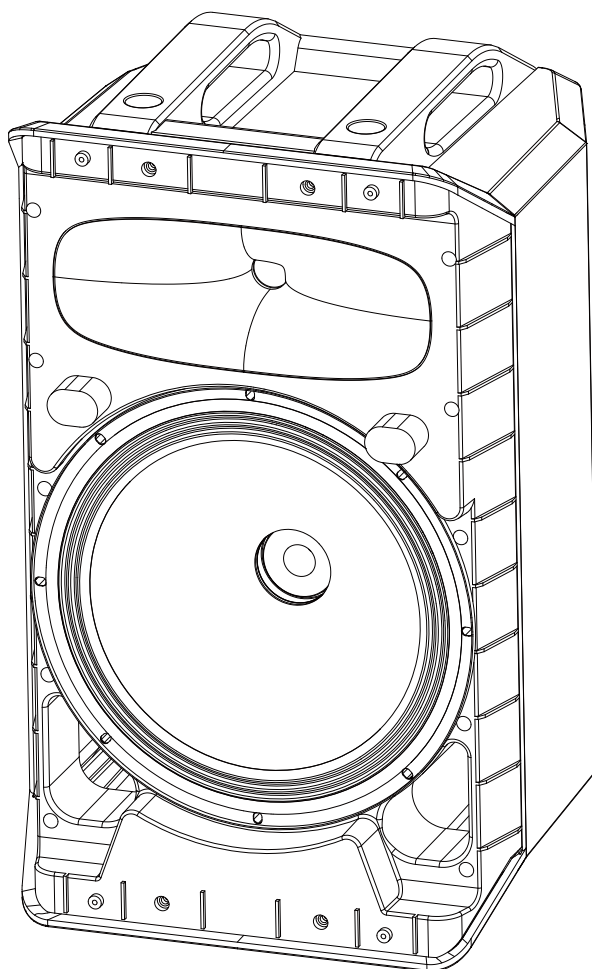




TYPHON-AX12 **TYPHON-AX12-BT**

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 these instructions – All the safety and operating instructions should be read before this product is operated.
2. Keep these instructions – The safety and operating instructions should be retained for future reference.
3. Heed all warnings – All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow all instructions – All operating and use instructions should be followed.
5. Do not use this apparatus near water – The appliance should not be used near water or moisture – for example, in a wet basement or near a swimming pool, and the like.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacture'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 plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart or rack is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



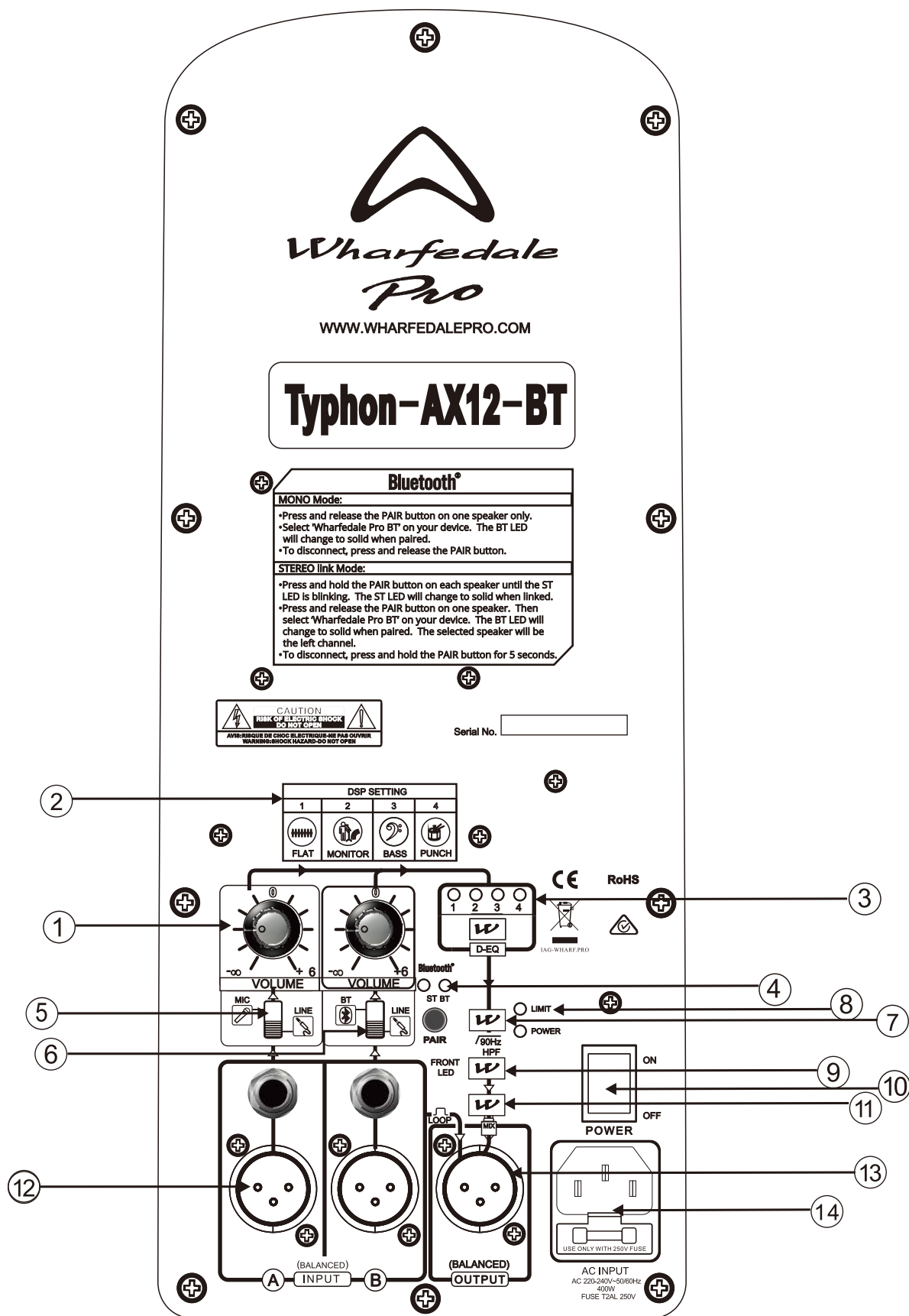
13. Unplug the apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

