All-domain noise reduction processor

Quick User Manual

Cnv

1.0

Chapter 1 Introduction

Thank you for trusting and selecting our products! This device is a high-performance dual-channel 6-in and 4-out all-domain noise reduction processor equipped with 4 analog balanced inputs, 4 analog balanced outputs and 2 unbalanced inputs. Provide professional noise suppressor effects for high-quality language sound reinforcement, and deeply learn the vocal characteristics through artificial intelligence algorithms to achieve active external whole-domain noise suppression. The device has built-in high-quality call playback and provides 48V phantom power supply. It is equipped with GPIO, RS-485, RS-232, network port, and USB interface to achieve rapid configuration, remote debugging and monitoring. Application

- ☐ Conference Room
- ☐ court
- ☐ hall

☐ Functional features
of multi-function hall

- ☐ High-performance professional audio processors with DSP technology
- ☐ Adopt 32-bit floating point DSP, 24-bit AD/DA, 48K sampling frequency
- ☐ The device provides RS-485, RS-232, network port, USB connection management
- ☐ 4 balanced inputs, 2 unbalanced inputs, 4 balanced outputs
- ☐ Active global noise suppression maximum 70dB
- ☐ Built-in 4-level feedback suppression
- ☐ Built-in AGC automatic gain
- ☐ Built-in high and low passes and 10-stage parameter equalization
- ☐ Each channel provides 7-segment PEQ and high-low pass settings

- Adopt a 2-inch full-color IPS screen with a resolution of 320×240dpi

- The equipment panel adopts single-key shuttle to quickly operate and BYPASS/MUTE shortcut keys

- Equipped with GPIO, RS-485, RS-232, network port, USB interface

Chapter 2 Technical parameters

Signal processing	32-bit fixed/floating-point DSP
Audio system delay	<15ms
Digital to analog conversion	24-bit
Sampling rate 48kHz	
Frequency response range 20Hz~20kHz ±1dB	
Total harmonic distortion < 0.02% THD+D	
Channel sound	LINE<-90dB@1kHz, MIC<-82dB@1kHz
Dynamic range	115dB
Input interface	4 XLR&TRS balanced inputs, 2 RCA unbalanced inputs
Input impedance	Balanced 10KΩ
Output interface	2xLR balanced outputs, 2x 1/4"TRS balanced outputs
Output impedance	<600Ω
Maximum input level	+15dBu（LINE）, -4dBu（MIC）
Maximum output level	+15dBu
Input Type	LINE/MIC, +48V phantom power supply
Function	Noise reduction, feedback suppression, automatic gain, PEQ, high and low pass
Communication interface	RS-485, RS-232, USB Type-B, network port, GPIO

Display	1.77 inch full color IPS screen
Indicator light	Noise reduction, feedback suppression, automatic gain, high and low pass
Power requirements	AC ~220V 50Hz, power consumption <20W
Operating temperature	0 °C ~+40 °C
Storage temperature	-20 °C ~ + 60 °C
size	482x44.5x270mm
Packaging size	550x80x395mm
net weight	3.6 kg
Gross weight	4.6 kg

Chapter 3 Quick use
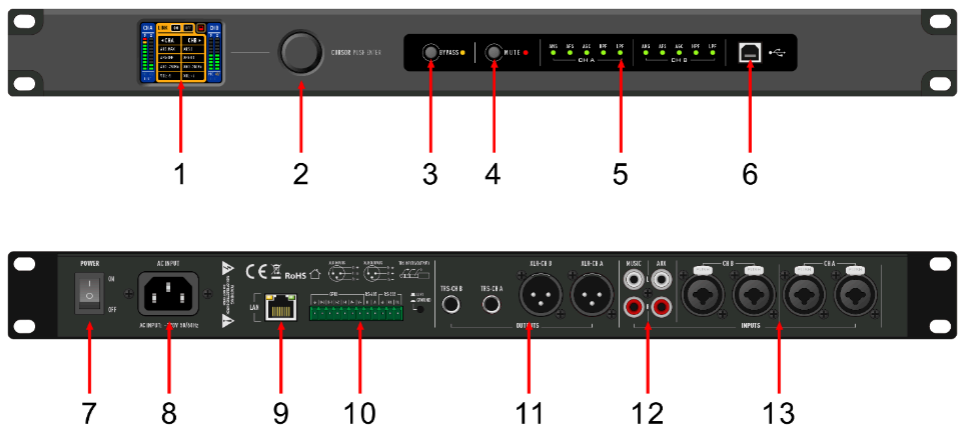

1: Display   2: Function setting knob   3: BYPASS shortcut keys 4: MUTE shortcut keys

5: Function status indicator 6: USB online interface   7: Power switch 8: AC input mount

