

CITRONIC®

CE22 Enhancer/Exciter + Surround Processor 170.938

User Manual



Features:

- **Switchable Surround Processor**
- **Independent Bass Processors with 2 modes**
- **Variable Enhancer/Exciter process blend**
- **Balanced or unbalanced signal path**

Introduction:

Thank you for choosing this Citronic enhancer/exciter unit. This product has been designed to deliver professional audio processing facilities with reliable and accurate function. In order to achieve the best results from this equipment and avoid damage through misuse, please read and follow these instructions and retain for future reference.

Warning:

To prevent the risk of fire or electric shock, do not expose any part of the unit to rain or moisture. If liquids are spilled on the surface, stop using immediately, allow unit to dry out and have checked by qualified personnel before further use.

Avoid impact, extreme pressure or heavy vibration to the unit.

There are no user serviceable parts inside the unit – refer all servicing to qualified service personnel.

Safety

- Check that the supplied mains lead is in good condition and the supply voltage is correct.
- Ensure signal leads are of good condition and connected to appropriate inputs/outputs
- Do not allow any foreign particles to enter the unit through control or connector apertures

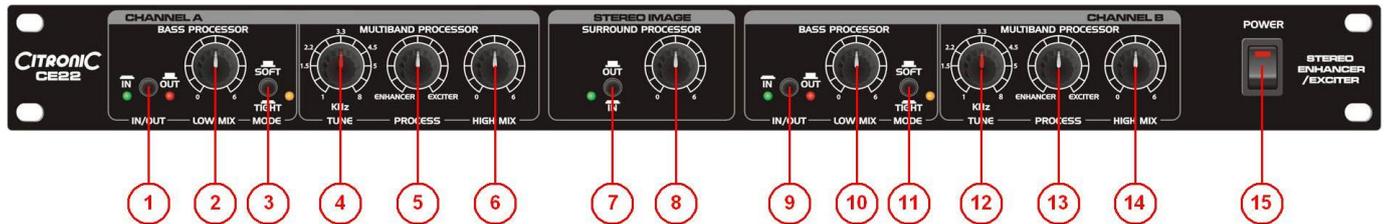
Placement

- Keep out of direct sunlight and away from heat sources.
- Keep away from damp or dusty environments.
- When rack-mounting, avoid placing heavy units above the unit and ensure all connectors are accessible

Cleaning

- Use a soft cloth with a neutral detergent to clean the casing as required
- Use a soft brush to clear debris from the control surface
- Do not use strong solvents for cleaning the unit.

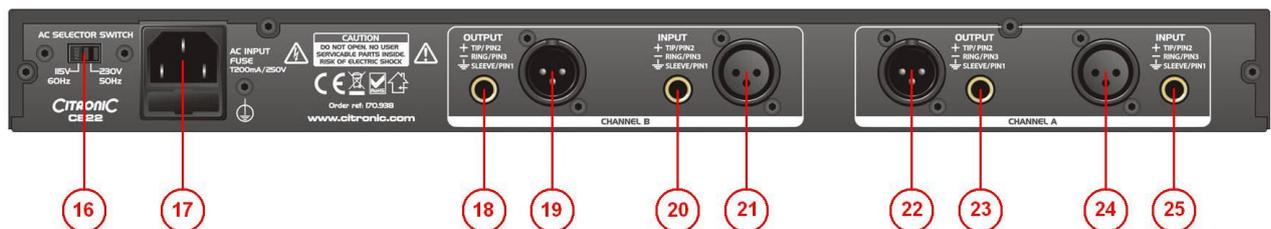
Front Panel



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| <ol style="list-style-type: none"> 1. Bass Processor IN/OUT switch and LEDs: CH A 2. Bass Processor LOW MIX control: CH A 3. Bass Processor MODE switch: CH A 4. TUNE frequency control: CH A 5. PROCESS control of Enhancer/Exciter mix: CH A 6. HIGH MIX Enhancer/Exciter amount: CH A 7. SURROUND PROCESSOR IN/OUT switch & LED 8. SURROUND PROCESSOR amount |
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| <ol style="list-style-type: none"> 9. Bass Processor IN/OUT switch and LEDs: CH B 10. Bass Processor LOW MIX control: CH B 11. Bass Processor MODE switch: CH B 12. TUNE frequency control: CH B 13. PROCESS control of Enhancer/Exciter mix: CH B 14. HIGH MIX Enhancer/Exciter amount: CH B 15. POWER switch |
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Rear Panel



