



DATAMARS
Livestock[™]

Livestock Management Solutions

Electric Fencing & Waterers

Speedrite
DATAMARS

Patriot
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Tru-Test
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DATAMARS ***Livestock***TM

**We are a division of Datamars, a global company.
Datamars Livestock provides the platform and
tools for today's producers to better manage
their livestock.**

Tru-Test.
DATAMARS

Z
TAGS.
DATAMARS

T
Temple Tag
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We know that when our customers are able to collect and use data to make informed decisions, they achieve better and more consistent results. Simply, accurate livestock management translates to profitable operations.

Datamars Livestock is here for producers just like you. We are here to support you through the everyday requirements of livestock production. Our innovative and well-developed technology works alongside you, in the real nitty-gritty, day to day tasks.

Datamars Livestock links tools that promote animal health, enable precision animal management, and improve protein production.

These tools work together, communicating with each other and communicating with you.

When you're working the land, we're there with you. In the field and online, our digital platform connects you with information about your livestock, bolstering your intuition and enabling you to make precise, informed decisions.

Datamars Livestock - our products work with each other, but most importantly, they work with you.

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FENCE PLANNING AND BUILD GUIDE

This brochure includes sections that make up a Fence Planning and Build Guide. This guide explains what you need to build an effective electric fence.

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Why use electric fencing?

An electric fence energizer (can also be called a charger or fencer) takes electric energy from a power source and delivers it to a fence as pulses.

These pulses are commonly referred to as the “shock” felt by any animal which touches an electrified fence. Unlike a conventional fence, an electric fence is a psychological barrier so animals learn to respect the fence. Electric fencing offers you a number of benefits over conventional fencing.

Safety



Animal safety A safe and effective option to barbed wire or woven fences, electric fence systems also deter and protect against trespassers and predators.

Lower cost Electric fence requires less labor and material than conventional fences (barbed or woven wire, wood rail, vinyl). Savings can also be achieved through reduced maintenance—animals are less likely to damage an electric fence because they don't usually touch it more than once. It is important to invest in quality components as these will also provide fewer maintenance problems and greater fence life-expectancy, increasing your value for money.

Cost



Flexibility



Ease of construction Relatively simple and easy to build, electric fences can be installed quickly and with minimum tools saving you labor, time, and costs.

Flexibility Wire spacing and fence design can be modified to control a variety of animals. Temporary electric fences can also be moved quickly and easily.

Long life Using quality components and materials, electric fences can last a long time, with permanent electric fences lasting up to 20 years.

Ease



Durability



Electric Fence Brands

We have industry-leading brands to meet all of your electric fencing needs. Whether you're building a fence to last 20 years or installing temporary netting to protect a campsite, our brands are here to help walk you through the process and get you what you need.

Speedrite™ DATAMARS

No nonsense electric fence solutions for the serious farmer and rancher.

Speedrite premium electric fence has provided producers with superior features and technology since 1938.

speedrite.com



Patriot™ DATAMARS

Patriot electric fence offers quality fencing at an outstanding value.

Patriot provides you the flexibility to enjoy your lifestyle while meeting your needs for simplicity, reliability, and performance.

patriotglobal.com

FENCE PLANNING AND BUILD GUIDE STEP NUMBER	1	2	3	4	5	6
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Select the electric fence for your needs

The best electric fence is the one that is suited to your requirements. The table below outlines the 3 main types of electric fence structures as a starting point to help you identify which fence type best suits your needs.

	Portable/Temporary	Semi-Permanent/ Permanent	Permanent High-Tensile
Longevity of Fence	Short—moves frequently	1–20 Years*	20–40 Years*
Ease of Construction	Simple and fast	Easy to medium	Medium. Requires special tools
Recommended For	Horses, cows, pets, garden, and small nuisance animals	Deer, horses, cows, sheep, goats, pigs, exotics (llamas, emus etc.), predators	Deer, cows, sheep, goats, pigs, exotics (llamas, emus etc.), predators
Containment Area	Short/small	Unlimited	Unlimited
Primary Need	Temporary containment, intensive grazing	Pastures and cross fencing	Perimeter fencing
Key Benefits	Easy to install, use, and move	Can use any combination of post type and conductive wire	Offers greatest fence life. Requires minimal maintenance

Main Fence Components			
Energizer Type	Solar, dual-purpose, AC, battery	Solar, dual-purpose, AC, battery	Solar, dual-purpose, AC, battery
Wire Type	Poliwire, tape, rope, or braid	Poliwire, tape or rope, steel/aluminum wire	12.5 gauge high-tensile wire
Post Type	Tread-in, rod, steel, or fiberglass posts	Wood posts, T-posts, rod posts, metal pipes	Wood posts, T-posts, rod posts, metal pipes

* This time frame indicates the expected fence life using quality products and keeping the fence maintained.

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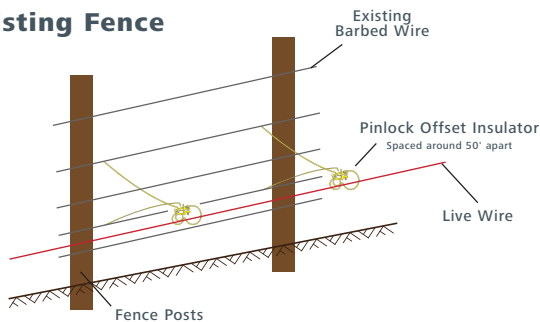
Types of electric fencing

Speedrite
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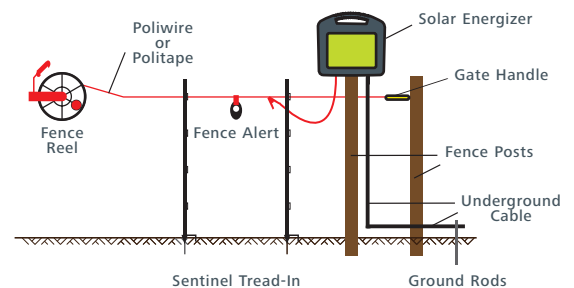
Patriot
DATAMARS

Speedrite and Patriot offer a variety of flexible fencing solutions to meet your needs. Speedrite offers premium products for high-tensile, long-term solutions. Patriot offers solutions for low-strain fencing, with high-quality products at an outstanding value. Both brands also offer a range of products for temporary applications.

Renovating an Existing Fence



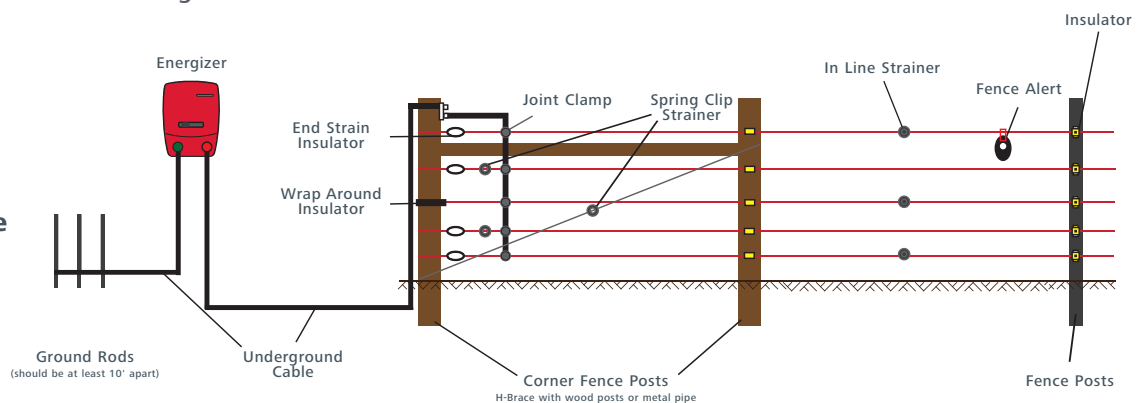
Temporary Electric Fence



Speedrite
DATAMARS

Speedrite premium electric fence products are well-suited for high-tensile, permanent fencing. Premium accessories and quality construction are crucial to building an electric fence to last.

Permanent Electric Fence



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Fence Design

Containment vs. Exclusion

Traditional **containment** electric fence applications, such as those used to control cattle, horses, sheep, and goats, are primarily designed to keep these animals in a limited area. These animals are usually domesticated and are somewhat predictable. Most importantly, you are fencing these animals **IN** with their food source.

Containment fences for dogs are primarily designed to keep them in a residential yard. Usually, a single electrified wire placed 4-6" above the ground will be sufficient as most dogs will try to dig under the existing permanent fence. Make sure the wire is not too close that it actually touches the ground itself. If you want to add a 2nd or 3rd wire, allow 4-8" vertical distance between each wire. Unlike containment fences for livestock, those designed for dogs can typically be used with any energizer depending on the total area to be fenced.

Standard **exclusion** fences – such as those designed to keep out bears, wolves, coyotes, deer, or feral hogs – are different from traditional electric fence applications. These animals are not domesticated, are highly unpredictable, and can be extremely dangerous. Most importantly, you are fencing these animals **OUT** of their food source. Electric fence is an effective solution for exclusion fences, but it is absolutely critical that you do it right – for you, your property, and the animals.

Exclusion fences for small nuisance animals are primarily designed to keep them out of small flower gardens, landscaped areas, and other similar areas around a house or business. Usually, a single wire fence placed 4-6" off of the ground will be sufficient. Make sure the wire is not too close that it actually touches the ground itself. In some cases, you may need to add a 2nd or 3rd wire (allow 4-8" vertical distance between each wire). Unlike standard exclusion fences, those designed for small nuisance animals can typically be used with any energizer depending on the total area to be fenced.

BASIC GUIDELINES FOR STANDARD EXCLUSION FENCES

DO'S

- ✓ **DO** research the type of fence design and conductor wire required for your specific application.
- ✓ **DO** solicit sound, professional advice before starting any project.
- ✓ **DO** use an energizer with a MINIMUM of 0.5 OUTPUT joules (NOT stored joules). Wildlife agencies recognize 0.5 output joules as the minimum output energy required to control predators.
- ✓ **DO** use proper grounding and fence construction techniques when building the electric fence. Both of these elements are crucial to the success of the fence.

DON'TS

- ✗ **DO NOT** use inferior products. This is NOT the time to go cheap on your energizer, fence materials, and ground system just to save a few dollars.
- ✗ **DO NOT** annoy the animal by using under-powered energizers. The energizer must deliver a powerful enough shock to deter the animal. Under-powered energizers just make the animal mad, making the animal try harder to get through the fence.
- ✗ **DO NOT** assume that all conductors (wires) are good or acceptable to use when controlling predators. Certain applications are fine with poli products, while others will require heavier gauge steel or aluminum wires.

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CONTAINMENT FENCE

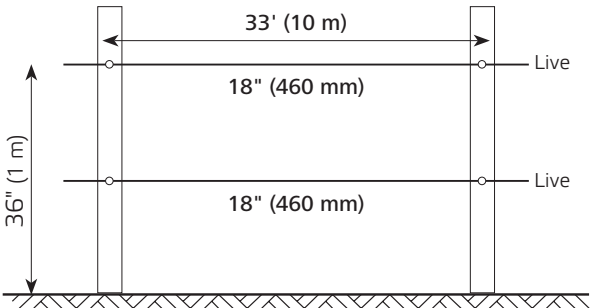
Recommended for domesticated livestock.

Common uses

- Small or large pastures
- Strip grazing/managed grazing

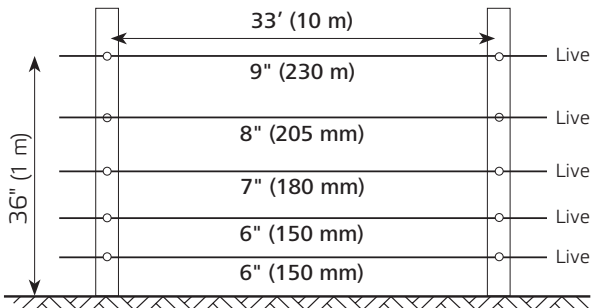
CATTLE AND HORSES

33' (10 m) spacing, posts only



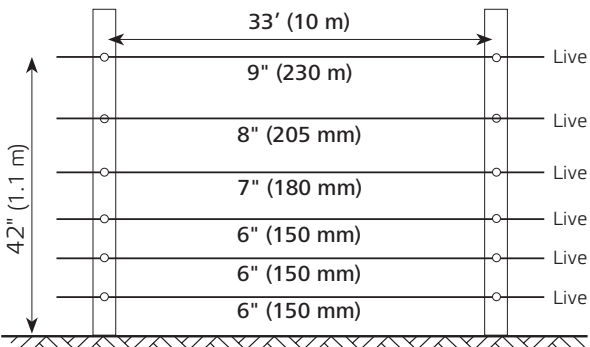
GOATS, SHEEP, AND DOMESTIC PIGS

16 - 33' (5 - 10 m) spacing, posts only



6 WIRE BOUNDARY OR SUBDIVISION

33' (10 m) spacing, posts only



FENCE PLANNING AND BUILD GUIDE STEP NUMBER	1	2	3	4	5	6
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EXCLUSION FENCES

Key considerations

- Size of the animal determines the wire spacing needed
- Jumping ability of the animal will determine height of the fence
- Maintain low wire spacings for animals known to dig
- As a general rule, all exclusion fences should use a hot-ground system
- Netting can be an acceptable solution in some cases. Use "Pos/Neg" electrified netting in areas with poor grounding conditions. See page 87 for a list of available netting products.

Common uses

- Beehives
- Chickens
- Campsites
- Residential garbage protection
- Fencing off hay/equipment

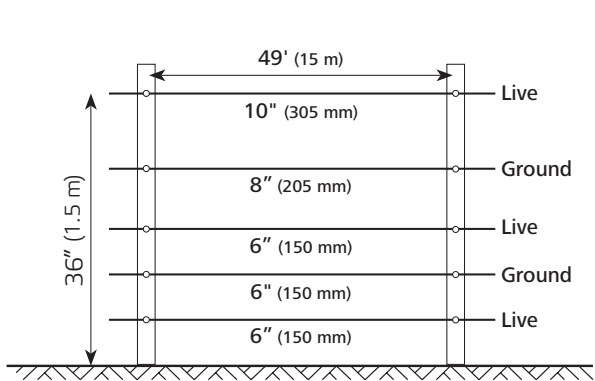
! Remember, you need an energizer with at least 0.5 OUTPUT joules to effectively control bears!



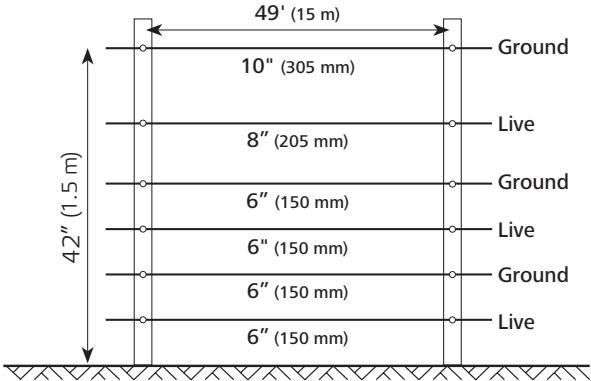
"Deer and hogs have always been a problem for us. Putting in a Patriot electric fence was one of the best business decisions we ever made. We now harvest fields that previously were too damaged from deer and hogs for us to get a crop. Plus, the fence has helped us to achieve the maximum benefit from our seed, chemical, and fertilizer inputs. In fact, the fence easily paid for itself within the first year."

Johnny and Crawford Henry — Cotton and Peanut Growers

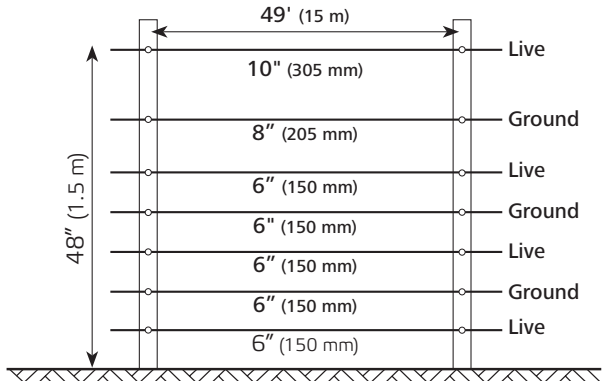
5 WIRE FENCE
Recommended for coyotes and feral hogs.



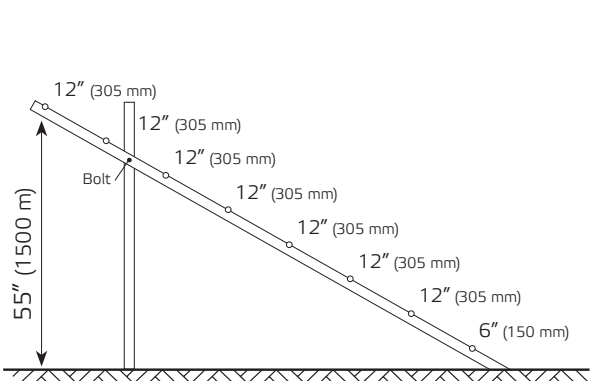
6 WIRE FENCE
Recommended for coyotes and feral hogs.



7 WIRE FENCE
Recommended for bears.



SLANT FENCE
Recommended for animals that jump (deer and elk).



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CROP PROTECTION

Key considerations

The 2 fence system (i.e. inside and outside fence), with differing heights, and the slant fence achieve a 3-dimensional effect on the deer. This impairs the deer’s ability to judge the height and distance they need to jump to clear the fence.

Common uses

- Commercial row crop protection
- Food plots
- Gardens
- Certified organic operations

! Make sure you have enough energizer to deliver an effective shock. Most applications require a minimum of 1 output joule per 10 acres.

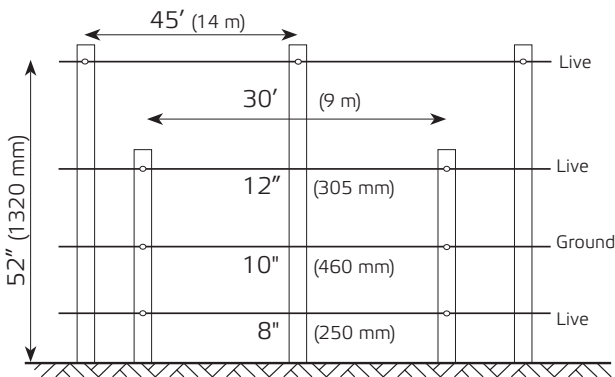
FERAL HOGS

Most feral hog fences are similar in design to the crop protection fence, except there is no need for the inside fence. The 5 wire fence diagram on the previous page is also an acceptable solution. A hot/ground system is preferred.

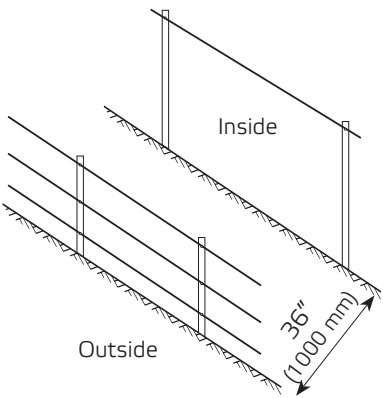


CROP PROTECTION FENCE

FRONT VIEW



TOP VIEW



Crop damage due to wildlife is estimated to cost nearly \$1 billion annually. Whether you are a full time producer or a subsistence farmer, electric fencing is an inexpensive, flexible solution to deter pests and predators in any situation.

Speedrite
DATAMARS



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Select your energizer

The first component to building an effective electric fence is selecting a quality energizer to meet your power needs. This step-by-step process will walk you through the factors to consider when selecting a Speedrite or Patriot energizer.

Step 1. Power Type

The first step in choosing your energizer is to decide on your power source. Patriot and Speedrite energizers are available in AC, solar, and battery powered. There are also dual-purpose models that can work with any of those power sources.



AC



Solar



Battery

Step 2. Animals Controlled

The next factor to consider is the type of animal the fence would control. There are two types of fence: containment and exclusion. Containment fences are designed to keep livestock and pets in a fenced area. Exclusion fences are designed to keep predators and pets out. For voltage considerations, see page 15.



Containment



Exclusion

Step 3. Area Covered

The recommended amount of power is 1 joule of output power per every 40 acres fenced. We recommend connecting live wires with vertical jumpers every half mile for maximum conductivity.

Total Power Needed = 1J per 40 acres fenced

240 acres fenced

÷ 40 acres per 1 joule

= 6 joules of power needed

Premium Features

Speedrite premium energizers feature professional technology for ultimate power and reliability. For more information about Speedrite features, see pages 35, 39, and 47.



Smart Technology



3 Year Warranty



Repairable



Adjustable Pulse Speeds



Bi-Polar Technology



Remote Compatible



Cyclic Wave Technology



Day/Night Sensor



Low Energy Terminal

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ANIMAL CONSIDERATIONS

Containment	Min. Fence Voltage*	Characteristics/Tips
Beef Cattle	3,500 V	Bulls require a higher voltage as they are more aggressive.
Dairy Cattle	3,000 V	If kept separately, calves and heifers require lower wires and less spacing.
Horses	2,500 V	Intelligent, learn quickly, easy to control. A fence made of politape, wire, or rope is less likely to injure if a spooked horse tries to run through it.
Llamas	6,000 V	Thick coats insulate from electric shocks, requiring higher voltage.
Deer and Elk	6,000 V	Spook easily and jump higher than most other animals. Above head height, electric high-tensile fence recommended. Space wires close enough to prevent stepping through or heads between wires.
Sheep	6,000 V	Wool insulates from electric shocks, requiring higher voltage.
Goats	6,000 V	Some species have thick insulating coats requiring higher voltage. Tend to test fences—space wires low to ground and high enough to prevent being jumped.
Pigs	3,000 V	Start wires close to ground and finish at nose level.
Pets	750 V	Start wires close to ground.

Exclusion	Min. Fence Voltage*	Characteristics/Tips
Wild Hogs	6,000 V	Aggressive and persistent. Deter from rooting by starting wires close to ground.
Wolves and Coyotes	6,000 V	Very thick, insulating fur requires high voltage. Can dig to reach prey so place first wire low to the ground.
Bears	6,000 V	Thick, insulating fur requires high voltage. Bait fences to train avoidance.
Deer and Elk	6,000 V	Move quickly and often run through unseen fences so make fence highly visible.
Small Nuisance Animals	2,000 V	Start wires close to ground as most species are small and prone to digging.

Notes:

Fences enclosing both mothers and offspring require an electrified wire at the nose-level height of each.

Please see predator voltage ranges if you want to keep animals in and predators out. To cover all predators, use a minimum voltage of 6,000.

* Recommended Minimum Voltage. Please note voltage levels are impacted by vegetation on the fence line, length of fence, and type of wire. To check voltage levels on your fence line, use the a voltage testers.



How does your charger measure up?

Speedrite
DATAMARS

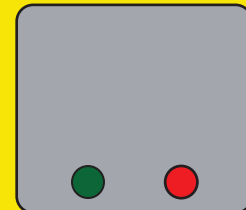


Model: 6000

Output Energy: 6.0J

Stored Energy: 9.0J

**Other
Brands**



Comparable Model

Output Energy: 4.9J

Stored Energy: 8.0J

Output Joules = Power on your fence

All energizers can be measured in stored and output joules. Stored joules measure how much energy is produced internally by the unit. Output joules measure how much energy is converted through the transformer and is discharged on the fence. When comparing energizers, output joules are what matter, so you know exactly how much power you'll get on your fence. At Datamars Livestock, we stand behind our products. That's why we rate our energizers in output joules.

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Why do joules matter?

