

OPERATING INSTRUCTIONS




**SRM402 / SRM406 / SRM412**  
**230V MAINS POWERED**  
**ENERGISER**

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0.2J / 0.6J / 1.2J

  
Be sure to read this manual for  
safe and proper operation

[ShockRite.co.uk](http://ShockRite.co.uk)

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# 1. INTRODUCTION

Thank you for buying a ShockRite electric fence energiser. This energiser has built-in lightning protection devices to reduce the risk of lightning damage, and has built-in RFI (Radio Frequency Interference) suppressed circuitry. If for any reason you are not happy with your purchase, please return the energiser to your supplier within 30 days of purchase and we will give you a full refund.

Please read this manual carefully before installation.

This manual refers to ShockRite electric fence energisers SRM402, SRM406, and SRM412.

# 2. SAFETY REQUIREMENTS AND REGULATIONS



**WARNING:** Please read the following installation requirements and regulations:

- Ensure energiser is turned off before touching fence.
- For animal use only, warning signs must be displayed.
- Make sure energiser is well earthed in continuously damp soil.
- Poor earthing, insulation or excessive vegetation will reduce the effectiveness of the energiser.
- Do NOT climb over, through or under a multi-wire electric fence. Use a gate or a specially designed crossing point.
- Avoid electric fence configurations that are likely to lead to the entanglement of animals or people.
- The energiser must be installed in a shelter and the power supply cord must not be handled when the ambient temperature is below +5 deg C.
- Electric fences should be installed and operated so that they cause no electrical hazard to persons, animals or their surroundings.
- Children or infirmed persons must be supervised at all times.
- Do not place combustible materials near the fence or energiser connections. In the event of a fire, the energiser must be disconnected.
- Do not dismantle or attempt to make any changes to the energiser yourself.
- Do not supply an electric fence from two separate energisers or from independent fence circuits of the same energiser.
- Only one energiser at a time can be connected to any fence.
- The minimum distance allowed between two separate electric fences powered by their own energiser is 2.5m, should these fences need to be connected this can only be done using non conductive material.
- Do not electrify barbed or razor wire.
- In areas of public access, use an electric fence warning sign every 10m (33ft) to identify the electrified wire(s).
- Crossing with overhead power lines should be avoided wherever possible. If such a crossing cannot be avoided, it should be made underneath the power line and at right angles.

- If connecting leads and electric fence wires are installed near an overhead power line, the clearances should be not less than those shown below:

Power Line Voltage (Voltage)	Clearance (Metres)
Under 1,000	3
Between 1,000 and 33,000	4
Over 33,000	8

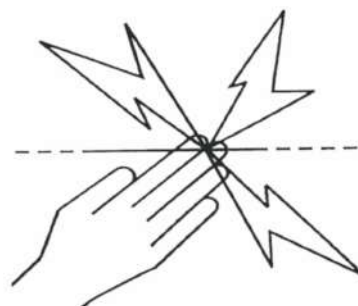
- If connecting leads and electric fence wires are installed near an overhead power line, their height above the ground should not exceed 3m.  
This height applies either side of the orthogonal projection of the outermost conductors of the power line on the ground surface, for a distance of:

- 2 metres for power lines operating at a nominal voltage not exceeding 1,000 volts;
- 15 metres for power lines operating at a nominal voltage exceeding 1,000 volts.

- Electric animal fences intended for deterring birds, household pet containment or training animals such as cows need only be supplied from low output energisers to obtain satisfactory and safe performance.
- For electric animal fences intended for deterring birds from roosting on buildings, no electric fence wire should be connected to the energiser earth electrode. A warning sign should be fitted to every point where persons may gain ready access to the conductors.
- Fence wiring should be installed well away from any telephone line, telegraph line or radio aerial.

