

DATAMARS
Livestock™

Tru-Test.
DATAMARS

Speedrite.
DATAMARS

Patriot™
DATAMARS

**Z
TAGS.**
DATAMARS

njphillips.
DATAMARS

Simcro™
DATAMARS

Electric Fencing

& Waterers Catalog

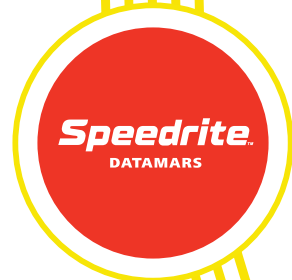
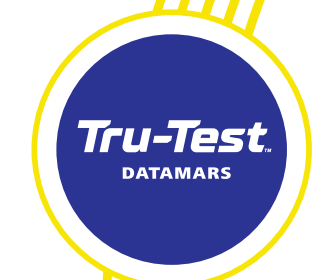
Livestock Management Solutions
PRODUCT GUIDEBOOK

DATAMARS
Livestock™

We empower producers by enabling data-driven decisions, ensuring consistent and profitable results. We support you through everyday livestock production needs, with innovative technology aiding day-to-day tasks. Our tools enhance animal health, precision management, and protein production, working seamlessly together and with you. Whether in the field or online, our digital platform provides real-time livestock information, enhancing decision-making. Our products not only work together but, more importantly, work for you.

Datamars Livestock, a division of global company Datamars, Inc., is a leading provider of precision livestock management solutions. Our top-quality tools, including Z Tags, Temple Tag, Tru-Test, and others, support efficient and profitable livestock management. Backed by the Datamars Livestock cloud software, our products offer real-time data for producers.

VISIT [LIVESTOCK.DATAMARS.COM](https://www.livestock.datamars.com)



Electric Fence Planning & Building Steps

This product guidebook explains the products and tools needed to build an effective electric fence.

Why use electric fencing?	4
Step 1: Electric Fence Selection Needs	5
Step 2: Fence Design	7
Step 3: Selecting an Energizer	11
Step 4: Selecting Wire Products	15
Electric Fence Checklist	18
Step 5: Fence Installation	19
Step 6: Grounding & Testing	22
Fence Monitoring System	26
Key Terminology	28

SPEEDRITE FENCE SYSTEMS	30	PATRIOT FENCE SYSTEMS	60
Choosing an Energizer	32	Selecting an Energizer	61
AC Mains Energizers	34	Energizer Selection Chart	64
Unigizers™	36	Dual-Purpose Energizers	65
Unigizers™ Solar Systems	40	SolarGuard Energizers	66
Integrated Solar Energizers	42	AC (110V) Energizers	68
Battery Energizers	44	Battery Energizers	69
Management Tools	45	Management Tools & Exclusion Kits	70
Electric Fence Accessories	47	Insulators	71
Wire Strainers	48	Tread-in Posts	75
Insulators	49	Gate Handles & Accessories	76
End-Strain Insulators, Offsets & Posts	50	Poli-Products	77
Poli-Products & Gate Accessories	51	Netting, Aluminum, & Steel Wire	78
Reels	53	Ground Rods & Clamps	79
Gate Hardware	54	General Accessories	79
Ground Rods	55	Hardware & Crimp Sleeves	81
Underground Cable & General Accessories	56	Equine & Gate Hardware	82
Hayes Tools	58		
Ground Systems	59	TRU-TEST AUTOMATIC WATERERS	84
		Why use Automatic Waterers	85
		How do Automatic Waterers Work	86
		Thermal Earth Tube & Installation	87
		WaterWell™ 4 & WaterWell™ 2	88
		WaterPro™ 2	89
		Spare Parts	91

CUSTOMER SUPPORT:

(800) 433-3112 or customer.service@datamars.com

Why Use Electric Fencing?

An electric fence energizer (also 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



Low Cost



Flexibility



Ease of Usage



Durability

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

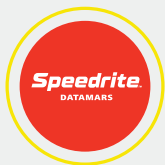
Lower cost: Electric fence requires less labor and material than conventional fences (barbed or woven wire, wood rail, vinyl). Savings can also be achieved through reduced maintenance—animals are less likely to damage an electric fence because they don't usually touch it more than once. It is important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

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.

Our industry-leading brands to meet anyone’s electric fencing needs. Whether building a fence to last 20 years or installing temporary netting to protect a campsite, our brands are a quality solution for any fencing needs.



speedrite.com

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.



patriotglobal.com

Patriot electric fence offers quality fencing at an outstanding value.

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

1. Electric Fence Selection Needs

FENCE PLANNING & BUILDING STEP NUMBER

1 2 3 4 5 6

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*	1–20 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	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

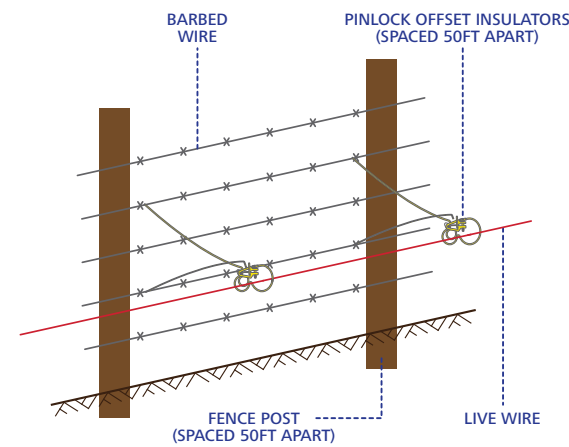
* This time frame indicates the expected fence life using quality products and keeping the fence maintained.

TYPES OF ELECTRIC FENCING

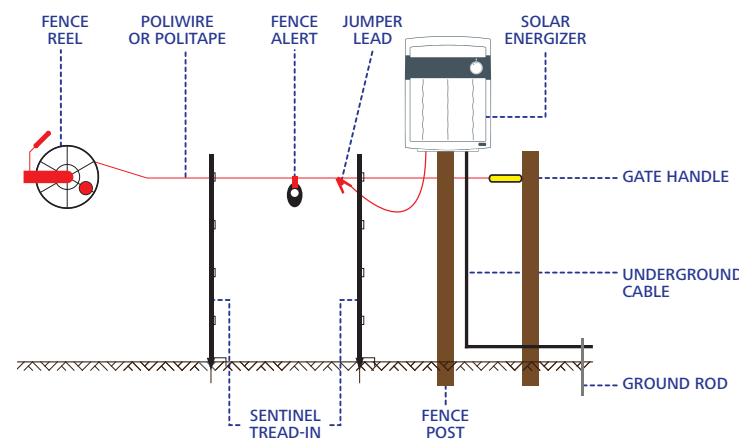
FENCE PLANNING & BUILDING STEP NUMBER	1	2	3	4	5	6
---------------------------------------	----------	---	---	---	---	---

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

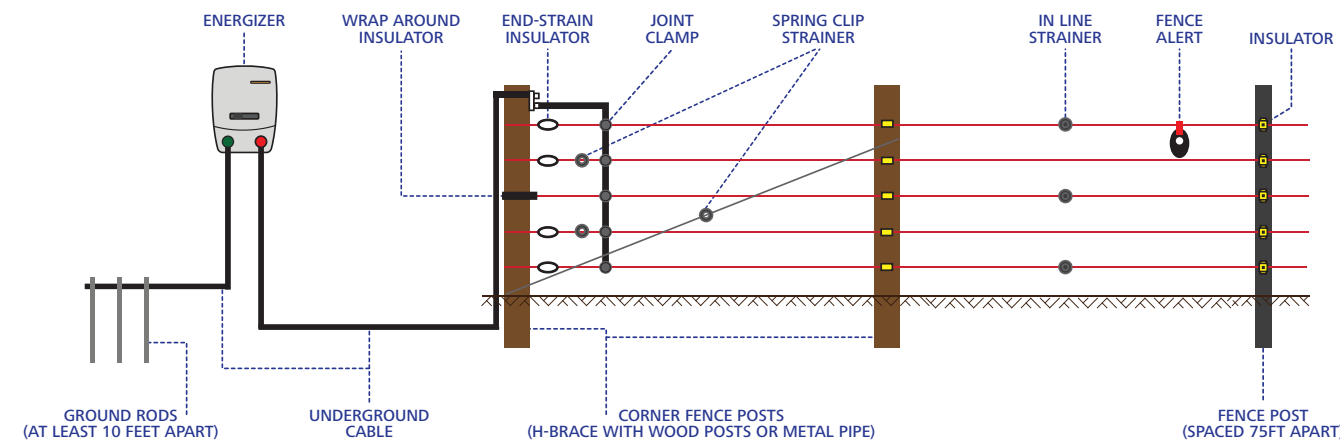


Temporary Electric Fence



Speedrite 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



2. Fence Design

FENCE PLANNING & BUILDING STEP NUMBER	1	2	3	4	5	6
---------------------------------------	---	----------	---	---	---	---

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.

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.

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.

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.

Standard exclusion fences – such as those designed to keep out bears, wolves, coyotes, deer, or feral hogs – are different from traditional electric fence applications.

Basic Guidelines For Standard Exclusion Fences

DO'S	DON'TS
<ul style="list-style-type: none"> DO: Research the type of fence design and conductor wire required for 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. 	<ul style="list-style-type: none"> No 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. No 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. No 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.

CONTAINMENT FENCE

EXCLUSION FENCES

FENCE PLANNING & BUILDING STEP NUMBER

- 1
- 2
- 3
- 4
- 5
- 6

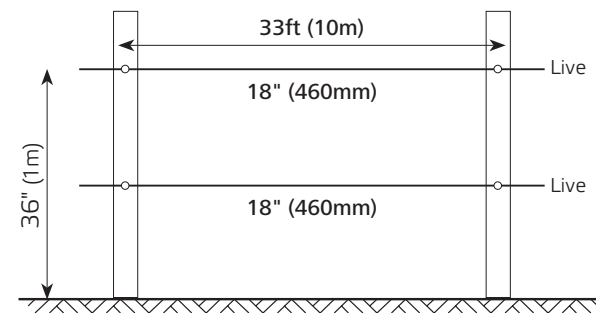
Recommended for domesticated livestock.

Common Uses:

- Small or large pastures
- Strip grazing/managed grazing

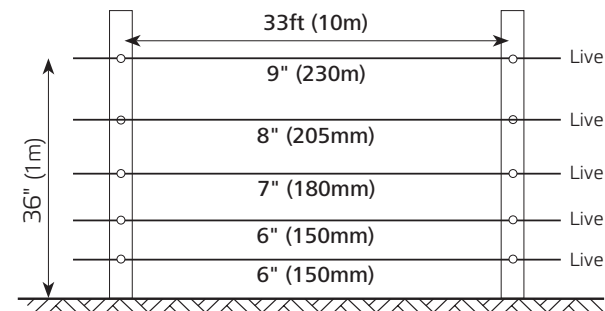
CATTLE AND HORSES

33ft (10m) spacing, posts only



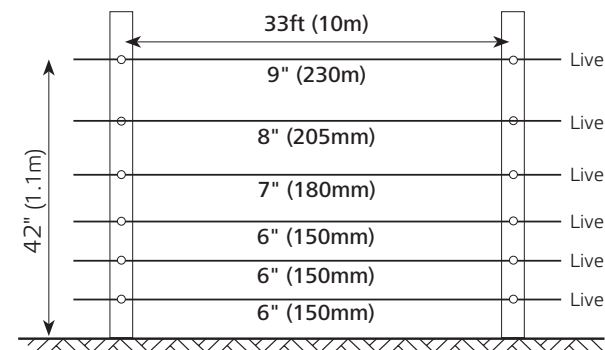
GOATS, SHEEP, AND DOMESTIC PIGS

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



6 WIRE BOUNDARY OR SUBDIVISION

33ft (10m) spacing, posts only



“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 & CRAWFORD HENRY —
Cotton and Peanut Growers

FENCE PLANNING & BUILDING STEP NUMBER

- 1
- 2
- 3
- 4
- 5
- 6

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 76 for a list of available netting products.

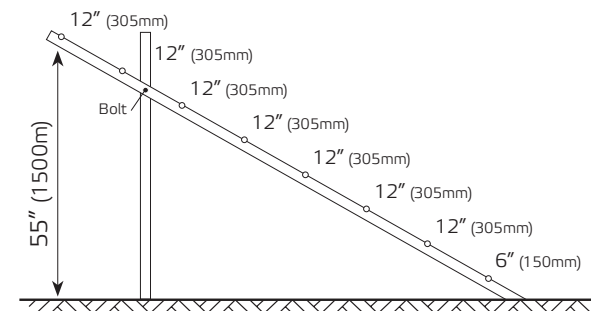
Common Uses:

- 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.

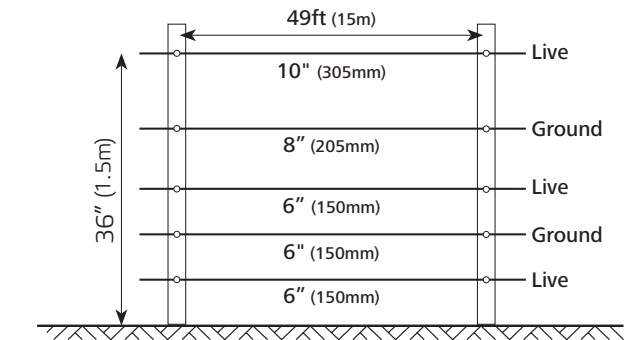
SLANT FENCE

Recommended for animals that jump (deer and elk).



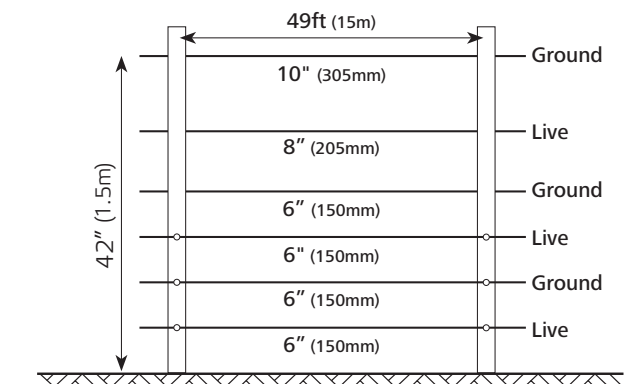
5 WIRE FENCE

Recommended for coyotes and feral hogs.



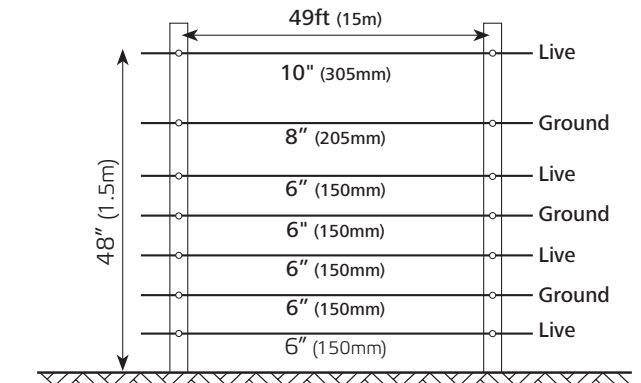
6 WIRE FENCE

Recommended for coyotes and feral hogs.



7 WIRE FENCE

Recommended for bears.



CROP PROTECTION FENCING

FENCE PLANNING & BUILDING STEP NUMBER

- 1 2 3 4 5 6

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.

