78dBv or 1.228Vrms)
Maximum Input Level	+22dBu	+22dBu	+22dBu
Input Connector	XLR - 1/ 4" Combo jack	XLR - 1/ 4" Combo jack	XLR - 1/ 4" Combo jack
Input Impedance	Balanced: 20k ohms	Balanced: 20k ohms Unbalanced: 10k ohms	Balanced: 20k ohms Unbalanced: 10k ohms
Maximum Input Level	+22dBu	+22dBu	+22dBu
Input B – type	-	Line level input	Line level input
Input Sensitivity	-	XLR - 1/4" Combo jack: 1.78dBv or 1.228Vrms RCA: 0dBu (-2.2dBv or 0.775Vrms)	XLR - 1/4" Combo jack: 1.78dBv or 1.228Vrms RCA: 0dBu (-2.2dBv or 0.775Vrms)
Maximum Input Level	+22dBu	+22dBu	+22dBu
Input Connectors	Combo jack: 1/4" - XLR	Combo jack: 1/4" - XLR / Summed dual RCA jacks	Combo jack: 1/4" - XLR / Summed dual RCA jacks
Line Output			
Line Output Connector	-	Switchable LOOP / MIX Balanced Male XLR	Switchable LOOP / MIX Balanced Male XLR
Impedance Balanced:	-	Balanced: 1k ohm – Unbalanced: 500 ohm	Balanced: 1k ohm – Unbalanced: 500 ohm
Sensitivity	-	+4dBu (1.78dBv or 1.228Vrms)	+4dBu (1.78dBv or 1.228Vrms)
AC Power details			
Power Supply	High Efficiency Switching Mode Power Supply	High Efficiency Switching Mode Power Supply	High Efficiency Switching Mode Power Supply
AC Power Options	AC100~120V / 220~240V, 50 / 60Hz	AC100~120V / 220~240V, 50 / 60Hz	AC100~120V / 220~240V, 50 / 60Hz
Power On Indicator	LED	LED	LED
Rigging / Bracket / Mounting Options	8 M6 threaded inserts including 4 M6 threaded inserts on bottom in OmniMount 30.0-type footprint Pole-mount receptacle with lock screw 1 carry handles (on each side) Optional wall-mount bracket	10 M8 threaded inserts including 4 M8 threaded inserts on bottom in OmniMount 60.0-type footprint Pole-mount receptacle with lock screw 2 carry handles (one on each side) Optional wall-mount bracket	10 M8 threaded inserts including 4 M8 threaded inserts on bottom in OmniMount 60.0-type footprint Pole-mount receptacle with lock screw 2 carry handles (one on each side) Optional wall-mount bracket
Enclosure Material	Injection Moulded Polypropylene	Injection Moulded Polypropylene	Injection Moulded Polypropylene
Colour	Grey or White or Black	Grey or White or Black	Grey or White or Black
Dimensions (HxWxD) mm	396mm x 266mm x 221mm	556mm x 384mm x 312mm	708.3mm x 477.8mm x 401.77mm
Dimensions (HxWxD) inches	15.59" x 10.47" x 8.7"	21.88" x 15.11" x 12.28"	27.9" x 18.8" x 15.8"
Net Weight (kg / lbs)	5.7kg / 12.54lbs	12.8kg / 28.16lbs	23.94kg / 52.67lbs
Gross Weight (kg / lbs)	7.70kg /16.94lbs	14.8kg / 32.56lbs	26.94kg / 59.27lbs

