**30 DAY SATISFACTION GUARANTEE**

POWER WIZARD, INC. guarantees your complete satisfaction with this fence energizer. If you are not satisfied w\ 26th this product, ou may return the energizer to the original place of purchase within 30 days of purchase for a full refund. Proof of purchase is required for a refund.

**LIMITED WARRANTY**

POWER WIZARD, INC. warrants this fence energizer to the original purchaser only, for a period of thirty-six (36) months\ 34from the date of purchas, when installed a\ 31d used in accordance with the enclosed installation instructions. The two exceptions are the \ 24olar panel and the battey are under warranty for 12 months. Proof of purchase is required for warranty consideration. This warranty covers defects in materials and workmanship to the fence energizer. The warranty also covers damage to the energizer caused by lightning.

**TERMS THAT APPLY TO BOTH THE GUARANTEE AND WARRANTY**

Improper installation, misuse, neglect, tampering, or any other reason not related to material or workmanship are NOT covered under the 30-Day Guarantee or the Limited Warranty. No warranty other than the above is expressed or implied. Implied warranties of merchantability and fitness for a particular application are hereby disclaimed unless the law specifically precludes this disclaimer. The manufacturer and seller shall have no liability for damages, incidental or consequential, resmlting from or caused by any failure, malfunction or defect of any product.

The sole obligation of Power Wizard, Inc. shall be limitedm\ 35o repair or replacement, at its option, of the defective fence energizer or part.

## TO MAKE A WARRANTY CLAIM

1. First disconnect energizer from fence and confirm that voltage output at the energizer terminals is not normal.
2. Before returning product under warranty, you must call Power Wizard at (800) 866-2161 to obtain a Return Goods Authorization number and a shipping address for the service center that will process the return. The RGA number must accompany the returned product.
3. Attach a note showing your name, phone number, return address and brief description of the problem.
4. Pack product carefully in oversized carton with crushed newspaper for cushioning.
5. Your product should be shipped **prepaid** and insured againsmt shipping loss or damage.

POWER WIZARD®
SHOCK TECHNOLOGY

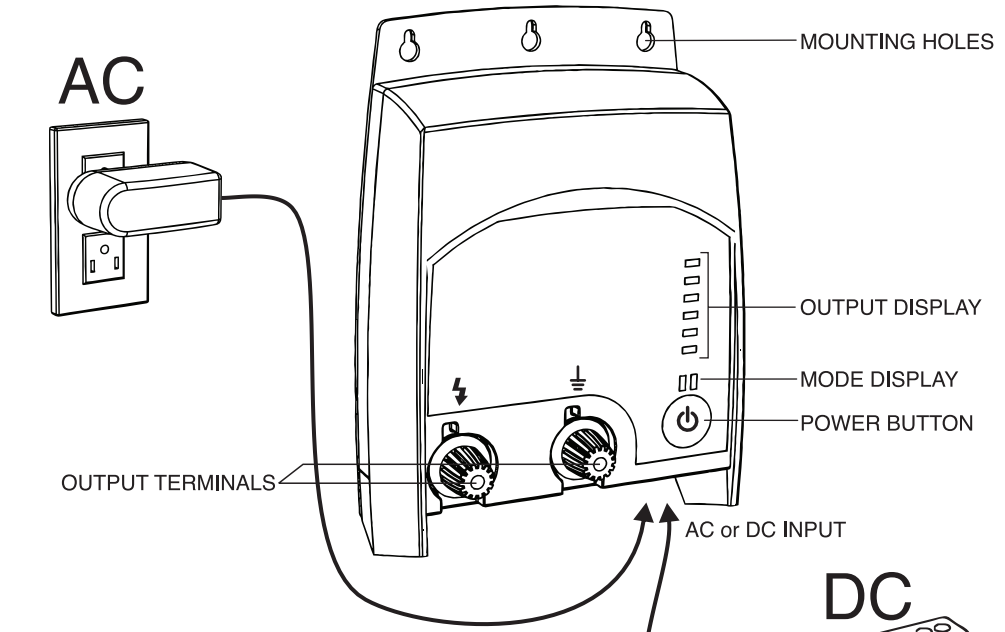
10375 State Route 43
Streetsboro, OH 44241
Phone: 800.866.2161
Fax: 330.562.7403
www.powerwizardinc.com