Key Considerations:

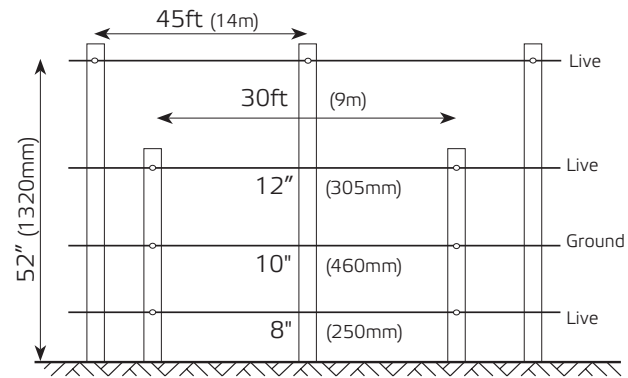
The 2 fence system (i.e. inside and outside fence), with differing heights, and the slant fence achieve a 3-dimensional effect on the deer. This impairs the deer's ability to judge the height and distance they need to jump to clear the fence.

Common Uses:

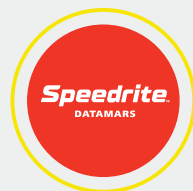
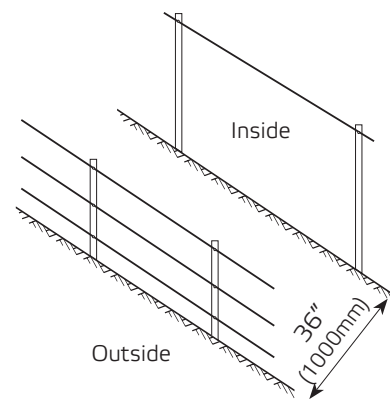
- Commercial row crop protection
- Food plots
- Gardens
- Certified organic operations

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

FRONT VIEW OF 3D FENCE



TOP VIEW OF 3D FENCE



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.

3. Selecting An Energizer

FENCE PLANNING & BUILDING STEP NUMBER

- 1 2 3 4 5 6

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

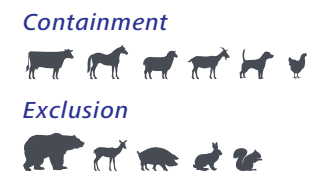
1: Power Type

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.



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 13.



3: Coverage Area

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.

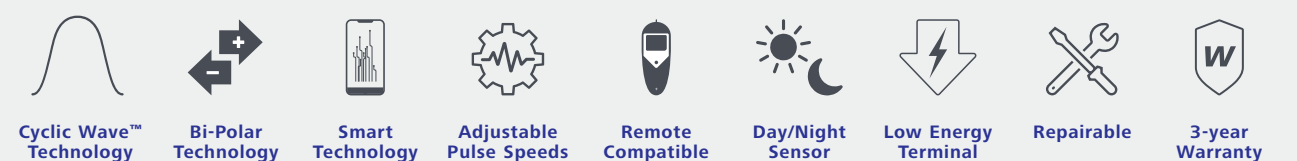
Total Power Need = 1J per 40 acres fenced

$$\begin{aligned} & 240 \text{ acres fenced} \\ & \div 40 \text{ acres per 1 joule} \\ & = 6 \text{ joules of power needed} \end{aligned}$$



Speedrite Premium Energizer Features

Speedrite premium energizers feature professional technology for ultimate power and reliability. For more information about Speedrite features, see pages 34, 36, 39 and 43.



ANIMAL CONSIDERATIONS

FENCE PLANNING & BUILDING STEP NUMBER

- 1 2 **3** 4 5 6

Containment	Min. Fence Voltage*	Characteristics/Tips
Beef Cattle	3,500V	Bulls require a higher voltage as they are more aggressive.
Dairy Cattle	3,000V	If kept separately, calves and heifers require lower wire and less spacing.
Horses	2,500V	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	6,000V	Thick coats insulate from electric shocks, requiring higher voltage.
Deer & Elk	6,000V	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	6,000V	Wool insulates from electric shocks, requiring higher voltage.
Goats	6,000V	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	3,000V	Start wires close to ground and finish at nose level.
Pets	750V	Start wires close to ground.

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

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 a voltage tester.

WHY DO JOULES MATTER?

FENCE PLANNING & BUILDING STEP NUMBER

- 1 2 **3** 4 5 6

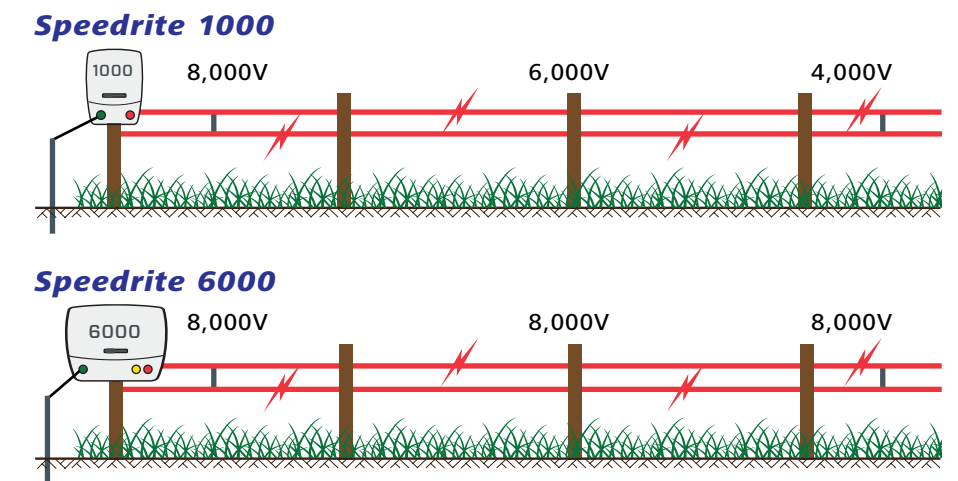
A joule is a measure of energy. More joules push voltage further down the fence. More joules also help maintain power when there is an increased load on the fence (i.e. vegetation, fault or short, broken insulator).

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

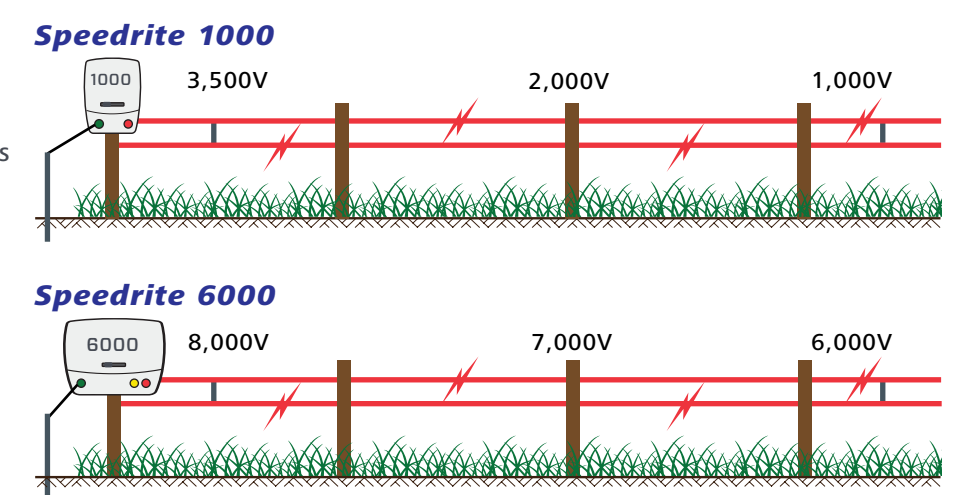
CLEAN FENCE

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.

How Does Your Energizer Measure Up?

Output Joules = Power on the 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.



Model: 6000

Output Energy: 6 J



Stored Energy: 9 J



Model: PMX600

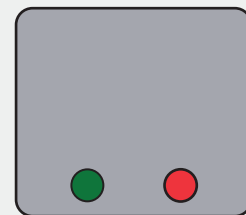
Output Energy: 6.7 J



Stored Energy: 9.9 J



Other Brands



Comparable Model

Output Energy: 4.9J



Stored Energy: 8 J



4. Selecting Wire Products

FENCE PLANNING & BUILDING STEP NUMBER



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.

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

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

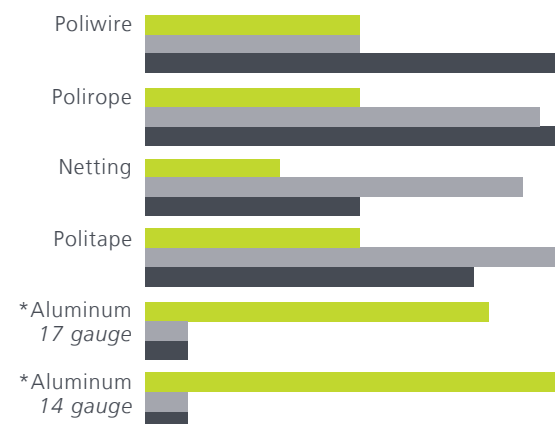


Exclusion

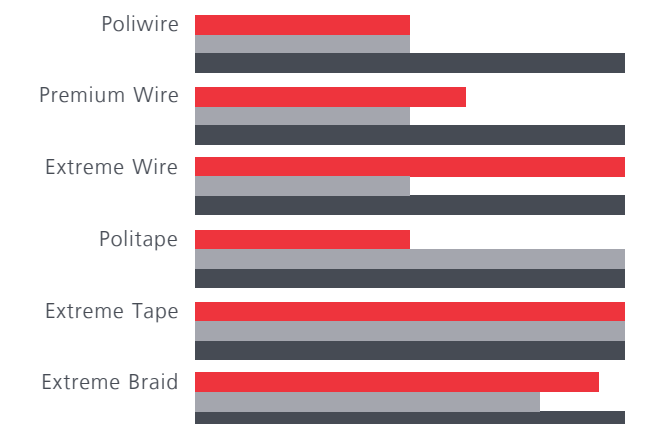
3: Other Characteristics



Conductivity
Visibility
Flexibility



Conductivity
Visibility
Flexibility



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

SELECTING INSULATORS

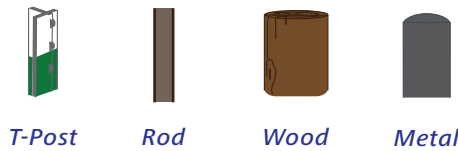
FENCE PLANNING & BUILDING STEP NUMBER

- 1 2 3 **4** 5 6

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.

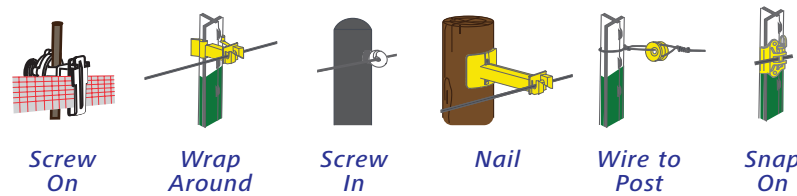
1: Type of Post

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.



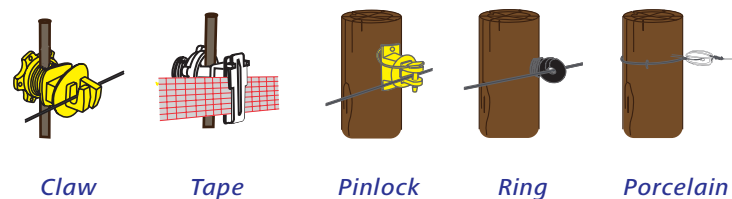
2: Installation Type

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.



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.



Speedrite 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 49-50.

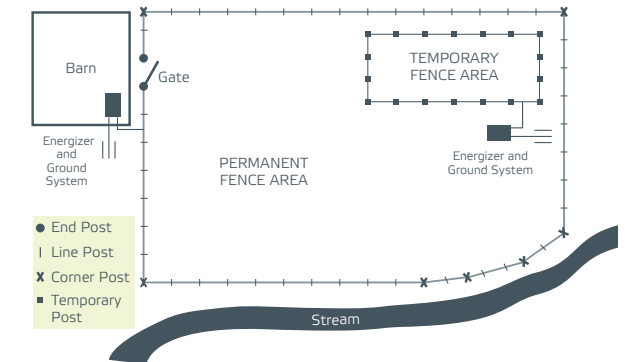
LAYOUT PLANNING OF ELECTRIC FENCE

FENCE PLANNING & BUILDING STEP NUMBER

- 1 2 3 **4** 5 6

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.

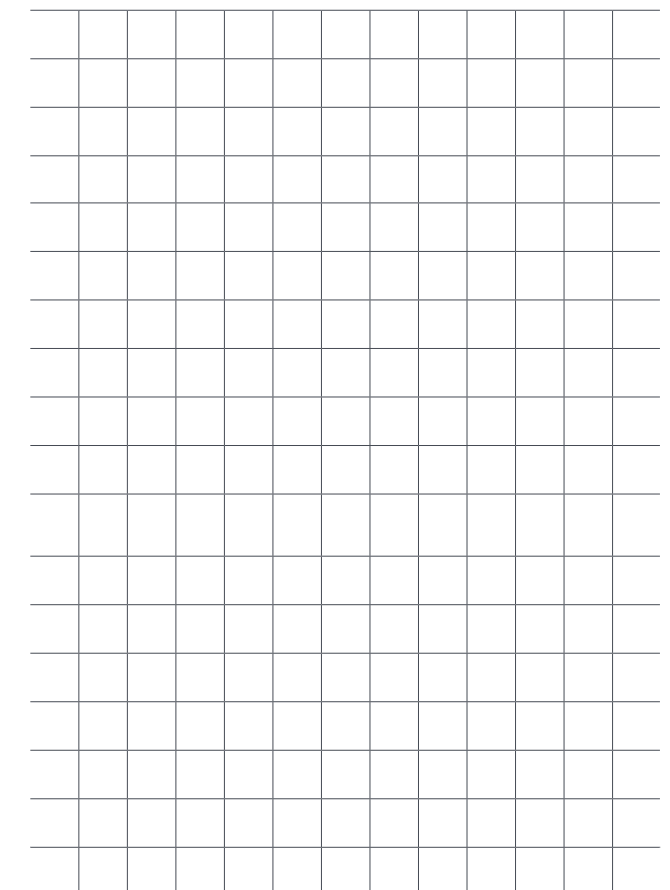


Grab a pencil and walk around the area you want to fence, measuring and sketching your layout. Also include in your plan:

- 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
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.
- Water supply and feeding locations
- Gate locations
- Fence termination points

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?



ELECTRIC FENCE CHECKLIST

FENCE PLANNING & BUILDING STEP NUMBER	1	2	3	4	5	6
--------------------------------------------------	----------	----------	----------	----------	----------	----------

Depending on the type of fence you're building, these check-lists 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 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

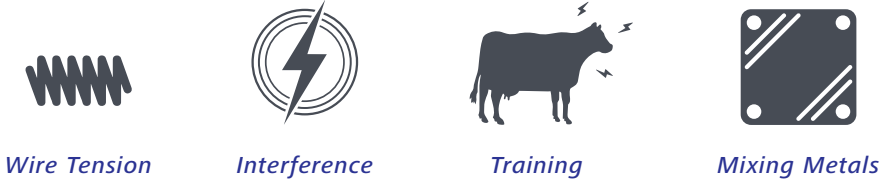
For adding an electric component to an existing barbed wire or perimeter fence, we recommend pairing Speedrite energizer and offset insulators with 12.5 gauge wire. For adding an electric component to a backyard chain link or other existing fence, check out Patriot's specialty insulators.

