

Hybrid

LS18A **POWERED BASS BIN**



USER MANUAL

REV Z0 17-11-2022

IMPORTANT PRECAUTIONS



SYMBOL ALERTING THE OPERATOR TO FOLLOW IMPORTANT OPERATING INSTRUCTIONS AND PRECAUTIONS DETAILED IN THIS DOCUMENT.



SYMBOL WARNING THE OPERATOR THAT UNINSULATED, DANGEROUS VOLTAGES ARE PRESENT WITHIN THE ENCLOSURE THAT MAY POSE A RISK OF ELECTRIC SHOCK.

- Save the carton and packing material even if the Speaker has arrived in perfect condition. Should you ever need to ship the Speaker for servicing, use the original packaging supplied.
- Read all documentation before operating your Speaker. Retain all documentation for future reference.



Follow all instructions printed on this user manual and the back panel of the Speaker for proper and safe operation.



Do not spill water or other liquids into or on the Speaker, or operate the Speaker whilst under wet or damp conditions.



Ensure that power outlets and mains voltage conform to the power requirements printed on the back panel of the Speaker.



Do not use the Speaker if the electrical power cable is frayed or damaged. The mains cable should be routed so that it is not walked upon or pinched by objects close by. Only use the original power cable supplied with your Speaker.



Always operate the Speaker with the AC Earth wire connected on both sides (speaker and mains).



Precaution should be taken so that the Earth connection is not defeated.



Power down and disconnect your Speaker from mains power before attempting any physical connections to audio sources.



Never force the power on-off switch to the ON position if it will not stay there by itself.



Never use your Speaker near heat radiating appliances, such as stoves and heaters.



Do not operate your Speaker on a surface or in an environment that may impede the normal flow of air around the Speaker.

- If the Speaker is consistently used in an extremely dusty or smoky environment, the amplifier should periodically be blown free of foreign matter. However, this operation should only be carried out by a qualified service agent/centre



Do not remove the amplifier module of the Speaker. Removing this panel yourself will expose you to potentially dangerous voltages. There are no user-serviceable parts inside the Speaker.



Do not apply an input signal that is much greater than that which is required to achieve the maximum output level. This may damage the pre-amplification stage circuitry.



Do not connect the input or output connectors of your Speaker to any other voltage sources, such as batteries, mains power or power supply units, regardless of whether the Speaker is switched on or off.



During long periods of disuse, the power cable should be unplugged from the mains voltage outlet.

- After long periods of disuse, the mains cable should be inspected for any damage before using the Speaker again.
- Your Speaker should be serviced only by qualified service personnel. Contact your nearest official retailer should your Speaker need technical attention.
- Your Speaker should be serviced by a qualified service technician when:
 - The power supply cord or plug/s have been damaged.
 - Liquids have been spilled inside the speaker enclosure.
 - The speaker has been exposed to rain or excessive moisture.
 - The speaker does not appear to operate normally, or exhibits a reduction in performance.
 - The speaker has been dropped or the enclosure is damaged.

INTRODUCTION

- Congratulations on your purchase of the new Hybrid L6A Powered Line Array Speaker, and thank you for your confidence in the Hybrid brand. You are amongst the growing number of audio professionals who have made Hybrid one of Southern Africa’s leading brands of professional and commercial audio systems.
- For your safety, please read the important precautions before installing and operating your Speaker. The Hybrid L6A is based on the same advanced circuit topologies that have made Hybrid products the choice of professionals for the past 30 years. The Hybrid L6A has been designed for high operating efficiency and accurate sonic performance across the full audio bandwidth, even under stressful conditions. The internal components are of the finest available, and sub-assemblies are pre-tested before the final assembly. Each speaker is “burned in” and thoroughly tested using precision audio testing equipment before shipping. Finally, the Hybrid L6A incorporates extensive protective features to safeguard both the internal circuitry and transducers. This proven combination of advanced design, quality construction and comprehensive circuit protection is your guarantee for fail-safe reliability, meaning you can depend on consistent, stable performance.

