

OPERATING INSTRUCTIONS

SHOCKRITE[®]

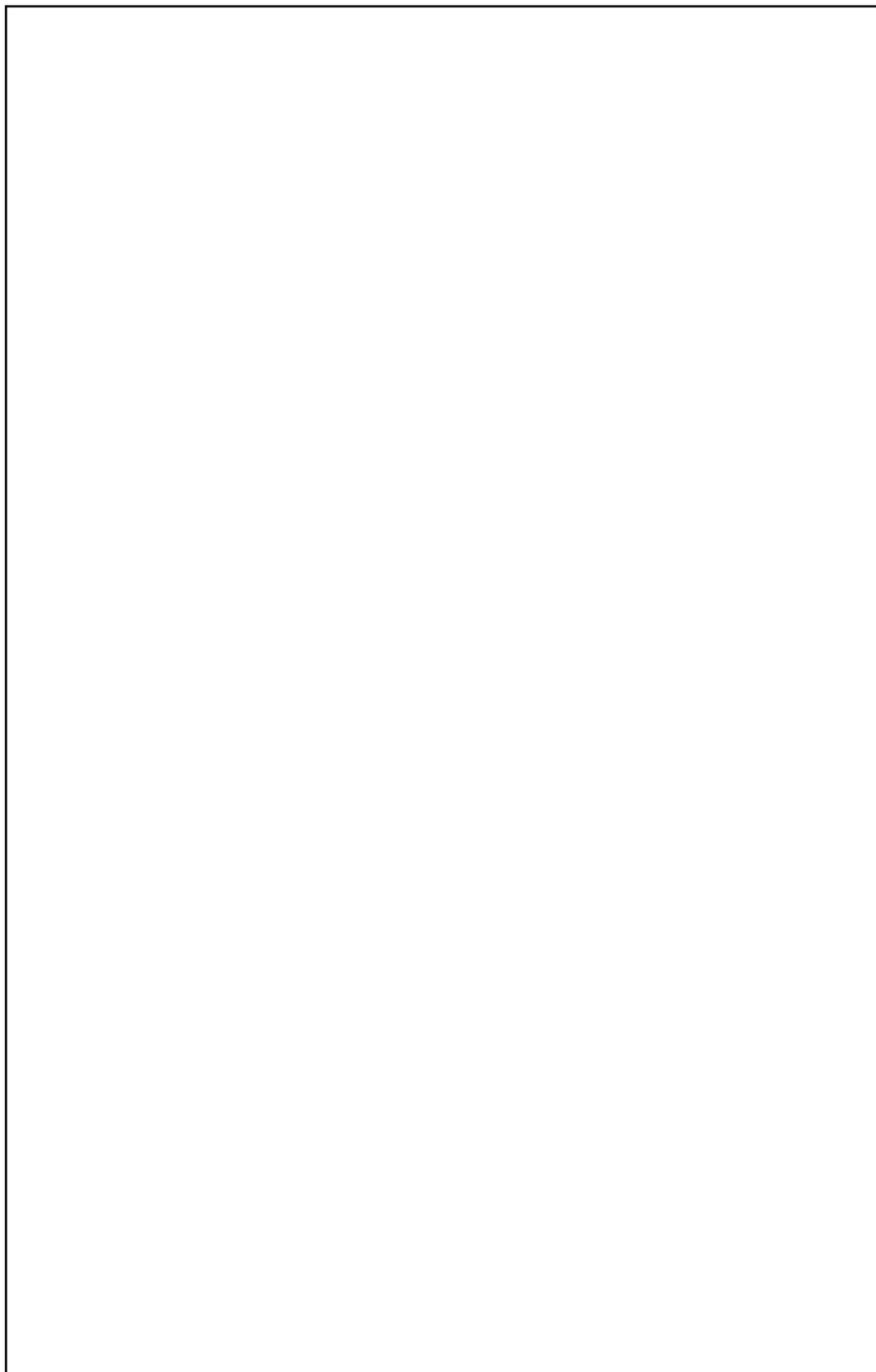
SRS02 / SRS05
12V SOLAR POWERED
ENERGISER



0.2J / 0.5J

▲
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 retailer 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 SRS02, and SRS05.

2. SAFETY REQUIREMENTS & 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 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.
- 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 tamper with the energiser.
- Do not supply an electric fence from two separate energisers.
- 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.
- 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 on the following page:

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

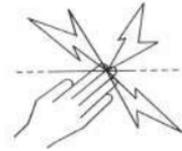
- If connecting leads and electric fence wires are installed near an overhead power line, their height above the ground should not exceed 3m.

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.

