

OPERATING INSTRUCTIONS



SRB20 / SRB60 / SRB120 / SRB170  
SRM406 / SRM412 / SRM417  
12V BATTERY POWERED  
ENERGISERS

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0.2J / 0.6J / 1.2J / 1.7J

  
Be sure to read this manual for  
safe and proper operation

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 dealer 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 SRB20, SRB60, SRM406, SRB120 and SRM417.

# 2. SAFETY REQUIREMENTS AND REGULATIONS



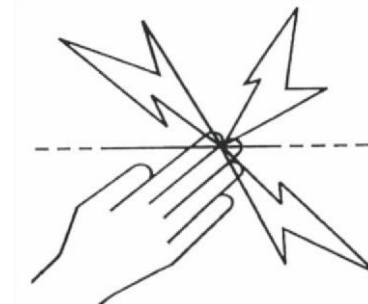
**WARNING:** Please read the following installation requirements and regulations:

- Ensure energiser is turned off before touching fence.
- Do not submerge energiser in water or expose to possible flooding.
- Keep battery in a well ventilated area.
- For animal use only, warning signs must be displayed.
- Make sure energiser is well earthed in continuous 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.
- 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.
- 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.

This energiser complies with international safety regulations and is manufactured to international standards.

### 3. SPECIFICATION



Key	
1. Pulse/ Low Battery Indicator	5. Earth Stake
2. Earth Terminal	6. Wing Bolt
3. Fence Terminal	
4. Battery Connection Cable	

#### Contents:

1 x Battery operated Energiser

1 x Fence Wire

1 x Earth Wire

1 x Earth Stake/Mount & Wing Bolt

#### Features:

1. Weatherproof heavy duty case

2. Low average current use

3. Pulse Indicator

4. CE, ROHS approved

5. Low battery Indicator

6. Easy-access terminals, and mounting brackets for quick connection and installation

**Weight:** 1.0kg.

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

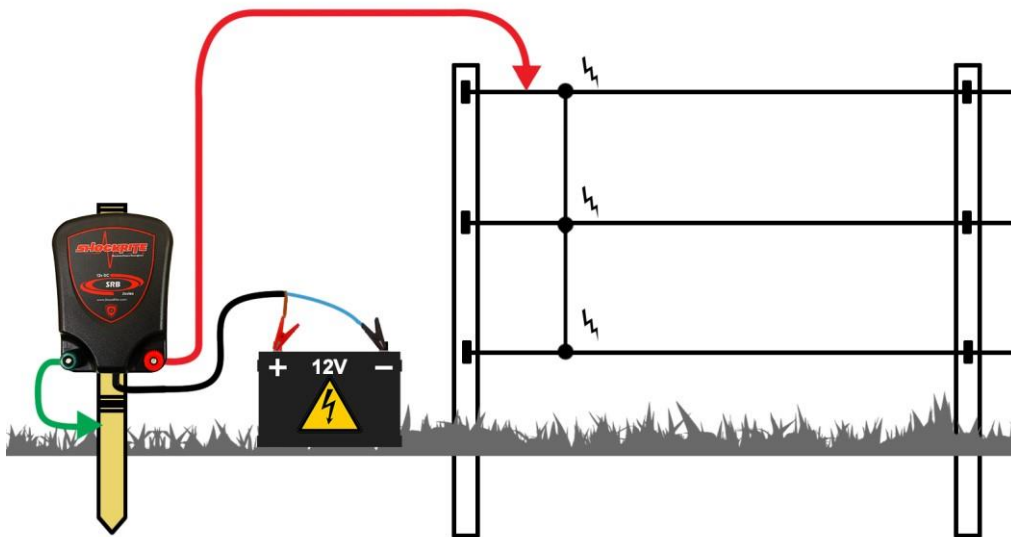
**Ingress Protection Rating:** IP44

**Characteristics:**

Model Number	Output Energy (Joules)	Stored Energy (Joules)	Power Source	Open Volts	Power Consumption	500 Ohm Load Volts	Power Length (km)
SRB20	0.2	0.25	12V	8500	25mA	4500	3
SRB60 SRM406	0.6	0.7	12V	9500	60mA	4500	10
SRB120 SRM412	1.2	1.3	12V	10000	120mA	5600	20
SRB170 SRM417	1.7	1.8	12V	10000	170MA	5700	30

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

## 4. INSTALLATION GUIDE



*(Image for illustration purposes only)*

**Step1. Mounting the energiser**

Connect the two sections of the earth stake together using the wing bolt provided, and insert the earth stake into moist soil.

Ensure the energiser is correctly mounted onto the earth stake by its mounting point to prevent water damage.

**Step 2. Earthing the Energiser**

Place the earth stake in continuously damp soil. Using the earth connection cable provided attach the cable to the earth terminal of the energiser and then attach the crocodile clip to the earth stake (which the energiser is mounted on).

### **Step 3. Connecting Energiser to fence**

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

### **Step 4: Connecting to Power Supply**

Connect the red crocodile clip to the "+" on the battery and the black crocodile clip to the "-" on the battery. Recommended battery for energiser operation is a 85 Ah 12 volt Leisure battery. (Battery Not Included )

### **Step 5. Operation**

Under normal operation the LED on the unit will flash green once every 1.5 seconds, if the battery voltage drops to 11.6 volts or less the led on the energiser will flash red and at a slower pace (every 2.5 seconds) to conserve power.

## **5. TROUBLESHOOTING**

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

Fault	Solution
The Pulse indicator light is flashing, but the electric shock delivered by the fence is weak	Check that all connections in the fence and earth system are firm and secure. If necessary, clean away any corrosion.
	Check that the earth stake is pushed firmly into good conduction soil
	Check for faults in the fence-line caused by trees or vegetation. If necessary, remove obstructions and mend the fence.
	Check that the energiser is adequate for the length of the fence. If necessary, reduce the length of the fence or reduce the number of fence wires. Alternatively, divide the fence-line into smaller zones, with each zone powered by a separate energiser.
The Pulse indicator light is not flashing	Check that the energiser is switched on
	Check the battery is fully charged
	Check that the red lead is connected to the (+) terminal of battery, black lead to (-) terminal

## **6. GUARANTEE**

We offer a **3 Year Warranty** starting from the date of the purchase. We will only perform warranty services when the unit is returned to us un-tampered. 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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