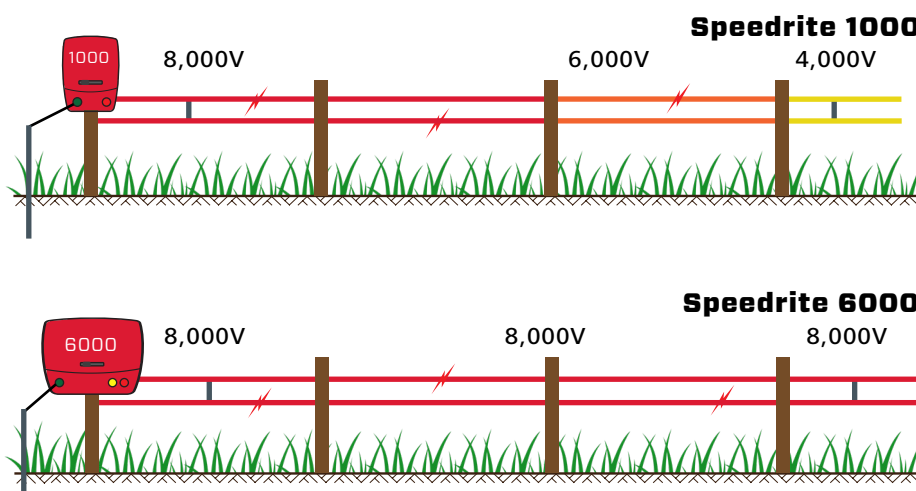
A joule is a measure of energy. More joules push voltage further down the fence. More joules also help maintain power when there is an increased load on the fence (i.e. vegetation, fault or short, broken insulator).

When choosing your energizer, consider the type of environment (high vegetation, long distance) and choose enough joules to maintain power on your fence.

The graphics below are to illustrate a scenario where the 1000 model is used on a fence too large for the energizer. For appropriate fence lengths and load, the 1000 will produce high voltages like all Speedrite premium energizers.

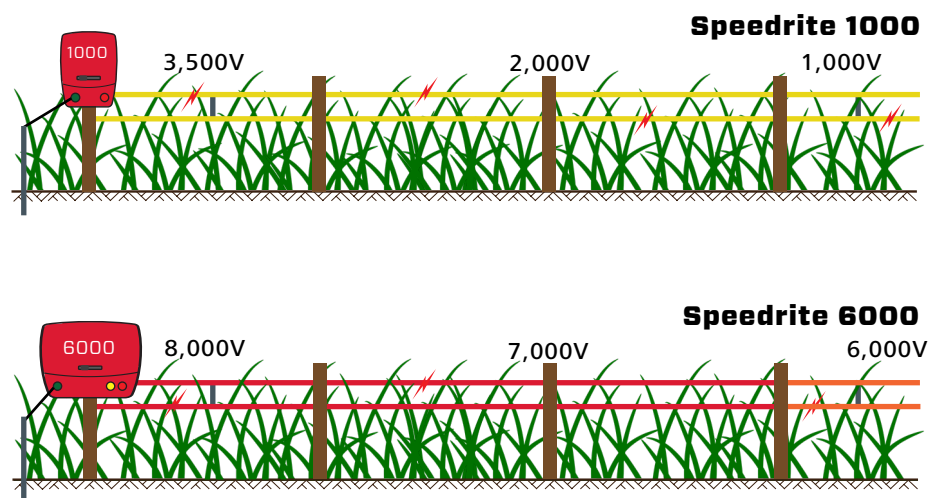
Clean fence

Here is a comparison of 1J and 6J energizers on a clean fence with minimal load. Both energizers will produce approximately 8,000V, but the 6J energizer will carry the voltage much farther.



Typical fence

Here is a comparison of 1J and 6J energizers on a typical fence with a heavy load (high vegetation level and potential shorts). Under these conditions with the 1J energizer, there will be around 3,500V on the fence and the voltage will travel a shorter distance. Under the same conditions with a 6J energizer, there will be more voltage on the fence and the voltage will not decrease as significantly along the fence line.



*Note: Voltage amounts and distance are approximations for comparison purposes.

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Select your wire products

When choosing your wire products, it is important to consider your fence design. The recommended products will vary based on whether the fence is designed for permanent, semi-permanent, or temporary applications. Recommendations will also vary based on the animals being controlled and visibility and conductivity needs.

Step 1. Fence Type

Temporary or Semi-Permanent Fences

- Rotational/intensive grazing
- Equipment/hay protection
- Seasonal uses
- Separating livestock
- Short-term containment



Permanent, High-Tensile Fences

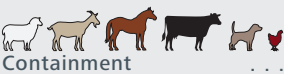
- Permanent containment/exclusion
- Perimeter fencing
- Cross fencing
- Crop protection



Step 2. Animals Controlled

Poliwire Products

- Recommended for all temporary applications
- Available in wire, rope, braid, tape, or netting
- Built to be flexible and portable



Containment



Exclusion

Aluminum/Steel Wire Products

- Recommended for permanent fences
- High-tensile, 12.5g wire recommended for long-term fences
- Ranges from 18g to 12.5g

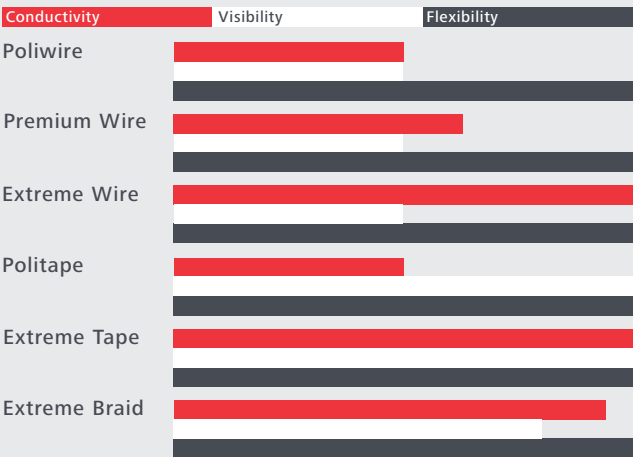
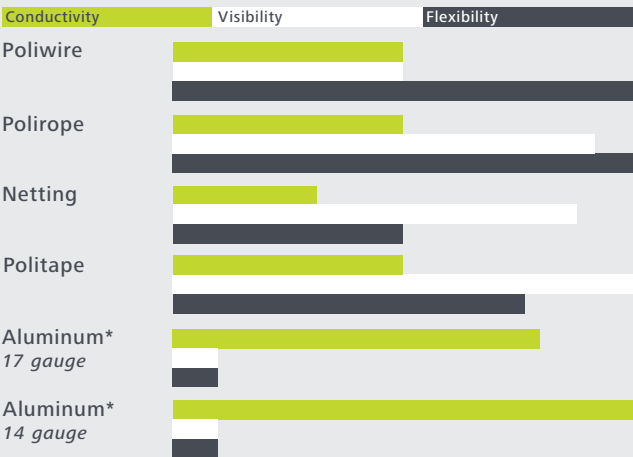


Containment



Exclusion

Step 3. Other Characteristics



*Aluminum and steel wire are more conductive than all Patriot and Speedrite poli-products.

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Select your insulators

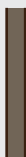
Using quality components is crucial for building an effective electric fence. Consider the following when selecting your insulators. For high-tensile, permanent fencing, we recommend using Speedrite premium insulators.

Step 1. Type of Post

The first thing to consider when choosing your insulators is the type of post you want to use for your fence. Depending on your fence design, you may use a couple of different types of posts, so you may need multiple types of insulators.



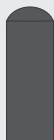
T-Post



Rod



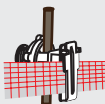
Wood



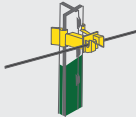
Metal

Step 2. Installation Type

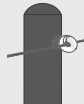
Installation type refers to the way the insulator is installed on the post. Various installation types work with various wire types, so it is important to consider the type of wire being used as well as the type of post.



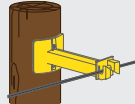
Screw On



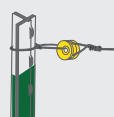
Wrap Around



Screw In



Nail



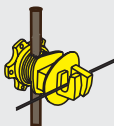
Wire to Post



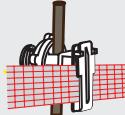
Snap On

Step 3. Attachment Type

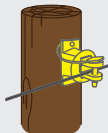
The attachment type describes the way the wire attaches to the insulator. There are several types of attachment types, which vary based on the post and installation types.



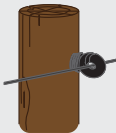
Claw



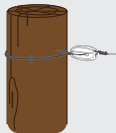
Tape



Pinlock



Ring

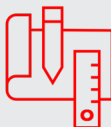


Porcelain

Premium Features

Speedrite premium insulators are built to last. These insulators are made with high quality materials and are designed for high-tensile fence. We believe in the quality of our products, so we back these insulators with an industry leading 10-year warranty. For more information, see pages 57-59.

Speedrite
DATAMARS



Designed for High-Tensile



10 Year Warranty



Superior UV Stabilization

FENCE PLANNING AND BUILD GUIDE STEP NUMBER	1	2	3	4	5	6
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Plan your electric fence layout

Once you have decided on your type of fence (permanent, semi-permanent, or temporary) and the fence design that will best suit your needs, you should plan your fence layout to ensure you get the correct amounts of all of your necessary accessories.

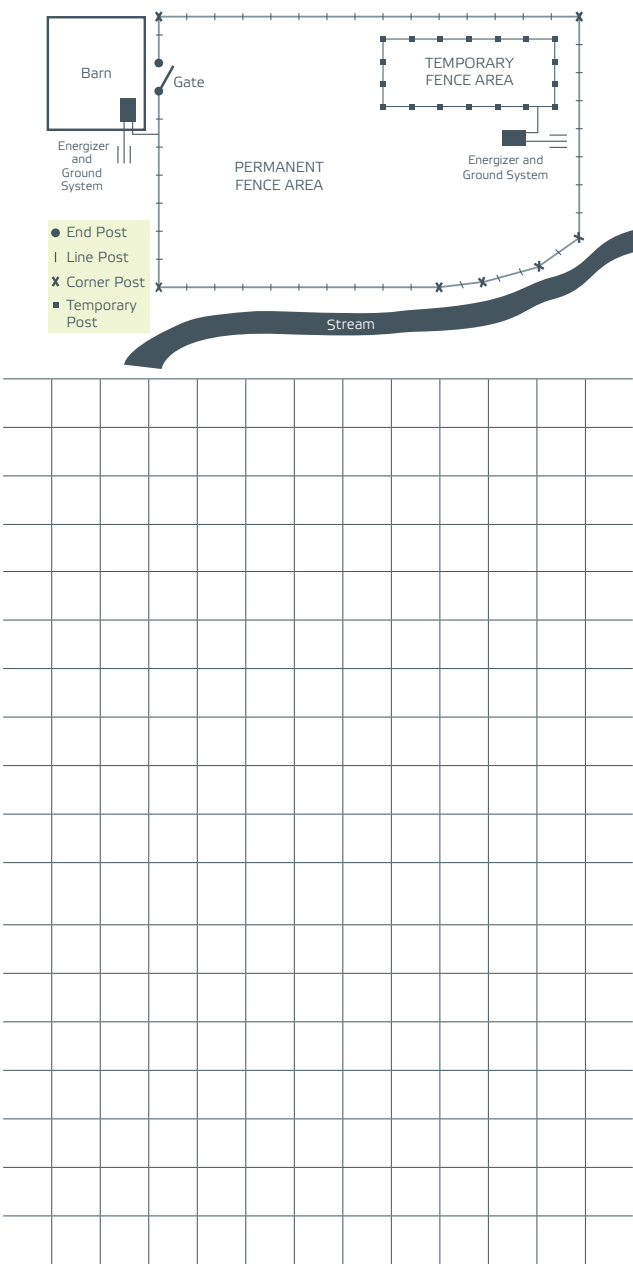
Sketch a diagram and measure the distance of the area you would like to fence.

Grab a pencil and walk around the area you want to fence, measuring and sketching your layout. Also include in your plan:

- Location of buildings/ barns enclosed by or sitting adjacent to your fence
 - Location of your fence energizer and electrical source (if required)
 - Trees, hills, low and/or wet areas, or other obstacles
 - Water supply and feeding locations
 - Gate locations
 - Fence termination points
- If necessary, it is also a good idea to have your utility company mark any underground cables/lines that may be in the immediate vicinity

As you are sketching your layout consider these questions:

- What type of gate(s) do you plan on using?
- Where will you put cut-out switches?
- How will you secure your corners?



FENCE PLANNING AND BUILD GUIDE STEP NUMBER	1	2	3	4	5	6
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Electric fence checklist

Depending on the type of fence you're building, these checklists will ensure you've gotten all of the components you need.

Permanent Fencing

Use this checklist if you are building a permanent, high-tensile fence. We recommend Speedrite products for premium features and technology to serve your professional needs.

	Energizer		Posts		Lightning Protection
	Ground Rod		Wire (12.5g recommended)		Cut-Out Switch
	Ground Rod Clamps		Wire Strainers		Digital Voltmeter
	Underground Cable		Spinning Jenny		Fence Alert
	Joint Clamps		Insulators (End Strain and Post)		

Temporary Fencing

For temporary fencing, this checklist will help you find what you need. Patriot offers flexible, quality products for rotational grazing or other temporary applications. Speedrite's premium features are suited for professional temporary or semi-permanent fences.

	Energizer		Poliwire Product
	Ground Rod		Fence Reel
	Ground Rod Clamps		Digital Voltmeter
	Underground Cable		Fence Alert
	Pigtail/Tread In Posts		Gate Handle

Renovating an Existing Fence

For adding an electric component to an existing barbed wire or perimeter fence, we recommend pairing Speedrite energizer and offset insulators with 12.5 gauge wire. For adding an electric component to a backyard chain link or other existing fence, check out Patriot's specialty insulators.

	Energizer
	Ground Rod
	Ground Rod Clamps
	Pinlock Offset Insulators
	Wire (12.5g recommended)

FENCE PLANNING AND BUILD GUIDE STEP NUMBER	1	2	3	4	5	6
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Installing your fence

Below are a few things to consider when installing your electric fence.

Wire Tension



Interference



Training



Mixing Metals

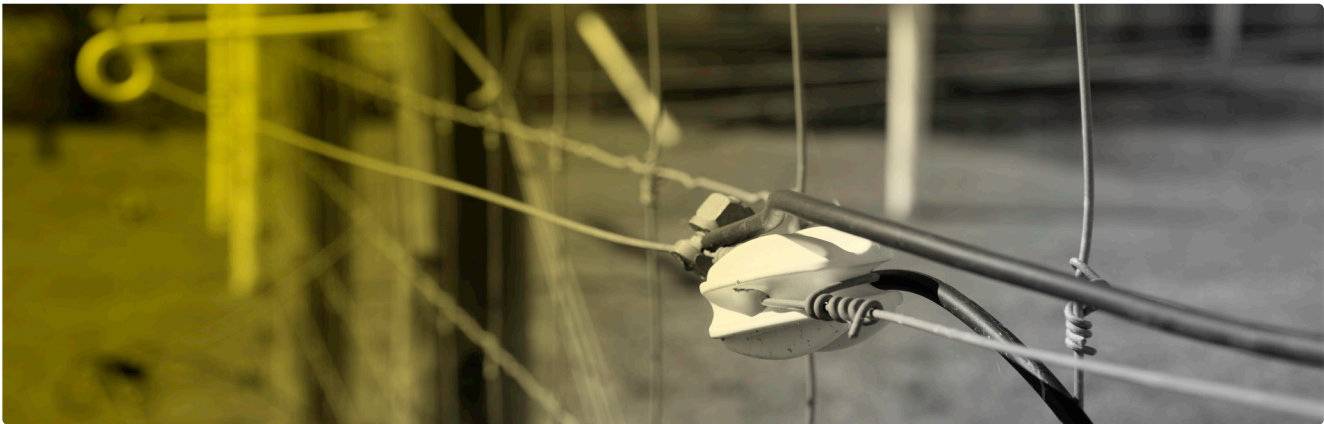


Wire tension Electric fencing provides a psychological barrier rather than a physical one, so there is no need to excessively tension wire. Heavy strainer assemblies are not required either, reducing the overall cost of construction. Electric fence wire should be tensioned to 200 lb. By comparison, conventional fence wire should be tensioned to 340 lb. The tension of each wire can be measured using a tension meter.

RFI (Radio Frequency Interference) Many farms suffer from RFI. This often results in poor radio reception and an annoying ticking noise on the telephone line. Most energizers are fitted with special components and advanced circuitry that significantly reduces the levels of electrical emissions that might otherwise affect adjacent electrical equipment.

Animal training One method to train animals to respect electric fencing is to use a small, well-fenced holding paddock. Divide the holding paddock using your energizer and poliwire. Introduce the untrained livestock to the paddock. The animals will quickly learn to avoid the electric fence barrier.

Mixing metals Avoid using different metals in your electric fence. In damp conditions, when an electric current passes through the differing metals, electrolysis will occur. For example, using copper ground rods and steel lead out wire will cause problems. This will cause corrosion at the point of contact. Using the same metals in your electric fence will avoid problems altogether.



FENCE PLANNING AND BUILD GUIDE STEP NUMBER

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6

TEMPORARY ELECTRIC FENCING

A temporary electric fence works well for maintaining a small number of livestock for relatively short periods of time. The fence can be quickly constructed and moved as often as needed. Temporary electric fences are excellent choices for cattle and horses. They are sufficient for sheep and goats, but require more work and greater attention to detail (i.e., wire spacing, available posts, line tension, etc.). Temporary electric fences are also ideal for overnight trail rides to control horses and on camping trips to keep unwanted animals away from your camp site.

Fence posts

Temporary electric fences are generally constructed with either Sentinel Tread-In or Pigtail Tread-In posts.

Fence wire

For temporary fences, good poliwire, poliropo, or politape with at least 6 strands of conductors are the best choice.

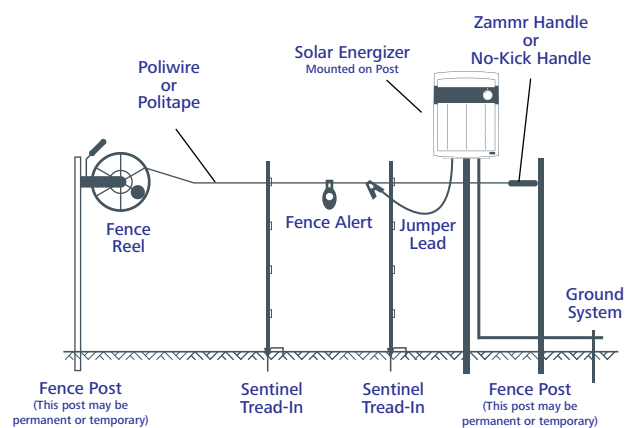
Our temporary fencing wire contains 6 stainless steel conductors and white UV stabilized yarn for greater visibility and longevity. The biggest difference is the thickness and visibility of the different products i.e. politape is larger and therefore more visible than poliwire.

How do you join Poliwire or Politape?

To join broken (or separate ends) of poliwire or politape, use poliwire joiners or tape buckles.

Can a temporary fence be used as a boundary fence?

No, a temporary fence is not suitable for a boundary fence. A permanent fence is a much better choice.



FENCE PLANNING AND BUILD GUIDE STEP NUMBER	1	2	3	4	5	6
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PERMANENT ELECTRIC FENCING

Converting a barbed wire or woven wire fence

Do you already have a good barbed wire or woven wire fence, but want to add an electric component?

Note: You should never try to electrify the existing barbed or woven wire as it is too dangerous for your livestock.

Wood Post Extenders and T-Post Extenders allow you to maintain your current fence structure while adding high tensile wire, poliwire, politape, or polirope to make it electric. This is a safe and highly effective way to convert a barbed or woven wire fence to electric.

Fence wire

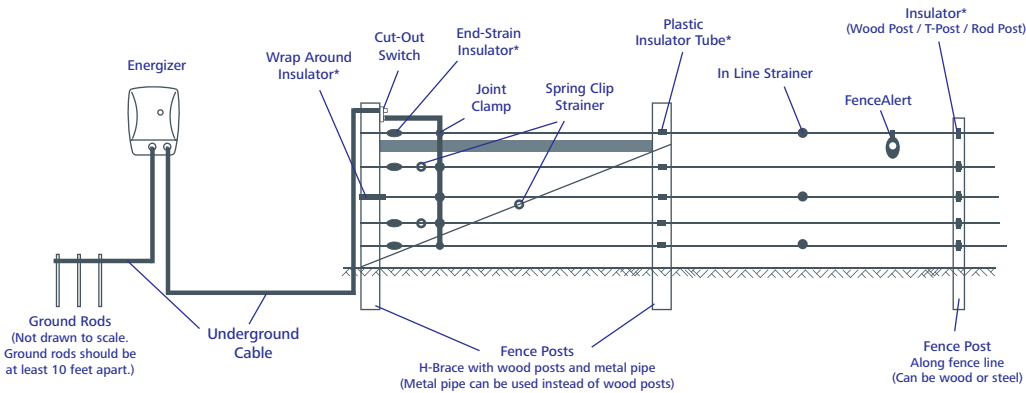
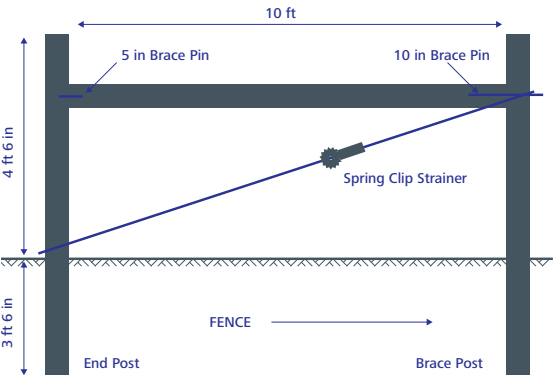
The best permanent electric fences are constructed using 12.5 gauge galvanized high-tensile wire. It provides a lower level of resistance than a smaller gauge of wire and has sufficient capacity to carry the electrical current of the fence. Some people use a smaller gauge galvanized wire (i.e. 14 ga., 16 ga., etc.); however, these have higher levels of resistance, do not allow you to achieve the maximum benefits of your energizer, and your fence life may not be as long. (Aluminum wire is not the same as steel galvanized wire. Small aluminum wire also has less resistance than comparable size steel wire.)

Fence posts

Permanent electric fences can be adequately constructed with wood posts, T-posts, rod posts, or metal posts. Typically, the type of post chosen is determined by local availability and price.

Corner/End braces

Corner and end braces are most commonly made of wood posts with a metal pipe between them. (You can also use metal pipe posts instead of wood posts.) The most common braces are made of at least two posts spaced at least 10 feet apart or 2.5 times the height of the finished fence. These H braces serve as the foundation of the fence line and help to maintain the tension, which is very important for high-tensile fences. For more information on brace construction, please consult your local electric fencing dealer or a fence construction company.



* Insulator style and type may vary depending on individual need and type of post.

FENCE PLANNING AND BUILD GUIDE STEP NUMBER	1	2	3	4	5	6
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Grounding and testing

This is one of the most important parts of the fence. Without a proper ground system, you will not be able to achieve the maximum benefits of your electric fence.

What is a Ground System?

A ground system is the most important component of any electric fence system. If an electric fence is not properly grounded, it will be much less effective.

A ground system consists of a number of ground rods (stakes) that pass electric current back from the soil to the energizer. The larger the energizer and the longer the fence line, the more ground rods are required.

How does grounding work?

For an electric fence to give an animal an electric shock, electrical current (produced by the energizer) must complete a circuit. The current from the energizer flows along the wires, through the animal's body, down through the soil to the ground system, then back up to the energizer. If the ground system isn't working properly, the animal won't get an effective shock.