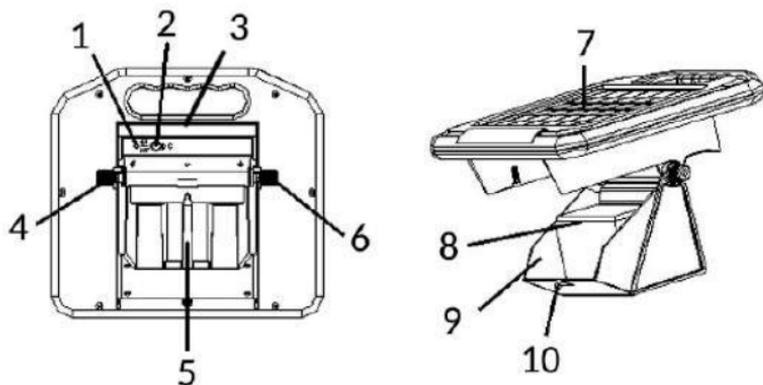
Caution: Arcing on the fence will cause radio interferences. Vegetation and other causes of arcing must be removed and maintained.

- In areas of public access, use an electric fence warning sign every 10m (33ft) to identify the electrified wire(s).
- 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. SPECIFICATIONS



Key

1. On/Off Switch	6. Earth Terminal
2. Charger Input	7. Solar Panel
3. Pulse Indicator	8. Battery
4. Fence Terminal	9. Battery Compartment
5. Mounting Hole	10. Battery Access

Contents:

<ul style="list-style-type: none">1 x Solar-Powered Energiser	<ul style="list-style-type: none">1 x Earth Stake/Mounting Rod
<ul style="list-style-type: none">1 x Earth Wire	<ul style="list-style-type: none">1 x Fence Wire
<ul style="list-style-type: none">1 x 12V Internal 8Ah Rechargeable Lead Acid Battery	<ul style="list-style-type: none">1 x Mains Charging Adaptor

Features:

1. Weatherproof heavy-duty case.	2. Low average current use.
3. Pulse/ Battery Indicator: Green = Battery OK Red = Battery Needs Charging	4. Easy-access terminals and mounting brackets for quick connection and installation.
5. Carry handle makes it easy to transport for relocation.	6. CE, ROHS approved.

Energiser Weight: 6.3kg

Dimensions: 385mm x 340mm x 195mm

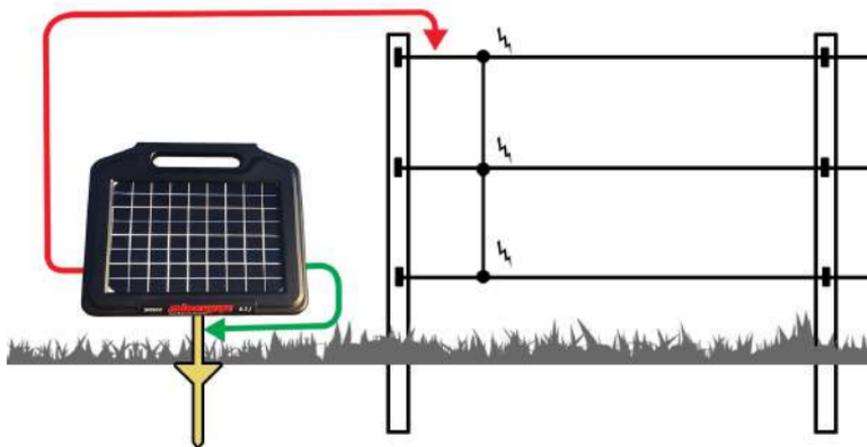
Ingress Protection Rating: IPX4

Characteristics:

Model No.	Output Energy (Joules)	Stored Energy (Joules)	Power Source	Power Consumption	Open Volts	500 Ohm Load Volts	Power Length (km)
SRS02	0.2	0.2	12V	25mA	8,500	2,500	3
SRS05	0.5	0.65	12V	55mA	9,500	4,500	8

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

4. INSTALLATION GUIDE

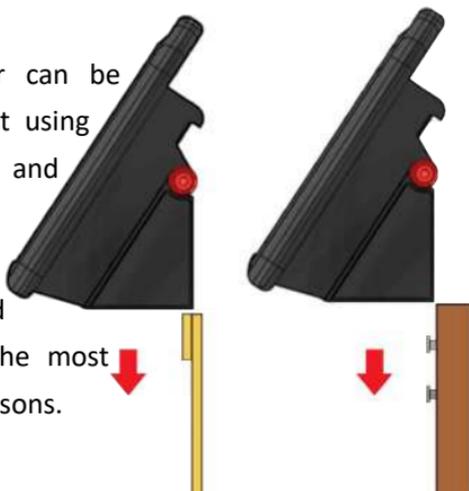


(Image for illustration purposes only)

Step 1. Mounting the Energiser

The energiser can be mounted directly onto a steel Y-post, T-post, or the earth stake (provided) using the post-mounting slot.

