BATTERY POWERED

speedrite™
by TRU-TEST®

Battery Powered Energizer
Installation Instructions

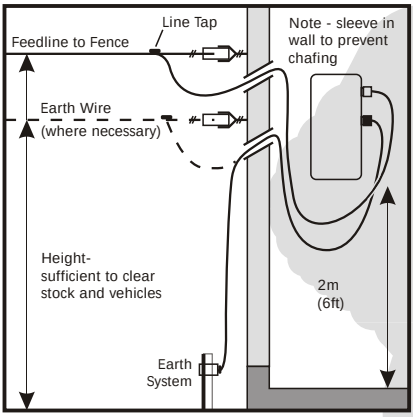
1500 3000

WARNING: Do not connect to mains operated equipment.

Build new fence (if required)

To optimise your new energizer's performance, ensure that your fence system is of a high standard, using high quality Speedrite accessory products where appropriate. Refer to the enclosed Speedrite Fence Manual for complete fence building instructions.

Indoor Installation Option



Install your earthing/ grounding system

For optimum performance of your energizer a suitable earth/ground system must be installed at least 10m (33ft) from other earth/ground systems (ie telephone/mains power). Ideally Speedrite Earth Stakes (SA067) or Speedrite Super Earth Kits (SA066) should be used, alternatively galvanised pipe or steel posts can be used as earth rods. Earth rods should be driven 2m (6.5ft) into the soil and spaced at least 3m (10ft) apart.

Total recommended minimum earth/ground length	
Energizer Model	(combined length of all earth rods)
Viper 1500	3m (10ft)
Viper 3000	6m (20ft)

For complete earthing/ ground instructions refer to your Speedrite Fence Manual.

Install the energizer (refer diagram above)

Select a suitable location, either indoors or outdoors. Where possible the energizer should be mounted out of reach of children and livestock. The Viper 3000 and Viper 1500 can be hung vertically from the keyholes in the back of the case or from the energizer's carry rope.

Connect the earth/ground and fence

Connect the energizer “Earth” (black) terminal to your earth system, preferably using a length of 2.5mm (12.5g) Speedrite Insulated Cable (SC005). Connect the fence to the “Fence High Output” (red) terminal on the Viper 3000 or “Fence” terminal on the Viper 1500, again using 2.5mm (12.5g) cable. Use a Speedrite Line Tap (SA052) to connect your insulated cable to the fence. For outdoor connection an optional set of accessory leads are provided. Use the yellow lead to connect the fence to the “Fence High Output” (red) terminal on the Viper 3000 or “Fence” (red) terminal on the Viper 1500. Use the black lead to connect the earth system to the “Earth” Terminal.

The “Fence Low Output” (yellow) terminal (Viper 3000 only) can be connected to fences where high power is not required (eg. yard, barn or shed fences).

Connect battery

Connect the red clip to the positive (+ve) battery terminal and the black clip to the negative (-ve) terminal.

A 12V (100Ahr) wet cell deep cycle battery is recommended for best performance from your energizer, however any 12V wet cell battery (eg. car or tractor) or dry cell battery can be used.

Battery Life Guide - for 80% discharge of battery

	100 Ahr battery		60 Ahr battery	
Energizer Model	Fast Pulse	Slow Pulse	Fast Pulse	Slow Pulse
Viper 1500	20 days	40 days	12 days	24 days
Viper 3000	10 days	23 days	6 days	14 days

Battery care

To optimise the expected total life of your battery:

- Avoid complete discharging (100% discharge) of your battery.
- If a battery is accidentally discharged completely, recharge it as soon as possible.
- Batteries should be charged prior to storage then recharged at regular intervals (every 8 weeks) during storage.
- Avoid high temperatures > 50°C (120°F) and keep naked flames and sparks away from battery when recharging. The battery should not be placed directly underneath the energizer.
- Check battery electrolyte level at every recharge and refill, preferably with deionized, distilled or rain water.

Operation of the energizer

Turn the pulse speed switch to Slow (approx 2 seconds/pulse) or Fast (approx 1.2 seconds per pulse) as desired.

Hint: Use Fast setting for training animals that have not experienced electric fences before or for feral animal fences. Use Slow for normal running to conserve battery power.

The "Pulse" light will flash with each pulse, indicating that there is a pulse at the output terminals. The pulse light will get dimmer as fence load increases, indicating that fence maintenance (eg clearing vegetation from fence) is required.

The Viper 3000 features a Light Sensor function, which, when the pulse speed switch is set to Slow, reduces the pulse speed from 2 seconds per pulse to 3.5 seconds per pulse during night time to further conserve battery power.

The Viper 3000 also features a "Battery" light which will extinguish when battery voltage drops below 11.3V (approx.) indicating that the battery should be re-charged.

Test the earth/ground system

See the enclosed Speedrite Fence Manual.

Solar instructions

Install the energizer on the underside of the Speedrite Solar Panel - full instructions are provided with the Solar Kit.

Note: Do not power the energizer directly from a solar panel without using a 12V external battery.

Please save these instructions

Safety Points and Regulations

All energizers must comply with local standard requirements. These requirements may vary from country to country.

In areas prone to bush fires there may be a risk of fire caused by sparking from the fence. In high risk situations, if available, the Fence Low Output should be used, or the energizer should be turned off.

Barbed Wire should never be used for electric fencing.

Energizers should, if possible be installed inside a building in a position free from the risk of mechanical damage. If mounted outdoors they should be mounted on a substantial structure in a position free from risk of mechanical damage.

Avoid erecting a fence which runs parallel to or under power lines. Where this is unavoidable the crossing should be underneath the power lines and as near as possible at right angles to the lines.

If an electric fence has to be installed in the vicinity of an overhead power line, the vertical distance between any fence wire or connecting lead and the surface of the earth should not exceed 2m.

Fence wiring should be installed so that it is well away from any telephone/telegraph line or radio aerial.

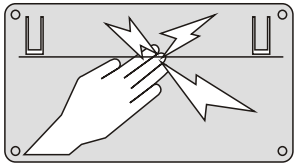
Each energizer should be connected to its own earth system and this should not be connected to any other earth system.

Do not connect more than one energizer to a single electric fence.

Do not connect the energizer simultaneously to a fence and to any other device such as a cattle trainer or poultry trainer, otherwise lightning striking your fence will be conducted to all other devices.

When an electric fence is installed where it might reasonably be expected to be touched by the public then warning signs must be attached. The warning sign must be at least 200mm x 100mm (8" x 4") in size and should be attached at intervals not exceeding 90m (295ft).

The sign should display the symbol below or the words "Electric Fence".



The inscription should be indelible and any lettering should have a height of at least 35mm (1 1/3"). It is recommended that the basic colour off the sign be yellow with black inscription.

(SA046)

When the energizer is used to supply a system of conductors used for deterring birds from roosting on buildings, no conductor should be connected to earth. A switch should be installed to provide means of isolating the energizer from all poles of the supply and clear warning signs should be fitted at every point where a person may have ready access to the conductors. The notice should bear the words "LIVE WIRES" in block letters not less than 13mm (1/2") high, the letters should be red on a white background and the size of each notice should be not less than 62mm x 50mm (2 1/2" x 2") overall.

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