DB mode
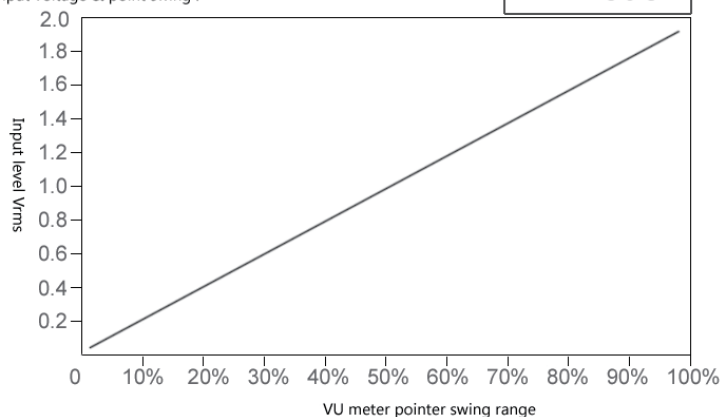
Input voltage & point swing :

1. In ACG mode, the VU meter is driven by a dynamic square root audio compression algorithm, which means that the relationship between the input volume and the swing of VU meter pointer is not proportional. It can be seen from the relationship diagram that when the input volume is low, the swing amplitude of the pointer is large, and when the volume is gradually increased, the swing amplitude of the pointer gradually becomes small. In this mode, users can use VU1 PRO meter to get good display effects in a larger audio input range without adjusting the gain. It is recommended to adjust GAIN to make the pointer swing as close as possible to 70% (0dB). Due to the algorithm driver of dynamic square root audio compression, it cannot truly display the actual level of the current input volume, so it is not suitable for professional recording occasions. But this mode is suitable for people's regular hearing habits.

2. In DB mode, the data is the most original without any compression changes, therefore, the swing of the VU meter pointer is proportional to the input signal. This display mode is suitable for some occasions that need to know the real music level, such as a recording studio or when testing a certain sound level.

Introduction of Environment Noise Filter

1. After all connections, firstly please play music normally, and set the pointer jumping in the proper range through adjust GAIN knob, about 50% to 90% position of the dial. Then pause the music, long press the DB/AGC button for 3 seconds until all 4 LED lights (indicators of MIC/LINE/DB/ AGC) light up, please release the DB/AGC button. Then the environment noise filter function of VU1 PRO will turn on. The system will set a fixed threshold value according to the actual environmental noise intensity collected to filter out the highest noise, whole setting time will last about 3 seconds. And VU1 PRO will auto exit setting when the setting is completed, and two of 4 LED lights will turn off, then you can play music again.

Please note that before exiting setting. don't make any other sounds such as talking, or playing other music except the real environmental noise, otherwise the setting inaccuracy will be affected.

2. Environmental noise filter function can only filter up to 50% of the maximum value of the pointer swing, and the noise beyond this position cannot be filtered. Recommended to adjust the GAIN to reduce the swing range of pointer.

3. Once environment noise filtering function is set, it will work in both LINE and MIC modes. If want to restore the default value without restarting, please adjust GAIN to the minimum and then enter the environment noise filtering function again.

4. The setting of environment noise filtering function doesn't support saving after turn off. If in soft shutdown condiction (turn off by pressing the button but not disconnect the USB power cord), the set value can be temporarily stored. If power-off (unplug the USB power supply) and then turn on, VU1 PRO will restore the default value.

Frequently Asked Questions

Q: The pointer of VU Meter is moving even there is no music input.

A: 1) The quality of the USB power supply is poor with large ripples that causes great interference. Recommended to change a better USB power supply.

2) VU1 PRO shares a USB power supply with the player's audio source that causes common ground interference. Please use USB supply to power VU1 PRO separately

Q: The backlight brightness of VU1 PRO's two VU meter is not the same.

A: Because VU1-PRO uses a tungsten bulb as the backlight of the meter, during transportation the tungsten filaments in the bulb may become entangled and shortened due to vibration, then the internal resistance becomes smaller and cause different brightness.

You can manually adjust the backlight of the two meter by adjusting the resistance of the backlight brightness on the back panel of VU1 PRO.

Contact Information

ONE Little Bear

DOUK AUDIO VU1-PRO

—— *VU1 PRO VU Meter & Audio Converter* ——

Introduction

VU1 PRO is a multifunctional device that can both be used as VU meter and audio switcher, with microphone/RCA/XLR inputs. Supporting AGC and DB two audio signal processing methods, manual adjustment of gain and range of pointer swing and providing ultra-wide input signal range that up to 5Vrms, practical and beautiful.