9: Net port   10：RS-485/RS-232/GPIO   11: Output XLR/TRS interface

1: Unlock the device

The device is turned on by default and press the setting knob for 5 seconds to unlock. The BYPASS and MUTE shortcut keys are invalid in the locked state. The device will automatically lock after 5 minutes of uninstalling.
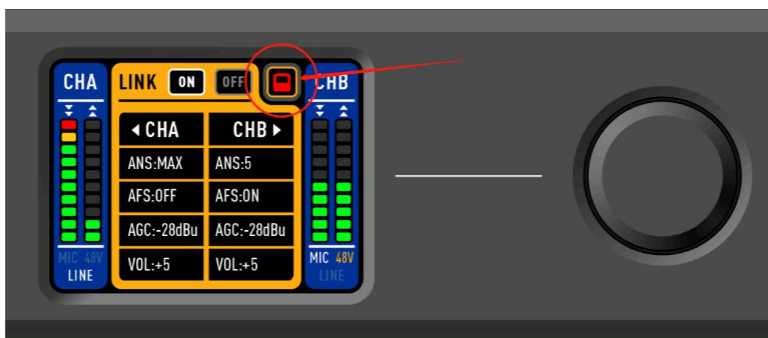
2: Access to LINE signal

The default input signal of the device is LINE, and no setting is required when the input signal source is a mixer, matrix, or a microphone with LINE output.
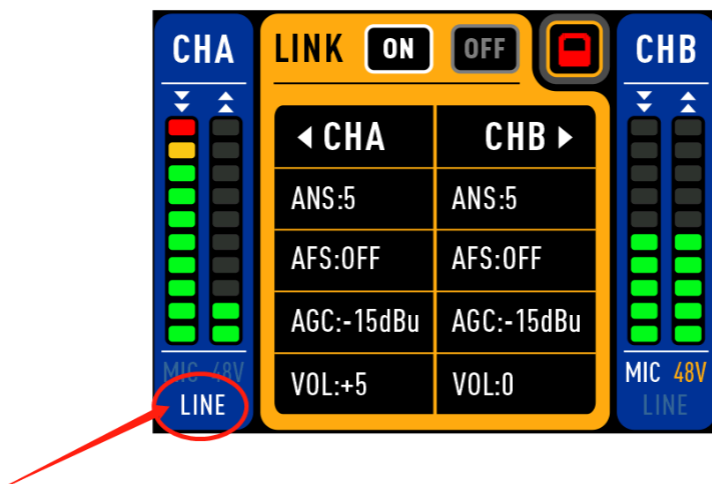
3: Access the MIC signal

After unlocking the device, turn the knob to the "MIC" icon in the corresponding channel blinks. Press the knob and the input will switch to the MIC. If you connect to a capacitor microphone, you need to switch to the MIC first and then select the "48V" icon and press Confirm.

Warning: Please confirm the signal output sensitivity of the front-end device before selecting toggle! Warning: Before turning on the "48V" phantom power supply, please make sure that the front end is a capacitor microphone that needs power supply, otherwise the front end device may be damaged! 4: A/B channel adjustment simultaneously

If the A/B channel needs to be adjusted at the same time, you can rotate it to LINK——The "ON" icon flashes and press the knob to confirm. After LINK, the ANS (noise reduction), AFC (feedback rejection), and AGC (automatic gain) of channel B will be automatically synchronized with channel A.
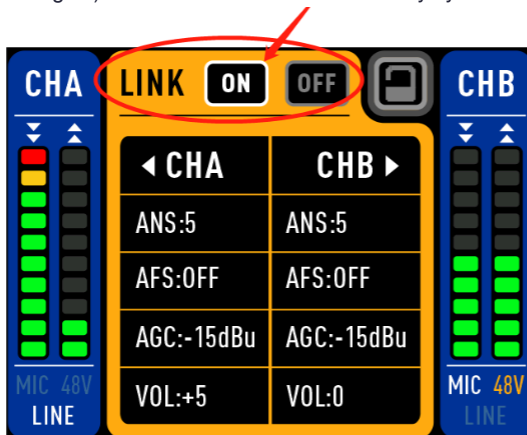
5: Adjust noise reduction, feedback suppression, automatic gain

The ANS (noise reduction) levels are OFF, 1~9, MAX, and the default value is 5. Turn the knob to ANS level and flash and press to adjust. At this time, the BYPASS key is to switch the current level and OFF toggle.
The AFC (feedback suppression) level is ON/OFF. Turn the knob to AFC level and flash and press to adjust. At this time, the BYPASS key is to switch the current level and OFF toggle.

AGC (automatic gain) adjustment range -51~+15dBu. Turn the knob to AGC value and flash, and press to adjust. At this time, the BYPASS key is to switch the current value and OFF switch.
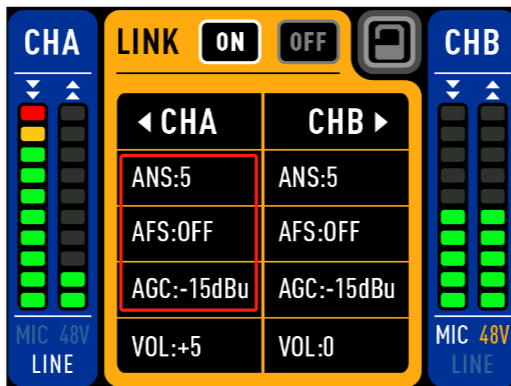
6: Gain adjustment

The A/B channel gain is independently adjusted. Turn the knob to VOL value and then press to adjust. 7: Factory reset

To restore the factory settings, press the BYPASS key and MUTE key at the same time for 5 seconds, and the device restarts and restores the factory settings.