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Douk Audio

Douk Audio VU56 PRO User Manual

MIC & Analog Sound Level Meter, LED Music Spectrum Visualizer, Audio Splitter with Remote Control

1. Introduction

The Douk Audio VU56 PRO is an advanced sound level meter and audio splitter designed for precise audio level monitoring and visual display. It features a 56-bit per channel LED music spectrum display, offering high resolution and real-time visualization of audio signals. This device supports both PPM (peak programme meter) and VU (volume unit) modes, making it suitable for various professional and recreational audio applications. Additionally, it functions as an audio converter/splitter with multiple input and output options, controlled conveniently via an included remote.

2. Safety Information

- Ensure the device is powered by a DC 5V (≥1A) Micro USB power supply. Using an incorrect power supply may damage the unit.
- Do not expose the device to water, moisture, or extreme temperatures.
- Avoid placing the device in direct sunlight or near heat sources.
- Do not attempt to disassemble or modify the device. Refer all servicing to qualified personnel.
- Keep the device away from strong magnetic fields.
- Handle the remote control with care. Ensure the correct battery type (CR2025) is used if replacement is needed.

3. Package Contents

Verify that all items are present in the package:

- 1x Douk Audio VU56 PRO Sound Level Meter
- 1x Remote Control
- 1x USB Cable (for power)
- 1x 3.5mm AUX Cable
- 1x User Manual

4. Product Overview

4.1 Front Panel

The front panel features the primary LED display, showing audio levels for both left and right channels. The display provides a visual representation of the audio signal's dynamics.

