

POWER WIZARD®

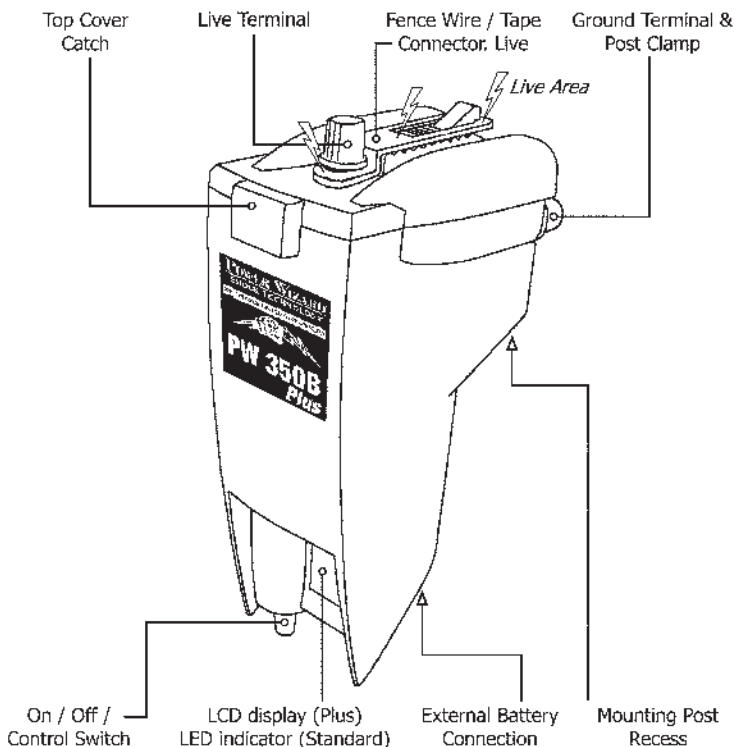
Read All Instructions

For Models:

PW-350B & PW-350B PLUS

High Performance Fence Energizer with 4 internal D-cell batteries or external 6-12V.
Powers up to 35 acres or 15 miles of multi-wire overgrown fence.

WARNING
Risk of Electric Shock



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IMPORTANT - READ THE FOLLOWING SAFETY CONSIDERATIONS CAREFULLY:

1. **WARNING: DO NOT CONNECT ENERGIZER SIMULTANEOUSLY TO A FENCE AND TO ANY OTHER DEVICE SUCH AS A CATTLE TRAINER OR A POULTRY TRAINER. OTHERWISE, LIGHTNING STRIKING YOUR FENCE WILL BE CONDUCTED TO ALL OTHER DEVICES.**
2. **CAUTION: RISK OF ELECTRIC SHOCK.** Do not install where small children, the elderly or unhealthy persons may come in contact with the live portions of electric fencing. Use Electric Fence Warning Signs wherever humans may come in contact with the fence.
3. **NEVER** electrify barbed wire or loose fencing materials that risk entanglement of a human or animal. Exposure to continuous or multiple shocks is very dangerous.
4. **STAY AWAY** from the fence energizer and from the fence line just before and during lightning storms.
5. **FOLLOW** all National, State and Local regulations that may apply to installation of electric fence.
6. **REFER TO AUTHORIZED REPAIR CENTER FOR SERVICE.** There are no user serviceable parts. Never alter the design of the energizer. Doing so is hazardous and will void the warranty.
7. **NEVER** put more than one energizer on a fence. Doing so is dangerous because it may reduce time off between pulses, may damage the energizer and will invalidate the warranty.
8. **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 the high voltage lines. Never cross under a high voltage line with electric fence.
9. **ALWAYS** maintain an adequate ground system securely attached to the energizer.
10. **NEVER** charge a battery that is connected to a fence energizer. Always disconnect the battery from the energizer first.

Keys To Successful Energizer Installation

Take care of the following details and you will save many hours of labor time.

