



G&P New Energy Solutions

# Solar Powered Electric Fence Energizer User Guide

[Revision 1.0 October 2016]

## Safety

Read and understand this user guide before attempting to install or use the equipment. Retain the user guide for future reference. **Any damage or equipment failure due to incorrect installation or use is not covered by warranty.**

- Always wear ANSI approved safety goggles when working with tools and equipment.
- This product is designed to assist in keeping animals confined to an area that is fenced using electrically conductive wire. **DO NOT USE THIS PRODUCT FOR ANY OTHER PURPOSE.**
- It is recommended that this product be installed by a qualified and certified electrician.
- Do not submerge the energizer unit or damage to the unit may occur.
- Avoid electric fences and equipment during electrical storms (lightning).
- Keep energizer solar panels clean to ensure proper charger and equipment operation.



- Never install an electric fence below high-voltage power lines.
- Never touch or attempt to climb an electric fence.
- Never use more than 1 energizer unit on the same fence.
- Install appropriate warning signs in easily visible locations to identify electric fences.
- Inform applicable persons of electric fence locations and instruct them on how to switch off the energizer unit in the event of an emergency.
- Do not attempt to charge the energizer unit battery with equipment other than the supplied solar panel or battery charger.
- Do not remove any warning labels or stickers from the product.

## Overview

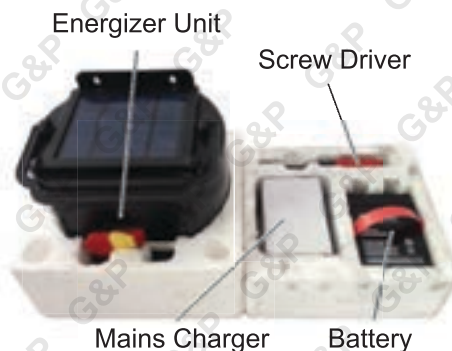
The solar powered electric fence energizer is designed to electrically charge a fence of appropriately conductive wire up to a maximum length (see specifications), and is designed to assist in keeping animals from crossing the fenced boundary. The energizer provides a high voltage pulse of 8.0kV initially that rapidly drops to 1.2kV when the attached fence is touched. This is harmless to animals but an effective deterrent.

If the overall length of fence exceeds the maximum length for the energizer, divide the fence into smaller sections, with each section electrically isolated from other sections, and use multiple energizer units - one per section of fencing.

The energizer unit contains a rechargeable battery that is charged by the built-in solar panel or the supplied mains voltage charger. In normal conditions and with correct installation, the solar panel should provide adequate charging for continuous use without any intervention required. During times where there is not sufficient sunlight to fully charge the battery, the mains charger can be used. When fully charged, the battery will power the fence for a "work time" (see specifications) without further charging.

## Specifications

	Model		
	SL03	SL05	SL08
Discharge Energy	0.1Joule 8kV $\pm$ 1.5kV	0.15Joule 8kV $\pm$ 1.5kV	0.3Joule 8kV $\pm$ 1.5kV
Fence Length	3km maximum	5km maximum	8km maximum
Work Time*	6 days	5 days	3 days
Battery Type	6V 4.5Ah sealed	6V 5Ah sealed	6V 5Ah sealed
Dimensions	194x178x175mm		
Weight	1.66kg	1.76kg	2.3kg



\* The energizer units feature automatic shut-off and activation features to help lengthen battery life. If battery capacity falls below 20%, the energizer will temporarily deactivate in order to allow the battery to recharge. When the battery capacity reaches 50%, the energizer reactivates.

## Assembly, Installation and Operation

Before proceeding with assembly and installation, ensure all parts have been supplied.

- 1 On the underside of the energizer unit, remove the screw securing the battery cover, and remove the cover.
- 2 Remove the battery terminal covers from the battery, if fitted, then connect the battery connection cables in the energizer unit to the battery. **Ensure to connect the red wire to the positive (+ red) battery terminal.**
- 3 Carefully insert the connected battery into the battery compartment and re-install the cover.