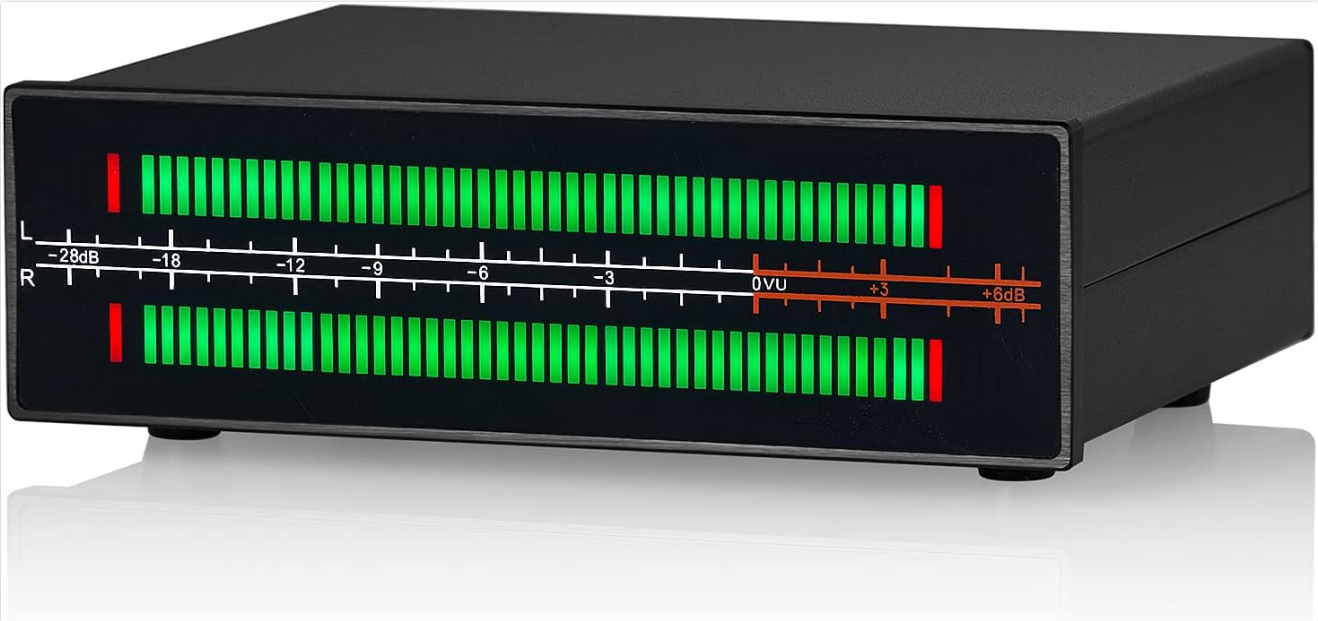
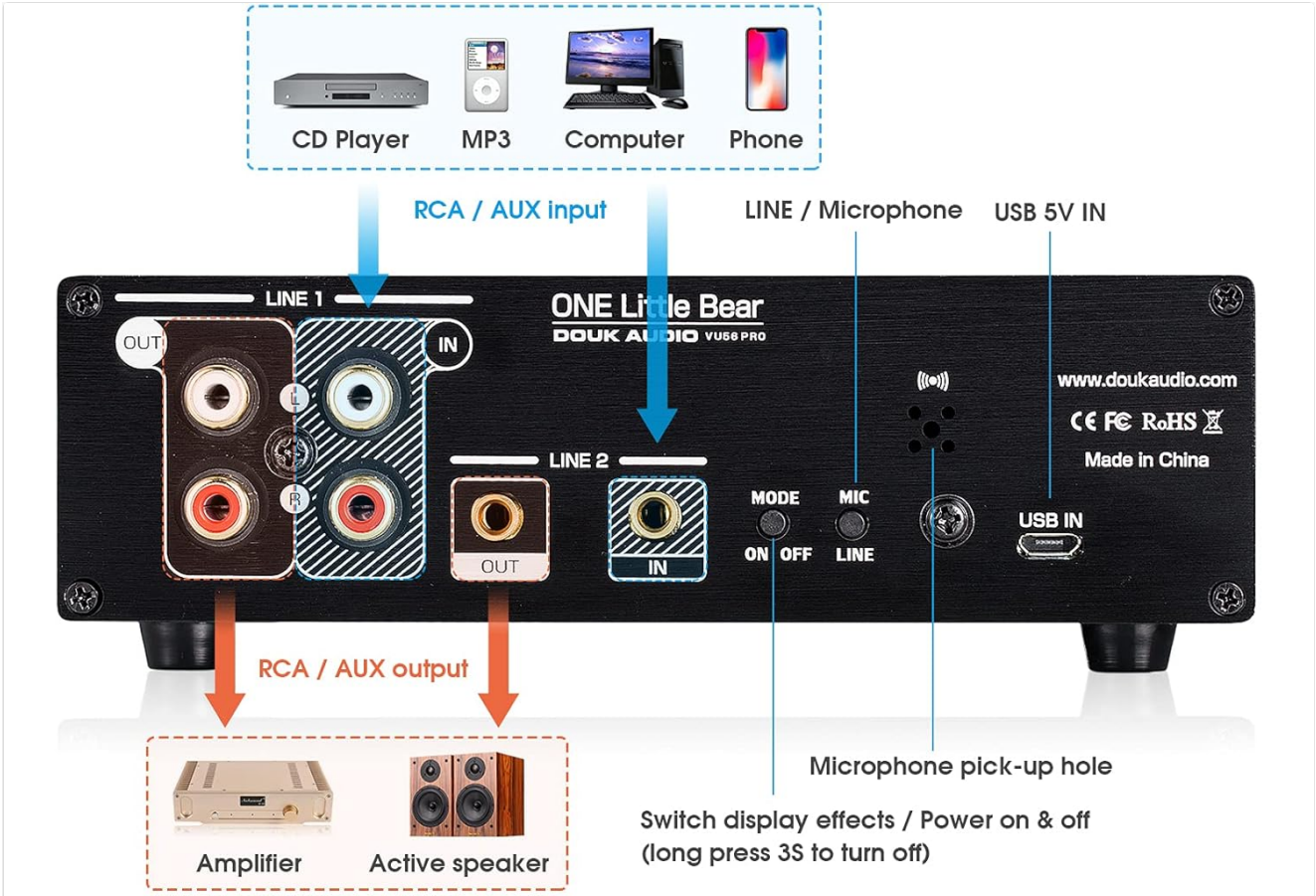


Figure 4.1: Front view of the VU56 PRO with active LED display.