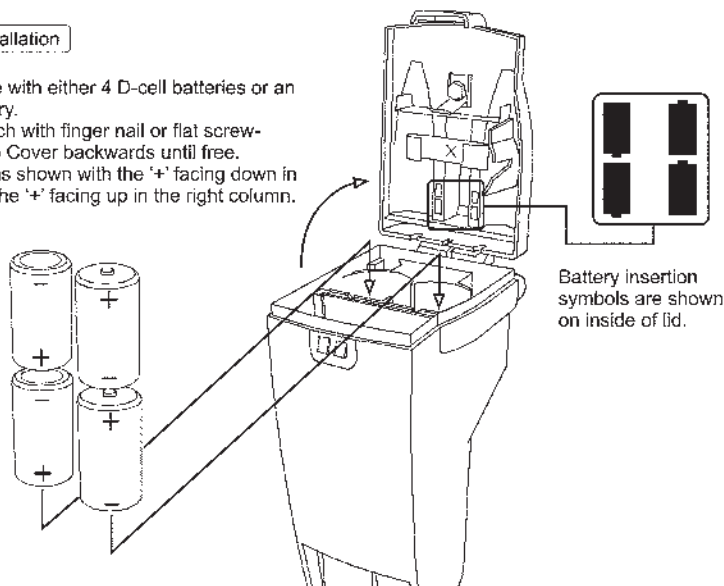
1. Use the correct size energizer. If your energizer is underpowered for the fence condition and application you want to energize, your electric fence will not work.
2. Carefully install a complete ground system. Most electric fencing failures are due to improper grounding.
3. Take time to properly connect 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. Make sure all connection surfaces are of bare shiny metal.
4. When using wire for fence and earth connections, use adequately insulated hook-up or underground wire (rated for at least 20,000 Volts) for lead out wires to ground and fence and anywhere the hotwire must travel underground. Never use standard household insulated wire, which is generally rated at only 600 volts or less.
5. Maintain proper distances from buried and above ground; utility company ground rods, water pipes, metal siding, & telephone wire.
6. Use an Electric Fence Volt Meter to periodically check the condition of your fence and to diagnose and repair shorts, poor connections and inadequate ground conditions.
7. Finally, it is important that an animal's first experience with an electric fence shock is one of respect or fear. Some animals require more than one shock experience for lasting respect of the fence line. Always train the animal to the fence by insuring that the animal's first approach to the fence is slow and that an effective repelling shock is experienced.

Internal Battery Installation

Both models operate with either 4 D-cell batteries or an external 6-12V battery.

Open Top Cover catch with finger nail or flat screwdriver and rotate Top Cover backwards until free.

Insert the 4 D-cells as shown with the '+' facing down in the left column and the '+' facing up in the right column.



Battery insertion symbols are shown on inside of lid.

External Battery connection

The PW-350B is also able to operate with an external 6 or 12V battery.

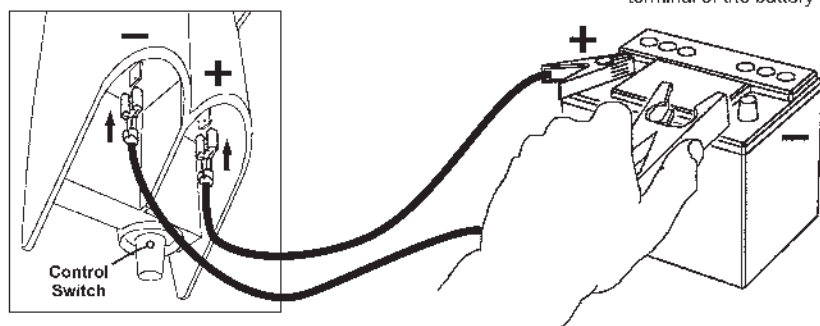
To connect the External Battery, first remove the internal D-cells. Connect the wires provided to the underside of the unit using flat female connectors.

The '+' on the same side as the control switch and the '-' on the other.

WARNING

**INTERNAL BATTERIES MUST
BE REMOVED BEFORE
EXTERNAL BATTERY IS
CONNECTED**

Use the battery clips to connect to the corresponding terminal of the battery



Tape / Wire Connection

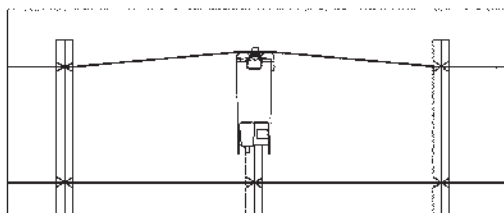
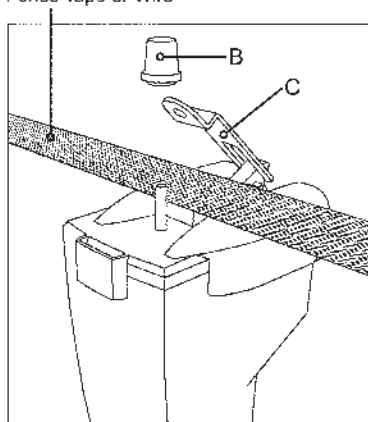
To connect the fence wire or tape, loosen the Live Terminal Knob (B) and remove.

Lift up the Fence Wire Clamp (C) and place the fence wire or tape underneath.

Replace the Fence Wire Clamp (C) and Terminal Knob (B) and tighten sufficiently until a good connection is achieved.

Do not over tighten.

