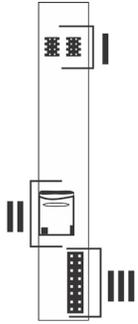


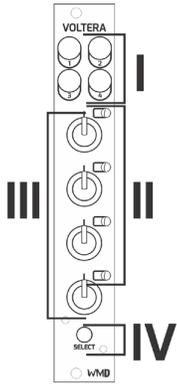
# VOLTERA EXPANDER

## REAR CONNECTIONS



- I. **EXP:** 2x proprietary bus connectors for connecting multiple Metron and Volteras.
- II. **MEMORY CARD:** Voltera requires a memory card to be present at all times.
- III. **POWER:** Voltera uses a 16 pin power connector. No power is consumed from the +5V.

## FRONT PANEL OVERVIEW



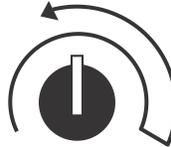
- I. **OUTPUTS:** 4x bi-polar CV outputs. Ranges from -5V to 5V.
- II. **TRACK LED:** 4x bi-color LED's associated with the track label.
- III. **TRACK KNOB:** 4x potentiometers for entering data and selecting tracks.
- IV. **SELECT BUTTON:** Back lit momentary push button used for output takeover, and viewing set voltages.

## CONNECTING VOLTERA AND METRON

The EXP headers on the back of Metron and Voltera make it extremely simple to connect expanders to Metron. Connect one 8-pin ribbon cable, supplied with Voltera, to either of the two EXP headers on Metron. Be sure to orient the red stripe toward the white dot printed next to the "EXP" label. Connect additional Voltera's either to each other or to the second EXP header on Metron. Finally, place the EXP TERM covers on open headers. Indicators must be facing the same direction (down) on the covers and pcb. It is generally best practice to string or chain Metron and Volteras one by one, and place EXP TERM covers at either end of the string.

If a visual explanation would be more helpful, check out the Voltera playlist on our Youtube channel. <https://youtube.com/wmdevices>

## TRACK SELECT "TURN" GESTURE



Because there are no individual track select buttons on the Voltera unit, the knobs are used to select each track using the "turn" gesture.

Perform the "turn" gesture by turning a knob to the full CW position then a small turn back in the CCW position.

## Functions That Use The "Turn" Gesture

The following Metron track functions are available to Voltera tracks by using the "turn" gesture:

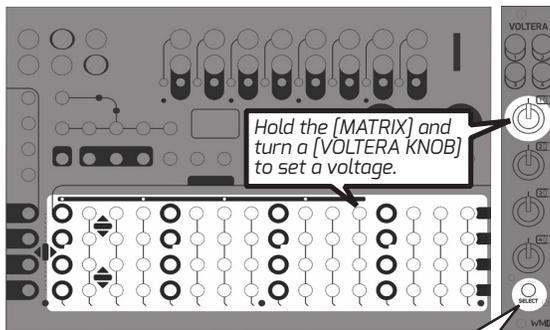
- DUPLICATE**
- CLEAR**
- SPECIAL FUNCTIONS: PL.DUP, CONTRACT, EXPAND**

Other Metron track functions like **NUDGE** and **PTN LENGTH** can be performed on a Voltera track by moving a Voltera [TRACK KNOB] or pressing the [SELECT] button followed by the Metron [MATRIX] buttons normally associated with the mode.

## BASIC FUNCTIONS

### "Last Event" Method of Operation

Voltera is a "last event" sequencer. This means that the outputs will always hold the voltage of the "last event" sent to them. Setting a step will not send an event to the output until the sequencer plays that step.



### Setting a Voltage on a Step

Set a Voltage on a step by holding a Metron [MATRIX] button and then turning the [VOLTERA KNOB] associated to the output the user would like to set the voltage on. The voltage or quantized v/oct value will be displayed on Metron's [CURRENT STEP DISPLAY] as well as Voltera's [TRACK LED].

### Voltage Display



#### RED/GREEN TRACK LED

Positive Voltages are Green, negative voltages are Red.



#### NON-QUANTIZED VOLTAGE

Display shows volts. See LED for positive or negative indication.



#### QUANTIZED VOLTAGE

The leftmost digit displays the note. The center indicates whether the note is flat. The rightmost digit is the octave.