Titan™ Passive Series Specification

Model Name	Titan™ 8 Passive	Titan™ 12 Passive	Titan™ 15 Passive
LoudspeakerType:	8" 2-way	12" 2-way	15" 2-way
Frequency Response (+/- 3dB):	70Hz -20kHz	55Hz -20kHz	50Hz -20kHz
Sensitivity (1W@1M):	96dB	98dB	97dB
Peak SPL:	124dB	128dB	129dB
HF Coverage (H x V):	90°x 60°	90°x 60°	90°x 60°
System Impedance:	8 ohm	8 ohm	8 ohm
POWER (WATTS)			
Continuous:	150W	250W	400W
Music:	300W	500W	800W
Peak:	600W	1000W	1600W
LF DRIVER			
Size:	203mm/ 8"	305mm/ 12"	381mm/ 15"
Coil Size:	38.86mm / 1.53"	64.26mm / 2.5"	38.86mm / 3.0"
HF DRIVER/ HORN	Compression Driver	Compression Driver	Compression Driver
Coil Size:	30mm/1.2"	44mm/1.75"	51mm/2.0"
Exit Size:	25mm/1"	25mm/1"	25mm/1"
Diaphragm Material:	Cloth	Titanium	Titanium
HF Driver Protection:	Bulb	DTF™ Dynamic Thermal Filament	DTF™ Dynamic Thermal Filament
Long-Throw EQ Compensation:	N/A	3dB boost (long-throw) / Flat (near-field)	3dB boost (long-throw) / Flat (near-field)
Horn Type:	EWG™ -Elliptical Waveguide	EWG™ -Elliptical Waveguide	EWG™ -Elliptical Waveguide
Throat Size:	25mm/1"	25mm/1"	25mm/1"
CROSSOVER			
Type/Frequency/Filter:	2-way 2.4KHz / Linkwitz-Riley	2-way 2.2KHz / Linkwitz-Riley	2-way 1.8KHz / Linkwitz-Riley
ENCLOSURE			
Shape/ Material:	Trapezoidal/ Polypropylene	Trapezoidal/ Polypropylene	Trapezoidal/ Polypropylene
Rigging:	+ (8) M6 threaded rigging points + (4) M6 threaded rigging points on bottom in Omnimount® 30.0-type footprint + Speaker pole-mount receptacle with lock screw + 1 built-in carry handle + Optional wall-mount bracket + Optional dual-unit array speaker stand hardware	+ (10) M8 threaded rigging points + (4) M8 threaded rigging points on bottom in Omnimount® 60.0-type footprint + Speaker pole-mount receptacle with lock screw + Optional wall-mount bracket + Optional dual-unit array speaker stand hardware	+ (10) M8 threaded rigging points + (4) M8 threaded rigging points on bottom in Omnimount® 60.0-type footprint + Speaker pole-mount receptacle with lock screw + Optional wall-mount bracket + Optional dual-unit array speaker stand hardware
OUTPUT CONNECTORS	2 x 1/4" jacks + 2 x NL4	2 x 1/4" jacks + 2 x NL4	2 x 1/4" jacks + 2 x NL4
DIMENSIONS/WEIGHTS			
Weight:	5.5kg / 12.1lbs	12kg / 26.4lbs	22kg / 48.4lbs
Dimensions (H x W x D):	396mm x 266mm x 221mm 15.59" x 10.47" x 8.7"	556mm x 384mm x 312mm 21.88" x 15.1" x 12.3"	708.3mm x 477.8mm x 401.77mm 27.9" x 18.8" x 15.8"

Titan™ Sub-A Series Specification

Model Name	Titan™ Sub-A12	Titan™ Sub-A15
System Type	Reflex subwoofer	Band-pass subwoofer
Frequency Response (+/-3dB)	55-200Hz	45-150Hz
Enclosure Material	15mm MDF	18mm Plywood
Enclosure Colour	Grey	Grey
Frame material	steel frame	Die-cast aluminium frame
Size (mm / inches)	305mm / 12"	404mm / 15"
Coil Size (mm / inches)	64.26mm / 2.5"	75 / 3"
Impedance	4 ohm	4 ohm
Speaker Pole Adapter	Yes	Yes
Inputs A & B - Type / Connection	Balanced Line Level inputs via two combo connectors	Balanced Line Level inputs via two combo connectors
Output A & B Type / Connection	Balanced Line Level inputs via two combo connectors	Balanced Line Level inputs via two combo connectors
Input Sensitivity	0.37V	0.775V
High Pass Frequency Selection	150Hz	100Hz
Phase Switch Selection	0° / 180°	0° / 180°
Crossover Frequency	80Hz/100Hz/120Hz/150Hz/180Hz/200Hz (adjustable)	150Hz
Speaker Level Input Impedance	-	1/4" TS Phone input
Speaker Level Input Connection	-	4Ω
Amplifier Power:		
Continuous	250W	400W
Peak	500W	600W
Power On Indicator	LED	LED
Power On Protection	Power switch on / off mute	Power switch on / off mute
Thermal Protection	Amplifier shutdown, auto reset	Amplifier shutdown, auto reset
Low Line Voltage Shut Down	60% Nominal line voltage	60% Nominal line voltage
Driver Protection	Independent LF limiters	Independent LF limiters
DC Protection	Yes	Yes
Short Protection	Yes	Yes
Clip Limiter:	Turns on approx 250W output	Turns on approx 400W output
Limiter Indicator	Red LED	Red LED
Power Indicator	Blue LED	Blue LED
Dimensions (HxWxD)		
mm	360.0mm x 493.0mm x 431.0mm	630.0mm x 478.0mm x 640.0mm
inches	14.2" x 19.4" x 16.9"	24.8" x 18.8" x 25.2"
Weight (Net) kg / lbs	22.31kg /49.0lbs	45.48kg / 100.0lbs
Weight (Gross) kg / lbs	26.26kg / 57.8lbs	50.26kg / 110.5lbs