

PATRIOT™



FLEXIBILITY

DESIGN

VALUE



P5

P10

P20

P30

USER MANUAL

WARNING: READ ALL INSTRUCTIONS

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For more information about the Patriot range of quality products, see www.patriotglobal.com.

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PATRIOT™

Patriot P5, P10, P20 and P30 Energizer



Key to symbols on the energizer

-  The energizer should only be opened or repaired by qualified personnel, to reduce the risk of electric shock.
-  Read full instructions before use.
-  Double insulation – no serviceable parts.

Power adaptor

DANGER!

Risk of electric shock!



INDOOR DRY
LOCATIONS ONLY

Do not place or store power adaptor where it can be exposed to liquids.

Do not place or drop power adaptor into water or other liquid.

If the power adaptor falls into water, do not attempt to reuse it.

Electric shock may result.

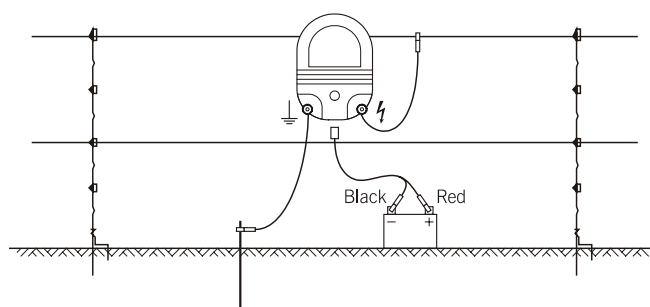
Installation

Warning!

- Disconnect power before making changes to fence or earth wiring
- Mount out of reach of children.

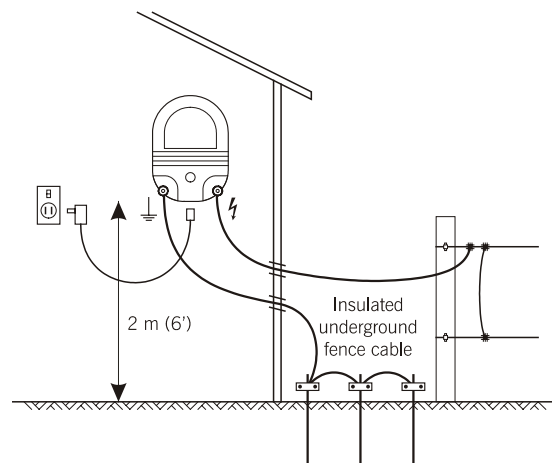
- 1 Connect the Fence earth terminal to a separate earth system that is at least 10 m (33') away from other earth systems.
- 2 Connect the Fence output terminal to the fence.

Outdoors with 12 V battery



Only use the battery lead supplied with your energizer, or a genuine Patriot replacement.

Indoors/Dry locations with mains power adaptor



Only use the power adaptor supplied with your energizer, or a genuine Patriot replacement.

See *Safety information* on page 2 for power adaptor care instructions.

Building an electric fence

For information about building an electric fence, refer to the Patriot website www.patriotglobal.com.

Installing and testing an earth system

Select a suitable site for the earth system. Sites need to be at least 10 m (33') from other earth systems (e.g. telephone, mains power or the earth system from another energizer).

Drive 6'6" (2 m) earth rods into the soil. The table below specifies the minimum number of 2 m (6'6") earth rods recommended for an earthing system:

<u>Energizer</u>	<u>Earth rods</u>
Patriot P5	1
Patriot P10	2
Patriot P20	3
Patriot P30	4

Safe electric fence construction

Warning! Read before use.

An electric fence can be hazardous when there is a risk of entrapment or entanglement, or other hazards exist. Serious injury or death may result. Take all steps to avoid the risk of entrapment or entanglement. This safety information should be read in conjunction with *Requirements for electric animal fences* on page 2.

