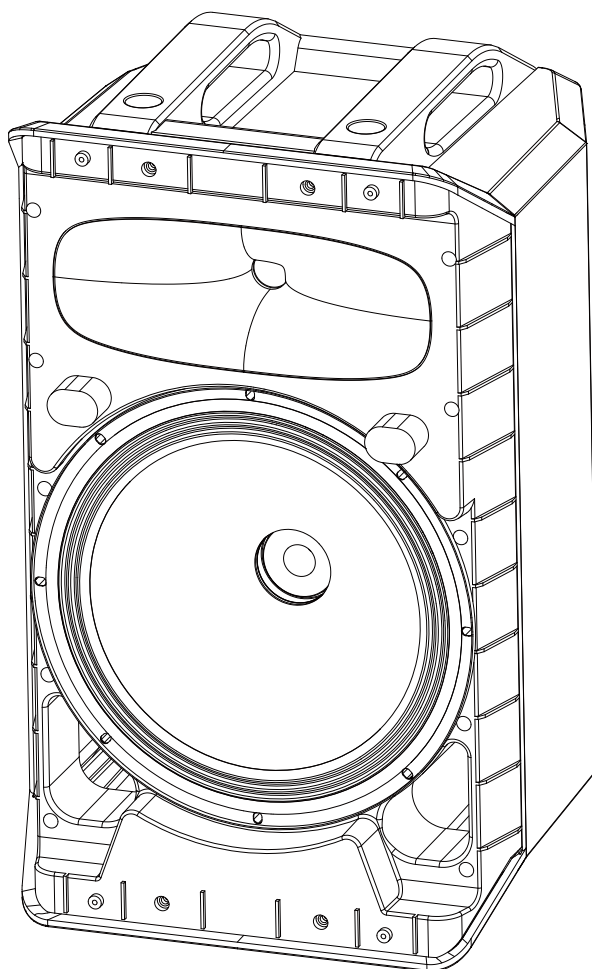




# TYPHON-AX12 TYPHON-AX12-BT

POWERFUL | PORTABLE | VERSATILE PA



# 1. IMPORTANT SAFETY INSTRUCTIONS



**CAUTION:** To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside; refer servicing to qualified personnel.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure-voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

## 2. DETAILED SAFETY INSTRUCTIONS:

- (1) Read these instructions.
- (2) Keep these instructions.
- (3) Heed all warnings.
- (4) Follow all instructions.
- (5) Do not use this device near water.
- (6) Clean only with a dry cloth.
- (7) Do not block any ventilation openings. Install in accordance with the manufacturer s instructions.
- (8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- (9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

## 2. **TYPHON - Pronounced - “TYF—ON”**

*In ancient mythology, Typhon was a giant who brought fear to his enemies. From a similar era to the Titans, it is said that the God Typhon had the power to create and control massive wind tornadoes in his battles. Mythology also often refers to him as being invincible.*

Power, control and “invincibility” are all features which Typhon active loudspeakers have been designed around.

Two models are available. Typhon-AX12 - a 12” 2-way 720w Continuous active loudspeaker and an aptX Bluetooth enabled brother - the Typhon-AX12-BT.

A polypropylene cabinet design with a full frontal steel grille houses the most advanced active loudspeaker ever created by Wharfedale Pro. This injection moulded cabinet is carefully engineered to feature 5 carry handles making transportation easy and well balanced.

Advanced internal DSP algorithms generate a sound stage which surpasses the dimensions of the cabinet. The two separate Class D power amps (600w RMS for the LF and 120w RMS for the HF) deliver huge output power while keeping the overall weight to minimum. The efficiency of the amplifier stage means that Typhon uses convection cooling - resulting in a more reliable product with quieter operation.

Custom Wharfedale Pro transducers have been selected for Typhon. The custom compression driver features a 1.75” voice coil. This is coupled to a 100° x 80° waveguide for smooth HF dispersion. The custom Wharfedale Pro 12” LF transducer has a newly designed ferrite core, uses flat coil windings to aid cooling, and features a moisture rejecting cone material which allows Typhon to be used in damp or humid conditions.