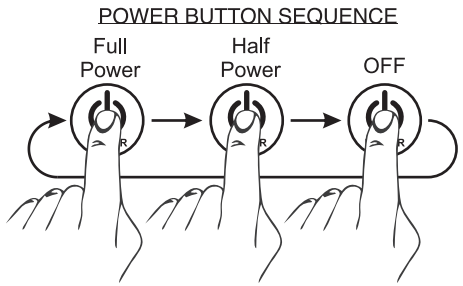
Rev. 02 -11

*EMPTY SPACE FOR BRAND, PRODUCT, MODEL, SPEC.*

# AC/DC Dual Power Electric Fence Energizer

## Installation, Operating and Warranty Instructions




SAVE THESE INSTRUCTIONS

## READ BEFORE YOU INSTALL YOUR ELECTRIC FENCE ENERGIZER | PAGE 1

**WARNING: READ ALL INSTRUCTIONS BEFORE INSTALLATION.** Only use electric fence controller for the purpose indicated in this manual.
**CAUTION:** To reduce the risk of electric shock **do not** remove cover. Refer to service personnel. **Always** turn off energizer before handling.
**WARNING: Do not** connect simultaneously to a fence and any other device such as a cattle trainer or a poultry trainer. Otherwise, lightening striking your fence will be conducted to all other devices.
**WARNING: NEVER** put more than one energizer on a fence. Doing so can be hazardous, and may also damage the energizer.
**WARNING:** In areas prone to brushfires turn off the fence controller on very dry days.
**WARNING:** During lightning storms do not disconnmct wires or approach the electric fence.
**WARNING: NEVER** electrify barbed wire or similar fence types were humans or animals can become entangled in the fence or caught against the fence.
**WARNING: Do not** operate electric fence controllers near any combustible materials including gasoline, cleaning fluids and kerosene.
**CAUTION:** RISK OF ELECTRIC SHOCK. Do not install wmere small children, the elderly or unhealthy persons may come in contact with the live portions of electric fencing. Use electric fence warning signs where humans may come in contact with the fence.
**WARNING:** Follow all national, state and local codes and regulations that apply to installation of electric fence in your area.
REFER TO AUTHORIZED REPAIR CENTER FOR SERVICE. Never alter the design of the energizer. Doing so is hazardous and will void the warranty.
**WARNING: DO NOT** run fence wire above ground near high voltage power lines. If too close, the electric fence may pick up dangerous levels of power from high voltage lines. Do not cross under a high voltage line with electric fence.
**WARNING:** Electric fences are very effective psychological barriers when properly installed and when animals are trained to the fence. Electric fences are NOT complete physical barriers. Erratic animal behavior cannot be predicted and occasional fence penetration can occur. Therefore, Power Wizard assumes no liability for animal containment, injury or the consequences for the misuse of the equipment.

**Note:** The fence hot terminal is either indicated by a red knob or a lightning bolt symbol ( ϟ ) and the ground is indicated by a black knob or an arrow symbol ( ⏚ ).

## SPECIFICATIONS, FEATURES, AND APPLICATIONS

- 120V AC with AC power adapter
- External 12V rechargeable battery NOT INCLUDED
- Full-Power and Half-Power modes – User selectable full or half power mode.
- Fence Voltage Indicators – LED indicators let you know the terminal voltage, and if your fence has too many shorts
- Battery Voltage Indicators – LED indicators let you know when to swap you current battery with a fully charged battery.
- 1J or 3J Joule output depending on the model (not stored energy, but output onto the fence)
- Easy mounting with 3 optional mounting holes on the top of the unit and 2 at the bottom

## KEYS TO SUCCESSFUL ENERGIZER INSTALLATION | PAGE 2

**Take care of the 5 following details and you will prevent many hours of extra work.**

1. Grounding - Carefully install a complete ground system. Most electric fence failures are caused by an improper ground system (see Diagram #1).

2. Connections – Carefully connect lead out wire, ground wire and fence line splices. This is the second most common cause of electric fence failure. Use clamps, split bolts and taps for securing wire connections. Make sure all connection surfaces are of bare, shiny metal (see Diagram 2, Wire Splice and Connections).

3. Use adequately insulated hook-up wire (rated for at least 20,000V) where the hot wire must travel underground. Never use standard household insulated wire, which is typically rated for only 600 volts or less.
4. Maintain at least 75 feet from buried and above ground: utility company ground rods, water pipes, metal siding, telephone wire and stock watering tanks.

5. Finally, it is very important that an animal's first experience with an electric fence shock is one of respect. Some animals require more than one shock experience for lasting respect of the fence line. Always train the animal to the fence prior to unsupervised entry into pastures by insuring that the animal's first approach to the fence is slow, without stress and that an effective repelling shock is experienced.