4.2 Rear Panel

The rear panel houses all input and output connections, along with the power input and mode selection switch.



Note: The inputs and outputs of LINE1 and LINE2 are connected in parallel, only need to connect one of the inputs and outputs, as the picture shows:

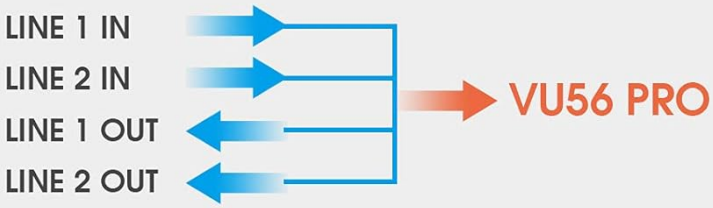


Figure 4.2: Rear panel connections and controls.

- **RCA / AUX Input (LINE 1 IN):** For connecting audio sources via RCA or 3.5mm AUX.
- **RCA / AUX Output (LINE 1 OUT):** For connecting to amplifiers or active speakers.
- **LINE 2 IN / OUT:** Additional RCA/AUX input/output, connected in parallel with LINE 1.
- **MODE Switch:** Toggles between MIC (microphone) and LINE input modes.
- **ON/OFF Switch:** Power switch.
- **Microphone Pick-up Hole:** Built-in microphone for ambient sound level detection.
- **USB IN:** Micro USB port for DC 5V power input.

Note: The inputs and outputs of LINE 1 and LINE 2 are connected in parallel. Only one set of inputs and outputs should be connected at a time to avoid signal conflicts.

5. Setup

1. **Power Connection:** Connect the provided USB cable to the "USB IN" port on the rear panel of the VU56 PRO. Connect the other end of the USB cable to a DC 5V (≥1A) power adapter (not included) or a compatible USB port.

2. **Audio Input Connection:**
    - **Line Input (RCA/AUX):** If using an audio source like a CD player, MP3 player, computer, or phone, connect it to the "LINE 1 IN" or "LINE 2 IN" RCA/3.5mm AUX ports using the appropriate audio cable. Ensure the MODE switch is set to "LINE".
    - **Microphone Input:** If monitoring ambient sound, ensure the MODE switch is set to "MIC". The built-in microphone will pick up sound from the environment.
3. **Audio Output Connection (Optional):** If using the VU56 PRO as an audio splitter, connect the "LINE 1 OUT" or "LINE 2 OUT" RCA/3.5mm AUX ports to your amplifier or active speakers.
4. **Power On:** Flip the ON/OFF switch on the rear panel to the "ON" position. The LED display should illuminate.

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Video 5.1: Demonstration of connecting the Douk Audio VU56 PRO and its visual operation.

6. Operating Instructions

The VU56 PRO is primarily controlled using the included remote control. Ensure the remote has a CR2025 battery installed.

Figure 6.1: VU56 PRO with remote control.

6.1 Display Modes (PPM / VU)

The VU56 PRO supports two main display modes:

- **PPM Mode (Peak Programme Meter):** 0dB = 1.5Vpp. Recommended for general dynamic display.
- **VU Mode (Volume Unit):** 0dB = 0.775Vrms. More suitable for professional audio level monitoring.

Switch between modes using the remote control (refer to remote button functions below).

Figure 6.2: VU56 PRO displaying in PPM (top) and VU (bottom) modes.

6.2 Remote Control Functions

The remote control allows adjustment of various display parameters:

- **Power Button:** Turns the device on/off.
- **Brightness Adjustment:** Adjusts the LED display brightness (4 levels).
- **Display Color Switch:** Toggles between green and red display colors for the main bar and peak LED.