What factors will affect the Ground System?

Soil Type



Soil Type

Dry, sandy, and non-conductive soil types limit the current flow to the ground rods. If you have soil that is not well suited to grounding, use additional ground rods, choose a better location for the ground system, or use an alternate method of grounding such as a ground wire return.

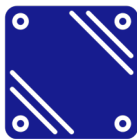
Vegetation



Vegetation

Vegetation touching the live fence wires allows current to leak, causing the fence to "short" and voltage to drop. Check the fence regularly to make sure that long grass and overhanging branches are not touching the live fence wire.

Metal Type



Metal Type

Using a mixture of metals in the ground system will lead to corrosion. This will cause problems with your grounding system. For example, never use copper wire with galvanized ground rods. You should also avoid using steel T-posts as ground rods because they will corrode and become non-effective.

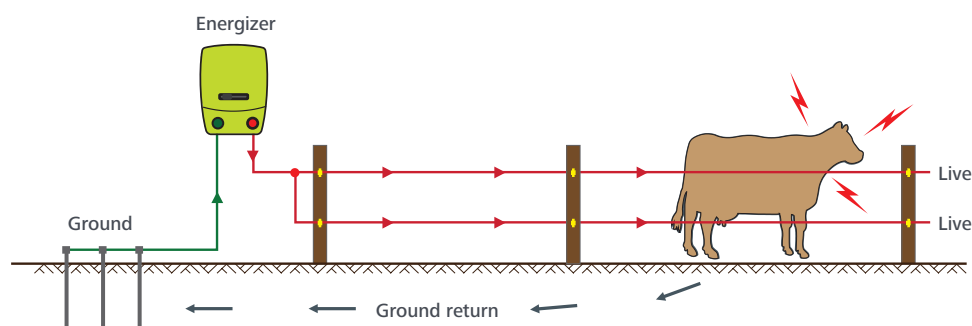
! NOTE: If it is not possible to locate the ground system in close proximity to the energizer, you may be able to use the existing fence line to connect to a remote ground system. In dry weather, it may be necessary to water the ground system in order to improve soil conductivity.

FENCE PLANNING AND BUILD GUIDE STEP NUMBER	1	2	3	4	5	6

TYPES OF GROUND SYSTEMS

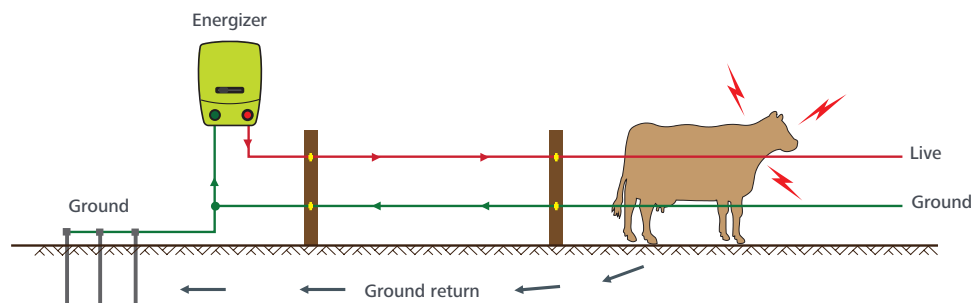
All Live Grounding System

An all live ground system is recommended where soil is conductive (most moist soils are conductive). When an animal standing on the soil touches the fence, the circuit is completed when the current travels back to the energizer via the ground rods, at which point the animal gets a shock.



Ground Wire Return (Hot/Ground)

A ground wire return, or hot-ground system, is recommended where soil is not conductive (most dry or sandy soils). The fence is constructed using both live and ground wires. When an animal touches a live wire and a ground wire at the same time, the circuit is completed and the animal gets a shock.



Selecting a Site for the Ground System

A suitable place for the ground system is:

- At least 33 ft (10 m) away from any other ground system (i.e. telephone, house power line, etc.)
- Away from livestock or other traffic that could interfere with the installation
- Where the system can easily be accessed for maintenance
- Ideally, where there is damp soil all year round (i.e. a shaded area or under the drip line of a building).

FENCE PLANNING AND BUILD GUIDE STEP NUMBER	1	2	3	4	5	6
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SETTING UP A GROUND SYSTEM

GROUND RODS

The number of ground rods required depends on the type of energizer being used to power the fence and soil condition. As a general rule, you should use one ground rod per 2 output joules. You can use a T-handle ground rod for all integrated solar energizers and energizers rated for 0.5J or less.

For long ground rods (5'–6' length):

- Space the required number of 5–6 ft (2 m) ground rods at least 10 ft (3 m) apart.
- Drive the ground rods deeply into the soil, at least 10 ft (3 m) apart. Make sure that the ground rods protrude out of the soil at least 4 in (10 cm) so they can be easily connected.
- Join the ground rods in a series using ground clamps and underground cable.

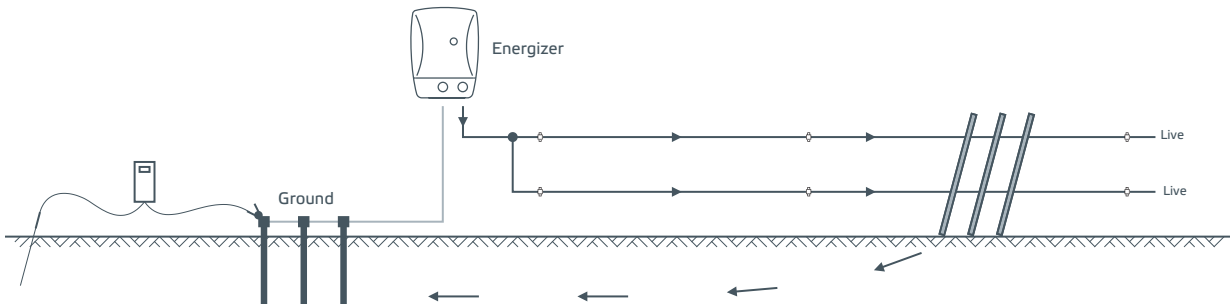
For T-handle ground rods (3' length):

- Insert the rod out of the soil least 4 in (10 cm)

TESTING THE GROUND SYSTEM

1. Turn off the energizer.
2. At least 330 ft (100 m) away from the energizer, short circuit the fence by laying several steel rods (or lengths of pipe) against the fence. In dry or sandy soils, drive the rods up to 12 in (30 cm) into the soil.
3. Turn on the energizer.
4. Use a digital voltmeter to measure the fence voltage. It should read 2 kV or less. If not, repeat steps 1 to 3.
5. To check the ground system, attach the voltmeter's clip to the last ground rod and insert the ground probe into the soil at the full extent of the lead. The voltmeter reading should be no more than 0.3 kV. If the reading is higher than this, the ground system is insufficient. See the grounding checklist, add more ground rods, or find a better location for your ground system.

TESTING THE GROUND SYSTEM



Grounding Checklist			
All wires are joined securely.		There are a sufficient number of ground rods.	
Connections to ground rods are secure.		All parts of the ground system are made of the same metal.	
Ground rods are at least 5–6 ft long and at least 10 ft apart.		Ground rods are buried deeply in the soil.	

FENCE PLANNING AND BUILD GUIDE STEP NUMBER	1	2	3	4	5	6

TROUBLESHOOTING

Finding a Fault Using a Digital Voltmeter

Electrical current flows toward a fault (short) in the same way that water flows towards the plug-hole in a bath tub. A digital voltmeter allows you to follow the direction of the current towards the fault.

Check the energizer and the ground system.

At the first cut-out switch, disconnect the rest of the fence and take a voltage reading. The voltage should be normal.

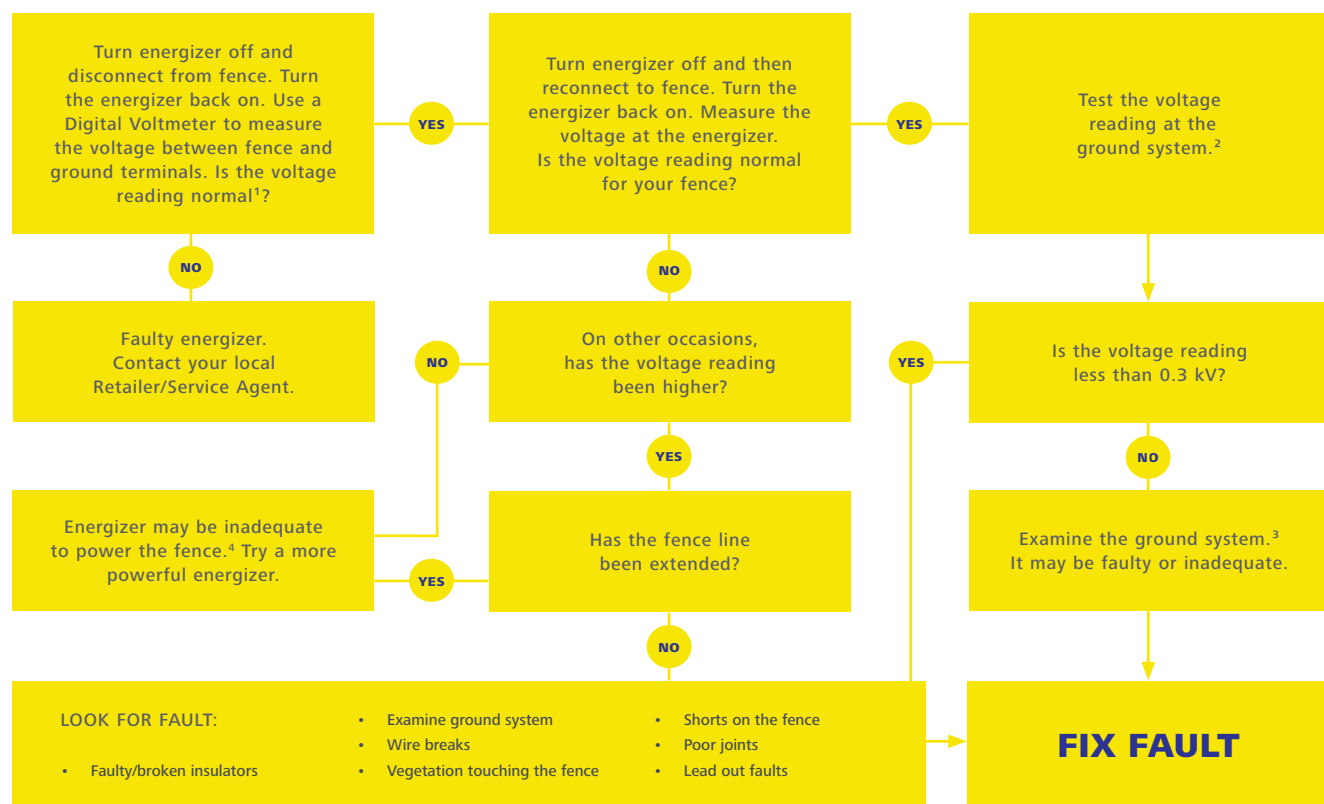
Move along the fence line stopping at each cut-out switch. Take a voltage reading with the cut-out switch closed and again with the cut-out switch open. A spike in the voltage reading with the cut-out switch open indicates a fault in the section of the fence which has been disconnected.

If you are still having trouble, follow the troubleshooting flow chart below.



When using the Digital Voltmeter to find faults, isolate sections of the fence line with a cut-out switch.

START



1. Compare this voltage reading to the voltage output on the user manual or Energizers section of this brochure.
 2. There are different ways a ground system can be set up. To find out the best way to test the voltage reading of your ground system see page 27, or contact your local Retailer for assistance.
 3. Refer to the Grounding and Testing section of this brochure.

4. Refer to Animal Considerations section for more information on recommended minimum fence voltage for animal containment.
 5. Always check that the fault has been fixed correctly. If fault is still present, return to start.
 6. For further assistance, contact your local Retailer, or call Datamars Livestock Customer Service at 800-433-3112.

Key Terminology

AC	Alternating current, AC power supply 110 - 120 V or 220 - 240 V.
Amp	Unit of current. Short for Ampere.
Capacitor	Used to store energy in the energizer.
Current	Duration and magnitude of current causes the shock given by the electric fence. Increasing the voltage increases current, while increasing resistance decreases current.
DC	Direct current, battery power supply (e.g. 12 V battery input).
Fault / Short	Energy loss from the fence (i.e, live wire lying on the ground, vegetation growing over the fence, etc.).
Ground System	The rod(s) in the ground connected to the ground terminal on the energizer.
Joule	Unit of energy. One joule is one watt of power for one second.
Lead Out Wire	Section of underground cable or wire that carries the electrical current from the energizer to the fence.
Live	The current-carrying wire connected to the energizer fence output terminal.
Ohm	Unit of resistance.
Output Energy	Effective energy delivered by the energizer. Also known as output joules.
Pulse	Brief electrical current given by an energizer, approximately 0.0003 seconds per pulse.
Resistance	What causes loss of power and voltage on the fence.
Stored Energy	Energy accumulated in the storage capacitor(s) in between output pulses. Also known as stored joules.
Watt	Unit of power. One watt is one joule per second.
Volt	Unit of electrical pressure. Sometimes it is stated as "kV" or kilovolts which is equal to 1,000 volts.
Voltage	Electrical pressure causing current to flow.

SPEEDRITE PREMIUM ELECTRIC FENCING



ABOUT SPEEDRITE

The result of decades of intense research and development, you can rely on the Speedrite premium range of energizers and electric fencing accessories to deliver maximum power. Speedrite products feature unique, market leading technology, giving you the best premium electric fencing available.

CHOOSING YOUR ENERGIZER






















































































































































Speedrite offers a range of energizers to suit your professional needs.

From cost effective and reliable AC energizers to all-in-one Unigizers™, the Speedrite range of energizers also includes portable options and a solar range, ideal for isolated areas where no AC power is available.

ENERGIZERS

You can rely on Speedrite to deliver maximum power. Speedrite energizers are the result of decades of intense research and development. Our energizer range features unique market-leading technologies. See for yourself why Speedrite is the promise of power in action!

Energizer Selection Chart

Model	Remote Capable	Power			Livestock / Animals controlled	General fence range*
		AC	Battery	Solar		
63000RS <small>(AVAILABLE ONLY IN 220 V)</small>					       	4,000 ACRES (390 MILES)
46000W					       	3,300 ACRES (290 MILES)
18000i					       	1,300 ACRES (120 MILES)
12000i					       	500 ACRES (90 MILES)
6000i					       	240 ACRES (60 MILES)
6000					       	240 ACRES (60 MILES)
3000					       	120 ACRES (30 MILES)
3 J SOLAR SYSTEM					       	120 ACRES (30 MILES)
2000					       	80 ACRES (20 MILES)
2 J SOLAR SYSTEM					       	80 ACRES (20 MILES)
1000					       	140 ACRES (40 MILES)
1 J SOLAR SYSTEM					       	40 ACRES (10 MILES)
S500 <small>(INTEGRATED SOLAR ENERGIZER)</small>					       	100 ACRES (30 MILES)
AN90		 OR 			  	5 ACRES (1.25 MILES)
AN20					 	1 ACRE (0.6 MILES)

*Note: Range claims are a general guide and based on multi-wire fences. Actual range claims depend on many factors including fence and operation conditions, livestock type, and environment. Solar panel wattage numbers are only general recommendations and may vary based on geography. Please consult your local electric fence professional to determine the best solar panel for your operation. All Speedrite energizers are low impedance.

AC Range



An AC powered energizer is the most cost-effective, reliable way to power a permanent electric fence. Unigizers are also compatible with AC power.

Unigizer Range



A Unigizer is a flexible, all-in-one AC and battery energizer with solar compatibility. It is a versatile solution that works across permanent, semi-permanent, and temporary fencing.

Solar Range



Suitable for strip grazing, permanent, semi-permanent, and temporary fencing, and the ideal solution for isolated areas where no AC power is available. Our Solar Systems and Kits provide remote power for permanent installations. Permanent installations are an all-in-one solution with built-in solar panel and battery. The Unigizer range is also solar compatible.

Battery Range



Convenient, portable, and quick to set up, battery units are suitable for temporary, strip grazing, and semi-permanent fencing. Unigizers are also compatible with battery power.

AC ENERGIZERS



Speedrite AC powered energizers are high performing, powerful units designed for extensive electric fence systems.

From hi-tech components and a compact, rugged design, to advanced Cyclic Wave™ and Bi-polar technologies, our energizers are rugged, made for all weather conditions, and backed by a 3 year warranty.



AC ENERGIZER FEATURES



3 year warranty

We stand behind the reliability of our products. Visit speedrite.com for full warranty details.



Load response feature

Controls energizer output to match conditions, providing maximum fence voltage for effective stock control.



Low interference

Cyclic Wave™ technology delivers outstanding fence performance and helps to minimize electromagnetic interference in line with international standards.



Large terminals

Mounted on the front of the energizer casing for convenience, these large terminals are easily adjusted and accept up to two fence wires. The slotted terminals make inserting wires and getting a good connection easy.



Compact, rugged design

Hi-tech components and advanced research and development have enabled us to make powerful energizers in a compact, rugged polymer case.



Cyclic Wave technology

Provides a cleaner, more powerful pulse, maximizing the energy that travels down the fence for optimal stock control.



Bi-polar technology

Enables the user to power a fence system to perform exceptionally well in dry, low conductive soil.



Remote capable

Using a Speedrite fence remote (with remote capable Speedrite energizers) enables you to switch the energizer on or off from anywhere along the fence line. This makes it easy to manage repairs and maintenance.



Indicator lights (voltage)

Easy to read light bar display provides an instant measure of the energizer output voltage for quick fence diagnostics. The LED display shows red when the fence is under a heavy load.



Split bolt terminal design

Allows multiple fence wires to be connected easily, with a robust connection without needing to bend the fence wire or over-tighten. (46000W only)



Datamars Livestock: Farm App

Connect to your energizer and see the fence voltage in real-time, configure your energizer settings, and connect the energizer to your Wi-Fi network. (46000W only)

AC ENERGIZERS

63000RS

Powers up to 390 miles / 4,000 acres of fence
63 J maximum output energy (97 J stored energy)



- Remote and Fault Finder included
- Cyclic Wave™ technology
- Bi-polar technology
- Remote capable (included)
- Indicator lights (voltage)
- Compact, rugged design
- Large terminals
- Low interference
- Load response feature
- Half voltage terminal
- 3 year warranty
- Use with 220V



880 0001-030, 816643

46000W

Powers up to 290 miles / 3,300 acres of fence
46 J maximum output energy (68 J stored energy)



- Cyclic Wave™ technology
- Wi-Fi and Bluetooth capable
- Bi-polar technology
- Remote capable (included)
- Indicator lights (voltage)
- Compact, rugged design
- Low interference
- Load Response Feature
- Voltage display
- Robust terminal design
- Control energizer and monitor performance with the Datamars Livestock: Farm App
- 3 year warranty
- Use with 110V

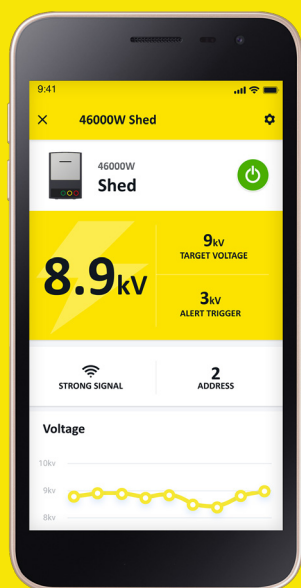


880 0002-883

*Starter plan included free with purchase

Comparing AC Energizers

	63000RS	46000W
AREA/DISTANCE YOU WANT THE ENERGIZER TO POWER	390 miles 4,000 acres	290 miles 3,300 acres
MAXIMUM OUTPUT ENERGY	63 J	46 J
MAXIMUM STORED ENERGY	97 J	68 J
NO LOAD VOLTAGE	9,500 V	9,500 V
MEDIUM LOAD VOLTAGE AT 500 Ω	8,500 V	9,300 V
HEAVY LOAD VOLTAGE AT 100 Ω	9,600 V	8,900 V
MINIMUM NUMBER OF GROUND RODS	10	9
INPUT VOLTAGE	220 - 240 V	100 - 240 V



***Keep your fence
performance close at hand***

Monitor and control the 46000W AC energizer from your smartphone, with the Datamars Livestock: Farm App.



DATAMARS
Livestock

UNIGIZERS™



Speedrite Unigizers give you a versatile 3-in-1 solution to manage your electric fence system.

You have the flexibility to choose from either 110V, battery, or solar energy to power your electric fence – all in one unit.

The 3-in-1 capability allows the Unigizer to be used for temporary, semi-permanent, permanent, and strip grazing fence systems. It's never been easier to create an electric fencing solution.



UNIGIZER FEATURES



3 year warranty

We stand behind the reliability of our products. Visit speedrite.com for full warranty details.



Versatile power options

Can be used in AC, battery or solar power applications, providing convenient, versatile livestock control.



Versatile mounting options

Can be mounted on a wall, post, or fence wire. Choose indoor or outdoor installation, depending on your fence location and power supply.



Ground monitoring

Indicates ground system problems by monitoring the level of voltage around the ground system.



Low interference

Cyclic Wave™ technology delivers outstanding fence performance and helps to minimize electromagnetic interference in line with international EMC standards.



Large terminals

Mounted on the front of the energizer casing for convenience, these large terminals are easily adjusted and accept up to two fence wires. The slotted terminals make inserting wires and getting a good connection easy.



Day/night sensor

Automatically adjusts to contain or exclude animals based on day or night conditions.



Cyclic Wave™ technology

Provides a cleaner, more powerful pulse, maximizing the energy that travels down the fence for optimal stock control.



Bi-polar technology

Enables the user to power a fence system to perform exceptionally well in dry, low conductive soil.



Low energy terminal

Limits energy to below 1.5 J for use around buildings and houses.



Solar compatible

Electrify your fence with solar power by connecting solar panels to any Speedrite Unigizer. The solar panels charge the battery connected to the Unigizer, for reliable livestock control.



Remote capable

A Speedrite fence remote enables you to switch the energizer on or off from anywhere along the fence line. This makes it easy to manage repairs and maintenance.



LCD voltage display

Displays output voltage, battery voltage and ground voltage. LCD is backlit for viewing in poor light conditions. On selected models only.



Indicator lights (voltage and battery)

Easy to read light bar display provides an instant measure of the energizer output voltage for quick fence diagnostics. The LED display shows red when heavily loaded.



Battery saver

Microprocessor technology automatically adjusts the output energy depending on the battery condition. This feature extends battery life and is particularly effective when used in solar installations.