Energizer
Ground Rod
Ground Rod Clamps
Pinlock Offset Insulators
Wire (12.5g recommended)
End-strain insulators

5. Fence Installation

FENCE PLANNING & BUILDING STEP NUMBER	1	2	3	4	5	6
--------------------------------------------------	----------	----------	----------	----------	----------	----------

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



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.

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.

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.

TEMPORARY ELECTRIC FENCING

FENCE PLANNING & BUILDING STEP NUMBER

- 1
- 2
- 3
- 4
- 5
- 6

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.

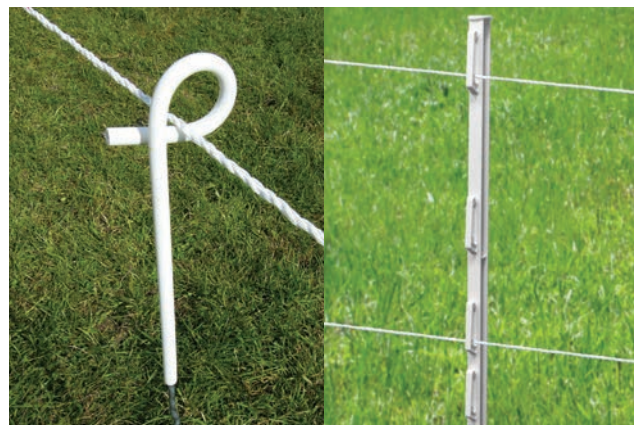
Our temporary fencing wire contains 6 stainless steel conductors and white UV stabilized yarn for greater visibility and longevity. The biggest difference is the thickness and visibility of the different products i.e. politape is larger and therefore more visible than poliwire.

How do you join Poliwire or Politape?

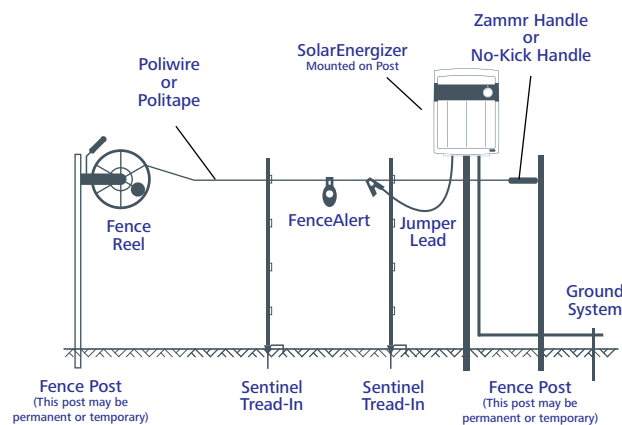
To join broken (or separate ends) of poliwire or politape, use poliwire joiners or tape buckles.

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.



Section of temporary fence using Pigtail Tread-In Post and Poliwire.



PERMANENT ELECTRIC FENCING

FENCE PLANNING & BUILDING STEP NUMBER

- 1
- 2
- 3
- 4
- 5
- 6

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 poliropo 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.)

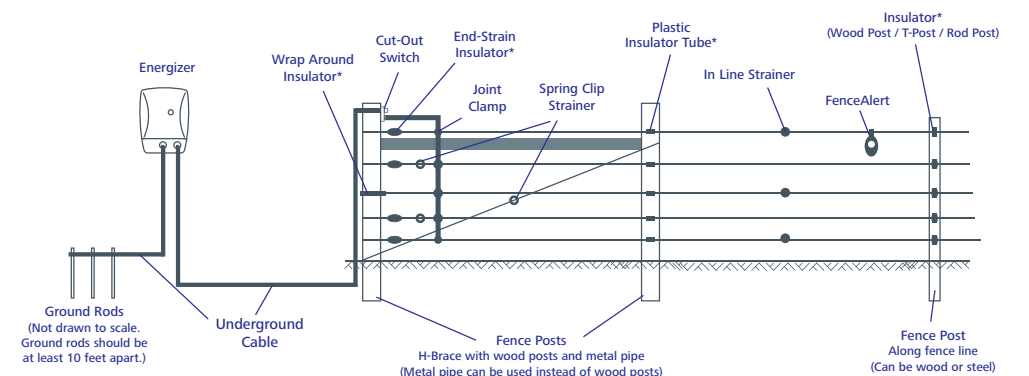
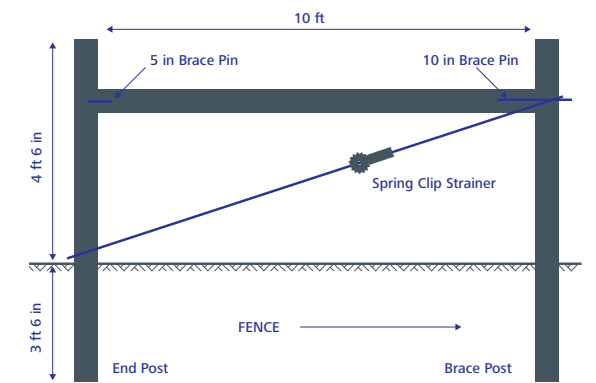
Fence posts

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.

6. Grounding & Testing

FENCE PLANNING & BUILDING STEP NUMBER

1 2 3 4 5 **6**

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.

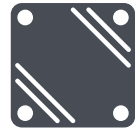
What factors will affect the Ground System?



Soil Type



Vegetation



Metal 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 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

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.

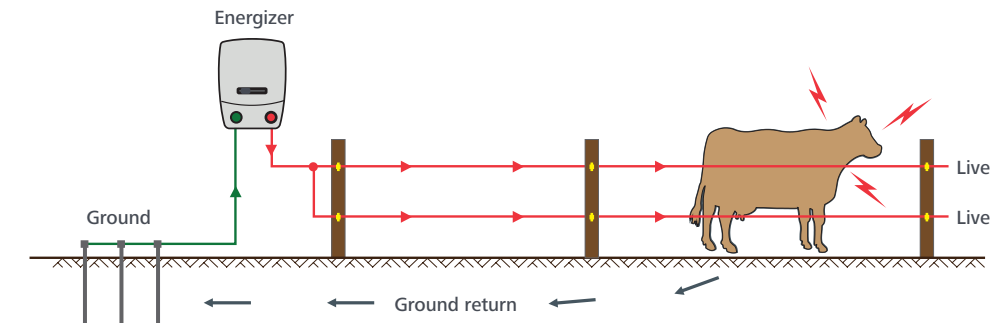
TYPES OF GROUND SYSTEMS

FENCE PLANNING & BUILDING STEP NUMBER

1 2 3 4 5 **6**

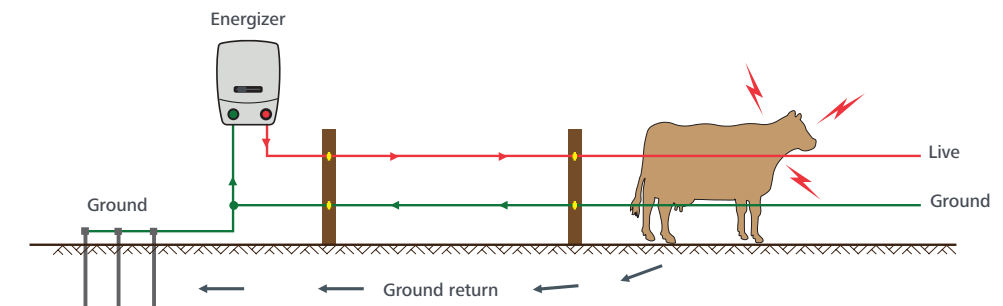
All Live Grounding System

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 33ft (10m) 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).

SETTING UP A GROUND SYSTEM

FENCE PLANNING & BUILDING STEP NUMBER

- 1
- 2
- 3
- 4
- 5
- 6

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 .5J or less.

For long ground rods (5ft– 6ft length):

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

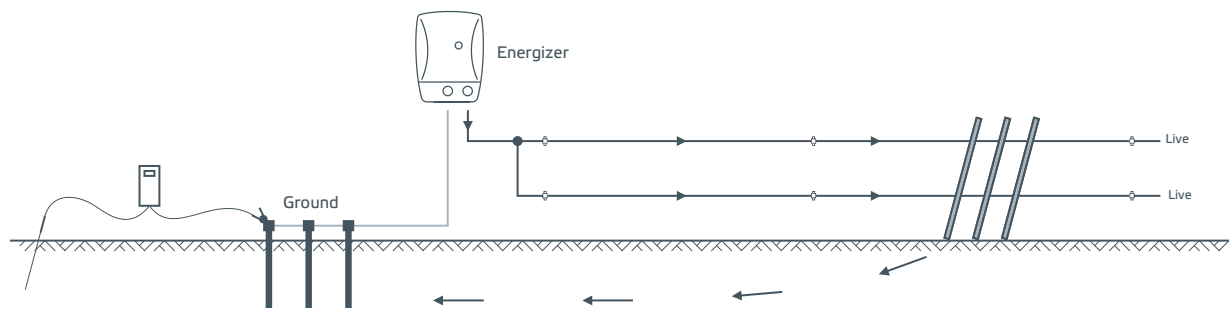
For T-handle ground rods (3ft length):

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

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 – 6ft long and at least 10ft apart.	Ground rods are buried deeply in the soil.



1. Turn off the energizer.
2. At least 330ft (100m) 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" (30cm) into the soil.
3. Turn on the energizer.
4. Use a digital voltmeter to measure the fence voltage. It should read 2kV 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 .3kV. 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.

TROUBLESHOOTING

FENCE PLANNING & BUILDING STEP NUMBER

- 1
- 2
- 3
- 4
- 5
- 6

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

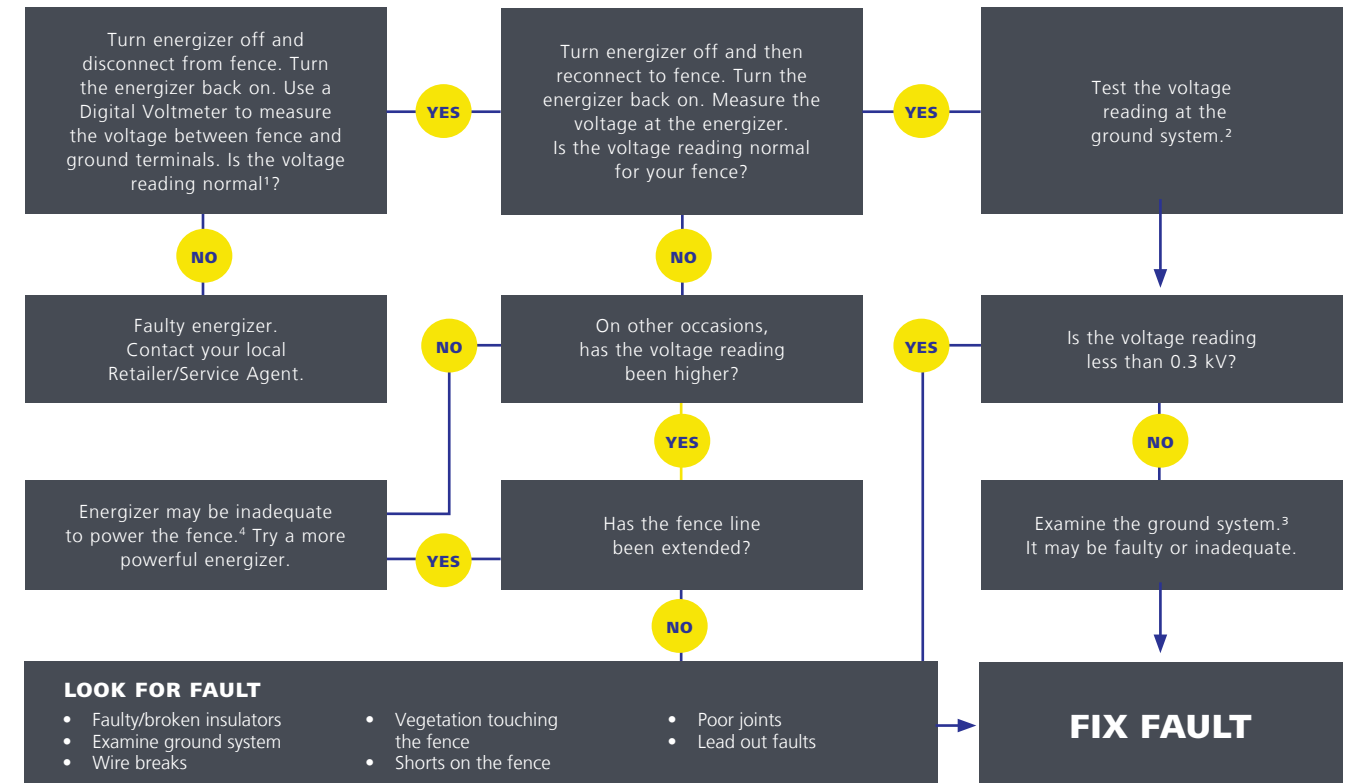
At the first cut-out switch, disconnect the rest of the fence and take a voltage reading. The voltage should be normal.

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.

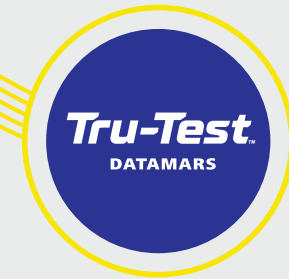
START



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.

Fence Monitoring System

DATAMARS **Livestock™**



Receive Real-time Voltage via a Smart Phone, Anytime, Anywhere

The convenience of real-time, continuous fence voltage readings directly to your smart phone. Secure your livestock or crops. **The Fence Monitoring System is compatible to use with any energizer brand.**

- ✔ **SECURE LIVESTOCK & EXCLUDE PREDATORS**
- ✔ **FAST FENCE REPAIR**
Approximate fault location so you can get to it quickly.
- ✔ **SAVE TIME, LABOR, & EFFORT**
No more checking miles of fence. Install the system to view and control it.

When a fault occurs, the solar-powered nodes positioned along the electric fence line promptly notify you on your smart phone. Throughout the day, the fence nodes consistently measure voltage and communicate with both the Farm Gateway and other Fence Nodes. The Gateway easily connects to a building and utilizes Cloud-based software to transmit alerts to the Datamars Livestock Farm App. This enables you to quickly identify the fault and safeguard your livestock or crops before the problem escalates.

