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Vancura Innovations, LLC

Imagination is more important than knowledge ... until you have to build what you've imagined.

Channel Listener CL-1 Operating instructions

Batteries

Channel Listener requires two AAA batteries for operation. The batteries may be either alkaline or rechargeable. Please note polarity when inserting the batteries. Although the unit will not be harmed if they are inserted backwards, it will not function either. Battery life depends on the capacity of the batteries and will operate about 10 hours on a pair of fresh 800mah alkaline batteries.

The power switch is on the top of the unit next to the BNC connector. Slide the switch to the ON position, and the unit will perform a power-on self-test, momentarily illuminating all of the LEDS. Make sure the unit is OFF when not in use to extend battery life.

Digital Audio Input

The BNC connector is a 75 ohm terminated input for the digital audio signal. Do not input a signal greater than 6 volts peak-to-peak continuous, or 9 peak-to-peak volts for more than 30 seconds.

Audio Output

The mini jack next to the BNC connector is for stereo headphones and provides audio output to verify program material. Output is 9 bits resolution maximum.

Signal strength

Signal strength indicates the peak-to-peak signal level of the digital audio stream, and the chart on the front label indicates the output level for each number. The unit will indicate levels from 0.5 volts to 6 volts. The value 5 is for nominal 1.0-volt peak-to-peak input.

Status LEDS

- 1. Lock Indicator: Illuminates when a valid 48Hz digital input (Audio or Data) is received that has a valid data format and a proper even parity.
- 2. Audio: Indicates that the status block is valid and that the digital audio bit is set. The LED will **blink** if the signal is a **D**igital **A**udio **R**eference signal (DAR).
- 3. Left @ -20dBFS: Left channel input is within +/-0.1dB of -20 dBFS.
- 4. Right @ -20dBFS: Right channel input is within +/-0.1dB of -20 dBFS.
- 5. L OK: Left channel is properly phased as determined from monitoring an approved polarity signal.
- 6. L REV: Left channel is inverted in phased as determined from monitoring an approved polarity signal.
- 7. R OK: Right channel is properly phased as determined from monitoring an approved polarity signal.
- 8. R REV: Right channel is inverted in phased as determined from monitoring an approved polarity signal.

Note: The Channel Talker CTD-8 generates an approved polarity signal for use with the CL-1.

Vu Meter

The VU meters are direct-from-digital peak-reading meters and indicate the audio channel levels in 3dB steps. The LED at –18dB is RED to indicate the audio is near –20 dBFS. See status LEDS 3 & 4 for being exactly at –20dBFS.

Warrantee

The CL-1 is warranted from defects in materials and in manufacturing for a period of 90 days.

Contact

If you have any further questions on the operation of the Channel Listener CL-1 please contact Vancura Innovations at 309.756.0769 on business days 8:00-6:00 Central time, or email anytime to info@vancura-innovations.com.