Hazards

- ☒ Do not climb through or under an electric fence. If it is necessary to cross an electric fence use a gate or specially designed crossing point.
- ☒ Do not allow young or infirm persons to use this energizer without supervision. Do not allow young children to play with this energizer or near an electric fence or electrified wires.
- ☒ Do not electrify barbed wire.
- ☒ Do not support off-set electrified wires less than 150 mm (6") from a barbed wire fence.
- ☒ Do not electrify any fence construction which could lead to entanglement of persons or animals. We recommend for instance, that no more than one electrified off-set wire be supported on either side of a barbed wire or mesh fence.
- ☒ Do not supply an electric fence from two energizers.
- ☒ Do not allow electrified wires from two energizers on the same or adjacent properties to be less than 2 m (6'6") apart.
- ☒ Do not place energizer earth electrodes within 10 m (33') of any part of a power supply earth system or telecommunications earth system.
- ☒ Do not run electric fence wires above or close to overhead power or communication lines.

Duty to the public

Fasten warning signs to electric fence posts or wires at frequent intervals along any public roads or pathways. Incorporate a non-electrified gate or stile where an electric animal fence crosses a public pathway and fasten warning signs to fence posts or wires adjacent to the crossing.

For more information, contact Patriot or your local Patriot dealer. Refer to www.patriotglobal.com for contact details.

Safety information

Warning!

- Risk of electric shock.
- Do not connect 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.
- Do not place or store power adaptor where it can be exposed to any potential wet location. Do not place in or drop into water or other liquid. If the power adaptor falls into water, do not attempt to reuse it. Electric shock may result.

Definition of special terms

Electric fence energizer/Energizer – An appliance that is intended to periodically deliver voltage impulses to a fence connected to it.

Fence – A barrier for animals or for the purpose of security, comprising one or more conductors such as metal wires, rods or rails.

Electric fence – A barrier that includes one or more electric conductors, insulated from earth to which electric pulses are applied by an electric fence energizer.

Earth electrode – Metal structure that is driven into the ground near an electric fence energizer and connected electrically to the output Fence earth terminal of the electric fence energizer, and that is independent of other earthing arrangements.

Connecting lead – An electric conductor, used to connect the electric fence energizer to the electric fence or the earth electrode.

Requirements for electric animal fences

Electric animal fences and their ancillary equipment shall be installed, operated and maintained in a manner that minimizes danger to persons, animals or their surroundings.

Electric animal fence constructions that are likely to lead to the entanglement of animals or persons shall be avoided.

An electric animal fence shall not be supplied from two separate energizers or from independent fence circuits of the same energizer.

For any two separate electric animal fences, each supplied from a separate energizer independently timed, the distance between the wires of the two electric animal fences shall be at least 2 m (6'6"). If this gap is to be closed, this shall be effected by means of electrically non-conductive material or an isolated metal barrier.

Barbed wire or razor wire shall not be electrified by an energizer.

A non-electrified fence incorporating barbed wire or razor wire may be used to support one or more offset electrified wires of an electric animal fence. The supporting devices for the electrified wires shall be constructed so as to ensure that these wires are positioned at a minimum distance of 150 mm (6") from the vertical plane of the non-electrified wires. The barbed wire and razor wire shall be earthed at regular intervals. Go to www.patriotglobal.com for information regarding earthing.

A distance of at least 10 m (33') shall be maintained between the energizer's earth electrode and any other earthing system connected parts such as the power supply system protective earth or the telecommunication system earth.

Connecting leads that are run inside buildings shall be effectively insulated from the earthed structural parts of the building. This may be achieved by using insulated high voltage cable.

Connecting leads that are run underground shall be run in conduit of insulating material or else insulated high voltage cable shall be used. Care must be taken to avoid damage to the connecting leads due to the effects of animal hooves or vehicle wheels sinking into the ground.

Connecting leads shall not be installed in the same conduit as mains supply wiring, communication cables or data cables.