All You Need is



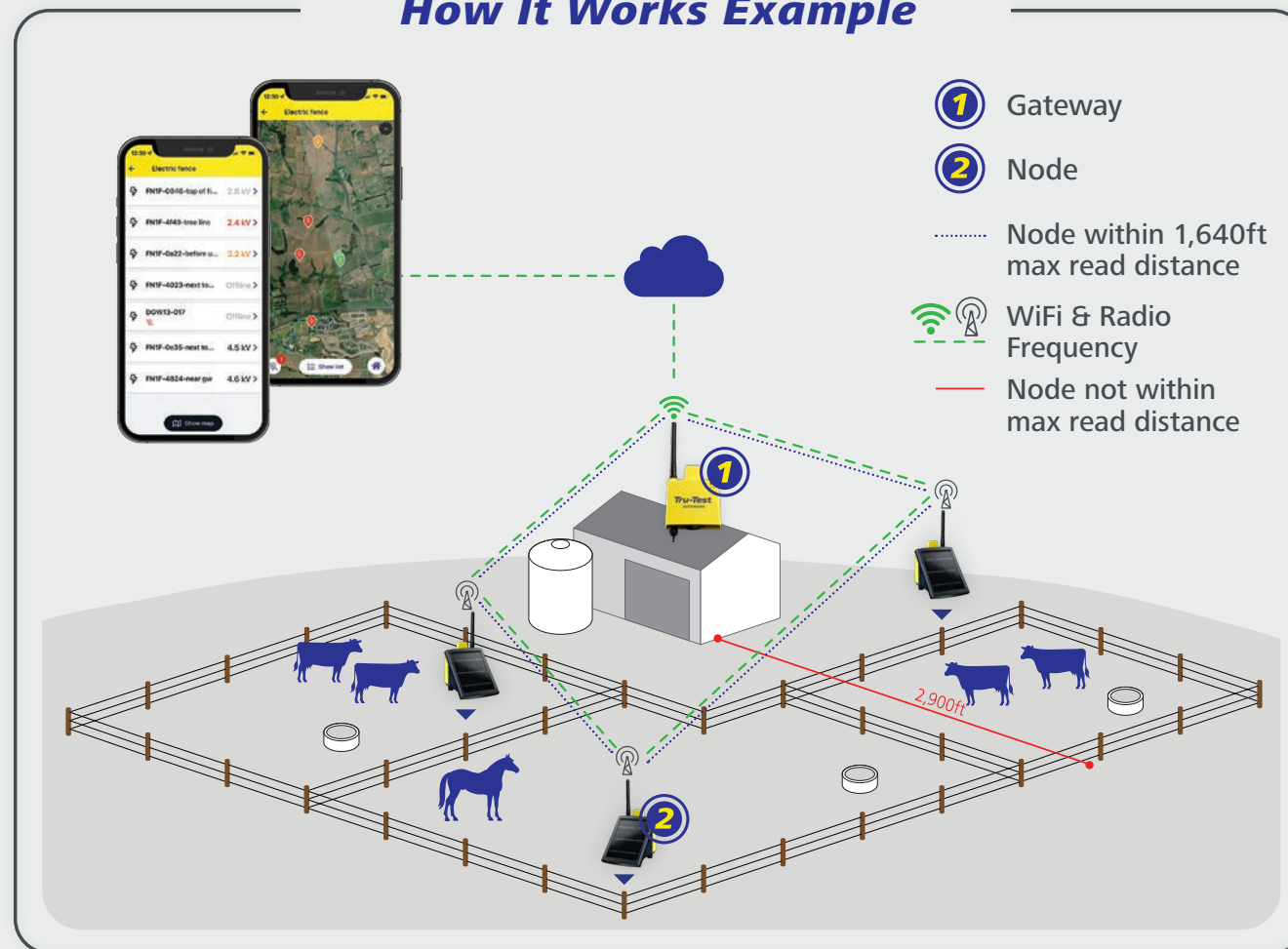
FENCE NODE: 880 0004-540
FARM GATEWAY: 880 0004-541

LEARN MORE: TRU-TEST.COM

No Other Fence Monitoring System Compares:

- ✔ Compatible with any energizer brand
- ✔ Instant voltage readings to a smart phone
- ✔ Gateway connects by WiFi or Ethernet
- ✔ 24/7 Cloud-based data storage & monitoring
- ✔ Expandable system; 1 Gateway & up to 50 Nodes per system
- ✔ UV stabilized hardware; weatherproof durability
- ✔ Easy installation with LEDs & in-app instructions using just a cordless drill, wrench & wire cutters

How It Works Example



Datamars Livestock Farm App:

- ✔ Installs the Fence Monitoring System
- ✔ Register your farm and add users
- ✔ View current or change voltage thresholds
- ✔ Set admin permissions and update information
- ✔ Adjust notifications & GPS locations
- ✔ Update WiFi network as needed

KEY TERMINOLOGY

AC	Alternating Current, AC power supply 110V – 120V or 220V – 240V
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. 12V 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.

DATAMARS
Livestock.

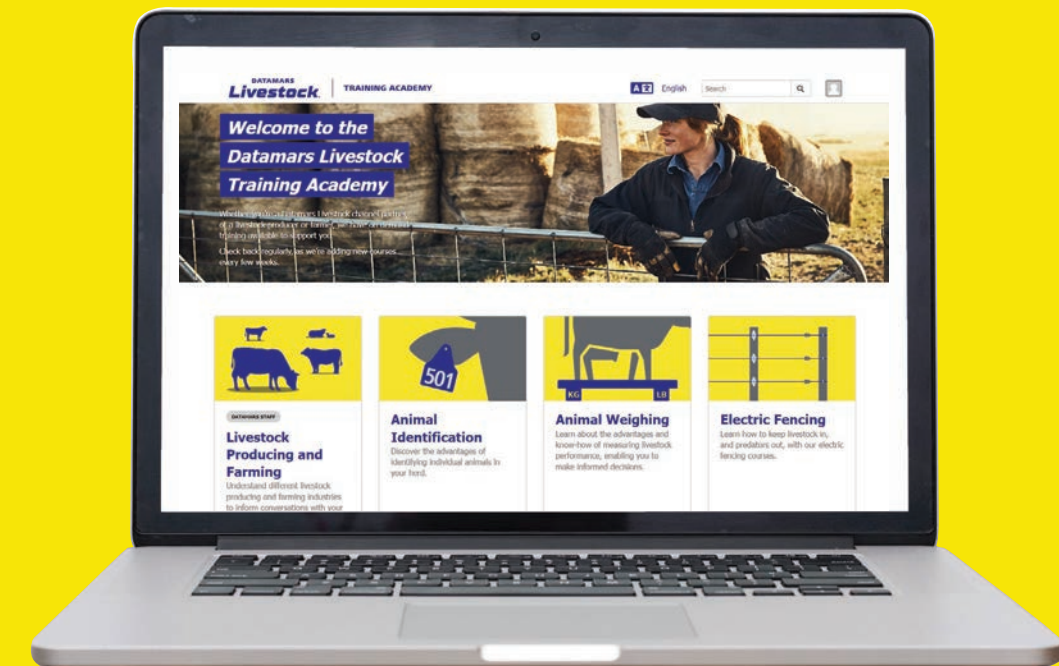
Training Academy

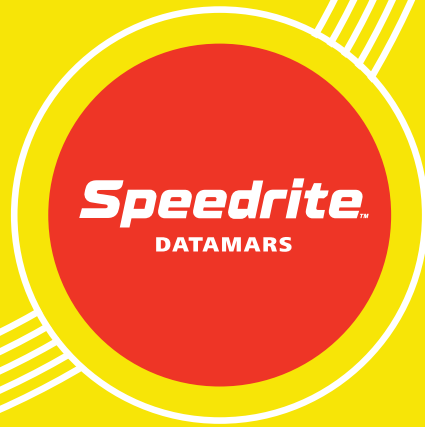
Learn about Datamars Livestock solutions and products in a easy, accessible way!

**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 academy.livestock.datamars.com





DATAMARS
Livestock™

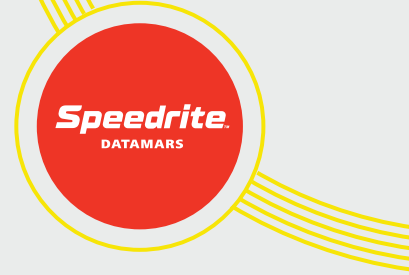
Premium **Electric Fencing**

Decades of rigorous research and development have culminated in Speedrite distinguished line of energizers and electric fencing accessories. Renowned and trusted for their exceptional quality and cutting-edge technology, makes them the epitome of excellence. Speedrite products are a testament of commitment to delivering state-of-the-art pasture management solutions.

LEARN MORE: SPEEDRITE.COM



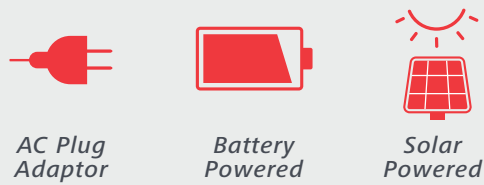
Selecting An Energizer



A range of superior energizers to suit any need.

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.

Speedrite Energizers deliver maximum power and reliability from results of intensive research and development. All energizers feature unique market-leading technologies and promise of power in action!



Energizer Selection Chart

MODEL	REMOTE CAPABLE	POWER	CONTAINMENT OR EXCLUSION	COVERAGE AREA*
86000W	Yes	AC	Cattle, Horses, Sheep, Goats, Pigs, Chickens	6,200 ACRES / 540 MILES
46000W	Yes	AC	Cattle, Horses, Sheep, Goats, Pigs, Chickens	3,300 ACRES / 290 MILES
18000i	Yes	AC, 12V, Solar	Cattle, Horses, Sheep, Goats, Pigs, Chickens	1,300 ACRES / 120 MILES
12000i	Yes	AC, 12V, Solar	Cattle, Horses, Sheep, Goats, Pigs, Chickens	500 ACRES / 90 MILES
6000i	Yes	AC, 12V, Solar	Cattle, Horses, Sheep, Goats, Pigs, Chickens	240 ACRES / 60 MILES
6000	No	AC, 12V, Solar	Cattle, Horses, Sheep, Goats, Pigs, Chickens	240 ACRES / 60 MILES
3000	No	AC, 12V, Solar	Cattle, Horses, Sheep, Goats, Pigs, Chickens	120 ACRES / 30 MILES
3 J SOLAR SYSTEM	No	12V, Solar	Cattle, Horses, Sheep, Goats, Pigs, Chickens	120 ACRES / 30 MILES
2000	No	AC, 12V, Solar	Cattle, Horses, Sheep, Goats, Pigs, Chickens	80 ACRES / 20 MILES
2 J SOLAR SYSTEM	No	12V, Solar	Cattle, Horses, Sheep, Goats, Pigs, Chickens	80 ACRES / 20 MILES
1000	No	AC, 12V, Solar	Cattle, Horses, Sheep, Goats, Pigs, Chickens	140 ACRES / 40 MILES
S1000 INTEGRATED SOLAR ENERGIZER	No	Solar	Cattle, Horses, Sheep, Goats, Pigs, Chickens	140 ACRES / 40 MILES
S500 INTEGRATED SOLAR ENERGIZER	No	Solar	Cattle, Horses, Sheep, Goats, Pigs, Chickens	100 ACRES / 30 MILES
AN90	No	6V, 12V, D	Cattle, Horses, Sheep	5 ACRES / 1.25 MILES
AN20	No	D	Cattle, Horses	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. Fence conditions can have a major impact on the voltage and effectiveness of any electric fence. Fence condition is dependent upon a number of factors including fence layout, vegetation, grounding conditions, age and state of repair. 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 Mains



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

Unigizers™



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



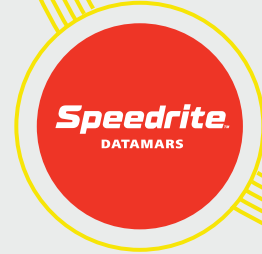
Suitable for strip grazing, permanent, semi-permanent, and temporary fencing, and the ideal solution for isolated areas where no AC power is available. Our Solar Systems and Kits provide remote power for permanent installations. Permanent installations are an all-in-one solution with built-in solar panel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

Battery



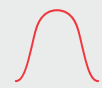
Convenient, portable, and quick to set up, battery units are suitable for temporary, strip grazing, and semi-permanent fencing. Unigizers are also compatible with battery power.

AC Mains 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.



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



Robust 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.



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



Large Terminals
Front mounted terminals for convenience, making adjustments and multiple fence wire usage. Terminals are slotted for ease of access and a superb connection.



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



Remote Capable (included)
Enables the user to turn the energizer on or off anytime, anywhere along the fence line to manage maintenance or repairs.



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



Output Voltage & Indicator Lights
Light bar display provides an instant measure of the energizer output voltage for quick fence diagnostics. Red light indicates when the fence is under a heavy load.



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



Datamars Livestock App, WiFi Network & Bluetooth Capabilities
Connect the energizer: see the fence voltage in real-time, configure the energizer settings, and connect the energizer to a WiFi network. Energizer is also Bluetooth compatible.



120V AC Plug*
Operates on standard 120V outlets in the United States and Canada.



3-Year Hassle-Free Warranty
We stand behind the reliability of our products. Visit speedrite.com for full warranty details. Starter plan included with purchase.

*110V and 120V plugs are synonymous. The 110V term has become obsolete since power is now standardized to 120V at 60Hz.

NOTE: Actual color of the Speedrite AC Energizers may vary from this guidebook. Not all AC energizers contain the features listed here. See product descriptions for more details.

AC MAINS ENERGIZERS

World's Most Powerful Energizer AC Mains 86000W Energizer

**Up to 540 miles / 6,200 acres
86 J Maximum Output Energy (128 J Stored Energy)**

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



880 0010-970

STARTER PLAN INCLUDED WITH PURCHASE.

AC Mains 46000W Energizer

**Up to 290 miles / 3,300 acres
46 J Maximum Output Energy (68 J Stored Energy)**

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

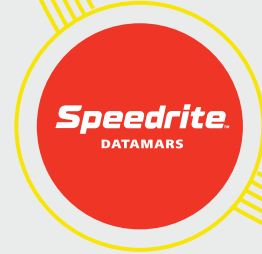


880 0002-883

STARTER PLAN INCLUDED WITH PURCHASE.

AC MAINS ENERGIZER COMPARISON	86000W	46000W
Area/Distance You Want the Energizer to Power	540 miles / 6,200 acres	290 miles / 3,300 acres
Maximum Output Energy	86 J	46 J
Maximum Stored Energy	128 J	68 J
No Load Voltage	10,000V	9,500V
Standard Load Voltage	10,000V at 100 Ω	9,300V at 500 Ω
Heavy Load Voltage	6,800V at 25 Ω	8,900V at 100 Ω
Minimum Number of Ground Rods	12	9
Input Voltage	120 - 240V, 50 - 60 Hz	100 - 240V, 50 - 60 Hz

Unigizers™ Features



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.

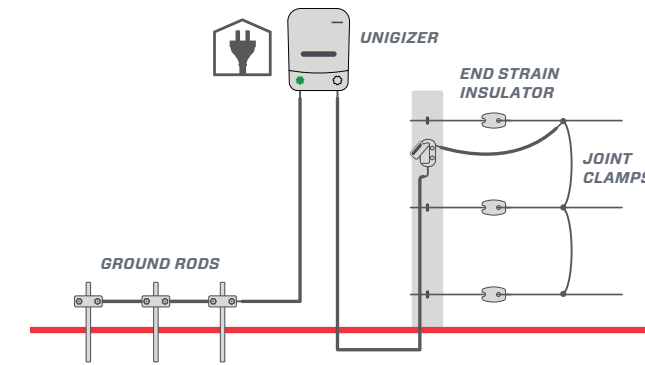
- 
Cyclic Wave™ Technology
 Provides a cleaner, more powerful pulse, maximizing the energy that travels down the fence for optimal stock control.
- 
Bi-Polar Technology
 Enables the user to power a fence system to perform exceptionally well in dry, low conductive soil.
- 
Low Interference
 Cyclic Wave™ technology delivers outstanding fence performance and helps to minimize electromagnetic interference in line with international standards.
- 
Multiple Power Options
 AC, battery or solar power applications provides convenient livestock control.
- 
Versatile Mounting Options
 Mount unit to a wall, post, or fence wire. Indoor or outdoor capabilities depends on fence location and power supply.
- 
Ground Monitoring
 Indicates faults by monitoring voltage levels around the grounding system.
- 
Battery Saver
 Microprocessor automatically adjusts the output energy depending on the battery condition extending the life of the battery. Highly effective for solar installations.
- 
Large Terminals
 Front mounted terminals for convenience, making adjustments and multiple fence wire usage. Terminals are slotted for ease of access and a superb connection.
- 
Remote Capable (included)
 Enables the user to turn the energizer on or off anytime, anywhere along the fence line to manage maintenance or repairs.
- 
Output Voltage & Indicator Lights
 Light bar display provides an instant measure of the energizer output voltage for quick fence diagnostics. Red light indicates when the fence is under a heavy load.
- 
Low Energy Terminal
 Limits energy to below 1.5 J for usage close to buildings or home.
- 
Solar Compatible
 Electrify the fence with solar power by connecting solar panels to any Unigizer which charges the battery for reliable livestock control.
- 
LCD Display
 Displays output voltage and battery/ground voltage. Backlit readable screen for poor lighting conditions. Only on select models.
- 
3-Year Hassle-Free Warranty
 We stand behind the reliability of our products. Visit speedrite.com for full warranty details. Starter plan included with purchase.