1



2



3

### Battery Charging

The battery can be charged using the supplied mains powered charger for a minimum of 8 hours. To charge using the battery charger, connect the charger to the mains power supply and switch ON, then plug the end of the charger cable into the socket on the underside of the energizer unit. Alternatively, the battery will charge in 2 to 3 days of reasonable sunlight by the solar panel. Once the battery is charged, the energizer unit can be put into service.

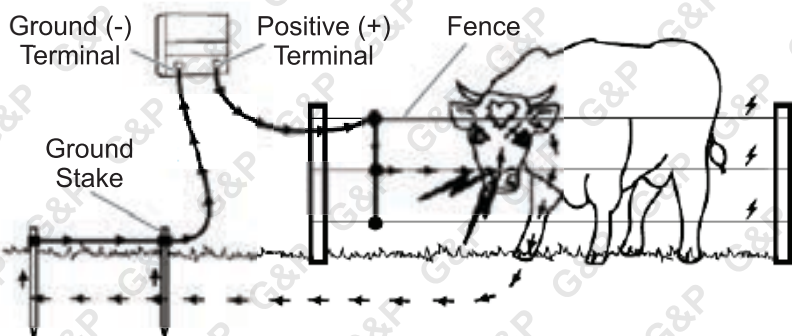


Do NOT connect the mains powered charger to the energizer unit when the unit is grounded as equipment damage may result. • If the energizer is not in use, it is important to charge the battery monthly to maintain its condition.



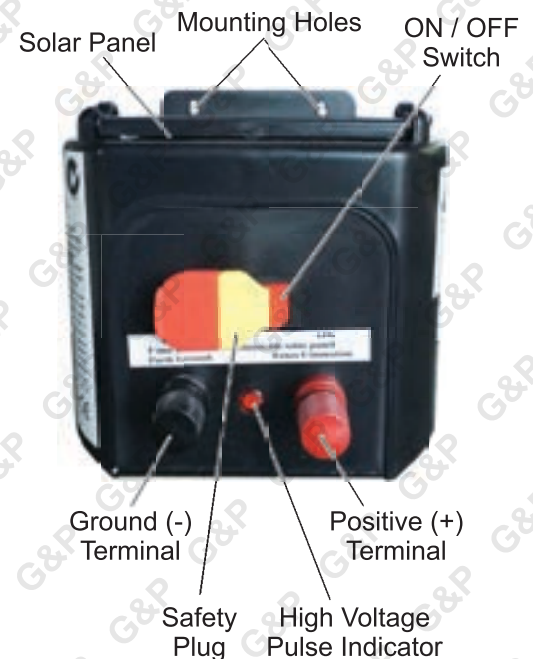
### Installation

- 1 Attach the energizer unit to a suitable structure (post, wall etc) using the slotted holes. Ensure that the solar panel will receive sufficient light to charge the battery - adjust the solar panel angle as required.
- 2 Insert a suitable conductive stake (not supplied) into the earth for the energizer ground connection.
- 3 Unscrew the **BLACK GROUND** terminal nut on the energizer and connect suitable cabling (3mm) from it to the **GROUND** stake. Ensure that connections on either end are secure, then tighten the nut.
- 4 Unscrew the **RED POSITIVE** terminal nut on the energizer and connect suitable cabling (3mm) from it to the **FENCE**. Ensure that connections on either end are secure, then tighten the nut.
- 5 Check all connections have correct polarity and are secure., then activate the energizer by pulling the ON/OFF switch outward.



### Operation

- Activate the energizer by pulling the ON/OFF switch out (safety plug must be installed). Deactivate the energizer by pushing the ON/OFF switch in.
- During maintenance etc, to prevent accidental activation of the fence, remove the safety plug from the ON/OFF switch. When removed, the energizer cannot be activated.
- The high voltage pulse indicator flashes whenever the fence is grounded (touched).





**Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see [www.datastreamserver.com/safety](http://www.datastreamserver.com/safety)**

- Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.
  - Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.
  - Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.
  - Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.
  - If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.
  - This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.



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