Fence Tape or Wire



Post Mounting Methods

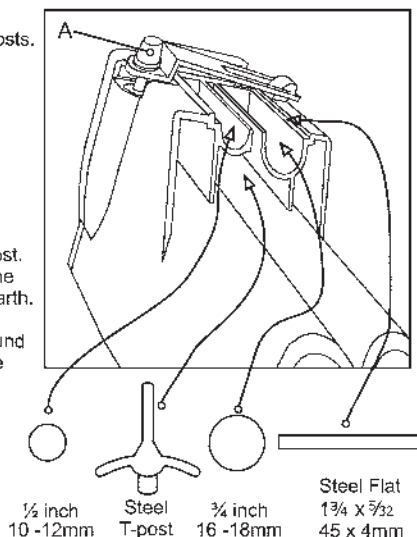
The PW-350B can be mounted to 4 different types of posts. On the back are the various channels for this use.

Loosen the Post Clamp/Ground Terminal Knob (A) to allow the post to slide into place. Follow the guide below for specific post location.

Tighten the Ground Terminal Knob (A) to clamp the PW-350B to the post.

You can ground the PW-350B with a metal mounting post. It is necessary to clean off dirt, grease and paint from the end in contact with the post clamp and the end in the earth.

Non-conductive posts will not provide an adequate ground connection and therefore a separate ground wire will be required. See section below.



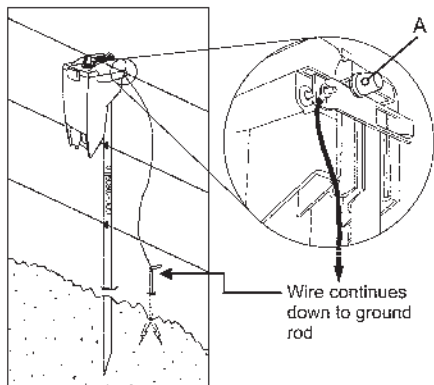
Ground Connection Methods

****Important: The PW350B and PW350B Plus must have a ground connection to operate correctly****

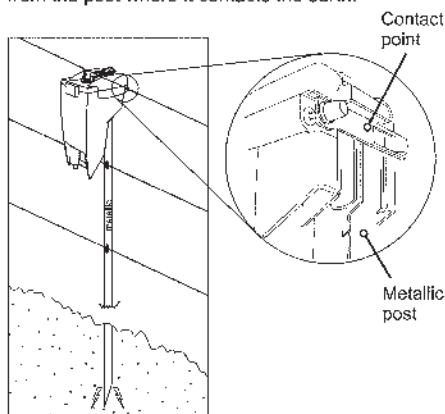
It is possible to ground the Porta-Power 350B either through:

- The Fence post if it is metal or,
- Ground wire and ground rod when using non-metallic post.

If using a ground wire, remove the Ground Terminal Knob (A) and attach the wire around the bolt. Replace the Ground Terminal Knob and tighten. Insert the ground rod into the earth.



If using the metal post method, it may be necessary to clean any paint, dirt or grease from the top of the post where it touches the post clamp and also from the post where it contacts the earth.



PW350B PLUS

Specification & Function

- Adjustable Pulse Rate from 20 - 60 pulses per minute.
- Increased energy output when operated from supply above 7V.*
- Operates from 4 internal D-cell batteries or external 6-12V battery.
- Protection against reversed battery.
- 3 Operating programs.
- Multi-function LCD (liquid crystal) display.**

* When the external supply voltage is higher than 7V, the output energy is doubled.

This results in a higher battery power consumption.

** At low temperatures (below freezing), the LCD will become slow to change its display but the energizer will still pulse as normal.

Programs

To select different programs the On/Off knob is turned different amounts within the first 3 seconds of power on.

- P1. Night Mode plus Battery Saver** - Reduces the pulse rate to half the set pulses per minute during dark hours & keeps the output voltage around 4,500V maximum, if the fence conditions allow it.
- P2. Battery Saver** - Keeps the output voltage around 4,500V maximum, if the fence conditions allow it.
- P3. Full Power** - Allows maximum output voltage, if the fence conditions allow it.

P1. Night Mode plus Battery Saver

To select this program, turn the knob to less than $\frac{1}{3}$ of the total range. The Moon, Lightening Bolt and P1 are displayed.



P2. Battery Saver

To select this program, turn the knob to between $\frac{1}{3}$ and $\frac{2}{3}$ of the total range. The Lightning Bolt and P2 are displayed.