**Tools Needed**

1. Hammer or Screwdriver – for mounting energizer
2. Wire cutters – to cut and strip insulation
3. Post driver – to install ground rods and posts
4. Digital volt meter – for electric fence testing and troubleshooting

**Accessories Needed**

1. 1 to 3 galvanized ground rods – minimum 4-6 feet by 1/2” (minimum) diameter
2. 1 to 3 ground rod clamps
3. Insulated underground hook-up wire – 25 feet (20,000V rating)
4. Line clamps
5. Highly Recommended: 1 lightning choke and 1 lightning diverter or a combination choke and diverter. Lightning is the number one cause of failure for electric fence energizers.
6. Nails of screws for mounting

**Installation STEP 3: Connect energizer ground terminal (black) to your ground Rod/s**

The "ground system" consists of 1 or more highly conductive ground rods driven into the soil and then connected by wire to the ground terminal of your fence energizer. The ground system allows current to flow through the soil to complete the circuit needed for delivering an effective shock.

1. Locate an area of soil for placing ground rods that contains good conductive earth (not sandy or rocky). Soil that is moist throughout the year is best. The ground system should be located within 75 feet of your fence energizer and at least 25 feet from buildings.
2. Locate ground system a minimum of 75 feet away from: Utility company (electric, gas, water) ground system, underground water pipe, metal water tanks, and metal siding on building (minimum 25 ft. away).
3. Drive one 4-6 foot (6 foot preferred) by 1/2" (minimum) galvanized ground rod into the ground. Leave 6 inches above the ground for securing ground clamps. Mark the area as a hazard.
4. If more than 1 ground rod is used connect the ground rods, in a series, 10 feet apart, with one piece of continuous 10 to 14 gauge galvanized wire. Use clamps to secure the wire to the ground rod. The ground hook-up wire should be equal to or larger than the diameter of the fence line wire.

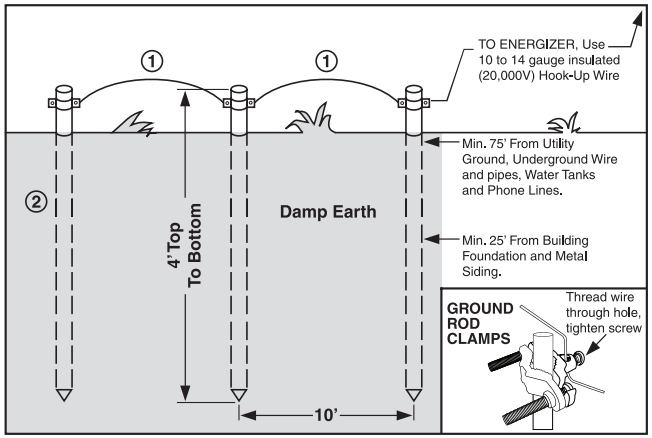



Diagram 1 – Ground System Installation

1. 12-14 gauge galvanized fence wire.
2. Ground rods – 4 feet long by 1/2" (or more) in diameter, galvanized steel rods.

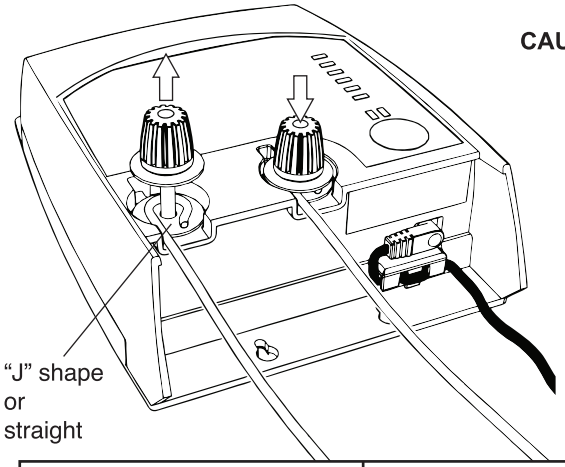
IMPORTANT:
Avoid pounding your ground rods into SANDY, DRY and ROCKY soil.

**Installation STEP 4: Connect the fence hot (red knob) terminal**

**Note:** Ensure the energizer is OFF before making this connection or you will be shocked.

1. Refer to the red fence terminal knob on the front/bottom of the energizer. The red knob is under small lightning bolt on the front label.
2. Unscrew the fence terminal knob without fully removing it. Make a "J" shape in a bare end of hook-up wire, wrap this bare end of wire around the fence terminal bolt between the two washers, and hand tighten the red knob. Do not use pliers or other tool to over tighten the knob or you may damage the knob. 10 to 14 gauge insulated lead-out wire (rated at 20,000V) is commonly used for this.
3. Properly connect the other end of the wire to your fence. A split bolt line tap is a common means of connection. Refer to the WIRE SPLICING AND CONNECTIONS diagram for other connection means.