UNIGIZERS

18000i

Powers up to 1,300 acres / 120 miles of fence



- Cyclic Wave technology
- Low energy terminal
- Solar compatible
- Remote capable (Remote sold separately)
- LCD voltage display
- Indicator lights (voltage and battery)
- Battery saver
- Day/Night sensor - pulse speed
- Large terminals
- Low interference
- Ground monitoring
- Versatile mounting and power options
- Adjustable output power and pulse speeds
- 3 year warranty
- Includes battery leads and 110 V power adaptor
- 18J output power

880 0000-269, 821014



12000i

Powers up to 500 acres / 90 miles of fence



- Cyclic Wave technology
- Bi-polar technology
- Solar compatible
- Remote capable (remote sold separately)
- LCD voltage display
- Indicator lights (voltage and battery)
- Battery saver
- Day/Night sensor - pulse speed
- Large terminals
- Low Interference
- Ground monitoring
- Versatile mounting and power options
- Half voltage terminal
- Adjustable output power and pulse speeds
- 3 year warranty
- Includes battery leads and 110 V power adaptor
- 12J output power

880 0000-838, 814086



UNIGIZERS

6000/6000i

Powers up to 240 acres / 60 miles of fence



- Cyclic Wave technology
- Bi-polar technology
- Solar compatible (60 watt panel)
- Remote capable (Remote included) *
- LCD voltage display *
- Ground monitoring *
- Indicator lights (voltage and battery)
- Battery saver
- Day/Night sensor - pulse speed
- Large terminals
- Low Interference
- Versatile mounting and power options
- Half voltage terminal
- Adjustable output power and pulse speeds
- 3 year warranty
- Includes battery lead and 110 V power adaptor
- 6J output power

* 6000i only



*6000i : 880 0000-742, 812654
6000: 880 0000-689, 812648

3000

Powers up to 120 acres / 30 miles



3J output power
Compatible with 30 watt solar panel

Features & Benefits

- Indicator lights (voltage and battery)
- Day/Night sensor- pulse speed
- Large terminals

880 0000-574, 809448

2000

Powers up to 80 acres / 20 miles



2J output power
Compatible with 20 watt solar panel

- Versatile mounting and power options
- Adjustable output power and pulse speeds

880 0001-050, 809447

1000

Powers up to 40 acres / 10 miles



1J output power
Compatible with 10 watt solar panel

- 3 year warranty
- Includes battery lead, 110 V power adaptor and fence lead set

880 0000-698, 809446

Comparing Unigizers

	18000i	12000i	6000/ 6000i	3000	2000	1000
AREA/DISTANCE	120 miles 1,300 acres	90 miles 500 acres	60 miles 240 acres	30 miles 120 acres	20 miles 80 acres	10 miles 40 acres
MAXIMUM OUTPUT ENERGYV	18 J	12 J	6 J	3 J	2 J	1 J
MAXIMUM STORED ENERGY	24 J	16 J	9 J	4.5 J	2.7 J	1.5 J
NO LOAD VOLTAGE	10,000 V	9,100 V	9,500 V	11,400 V	11,000 V	9,800 V
MEDIUM LOAD VOLTAGE AT 500 Ω	7,800 V	7,700 V	6,700 V	6,200 V	5,900 V	5,300 V
MINIMUM NUMBER OF GROUND RODS	6	6	4	3	3	2
INPUT VOLTAGE	12 V / 100 - 240 V					
CURRENT CONSUMPTION	1.4 A	1.1 A	700 mA	290 mA	180 mA	95mA
SOLAR PANEL (RECOMMENDED)	180 watt	120 watt	60 watt	30 watt	20 watt	10 watt

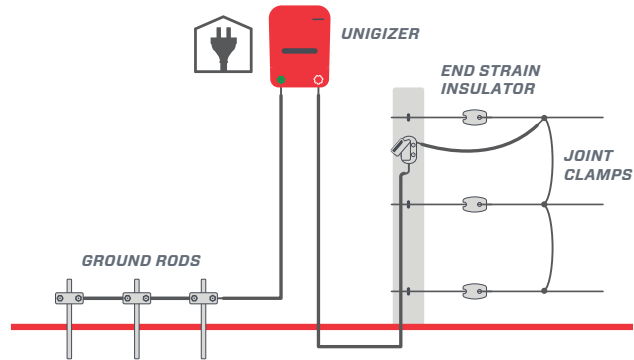
To achieve the peak performance of your energizer, it is essential you have the correct number of ground rods. Please refer to your user manual for this number. NOTE: Area recommendations are a guide only and are listed in multiple wire terms. Performance will be affected by the condition of your fence or environment.



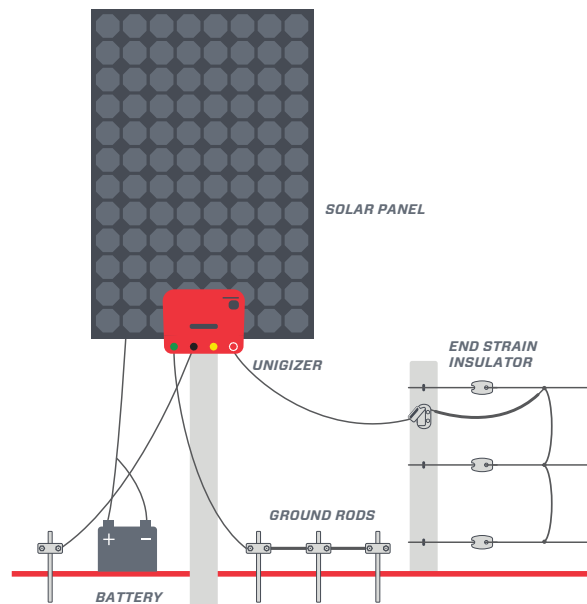
UNIGIZER POWERING EXAMPLES

Sample diagrams showing Unigizer and ground system. The number of ground rods will vary, depending on the Unigizer and soil conditions.

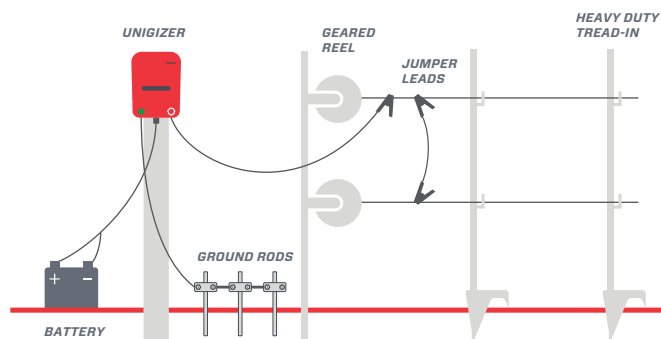
**INDOOR DRY LOCATIONS
WITH AC POWER**



**OUTDOORS WITH 12 V
BATTERY AND UNIGIZER
SOLAR KIT**



**OUTDOORS WITH 12 V
BATTERY**



UNIGIZER SOLAR SYSTEMS



Speedrite offers a range of solar systems and kits for solar compatible energizers.

Innovations in technology mean solar installations are now a practical and cost effective method of powering areas where AC power is either unavailable or impractical. Speedrite solar panels and energizers feature hi-tech materials and are engineered to meet rigorous quality standards. This means you can trust Speedrite to transfer energy with minimal loss. The end result is less battery drain while maintaining higher fence voltage.

Comparing Solar Systems

	3 J SOLAR SYSTEM	2 J SOLAR SYSTEM
AREA/DISTANCE*	30 miles 120 acres	20 miles 80 acres
MAXIMUM OUTPUT ENERGY	3.0 J	2.0 J
MAXIMUM STORED ENERGY	4.5 J	2.7 J
NO LOAD VOLTAGE	11,400 V	11,000 V
LIGHT LOAD VOLTAGE AT 2000 Ω	9,500 V	9,000 V
STANDARD LOAD VOLTAGE AT 1000 Ω	8,000 V	7,700 V
STANDARD LOAD VOLTAGE AT 500 Ω	6,200 V	5,900 V
CURRENT CONSUMPTION	290 mA	180 mA
BATTERY TYPE	12 V battery	12 V battery
SOLAR PANEL	30 watt	20 watt

To achieve the peak performance of your energizer, it is essential you have the correct number of ground rods. Please refer to your user manual for this number. NOTE: Area recommendations are a guide only and in multiple wire terms. Performance will be affected by the condition of your fence or environment.

SOLAR SYSTEMS

3 J SOLAR SYSTEM

Powers up to 120 acres / 30 miles



- Solar compatible
- Indicator lights
- Day/Night sensor
- Large terminals
- Low impedance
- Versatile mounting options
- Adjustable power & pulse speeds
- 3 year warranty - Includes lightning

System includes: Speedrite 3000 Unigizer, 30 watt solar panel with voltage regulator, solid steel powder-coated frame and battery box. Requires 12 V deep cycle battery (not included).

880 0003-278

2 J SOLAR SYSTEM

Powers up to 80 acres / 20 miles

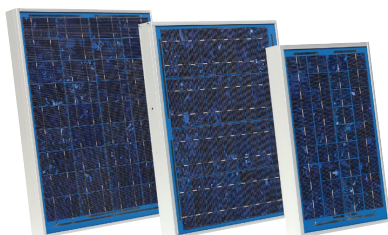


- Solar compatible
- Indicator lights
- Day/Night sensor
- Large terminals
- Low impedance
- Versatile mounting options
- Adjustable power & pulse speeds
- 3 year warranty - Includes lightning

System includes: Speedrite 2000 Unigizer, 20 watt solar panel with voltage regulator, solid steel powder-coated frame and battery box. Requires 12 V deep cycle battery (not included).

880 0003-276

30 W, 20 W, 10 W



Speedrite solar panels provide fast charging of batteries through superior conversion efficiency of sunlight to electrical current. A full range of panel sizes are available to meet individual requirements.

- Premium, highly efficient polycrystalline panels
- Rugged aluminum framing
- Diodes and regulators are used to prevent overcharging of batteries.

Specifications

SOLAR PANEL	MAXIMUM POWER	CURRENT AT MAX POWER	VOLTAGE AT MAX POWER
10 W (830926, 880 0003-415)	10 w	0.59 A	16.8 V
20 W (830927, 880 0003-416)	20 w	1.19 A	16.8 V
30 W (830928, 880 0003-417)	30 w	1.78 A	16.8 V

All solar panels are packaged with a mounting bracket and pre-installed solar panel regulator.

ACCESSORIES

Improve the performance of your solar system set up with the use of a Solar Panel Regulator:

Solar Panel Regulator (830929, 880 0003-091)

INTEGRATED SOLAR ENERGIZERS



Speedrite integrated solar energizers incorporate an internal battery and are perfect for portable uses like strip grazing or powering a small area.

These self contained energizers feature an integrated solar panel and a sophisticated battery management system in a rugged carry case.



INTEGRATED SOLAR ENERGIZER FEATURES



3 year warranty

We stand behind the reliability of our products. Visit speedrite.com for full warranty details.



Steel and wood post mounting options

High impact enclosure is designed to securely mount on T-posts and wood posts.



Requires minimal sunlight

Energizer requires minimal sunlight hours to keep battery at, or near, full charge.



Rechargeable internal battery

Rechargeable internal sealed battery included.



Battery recharge

Energizer intelligently manages battery recharging during sunny weather.



High output voltage

Intelligent output up to 9,500 V with no load.



Rugged design

UV resistant case provides maximum weather protection for extreme environments.



Battery saver

Microprocessor technology automatically adjusts the output energy depending on the battery condition. This feature is designed to extend battery life.



Indicator light

Located on the face of energizer, indicates the solar energizer is operating.

INTEGRATED SOLAR ENERGIZERS

S1000

Powers up to 140 acres or 40 miles of fence



- Requires minimal sunlight
- Indicator light (pulse)
- Battery saver
- Rugged design
- High output voltage
- Rechargeable internal battery
- Steel and wood post mounting options
- On/Off switch
- 3 year warranty
- Comes with built-in solar panel and 12 V 7 amp hour battery
- 1J output power

880 0002-723, 834996



S500

Powers up to 100 acres or 30 miles of fence



- Requires minimal sunlight
- Indicator light (pulse)
- Battery saver
- Rugged design
- High output voltage
- Rechargeable internal battery
- Steel and wood post mounting options
- On/Off switch
- 3 year warranty
- Comes with built-in solar panel and 12 V 7 amp hour battery
- 0.5J output power

880 0002-721, 834994



Comparing Integrated Solar Energizers

	\$1000	\$500
AREA/DISTANCE*	40 miles 140 acres	30 miles 100 acres
MAXIMUM OUTPUT ENERGY	1.00 J	0.50 J
MAXIMUM STORED ENERGY	1.30 J	0.65 J
NO LOAD VOLTAGE	9,600 V	9,800 V
LIGHT LOAD VOLTAGE AT 2000 Ω	7,100 V	6,200 V
STANDARD LOAD VOLTAGE AT 1000 Ω	5,600 V	4,500 V
MINIMUM NUMBER OF GROUND RODS	1	1
INPUT VOLTAGE	12 V internal battery	



BATTERY ENERGIZERS



Speedrite battery energizers provide a portable and practical solution for strip grazing and large or small electric fence systems.

Convenient, portable and quick to set up. Unigizers are also compatible with battery power.



BATTERY ENERGIZERS

AN90

Powers up to 2 miles/5 acres



- Powerful and versatile strip grazing unit
- Simple set up
- On/Off switch
- Fast and slow options
- Optional tread-in stand
- Flashing LED
- 3 year warranty
- 1.2J output power

880 0000-775, SE117-01
880 0000-185, SE117WS-01 (with stand)
880 0001-045, 814072 (with stand and solar panel)

AN20

Powers up to 1 acre



- Simple set up
- On/Off Switch
- Intelligent battery management to extend battery life
- 3 year warranty
- 0.04J output power

880 0000-329, 814888

Corral Kit

'Fence-in-a-bag' kit includes basic assortment of items to easily construct a reliable temporary electric fence.



- Great for rodeos, horse shows, or trail rides
- Works with most types of animals
- Kit includes: AN20 energizer, 12 SENTINEL tread-in posts, No Kick handle, 660' roll of 1/2" politape, reel, carry bag, ground rod, assembly instructions

880 0003-476, SA1001

Comparing Battery Energizers

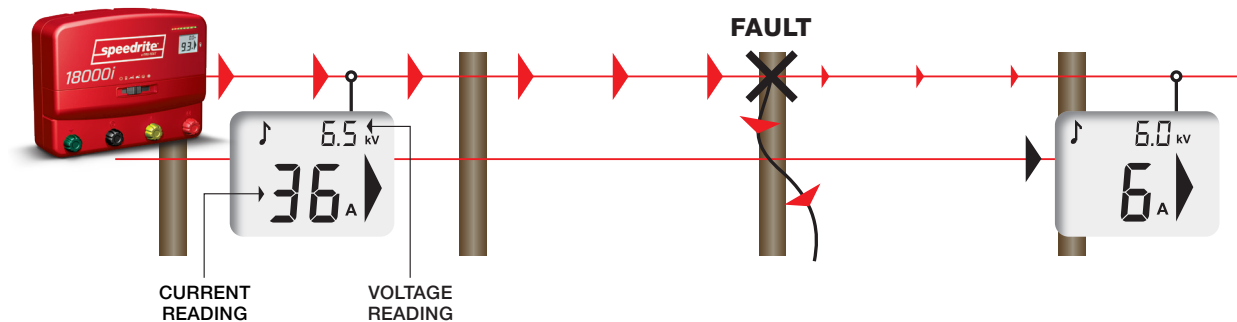
	AN90	AN20
DISTANCE YOU WANT THE ENERGIZER TO POWER	1.25 miles	0.6 miles
MAXIMUM OUTPUT ENERGY	0.12 J	0.04 J
MAXIMUM STORED ENERGY	0.16 J	0.05 J
NO LOAD VOLTAGE	8,000 V	5,800 V
LIGHT LOAD VOLTAGE AT 2000 Ω	4,500 V	2,800 V
CURRENT CONSUMPTION	7-24 mA	14 mA
SOLAR PANEL	1 Watt (optional)	N/A
BATTERY TYPE (Sold Separately)	4 x D batteries, 12 V or 6 V external battery	2 x D batteries

MANAGEMENT TOOLS

To get the maximum performance from an energizer you need to be able to measure and monitor your fence system effectively.

No matter how good an energizer is, if the fence line is badly insulated, has shorts, or is poorly grounded, it will perform well below its optimum.

Advances in remote and fault-finding technology mean you can quickly locate and fix faults on your fence with minimal fuss.



How to use a fault finder Start near the energizer's lead-out wires with your Speedrite Remote with Fault Finder or your Speedrite Fault Finder. Move down the fence line following the arrow away from the energizer. Take readings at regular intervals and at any junction point.

The previous current reading is shown briefly in the top right corner of the screen so that you can compare readings. If the current reading suddenly falls, you have gone past a fault. Retrace your steps to find the fault. Note that after a few seconds the previous current reading will be replaced with the present voltage reading (kV).

MANAGEMENT TOOLS

Remote with Fault Finder



- Turns compatible Speedrite energizer on or off from anywhere along the fence line
- Quickly & easily locates faults along the fence line
- Large back-lit display
- Displays current, voltage & current direction simultaneously
- Audible current indicator
- Displays previous current reading to compare values
- Convenient belt clip
- Insulated, rugged, water resistant case
- Replaceable 9 V battery
- Low battery warning system
- Automatic energizer polarity detection
- 1 year warranty*

880 0000-860, ST102

Digital Fault Finder



- Quickly & easily locates faults along the fence line
- Large back-lit display
- Displays current, voltage & current direction simultaneously
- Displays previous current reading to compare values
- Audible current indicator
- Convenient belt clip
- Insulated, rugged, water resistant case
- Replaceable 9 V battery
- Low battery warning system
- Automatic energizer polarity detection
- Can be used with all energizers
- 1 year warranty*

880 0000-771, ST100

Digital Voltmeter



- Tests fence, energizer, and ground system
- Ground probe provides accurate fence to ground voltage measurements
- Rugged design
- Readings from 200 V to 9,900 V (0.2 kV to 9.9 kV)
- Automatic On/Off
- Replaceable 9V battery
- 1 year warranty*

880 0002-503, 822643

Fence Alert™

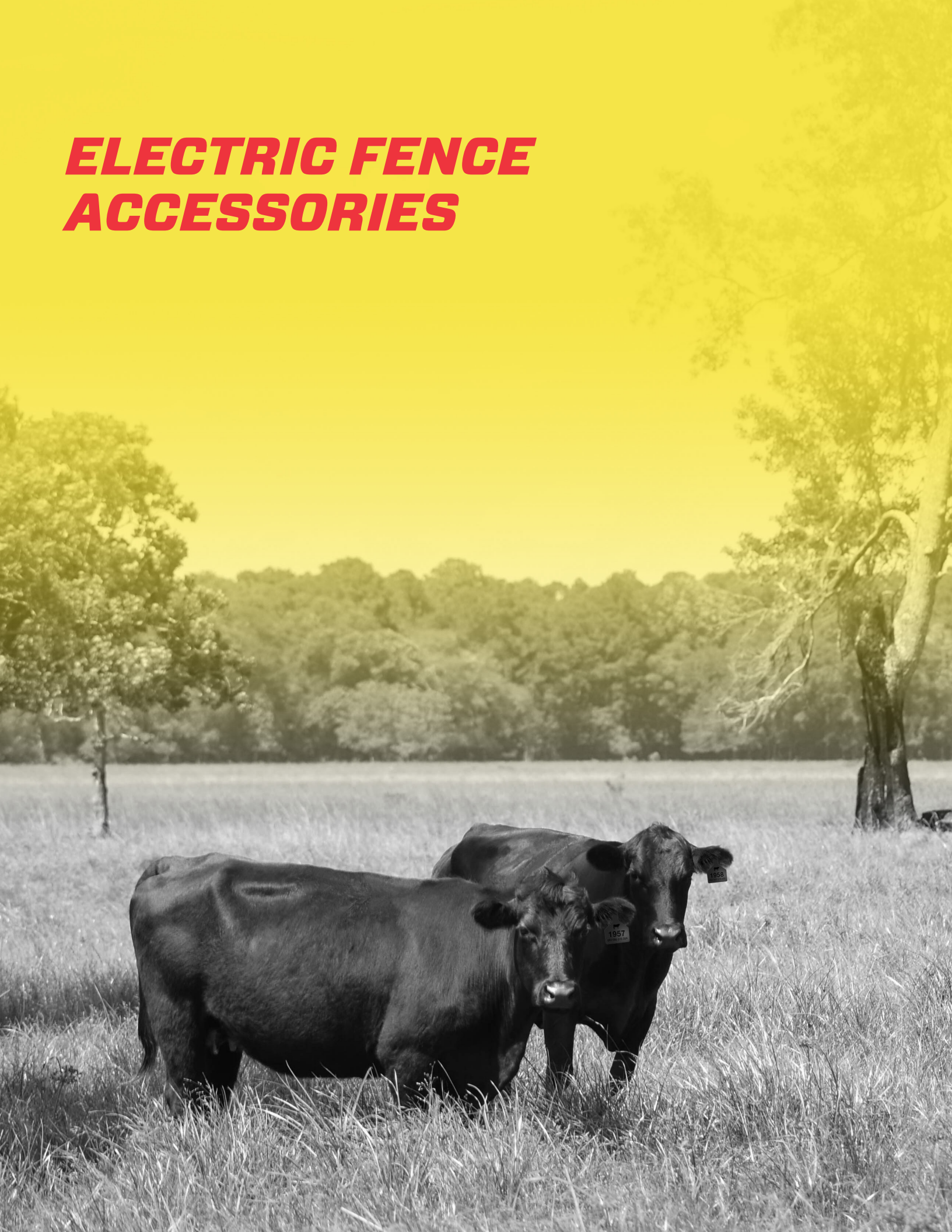


- Warning light begins flashing when voltage is too low
- Visible up to 1 mile away
- Rugged impact & water resistant case
- Can be used on any type of electric fence including steel or aluminum wire and on portable poli products
- Works with all energizers
- No ground wires or external power sources required
- Typical battery life 5 years on standby or up to 2 weeks of continuous flashing
- Two preset voltage triggers can be selected
- Replaceable CR2032 lithium button cell battery
- 1 year warranty*

880 0000-521, ST0303

*Excludes battery. Batteries fitted inside management tools have a 90 day warranty.

ELECTRIC FENCE ACCESSORIES





FLEXIBLE, DURABLE, & VERSATILE

Speedrite has a range of both temporary and permanent electric fencing products.

Portable fencing solutions help to increase production through providing a quick, easy and inexpensive way to subdivide paddocks. This gives you the versatility to strip graze, make temporary paddocks or pens, and protect trees and crops from damage by stock.

Permanent electric fence solutions are easy to install and operate with less maintenance. They are also a safer fencing solution for your livestock. Animal contact with the fence is reduced and it's less likely to injure if a fence is breached.