Parameters

Audio input: stereo RCA / XLR / Microphone

Audio output: XLR / stereo RCA

Sensitivity adjustment: support

Gain adjustment: support

Display mode: AGC / DB

Environment noise filter function: supprt

Working voltage: Micro USB DC 5V (above 1A)

Voltage of backlight filament (tungsten lamp): DC 9-12V

Settings saved after shutdown: support

Diameter of VU meter: 35mm / 0.11in

Important Note

1. VU1 PRO needs to be powered by separate USB power supply, don't use the USB port of computers or other equipments to power it, otherwise the VU meter pointer may move or noise may be caused because of audio input common ground.

2. The USB power supply can only be 5V single voltage, and the current is at least 1A. Not recommended to use fast charging sources with dual voltages.

3. The audio input signal can only be connected to the audio output of ordinary players such as CDs, computers, mobile phones, MP3, etc.. Don't connect input of VU1 PRO to the output of amplifier or speaker, otherwise VU1 PRO will be damaged.

How to Use

1. VU1 PRO will automatically power on when connected to USB power cable.

2. Connect inputs and outputs

● Microphone input

Press MIC/LINE button until the indicator of MIC lights up,

VU1 PRO only can be used as VU meter in this input mode, just put it near your speaker to pickup the music.
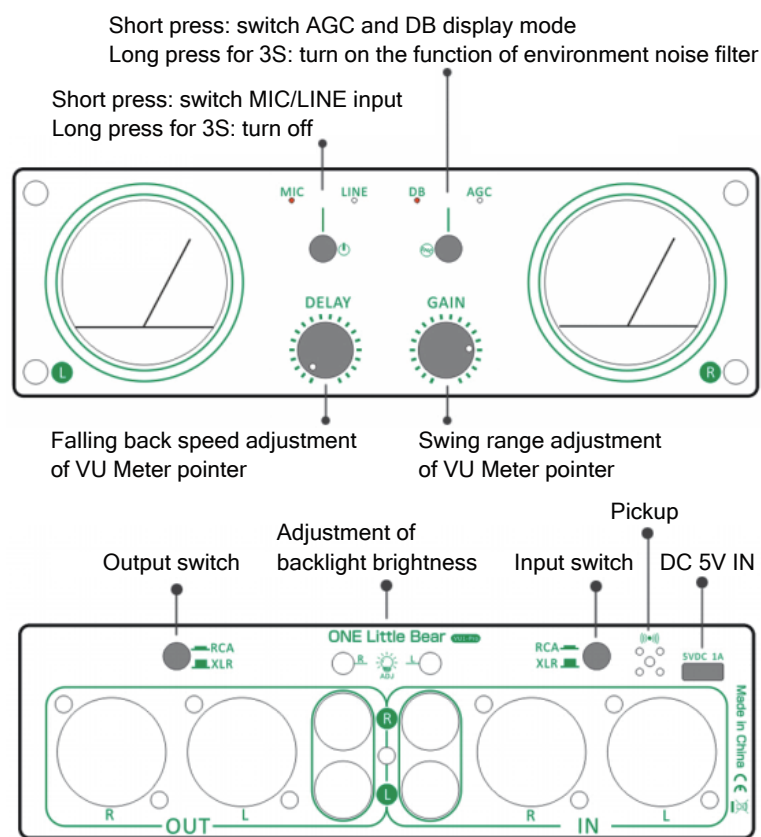
● LINE input

Press MIC/LINE button until the indicator of LINE lights up, according to the interfaces of your other audio device, select correct input and output. VU1 PRO also can be an audio switcher: RCA input--XLR output or XLR input--RCA output.

3. With AGC and DB audio signal methods switch, falling speed adjustment of VU meter pointer(DELAY), swing range adjustment of VU meter pointer(GAIN), environment noise filter function etc. You can adjust based on your own usage requirements.

4. After use, please long press MIC/LINE button to turn off, then disconnect the USB power cable.

Front and Back Panel

Short press: switch AGC and DB display mode
Long press for 3S: turn on the function of environment noise filter

Short press: switch MIC/LINE input
Long press for 3S: turn off

Falling back speed adjustment of VU Meter pointer

Swing range adjustment of VU Meter pointer

Output switch

Adjustment of backlight brightness

Input switch

Pickup

DC 5V IN

The difference of AGC and DB Mode

Input voltage & point swing :

AGC mode