UNPACKING

What’s in the box:

- * 1 X LS218A Powered Bass Bin
- * 1 X 220 Vac Powered Link Cable 2m
- * 1 X User Manual

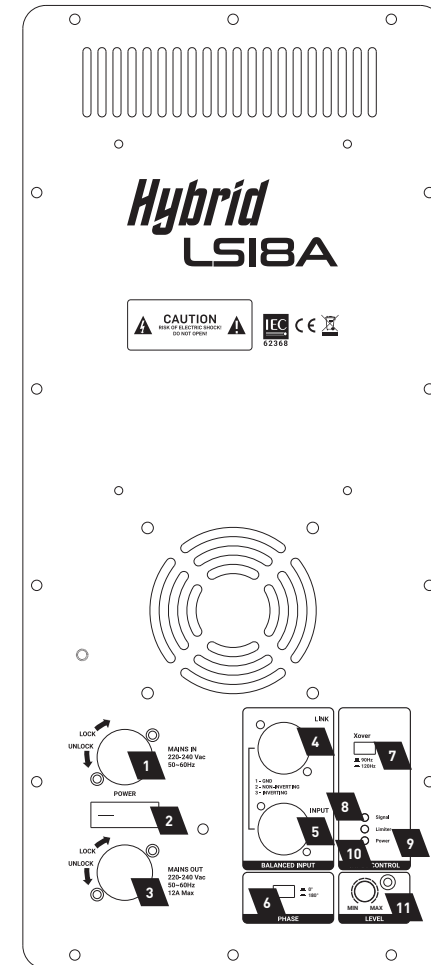
- Please inspect the Speaker carefully immediately after unpacking. If you find any visible damage, notify your supplier/retailer immediately. Be sure to save the carton and all packing materials should you need to ship the unit back to your authorised service centre.
- The Hybrid L6P offers a 12-month “No-Quibble” carry-in guarantee, and should your Speaker, in the unlikely event, be damaged upon receipt and inspection, we offer an exchange immediately, provided that all packaging and cabling are returned in their original condition.

INSTALLATION AND MOUNTING

- The Hybrid LS218A speakers must be installed on their feet on a stable flat surface. The integrated M20 top plate can be used to screw the LS218P pole into the LS218A bass bin in order to attach the L6F frame to the pole.

USER INTERFACE ELEMENTS

Rear Panel: LS18A



- | | | |
|----------------------------------|--------------------------------|---------------------------------------|
| 1: Powercon IN connector | 4: XLR OUTPUT connector | 7: Cross Over Frequency Switch |
| 2: Power ON-OFF- switch | 5: XLR OUTPUT connector | 8: Signal Indicator |
| 3: Powercon OUT connector | 6: Phase switch | 9: Limiter indicator |
| 10: Limiter LED | 11: Signal level | |

9: Limiter indicator

10: Limiter LED

11: Signal level

4: POWERCON IN CONNECTOR



- Mains 220–240Vac Input connector
- Only use the cable supplied with this speaker to power up the unit (Powercon–South African mains 3-pin plug)
- DO NOT modify the cable in any way.
- Inspect the cable before use and should any sign of damage be visible, replace the faulty cable with another of the exact same type, available from your nearest authorised retailer.

2: POWER ON-OFF SWITCH



The main power switch, which switches the speaker ON or OFF. Once the speaker is switched

3: POWERCON OUT CONNECTOR



- Mains 220–240Vac loop-through Output connector, allowing multiple Hybrid L6A speakers to be powered by the same mains outlet.
- Do not power (daisy-chain) more than 4 cabinets from the same mains outlet. Overloading the power source may cause the line circuit breaker to activate and, in extreme cases, could be a fire hazard.
- Only use Powercon Output–Powercon Input cables to connect multiple speaker cabinets.
- 3 core cable (Live, Neutral and Earth), minimum 1mm diameter/core.

4: XLR OUTPUT CONNECTOR



- The input loop-through connector enables linking the input to multiple powered speaker units.
- The XLR Male connector is a balanced line connector with an industry standard pin-out configuration as follows:

Pin 1 – Ground

Pin 2 – Non-inverting (+)

Pin 3 – Inverting (-)

5: XLR INPUT CONNECTOR



- The XLR Female Input connector is configured as a mono balanced input and should be connected to the main line level output from your mixer or audio source. Only use an audio source with a balanced line outputs on the LS18A

This cable is NOT supplied with the LS18A since the length between the LS18A and the signal source varies from application to application.

PIN-OUT CONFIGURATION OF A MONO BALANCED INPUT

Pin 1 – Ground

Pin 2 – Non-inverting (+)

Pin 3 – Inverting (-)

6: PHASE SWITCH

- The phase switch will invert the phase of the LS218A.