WIRE STRAINERS

Spring Clip Strainer



- Suitable for high strain use
- Spring clip design for easy tensioning
- Rust resistant
- Rugged & easy to use
- Galvanized frame with aluminum spool
- Use with Speedrite Strainer Handle (880 0003-217)
- 10 per pack

880 0000-044, SA100-50

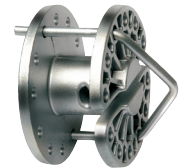
Bullnose Insulated Strainer



- Suitable for high strain use
- Spring clip design for easy tensioning
- Heavy duty insulator protects against arcing
- Rust resistant
- Rugged & easy to use
- Galvanized frame with aluminum spool
- UV stabilized for long life
- Use with Speedrite Strainer Handle (880 0003-217)
- 10 per pack

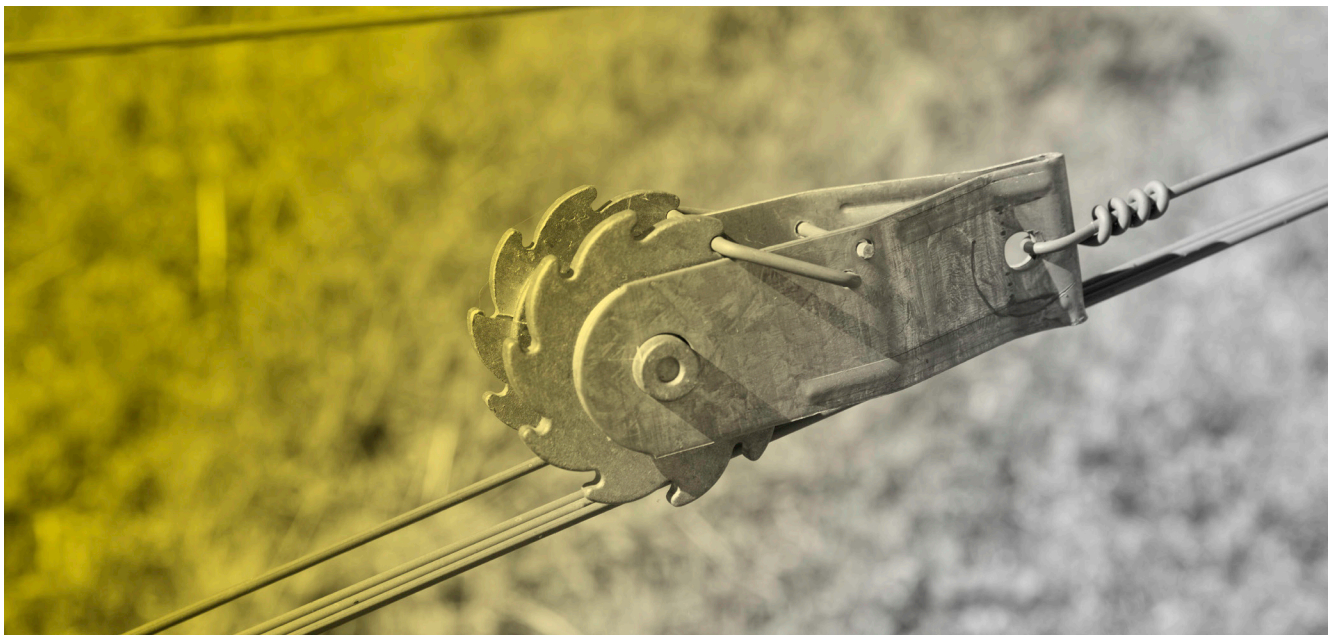
880 0000-002, 814570

In Line Strainer



- Suitable for high strain use
- Can be added to fence without cutting wire
- Rust resistant
- Rugged & easy to use
- Lightweight high strength aluminum construction
- Designed to work with Speedrite In Line Strainer Handle (880 0000-099) or 1/2" (12 mm) drive ratchet
- 5 per pack

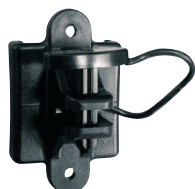
880 0000-005, 813398



INSULATORS

All Speedrite insulators come with a 10 YEAR WARRANTY.

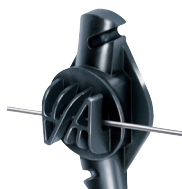
Dual-Purpose Pinlock



- Works with T-posts, wood, or metal pipe posts
- Sturdy pin for longer life
- Reinforced jaws
- Pinlock allows for easy wire removal
- UV stabilized for long life
- MADE IN USA
- 25 per pack

880 0003-483, SI037 Black

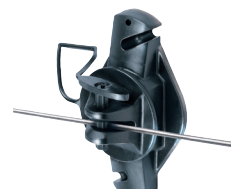
Wood Post Claw



- Rugged claw design for added strength & support
- UV stabilized for long life
- Twin spark guards prevent arcing & increased distance from wire to post reduces risk of leakage
- Supports up to 8 ga (4 mm) steel wire
- Unique staple guides
- Ribbed claw for added strength and support
- 25 per pack

880 0000-629, SI0292 Black

Wood Post Pinlock



- Rugged, high strength pinlock design
- UV stabilized for long life
- Twin spark guards prevent arcing & increased distance from wire to post reduces risk of leakage
- Supports up to 8 ga (4 mm) steel wire
- Unique staple guides
- Design conveniently allows easy removal of wire
- 25 per pack

880 0000-833, SI027 Black

Rod Post



- Versatile design holds high tensile wire, poliwire and tape
- Features a flexible front and back design and heavy duty screw nut for a secure fit
- UV stabilized for long life
- Fits rod posts 1/4" to 9/16" (6 mm to 14 mm) in diameter
- MADE IN USA
- 25 per pack

820847, 880 0002-504 Black

Insultube



- Heavy duty polyethylene tube
- 3/16" ID x 3/8" OD, 39' (4 mm ID x 9 mm OD, 12 m)

807936, 880 0000-947 Black

END STRAIN INSULATORS

All Speedrite insulators come with a 10 YEAR WARRANTY.

Heavy-Duty White End Strain



- Suitable for high strain use
- Reinforced glass filled polymer for maximum strength
- Deep grooves hold wire in place & prevent twisting
- Long leakage path prevents arcing
- Use with most sizes of fence wire
- Superior UV stabilization for long life
- 5 per pack

880 0003-209, 812842 White

Black End Strain



- Suitable for medium strain use
- Deep grooves hold wire in place & prevent twisting
- Long leakage path prevents arcing
- Use with most sizes of fence wire
- UV stabilized for long life
- 25 per pack

880 0000- 260, SI031D Black

Porcelain End Strain



- Suitable for high strain use
- Deep grooves hold wire in place & prevent twisting under tension
- High quality long life porcelain
- White glaze finish
- 10 per pack

880 0000-677, SI023 White

Power Staple Wood Post Claw Insulator



- Designed specifically for use with STOCKade® ST400/ST400i fencing staplers and staples as part of a world-first electric fencing installation system
- System dramatically reduces the typical time required to build a fence
- Robust design securely holds wire and ribbed claw provides added strength and support
- 200 per carton

880 0000-421, 831743 Black

Power Staple Guide Attachment



- Exclusive guide attachment required for insulator to work with STOCKade® ST400/ST400i fencing staplers and staples
- Designed to guide staples safely and accurately through Power Staple Wood Post Claw Insulator (831743)

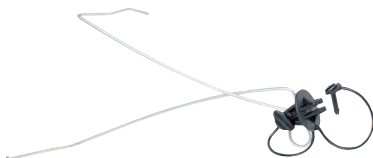
880 0000-272, 831311 Black

*NOTE: STOCKade fencing staplers and staples are only available from STOCKade distributors.

OFFSETS

All Speedrite insulators come with a 10 YEAR WARRANTY.

Pinlock Wire Offset



- Extends the life of barb and woven wire fences
- Electrified wire sits 12" (305 mm) from existing fence
- High tensile galvanized steel frame securely attaches to existing fence wire
- PRE-ASSEMBLED, ready to use
- UV stabilized pinlock insulator for easy wire insertion and removal
- Replacement insulator (880 0001-046)
- 50 per carton (packs of 5 or bulk packed)

880 0000-191, SI060SP, Black

Side Fixing Pigtail Standoff



- Galvanized spring steel construction
- UV stabilized for long life
- Electrified wire sits 6-10" from existing fence

880 0000-058, 807867 White 10 1/2" (270 mm)

880 0000-029, 807873 White 6" (150 mm)

TEMPORARY FENCE POSTS

Pigtail Tread-In

- For use with poliwire, poliropo, politape (1/2 in)
- Easy to move, steel step-in post with large foot and insulated top
- Measures 41 in in total height (34 in height above ground).



880 0003-413, 829704 White

SENTINEL Heavy Duty Tread-In



- 49" (1,125 mm) tall post with 8 different positions for poliwire, politape, or poliropo
- Simple step-in feature and pointed tip for easy installation
- High strength "H" profile for rigidity
- UV stabilized for long life
- MADE IN USA
- 50 per carton



880 0002-506, 820013, White

880 0003-259, 820014, Black

WIRE, TAPE AND BRAID POLI PRODUCTS



The Speedrite Extreme range provides the ultimate in conductivity and strength for demanding professional livestock / animal control applications. Tinned copper strands for extreme shock power.*



The Speedrite Premium range provides greater conductivity and strength for more demanding professional livestock / animal control applications. Stainless steel strands for greater shock power.



The Speedrite Poli range provides effective conductivity and strength for professional livestock / animal control applications. Stainless steel strands for shock power.

* Some Extreme products in the Speedrite Equine range also contain stainless steel strands.

EQUINE CONNECTORS



Creating tight connections between fence wires and from fence wire to energizer, connectors help ensure your electric fence is built properly.

Rope / Braid Clamp

- Ideal for joining polirope or braid together
- 3 per pack



Wide Tape Buckle

- Use to join or splice up to 1 1/2" (40 mm) wide politape
- Made from stainless steel
- 5 per pack



WIRE	EXTREME WIRE	PREMIUM WIRE	POLI WIRE	EXTREME TAPE	POLI TAPE	BRAID
RESISTANCE (OHMS / MILE)	105	7,000	11,000	105	11,000	160
VOLTAGE AT START OF FENCE (V)	8,000	8,000	8,000	8000	8000	8000
VOLTAGE AT 330' (V)	7,900	4,200	3,400	7,900	5,700	7,800
VOLTAGE AT 1,650' (V)	7,500	1,500	1,000	7,500	2,700	7,300
VOLTAGE AT 3,300' (V)	7,100	800	550	7,100	1,600	6,700

WIRE

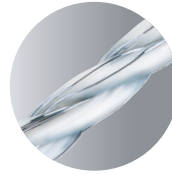
Extreme Wire



- 6 tinned copper strands
- 105 x more conductive than standard poliwire
- Increased shocking and stopping power, ideal for long lengths of temporary fence
- White with red weave for ultimate visibility
- UV stabilized for long life

SP040 White 660' (200 m)
SP041 White 1,320' (400 m)
815241 White 2,640' (800 m)

Premium Wire



- 9 stainless steel strands
- 1.5 x more conductive than standard poliwire
- Ideal for temporary fencing and strip grazing
- UV stabilized for long life

SP040 White 660' (200 m)
SP041 White 1,320' (400 m)
815241 White 2,640' (800 m)

Poli Wire

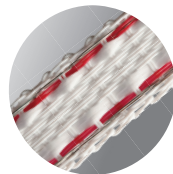


- 6 stainless steel strands
- Ideal for temporary fencing and strip grazing
- UV stabilized for long life

SP013 White 660' (200 m)
SP011 White 1,650' (500 m)

TAPE

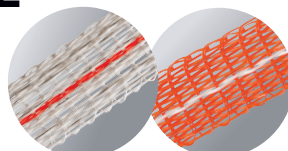
Extreme Tape 1/2"



- 6 tinned copper strands
- 106 x more conductive than standard politape
- Increased shocking and stopping power, ideal for long lengths of temporary fence
- Heavy duty tape, tightly woven for superior strength
- 1/2" (12 mm) width with white & red weave for ultimate visibility
- UV stabilized for long life

SP050 White 660' (200 m)
SP052 White 1,320' (400 m)

Politape 1/2"



- 9 stainless steel strands
- 1.5 x more conductive than standard poliwire
- Ideal for temporary fencing and strip grazing
- UV stabilized for long life

SP016 White 660' (200 m)
SP018 Orange 660' (200 m)

BRAID

Extreme Braid 1/4"



- 4 tinned copper strands for ultimate conductivity
- 4 stainless steel strands for ultimate strength
- 68 x more conductive than standard poliwire
- Increased shocking & stopping power, ideal for temporary and semi-permanent fence
- White with red weave for ultimate visibility
- UV stabilized for long life

814540 White 660' (200 m)

REELS & ACCESSORIES

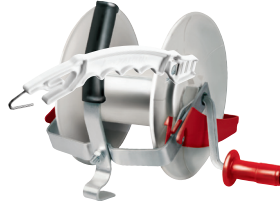
Geared Mega Reel



- Holds 3,300' (1,000 m) poliwire or 1,320' (400 m) 1/2" (12 mm) politape
- 3:1 gear ratio with a solid steel crank
- Use with carry handle or on mounting post
- Galvanized steel frame
- Rugged steel locking system
- UV stabilized for long life

880 0001-042, SR021

Geared Reel



- Holds 1,650' (500 m) poliwire or 660' (200 m) 1/2" (12 mm) politape
- 3:1 gear ratio with a solid steel crank
- Use with carry handle or on mounting post
- Galvanized steel frame
- Rugged steel locking system
- UV stabilized for long life
- Includes: Speedrite ZAMMR Handle

880 0000-735, 822714A
Replacement Bobbin: 805551

Jumbo Reel



- Holds 3,300' (1,000 m) poliwire or 1,320' (400 m) politape
- Use with carry handle or on mounting post
- Galvanized steel frame
- Rugged steel locking system
- UV stabilized for long life

880 0000-862, SR001
Replacement Bobbin: SR002

Econo Reel



- Holds 1,650' (500 m) poliwire or 660' (200 m) 1/2" (12 mm) politape
- Frame insulated from spool
- Use with carry handle or on mounting post
- Galvanized steel frame
- Rugged steel locking system
- Innovative notch frame design for easy & secure fence attachment
- UV stabilized for long life

880 0000-999, SR015
Replacement Bobbin: 814357

Reel Mounting Post



- Sturdy galvanized steel construction
- 3 holes for use in mounting up to 3 reels of poli products
- Includes anchor chain

880 0000-482, 814844

Jumper Leads



- Recommended for ensuring good electrical connections in temporary fencing
- Single jumper lead set contains 1 alligator clip on each end for connection between two fence wires

880 0000-312, SA004

GATE HARDWARE

Heavy Duty Gate Break Handle



- Non-slip insulated grip
- High tensile galvanized spring
- Heavy duty, rugged body with large protective guards
- High density, UV stabilized polyethylene for long life

880 0000-483, 807888, Red

Compression Gate Break Handle



- Non-slip insulated grip
- High tensile, heavy duty spring compresses under tension, preventing over-stretching
- High density, UV stabilized polyethylene for long life

880 0000-330, SA042C, Blue

ZAMMR Handle



- Use as a live hook or an insulated hook in temporary fencing, or as a gate break handle
- Versatile – connect temporary fence wire, tape or bungy
- Strong stainless steel backbone for high conductivity and corrosion resistance
- Durable design for use in the toughest conditions

880 0000-568, 824115

Spring Gate



- Electrifies gateways up to 26' (8 m) wide
- Versatile & easy to install
- Fully insulated, heavy duty handle with protective guards & non-slip grip
- Galvanized rust resistant spring
- Includes: Heavy duty insulated handle, wood post pinlock insulator, gate activator & galvanized spring

880 0000-924, SA0448M
Replacement Spring: 880 0000-508

Bungy Gate



- Electrifies gateways from 11' (3.5 m) to 23' (7 m) wide
- Versatile & easy to install
- Bungy cord with four stainless steel strands provides extreme stretch, high conductivity and maximum shock exposure
- Extra bungy cord 880 0000-844, 165' (50 m) roll
- Includes: Insulated handle, wood post pinlock insulator, gate activator, high visibility flag & bungy cord

880 0000-623, 813719

Gate Activator



- For use with all Speedrite gate break handles
- 3 connection points for flexibility
- Long lasting hot dipped galvanized steel

880 0003-312, 824843, Black

GROUND RODS

No Kick Handle



- Used when an insulated connection is required
- For use in temporary fence application
- Slim design for ease of use
- Strong, UV resistant design

880 0000-543, SA013, Red

Ground Rod and Ground Rod Clamp



- 6' (2 m) long galvanized steel ground rod with tapered end
- Heavy duty, brass clamp for use in securing underground cable to ground rod

880 0003-477 (SA110) Ground Rod
880 0003-479 (SA112) Ground Rod Clamp

T-Handle Ground Rod



- 30" (760 mm) long galvanized steel ground rod with 6" (150 mm) handle and tapered end
- Ideal for energizers and temporary fences that will be moved frequently
- Use with integrated solar energizers and energizers rated for 0.5J or less

880 0003-478 (SA111)

UNDERGROUND CABLE

Extreme Underground Cable



- Ideal for large properties with high powered energizers, including all Speedrite energizers with 12 joules of output energy or greater
- 10 ga (2.7 mm) aluminum coated steel for extreme conductivity
- 8 x more conductive than standard underground cable
- UV stabilized for long life

880 0000-567 (806052)
10 ga x 330' (2.7 mm x 100 m)

Premium Underground Cable



- 12.5 ga (2.5 mm) galvanized steel
- 3 x more conductive than standard underground cable
- UV stabilized for long life

880 0000-718 (806042)
12.5 ga x 82' (2.5 mm x 25 m)

880 0000-777 (806045)
12.5 ga x 165' (2.5 mm x 50 m)

880 0000-208 (806046)
12.5 ga x 330' (2.5 mm x 100 m)



GENERAL FENCE ACCESSORIES

Heavy Duty Joint Clamp



- Creates an effective electrical connection between wires
- Galvanized construction for superior rust resistance
- Claw design to allow multiple connecting wires

880 0000-113, SA052

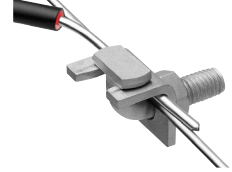
Split Bolt Joint Clamp



- Creates an effective electrical connection between wires
- Solid zinc for superior corrosion resistance
- For wires up to 12 ga (2.7 mm) diameter

880 0003-704, SA049

L-Shape Joint Clamp



- Ensures a highly conductive connection for wire up to 8 ga (4 mm)
- Use to create electrical connections between wires
- High-spec galvanized construction for superior rust resistance
- Ideal for most farm conditions

880 0002-029, 827518

Extreme Cut-Out Switch



- Use to isolate sections of electric fence with minimal disruption to your farm
- Long life stainless steel contacts
- Easily sighted on/off position
- UV stabilized for long life
- Recommended for use with Extreme Underground Cable and larger energizers including the 12000i, 18000i, 46000W and 63000RS

880 0000-542, 807882

Standard Cut-Out Switch



- Use to isolate sections of electric fence with minimal disruption to your farm
- 2 stainless steel contacts for positive connection
- Highly visible on/off position
- Fits securely onto post
- UV stabilized for long life

880 0000-082, SA064

Lightning Diverter



- Redirects lightning to ground minimizing energizer and fence damage
- Simple to use
- Easily mounts to wood post

880 0003-296, 822024

Wire Links



- Internal spring-loaded clamps securely hold wire
- Quickly splices 2 lines of fence wire together
- Use with 12.5g (2.5 mm) high tensile wire

880 0003-192, 805542

Warning Sign



- Clear warning for safety
- Signs may be required by law, refer to your local bylaws for more information

880 0000-076, SA046

Heavy Duty Compression Spring



- 9" (230 mm) spring
- Helps properly tension wire on permanent fences
- Made of high quality galvanized steel

880 0003-193, 805543

Maun Fencing Pliers

- 8" (203 mm) parallel action, side-cutting pliers
- Cuts high tensile wire
- Plastic covered handle



880 0003-475, SA070

Flood Gate Controller

- Limits energy loss from heavy growth or flooding
- Fully sealed from insects and the environment
- Ideal for use near creeks, streams, river beds & areas prone to flooding



880 0000-597, SA038

HAYES™

Fence Tools

Crimping & Fencing Tool

(827085)

- **Wire Crimper** for use on fence wire 1.6-4.0 mm
- **Wire Cutter** for wire up to 4.0 mm
- **Wire Stripper** for use on 2.5 mm underground cable



Smooth Grip Chain Strainer

H300 (872002)

The **original** chain and grab wire strainer. Proven in the field for over 100 years.

- Heavy duty industry leader



Made in NZ

Crimp Sleeves

The easiest and most effective means of joining wire. Creates a joint that exceeds the breaking strength of wire.



HC2

Suitable for 16 - 12½ gauge (1.6 - 2.5 mm) fence wire
7/8" length (Nearly 3X longer than standard crimp sleeves!)
Jar of 100 (807979)



HC3

Suitable for 12½ - 10 gauge (2.50 - 3.15 mm) fence wire
Jar of 50 (808209)



HC4

Suitable for 9 - 8 gauge (3.55 - 4.0 mm) fence wire
Jar of 50 (808210)



HCB

Suitable for barbed wire
Jar of 50 (872051)



HCE

For connection to electric fences
Jar of 50 (872052)



Fencing Innovation Since 1895

GROUND SYSTEMS

Your ground system is the most important component of your electric fence system. An effective ground system is necessary to achieve the maximum results of your energizer and your fence.

What is a ground system?

The ground system consists of a number of ground rods that provide an effective (low resistance) path for the current to return to the energizer's ground terminal. Larger energizers with large fence lines require more ground rods.

How does grounding work?

For an electric fence to give an electric shock the current produced by an energizer must

complete a full circuit. The current leaves the energizer and moves along the fence wires through the animal, into the soil and back to the energizer via the ground system.

What factors affect your ground system?

Dry, sandy or non-conductive soil provides an ineffective ground system. If you have this type of soil, it's a good idea to:

- 1) Use additional ground rods; or
- 2) Choose a better location for the ground system (such as damp soil); or
- 3) Consider an alternative method of grounding such as the hot / ground system.

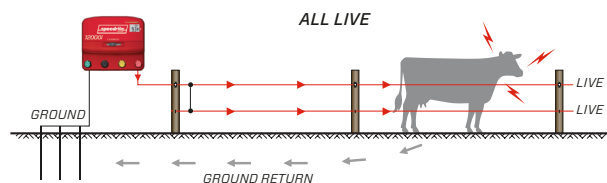
*For T-handle or 3' length ground rods, insert the rod at least 6"-12" into the soil.

SETTING UP YOUR GROUND SYSTEM

STEP 1: CHOOSE THE RIGHT SYSTEM FOR YOU

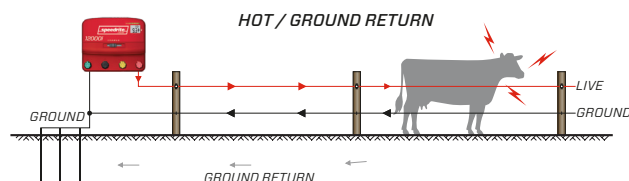
Option 1 All Live

Recommended where soil is conductive. This system is suitable for most moist soils. Current flows through the animal and the ground back to the ground rods.



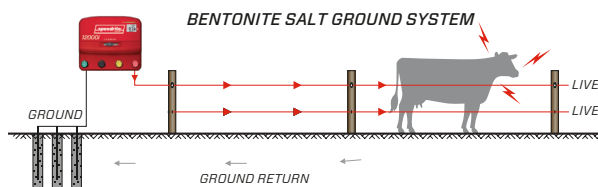
Option 2 Hot / Ground

Recommended where soil is not conductive. If the soil is dry or sandy it is usually not very conductive. The fence is constructed using both live and ground wires. If the animal touches the live wire the current flows through the animal and the ground back to the ground rods. If the animal touches the live wire and the ground wire the current flows through the ground and fence ground wire to the ground rods.



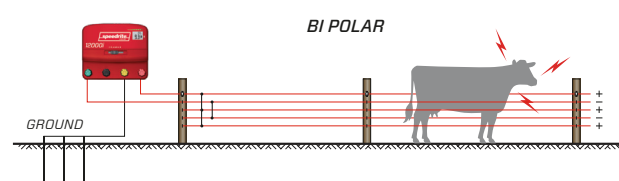
Option 3 Bentonite Salt Ground

Recommended for extremely dry soil conditions. A mixture of bentonite and salt surrounds each ground rod. The salt attracts moisture and acts as a conductor while the bentonite retains moisture over long periods of time. Stainless steel ground rods are required in order to prevent salt corrosion.