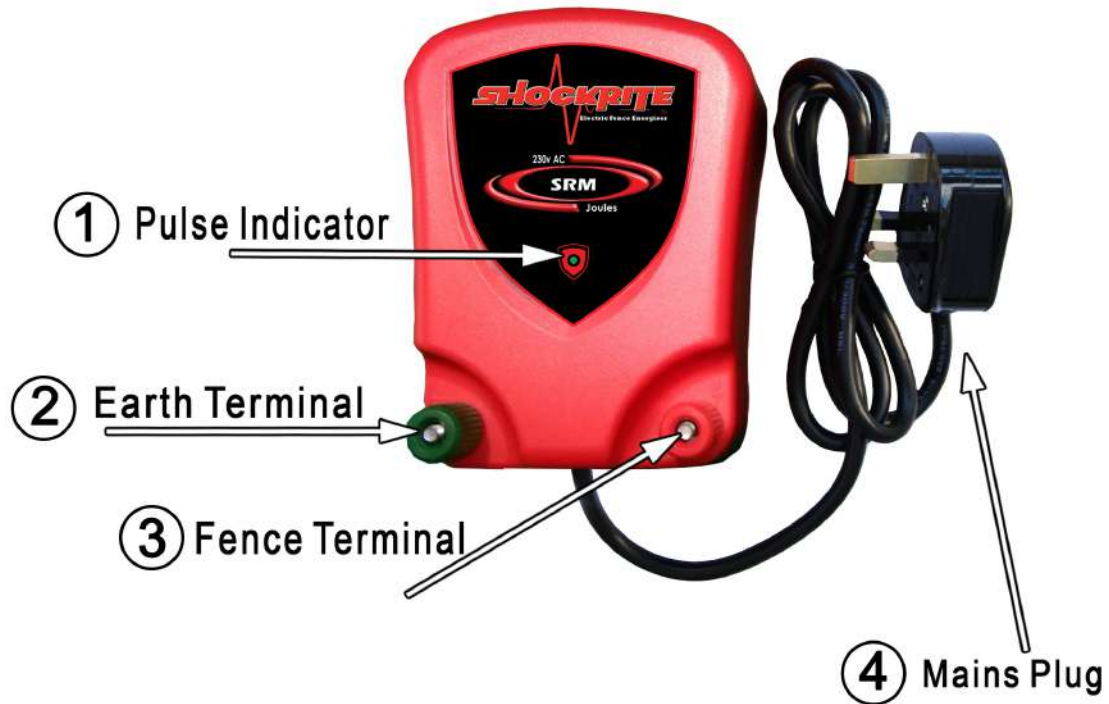
**Caution:** Arcing on the fence will cause radio interferences. Vegetation and other causes of arcing must be removed and maintained.

- The size of the warning sign must be at least 100mm x 200mm.
- The background colour of both sides of the warning sign should be yellow. The text on the sign should be black and should show either:
  - “CAUTION: Electric Animal Fence” or,
  - The symbol shown:



- The inscription must be indelible, inscribed on both sides of the warning sign and have a height of at least 25mm.

### 3. SPECIFICATION



#### Key

1. Pulse Indicator	3. Fence Terminal
2. Earth Terminal	4. Mains Plug

#### Contents:

1 x Mains Electric Fence Energiser	1 x Fence Wire
1 x Earth Wire	1 x Earth Stake

#### Features:

1. Heavy duty case
2. Pulse indicator will flash with each pulse
3. High-quality double insulated transformer for maximum protection
4. Easy-access terminals, and mounting brackets for quick connection and installation
5. CE, ROHS approved

