

# How to Install and Set up the VoltageMinder

## Mounting

Secure the VoltageMinder in the workroom within 7 feet of a 120Vac grounded receptacle.

## Preparing the Nest and Ground Rod

Choose the designated area on the nest where the supplied copper clamp will be attached. Using a 7/64 bit drill a hole for the mounting of the ground clamp and scratch the nest to ensure a solid connection between the nest and the copper clamp. (Figure 1)

Drive a separate 4 ft x 1/2" ground rod (not included) for each channel near each nest being monitored. (Figure 2)

## Channel Monitoring Leads

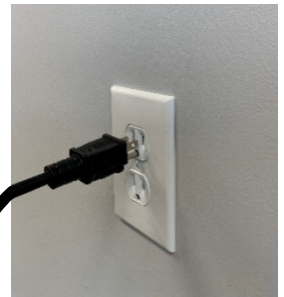
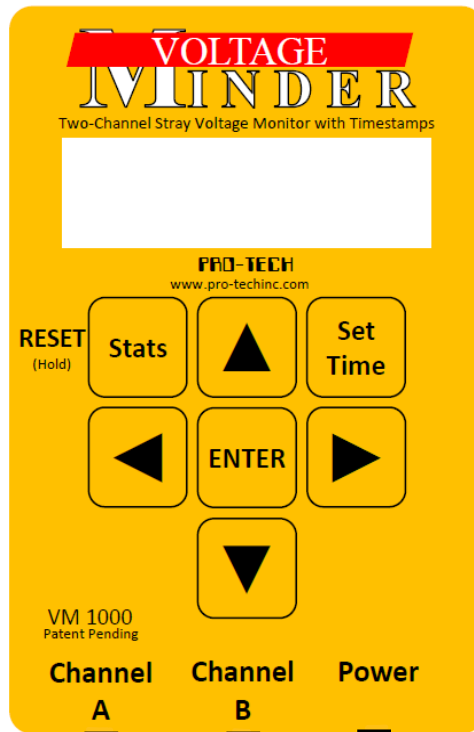
Solidly connect one wire from each set of channel leads (Channel A and B) to the metal part of the nest using the supplied nuts and bolts. Make sure the connections are tight! Connect the other wires from the channel leads to the driven ground rods using the supplied ground clamps. The channel leads are not polarized, since the VoltageMinder monitors AC voltage.

After all connections are secure, power the VoltageMinder by plugging it into the AC receptacle.

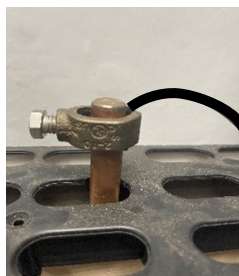
(Figure 1)



(Figure 2)



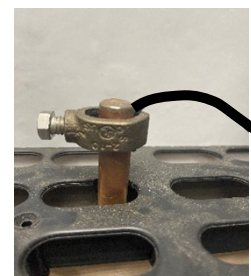
Channel A  
Nest Connection



Channel A  
Ground Rod Connection



Channel B  
Nest Connection



Channel B  
Ground Rod Connection

## Set Date and Time

Press “Set Time.” The screen displays the date and time. Press ◀ and ▶ to move the cursor underneath the characters. Press ▲ and ▼ to make changes.

Once the date and time are correct, press “ENTER”, the screen displays “Date and Time Accepted.”

The unit retains data from factory production. To clear the data hold “Stats” and the screen displays “RESET ACCEPTED.”

## Basic Operation

The VoltageMinder takes a voltage reading every 5 seconds. If stray voltage over 1.5V<sub>AC</sub> is detected the unit records and stores data. The screen flashes in the event of a voltage reading over 3.0V<sub>AC</sub>.

- **Maximum**

When a higher voltage than the previous maximum recorded is detected the unit updates the statistics.

- **Average**

If a minute has passed since the last recorded average event, the unit recalculates the average and stores another event.

- **Event with Timestamp**

If a minute has passed since the last recorded event, and the voltage reading exceeds the “Caution” level (1.5V<sub>AC</sub>) or the “ACTION NEEDED” level (3.0V<sub>AC</sub>), the VoltageMinder records the event. When viewing Stats, “#1” displays on screen with Timestamp.

**IMPORTANT!** Make sure you return to the main screen every time you view statistics or set the date and time. The VoltageMinder does NOT take readings if the date and time are being set or the statistics are being viewed. To make sure the VoltageMinder is taking readings, observe the screen to see if the bottom row displays, “Acceptable,” “Caution,” or “ACTION NEEDED!”

## Viewing the Historical Data

To view the statistics, press “Stats”. In the Stats information screens, you can observe the following information:

1. Average Voltage for **Channel A** with Timestamp since the last RESET
2. Average Voltage for **Channel B** with Timestamp since the last RESET
3. Maximum Voltage for **Channel A** with Timestamp since the last RESET
4. Maximum Voltage for **Channel B** with Timestamp since the last RESET
5. Voltage Events for each channel with Timestamp

To cycle through the data, press “ENTER” or “Stats”. When you reach the Voltage Events screen, scroll through the events using ▲ and ▼. The most recent event displays first, and the channel of the event displays in the top right corner.

All events are recorded with a Timestamp. The VoltageMinder can store a maximum of 90 events.

## Notes

If power is lost the VoltageMinder retains historical data, date, and time for up to 10 days. Upon data loss you must reset date and time.

### WARNINGS

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT OPEN THIS COVER WITHOUT DISCONNECTING POWER.

WHEN THIS UNIT IS USED IN A LIFE SUPPORT VENTILATION SYSTEM WHERE FAILURE COULD RESULT IN LOSS OR INJURY, THE USER SHALL PROVIDE ADEQUATE BACK-UP CONTROL FACILITIES OR ACCEPT THE RISK OF SUCH LOSS OR INJURY.

THIS APPLIANCE IS OFFERED FOR SALE SPECIFICALLY ON THE BUYER'S ACCEPTANCE OF THE ABOVE CONDITIONS AND THE MANUFACTURER'S WARRANTY FOR THIS APPLIANCE. ACCEPTANCE, RETENTION, INSTALLATION, OR THE OPERATION OF THIS APPLIANCE BY THE BUYER SHALL BE CONSIDERED AS ACKNOWLEDGEMENT AND ACCEPTANCE OF THE ABOVE CONDITIONS.

### LIMITED WARRANTY

Pro-Tech18, Inc. warrants this product to be free from defects in material and workmanship for a period of six months from the date of purchase if is used for the purpose for which it is intended.

Pro-Tech 18, Inc. will repair or replace this product if it proves to be defective in material or workmanship.

Pro-Tech 18, Inc. will not cover incidental or consequential damages or damage due to misuse of the product.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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