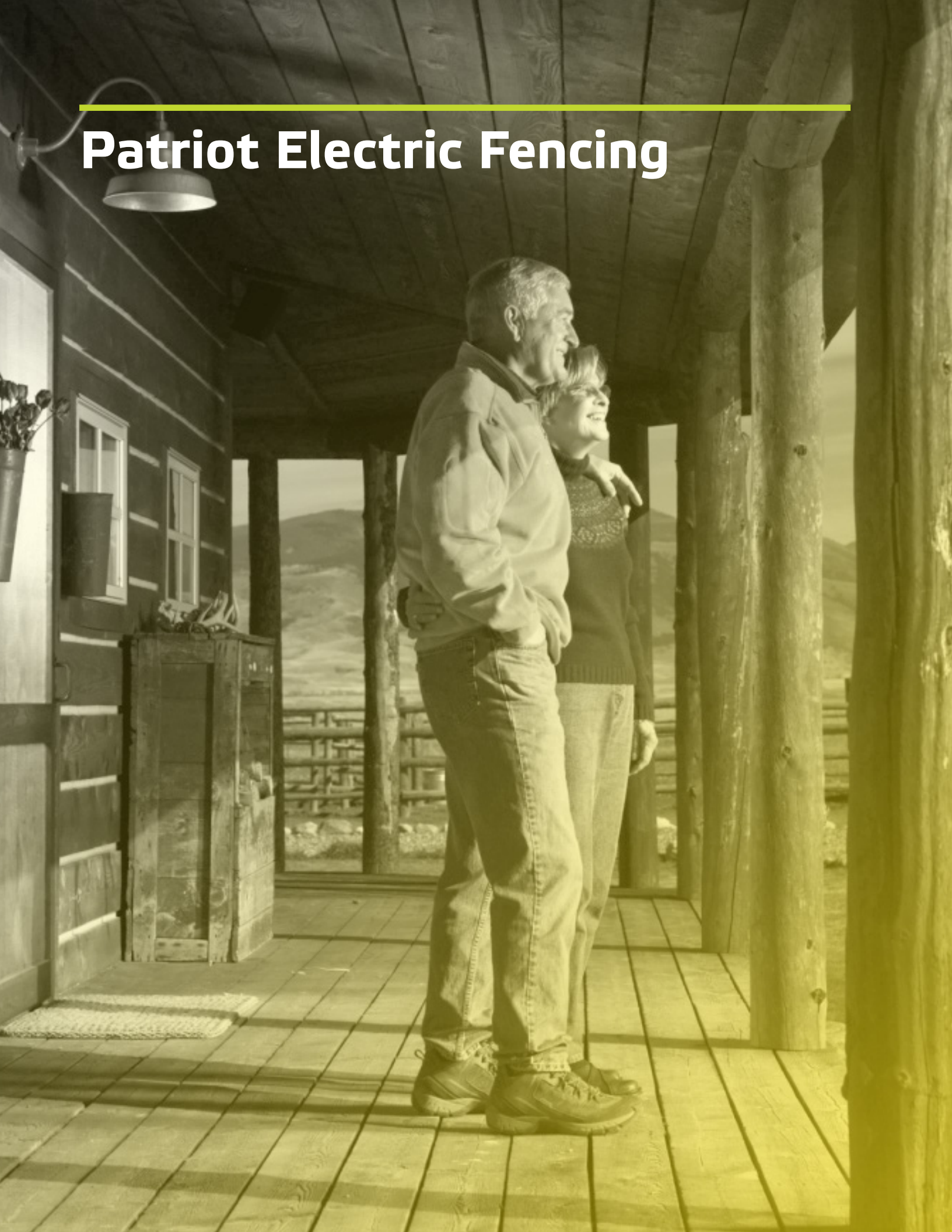


Option 4 Bi-Polar

Recommended where soil has little or no conductivity (sand, extremely dry conditions) and for fences that require all wires to be live. Enables you to set up an electrical system that performs exceptionally well in dry, low conductive soil.



Patriot Electric Fencing





ABOUT PATRIOT

Patriot electric fence energizers and accessories are built on the foundation of providing you the flexibility to enjoy your lifestyle and meet your need for simplicity, reliability, and performance.

All Patriot electric fence products are the result of over 70 years experience from one of the world's leading electric fence manufacturers—Datamars Livestock.

If you have any questions not covered in this brochure, please visit our website www.patriotglobal.com or contact your nearest Patriot retailer.

Safety First!

Before you begin installation of your electric fence, check the local zoning law guidelines for your area. Most importantly, check with your local utility companies to identify any buried cables or natural gas lines on or near your property - before you start any digging.

patriotglobal.com

Patriot Energizers

Forming the heart of your electric fence system, energizers provide the source for the electric current that flows through the fence wire. The amount of electric current output (size) and power source, AC (110 V) ⚡, battery 🔋, or solar ☀️, differs across energizer products.

Your choice of fence energizer depends on the following key factors:

- Area fenced
- Power source
- Type of animal contained or excluded.

Things to Consider

Where should you install your energizer?

If you plan to use a 110V plug to power your energizer, it should be placed inside a barn or shed near the power source.

Patriot dual-purpose energizers (P30, P20, P10, P5) offer both a weather-resistant case and a built-in clip-on-wire feature allowing them to be attached directly to the fence wire.

If you are using the the Patriot SolarGuard 1000, SolarGuard 500, SolarGuard 150, SolarGuard 80, or

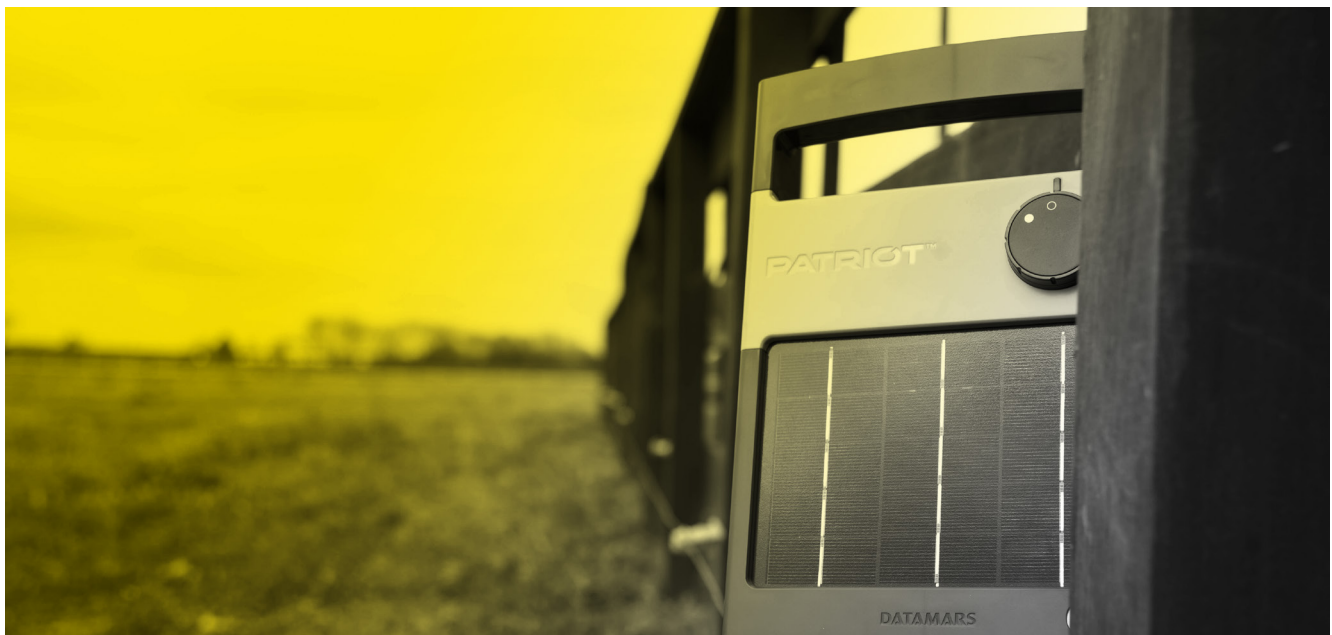
PS5, these are most effective if placed along the middle of the fence with the panel facing towards the south.

In all cases, refer to your energizer's user manual for specific installation instructions and always mount out of reach of children and animals.

Can I use more than one energizer?

Yes, you can use more than one energizer, but each must be on a separate fence system.

! Never connect more than one energizer to the same fence.



AC (110V) Range



AC (110V) powered energizers are the most cost-effective, reliable way to power a permanent electric fence. Patriot's AC energizers come in a variety of sizes to meet your needs.

Dual-Purpose Range



Patriot dual-purpose energizers are compatible with AC (110V), battery, or solar power. These flexible options allow you to choose the power source that best works for your fencing area.

SolarGuard™ Range












The integrated SolarGuard energizers are compact, portable, and energy efficient. These feature an all-in-one design, letting you harness free energy from the sun and giving you power wherever you need it.

Battery Range



Battery energizers are an effective alternative where AC (110V) power is unavailable. Whether you need portable energizer or you're fencing larger areas, Patriot has a battery option for you.

Energizer Selection Chart

MODEL	POWER TYPE			FENCE RANGE / ANIMALS CONTROLLED*	
				         	
PMX1500	✓			600 ACRES 200 MILES	<div></div>
PMX600	✓			300 ACRES 100 MILES	<div></div>
PMX350	✓			200 ACRES 65 MILES	<div></div>
P30	✓	✓	✓	200 ACRES 65 MILES	<div></div>
P20	✓	✓	✓	165 ACRES 50 MILES	<div></div>
PBX200		✓	✓	165 ACRES 50 MILES	<div></div>
PMX200	✓			165 ACRES 50 MILES	<div></div>
P10	✓	✓	✓	100 ACRES 30 MILES	<div></div>
PBX120		✓	✓	100 ACRES 30 MILES	<div></div>
PMX120	✓			100 ACRES 30 MILES	<div></div>
SG1000		✓	✓	140 ACRES 40 MILES	<div></div>
SG500		✓	✓	100 ACRES 30 MILES	<div></div>
P5	✓	✓	✓	60 ACRES 15 MILES	<div></div>
PBX50		✓	✓	60 ACRES 15 MILES	<div></div>
PMX50	✓			60 ACRES 15 MILES	<div></div>
				     	
PB12		✓		40 ACRES 10 MILES	<div></div>
PE10B		✓		40 ACRES 10 MILES	<div></div>
PE10	✓			40 ACRES 10 MILES	<div></div>
SG150		✓	✓	40 ACRES 12 MILES	<div></div>
PE5B		✓		20 ACRES 5 MILES	<div></div>
PE5	✓			20 ACRES 5 MILES	<div></div>
SG80		✓	✓	15 ACRES 3 MILES	<div></div>
				   	
PE2	✓			8 ACRES 2 MILES	<div></div>
PS5		✓	✓	8 ACRES 2 MILES	<div></div>




MODEL	PEAK OUTPUT ENERGY (UP TO)	PEAK STORED ENERGY (UP TO)	OUTPUT VOLTAGE (UP TO)	INTERNAL RECHARGEABLE BATTERY	CURRENT CONSUMPTION	RECOMMENDED SOLAR PANEL
						
PMX1500	12 J	20 J	10.6 kV max, 8.4 kV @ 500 Ω	-	-	-
PMX600	6.7 J	9.9 J	10.2 kV max, 7.0 kV @ 500 Ω	-	-	-
PMX350	3.5 J	6.4 J	10.2 kV max, 6.2 kV @ 500 Ω	-	-	-
P30	3.0 J	4.5 J	11 kV max, 6.4 kV @ 500 Ω	-	300 mA	30 watt
P20	2.0 J	2.7 J	10.5 kV max, 6.0 kV @ 500 Ω	-	170 mA	20 watt
PBX200	1.9 J	2.7 J	10.4 kV max, 5.8 kV @ 500 Ω	-	170 mA	20 watt
PMX200	2.0 J	3.0 J	9.5 kV max, 5.7 kV @ 500 Ω	-	-	-
P10	1.0 J	1.4 J	9.7 kV max, 5.4 kV @ 500 Ω	-	90 mA	10 watt
PBX120	1.2 J	1.7 J	10.0 kV max, 5.5 kV @ 500 Ω	-	110 mA	10 watt
PMX120	1.2 J	1.7 J	10.2 kV max, 5.5 kV @ 500 Ω	-	-	-
SG1000	1.0J	1.3 J	9.6 kV max, 7.0 kV @ 1,000 Ω	12 V	90 mA	-
SG500	0.5 J	0.65 J	9.8 kV max, 6.2 kV @ 1,000 Ω	12 V	50 mA	-
P5	0.5 J	0.7 J	8.0 kV max, 4.5 kV @ 500 Ω	-	45 mA	10 watt
PBX50	0.5 J	0.67 J	8.2 kV max, 4.4 kV @ 500 Ω	-	50 mA	10 watt
PMX50	0.5 J	0.85 J	10.0 kV max, 4.8 kV @ 500 Ω	-	-	-
						
PB12	0.12 J	0.16 J	8.0 kV max, 4.5 kV @ 500 Ω	-	7-25 mA	-
PE10B	0.3 J	0.49 J	5.0 kV max, 3.5 kV @ 500 Ω	-	36 mA	-
PE10	0.3 J	0.49 J	5 kV max, 3.5 kV @ 500 Ω	-	-	-
SG150	0.15 J	0.21 J	9.3 KV max, 4.1 kV @ 1,000 Ω	6 V	30 mA	-
PE5B	0.2 J	0.3 J	5.0 kV max, 3.2 kV @ 500 Ω	-	24 mA	-
PE5	0.2 J	0.32 J	5 kV max, 3.2 kV @ 500 Ω	-	-	-
SG80	0.08 J	0.10 J	7.3 KV max, 3.2 kV @ 1,000 Ω	6 V	16 mA	-
						
PE2	0.1 J	0.16 J	5 kV max, 2.8 kV @ 500 Ω	-	-	-

Table represents typical values.

* NOTE: Range claims are a general guide and based on single-wire, weed-free fences. Actual range claims depend on many factors including fence and operation conditions, livestock type, and environment. Solar panel wattage numbers are general recommendations and may vary based on geography. Please consult your local electric fence professional to determine the best solar panel for you. All Patriot energizers are low-impedance.

Solar Energizers

Solar panel and battery integrated in one convenient robust case.



SolarGuard 1000

140 acres / 40 miles



- Light-weight and easy to carry portable housing
- More powerful than comparable energizers
- Reliable year round performance in harsh weather
- 1.0J output power

(834689) 880 0002-628,
Fence lead set: 812229



SolarGuard 500

100 acres / 30 miles



- Light-weight and easy to carry portable housing
- More powerful than comparable energizers
- Reliable year round performance in harsh weather
- 0.5J output power

(834685) 880 0002-625
replacement 12 V battery: TBC.
Fence lead set: 812229



SolarGuard 150

40 acres / 12 miles



- Light-weight and easy to carry portable housing
- More powerful than comparable energizers
- Reliable year round performance in harsh weather
- 0.15J output power

834240 (880 0002-605);
replacement 12 V battery: TBC.
Fence lead set: 812229



SolarGuard 80

15 acres / 3 miles



- Light-weight and easy to carry portable housing
- More powerful than comparable energizers
- Reliable year round performance in harsh weather
- 0.08J output power

834373 (880 0002-608);
replacement 6 V battery: TBC
Fence lead set: 812229



PS5

8 acres / 2 miles



- Ideal for keeping small nuisance pests out, or for keeping small animals safely contained
- 0.04J output power

817369,
replacement 4 V battery: 818953,
Fence Lead Set: 812229.



FEATURES/BENEFITS

- **Fully portable, 'All in One' compact design**
Comes with an internal battery and solar panel, providing a convenient all-in-one energizer.
- **Solar powered**
Energy-efficient solar panel charges the internal battery to power the fence line.
- **Internal rechargeable battery**
Solar power recharges the battery as required to support long battery life.
- **Flashing lights**
Indicates at a glance the energizer is working and powering the fence.
- **Battery***
Battery saving mode maximizes battery life.
- **Low impedance energizer***
Designed to deliver power to the end of the fence even under heavy load e.g. foliage, undergrowth.
- **Multiple mounting options***
T-post and wood post mounting option.
- **Optimal voltage for maximum control***
- **Fully weatherproof***
- **3 year full replacement warranty**
Includes lighting. (1 year with the PS5)

*Except PS5

Dual-Purpose Energizers



P30

200 acres / 65 miles



- Most powerful energizer in the dual-purpose lineup with the greatest range and livestock control
- 3.0 output power



805153 (880 0000-362),
replacement power cord: 807426 (880 0000-472),
replacement battery leads: 807396 (880 0000-990).

P20

165 acres / 50 miles



- Greater range for more acres and a larger number of livestock
- 2.0J output power



803403 (880 0000-996),
replacement power cord: 807426 (880 0000-472),
replacement battery leads: 807396 (880 0000-990).

P10

100 acres / 30 miles



- Great choice for fencing a small number of livestock
- 1.0J output power



803402 (880 0000-913),
replacement power cord: 807426 (880 0000-472),
replacement battery leads: 807396 (880 0000-990).

P5

60 acres / 15 miles



- Ideal unit for smaller applications, strip-grazing and portable fencing
- 0.5J output power



803401 (880 0000-179),
replacement power cord: 807426 (880 0000-472),
replacement battery leads: 807396 (880 0000-990).

FEATURES/BENEFITS

• Multiple power options

Dual-purpose feature allows energizer to run on 110 V plug or 12 V (deep cycle, marine type) battery*.

• Solar compatible

Solar panel* charges a 12 V (deep cycle, marine type) battery* to power the Patriot Dual-Purpose energizer and fence line. Ideal for remote areas where AC (110 V) power is not available.

• LED indicator

LED indicator pulses when energizer is working.

• Low impedance energizer

Designed to deliver power to the end of the fence even under heavy load e.g. foliage, undergrowth.

• Robust design

Easy, safe installation and good wire connection.

• Easy mounting option

Unique, clip-on wire feature allows mounting on fence wire.

• 3 year full replacement warranty

Includes lightning.

*Sold separately.

AC (110 V) Energizers



PMX1500

600 acres / 200 miles



- Most powerful energizer in the entire Patriot line.
- 12J output power

825681
(880 0001-027)



PMX600

300 acres / 100 miles



- Designed for large operations with a large number of livestock.
- 6.7J output power

816869
(880 0000-647)



PMX350

300 acres / 65 miles



- Provides more power for slightly larger areas.
- 3.5J output power

816867
(880 0000-446)



PMX200

165 acres / 50 miles



- Ideal for medium to large operations with a larger number of livestock.
- 2.0 output power

816865
(880 0000-840)



PMX120

100 acres / 30 miles



- Suited for operations with small numbers of livestock.
- 1.2J output power

816864
(880 0000-596)



PMX50

60 acres / 15 miles



- Ideal for smaller fence lines.
- 0.5J output power

816863
(880 0000-685)



PE10

40 acres / 10 miles



- Ideal for fencing small properties up to 40 acres.
- Keep under shelter and out of the elements.
- 0.3J output power

819959
(880 0000-425)



PE5

20 acres / 5 miles



- Ideal for fencing small properties up to 20 acres.
- Keep under shelter and out of the elements.
- 0.2J output power

819958
(880 0000-204)



PE2

8 acres / 2 miles



- Ideal for containing pets and keeping out small nuisance animals.
- Keep under shelter and out of the elements.
- 0.1J output power

819957
(880 0000-617)



FEATURES/BENEFITS

- **Powered by 110 V plug**
- **Low maintenance design**
Simple operation.
- **LED indicator**
LED indicator pulses when energizer is working.
- **Robust knob design**
Easy installation and good wire connection.
- **Low impedance energizer**
Designed to deliver power to the end of the fence even under heavy load e.g. foliage, undergrowth.
- **Multiple mounting options (PMX range only)**
Easily mounts on wall, wood post, or T-post.
- **Warranty (including lightning)**
PMX series: 3 year | PE series: 2 years

Battery Energizers



PBX200

165 acres / 50 miles



- Ideal for medium to large operations with a larger number of livestock.
- Easily mounts on wall, wood post, or T-post.
- Power with 12V battery.
- Solar compatible with external solar panel.
- 1.9J output power



818352
(880 0000-353)

PBX120

100 acres / 30 miles



- Suited for operations with small numbers of livestock.
- Easily mounts on wall, wood post, or T-post.
- Power with 12V battery.
- Solar compatible with external solar panel.
- 1.2J output power



818351
(880 0003-244)

PBX50

60 acres / 15 miles



- Ideal for smaller fence lines.
- Easily mounts on wall, wood post, or T-post.
- Power with 12V battery.
- Solar compatible with external solar panel.
- 0.5J output power



818350
(880 0003-243)

PB12

40 acres / 10 miles



- Ideal for small remote areas or quick temporary fences
- Can be powered externally (6V or 12V) or internally (4 x D batteries).*
- Simple set up.
- On/off switch.
- 0.12J output power



820947 (880 0000-283)
Optional tread-in stand* SA063 (880 0003-474)

PE10B

40 acres / 10 miles



- Ideal for fencing small properties up to 40 acres.
- Power with 6V or 12V battery.
- 0.3J output power



819963
(880 0000-235)

PE5B

20 acres / 5 miles



- Ideal for fencing small properties up to 20 acres.
- Power with 6V or 12V battery.
- 0.2J output power



819962
(880 0000-856)

FEATURES/BENEFITS

- **Portable, convenient energizer**
- **Low maintenance design**
Simple operation.
- **LED indicator**
LED indicator pulses when energizer is working.
- **Robust knob design****
Easy installation and good wire connection.
- **Low impedance energizer**
Designed to deliver power to the end of the fence even under heavy load e.g. foliage, undergrowth.
- **Multiple mounting options (PBX range only)**
Easily mounts on wall, wood post, or T-post.
- **Warranty (including lightning)**
PBX series & PB12: 3 year | PEB series: 2 years

* Sold separately. ** Except PB12.

Management Tools

Single Light Tester

- Designed for use with electric fence energizers
- Light shines if voltage is present on the fence
- Suitable for use with most types of electric fence wire
- Place probe in ground. Touch tip of tester to fence.



826863 (880 0003-379)

5 Light Tester

- Use to measure and display approximate fence voltage
- Bright voltage lights and easy to read voltage indicator
- Suitable for use with most types of electric fence wire
- Sold individually



814217 (880 0000-119)

Fence Alert

- Fence wire: Poliwire, poliropo/braid, politape (½ in and 1½ in), steel/aluminum wire
- Light flashes if fence voltage is too low or there is a loss of power
- Can be seen up to a mile away
- Replaceable lithium battery can power up to 5 years on standby or 2 weeks of continuous flashing
- Sold individually



804565 (880 0000-801)

Digital Voltmeter

- Essential for most accurate testing of fence and energizer ground system
- Robust design
- Reads from 200 V to 9,900 V



806217 (880 0000-178)

Exclusion Kits

Pet and Garden Kit

- Great for yards, flower and vegetable gardens, and other similar areas
- Safely contains pets and deters small nuisance animals
- Kit includes: 110 V Patriot PE2 energizer, 10 x 28.5" posts with 4 preset clips on each post for quick installation, 100ft of green poliwire, ground rod and fence connectors, step by step instructions and sturdy box to store kit when not in use



820963 (880 0003-283)

Bear and Nuisance Animal Fence Kit

- Excellent way to safely and effectively protect beehives, garbage bins, compost piles, feed grain, fruit trees, small campsites, and so much more.
- Meets the needs of the USDA Food Storage Act where federal / state lands require all food products be stored out of reach of bears.

NOTE: To comply with this regulation, a PB12 or AN90 model energizer – or larger – must be used.

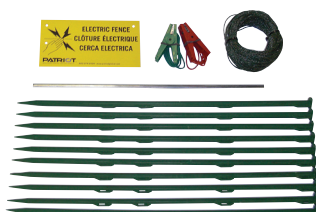
- Basic kit provides a simple solution to deter bears, raccoons, wild hogs, or other similar size nuisance animals.
- Lightweight, easy to use, sets up and tears down in a matter of minutes!
- Kit includes: Pos/Neg Electrified Netting (40"H x 50'L, corner stakes & repair kit), T-Handle Ground Rod, Fence & Ground Connectors, Five Light Fence Tester, extra Jumper Lead. ENERGIZER NOT INCLUDED.