NOTE: Actual color of the Speedrite Unigizer may vary from this guidebook.

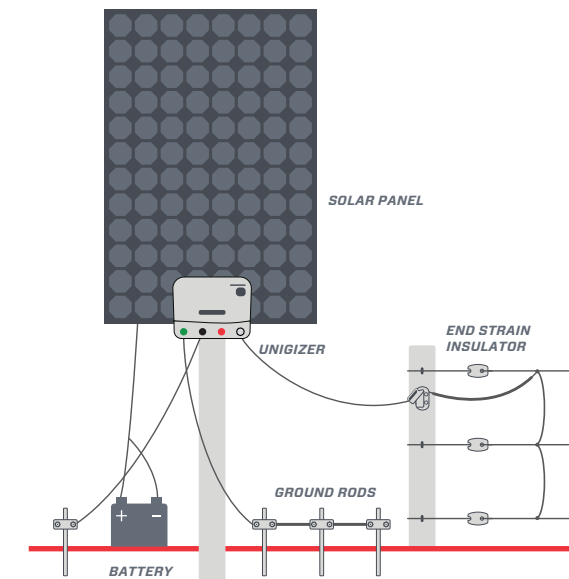
UNIGIZER POWER EXAMPLES

The below diagrams are ways to utilize a Unigizer unit and a ground system. The number of ground rods will vary, depending on the Unigizer unit and soil conditions.

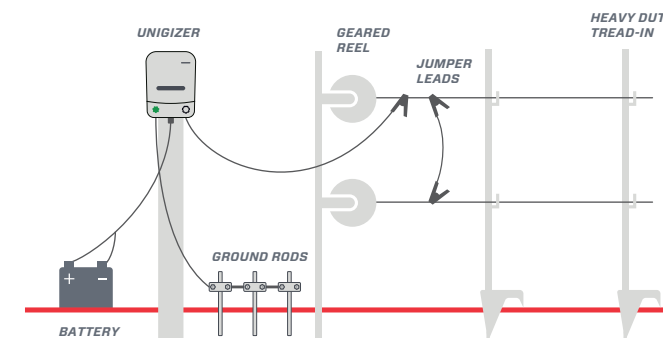
Indoor Dry Locations with AC Power



Outdoors with 12V Battery & Unigizer Solar Kit



Outdoors with 12V Battery



UNIGIZERS

18000i Unigizer

Up to 120 miles / 1,300 acres

- 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 110V power adaptor
- 18 J output power



821014, 880 0000-269

12000i Unigizer

Up to 90 miles / 500 acres

- 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 110V power adaptor
- 12 J output power



814086, 880 0000-838

6000i & 6000 Unigizers

Up to 60 miles / 240 acres

- Cyclic Wave technology
- Bi-polar technology
- Solar compatible (60w 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 110V power adaptor
- 6 J output power



*6000i : 812654, 880 0000-742
6000: 81264, 880 0000-689

* 6000i ONLY

3000 Unigizer

Up to 30 miles / 120 acres



- 3 J output power
- Compatible with 30w solar panel

809448, 880 0000-547

2000 Unigizer

Up to 20 miles / 80 acres



- 2 J output power
- Compatible with 20w solar panel

809447, 880 0001-050

1000 Unigizer

Up to 10 miles / 40 acres



- 1 J output power
- Compatible with 10w solar panel

809446, 880 0000-698

Unigizer Features & Benefits

- Indicator lights (voltage and battery)
- Day/Night sensor- pulse speed
- Large terminals
- Versatile mounting and power options
- Adjustable output power and pulse speeds
- 3-year warranty
- Includes battery lead, 110V power adaptor and fence lead set

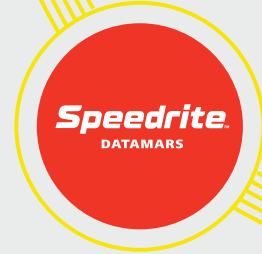


To achieve the peak performance of your energizer, it is essential you have the correct number of ground rods. Please refer to your user manual for this number. **NOTE:** Area recommendations are a guide only and are listed in multiple wire terms. Performance will be affected by the condition of your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

UNIGIZER COMPARISON	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 Energy	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	10,000V	9,100V	9,500V	11,400V	11,000V	9,800V
Standard Load Voltage	7,800V @ 500Ω	7,800V @ 500Ω	8,000V @ 1000Ω	7,900V @ 1000Ω	7,700V @ 1000Ω	6,900V @ 1000Ω
Minimum Number of Ground Rods	6	6	4	3	3	2
Input Voltage	12V / 100 - 240V					
Current Consumption	1.4A	1.1A	700mA	290mA	180mA	95mA
Solar Panel (Recommended)	180w	120w	60w	30w	20w	10w

NOTE: Actual color of the Speedrite Unigizers may vary from this guidebook.

Unigizers™ Solar Systems



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.

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.

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 J	2 J
Maximum Stored Energy	4.5 J	2.7 J
No Load Voltage	11,400V	11,000V
Light Load Voltage At 2000 Ω	9,500V	9,000V
Standard Load Voltage At 1000 Ω	7,900V	7,700V
Heavy Load Voltage At 500 Ω	6,200V	5,900V
Current Consumption	290mA	180mA
Battery Type	12V battery	12V battery
Solar Panel	30 watt	20 watt

SOLAR SYSTEMS

3 J Solar System

Up to 30 miles / 120 acres

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



880 0003-278

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

2 J Solar System

Up to 20 miles / 80 acres

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



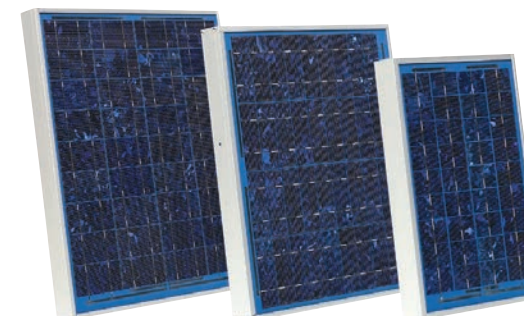
380 0012-150

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

30w, 20w, 10w

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
10w 830926, 880 0003-415	10w	.59A	16.8V
20w 830927, 880 0003-416	20w	1.19A	16.8V
30w 830928, 880 0003-417	30w	1.78A	16.8V

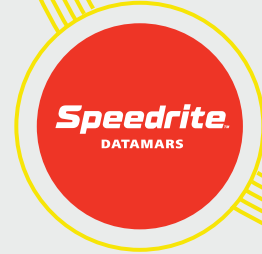
All solar panels are packaged with a mounting bracket and pre-installed solar panel regulator.

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 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.

Steel & Wood Post Mounting Options
High impact enclosure is designed to securely mount on T-posts and wood posts.

Compact, Rugged Design
UV resistant case provides maximum weather protection for extreme environments.

Internal Rechargeable Battery
Includes an internal rechargeable sealed battery.

Battery Saver
Microprocessor automatically adjusts the output energy depending on the battery condition extending the life of the battery. Highly effective for solar installations.

Solar Recharge Battery
During sunny weather, the energizer automatically recharges the battery.

Indicator Lights
Red light indicates that the solar energizer is operating.

Minimal Sunlight Required
Energizer needs minimal sunlight hours to keep battery at, or near, full charge.

3-Year Hassle-Free Warranty
We stand behind the reliability of our products. Visit speedrite.com for full warranty details.

High Voltage Output
Output up to 9,500V without a load.

INTEGRATED SOLAR ENERGIZERS

S1000 Integrated Solar Energizer

Powers fences up to 40 miles / 140 acres

- 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 12V, 7 amp hour battery
- 1J output power



834996, 880 0002-723

S500 Integrated Solar Energizer

Powers fences up to 30 miles / 100 acres

- 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 12V, 7 amp hour battery
- .5J output power



834994, 880 0002-721

COMPARING INTEGRATED SOLAR ENERGIZERS	S1000	S500
Area/Distance	40 miles / 140 acres	30 miles / 100 acres
Maximum Output Energy	1 J	.50 J
Maximum Stored Energy	1.3 J	.65 J
No Load Voltage	9,600V	9,600V
Standard Load Voltage At 1000 Ω	7,100V	6,200V
Heavy Load Voltage At 500 Ω	5,600V	4,500V
Minimum Number of Ground Rods	1	1
Input Voltage	12V internal battery	

Battery Energizers

Portable and Practical Solution for Strip Grazing and Large or Small Electric Fence Systems.

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

COMPARING BATTERY ENERGIZERS	AN90	AN20
Area/Distance to Power	1.25 miles	.6 miles
Maximum Output Energy	.12 J	.04 J
Maximum Stored Energy	.16 J	.05 J
No Load Voltage	8,000V	5,800V
Light Load Voltage At 2000 Ω	4,500V	2,800V
Current Consumption	7-24mA	14mA
Solar Panel	1 Watt (optional)	N/A
Battery Type (sold separately)	D Batteries (x4) OR 12V or 6V External Battery	D Batteries (x2)

AN90

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



SE117-01, 880 0000-775
WITH STAND: SE117WS-01, 880 0000-185
WITH STAND/SOLAR PANEL: 814072, 880 0001-045

AN20

Up to 1 acre



- Simple set up
- On/Off Switch
- Intelligent battery management to extend battery life
- 3-year warranty
- .04J output power



814888, 880 0000-329

Corral Kit

Up to 40 acres / 10 miles



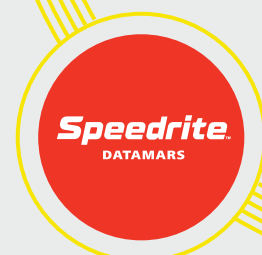
- Great for rodeos, horse shows, or trail rides
- Works with most types of animals
- Kit includes: AN20 energizer, 12 Sentinel Tread-In posts, No Kick handle, 660ft roll of 1/2" politape, reel, carry bag, ground rod, assembly instructions

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



5A1001, 880 0003-476

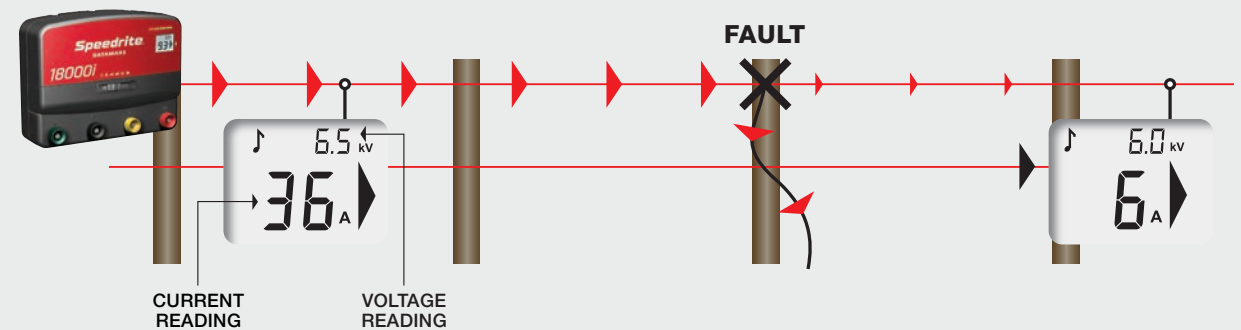
Management Tools



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 9V battery
- Low battery warning system
- Automatic energizer polarity detection
- 1-year warranty*



ST102, 880 0000-860

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 9V battery
- Low battery warning system
- Automatic energizer polarity detection
- Can be used with all energizers
- 1-year warranty*



ST100, 880 0000-771

Digital Voltmeter

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



822643, 880 0002-503

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*



ST0303, 880 0000-521

DATAMARS
Livestock™

Electric Fencing

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.

LEARN MORE: SPEEDRITE.COM

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 Strainer Tensioner Handle (880 0003-217)



SA100-50, 880 0000-044 10/PACK

Bullnose Insulated Strainer

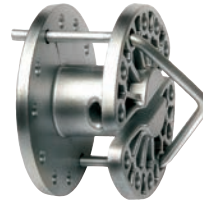
- Suitable for high strain use
- Spring clip design for easy tensioning
- Heavy duty insulator protects against arcing
- Rust resistant
- Rugged & easy to use
- Galvanized frame with Aluminum spool
- UV stabilized for long life
- Use with Strainer Tensioner Handle (880 0003-217)



814570, 880 0000-002 10/PACK

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" (12mm) Drive Ratchet



813398, 880 0000-005 25/PACK

Strainer Handle



880 0003-217

In-Line Strainer Handle



880 0000-099

Dual-Purpose Pinlock

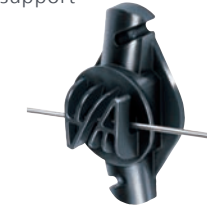
- Works with T-posts, wood, or metal pipe posts
- Sturdy pin for longer life
- Reinforced jaws
- Pinlock allows for easy wire removal
- UV stabilized for long life



S1037, 880 0003-483 BLACK 25/PACK

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 (4mm) steel wire
- Unique staple guides
- Ribbed claw for added strength and support



S10292, 880 0000-629 BLACK 25/PACK

Wood Post Pinlock

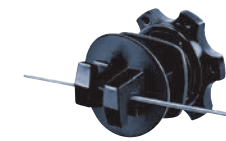
- Rugged, high strength Pinlock design
- UV stabilized for long life
- Twin spark guards prevent arcing & increased distance from wire to post reduces risk of leakage
- Supports up to 8 ga (4mm) steel wire
- Unique staple guides
- Design conveniently allows easy removal of wire



S1027, 880 0000-833 BLACK 25/PACK

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" – 9/16" (6mm – 14mm) in diameter



820847, 880 0002-504 BLACK 25/PACK

Insultube

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



807936, 880 0000-947 BLACK

INSULATORS

END STRAIN STRAINERS, OFFSETS & POSTS

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



812842 880 0003-209 WHITE 5/PACK

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



SI031D 880 0000- 260 BLACK 25/PACK

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



SI023 880 0000-677 WHITE 10/PACK

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



831743 ,880 0000-421 BLACK 200/CARTON

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)



831311, 880 0000-272 BLACK

Pinlock Wire Offset

- Extends the life of barb and woven wire fences
- Electrified wire sits 12" (305mm) from existing fence
- High tensile galvanized steel frame securely attaches to existing fence wire
- Pre-Assembled
- UV stabilized Pinlock insulator for easy wire insertion and removal



SI060SP, 880 0000-191 BLACK 50/CARTON (5/PACK OR BULK PACK)
REPLACEMENT INSULATOR: 800 0001-046

Side Fixing Pigtail Standoff

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



807867, 880 0000-058 WHITE 10 1/2" (270 MM)
807873, 880 0000-029 WHITE 6" (150 MM)

Pigtail Tread-In

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



829704, 880 0003-413 WHITE

Sentinel Heavy Duty Tread-In

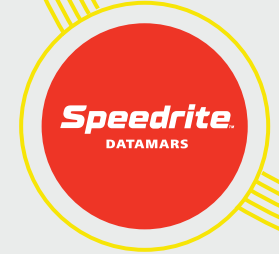
- 49" (1,125mm) tall post with 8 different positions for poliwire, politape or poliropo
- Simple step-in feature and pointed tip for easy installation
- High strength "H" profile for rigidity
- UV stabilized for long life



820013, 880 0002-506 WHITE 50/CARTON
820014, 880 0003-259 BLACK 50/CARTON

All Speedrite insulators come with a 10-year warranty.
*NOTE: STOCKade fencing staplers and staples are only available from STOCKade distributors.