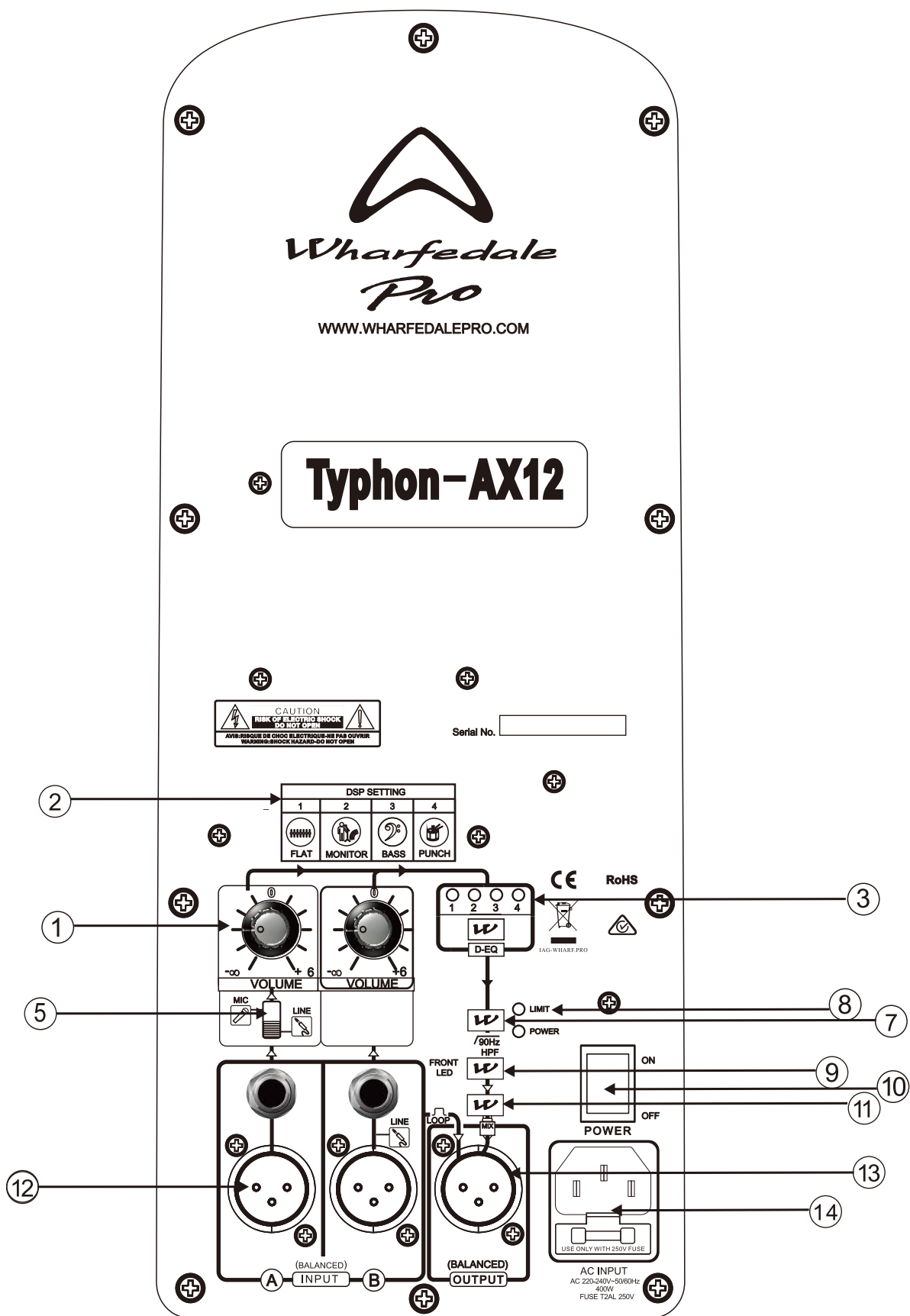
15. CAUTION: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
16. WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on apparatus.