Connecting leads and electric animal fence wires shall not cross above overhead power or communication lines.

Crossings with overhead power lines shall be avoided wherever possible. If such a crossing cannot be avoided it shall be made underneath the power line and as nearly as possible at right angles to it.

If connecting leads and electric animal fence wires are installed near an overhead power line, the clearances shall not be less than those shown in the table below.

Minimum clearances from power lines for electric animal fences

Power line voltage	Distance
≤1000 V	3 m (10')
> 1000 to ≤33,000 V	4 m (13')
> 33,000 V	8 m (14')

If connecting leads and electric animal fence wires are installed near an overhead power line, their height above the ground shall not exceed 3 m (10'). This height applies to either side of the orthogonal projection of the outermost conductors of the power line on the ground surface, for a distance of:

- 2 m (6'6") for power lines operating at a nominal voltage not exceeding 1,000 V.
- 15 m (50') for power lines operating at a nominal voltage exceeding 1,000 V.

Electric animal fences intended for deterring birds, household pet containment or training animals such as cows need only be supplied from low output energizers to obtain satisfactory and safe performance.

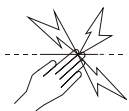
In electric animal fences intended for deterring birds from roosting on buildings, no electric fence wire shall be connected to the energizer's earth electrode.

A warning sign shall be fitted to every point where persons may gain ready access to the conductors.

Where an electric animal fence crosses a public pathway, a non-electrified gate shall be incorporated in the electric animal fence at that point or a crossing by means of stiles shall be provided. At any such crossing, the adjacent electrified wires shall carry warning signs.

Any part of an electric animal fence that is installed along a public road or pathway shall be identified at frequent intervals by warning signs securely fastened to the fence posts or firmly clamped to the fence wires.

- The size of the warning sign shall be at least 100x200 mm (4x8").
- The background colour of both sides of the warning sign shall be yellow. The inscription on the sign shall be black and shall be either:



or the substance of "CAUTION: Electric Fence".

- The inscription shall be indelible, inscribed on both sides of the warning sign and have a height of at least 25 mm (1").

Ensure that all mains-operated, ancillary equipment connected to the electric animal fence circuit provides a degree of isolation between the fence circuit and the supply mains equivalent to that provided by the energizer.

Protection from the weather shall be provided for the ancillary equipment unless this equipment is certified by the manufacturer as being suitable for use outdoors, and is of a type with a minimum degree of protection IPX4.

Servicing

This product cannot be serviced. Please refer to your warranty conditions.

Service of double insulated appliances

In a double insulated electric fence energizer, two systems of insulation are provided instead of earthing. Patriot energizers contain no serviceable parts.

12 month warranty from date of purchase

This warranty does not cover defects caused by:

- Lightning strike
- Incorrect input voltage or polarity
- Damage to external wiring
- Physical mishandling
- Water immersion
- Vermin or insect damage
- Battery leakage or chemicals

Note: This product has been manufactured to comply with international safety standards.

Tru-Test and its agents accept no responsibility for any accident caused subsequent to any tampering with or modification or misuse of this product, including repairs or alterations made by anyone other than Tru-Test or its agents.

No conditions, warranties or guarantees, statutory or otherwise, whether oral or in writing (other than this service warranty), shall attach to this product and its sale and purchase, other than that it will be delivered in good working condition.

The details below must be properly completed by the dealer at the time of purchase.

This product is warranted against faulty material and workmanship for a period of 12 calendar months FROM DATE OF PURCHASE.

If any warranted defect occurs during the warranty period, return the product with proof of purchase to your local Patriot dealer, distributor, or directly to the manufacturer. Protect your investment by completing this warranty card today and returning it to your nearest Patriot dealer.

Model:	Serial number:
Name of owner:	
Address:	
Date of purchase:	
Dealer contact details (must be completed by dealer)	

PATRIOT™

SAVE THESE INSTRUCTIONS

www.patriotglobal.com