- **Display Effects:** Selects from 8 different display effects.
- **Display Length Gain:** Adjusts the display sensitivity (-3dB, 0dB, +3dB).
- **Peak LED Holding Time:** Adjusts how long the peak LED remains illuminated.
- **Drop Speed:** Controls the speed at which the main bar and peak LED drop.
- **Mode Selection:** Dedicated buttons for PPM and VU mode selection.

All settings adjusted via the remote control are saved automatically, even after the device is powered off.

Figure 6.3: Examples of 8 different display effects.

7. Specifications

Parameter	Value
Audio Input	1 group RCA / 1 group 3.5mm AUX / Microphone
Audio Output	1 group RCA / 1 group 3.5mm AUX

Parameter	Value
Max. Input Level	2.5Vrms
Max. Effective Input Level	1.8Vrms
Monitoring Frequency Range	20Hz-20KHz
Input Impedance	10KΩ
Brightness Adjustment	4 levels
Display Color	Green / Red (switchable)
Display Effects	8 kinds
Remote Control	Supported
Display Length Gain	3 levels adjustable (-3dB, 0dB, +3dB)
PPM Mode (Peak Programme Meter)	0dB = 1.5Vpp
VU Mode (Volume Unit)	0dB = 0.775Vrms
Holding Time of Peak LED	Adjustable
Drop Speed of Main Bar/Peak LED	Adjustable
Working Voltage	DC 5V (≥1A)
Power Interface	Micro USB
Dimensions (L*W*H)	154*116*47mm / 6.06*4.57*1.85in
Net Weight	400g / 0.88lb