830491 (880 0003-414)

Pet and Garden Accessories Kit

- Accessory Kit includes: 10 x 28.5" posts with 4 preset clips on each post for quick installation, 100ft of green poliwire, ground rod and fence connectors.
- Energizer not included.



824168 (880 0003-538),
 Pet & Garden Kit – Extra Posts: 824169 (880 0003-302),
 Pet & Garden Kit – 100' Extra Poliwire: 821816 (880 0003-058).

ACCESSORIES



Insulators

T-POST INSULATORS

Wrap Around T-Post Claw

- Fence wire: Poliwire, poliropo, steel/aluminum wire
- Special wrap design secures insulator to post



820015 (880 0003-260, Black),
820016 (880 0002-508, Yellow). 25/Pack.



Wrap Around T-Post Pinlock

- Pinlock design allows easy removal of wires
- Fence wire: Poliwire, poliropo, steel/aluminum wire
- Special wrap design secures insulator to post



820017 (880 0003-261, Black),
820018 (880 0002-509, Yellow). 25/Pack.



Screw On

- Can also be used with metal pipes
- Fence wire: Poliwire, poliropo, steel/aluminum wire

816064 (880 0003-241, Black),
819047 (880 0003-247, Yellow). 25/Pack.



2 in (5 cm) Wrap Around T-Post Extender

- Fence wire: Poliwire, politape, poliropo, steel/aluminum wire
- Secure fit for all T-post sizes



820028 (880 0003-268, Black),
820029 (880 0003-269, Yellow). 25/Pack.



5 in (13 cm) Wrap Around T-Post Extender

- Protects existing fence by extending electric fence wire 5 in (13 cm) off the T-post
- Fence wire: Poliwire, poliropo, steel/aluminum wire
- Special wrap design secures insulator to post



820021 (880 0003-262, Black),
820022 (880 0003-263, Yellow). 25/Pack.



5 in (13 cm) Back Side T-Post Extender

- Protects existing fence by extending electric fence wire 5 in (13 cm) off the back side of the T-post
- Fence wire: Poliwire, poliropo, steel/aluminum wire
- Special wrap design secures insulator to post.



820035 (880 0003-274, Black),
820036 (880 0003-275, Yellow). 25/Pack.



T-Post Topper

- Fence wire: Poliwire, poliropo/braid, politape (½ in and 1½ in), coated/sighter wire



814705 (880 0002-413, White),
819728 (880 0003-254, Yellow). 10/Pack.



1½ in (40 mm) T-Post Wide Tape

- Fence wire: Politape (½ in and 1½ in)



814717 (880 0003-237, White)



Insulators

T-Post Politaire Corner/End Strain

- Use as a corner or end strain insulator
- For use on T-posts
- Suitable for use with politape up to 1½ in (40 mm) wide



824729 (880 0003-305, White). 1/Pack.



Jumbo Dual-Purpose Pinlock

- For use on T, wood, and metal pipe posts
- Pinlock design allows easy removal of wires
- Can be used with electric fence wire, poliropo, coated wire or braid
- Excellent arcing protection to reduce shorting
- UV stable and designed for long life



814587 (880 0003-230, White). 25/Pack.



Safety Cap

- Safely protects against scrapes from exposed T-posts
- Helps prevent injuries to people, pets, and livestock
- Strong, sturdy cap won't slip off post
- Easy to install, no tools needed
- Fits on most T-Post styles and sizes



828936 (880 0003-406, White). 10/Pack.



ROD POST INSULATORS

Screw On Rod Post

- Fence wire: Poliwire, politape (½ in), poliropo, steel/aluminum wire
- Fits posts ¼ in (6 mm) to 9/16 in (14 mm) in diameter



820019 (880 0002-505, Black),
820020 (880 0002-510, Yellow). 25/Pack.

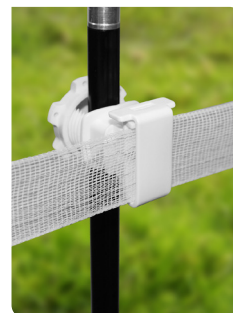


1½ in (40 mm) Rod Post Wide Tape

- Fence wire: Politape (½ in and 1½ in)
- Fits posts ¼ in (6 mm) to ¾ in (19 mm) in diameter



816066 (880 0003-242, White). 25/Pack.



MULTI-USE INSULATORS

End Strain

- For use with wood posts, metal pipes, and T-posts
- Fence wire: steel/aluminum wire
- Effective end strain for termination of electric fence wire



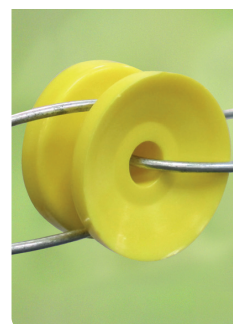
809981 (880 0000-556, Black). 10/Pack.



Corner Insulator

- For use with wood posts, metal pipes, and T-posts
- Fence wire: Poliwire, steel/aluminum wire
- Economical solution to create corners in electric fences

814715 (880 0003-236, Black),
819054 (880 0003-248, Yellow). 10/Pack.



Insulators

24 in (61 cm) Wrap Around

- For use with wood posts, metal pipes, and T-posts
- Fence wire: steel/aluminum wire
- Economical solution to create corners in electric fences

811413 (880 0001-933, Black). 10/Pack.



3½ in (90 mm) Chain Link

- Fence wire: Poliwire, steel/aluminum wire
- Extends electric fence wire 3½ in (90 mm) from chain link fence

816065 (880 0002-028, Black),
819056 (880 0003-249, Yellow). 25/Pack.



Pipe Clamp Insulator

- For use on pipes from 1 ½" to 1 5/8" diameter
- Great with most panels
- Works on vertical or horizontal pipe configurations
- Supports poliwire, ½" poltape, or poliropo up to 3" from pipe

828938 (880 0003-407, Black). 10/Pack.



Wood Post Claw

- Can also be used with metal pipes
- Fence wire: Poliwire, poliropo, steel/aluminum wire



820023 (880 0003-264, Black),
820024 (880 0003-265, Yellow). 25/Pack.



Wood Post Pinlock

- Pinlock design allows easy removal of wires
- Can also be used with metal pipes
- Fence wire: Poliwire, poliropo, steel/aluminum wire



820033 (880 0003-272, Black),
820034 (880 0003-273, Yellow). 25/Pack.



2 in (5 cm) Wood Post Slant Nail

- Protects existing fence by extending electric fence wire 2 in (5 cm) off the wood post
- Fence wire: Poliwire, poliropo, aluminum wire



820030 (880 0003-270, Black),
820031 (880 0003-271, Yellow). 25/Pack.



Jumbo Dual Purpose Pinlock

- For use on T, wood and metal pipe posts
- Pinlock design allows easy removal of wires
- Can be used with electric fence wire, poliropo, coated wire or braid
- Excellent arcing protection to reduce shorting
- UV stable and designed for long life



814587 (880 0003-230, White). 25/Pack.



5 in (13 cm) Wood Post Slant Nail

- Protects existing fence by extending electric fence wire 5 in (13 cm) off the wood post
- Fence wire: Poliwire, poliropo, aluminum wire



820026 (880 0003-266, Black),
820027 (880 0003-267, Yellow). 25/Pack.



Insulators

Wood Post Square

- Fence wire: Poliwire, thin gauge steel/aluminum wire
- Economical single nail installation



820032 (880 0000-380, Black). 25/Pack.



4 IN (10 CM) Plastic Insulator Tube

- Fence wire: steel/aluminum wire
- Economical way to insulate electric fence wire when using wood posts

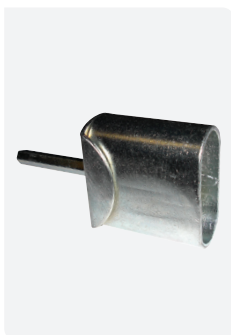
825017 (880 0003-314, Black). 25/Pack.



Ring Insulator Tool

- Designed for use with Patriot ring insulators
- Use with drill to install ring insulators into wood posts. Can also be used to remove insulators from posts
- Galvanized steel for corrosion resistance
- Sold individually.

815042 (880 0002-352). 1/Pack.



Ring

- Fence wire: Poliwire, Polirope, steel/aluminum wire
- Use with Patriot Ring Insulator Tool

817201 (880 0001-367, Black). 25/Pack.



Jumbo Wood Post Claw

- Can also be used with metal pipes
- Fence wire: Poliwire, polirope/braid, steel/aluminum wire



814718 (880 0002-361, White). 25/Pack.



Wide Tape Corner/End Strain

- Use as a corner or end strain insulator
- For use on wood or metal pipe posts
- Suitable for use with politape up to 1½ in (40 mm) wide



814593 (880 0003-231, White). 2/Pack.



1½ IN (40 MM) Tape Wood Post

- Can also be used with metal pipes
- Fence wire: Politape (½ in and 1½ in)



814596 (880 0003-520). 25/Pack.



Corner Lag

- Use to continue fence line in corners
- For use on wood posts
- Suitable for use with most types of electric fence wire



824731 (880 0003-307, Black). 4/Pack.



Insulators

Jumbo Ring Insulator

- Fence wire: Poliwire, poliropo/braid, steel/aluminum wire
- Use with Patriot Ring Insulator Tool



814590 (880 0002-056). 25/Pack

PORCELAIN INSULATORS

Porcelain Donut

- For use with wood posts, metal pipes, and T-posts
- Fence wire: steel/aluminum wire
- Creates corners and termination in electric fences. Use on fence ends, curves and corners
- Fire resistant



812511 (880 0001-253, White). 10/Pack.

Bullnose Porcelain

- For use with wood posts, metal pipes, and T-posts
- Fence wire: steel/aluminum wire
- Effective end strain for termination of electric fences
- Fire resistant



814206 (880 0003-216, White). 10/Pack.

Porcelain Screw-in Large

- For use with wood posts
- Fence wire: Poliwire, poliropo, steel/aluminum wire
- Suitable for use as a line or corner post insulator
- Fire resistant



826051 (880 0003-375, White). 15/Pack.

Porcelain Screw-in Small

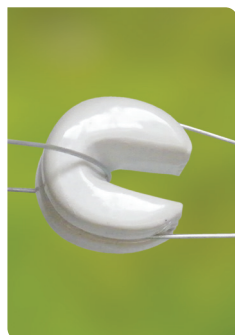
- For use with wood posts
- Fence wire: Poliwire, poliropo, steel/aluminum wire
- Suitable for use as a line or corner post insulator
- Fire resistant



814208 (880 0002-212, White). 25/Pack.

Heavy Duty U Porcelain

- For use with wood posts, metal pipes and T-posts
- Fence wire: steel/aluminum wire
- Effective end strain for termination of electric fence wires
- Fire resistant



814211 (880 0002-268, White). 10/Pack.

Wood Post Porcelain with Nail

- For use with wood posts
- Fence wire: steel/aluminum wire
- Effective as a line insulator
- Fire resistant



814213 (880 0003-219, White). 25/Pack.

Gate Handles and Accessories

When planning your electric fence layout, give thought to the location of your gates. Ideally, place where animals, people, and equipment need easy access to pasture or buildings such as stables and barns. All Patriot Gate Handles and Accessories come with a 1 year warranty.

16 FT (5 m) Spring Gate

- Fence wire: Poliwire, polirope, steel/aluminum wire, politape (½ in)
- For use with electric fence energizers, creates a quick and easy gate
- Fully insulated
- UV stable and designed for long life
- Spring and activator included



809983 (880 0000-598, Yellow).

Gate Handle

- Fence wire: Poliwire, polirope, steel/aluminum wire, politape (½ in)
- Fully insulated handle with non slip grip and galvanized spring used to electrify gate ways
- UV stable and designed for long life



817217 (880 0001-369, Black).

Rubber Handle

- Fence wire: Poliwire, polirope, steel/aluminum wire, politape (½ in)
- Convenient solution to electrify gate ways
- UV stable and designed for long life



828230 (880 0001-851)

No Kick Handle

- Fence wire: Poliwire, polirope, politape, steel/aluminum wire
- Fully insulated handle, used to safely hold electrified wires
- UV stable and designed for long life



810838 (880 0000-163)

T-Post Gate Anchor Insulator

- For use on T-posts
- Economical option for building a gate between T-posts
- Ideal for use with poliwire, polirope, steel/aluminum wire



814210 (880 0003-218). 2/Pack.

Wood Post Gate Anchor Insulator

- Economical option for building a gate between wood posts
- For use on wood posts
- Suitable for use with poliwire, polirope, steel/aluminum wire



814212 (880 0001-300, Black). 2/Pack.

Poli-Products

Patriot Poli-Products are compatible with Sentinel Heavy Duty Tread-In or Pigtail Tread-In posts and are made from long-life, UV-stabilized yarn colored white for greater visibility. All come with a 1 year UV guarantee.

Poliwire

- For use with Sentinel Tread-In or Pigtail Tread-In posts
- 6 stainless steel conductors, flexible, woven for strength and easy handling.



821449 (880 0003-288, White 660 ft/200 m),
822757 (880 0003-300, White 1320 ft/400 m).

Polirope

- For use with Sentinel Tread-In or Pigtail Tread-In posts and Equine Range insulators
- 6 strands of durable stainless steel conductors, tightly woven for superior strength.



821450 (880 0003-289, White 660 ft/200 m).

Politape ½ in

- For use with Sentinel Tread-In or Pigtail Tread-In posts
- 6 stainless steel conductors, flexible, woven for strength and easy handling.



821451 (880 0003-290, White 660 ft/200 m),
821452 (880 0003-291, White 1320 ft/400 m).

Politape 1½ in

- For use with Sentinel Tread-In or Pigtail Tread-In posts and Equine Range insulators
- 6 stainless steel conductors, flexible, woven for strength and easy handling.



821453 (880 0003-292, White 660 ft/200 m).

Poliwire Tensioner

- For tensioning poli electric fences
- Fence wire: Poliwire, politape (½ in)
- Non-conductive and easy to use
- UV stable for long life.



820150 (880 0003-280). 5/pack.

Fence Reel

- Fence wire: Poliwire, politape (½ in)
- Holds 600 ft (180m) poliwire, 300 ft (90 m) ½ in politape
- Compact size
- Portable, easy to use
- Sold individually.



824736 (880 0003-310)

Tread-in Posts

Sentinel Heavy Duty Tread-In

- Fence wire: Poliwire, poliropo, politape (½ in and 1½ in)
- Up to 8 positions for poliwire, politape (½ in and 1½ in) or poliropo
- UV stable for long life
- Measures 49 in in total height (39 in height above ground).



820013 (880 0002-506, White),
820014 (880 0003-259, Black).

Pigtail Tread-In

- Fence wire: Poliwire, politape (½ in)
- Easy to move, steel step-in post with large foot and insulated top
- Measures 41 in in total height (34 in height above ground).



829704 (880 0003-413)

Netting

Electrified netting is a great option for a variety of temporary fence applications including campsites, free range chicken operations, and keeping small nuisance animals out of gardens – just to name a few. Each roll of netting comes with a detailed set of instructions and pictures to help guide you through the set up and storage process.

Poultry Netting

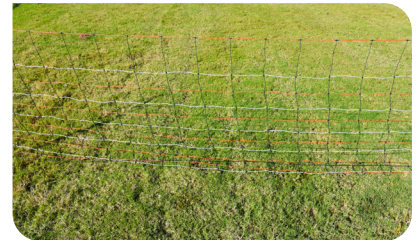
- Length 164'
- Height 40"
- 12" post spacing
- 15 posts
- 12 horizontal wires



828939 (880 0003-408)

Positive/Negative Netting 164'

- Length 164'
- Height 40"
- 10' post spacing
- 18 posts
- 9 horizontal wires



828941 (880 0003-410)

Sheep and Goat Netting

- Length 164'
- Height 35"
- 12.5" post spacing
- 14 posts
- 8 horizontal wires



828940 (880 0003-409)

Positive/Negative Netting 50'

- Length 50'
- Height 40"
- 10' post spacing
- 6 posts
- 9 horizontal wires



828942 (880 0003-083)



Aluminum / Steel Wire

Aluminum/Steel Wire

828930	17 Gauge Steel Wire	100 ft
828929	17 Gauge Aluminum Wire	100 ft
828931	17 Gauge Aluminum Wire	250 ft
828932	17 Gauge Aluminum Wire	1320 ft
828933	17 Gauge Aluminum Wire	2640 ft
828934	14 Gauge Aluminum Wire	1320 ft
828935	14 Gauge Aluminum Wire	2640 ft



Ground Rods and Clamps

Ground Clamp

- Use to secure underground cable to ground rod
- Suitable for use with most ground rods
- Sold individually



824726 (880 0002-507)

6 ft Ground Rod

- Fence wire: Underground cable
- Galvanized steel for long life
- Sold individually



SA110 (880 0003-477)

T-Handle Ground Rod

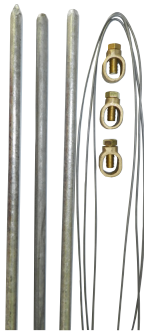
- 30" (760mm) long galvanized steel ground rod with 6" (150mm) handle and tapered end
- Ideal for energizers and temporary fences that will be moved frequently.
- Use with integrated solar energizers and energizers rated for 0.5J or less.



SA111 (880 0003-478)

3 Ground Rod Kit

- Complete kit for building an energizer ground system
- Kit includes: 3 – 6 ft. galvanized steel ground rods, 3 ground rod clamps, 50 ft of steel wire, and instructions.



826479 (880 0003-378)

General Accessories

Warning Sign

- Clips onto electric fence wire to create clear warning for safety
- Installs on most electric fence wires



809700 (880 0002-215, Yellow).

Lightning Arrestor

- Helps to protect energizer in the event of lightning strike to the fence line
- Strong porcelain frame with steel connection points



814630 (880 0001-058, White).

Cut-out Switch

- Can be used with wood posts and metal pipes
- Use to isolate sections of fence
- Stainless steel fittings for positive non-corrosive contact



817216 (880 0000-014, Black).

Underground Cable 50 ft (15 m)

- Use as a lead out wire to connect your energizer to electric fence wires
- Double insulated with 12.5 gauge galvanized wire
- UV stable for long life
- Available in: 50 ft roll.



809731 (880 0000-254, Black).

Fence Lead Set

- Use to connect energizer to fence wire and ground system



821229 (880 0003-287)

Jumper Leads

- Fence wire: Poliwire, poliropo/braid, politape (½ in)
- Use to ensure quality connections in temporary fencing



810836 (880 0003-001)

Economy Spinning Jenny

- Standard spinning jenny
- Non-wheel, pivots on a pin
- Steel spike with tapered point
- 4 adjustable steel arms
- Works with all common wire and coil sizes



823827 (880 0003-301)

Brace Pins

- Secures horizontal brace post to upright brace posts in corner and brace post assemblies
- For use with wood posts
- Galvanized for rust resistance and long life
- Available in: 5 per box.



814218 (880 0003-220, 5 in / 13 cm),
814219 (880 0003-519, 10 in / 26 cm).

General Accessories

Hi Tensile Wire Cutter

- Cuts most fence wire, including high tensile wire
- Suitable safety glasses must be worn



814237 (880 0003-228)

3-Hole Wire Twister Tool

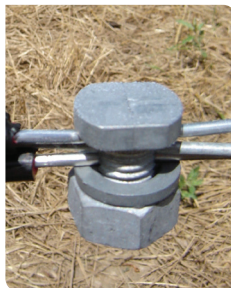
- Use to twist fence wire several times at the end of fence line for a solid connection
- Suitable for use with up to 8 gauge wire



824732 (880 0003-308)

Joint Clamp

- Fence wire: Underground cable, steel/aluminum wire
- Holds multiple fence wires or underground cables to provide electrical connection
- Solid zinc for long life and excellent conductivity

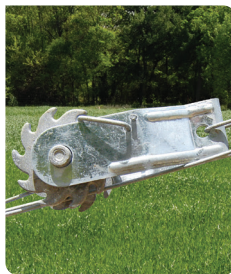


809984 (880 0001-225). 5/Pack.

Fence Hardware

Spring Clip Strainer

- Fence wire: steel/aluminum wire
- Available in: 10 per bag



809813 (880 0001-223)

In Line Strainer

- Use to tighten existing steel/aluminum wire fencing
- Can be added to fence without cutting wire
- Suitable for high-strain conditions
- Available in: 5 per pack



825247 (880 0003-541)

Strainer Tensioner Handle

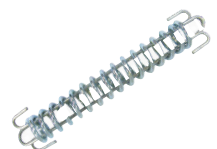
- For use with Patriot Spring Clip Strainer



814209 (880 0003-217)

Economy Compression Spring

- Helps properly tension wire on permanent fences
- Made of high quality zinc-plated steel
- Excellent conductivity
- Sold individually



824730 (880 0003-306)

Crimping Sleeves

Joins high tensile wire strands together. Use Patriot 4 Slot Crimp Tool to crimp.

1-2 Crimping Sleeve

- For use with 14.5 to 19.5 gauge wire



814231 (880 0003-222). 25/Pack.

2-3 Crimp Sleeve

- For use with 12.5 gauge wire



814232 (880 0003-223). 25/Pack,
814233 (880 0003-224). 100/Pack.

3-4 Crimp Sleeve

- For use with 10 and 11 gauge wire or 14 and 15 gauge barbed wire



814234 (880 0003-225). 10/Pack.

4-5 Crimp Sleeve

- For use with 9 ga smooth wire or 12.5-13.5 barbed wire



814235 (880 0003-226). 10/Pack.

3-4 Crimp

- For use with 12.5 to 14 gauge wire



814236 (880 0003-227). 10/Pack.