7: PHASE SWITCH

- The cross over frequency switch changes the frequency of the bass bin from 90 hertz to 120 hertz. The recommended selection when using the L6A/L6P is 90 hertz.

8: SIGNAL INDICATOR

- The signal indicator indicates when a signal is present.

9: LIMITER INDICATOR

- If the indicator is flashing the limiter indicator indicates that the bass bin has reached maximum power and the digital signal processor is limiting the input signal. If the indicator is fully on reduce the signal from the source in order to not damage the speaker by overdriving it.

10: POWER INDICATOR

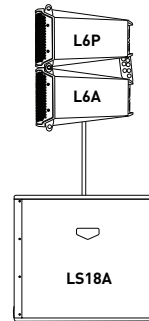
- The power indicator indicates that the Bass Bin has got power and is on.

11: LEVEL POTENTIOMETER

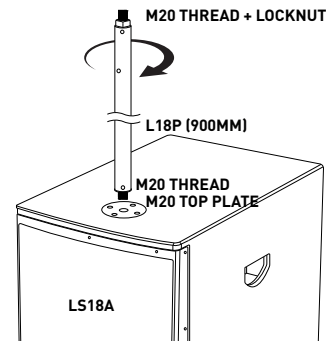
- The rotary level potentiometer controls the output level of the LS18A bass bin. It is good practice to have the level potentiometer at its lowest setting (rotated completely anti-clockwise) prior to switching the LS18A on or off.

GROUND-STACK WITH AN LS18A

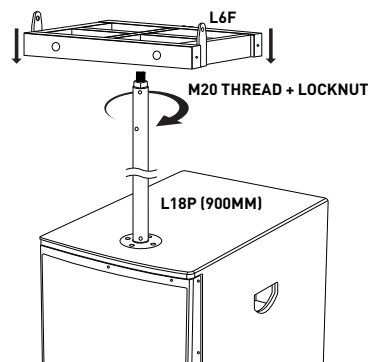
1: Place the Hybrid LS18A powered sub-bass speaker.



2: Attach the Hybrid L18P (900mm) pole to the LS18A sub-bass cabinet by screwing tightly the end with the shorter M20 thread clockwise onto the integrated M20 top plate on the cabinet.



3: Attach the Hybrid L6F fly frame to the opposite end of the Hybrid L18P pole by screwing the longer M20 thread onto the integrated M20 threaded hole on the frame. Once the frame is completely screwed in, place the frame in the desired horizontal position and tighten the lock nut provided on the L18P.



MAINTENANCE

Your Hybrid LS18A Passive Line Array Speaker requires no routine maintenance other than the occasional cleaning of the Speaker.

Users will not need to make any internal adjustments to the Hybrid LS18A Passive Line Array Speaker throughout its lifetime. There are no user-serviceable parts inside. Removal of the back panel voids the warranty; thus, should any servicing be needed, it should be carried out by an authorised and qualified service centre.

SERVICE, REPAIR AND GUARANTEE

In the unlikely event that your Hybrid LS18A Powered Bass Bin develops a technical fault, it should be returned to an authorised distributor or service centre. If the LS18A Bass Bin needs to be couriered to the distributor or service centre, ensure that it is correctly packed in its original packaging so as to avoid further damage.

Your Hybrid LS18A Speaker carries from the date of purchase a 12-month "No-Quibble" walk-in guarantee on all electronic components. Hybrid prides itself on its excellent after-sales service and it is our goal to return your LS18A back to you in perfect working

Thank you for purchasing a Hybrid product and for reading this user manual. You are now ready to use your Hybrid LS18A and we hope it brings you many hours of listening pleasure.

FEATURES

Ideal for small to medium indoor or outdoor applications.

Tailored bass reinforcement for Hybrid L6A & L6P line array speakers

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SPECIFICATIONS

Power	120W programme
LF	18" / 2000W PROG
Frequency response	35Hz - 120Hz
Directivity	Omnidirectional
Applications	CLASS D, 1000 + 1000W RMS
DSP	28/56-bit, 50MHz DIGITAL AUDIO PROCESSOR
DIMENSIONS	470mm x 630mm x 715mm (W x H x D)
WEIGHT	51kg

NET SHIPPING WEIGHT: 56kg

DIMENSIONS OF CARTON BOX HXWD: 515mm x 680mm x 745mm (W x H x D)

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