The Typhon-AX12-BT features aptX Bluetooth input connectivity and stereo linking which makes setup with mobile devices simple and cable free.

### **Features**

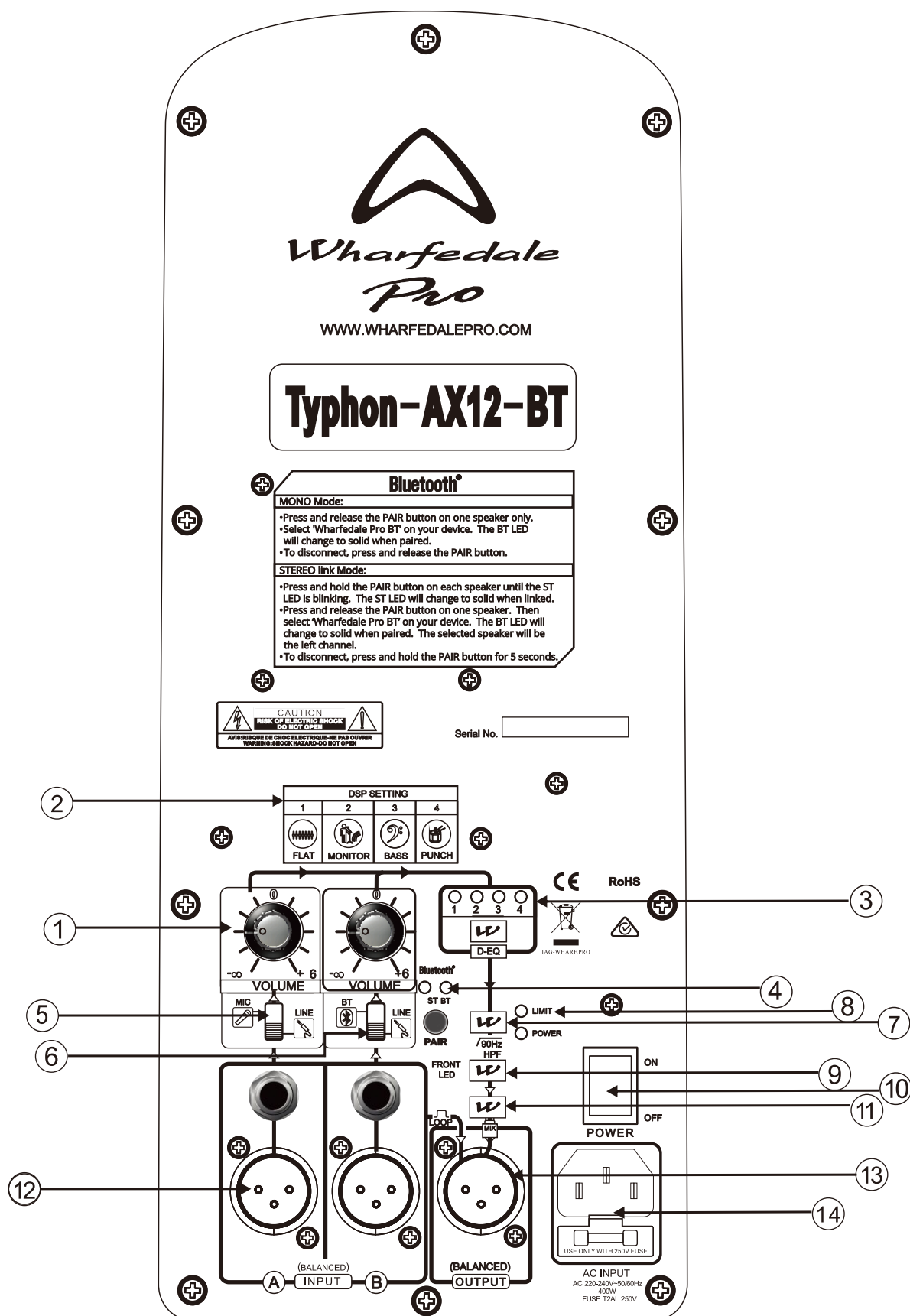
- 720w continuous (1440w peak)
- Full frontal steel grilles with inner cloth protection
- Top and bottom practical handles
- Bluetooth model available - Typhon-AX12-BT
- Bi-amplified with Class D amps
- 4 position DSP
- 9 x M8 rigging points
- 2.5” LF transducer voice coil with flat windings
- 1.75” HF compression driver voice coil
- 100° x 80° dispersion Hybrid Symmetry waveguide

