



Instruction Manual

OMX-VUM2TC

Dual Channel Audio
LED VU Meter

Thank you for purchasing this Ocean Matrix component. This unit is designed to give you years of trouble free professional operation for your most demanding applications. It is our goal to develop long term partnerships with our customers through our commitment to exceed their expectations.



OMX-VUM2TC Dual Channel Audio LED VU Meter

GENERAL OPERATION

Both audio format signals can be plugged into the unit, and can be active at the same time. A front panel slide switch marked "**B**" for **Balanced** and "**UB**" for **Unbalanced** will select which signal is being monitored. The OMX-VUM2TC will automatically calibrate to allow for the different signal characteristics between balanced and unbalanced signals.

SYSTEM INTERFACE

The OMX-VUM2TC is specially designed to interface transparently into audio signal paths.

DIRECT MONITORING: The OMX-VUM2TC is uniquely designed to plug in anywhere in the audio signal path. To directly monitor an audio signal simply plug into the proper connector. The high input impedance circuitry will not load down the signal but will still monitor correctly.

IN-LINE MONITORING: The OMX-VUM2TC can be "looped" in-line with an audio signal. Using an AUDIO "T" CONNECTOR for either XLR or RCA, the source signal can be connected to the OMX-VUM2TC and then looped out to continue to another audio device such as an amplifier, VTR or mixer. In this configuration the destination device will provide the signal impedance load and the OMX-VUM2TC will properly display the audio level under load.

DISPLAY SECTION

On the right side of the front panel is a switch marked "DOT" on top and "BAR" on bottom. This allows the user to select between Bar and Dot style display on the LEDs.

A BRIEF WORD ON AUDIO

There is a great deal of incorrect information concerning audio levels and how to measure them. The following chart may help in determining the various audio level issues. Use it as a reference to better help you understand your audio needs.

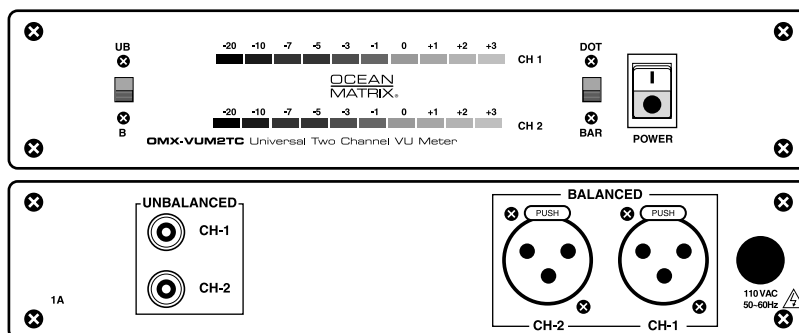
DECIBELS	RATIO	dBV (pp)	dBv (rms)
+20dB	10.0 x	10.0 volts	7.75 volts
+10dB	3.2 x	3.2 volts	2.45 volts
0dB	1.0 x	1.0 volts	.775 volts
-10dB	.32 x	.32 volts	.245 volts
-20dB	.1 x	.1 volts	.077 volts
-30dB	.032 x	.032 volts	.024 volts
-40dB	.01 x	.01 volts	.008 volts
-50dB	.003 x	.003 volts	.002 volts
-60dB	.001 x	.001 volts	.0008 volts
-70dB	.0003 x	.0003 volts	.0002 volts

- +8dBv (1.95 volts) = 0VU for the broadcast industry
- +4dBv (1.23 volts) = 0VU for the recording industry
- -10dBv (0.245 volts) = 0VU for home multi-track recording equipment
- -15dBv (0.138 volts) = 0VU for musical instrument level equipment

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The VUM-2TC is a precision audio level measurement tool for confirmation and/or calibration of line level audio signals. The VUM2TC is factory calibrated and requires no user adjustments. The OMX-VUM2TC is designed to work with either Balanced Audio or Unbalanced audio. Separate connector inputs are provided for either format. Female XLR connectors are provided for the Balanced signals and RCA phono type are provided for Unbalanced audio.

SPECIFICATIONS

NUMBER OF INPUTS:	2 XLR Female, Balanced Audio, Hi-Z Bridging 2 RCA Female, Unbalanced Audio, Hi-Z Bridging
FREQUENCY RESPONSE:	10-60Khz
INPUT RANGE:	Calibrated for 0vu at 1.023 Vp-p sinewave@ 1000Hz Max display +3VU
CONTROLS:	Unbalanced input select: Bar or Dot select
POWER:	110VAC 50/60Hz, 10 Watts (220V Model OMX-EU/VUM2TC)
DIMENSIONS:	1.625"H x 8.25"W x 6"D. Rackmountable with optional OMX-RK2 kit. OMX-RK2 Holds 2 units side by side.
WEIGHT:	3.5 lbs. (less shipping carton)

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