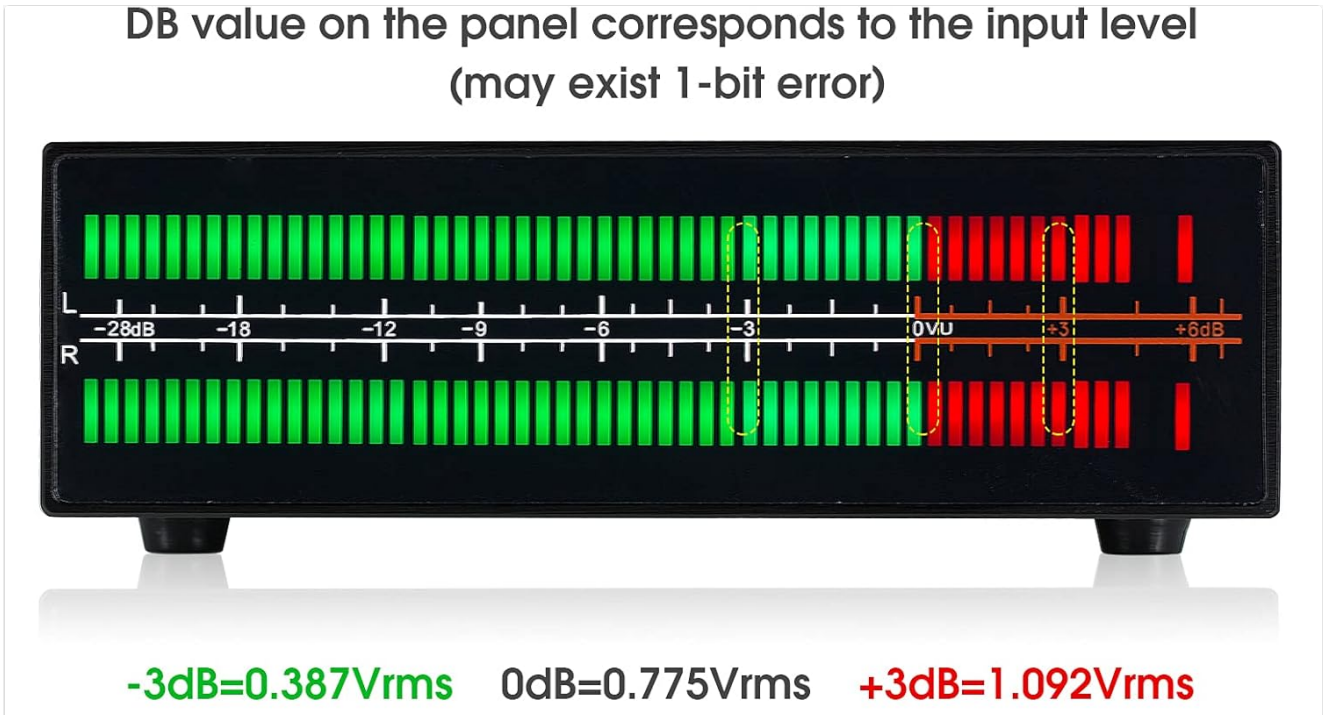

Figure 7.1: Display calibration values for 0dB, -3dB, and +3dB.

8. Maintenance

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Do not use liquid cleaners or aerosols.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures when not in use for extended periods.
- **Remote Battery:** Replace the CR2025 battery in the remote control when its performance degrades.

9. Troubleshooting

Problem	Possible Cause / Solution
Device does not power on.	◦ Ensure the USB power cable is securely connected. ◦ Verify the power adapter is supplying DC 5V (≥1A). A low-quality power supply can cause issues. ◦ Check if the ON/OFF switch on the rear panel is in the "ON" position.

Problem	Possible Cause / Solution
No audio level display.	◦ Ensure the audio input source is active and providing a signal. ◦ Check if the MODE switch is correctly set to "LINE" for line input or "MIC" for microphone input. ◦ Verify audio cables are securely connected to the correct input ports. ◦ Adjust the display length gain using the remote control if the input signal is very low.
Display is erratic or frozen.	◦ This can be caused by an insufficient or unstable power supply. Use a reliable DC 5V (≥1A) power adapter. ◦ Try restarting the device by cycling the power switch.
Remote control not working.	◦ Ensure there are no obstructions between the remote and the device. ◦ Check and replace the CR2025 battery in the remote control if necessary.
Buzzing sound in audio chain (if used as splitter).	◦ Ensure proper grounding of all audio equipment. ◦ Try isolating the power supply for the VU56 PRO from other audio components. ◦ Use high-quality shielded audio cables.

10. Warranty and Support

Douk Audio products are designed for reliability and performance. For warranty information and technical support, please refer to the official Douk Audio website or contact their customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.
For further assistance, please visit: www.doukaudio.com

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Related Documents -

	Douk Audio VU56 PRO Music Spectrum Display & Audio Converter Manual Explore the Douk Audio VU56 PRO, an advanced music spectrum display with VU and PPM modes, featuring RCA and 3.5mm AUX inputs/outputs, remote control, and 8 display effects. This manual provides detailed usage instructions, specifications, and troubleshooting for optimal audio visualization and conversion.

	[DOUK AUDIO AS1424 LED Music Spectrum MIC Sound Level Analyzer - User Guide] Official user guide for the DOUK AUDIO AS1424 LED Music Spectrum MIC Sound Level Analyzer. Learn how to use its key operations, understand connections, potentiometer functions, view specifications, packing list, and find contact information.
	[Douk Audio VU2: Multi-functional VU Meter and Audio Splitter User Guide] Comprehensive guide to the Douk Audio VU2, a versatile analog VU meter and 4-way audio splitter/switcher. Learn about its features, usage instructions, and technical specifications for optimizing your audio setup.
	[Douk Audio VU9 & VU9 MINI Music Spectrum Visualizer User Manual] User manual for Douk Audio VU9 and VU9 MINI music spectrum visualizers, covering setup, operation, specifications, and troubleshooting for these LED audio display devices.
	[Douk Audio VU9 & VU9 MINI Music Spectrum Visualizer User Manual] Detailed user manual for the Douk Audio VU9 and VU9 MINI music spectrum visualizers, covering features, setup, operation, specifications, and FAQs. Enhance your audio experience with synchronized LED lights.
	[DOUK AUDIO VU1 PRO VU Meter & Audio Converter User Manual] Official user manual for the DOUK AUDIO VU1 PRO VU Meter and Audio Converter. Learn about its features, parameters, operation, and troubleshooting.