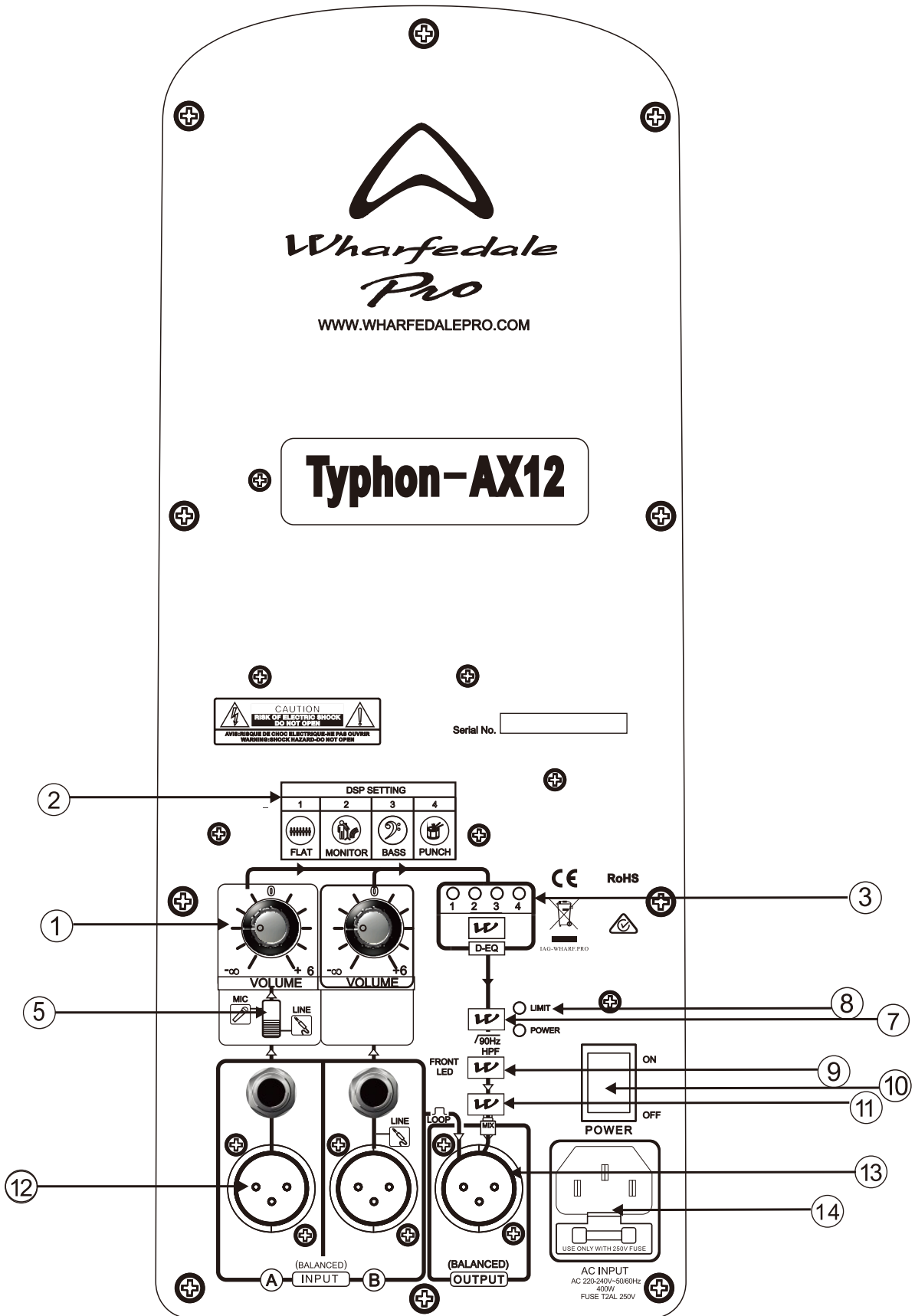
### **3. IMPORTANT WARNINGS & SAFETY INSTRUCTIONS**

1. READ ALL INSTRUCTIONS – carefully and become familiar with the features and functions of these products before operating them.
2. RETAIN THESE INSTRUCTIONS – for future reference.
3. COMPLY WITH ALL WARNINGS – All warnings and instructions for this product should be adhered to.
4. USE WITH AMPLIFIERS – In order to avoid damage to drivers and other equipment, it is advisable to establish and follow a routine for powering up and powering down a sound system. With all system components connected, turn on source equipment (mixers, signal processors, record and playback units, etc.) BEFORE powering up amplifiers. Transient voltages from powering up source equipment can damage speakers if amplifiers are already turned on. Make sure that amplifier volumes are set to their minimum settings and power up any system amplifiers LAST. It is recommended that all system components be allowed to stabilize for several seconds before any source signals are introduced or level setting adjustments are made. Similarly, when shutting systems down, turn all amplifiers off first, before powering down any other system components.