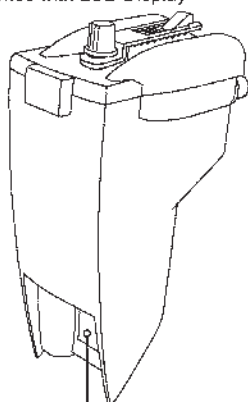
P3. Full Power

To select this program, turn the knob to between $\frac{2}{3}$ and the maximum of the total range. P3 is displayed.



After 3 seconds the energizer starts pulsing using the program that was shown on the display. When the energizer is running, the On/Off knob is used to set the pulse rate and can be adjusted at any time. If a different program is desired, the energizer has to be restarted by turning it off and on again.




Comes with LCD Display



PW350B PLUS

Specification & Function Continued

During operation, the information on the display is changed for every pulse in a round robin fashion as follows:

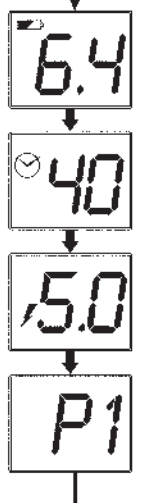
- 1st.  & supply voltage in volts. (Above 9.9V no decimal will be shown).
- 2nd.  & pulse rate in pulses per minute. (20-60 or 10-30 if night reduction).
- 3rd.  & output Voltage in volts x 1000. (Above 7,000V *HI* will be shown).
- 4th. Selected program (P1, P2 or P3).

This shifting information changes with every pulse, therefore the shift speed depends on the pulse rate.

If Night Reduction is active,  will be shown all the time.

If the supply Voltage drops below approximately 3.1V *LB* (Low Battery) is shown and the energizer will stop pulsing. It will only start pulsing again when the supply voltage is above 3.5V.

Example of display



Technical Data

Power Source:	Internal 4 x 1.5V D-cell battery or external 6-12V battery.
Current Consumption:	Approx. 10-40mA dependent on operating conditions.
Pulse Rate:	20 - 60 (10 - 30 if night reduction) pulses per minute.
Auto Voltage Level:	4.5kV (4,500V).
Output Energy:	70 - 360 mJ dependent on operating condition @ 500 Ohm.
Operating Temperature:	14 to 122°F (-10 to 50°C).

PW350B

Specification & Function

The Standard version does not have an LCD display but an LED (light emitting diode).

The LED flashes once for every pulse.

If the supply voltage drops below approximately 3.1V the LED starts to blink rapidly with weak light flashes. This indicates the battery is low.

Technical Data

Power Source:	Internal 4 x 1.5V D-cell battery or external 6-12V battery.
Current Consumption:	Approx. 20-40mA dependent on operating conditions.
Pulse Rate:	20 - 60 pulses per minute.
Output Energy:	70 - 360 mJ dependent on operating conditions @ 500 Ohm.
Operating Temperature:	14 to 122°F (-10 to 50°C).

SAVE THESE INSTRUCTIONS

POWER WIZARD WARRANTY

30 DAY SATISFACTION GUARANTEE

POWER WIZARD, INC. guarantees your complete satisfaction with this fence energizer. If you are not satisfied with this product you can 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 full refund.

LIMITED WARRANTY

POWER WIZARD, INC. warrants this fence energizer to the original purchaser for a period of twelve (12) months from the date of purchase, when installed and used in accordance with the enclosed installation instructions. You must retain your receipt for proof of purchase. This warranty covers defects in materials and workmanship to the fence energizer. The warranty also covers damage to the energizer caused by lightning and voltage spikes.

TERMS THAT APPLY TO BOTH THE GUARANTEE AND WARRANTY

Improper installation, misuse, neglect and tampering of any kind 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 have no liability for damages, incidental or consequential, resulting from or caused by any failure, malfunction or defect of any product.

The sole obligation of Power Wizard, Inc. shall be limited to 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, using an electric fence voltmeter.
2. Attach a note showing your name, phone number, return address and brief description of the problem.
3. Pack product carefully in oversized carton with crushed newspaper for cushioning.
4. Your product should be shipped prepaid and insured against shipping loss or damage.
5. Before returning products 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 centre that will process the return. The RGA number must accompany the returned product.

Battery Life Tables

These tables show the average battery life when using 4 D cell alkaline batteries.

Note: 40 pulses per minute is a common setting.

Note: Battery life will be shortened at colder temperatures.

PW350B PLUS		Pulses Per Minute				
		60	50	40	30	20
Porta-Power Mode	P1	9 weeks	13 weeks	17 weeks	21 weeks	25 weeks
	P2	6 weeks	9 weeks	12 weeks	15 weeks	17 weeks
	P3	4 weeks	6 weeks	7 weeks	9 weeks	10 weeks

PW350B (Standard)		Pulses Per Minute				
		60	50	40	30	20
		3 weeks	4 weeks	5 weeks	6 weeks	9 weeks