Poli-products & Gate Accessories



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.



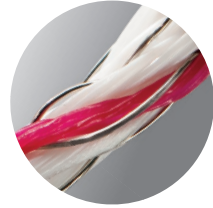
The **Speedrite Poli** range provides effective conductivity and strength for professional livestock/ animal control applications. Stainless steel strands for shock power.

	EXTREME WIRE	PREMIUM WIRE	POLIWIRES	EXTREME TAPE	POLITAPE	BRAID
Resistance (OHMS/Mile)	105	7,000	11,000	105	11,000	160
Starting Voltage of Fence (V)	8,000	8,000	8,000	8,000	8,000	8,000
Voltage at 330' (V)	7,900	4,200	3,400	7,000	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

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

WIRE

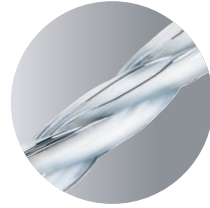
Extreme Wire



- 6 tinned copper strands
- 105 times 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, 880 0000-212
SP041, 880 0001-038
813241, 880 0003-240

Premium Wire



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

SP21, 1 880 0000-679 WHITE 1320FT

Poliwire

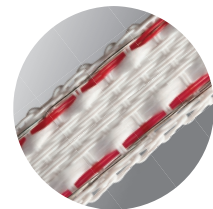


- 6 stainless steel strands
- Ideal for temporary fencing and strip grazing
- UV stabilized for long life

SP013, 880 0000-701
SP011, 880 0000-319

TAPE

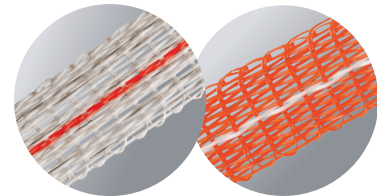
Extreme Tape 1/2"



- 6 tinned copper strands
- 106 times 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" (12mm) width with white & red weave for ultimate visibility
- UV stabilized for long life

SP050, 880 0000-772
SP052, 880 0000-514

Politape 1/2"



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

SP016, 880 0000-876
SP018, 880 0001-794

3mm Extreme Braid

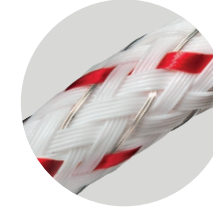


- 6 stainless steel and 3 tinned copper
- 72 times more conductive than standard poliwire
- Increased shocking & stopping power, ideal for temporary and semi-permanent fence
- Complex weave and polypropylene core for superior strength
- Red and white weave for ultimate visibility
- UV stabilized for long life

880 0001-796

BRAID, REELS & ACCESSORIES

Extreme Braid 1/4"



- 4 tinned copper strands for ultimate conductivity
- 4 stainless steel strands for ultimate strength
- 68 times 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, 880 0002-167

Extreme Geared Reel



- Drag adjust
- Fence & ATV/UTV lock with quick release trigger
- Locking pawl toggle
- On/off switch
- Wire tracking
- Fully insulated handle & frame
- Features the Speedrite Zammr handle for the ultimate, multi-purpose solution

880 0004-621

Geared Mega Reel



- Holds 3,300ft (1,000m) poliwire or 1,320ft (400m) 1/2" (12mm) 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

SR021, 880 0001-042

Geared Reel



- Holds 1,650ft (500m) poliwire or 660ft (200m) 1/2" (12mm) 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

822714A, 880 0000-434
REPLACEMENT BOBBIN: 880 0000-740

Jumbo Reel



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

SR001, 880 0000-862
REPLACEMENT BOBBIN: 814356, 880 0000-831

Econo Reel



- Holds 1,650ft (500m) poliwire or 660ft (200m) 1/2" (12mm) 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

SR015, 880 0000-999
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



814844, 880 0000-482

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



SA004, 880 0000-312

Spring Gate

- Electrifies gateways up to 26ft (8m) 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



SA0448M, 880 0000-924
REPLACEMENT SPRING: 814632, 880 0000-508

Bungy Gate

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



813719, 880 0000-623
BUNGY CORD: 805194, 880 0000-844

Gate Activator

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



824843, 880 0003-312 BLACK

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



807888, 880 0000-483 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



SA042C, 880 0000-330 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 bungee
- Strong stainless steel backbone for high conductivity and corrosion resistance
- Durable design for use in the toughest conditions



824115, 880 0000-568 WHITE

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



SA013, 880 0000-543 RED

Ground Rod & Ground Rod Clamp

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



GROUND ROD: SA110, 880 0003-477
GROUND ROD CLAMP: SA112, 380 0012-149

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 .5J or less



SA111, 880 0003-478

UNDERGROUND CABLE

Extreme Underground Cable



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

806052, 880 0000-567
10 GA X 330FT (2.7MM X 100M)

Premium Underground Cable



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

806042, 880 0000-718
12.5 GA X 82FT (2.5MM X 25M)
806045, 880 0000-777
12.5 GA X 165FT (2.5MM X 50M)
806046, 880 0000-208
12.5 GA X 330FT (2.5MM X 100M)



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 & 84000W

807882, 880 0000-542

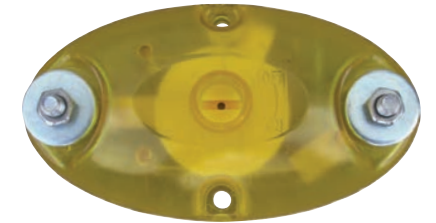
Standard Cut-Out Switch



- 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

SA064, 880 0000-082

Lightning Diverter

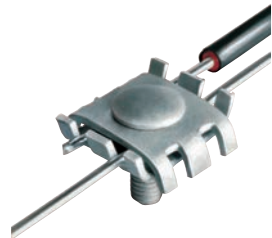


- Redirects lightning to ground minimizing energizer and fence damage
- Simple to use
- Easily mounts to wood post

822024, 880 0003-296

GENERAL 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

SA052, 880 0000-113

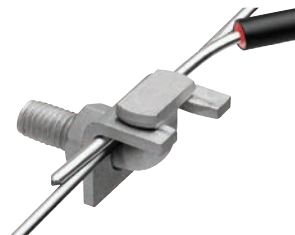
Split Bolt Joint Clamp



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

822467, 880 0000-214

L-Shape Joint Clamp



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

827518, 880 0000-103

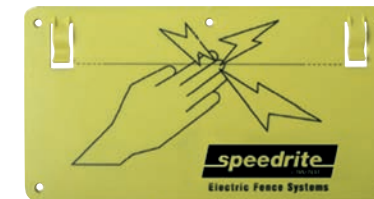
Wire Links



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

805542, 880 0003-192

Warning Sign



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

SA046, 380 0012-147

Heavy Duty Compression Spring



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

805543, 880 0003-193

Maun Fencing Pliers



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

SA070, 880 0003-475

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

SA038, 880 0000-597

HAYES™

Fence Tools

FENCE INNOVATION
Since 1895
Made in New Zealand

Crimping & Fencing Tool

- **Wire Crimper** for use on fence wire 1.6 – 4mm
- **Wire Cutter** for wire up to 4mm
- **Wire Stripper** for use on 2.5mm underground cable



827085, 380 0012-147

Smooth Grip Chain Strainer

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

- Heavy duty industry leader



H300 872002, 880 0000-015

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 ga (1.6 – 2.5mm) fence wire **7/8" length** (Nearly 3X longer than standard crimp sleeves!) Jar of 100



807979, 880 0000-124

HC3

Suitable for 12½ – 10 ga (2.50 – 3.15mm) fence wire Jar of 50



808209, 880 0000-090

HC4

Suitable for 9 – 8 ga (3.55 – 4.0mm) fence wire Jar of 50



808210, 880 0000-105

HCB

Suitable for barbed wire Jar of 50



872051, 880 0000-034

HCE

For connection to electric fences 16 – 12.5 ga Jar of 50



872052, 880 0000-052

Ground System

Speedrite
DATAMARS

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?

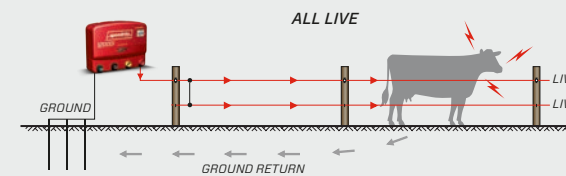
Dry, sandy or non-conductive soil provides an ineffective ground system. If you have this type of soil, it's a good idea to:

- 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.

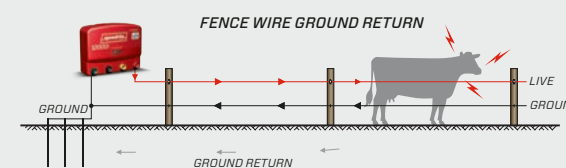
*For T-handle or 3ft length ground rods, insert the rod at least 6" – 12" into the soil.

CHOOSING THE RIGHT SYSTEM

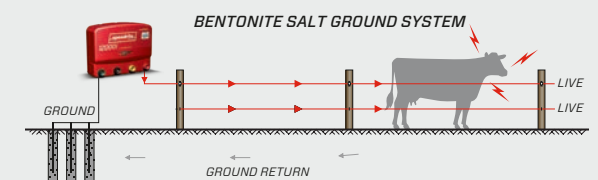
Option 1 All Live – Recommended where soil is conductive. This system is suitable for most moist soils. Current flows through the animal and the ground back to the ground rods.



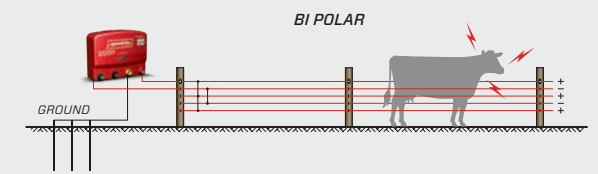
Option 2 Hot/Ground – Recommended where soil is not conductive. If the soil is dry or sandy it is usually not very conductive. The fence is constructed using both live and ground wires. If the animal touches the live wire the current flows through the animal and the ground back to the ground rods. If 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.



Selecting An Energizer

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 plug (110V), battery, or solar differs across energizer products.

The type of fence energizer depends on the following key factors:

- ✓ Total Coverage Area
- ✓ Power Source
- ✓ Type of Livestock/Predator to Contain or Exclude

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 **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 energizer must be on a separate fence system.



Never connect more than one energizer to the same fence.

Patriot™
DATAMARS

Quality Electric Fencing

Patriot electric fence energizers and accessories are designed to offer flexibility, allowing you to enjoy your lifestyle while addressing your requirements for simplicity, reliability, and performance. These products embody over 70 years of experience from Datamars Livestock, one of the world's leading electric fence manufacturers.

Safety First

Before commencing the installation of your electric fence or any digging activities, ensure to review all local zoning laws, regulations, and guidelines in your area.

Most importantly, consult with local utility companies to identify any buried cables or natural gas lines on or near your property.

LEARN MORE: [PATRIOTGLOBAL.COM](https://patriotglobal.com)



ENERGIZER COMPARISON CHART

MODEL	POWER	COVERAGE AREA	CONTAINMENT OR EXCLUSION	OUTPUT ENERGY (UP TO)	STORED ENERGY (UP TO)	OUTPUT VOLTAGE (UP TO)	INTERNAL RECHARGEABLE BATTERY	CURRENT CONSUMPTION	SOLAR PANEL
PMX1500		600 ACRES / 200 MILES		12 J	20 J	10.6kV max, 8.4kV @ 500 Ω	No	No	No
PMX600		300 ACRES / 100 MILES		6.7 J	9.9 J	10.2kV max, 7kV @ 500 Ω	No	No	No
PMX350		200 ACRES / 65 MILES		3.5 J	6.4 J	10.2kV max, 6.2kV @ 500 Ω	No	No	No
P30		200 ACRES / 65 MILES		3 J	4.5 J	11kV max, 6.4 kV @ 500 Ω	No	300mA	30 watt
SG3500 NEW*		200 ACRES / 65 MILES		3.5 J	4.6 J	10.1kV max, 9.2kV @ 2,000 Ω	12V; 24Ah	<290mA	INTEGRATED
SG2000 NEW*		165 ACRES / 50 MILES		2 J	2.6J	10.5kV max, 9kV @ 2,000 Ω	12V; 12Ah	<170mA	INTEGRATED
P20		165 ACRES / 50 MILES		2 J	2.7 J	10.5kVmax, 6kV @ 500 Ω	No	170mA	20 watt
PBX200		165 ACRES / 50 MILES		1.9J	2.7 J	10.4kV max, 5.8kV @ 500 Ω	No	170mA	20 watt
PMX200		165 ACRES / 50 MILES		2 J	3 J	9.5kV max, 5.7kV @ 500 Ω	No	No	No
P10		100 ACRES / 30 MILES		1 J	1.4 J	9.7kV max, 5.4kV @ 500 Ω	No	90mA	10 watt
PBX120		100 ACRES / 30 MILES		1.2 J	1.7 J	10kV max, 5.5kV @ 500 Ω	No	110mA	10 watt
PMX120		100 ACRES / 30 MILES		1.2 J	1.7 J	10.2kV max, 5.5kV @ 500 Ω	No	No	No
SG1000		140 ACRES / 40 MILES		1 J	1.3 J	9.6kV max, 7kV @ 1,000 Ω	12V; 7Ah	90mA	INTEGRATED
SG500		100 ACRES / 30 MILES		0.5 J	0.65 J	9.8kV max, 6.2kV @ 1,000 Ω	12V; 7Ah	50mA	INTEGRATED
P5		60 ACRES / 15 MILES		0.5 J	0.7 J	8kV max, 4.5kV @ 500 Ω	No	45mA	10 watt
PBX50		60 ACRES / 15 MILES		0.5 J	0.67 J	8.2kV max, 4.4kV @ 500 Ω	No	50mA	10 watt
PMX50		60 ACRES / 15 MILES		0.5 J	0.85 J	10kV max, 4.8kV @ 500 Ω	No	No	No
PB12		40 ACRES / 10 MILES		0.12 J	0.16 J	8kV max, 4.5kV @ 500 Ω	No	7-25mA	No
PE10B		40 ACRES / 10 MILES		0.3 J	0.49 J	5kV max, 3.5kV @ 500 Ω	No	36mA	No
PE10		40 ACRES / 10 MILES		0.3 J	0.49 J	5kV max, 3.5kV @ 500 Ω	No	No	No
SG150		40 ACRES / 10 MILES		0.15 J	0.21 J	9.3kV max, 4.1kV @ 1,000 Ω	6V; 4Ah	30mA	No
PE5B		20 ACRES / 5 MILES		0.2 J	0.3 J	5kV max, 3.2kV @ 500 Ω	No	24mA	No
PE5		20 ACRES / 5 MILES		0.2 J	0.32 J	5kV max, 3.2kV @ 500 Ω	No	No	No
SG80		15 ACRES / 3 MILES		0.08 J	0.10 J	7.3kV max, 3.2kV @ 1,000 Ω	6V; 4Ah	16mA	No
PE2		8 ACRES / 2 MILES		0.1 J	0.16 J	5kV max, 2.8kV @ 500 Ω	No	No	No
PS5		8 ACRES / 2 MILES		0.04 J	0.06 J	7.4kV max, 2.6kV @ 1,000 Ω	4V	No	No

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.