5. CABLES – Do not use shielded or microphone cables for connection between amplifiers and speakers. Use only approved speaker cables with proper connectors.
6. CAUTION – These professional loudspeaker systems are capable of generating very high sound pressure levels. Use care with placement and operation to avoid exposure to excessive volume levels. Permanent hearing damage can result when operated to extreme levels.
7. SERVICE – There are no user serviceable parts inside this product. Users should not attempt to service this product. Warranty nullification could result if this is attempted.
8. RIGGING - SUSPENDING - MOUNTING - Rigging suspending or mounting of speaker systems can expose members of the public to serious health risks and even death.

***UNDER NO CIRCUMSTANCES ATTEMPT TO RIG, SUSPEND OR OTHERWISE MOUNT THESE SPEAKERS UNLESS YOU ARE FULLY QUALIFIED AND CERTIFIED TO DO SO BY RELEVANT LOCAL, STATE AND NATIONAL AUTHORITIES. ALL RELEVANT SAFETY REGULATIONS MUST BE FOLLOWED. IF YOU ARE NOT PROPERLY QUALIFIED OR DO NOT KNOW OF PERTINENT REGULATIONS, CONSULT QUALIFIED PERSONNEL FOR ADVICE.***

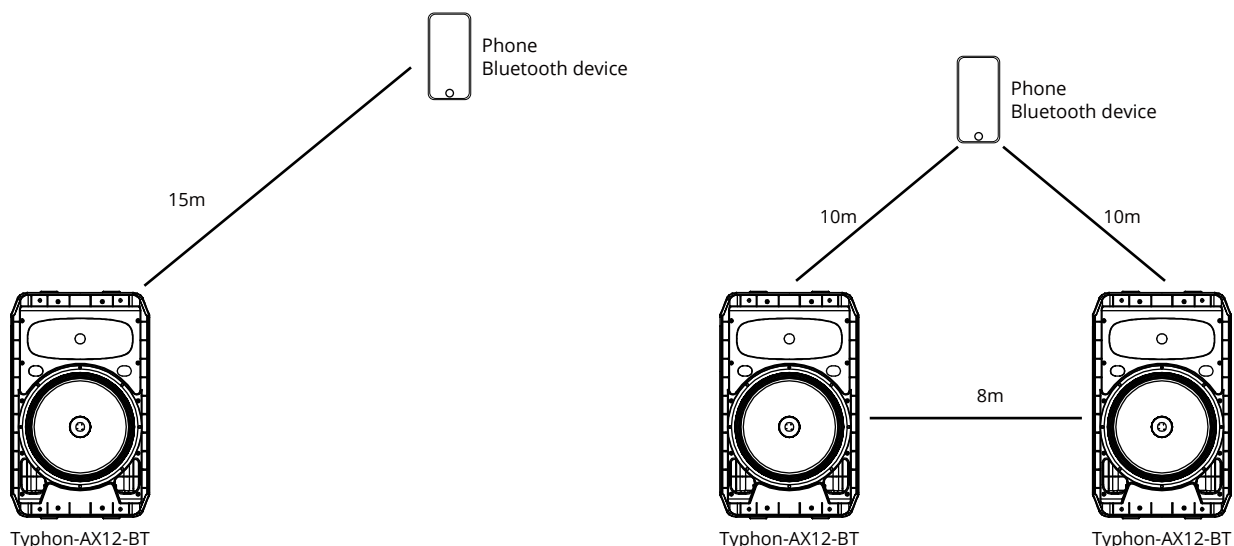
## 4. Typhon-AX12 / Typhon-AX12-BT REAR PANEL FEATURES





