CLB12A, CLB15A

ACTIVE SUBWOOFERS

Order ref: 178.271, 178.273

User Manual

Introduction

Thank you for choosing the Citronic CLB-series active subwoofer as part of your sound reinforcement system. Please read this manual fully and follow the instructions to achieve the best results with your new purchase and to avoid damage through misuse.

Unpacking

Your CLB active subwwofer should reach you in good condition and be supplied with the appropriate mains power lead(s).
If there is any damage or items missing, contact your retailer immediately.

Warning

To prevent the risk of fire or electric shock, do not expose any of the components to rain or moisture.
If liquids are spilled on the panel, disconnect mains and allow unit to dry out & have checked by qualified personnel before further use.
Avoid impact or extreme pressure to the cabinet, panel or grille
No user serviceable parts inside – Do not open the case – refer all servicing to qualified service personnel.

Safety

- Check for correct mains voltage and condition of IEC lead before connecting to power outlet
- Ensure signal leads are good condition with no short connections or damaged plugs

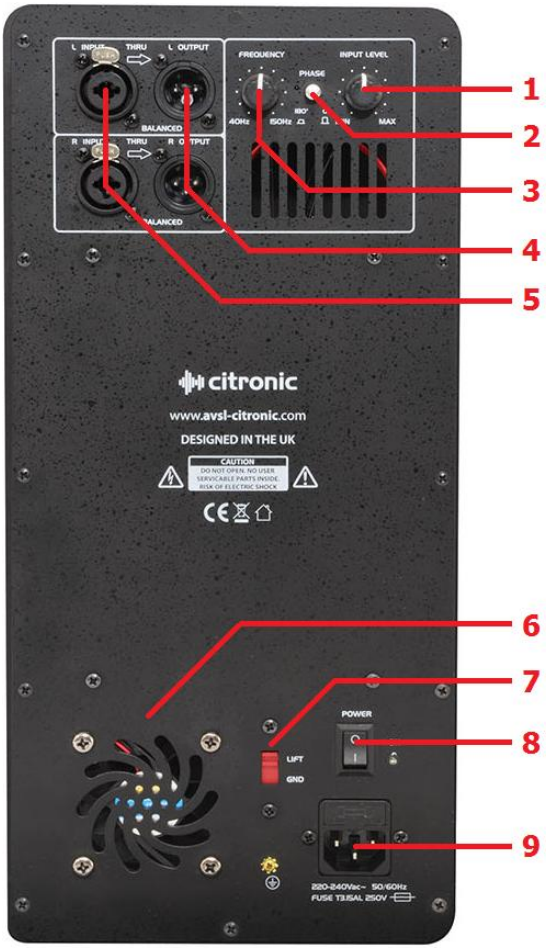
Placement

- Position on a stable, strong surface with the grille facing towards listeners
- Keep away from heat sources and away from damp or dusty environments
- Ensure adequate access to controls and connections

Cleaning

- Use a soft dry or slightly damp to clean the cabinet as required. Do not use strong solvents for cleaning the unit

Amplifier Panel



1. **INPUT LEVEL**
   Varies the gain of L+R line inputs

2. **PHASE**
   Press in to invert the signal polarity

3. **FREQUENCY**
   Adjusts cutoff frequency of sub filter

4. **L+R LINE OUTPUTS**
   XLRM connectors for parallel connection to further active speakers or amps

5. **L+R LINE INPUTS**
   Combo XLR/Jack connectors for Left + Right line inputs (summed together for sub signal)

6. **COOLING FAN**
   Air vent for cooling fan – do not cover or block

7. **GND/LIFT**
   Ground lift switch for venues with noisy mains. Switching to LIFT isolates signal ground from mains earth

8. **POWER**
   Power on/off switch and indicator

9. **MAINS INLET**
   Combined IEC inlet and fuse holder

Connection

Connect balanced or unbalanced line level signal(s) from sound source or audio mixer to the L+R combo inputs using good quality XLR or 6.3mm jack leads. Connecting to either of these will work for a mono input.

Connect the OUTPUT XLR to any further active speakers or amplifiers that are to be fed the same signal.

Connect the supplied mains cable from the IEC connector to a suitable mains outlet, ensuring correct voltage and adequate current capacity.

Operation

With the INPUT LEVEL control (1) turned fully down, switch on the power switch (8). The power LED will illuminate.

Ensure a signal is playing to the input(s) and gradually increase the INPUT LEVEL control (1) until the required output volume is reached.

The power LED doubles as a clip indicator, turning to red when the amplifier signal is clipping. It is OK for the clip indicator to light red momentarily on peaks in the audio but if the LED shows red for longer periods, it will be necessary to turn down the input level.

Adjusting the FREQUENCY control (3) varies the cutoff frequency of the high cut filter. Rotate left for lower frequency and right for higher frequency. Remember that lower frequency settings will cut out more of the mid frequencies and input level may need to be increased to compensate.

The INV switch reverses polarity when pressed in, which may help to avoid low frequency feedback or phase align 2 subs facing toward each other. The correct setting for this switch is whichever produces the best output or lowest feedback and is subject to trial and error.

The GND/LIFT switch can be used if there is noise introduced into the signal from a poor mains earth.
Otherwise, the best position for this switch is GND, which connects signal ground to mains earth.

Before powering down, turn the channel gain controls fully down to avoid loud noises when switching off.

Specifications

Model	CLB12A	CLB15A
Power supply	230Vac, 50Hz (IEC)	
Pole Mount	35mm cast metal socket	
Input connection	Balanced or unbalanced line L+R combo connectors (6.3mm jack/XLRF)	
Output connection	Balanced or unbalanced line L+R XLRM connectors (parallel to input)	
Driver	300mm (12") reinforced paper cone	380mm (15") reinforced paper cone
Impedance	4Ω	
Driver: Coil size	76mm (3")	76mm (3")
Driver: Basket	Die-cast aluminium frame	Die-cast aluminium frame
Output power: RMS	400W	500W
Frequency response (-3dB)	40Hz - 180Hz	35Hz - 180Hz
Crossover frequency	40Hz - 150Hz	40Hz - 150Hz
Sensitivity (1m, 1W)	100dB	105dB
Maximum SPL	120dB	129dB
THD	<1%	<1%
Dimensions	445 x 525 x 575mm	510 x 595 x 655mm
Weight	24kg	28kg

Troubleshooting

No power light on rear panel switch	Ensure IEC inlet is connected to mains and mains lead is in good condition
	Ensure mains outlet is switched on
	Check mains fuse. If repeatedly blowing, refer to qualified service personnel
Power light is on but no other LEDs and no output	Check input signal and connection leads
	Ensure input level and frequency controls are not turned fully down
Humming noise without any signal present	Test the GND/LIFT switch and check if the noise is from mains earth
	Check integrity of signal leads and ensure they are well screened
Output very distorted and/or power LED is frequently red	Turn down the input level rotary or output level from the audio source
	Adjust the cutoff to a lower frequency
Output is working but at very low level	Ensure input source is at line level
	Test the phase switch and check if one setting is louder than the other
	Increase input level control or output level from audio source
	Adjust the cutoff frequency upward to allow some more mid-range into the signal