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| <ol style="list-style-type: none"> 16. Voltage Selector 17. IEC mains inlet 18. 6.3mm jack output: CH B 19. XLR output: CH B 20. 6.3mm jack input: CH B |
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| <ol style="list-style-type: none"> 21. XLR input: CH B 22. XLR output: CH A 23. 6.3mm jack output: CH A 24. XLR input: CH A 25. 6.3mm jack input: CH A |
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What is an Enhancer or Exciter

An Audio Enhancer is a multi-band processor which focuses selected high frequencies and applies specific filtering to isolate and boost them without introducing other unwanted high frequencies, thus giving more “sparkle” and “liveliness” to the signal. An Audio Exciter is a processor which actively replaces missing high frequencies by actively generating overtones based on the existing frequencies to introduce more dramatic and yet more synthetic, high frequency content.

The Bass Processor on each channel is a device which improves phase-alignment and focus of low frequencies, giving similar attention to the bass as the Enhancer/Exciter does for the higher frequencies.

The SURROUND PROCESSOR varies phase-alignment between CH A and CH B to give the listener the impression that the sound is coming from increasingly different directions. This has the effect of a virtual widening of the stereo field when CH A and CH B are used to process the left and right channels of a mix.

Connection

The unit can be used in 2 configurations...

1. As 2 independent mono graphic enhancer/exciter – e.g. for 2 separate microphones on channel inserts
2. As a stereo left & right processor – e.g. as a main L+R enhancer/exciter on master inserts or between the mixer and amplifier or recording equipment

Before connecting to an amplifier or other equipment, turn down all volume controls to avoid loud noises which may cause damage to other equipment. Always switch amplifier power on last in line with volume levels down. Use good quality 6.3mm jack or XLR signal leads to connect the enhancer/exciter to allied equipment. Connect mains power via the IEC (ensuring lead is in good condition and the voltage selector is same as the supply voltage) and switch the POWER on.

Operation

Begin with LOW MIX, HIGH MIX and SURROUND controls set fully down (anti-clockwise)

Set the TUNE control to the desired range of frequencies to be affected – 1kHz is Mid frequencies and 8kHz is High

Begin with the PROCESS control in the centre position (equal amounts of each process)

Gradually increase HIGH MIX and check the difference in high frequency content until the desired effect is reached

Varying the TUNE control at this stage will sweep the effect through the various frequencies.

If the process sounds too dramatic or unnatural, turn the PROCESS control toward ENHANCER.

If the process is too mild or ineffective, turn the PROCESS control toward EXCITER

To process bass, switch the BASS PROCESSOR “IN/OUT” button to IN and the respective “IN” LED will light.

Select the MODE – SOFT suits classical and subtle music content, TIGHT suits high energy dance music

Pressing IN/OUT gives a comparison of the signal with and without the BASS PROCESSOR.

To expand the perceived stereo field, press IN/OUT until the indicator is lit and gradually increase the rotary control

Use the IN/OUT switch to compare the effected and unaffected signal until the desired amount of process is set.

SPECIFICATIONS	
Power supply	115/230Vac 50/60Hz - selectable (IEC)
Frequency response	20Hz-20KHz (+0/-3dB)
Input impedance	12kohms
Output impedance	45ohms
THD	0.008% @ +4dBu 1KHz
Signal to noise ratio	>95dBu
Dimensions	44 x 482 x 250mm
Weight	3.5kg

TROUBLESHOOTING	
No function and Power switch LED is not lit	Ensure mains voltage is correct and connected properly
	Ensure front panel power switch and mains outlet switch are on
Power is on but no audio output	Check XLR and/or jack leads are OK and connected properly
	Check that inputs and outputs are connected the correct way around
Distorted output	Reduce BASS MIX and HIGH MIX controls
	Switch out the SURROUND PROCESSOR

Note: for further troubleshooting, refer equipment to qualified service personnel for testing