1. **VOLUME controls for INPUT A and INPUT B:**  
These knobs control the level of each input channel.
2. **DSP setting : (4 modes)**
  - 1) FLAT
  - 2) MONITOR
  - 3) BASS
  - 4) PUNCH
3. **DSP Selection**  
With each tap of the D-EQ button, the DSP will step through each of the 4 above DSP modes. The LED will show which DSP mode is currently active.
4. **Bluetooth operation (Typhon-AX12-BT only) :**
  - a. MONO Mode:  
Press and release the PAIR button on one speaker only.  
Select "Wharfedale Pro BT" on your device. The BT LED will change to solid when paired.  
To disconnect, press and release the PAIR button.
  - b. STEREO Link Mode: - For use with 2 units of Typhon-AX12-BT  
Press and hold the PAIR button on each speaker until the ST LED is blinking. The ST LED will change to solid when Linked.  
Press and release the PAIR button on one speaker. Then select "Wharfedale PRO BT" on your device. The BT LED will change to solid when paired. The selected speaker will be the left channel.  
To disconnect, press and hold the PAIR button for 5 Seconds.

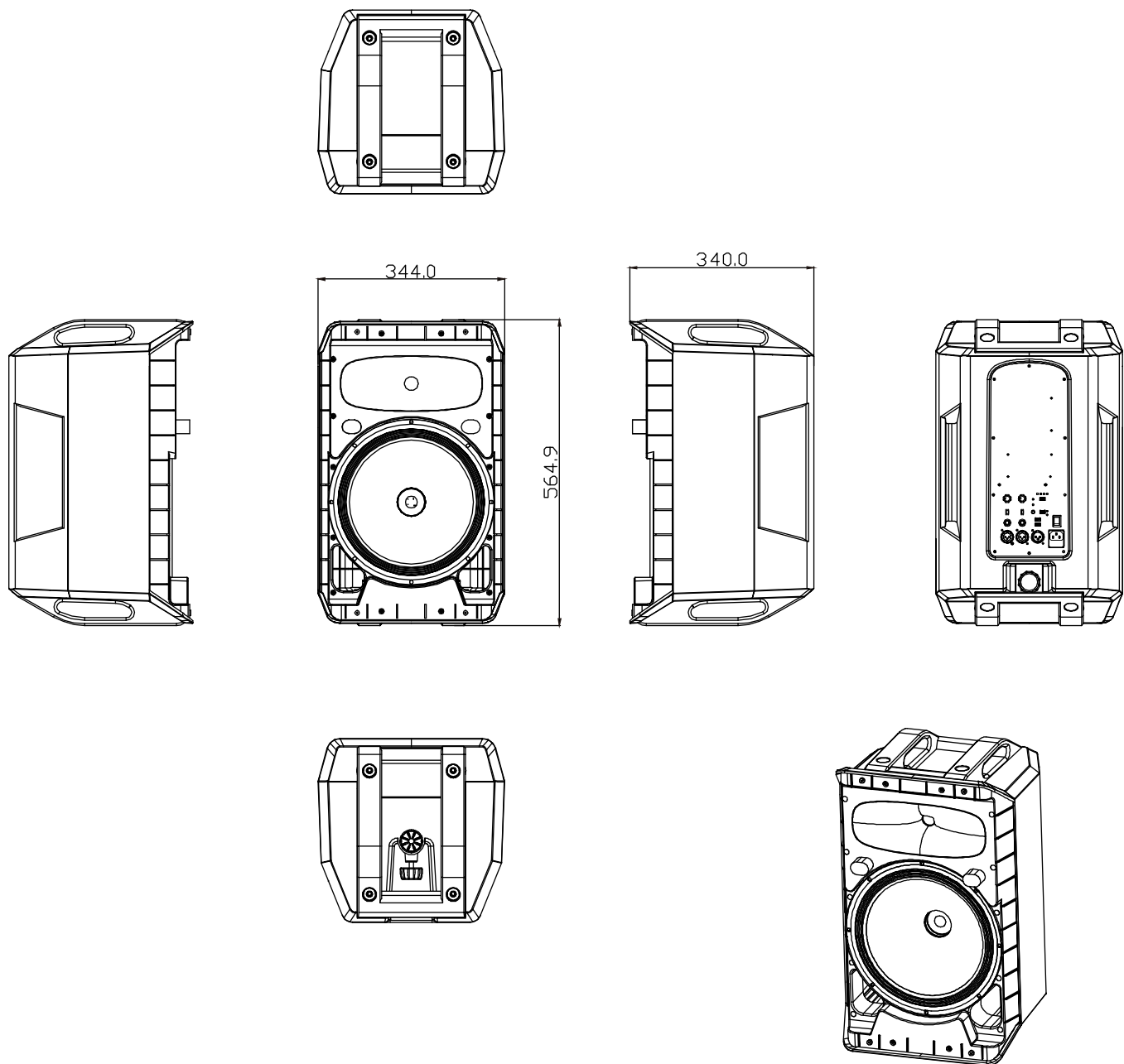
Transmission distance note : A single speaker working range is about 15 meters (Bluetooth device (eg Phone) to single speaker). When using Typhon-AX12-BT in stereo link mode the working range is about 10m (Bluetooth device (eg Phone) to speaker). In this mode the linked speakers can be up to 8m apart.