- 17.
- This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock.
 - Warning: To reduce the risk of electric shock, do not remove cover (or back) as there are no user-serviceable parts inside. Refer servicing to qualified personnel.
 - The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.
18.  Protective earthing terminal. The apparatus should be connected to a mains socket outlet with a protective earthing connection.
19. the ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.;
20. No naked flame sources, such as lighted candles, should be placed on the apparatus.
21. Attention should be drawn to environmental aspects of battery disposal.
22. The mains plug is used as disconnect device, the disconnect device shall remain readily operable.
23. The product is designed to use in moderate climates.

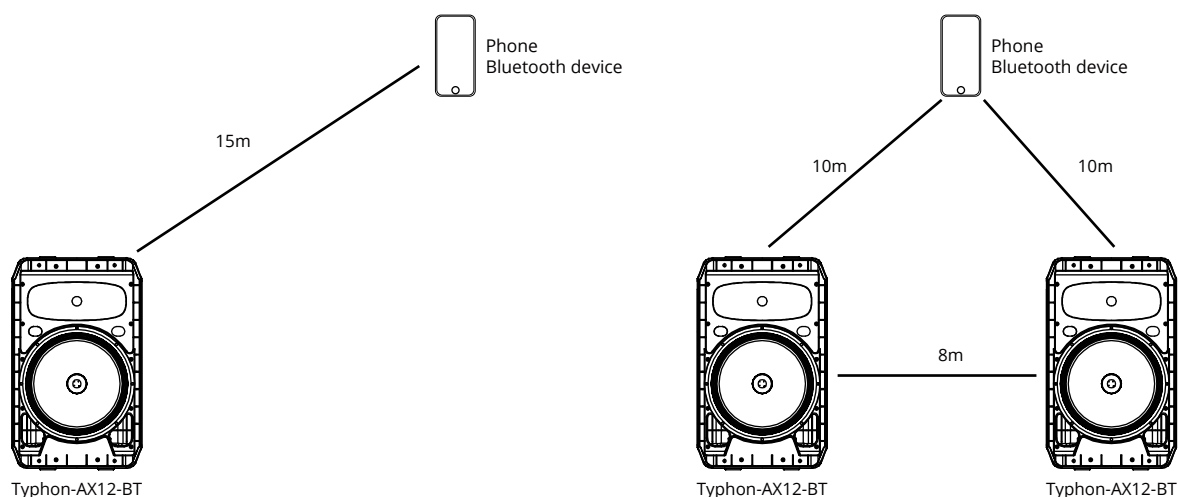
4. Typhon-AX12 / Typhon-AX12-BT REAR PANEL FEATURES