**Weight:** 1.0kg.

**Size:** 175mm x 135mm x 60mm

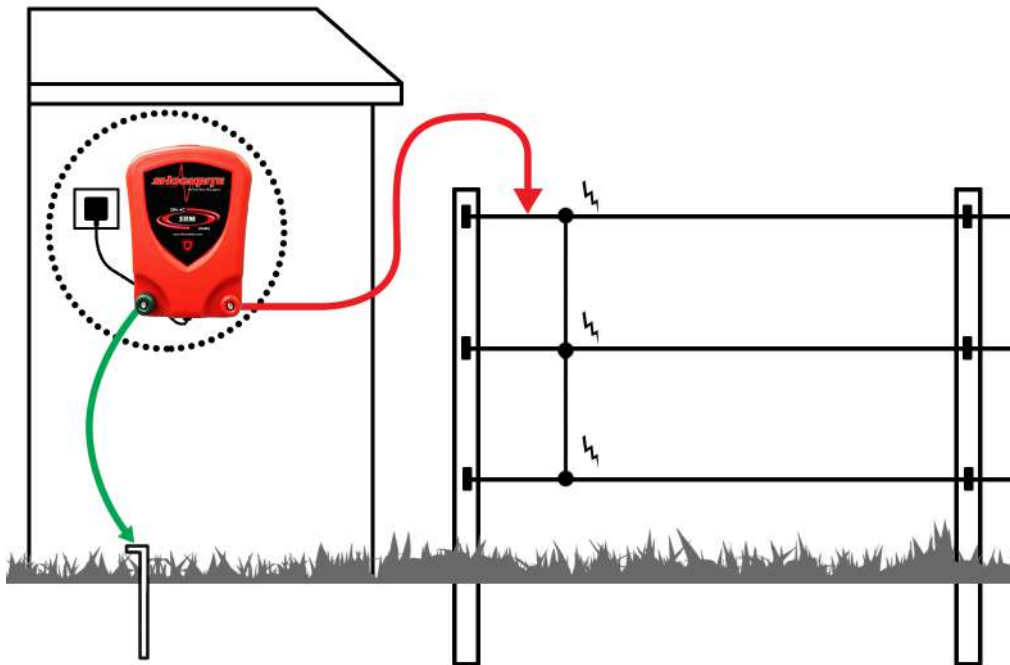
**Ingress Protection Rating:** IP44

## Characteristics:

Model Number	Output Energy (Joules)	Stored Energy (Joules)	Power Source	Power Consumption	Open Volts	500 Ohm Load Volts	Power Length (km)
SRM402	0.2	0.25	230V	0.6W	8,500	4,200	3
SRM406	0.6	0.7	230V	1.0W	9,500	4,500	10
SRM412	1.2	1.3	230V	1.5W	9,500	5,100	20

\*\*Distance is based on single strand high tensile galvanized wire (no vegetation)

## 4. INSTALLATION GUIDE



*(Image for illustration purposes only)*

### **Step 1. Mounting the Energiser**

The energiser should be mounted upright indoors, near a wall socket, using the mounting brackets provided on the rear of the energiser (or mount energiser in a weatherproof environment). Install where there is no risk of the energiser incurring fire or mechanical damage.

### **Step 2. Connection to Earth and Fence**

Connect the green terminal to the earth stake using connection cable provided.

The most effective place for an earth system is in continuously damp soil at least 10m away from the building, to ensure there is no interference with the building's main safety earth.

Connect the energiser's red terminal to the fence using the red connection cable provided.

### **Step 3. Connecting to Power Supply**

After all installation checks have been carried out, connect to mains using the plug provided. The pulse indicator will flash green every 1.5 seconds to show that the energiser is operating.

If the connection cables provided are not long enough to reach the earth stake or fence from where your energiser is mounted, please use electric fence double-insulated lead out cable to extend your connections.

## **5. TROUBLESHOOTING**

**Warning:** Do not dismantle the unit to repair. Please contact your supplier.

<b>Fault</b>	<b>Possible Cause(s)</b>	<b>Solution</b>
Energiser doesn't operate	Power is off	Check power supply
	The fuse is broken	Replace fuse in plug
	Faulty energiser	Have the energiser repaired. Contact your supplier
Electric fence voltage is below 3,000V or your stock are escaping	Energiser faulty	<ol style="list-style-type: none"><li>1. To check, turn off the energiser</li><li>2. Then disconnect the cables going to the fence and earth</li><li>3. Turn the energiser back on</li><li>4. Then measure the voltage between the 2 terminals (fence and earth) on the energiser with a digital fence tester (place a probe onto the "-" earth terminal and a probe onto the "+" fence terminal)</li><li>5. If the tester reads less than 4,000 volts, the energiser is the problem</li><li>6. If the tester reads more than 4,000 volts, the fence is the problem and the energiser is working properly</li></ol>
	Inadequate earthing	Improve the earth system by adding more galvanized earth stakes to the earth system until the earth voltage is 200V or below

	Short on the fence line	<p>Check the electrical connections are secure. From the fence to the red terminal, from the earth system to the green terminal, at gates etc.</p> <p>Check the voltage on the fence every 33m (100ft) using a Digital Volt Meter. Note if the voltage is dropping. The closer to a fault, the lower the voltage reading will be. Become aware of things that cause faults, and always be on the lookout for: stray pieces of wire on the fence, heavy vegetation growth, cracked or broken insulators, and broken wires</p>
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## 6. GUARANTEE

We offer a **3 Year Warranty** starting from the date of purchase marked on the invoice. We will only perform warranty services when the unit is returned to us un-tampered and with a copy of the original invoice. If these requirements are not fulfilled, we reserve the right to void warranty.

## 7. CONTACT INFORMATION

If you have any further technical questions about our products, please contact us:



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