5. **GAIN selection switch A:** This switch selects the proper gain structure for INPUT A. If a microphone is connected to INPUT A, use mic mode (up). If the signal source is anything other than a microphone (eg an analogue playback device, keyboard or mixer output) use the line selection (down).
6. **GAIN selection switch B:** This switch selects the proper gain structure for INPUT B. If a Bluetooth device is connected to INPUT B, use BT mode (up). If the signal source is anything other than a Bluetooth device (eg analogue playback device, keyboard or mixer output) use the line selection (down).
7. **90Hz Hi Pass Filter switch:**  
Used to reduce bass buildup due to half space loading. This is especially useful when using the Typhon on the floor as a floor monitor.
8. **Power “ON” indicator LED and LIMIT indicator LED:** The bracketed LED to the left of the POWER switch illuminates when the power switch is in the ‘ON’ position. The LIMIT LED illuminates when the signal limiter is limiting the level of the signal. This process prevents distortion and overload.
9. **Horn LED defeat switch:** Switches off the front horn power LED for discrete applications.
10. **POWER ON / OFF switch:** This switch turns the power on and off.
11. **Output source “LOOP / MIX” switch:** In the “LOOP” mode, this switch routes the signal of INPUT B to the line level XLR OUTPUT jack, bypassing the EQ section and volume control. When in the MIX mode, this switch routes the combined (or “mixed”) signals of both INPUT A and INPUT B to the line level XLR OUTPUT jack.
12. **XLR and ¼” input jacks for INPUT A and INPUT B.:** These connectors allow XLR or ¼” balanced input connections to INPUT A and INPUT B
13. **XLR line level OUTPUT:** This connector provides a balanced line level output for connection to additional active loudspeakers (such as another Typhon-AX12), powered subwoofers or external amplifiers.
14. **POWER cord input:** Typhon uses a standard IEC, three prong, grounded AC electrical connection. Be sure that you are plugging into the correct source voltage that matches what is indicated just below the power cord jack.