AC (110V)



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.

SolarGuard™



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.

Dual-Purpose



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.

Battery






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.


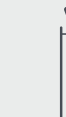


Dual-Purpose Energizers



Features & Benefits

-  **Multiple Power Options**
Dual-purpose feature allows energizer to run on AC 110V plug or 12V battery* (e.g., deep cycle, marine type).
-  **Low Impedance Energizer**
Designed to deliver power to the end of the fence, even under heavy load (e.g. foliage, undergrowth).
-  **Solar Compatible**
Solar panel* charges a 12V (deep cycle, marine type) battery* to power the Patriot Dual-Purpose energizer and fence line. Ideal for remote areas where AC 110V power is not available.

*Sold separately.

-  **Robust Design**
Easy, safe installation and good wire connection.
-  **Easy Mounting Option**
Unique, clip-on wire feature allows mounting on fence wire.
-  **LED Indicator Light**
Indicator pulses when energizer is working.
-  **3-Year Hassle-Free Warranty**
We stand behind the reliability of our products. Visit patriotglobal.com for full warranty details.

P30

200 acres/65 miles

- Most powerful energizer in the dual-purpose line-up with the greatest range and livestock control
- 3 J 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 J 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
- 1.0 J 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
- 0.5 J output power



803401, 880 0000-179
REPLACEMENT POWER CORD: 807426, 880 0000-472
REPLACEMENT BATTERY LEADS: 807396, 880 0000-990

SolarGuard™ Energizers



Features & Benefits

Solar panel and battery integrated in one convenient robust case.

Multiple Mounting Options*
T-post and wood post mounting option.

Compact, Rugged Design
Fully portable, weatherproof,* & compact design. Energizer comes with an internal battery and a solar panel, providing a convenient, all-in-one energizer.

Internal Rechargeable Battery
Solar power recharges the battery as required to support long battery life.

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).

Flashing Lights
Indicates at a glance the energizer is working and powering the fence.

Solar Powered
Energy-efficient solar panel charges the internal battery to power the fence line.

3-Year Hassle-Free Warranty*
We stand behind the reliability of our products. **The 3-year warranty excludes the PS5, which carries a 1-year hassle-free warranty.** Visit patriotglobal.com for full warranty details.

Optimal Voltage for Maximum Control*

*PS5 does not have this feature. Not all SolarGuard Energizers contain the features listed here. See product descriptions for more details.

SOLARGUARD™ ENERGIZERS

SolarGuard 3500
200 acres/65 miles



- More Electric Fence Power
- Plug and Play, Integrated, All-in-One Solar Units
- Designed for Temporary or Permanent Installation
- Ideal for Large, Remote Locations Without Traditional Power Source
- Easily Mount to a Wood or T-post
- Multiple Power Modes
- Battery Indication Mode

880 0004-860
REPLACEMENT 12V BATTERY: 880 0004-881
FENCE LEAD SET: 821229, 880 0003-287



SolarGuard 2000
165 acres/50 miles



- More Electric Fence Power
- Plug and Play, Integrated, All-in-One Solar Units
- Designed for Temporary or Permanent Installation
- Ideal for Large, Remote Locations Without Traditional Power Source
- Easily Mount to a Wood or T-post
- Multiple Power Modes
- Battery Indication Mode

880 0004-859
REPLACEMENT 12V BATTERY: 880 0004-882
FENCE LEAD SET: 821229, 880 0003-287



SolarGuard 1000
140 acres/40 miles



- Lightweight, easy-to-carry portable housing
- More powerful than comparable energizers
- Reliable year round performance in harsh weather
- 1 J output power

834689, 880 0002-628
REPLACEMENT 12V BATTERY: 880 0003-113
FENCE LEAD SET: 821229, 880 0003-287



SolarGuard 500
100 acres/30 miles



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

834685, 880 0002-625
REPLACEMENT 12V BATTERY: 880 0003-113
FENCE LEAD SET: 821229, 880 0003-287



SolarGuard 150
40 acres/12 miles

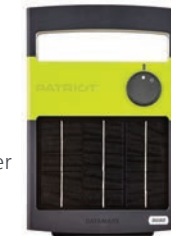


- Lightweight, easy-to-carry portable housing
- More powerful than comparable energizers
- Reliable year-round performance in harsh weather
- 0.15 J output power

834240, 880 0002-605
REPLACEMENT 6V BATTERY: 821212, 880 0003-284
FENCE LEAD SET: 821229, 880 0003-287



SolarGuard 80
15 acres/3 miles



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

834373, 880 0002-608
REPLACEMENT 6V BATTERY: 821212, 880 0003-284
FENCE LEAD SET: 821229, 880 0003-287



PS5*
8 acres/2 miles



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

817369, 880 0003-523
REPLACEMENT 4V BATTERY: 818953, 880 0003-246
FENCE LEAD SET: 821229, 880 0003-287



AC (110V) ENERGIZERS

PMX1500

600 acres/200 miles

- Most powerful Patriot energizer
- 12 J output power



825681, 880 0001-027

PMX600

300 acres/100 miles

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



816869, 880 0000-647

PMX350

200 acres/65 miles

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



816867, 880 0000-446

PMX200

165 acres/50 miles

- Ideal for medium to large operations with a larger number of livestock
- 2 J output power



816865, 880 0000-840

PMX120

100 acres/30 miles

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



816864, 880 0000-596

PMX50

60 acres/15 miles

- Ideal for smaller fence lines
- 0.5 J 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
- 0.3 J 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
- 0.2 J 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
- 0.1 J output power



819957, 880 0000-617

Features & Benefits

- Powered by 110V plug
- Low Maintenance Design Simple operation.
- LED Indicator 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 Includes lightning PMX series: 3-year | PE series: 2-year

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
- 1.9 J 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
- 1.2 J 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
- 0.5 J 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 (4X D batteries)*
- Simple set up
- On/off switch
- 0.12 J output power

820947, 880 0000-283
OPTIONAL TREAD-IN STAND* SA063P, 880 0002-499**PE10B**

40 acres/10 miles

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



819962, 880 0000-856

Features & Benefits

- Portable Convenient Energizer
- Low Maintenance Design Simple operation.
- LED Indicator 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 Includes lightning. PBX series & PB12: 3-year | PEB series: 2-year

* Sold separately. ** Except PB12.

MANAGEMENT TOOLS

Fence 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



814217, 880 0000-119

Fence Alert

- Fence wire: Poliwire, poliropo/braid, politape (1/2" and 1 1/2"), 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



804565, 880 0000-801

Digital Voltmeter

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



806217, 880 0000-178

EXCLUSION KITS

Pet & Garden Kit

- Great for yards, flower and vegetable gardens, and other similar areas
- Safely contains pets and deters small nuisance animals
- Kit includes: 110V Patriot PE2 energizer, 10X 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 & Nuisance Animal Fence Kit

- Excellent way to safely and effectively protect beehives, garbage bins, compost piles, feed grain, fruit trees, small campsites, and 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 50ft (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 & Garden Accessories Kit

- Accessory Kit includes: 10X 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**



PET & GARDEN KIT – EXTRA POSTS: 824168, 880 0003-538
 PET & GARDEN KIT – 100' EXTRA POLIWIRE: 824169, 380 0012-148
 PET & GARDEN KIT – 100' EXTRA POLIWIRE: 821816, 880 0003-058

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 25/PACK
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 25/PACK
820018, 880 0002-509 YELLOW 25/PACK

Screw On T-post

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

816064, 880 0003-241 BLACK 25/PACK
819047, 880 0003-247 YELLOW 25/PACK

2" (5cm) 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 25/PACK
820029, 880 0003-269 YELLOW 25/PACK

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

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

820021, 880 0003-262 BLACK 25/PACK
820022, 880 0003-263 YELLOW 25/PACK

5" Backside T-Post Extender

- Protects existing fence by extending electric fence wire 5" (13cm) 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 25/PACK
820036, 880 0003-275 YELLOW 25/PACK

T-Post Topper

- Fence wire: Poliwire, poliropo/braid, politape (1/2" and 1 1/2"), coated/sighter wire

814705, 880 0002-413 WHITE 10/PACK
819728, 880 0003-254 YELLOW 10/PACK

1 1/2" (40mm) T-Post Wide Tape

- Fence wire: Politape (1/2" and 1 1/2")



814717, 880 0003-237 WHITE



T-Post Politape Corner/End Strain

- Use as a corner or end strain insulator
- For use on T-posts
- Suitable for use with politape up to 1 1/2" (40mm) wide



824729, 880 0003-305, WHITE 1/PACK



ROD & MULTI-USE INSULATORS

Jumbo Dual-Purpose Pinlock



- For use on t-posts, 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, 380 0012-144 WHITE 10/PACK

Screw On Rod Post



- Fence wire: Poliwire, politape (1/2"), poliropo, steel/Aluminum wire
- Fits posts 1/4" (6mm) – 9/16" (14mm) in diameter



820019, 880 0002-505 BLACK 25/PACK
820020, 880 0002-510 YELLOW 25/PACK

1 1/2" (40mm) Rod Post Wide Tape



- Fence wire: Politape (1/2" and 1 1/2")
- Fits posts 1/4" (6mm) – 3/4" (19mm) in diameter



816066, 880 0003-242 WHITE 25/PACK

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 10/PACK
819054, 880 0003-248 YELLOW 10/PACK

24" (61cm) 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, 380 0012-145 BLACK 10/PACK

3 1/2" (90mm) Chain Link

- Fence wire: Poliwire, steel/Aluminum wire
- Extends electric fence wire 3 1/2" (90mm) from chain link fence



816065, 880 0002-028 BLACK 25/PACK
819056, 880 0003-249 YELLOW 25/PACK

Pipe Clamp Insulator

- For use on pipes from 1 1/2" – 1 5/8" diameter
- Great with most panels
- Works on vertical or horizontal pipe configurations
- Supports poliwire, 1/2" politape, or poliropo up to 3" from pipe



828938, 880 0003-407 BLACK 10/PACK

WOOD POST INSULATORS

Wood Post Claw



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



820023, 880 0003-264 BLACK 25/PACK
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 25/PACK
820034, 880 0003-273 YELLOW 25/PACK

2" (5cm) Wood Post Slant Nail



- Protects existing fence by extending electric fence wire 2" (5cm) off the wood post
- Fence wire: Poliwire, poliropo, steel/Aluminum wire



820030, 880 0003-270 BLACK 25/PACK
820031, 880 0003-271 YELLOW 25/PACK

Jumbo Dual-Purpose Pinlock



- For use on t-posts, 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" (13cm) Wood Post Slant Nail



- Protects existing fence by extending electric fence wire 5" (13cm) off the wood post
- Fence wire: Poliwire, poliropo, steel/Aluminum wire



820026, 880 0003-266 BLACK 25/PACK
820027, 880 0003-267 YELLOW 25/PACK

Wood Post Square



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



820032, 880 0000-380 BLACK 25/PACK

Ring Insulator Tool

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



815042, 880 0002-352

4" (10cm) Plastic Insulator Tube

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



825017, 380 0012-146 BLACK 25/PACK

Ring

- Fence wire: Poliwire, Poliropo, 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, poliropo/ 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 1 1/2" (40mm) wide



814593, 880 0003-231 WHITE 2/PACK

1 1/2in (40mm) Tape Wood Post



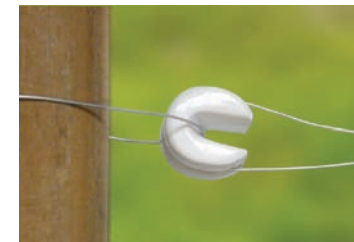
- Can also be used with metal pipes
- Fence wire: Politape (1/2" and 1 1/2")



814596, 880 0003-520 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

PORCELAIN INSULATORS

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

Jumbo Ring Insulator



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



814590, 880 0002-056 25/PACK

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

TREAD-IN POSTS

Sentinel Heavy Duty Tread-In

- Fence wire: Poliwire, poliropo, politape (1/2" and 1 1/2")
- Up to 8 positions for poliwire, politape (1/2" and 1 1/2") or poliropo
- UV stable for long life
- Measures 49" (H) and sets 39" (H) above ground

820013, 880 0002-506 WHITE
820014, 880 0003-259 BLACK

Pigtail Tread-In

- Fence wire: Poliwire, politape (1/2")
- Easy to move, steel step-in post with large foot and insulated top
- Measures 41" (H) and sets 34" (H) above ground



829704, 880 0003-413

GATE HANDLES & 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.