4 Slot Crimp Tool

- For use with Patriot Crimp Sleeves
- Sold individually



814220 (880 0003-221)

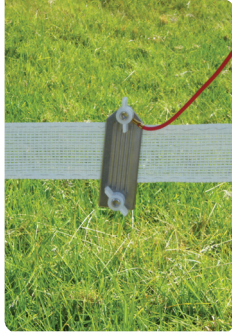
Equine Hardware

Energizer to Wide Tape Connector

- Use to connect politape to energizer
- Suitable for use with politape up to 1½ in wide
- Sold individually



814702 (880 0003-233)

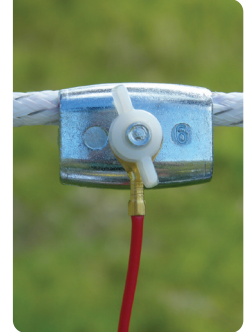


Energizer to Rope / Braid Connector

- Use to connect poliropo or braid strands to energizer
- Suitable for use with poliropo or braid
- Sold individually



814709 (880 0003-235)

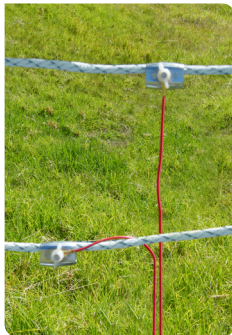


Rope to Rope Connector

- Allows the electricity from one poliropo or braid strand to be transmitted vertically to the poliropo or braid strand below
- Suitable for use with poliropo or braid
- Sold individually



814708 (880 0003-234)

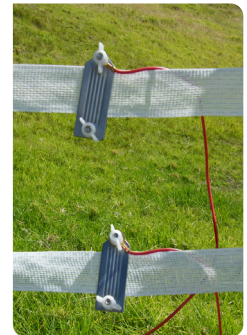


Tape to Tape Connector

- Allows the electricity from one politape strand to be transmitted vertically to the politape strand below
- Suitable for use with politape up to 1½ in wide
- Sold individually



814822 (880 0003-238)



2 In Tape Buckle

- Use to join or splice politape
- Angled end can be used to connect politape to gate handle
- Suitable for use with politape up to 2 in wide
- Available in: 3 per pack



824727 (880 0003-304)



Braid / Rope Clamp

- Use to join poliropo and braid
- Suitable for use with poliropo or braid
- Available in: 3 per pack



814599 (880 0003-232)



½ in Tape Buckle

- For use on T, wood, and metal pipe posts
- Pinlock design allows easy removal of wires
- Can be used with electric fence wire, poliropo, coated wire or braid
- Excellent arcing protection to reduce shorting
- UV stable and designed for long life



824725 (880 0003-303)



Gate Hardware

Two-Way Lockable Gate Latch - Large

- Simple, one-handed operation opens gate from inside or outside
- Zinc-coated, strong, sturdy materials for long-lasting performance
- Can be padlocked for increased security
- Gate mounting hardware included
- For use with 1 5/8" OD round tube gates

831693 (880 0003-222)



Two-Way Lockable Gate Latch - Small

- Simple, one-handed operation opens gate from inside or outside
- Zinc-coated, strong, sturdy materials for long-lasting performance
- Can be padlocked for increased security
- Gate mounting hardware included
- For use with 1 1/4" - 1 1/2" OD round tube gates

831694 (880 0003-223)



One-Way Lockable Gate Latch

- Simple, one-handed operation opens gate from inside or outside
- Zinc-coated, strong, sturdy materials for long-lasting performance
- Can be padlocked for increased security
- Gate mounting hardware included

831695 (880 0003-225)



Gate Wheel

- Provides smoother and easier means of opening and closing gates
- Zinc-coated, strong, sturdy materials for long-lasting performance
- Gate mounting hardware included
- For use with 1 5/8" - 2" OD round tube gates

831696 (880 0003-226)



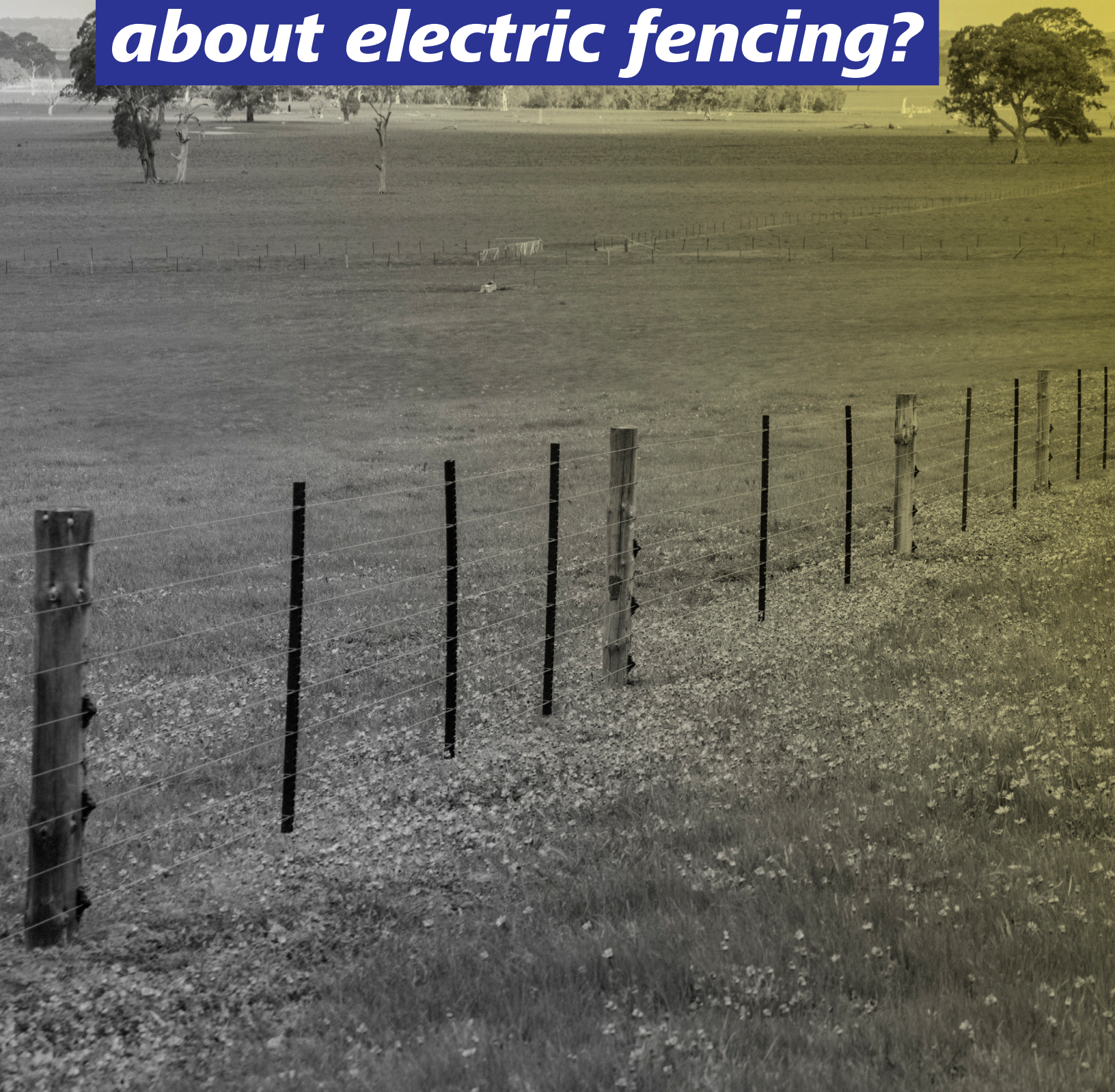
Gate Anchor

- Simple to use. Holds gate open for easy livestock movement.
- Zinc-coated, strong, sturdy materials for long-lasting performance
- Optional use as horizontal slide latch
- Gate mounting hardware included
- For use with 1 3/4" - 2" OD round tube gates

831697 (880 0003-227)



***Still have questions
about electric fencing?***



***Learn about Datamars
Livestock solutions
and products in an
easy, accessible way!***

Join our FREE Datamars Livestock Training Academy

Courses are short and available 24/7. Work at your own pace and share your certificate on LinkedIn when you're done!

Register online at academy.livestock.datamars.com



A person wearing a cowboy hat is seen from the side, looking out over a field. In the background, several cows are grazing. The scene is bathed in a warm, golden light, suggesting a sunset or sunrise. A thin yellow horizontal line is positioned above the main title.

Tru-Test Automatic Waterers

Tru-Test[™]

DATAMARS

About Tru-Test

Tru-Test products have a world-renowned reputation for technology, durability, and reliability. Tru-Test has been helping producers make informed decisions for over 30 years.

Making everyday tasks as easy and effortless as possible is just as important. Tru-Test Livestock Waterers are designed to deliver a fresh water supply for your livestock, all year round.

Why use Automatic Waterers?

Automatic waterers give livestock owners an easier, cleaner, healthier way to manage their animals' most important nutrient.

Benefits	Tru-Test Waterers	Traditional Open Tanks
Automatically replenishes to set water level	✓	✗
Keeps water cooler in the summer and warmer in the winter	✓	✗
Solid foam insulation and multiple seals for freeze resistant design	Water Well Series Resistant to -20°F for 60 hrs Water Pro Series Resistant to -35°F with de-icer	✗
Cleaner water all year round	✓	✗
Significantly reduced evaporation	✓	✗
Easy maintenance	✓	✗
Rust resistant	✓	✗
Reduced algae growth & insect breeding	Water Well Series	✗
Keeps water free from debris	Water Well Series	✗

WaterWell™ 4



- 60 gal / 226 liter
- 200 beef capacity

WaterWell™ 2



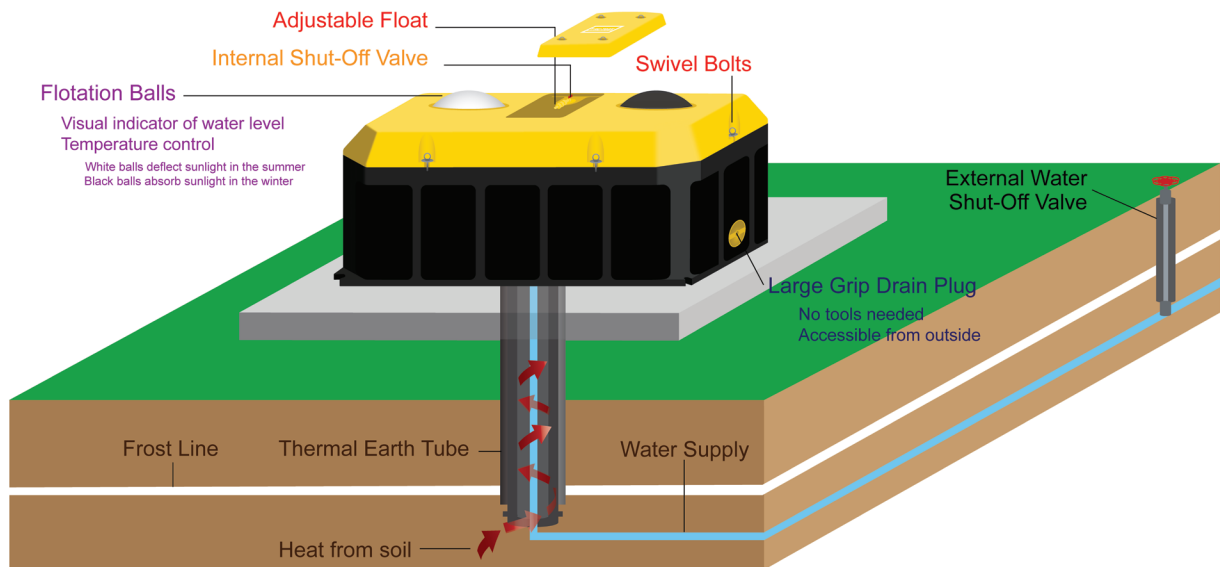
- 31 gal / 119 liter
- 110 beef capacity

WaterPro™ 2



- 7 gal / 27 liter
- 75 beef / horse capacity

HOW DO THEY WORK?



Step 1

Water comes from the underground source through the earth tube and into the unit. This keeps water fresh and prevents water line freezing.

Step 2

The tool-free adjustable float controls the water level. When the unit is full, the float shuts off the water. As animals drink, the water is replenished, keeping it fresh and clean.

Step 3

Top-quality insulation keeps water colder in the summer and warmer in the winter, giving your livestock a fresh water supply year-round.

Step 4

For maintenance, the reservoir lid gives you access to a shut-off valve inside the unit. Our tool-free design makes it easy to check and maintain your unit.

Step 5

To drain the unit, simply remove the large-grip drain plug from the outside of the unit. This gives you full access without having to reach inside the waterer.

Step 6

Clean water = healthy livestock. Constantly replenished water discourages algae growth and insect breeding, keeping the water cleaner and easier to manage.

WaterWell™ 4



Energy-free unit for larger operations.

- 60 gal/226 liter
- 200 beef herd capacity
- Dimensions: 43.5" L x 45.5" W x 21.9" H
- Item: 831830, 880 0003-425

Proudly features an industry-leading Jobe float valve.

Jobe Topaz Compact Valve

- 5-150 PSI
- Easy adjustment with no tools
- Easy servicing
- Self-cleaning
- On/Off switch



Item: 880 0003-762



Features

- ✓ Freeze resistant to -20°F up to 60 hours
- ✓ Shut-off valve at the waterer
- ✓ Large grip, exterior drain plugs
- ✓ Flotation balls help regulate temperature
- ✓ Sealed for protection against cold air
- ✓ Insulated with polyurethane foam for ultimate protection

Benefits

- ✓ Easy to clean and maintain
- ✓ Discourages insect breeding
- ✓ Virtually eliminates algae
- ✓ Reduced evaporation
- ✓ Keeps out debris
- ✓ Easy to see water level
- ✓ Tool-free access
- ✓ Can be split across two pens or pastures



WaterWell™ 2



Energy-free unit for moderate sized operations.

- 31 gal/119 liter
- 110 beef herd capacity
- Dimensions: 43.5" L x 27.5" W x 20.2" H
- Item: 831831, 880 0003-426

Proudly features an industry-leading Jobe float valve.

Jobe Topaz Compact Valve

- 5-150 PSI
- Easy adjustment with no tools
- Easy servicing
- Self-cleaning
- On/Off switch



Item: 880 0003-762



Features

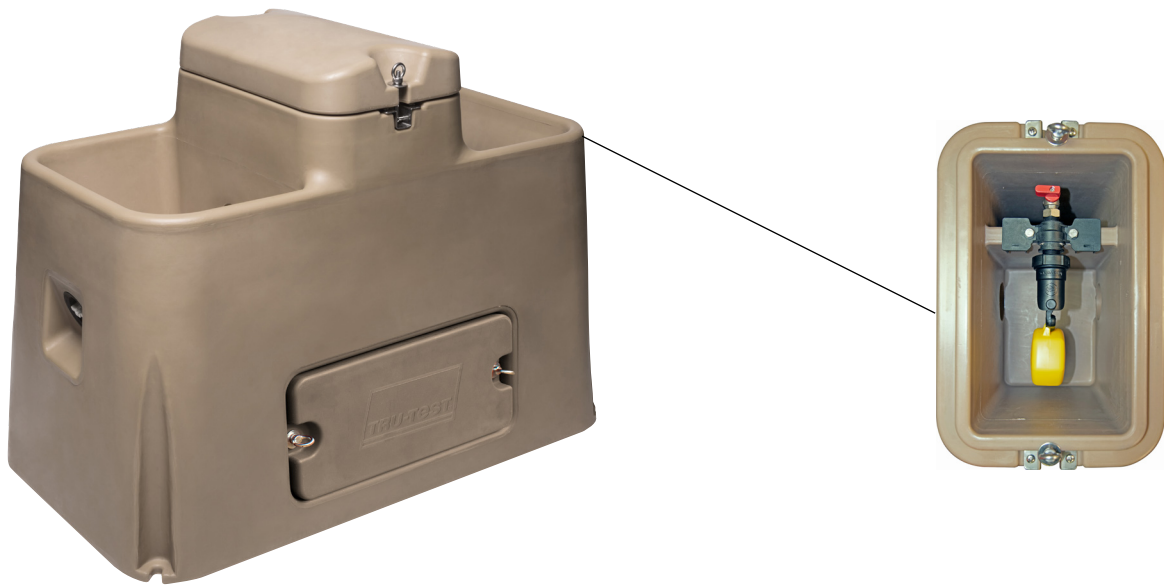
- ✓ Freeze resistant to -20°F up to 60 hours
- ✓ Shut-off valve at the waterer
- ✓ Large grip, exterior drain plugs
- ✓ Flotation balls help regulate temperature
- ✓ Sealed for protection against cold air
- ✓ Insulated with polyurethane foam for ultimate protection

Benefits

- ✓ Easy to clean and maintain
- ✓ Discourages insect breeding
- ✓ Virtually eliminates algae
- ✓ Reduced evaporation
- ✓ Keeps out debris
- ✓ Easy to see water level
- ✓ Tool-free access
- ✓ Can be split across two pens or pastures



WaterPro™ 2



Ideal for horses and larger animals. Compatible with de-icer.

- 7 gal/27 liter
- 75 horse/beef capacity
- Dimensions: 39.125" L x 22" W x 28.7" H
- Item: 831832, 880 0003-427

Proudly features an industry-leading Jobe float valve.



Jobe Rojo Compact Valve

- 0-150 PSI
- Easy adjustment with no tools
- Easy servicing
- Self-cleaning
- On/Off switch



Item: 834478, 880 0003-588



Features

- ✓ Freeze resistant to -35°F with de-icer
- ✓ Shut-off valve at the waterer
- ✓ Large grip, exterior drain plugs
- ✓ Plugs can also seal off one or both reservoirs
- ✓ Sealed for protection against cold air
- ✓ Insulated with polyurethane foam for ultimate protection

Benefits

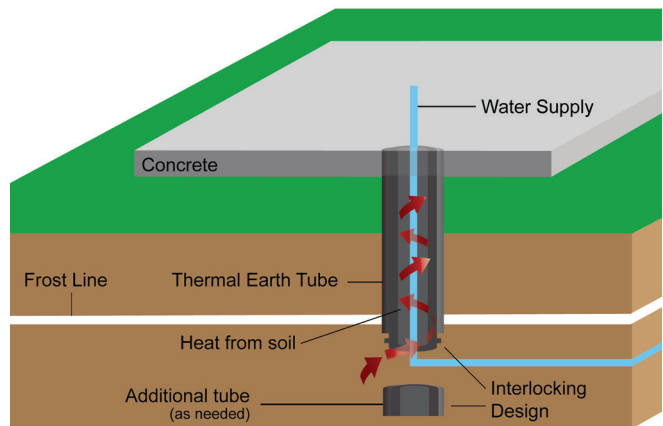
- ✓ Easy to clean and maintain
- ✓ Replenishes water frequently
- ✓ Can be split across two pens or pastures
- ✓ Comfortable height for larger animals
- ✓ Tool-free access



Thermal Earth Tube

Protect against water line freezing by installing a thermal earth tube beneath your automatic waterer.

The earth tube is designed to keep your water line from freezing. Positioned under the waterer, the earth tube should extend below the frost line to allow the thermal heat from the subsoil to rise and circulate the supply line. The tube also acts as an insulated barrier to the cold air surrounding the line.



Important things to remember:

- ✓ The top of the earth tube should sit flush with the concrete pad
- ✓ The vertical water supply line should be positioned in the center of the earth tube
- ✓ Do not fill the earth tube
This will block the flow of warm air around the water line.
- ✓ In areas where the frost line is deeper, you may need to add additional tubes
If needed, additional tubes will interlock to keep the tubes together, creating a seal against ground shifting.



For additional information, visit www.tru-test.com.

- Dimensions: 11.625" OD x 26.75" H
- Item: 831833, 880 0003-561

SPARE PARTS



Drain Plug - WaterWell

- O-ring not included (see 832382P)
- Item: 831836P



Drain Plug - WaterPro

- Plug that doubles for interior/ exterior use
- Item: 831839P



Black Seal for Valve - WaterWell

- Includes 2 seals
- Item: 832882P, 880 0003-111



O-ring for Drain Plug - WaterWell

- Includes 2 O-rings
- Item: 832382P, 880 0003-455



Black Flotation Ball - WaterWell

- For use in cold weather
- Item: 832878P



White Flotation Ball - WaterWell

- For use in hot weather
- Item: 832877P, 880 0003-458



Topaz Valve Assembly - WaterWell

- Topaz 3/4" Compact Valve
- 2 year warranty
- Item: 880 0003-762



Rojo Valve Assembly - WaterPro

- Rojo 3/4" Compact Valve
- 2 year warranty
- Item: 834478, 880 0003-588



Topaz Valve Inner Cartridge - WaterWell

- For use with Jobe Topaz Compact Valve
- Item: 880 0003-780



Rojo Valve Inner Cartridge - WaterPro

- For use with Jobe Rojo Compact Valve
- Item: 834479, 880 0003-589



Hardware for Float Reservoir Lid - WaterWell

- Includes one eye bolt, one gasket, and one washer
- Item: 832893P



Hardware for Panel Door - WaterPro

- Includes one eye bolt and one washer
- Item: 832894P



Spare Main Lid Swivel Eyebolt Hardware

- Comes in a kit
- For WaterWell
- Item: 880 0003-775



De-Icer - WaterPro

- 250W | 110V
- For WaterPro 2 only
- Item: 832381, 880 0003-431



INSTALLATION

Step 1

PREP THE LOCATION

Choose a place easily accessible by livestock and free of obstacles.

Refer to local electrical and plumbing codes before installation.

Step 2

INSTALL THE WATER SUPPLY LINE

Horizontal water line should be at least 1 foot below the frost line.

Vertical water line should be placed in the center of the desired location for the earth tube.

Step 3

INSTALL THE THERMAL EARTH TUBE

Make arrangements to install electricity prior to if using WaterPro 2 with de-icer.

Earth tube must extend at least 1 foot below frost line.

For colder climates or deeper frost areas, use additional earth tubes.

Step 4

POUR THE CONCRETE PAD

Always check measurements with user guide.

Earth tube should be flush with top of the concrete pad.

Remember: Do not fill the earth tube.

Step 5

POSITION THE WATERER AND CONNECT SUPPLY LINE

For the WaterWell series, lower the water level to train animals.

For the WaterPro 2, adjust water level to avoid overflow.

VALVE INFORMATION

Valve Ratings

Waterer	PSI Rating	Maximum Flow <i>gallon per minute at 30 PSI</i>
Water Well Series	5 - 150 PSI	50
Water Pro Series	0 - 150 PSI	3

Pressure reducer may need to be installed in areas of PSI greater than valve specifications.

Failure to reduce water pressure may affect valve performance.

Datamars and Jobe Valves do not accept any liability for any consequential damage caused, or any cost involved in a malfunction or repairing of Jobe Valve products or Tru-Test waterers.

Our waterers won't let you down.

- UV stabilized plastics for long term outdoor use.
- Impact resistant materials, so even in temperatures as extreme as -35°F, our waterers withstand the toughest abuse from livestock.
- To prevent freezing, we've focused on the seals, the internal baffles, and how the lid is secured to the tank bottom. Our waterers are filled with solid foam insulation and will stay ice free.
- Valves respond to water levels quickly. The shut-off valve also gives you complete control right at the unit.
- Low profile design maintains lower water levels to replenish water more often. This design meets all state minimum water capacity requirements, while keeping water fresher at a more consistent temperature. The design is also comfortable for livestock of all sizes to access.
- Flexible, so you can split any unit between two pastures with a fence separating the drinking stations.

***Works better
together.***

Tru-Test™
DATAMARS

Tru-Test's range of weighing products and EID readers help producers improve productivity and profitability.



tru-test.com

**Z
TAGS™**
DATAMARS

Providing producers with their identification needs for over 25 years, Z Tags products include long-term visual tags, electronic tags, and innovative applicators that make tagging livestock easy, safe, and efficient.



ztags.com

Temple Tag®
DATAMARS

Temple Tag has been the number one choice of professional cattle feeders since 1957. These products are uniquely designed to provide durable, efficient identification solutions for short-term use in a feedyard or stocker operation setting.



templetag.com

We're committed to delivering a broader, integrated animal management portfolio, so we've united our product brands under one family – Datamars Livestock.

Our goal is to give producers the tools they need to help feed the growing global need for high quality protein.

Our journey starts with young animals being tagged at birth. As your animals grow, our identification tools can help you track inputs more precisely. Our syringes will help you dose more accurately and efficiently, saving you time and stress. Our line of livestock scales and EID readers takes this one step further, allowing you to collect and manage data throughout the animal's lifecycle.

Managing inputs isn't just about the livestock either – our electric fencing and automatic waterers give you more control over the natural resources you use every day.

Datamars Livestock takes pride in quality products and exceptional service. We believe in the future of agriculture, and we're here to help you face whatever challenge comes your way.

Speedrite.
DATAMARS

From incredibly powerful energizers to a range of durable accessories, Speedrite premium electric fencing products offer a seriously unbeatable combination of power, innovation, and reliability.



speedrite.com

Patriot.
DATAMARS

Patriot's range of electric fencing energizers and accessories match your needs for simplicity, reliability, and performance - all at an outstanding value.



patriotglobal.com

njphillips.
DATAMARS

NJ Phillips animal health delivery systems are proven to perform under many different conditions. These products are known for accuracy, quality, and ease of use.



njphillips.com

DATAMARS *Livestock*

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