Alternatively, the energiser can be mounted to a wooden post using nails/screws/bolts and washers.



Note: The energiser should be placed so it receives the most daily sun throughout the seasons.

Step 2. Earthing the Energiser

Connect the earth terminal of the energiser to an earth stake using the green connection cable provided. The most effective place for an earth system is in continuously damp soil.

Step 3. Connecting Energiser to Fence

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

Step 4. Operation

Switching on and off

1. When switched on, the pulse indicator light flashes once for each output pulse.
2. When switched off the pulse indicator light will not flash.

Under normal operation the pulse indicator will flash green once every 1.5 seconds. If the voltage of the battery drops (due to prolonged overcast weather with reduced sunlight) the unit will pulse more slowly to extend battery life. This is slightly different depending on solar model:

The **SRS02 energiser** will flash green every 1.5 secs on a healthy battery, and then flash red and pulse every 2 seconds on a low battery.

The **SRS05 energiser** will flash green every 1.5 secs on a healthy battery but when the battery falls below a healthy charge, it will initially lower the output and continue to flash green every 2 seconds, but will then flash red every 2.5 seconds on a low battery.

For both models: Should the battery become critically low the unit

will enter standby mode to protect the internal battery. The energiser will resume delivering pulses when the solar panel has charged the battery so that it is above the 'safe operating level'.

5. IMPORTANT BATTERY INFORMATION

The energiser is charged and ready to use on arrival, but we would recommend a quick charge prior to first use to allow optimal energiser performance (see recharging instructions below).

Recharging

- The battery can be charged using the mains charging adaptor by plugging the male jack plug into the charger input location on the energiser. The LED on the charger will turn green and switch off when the battery is full (charging may take up to 13 hours if the battery is discharged). ***Warning! The energiser must be turned off and disconnected from the fence before charging with the mains adaptor.***
- The solar panel can fully charge a discharged battery in three days, provided the energiser is switched off and there is adequate sunlight.
- - Alternatively, The battery can also be charged using a 14.4v battery charger suitable for charging rechargeable lead-acid batteries. This should have an output voltage of 14.4v and output current not exceeding 1A. ***Warning! The battery***

must be disconnected and removed from the energiser before connecting it to a battery charger.

When fully charged, the battery should be able to power the energiser for over three weeks (0.2J model SRS02) or two weeks (0.5J model SRS05) with no sunlight.

Replacing the battery

If a replacement battery is required, use a 12V, 8Ah, rechargeable lead-acid battery (suitable for all models). Do not use a non-rechargeable battery. Do not dispose of the battery in a land-fill or in a fire.

Removing and inserting the battery

To remove and insert the battery:

1. Open the battery compartment using an allen key.
2. Disconnect the red and black leads connecting the battery to the energiser.
3. Lift out the battery.
4. Install the recharged or replacement battery.

Caution! When connecting the battery, be careful not to short-circuit the supply terminals.

Energiser maintenance

Clean the solar panel regularly with a soft cloth. This ensures the solar panel functions efficiently.

When transporting the energiser, protect the solar panel to prevent the glass surface from being damaged.

Energiser storage

If the energiser is stored for an extended period, the battery may discharge and become damaged as a result. To prevent this the energiser should be stored inside, next to a window, where sunlight can shine on the energiser each day.

If the energiser cannot be stored in a sunny position, it should be kept in a cool place with the battery fully charged and disconnected from the energiser. The battery should be recharged manually every six months using a suitable 12V battery charger, or the mains adaptor provided.

6. 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 rod is pushed firmly into good conducting 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

	<p>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.</p>
<p>The Pulse indicator light is not flashing.</p>	<p>Check that the energiser is switched on.</p>
	<p>If there has been insufficient sunlight to charge the battery, the energiser may be in Battery protection mode. Charge the battery by placing the energiser in a location to gain as much sunlight as possible.</p>
	<p>Ensure the battery is connected correctly with the positive (red) lead to the positive (+) terminal on the battery and the negative (black) lead to the negative (-) terminal on the battery.</p>
	<p>Try charging the battery manually using a suitable battery charger. Replace the battery with a new battery. Before installing a new battery, charge it fully using a suitable battery charger.</p> <p>If the pulse indicator light is still not flashing, return the energiser to the retailer.</p>
<p>The battery needs frequent replacement.</p>	<p>Check that the solar panel is clean and is not damaged. Make sure the energiser is positioned to receive maximum sunlight. If necessary, remove any objects or vegetation that might be casting a shadow on the energiser.</p>

7. GUARANTEE

We offer a **2 Year** Warranty starting from the date of purchase. Please complete the Product Registration Form on our website to ensure warranty.

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.**

8. TECHNICAL INFORMATION

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



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