**CAUTION:** Only hand-tighten the fence terminal knobs on the energizer. DO NOT use pliers or other mechanical means or they may be over-tighten, and damage may occur that will void your warranty.

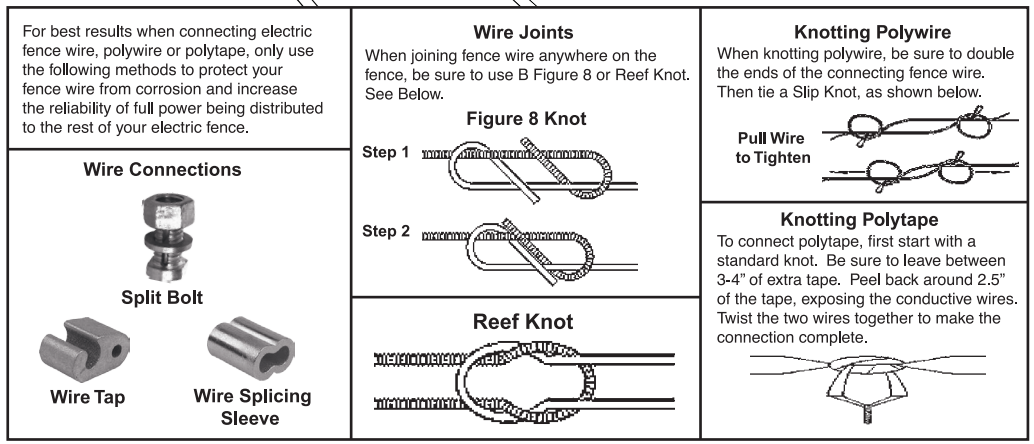


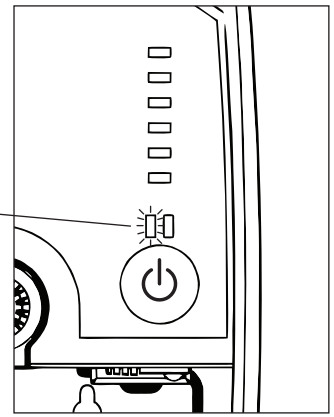

Diagram 2 – Wire Splicing and Connections

Installation STEP 5: Turn on and Test

Turn on

- With the desired power cable (120V or 12V battery) connected to your energizer, and the energizer off, press and release the energizer pushbutton one time. You will be in full-power mode and the full-power LED will be lit.

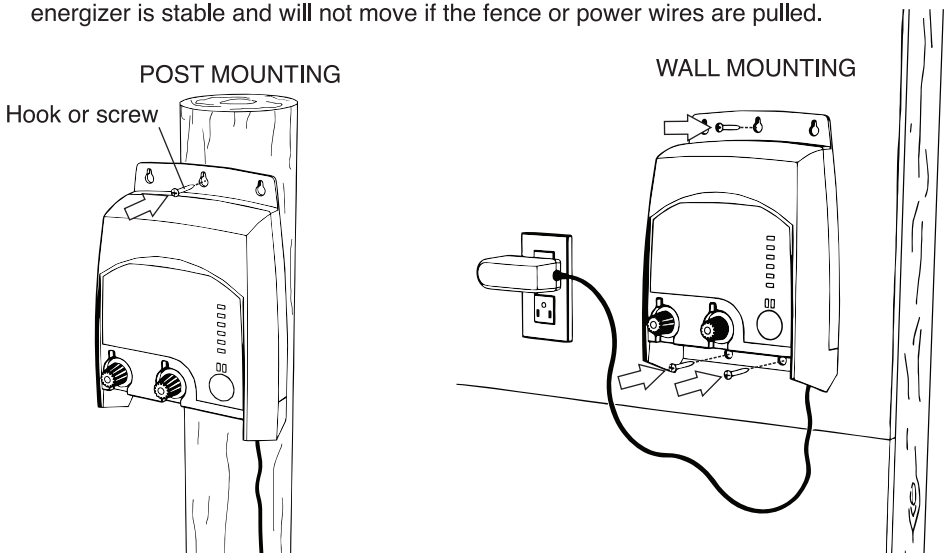
- Immediately after power-on, for an approximate duration of 5 seconds, the front panel LEDs (lights) will be flashing in a sequence as it's performing a self-check. After the self-check has completed the energizer will produce the high voltage pulse about every 1.5 seconds.



