



### **FEATURES:**

- Balanced Stereo Analog Signals
- Controlled Ballistic 40 LED per Channel Display
- Phoenix-Style Connectors for Hard Wiring
- User Controls: LED Brightness, Channel R and L Sensitivities, Mode
- Display Mode: Loudness, Loudness + Peak, Loudness + Peak Hold, Sum/Diff
- Compact Design: 1RU, < 1-inch deep</li>

## **SPECIFICATIONS:**

Scale: -25dB to +14dB

Voltage: 12VDCCurrent: 750mAWeight: 2 lb / 900 g

## **ITEM INCLUDES:**

• (2) Phoenix-style Connectors

• (1) 12VDC/2A Power Supply





### **VU METER MODES:**

#### 1st Mode: Loudness:

When the unit first is powered on, it is in the FIRST MODE. You can see the Left side of the LEFT METER flash to indicate LOUDNESS MODE.

Loudness represents the average power level of a signal. If you think of an audio signal as a sine wave, with the x-axis being "no music" and the peak being full volume, you'll notice that you don't get full volume all the time, but at (almost) all times, you'll get some level of music. "Loudness" here is usually measured using the RMS method, and shows you the average amount of music/volume/power delivered over the cycle of that sine wave.



#### 2nd Mode: Loudness and Peak:

When the mode button is pressed again, the VU is in second mode, LOUDNESS & PEAK. The right side of the LEFT METER flashes.

**Peak** shows you where the actual peaks of those sine waves reach, usually quite a bit higher than the average level. This is very useful in digital audio where you *normally* don't want those peaks to exceed 0 dbfs, which will lead to pretty ugly clipping.





### **VU METER MODES:**

#### 3rd Mode: Loudness and Peak Hold:

When the mode button is pressed again, the VU is in the third mode, LOUDNESS & PEAK HOLD. The left side of the RIGHT METER flashes.

**Peak and hold** allows for the peaks on the VU meter to stay lit up for a longer so that the user doesn't miss something critical.



### 4th Mode: Sum and Difference:

When the mode button is pressed again, the VU is in the fourth mode, SUM & DIFFERENCE. The right side of the RIGHT METER flashes.

Sum and difference combines the left and right signals and shows, on one meter the loudness of both signals combined, and in the other, the level of what is different between them. This is useful for checking phase cohesion between the channels (if signals are out of phase, sum will be low and difference will be high) or for checking stereo spread between signals (i.e. mono will be all sum and zero difference).





#### **SAFETY PRECAUTIONS:**

- 1. To prevent fire or shock hazard, do not expose this equipment to high humidity and/or dust. Do not use in an unprotected outdoor installation nor any area classified as overly damp or wet.
- 2. The temperature for installation should be kept between 32°F to 140°F (0°C to 60°C). Avoid direct sunlight exposure or extreme changes of temperature over a short period of time.
- 3. Do not disassemble the unit as this voids the warranty.
- 4. Do not drop the unit and avoid heavy impact.
- 5. This unit should not be permanently installed unless proper ventilation is provided. Any enclosure openings must not be blocked or covered as they protect the unit from overheating.
- 6. Before cleaning, turn off the power and unplug the unit from all connections. Use a damp cloth. Do not use liquid or aerosol cleaners.
- 7. Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.
- 8. Enclosure entry is dangerous. Never push objects of any kind, including liquids, into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
- 9. Do not attempt to open or service this unit yourself as opening or removing covers may expose you to dangerous voltage and other hazards.
- 10. There are no user-serviceable parts inside the unit. If the unit requires service contact your authorized dealer, or an authorized repair service company.