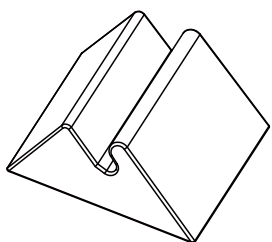
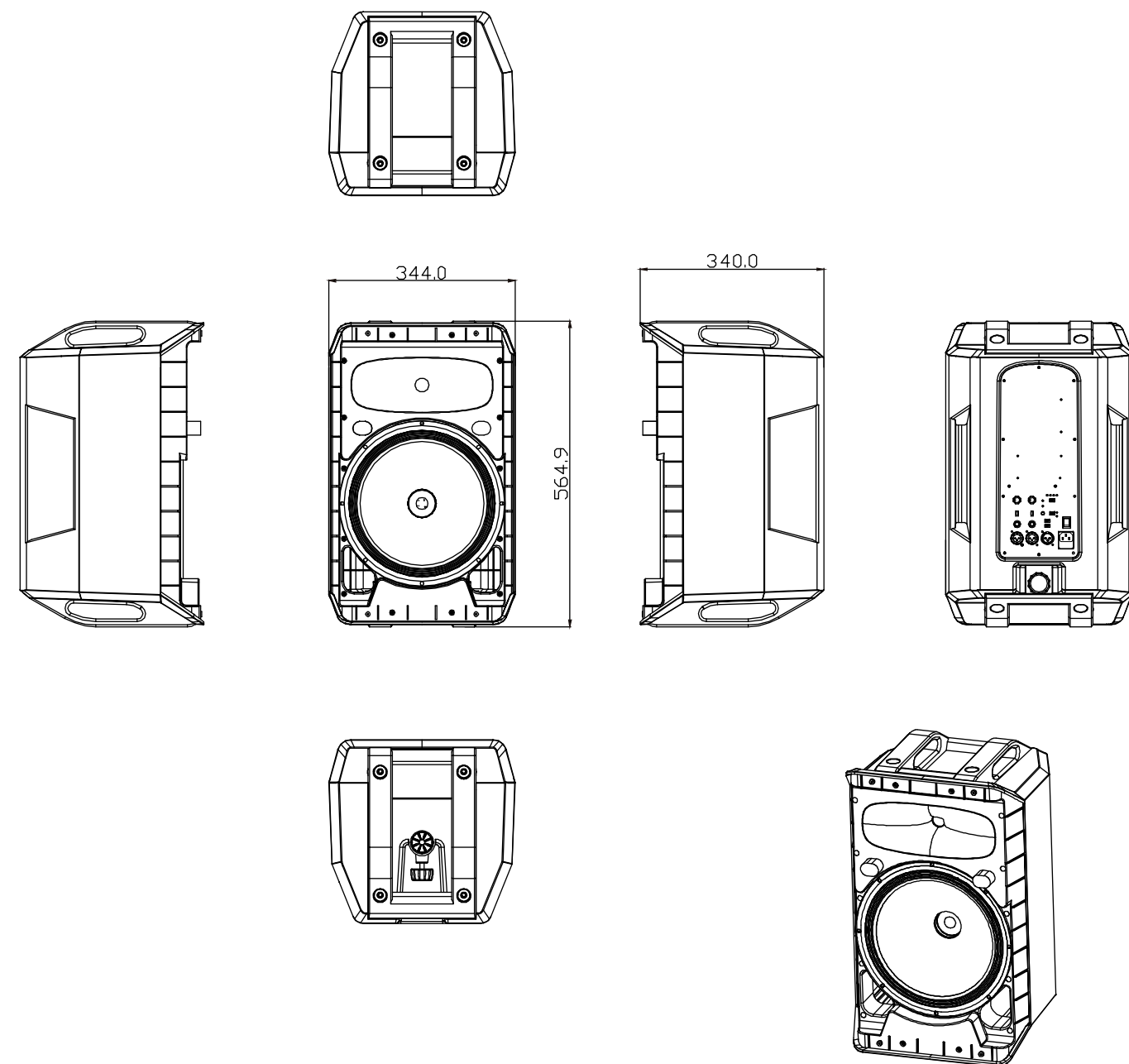
1. **VOLUME controls for INPUT A and INPUT B:**
These knobs control the level of each input channel.
2. **DSP setting : (4 modes)**
 - 1) FLAT
 - 2) MONITOR
 - 3) BASS
 - 4) PUNCH
3. **DSP Selection**
With each tap of the D-EQ button, the DSP will step through each of the 4 above DSP modes. The LED will 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



Typhon Monitor Wedge

Typhon is supplied with a monitor wedge adaptor. This supplied accessory gives you the perfect angle when using Typhon as a stage monitor.

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
Low Frequency Transducer		
Size (mm / inches)	305mm / 12"	305mm / 12"
Voice Coil Size (mm / inches)	65mm / 2.5"	65mm / 2.5"
Rated Impedance	4Ω	4Ω
High Frequency Transducer		
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°
Amplifiers		
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
Amplifier Protection		
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
Inputs		
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
Line Output		
Line Output Connector	Balanced XLR	Balanced XLR
Loop Gain	0dB	0dB
AC Power details		
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
Enclosure		
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
Dimensions - Unpacked (mm / inches):		
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"
Dimensions - Packed (mm / inches):		
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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FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Note 2: 1.Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

2. The minimum separation generally be used is at least 20 cm.