**Installation Instructions (Steps 1-5)**

**Installation STEP 1: Mount The Energizer**

Using the energizer's 3 upper mounting keyholes and the 2 lower mounting keyholes, drive either screws or nails into a stable wooden surface to mount the energizer.
Not all energizer mounting holes are needed, but use as many as possible to ensure the energizer is stable and will not move if the fence or power wires are pulled.

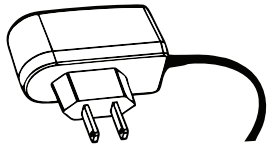



**Installation STEP 2: Connect Power and Test Energizer**

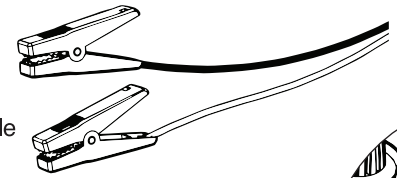
**Connect Power**

There are two power options for your dual power AC/DC energizer: 120V mains or 12V battery.

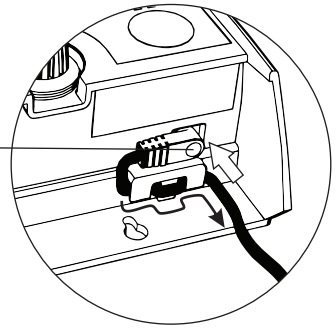
- **120V mains**
  If you have access to a 120V mains power plug, then use your AC adapter to power your energizer.



- **12V battery**
  If you don't have access to 120V mains then use the battery clamp wire assembly to connect to a 12V rechargeable battery to power your energizer.



- Connect the desired power source to the energizer at the base of the unit. Both power sources use the same socket. Tuck the power cable up into the cable strain relief to avoid accidental disconnection.



Note: 120V mains power is the preferred power connection, if you have access to it, since it saves you time from periodically swapping and recharging batteries.



**Test Energizer**

- With the energizer off, and disconnected from the fence, press and release the energizer pushbutton.
- The energizer will go through a power-on self test for about 5 seconds as represented by the LEDs sequence.
- After power-on self test completes, the unit will start putting a high voltage pulse onto the energizer terminals.
- The vertical row of green LEDs will light. The more that light, the higher the energizer pulse voltage.

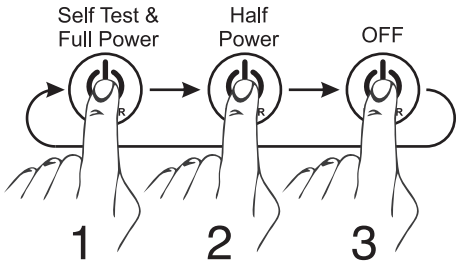
**Full or Half-Power selection**

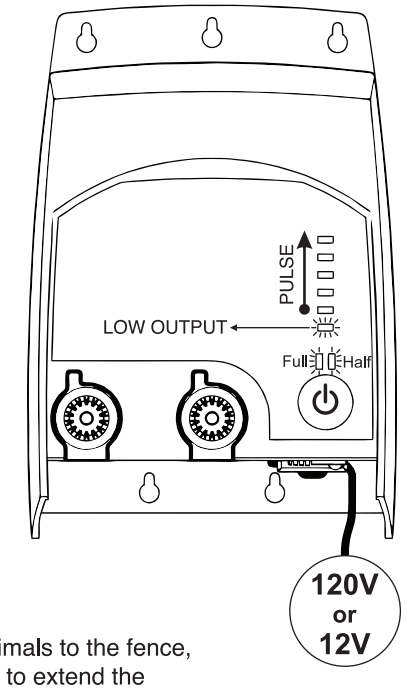
Start with the energizer OFF.

- Press and release the push button one time. You should now be in full power mode and the full power green led will be on continuous to identify full-power mode.
- Press and release the push button another time (while in full-power mode). You should now be in half-power mode and the half-power green LED will be on continuously to identify half-power mode.
- While in half-power mode press and release the push button another time and the unit will turn off.
- Thus, the unit cycles from (off) to (full power) to (half-power) and to (off) as you press and release the push button.

**WARNING**
**Use only 12V rechargeable lead acid battery if powered by an external battery**

POWER BUTTON SEQUENCE




Note: Full-power is the normal operating mode.
Half-power mode is mainly used to train young animals to the fence, train new animals to the electric fence, if you want to extend the number of days before swapping batteries, or if you are not concerned about predator animals.