5. TECHNICAL DRAWINGS



## 6. SPECIFICATIONS

Model Name	Typhon-AX12	Typhon-AX12-BT
System Type	Active 12" 2-way	Active 12" 2-way
Frequency Response (+/-3dB)	55Hz-20kHz	55Hz-20kHz
Frequency Range (- 10 dB)	50Hz-20kHz	50Hz-20kHz
Maximum SPL(peak)(@1m)	129dB	129dB
Sensitivity @ 1W / 1m)	98dB	98dB
<b>Low Frequency Transducer</b>		
Size (mm / inches)	305mm / 12"	305mm / 12"
Voice Coil Size (mm / inches)	65mm / 2.5"	65mm / 2.5"
Rated Impedance	4Ω	4Ω
<b>High Frequency Transducer</b>		
HF Driver Type	Compression Driver	Compression Driver
Coil Size (mm / inches)	44mm/1.75"	44mm/1.75"
Exit Size (mm / inches)	25mm/1"	25mm/1"
Diaphragm Material	Titanium	Titanium
Rated Impedance	8Ω	8Ω
Nominal Coverage (H x V)	Hybrid Symmetry Horn 100° x 80°	Hybrid Symmetry Horn 100° x 80°
<b>Amplifiers</b>		
Amplifier Design	Class D	Class D
Power Rating:	1440W Peak (1200W LF + 240W HF), 720W Continuous (600W LF + 120W HF)	1440W Peak (1200W LF + 240W HF), 720W Continuous (600W LF + 120W HF)
DSP Controls---D-EQ	FLAT/MONITOR/BASS/PUNCH	FLAT/MONITOR/BASS/PUNCH
<b>Amplifier Protection</b>		
Power On Protection	Yes	Yes
Thermal Protection	Yes	Yes
Low Line Voltage Shut Down	Yes	Yes
Driver Protection	Yes	Yes
DC Protection	Yes	Yes
Short Protection	Yes	Yes
Clip Limiter	Yes	Yes
Limiter Indicator	Yes	Yes
Power Indicator	Yes	Yes
<b>Inputs</b>		
Input A – type	Balanced	Balanced/Bluetooth(aptX,with link Stereo)
Input Sensitivity	775mV (0dBu)	775mV (0dBu)
Maximum Input Level	4V	4V
Input Connectors A / B	2*XLR, 2*6.3mm jack	2*XLR, 2*6.3mm jack
Input Impedance	20K ohms	20K ohms
<b>Line Output</b>		
Line Output Connector	Balanced XLR	Balanced XLR
Loop Gain	0dB	0dB
<b>AC Power details</b>		
Power Supply	220~240VAC/100~120VAC 50/60Hz	220~240VAC/100~120VAC 50/60Hz
Rigging / Bracket / Mounting Options	9 x M8 threaded inserts 35mm pole socket with lock screw Optional WPB-2 wall-mount bracket	9 x M8 threaded inserts 35mm pole socket with lock screw Optional WPB-2 wall-mount bracket
Handles	5 carry handles	5 carry handles
<b>Enclosure</b>		
Enclosure Material and finish	Injection Moulded Polypropylene	Injection Moulded Polypropylene
Colour Options	Black paint	Black paint
Grille Material & Finish	Full front steel	Full front steel
<b>Dimensions - Unpacked (mm / inches):</b>		
Height	558mm / 22.0"	558mm / 22.0"
Width Front	344mm / 13.6"	344mm / 13.6"
Width Rear	245mm / 9.6"	245mm / 9.6"
Depth	340mm / 13.4"	340mm / 13.4"
<b>Dimensions - Packed (mm / inches):</b>		
Height	645mm / 25.4"	645mm / 25.4"
Width Front	425mm / 16.7"	425mm / 16.7"
Width Rear	425mm / 16.7"	425mm / 16.7"
Depth	419mm / 16.5"	419mm / 16.5"
Net Weight (kg / lbs)	16.2kg / 35.64lbs	16.2kg / 35.64lbs
Gross Weight (kg / lbs)	19.2kg / 42.24lbs	19.2kg / 42.24lbs





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