# EXPECT THE BEST BEST



**VORTEX 18SA** 



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USER GUIDE

#### **SAFETY INSTRUCTIONS**

### READ THIS BEFORE YOU USE YOUR PRODUCT

- 1. Before connecting the A.C. power cord make sure the Voltage Selector is set for your local A.C. supply voltage.
  - For supplies between 100 and 240V ensure it is set to 230V.
- 2. Only use the A.C. power cord / mains lead supplied with this product. Replace if it becomes damaged in any way.
- 3. Never operate without, or remove the safety ground (earth) from the A.C. Power cord mains lead.
- 4. Do not attempt to remove any screws or panels. There are no user serviceable parts inside.
- 5. Do not operate the unit next to heat sources such as radiators.
- 6. The unit should not be operated or stored near rain or moisture.
- 7. This equipment must not be exposed to dripping or splashing and no objects filled with liquids should be placed on top of it.
- 8. Write the serial number in the box provided in the Warranty section for future reference.
- 9. If the unit gets damaged, has been dropped or appears to have developed a fault refer to the Service Information section for details.

WARNING: THIS APPARATUS MUST BE EARTHED (GROUNDED)



#### **WEEE Mark**

If you want to dispose of this product, do not mix with general household waste. There are separate collection systems for used electronic products in accordance with legislation under the WEEE Directive (Directive 2002/96/EC) and is effective only within the European Union.

#### A. Product features

#### a. Introduction

The cabinet uses plywood with increased special damping material, concave and convex complementary structure, CNC machining. High strength glue connecte it into an ideal rigid cavity. The size has been repeatedly optimized with excellent acoustic characteristics;

Specially design of the woofer magnetic circuit, to further improve the efficiency of heat dissipation, reduce the power compression under high pressure, special treatment of the diaphragm material, so that the low frequency is more rich and powerful;

Use environmentally friendly water-based paints to increase elasticity, exquisite handle, wear and crash resistance;

Class D amplifier with protection of overheating, overcurrent and short circuit, and automatic compression protection when signal is overloaded;

With full-range speakers, the system can be used as stage main sound reinforcement speaker, complementary speaker, stage monitor, etc. It can be used in multi-function halls, performance halls, auditoriums and other places.

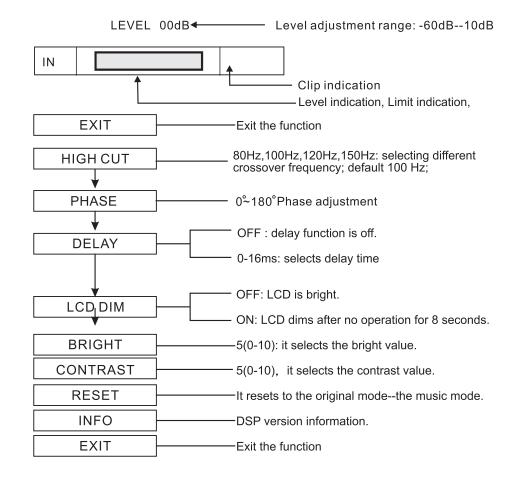
## b. Features

- 1.18inch active subwoofer.
- 2. Composed of a φ75. 8 woofer.
- 3. Light, high power Class D amplifier: high-stability performance.
- 4. Made with 15mm plywood, built-in vertical and horizontal reinforcement, solid and reliable, with powerful bass.

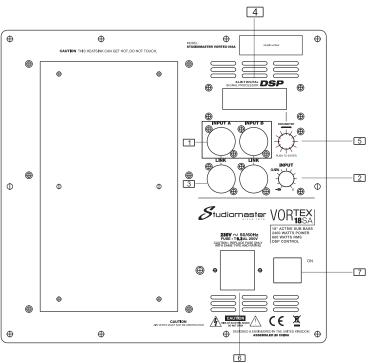
# C. Application

main reinforcement, filling reinforcement, stage monitoring in multifunction hall, auditorium, etc;

## **DSP** function



# Active panel



1). INPUT

XLR socket input L/R for line level equipment.

- 2). Input gain
  - $\mbox{-}\mbox{$\varpi$}$  to 0dB is for line volume adjustment.
- 3). LINK

Bal XLR connector L/R parallel output to link with the next active speaker cabinet or other equipment in the chain.

- 4). LCD
  - LCD displays DSP functions.
- 5). Master Vol

Turn it normally to adjust the master volume. Press it to enter into the menu mode, then turn it to select the function, then press it to confirm selecting the function. If there is no adjustment after entering into the menu mode, it exits automatically and enters into the main interface.

- 6). AC power socket/fuse holder(FUSE)
- 7). Power switch(POWER): it turns on/off the unit.

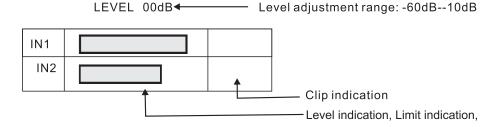
Model	VORTEX 18SA
Туре	18inch 2 way active speaker cabinet (DSP)
Frequency response	45Hz~100Hz (-3dB) 35Hz~150Hz (-10dB)
Input sensitivity	LINE:0dBu
Max SPL	134dB (PeaK)
Amp power	600W
LF unit	18" subwoofer
Input connection	2 Balanced XLR in and 2 Balanced XLR out
Input voltage	110V/230V (fixed voltage)
Suspension	Φ35
Dimension	(WxHxD) 530*681*610mm

# Quick trouble-shooting

Symptom	Probable causes
No sound	1.if the system connection is OK? Power supply is OK? If all equipments work normally? 2.if the volume control is turned on?
Distortion	If the input signal level too high? If the volume control is set to MIC function?
SPL not enough	If the external line in volume is set OK?     If the input signal level is too low?
Abnormal sound	1. If the mode selection is OK? 2.If EQ adjustment is OK? 3.If MODE and LOCATION selection are overlapped?
Weak bass	If mode and low cut are set normally?

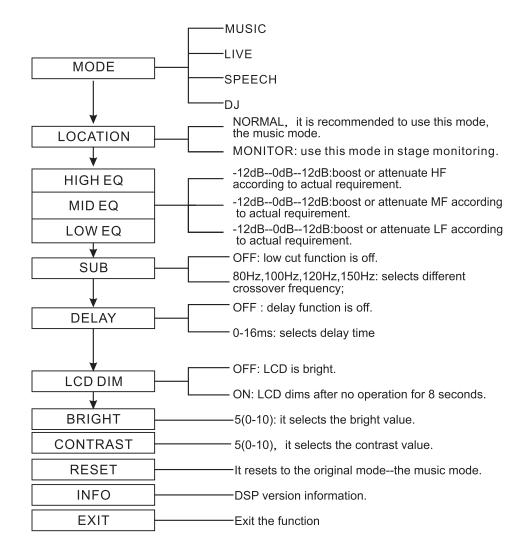
- Note: 1. if you can not solve the problem, please contact out service department or dealer.
  - 2. The product subject to change without prior notice.

## **DSP** function



step: 1.MASTER VOL adjusts range -60dB to 10dB level. (Refer to the figure above)

- 2. When the signal inputs from In1 or In2, LCD displays the level status; (Refer to the figure above)
- 3.press the button to enter into the sub-menu. Turn the button to select function.
- 4.when you want to select the function in this mode, press the button to enter, then turn the button to select. Press the button to exit. Operation as below:



- Note: 1. When in any mode of the subpage, if there is no operation for 8 seconds, it returns back to the home page.
  - 2. Memory function: when you turn on the system, it remains the function selection in the former operation.