### Audition Step While Setting Voltage

Pressing the [SELECT] button before or while setting a voltage on a step will "Audition" the voltage of that step. The output voltage will be directly set by the knob as long as the [MATRIX] button is held.

### Live Takeover

Holding the [SELECT] button on Voltera before turning the [VOLTERA KNOB] will set the output to "Live Takeover." When this is enabled the [VOLTERA KNOB] directly sets the voltage of the corresponding output. Regardless of the state of the sequencer. When the user releases the [VOLTERA SELECT] button the output will return to normal sequencer driven operation.

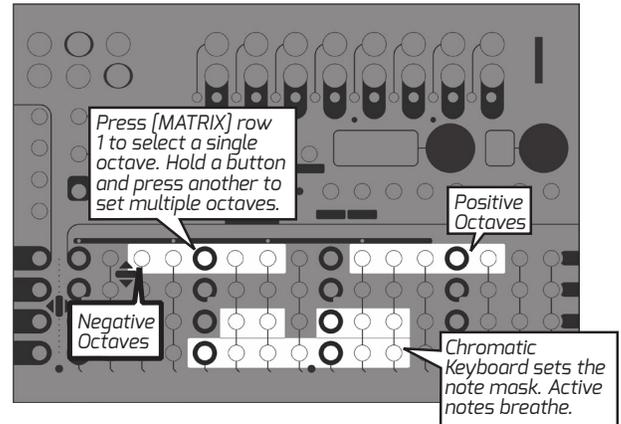
## KNOB INPUT RANGE

Voltera offers a number of knob input ranges for more detailed entry of control voltage data. Voltera's outputs always offer a -5V to +5V voltage range. The sequence will play as it was written regardless of the current input range. Enter this mode by moving any Voltera knob while viewing Global Settings. The currently selected Voltera track will show on the COUNTER display.

5-5	-5V to +5V no quantization	595	-5V to +5V 12 tone quantize
0-5	0V to +5V no quantization	095	0V to +5V 12 tone quantize
1-1	-1V to +1V no quantization	191	-1V to +1V 12 tone quantize
USr	User Scale		

## USER SCALE

The Voltera user scale allows you to set a custom scale with a custom octave range per output. The user scale is saved and recalled on power up as well as when a session is saved or loaded. Active notes and octave ranges will blink with a breathing pattern.



## GUESS WHAT!? THERE'S MORE!!!

Head to <https://wmdevices.com/products/metron> and download the updated Metron manual to find out about even more new features Voltera offers!

## SPECS

### Dimensions:

Width: 4HP (20.32mm)  
Height: Eurorack 3U (128.5mm Panel, 112mm PCB behind panel)  
Depth Including Cables: 43mm

### Power:

16 pin Eurorack standard power cable  
Reverse Polarity Protected  
• Do not connect power to expansion headers.  
Typical Power Consumption: +12V: 60mA, -12V: 15mA

### Outputs:

Channel Outputs 1-4: 470Ω Impedance, -5V to +5V  
Channels are simultaneously updated.  
Channel Outputs are Impedance compensated.

### Regulatory:

RoHS, CE, & WEEE Compliant  
Made with Lead Free solder and processes.

### Warranty:

All products manufactured by WMD are warranted to the original purchaser/ consumer, to be free from defects in material and workmanship for a period of one (1) year from date of invoice. The product must be sold by an authorized WMD dealer. Warranty will include labor and materials when proper use, application and maintenance procedures are followed. You can contact the WMD service department at [service@wmdevices.com](mailto:service@wmdevices.com). WMD will have no obligation whatsoever under this warranty, with respect to any of the following: Equipment that is (i) not used or maintained in a normal and proper manner, in accordance with all manuals and instructions; and (ii) Equipment that is modified, altered or repaired without the prior written approval of WMD. THE WARRANTY STATED HEREIN IS PERSONAL TO THE ORIGINAL PURCHASER AND WMD MAKES NO OTHER WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE EQUIPMENT FURNISHED HEREUNDER AND DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ABOVE WARRANTY SHALL CONSTITUTE BUYER'S EXCLUSIVE REMEDY WITH RESPECT TO THE EQUIPMENT FURNISHED HEREUNDER.



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