16ft (5m) Spring Gate

- Fence wire: Poliwire, poliropo, steel/ Aluminum wire, politape (1/2")
- 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, 380 0012-154 YELLOW

Gate Handle

- Fence wire: Poliwire, poliropo, steel/ Aluminum wire, politape (1/2")
- 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, poliropo, steel/ Aluminum wire, politape (1/2")
- Convenient solution to electrify gate ways
- UV stable and designed for long life



828230, 880 0001-851

No-Kick Handle

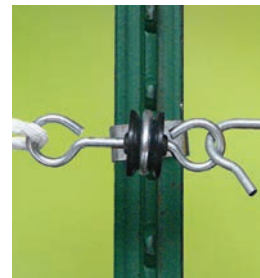
- Fence wire: Poliwire, poliropo, politape, steel/Aluminum wire
- Fully insulated handle, used to safely hold electrified wires
- UV stable and designed for long life



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, poliropo, steel/Aluminum wire



814210, 880 0003-218 2/PACK

Wood Post Gate Anchor Insulator

- Economical opt on for building a gate between wood posts
- For use on wood posts
- Suitable for use with poliwire, poliropo, 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 Patriot Poli-products come with a 1-year UV stabilized 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 660FT/200M
822757, 880 0003-300 WHITE 1320FT/400M

Poliropo

- 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 660FT/200M

Politape 1/2in

- 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 660FT/200M
821452, 880 0003-291 WHITE 1320FT/400M

Politape 1 1/2in

- 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 660FT/200M

Poliwire Tensioner

- For tensioning poli electric fences
- Fence wire: Poliwire, politape (1/2")
- Non-conductive and easy to use
- UV stable for long life



820150, 880 0003-280 5/PACK

Fence Reel

- Fence wire: Poliwire, politape (1/2")
- Holds 600ft (180m) poliwire or 300ft (90m) 1/2" politape
- Compact size
- Portable, easy to use
- Sold individually



824736, 880 0003-310

NETTING, ALUMINUM, & STEEL WIRE

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 164ft

- Height 40"
- 12" post spacing
- 15 posts
- 12 horizontal wires



828939, 880 0003-408

Positive/Negative Netting 164ft

- Height 40"
- 10ft post spacing
- 18 posts
- 9 horizontal wires



828941, 880 0003-410

Sheep & Goat Netting 164ft

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



828940, 880 0003-409

Positive/Negative Netting 50ft

- Height 40"
- 10ft post spacing
- 6 posts
- 9 horizontal wires



828942, 880 0003-083

828930, 880 0003-400	17ga Steel Wire	100'
828929, 880 0003-399	17ga Aluminum Wire	100'
828931, 880 0003-401	17ga Aluminum Wire	250'
828932, 880 0003-402	17ga Aluminum Wire	1,320'
828933, 880 0003-403	17ga Aluminum Wire	2,640'
828934, 880 0003-404	14ga Aluminum Wire	1,320'
828935, 880 0003-405	14ga Aluminum Wire	2,640'



GROUND RODS & CLAMPS

Ground Clamp

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



824726, 880 0002-507

6ft Ground Rod

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



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 .5 J or less

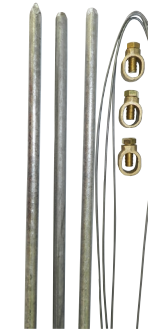


SA111, 880 0003-478

3 Ground Rod Kit

- Complete kit for building an energizer ground system

Kit includes: 3 – 6ft galvanized steel ground rods, 3 ground rod clamps, 50ft 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 50ft (15m)

- Use as a lead out wire to connect your energizer to electric fence wires
- Double insulated with 12.5ga galvanized wire
- UV stable for long life



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 (1/2")
- 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

814218, 880 0003-220 5"/13CM 5/BOX
814219, 880 0003-519 10"/26CM 5/BOX

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

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 8ga wire



824732, 880 0003-308

HARDWARE & CRIMP SLEEVES

Spring Clip Strainer

- Fence wire: steel/Aluminum wire



809813, 880 0001-223 10/PACK

In-Line Strainer

- Use to tighten existing steel/Aluminum wire fencing
- Can be added to fence without cutting wire
- Suitable for high-strain conditions



825247, 880 0003-541 5/PACK

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



824730, 880 0003-306

1-2 Crimping Sleeve*

- For use with 14.5 – 19.5 ga wire



814231, 880 0003-222 25/PACK

2-3 Crimping Sleeve*

- For use with 12.5 ga wire

814232, 880 0003-223 25/PACK
814233, 880 0003-224 100/PACK

3-4 Crimp Sleeve*

- For use with 10 – 11 ga wire or 14 – 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 – 14 ga wire



814236, 880 0003-227 10/PACK

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

4 Slot Crimp Tool

- For use with Patriot Crimp Sleeves



814220, 880 0003-221

Wire-Loop Strainer

- Time saving, no wire tying solution.
- 23.6" wire loop for easy, quick install
- Spring clip design for easy wire tightening
- UV stabilized for long life
- Galvanized frame
- Aluminum spool
- 2-year warranty

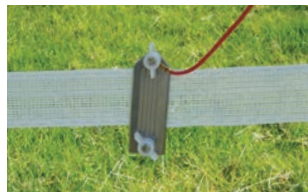


880 0010-912 10/PACK

EQUINE & GATE HARDWARE

Energizer to Wide Tape Connector

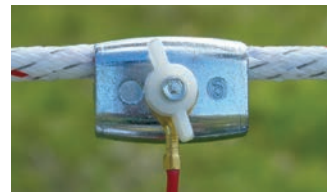
- Use to connect politape to energizer
- Suitable for use with politape up to 1 1/2" wide



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



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



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 1 1/2" wide



814822, 880 0003-238

2in 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" wide



824727, 880 0003-304 3/PACK

Braid/Rope Clamp

- Use to join poliropo and braid
- Suitable for use with poliropo or braid



814599, 880 0003-232 3/PACK

1/2in Tape Buckle

- For use on t-posts, 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 3/PACK

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 0003-419

Two-way Lockable Gate Latch – Small

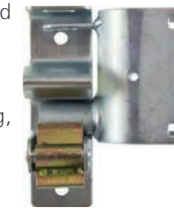
- Simple, one-handed operation opens gate from inside or outside
- Zinc-coated, strong, sturdy materials for long-lasting performance
- Can be padlocked for increased security
- Gate mounting hardware included
- For use with 1 1/4" – 1 1/2" (OD) round tube gates



831694, 880 0003-420

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 0003-421

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



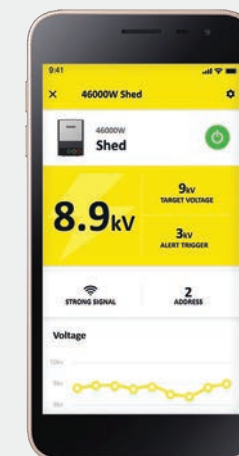
831696, 880 0003-422

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 0003-423



Monitor Your Fence

From the Palm of Your Hand

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



DATAMARS
Livestock.

DATAMARS
Livestock™



Water Management Solutions

Tru-Test products are globally recognized for their technology, durability, and reliability, with over 30 years of experience in assisting producers with informed decision-making. Ensuring everyday tasks are as effortless as possible is equally crucial. Tru-Test Waterers are specifically designed to provide a continuous supply of fresh water to your livestock throughout the entire year, regardless of environmental conditions.

LEARN MORE: TRU-TEST.COM

Why Use Automatic Waterers?

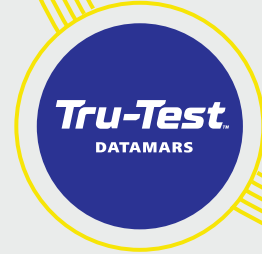
Tru-Test Waterers offer livestock owners a simpler, cleaner, and healthier method to manage their animals' most crucial nutrient.

BENEFIT	TRU-TEST WATERERS	TRADITIONAL OPEN TANKS
Automatically Replenishes to Set Level	✔	No
Regulates Water Temperature for Weather Conditions	✔	No
Freeze Resistant Design	WaterWell Series Resistant to -20°F for 60 hrs WaterPro Series Resistant to -35°F w/ de-icer	No
Clean Water Year-Round	✔	No
Reduces evaporation	✔	No
Easy Maintenance	✔	No
Rust Resistant	✔	No
Reduced Algae Growth & Insect Breeding	WaterWell Series Only	No
Debris Free	WaterWell Series Only	No

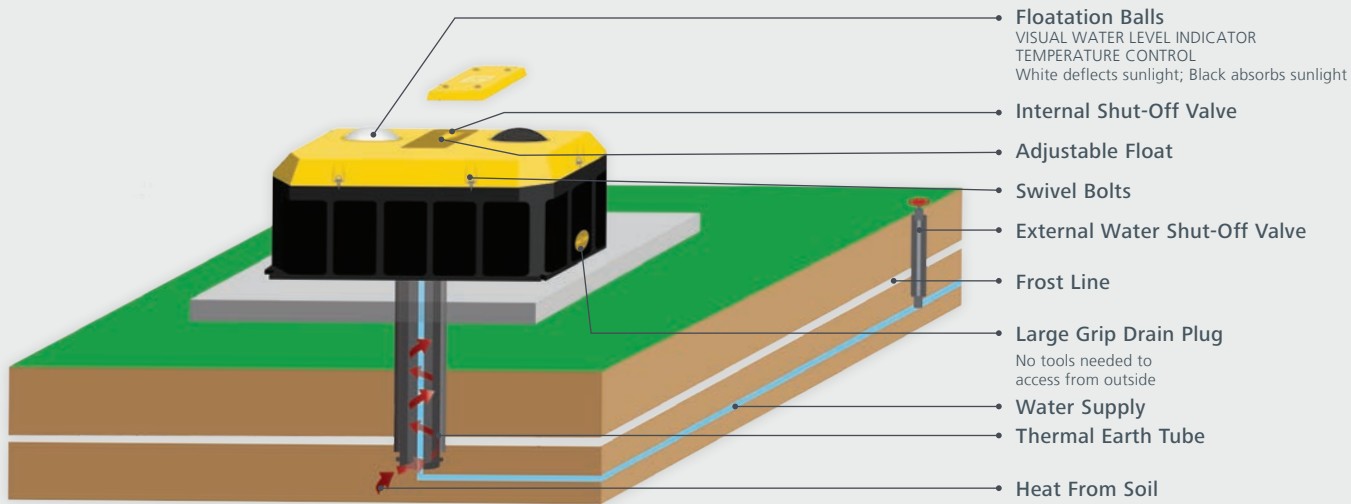
Tru-Test Waterers Won't Let You Down

- 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.

How Do Automatic Waterers™ Work?



1. Water comes from the underground source through the earth tube and into the unit. This keeps water fresh and prevents water line freezing.
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.
3. Top-quality insulation keeps water colder in the summer and warmer in the winter, giving your livestock a fresh water supply year-round.
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.
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.
6. Clean water = healthy livestock. Constantly replenished water discourages algae growth and insect breeding, keeping the water cleaner and easier to manage.



Value Information & Ratings*

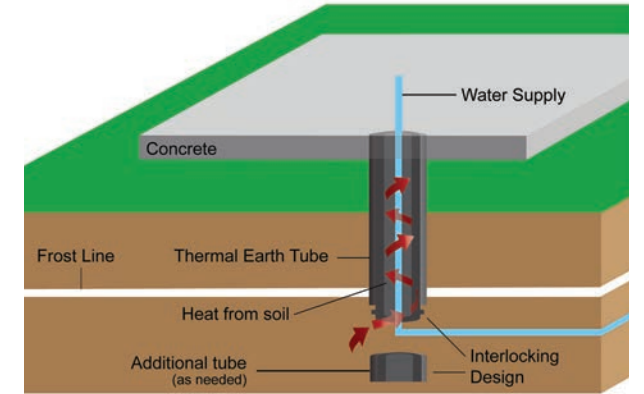
	PSI RATING with valve in closed position	MAXIMUM FLOW gallons per minute at 30 PSI
WaterWell Series	5 – 150 PSI	50
WaterPro Series	0 – 150 PSI	3

*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 Livestock 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.

THERMAL EARTH TUBE

Prevent water line freezing by installing a Thermal Earth Tube beneath the Automatic Waterer.

The purpose of the earth tube is to prevent the water line from freezing. Placed beneath the Waterer, the earth tube should extend below the frost line, enabling the thermal heat from the subsoil to rise and circulate around the supply line. Additionally, the tube serves as an insulated barrier against the cold air surrounding the line.



Important things to remember:

1. The top of the earth tube should sit flush with the concrete pad.
2. The vertical water supply line should be positioned in the center of the earth tube.
3. Do not fill the earth tube. This will block the flow of warm air around the water line.
4. 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.

Thermal Earth Tube

- Dimensions:
11.625" (OD) X 26.75" (H)



831833, 880 0003-561

How to Install An Automatic Waterer

1. PREP LOCATION: Choose a place easily accessible by livestock and free of obstacles. Refer to local electrical and plumbing codes before installation.
2. INSTALL 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.
3. INSTALL 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.
4. POUR THE CONCRETE PAD: 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.
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.

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

WATERWELLS

WaterWell™ 4

Energy-free unit for large operations.

- 60gal / 226L
- 200 herd capacity
- Dimensions:
43.5" (L) X 45.5" (W) X 21.9" (H)



PROUDLY FEATURES AN INDUSTRY-LEADING JOBE FLOAT VALVE.



831830, 880 0003-425

WaterWell™ 2

Energy-free unit for medium operations.

- 31gal / 119L
- 110 herd capacity
- Dimensions:
43.5" (L) X 27.5" (W) X 20.2" (H)



PROUDLY FEATURES AN INDUSTRY-LEADING JOBE FLOAT VALVE.



831831, 880 0003-426

WaterWell 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

WaterWell Benefits

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

Jobe Topaz Compact Valve

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



880 0003-762

WATERPRO

WaterPro™ 2

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

- 7 ga/27L
- 75 horse/beef capacity
- Dimensions:
39.125" (L) X 22" (W) X 28.7" (H)



PROUDLY FEATURES AN INDUSTRY-LEADING JOBE FLOAT VALVE.

831832, 880 0003-427

Jobe Topaz Compact Valve

- For the WaterPro™ 2
- 5-150 PSI
- Easy adjustment with no tools
- Easy servicing
- Self-cleaning
- On/Off switch



834478, 880 0003-588

WaterPro 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

WaterPro 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

A Measurable Difference



We are dedicated to providing a more comprehensive, integrated livestock management portfolio. As a result, we have united our product brands under a single family – Datamars Livestock.

Our goal is to provide producers with the essential tools to meet the increasing global demand for high-quality protein. The journey begins with tag identification at birth. As animals grow, our products meticulously track data insights, facilitating fact-based decision-making. Our animal health delivery systems ensure dose accuracy, safety, and efficiency, thereby saving time and reducing stress. Taking it a step further, our line of livestock scales and EID readers collects real-time data for effective management throughout the animal's life cycle.

Our strong track record partnering globally with the pharmaceutical industry with confidential and market-sensitive projects. Our collaborative and professional approach has earned us exceptional customer retention. Through stringent quality standards and innovative development, NJ Phillips and Simcro product lines enhance the value of pharmaceuticals and vaccines for production livestock. Our product hallmarks include dose accuracy, user safety, operational convenience, and animal welfare. During the design stage, our engineers consider end-user environments to manage health, safety, and animal welfare risks. All products undergo rigorous testing in both field trials and our in-house laboratories. Integrity is fundamental to our design, ensuring that customers receive an intransigent end product. Our specialty packaging can be tailored to meet specific brand requirements.

At Datamars Livestock, we take pride in delivering quality products and exceptional service. We believe in the future of agriculture and are ready to assist with any challenges at hand.

Tru-Test Weighing & EID Stick Readers

VISIT TRU-TEST.COM

Speedrite Superior Electric Fencing

VISIT SPEEDRITE.COM

Patriot Quality Electric Fencing

VISIT PATRIOTGLOBAL.COM

Z Tags & Temple Tag Livestock Identification Tags

VISIT ZTAGS.COM

NJ Phillips & Simcro Animal Health Delivery Systems

VISIT NJPHILLIPS.COM
VISIT SIMCRO.COM

SPARE PARTS



WATERWELL SPARE PARTS

Drain Plug

- O-ring not included (832382P)



831836P, 880 0003-732

Black Seal for Valve

- Includes: 2 seals



832882P, 880 0003-577

Black Flotation Ball

- Cold weather use



832878P, 880 0003-737

White Flotation Ball

- Hot weather use



832877P, 880 0003-457

Topaz Valve Assembly

- Topaz 3/4" Compact Valve
- 2-year Warranty



880 0003-762

Topaz Valve Inner Cartridge

- For use with Jobe Topaz Compact Valve



880 0003-780

Hardware for Float Reservoir Lid

- Includes: 1 eye bolt, 1 gasket, 1 washer



832893P, 880 0003-583

O-ring for Drain Plug

- Includes: 2 O-rings



832382P, 880 0003-455

Spare Main Lid Swivel Eyebolt Hardware

- Comes in a kit



880 0003-775



WATERPRO SPARE PARTS

Drain Plug

- Plug that doubles for interior/exterior use



831839P, 880 0003-735

Rojo Valve Assembly

- Rojo 3/4" Compact Valve
- 2-year warranty



834478, 880 0003-588

Rojo Valve Inner Cartridge

- For use with Jobe Rojo Compact Valve



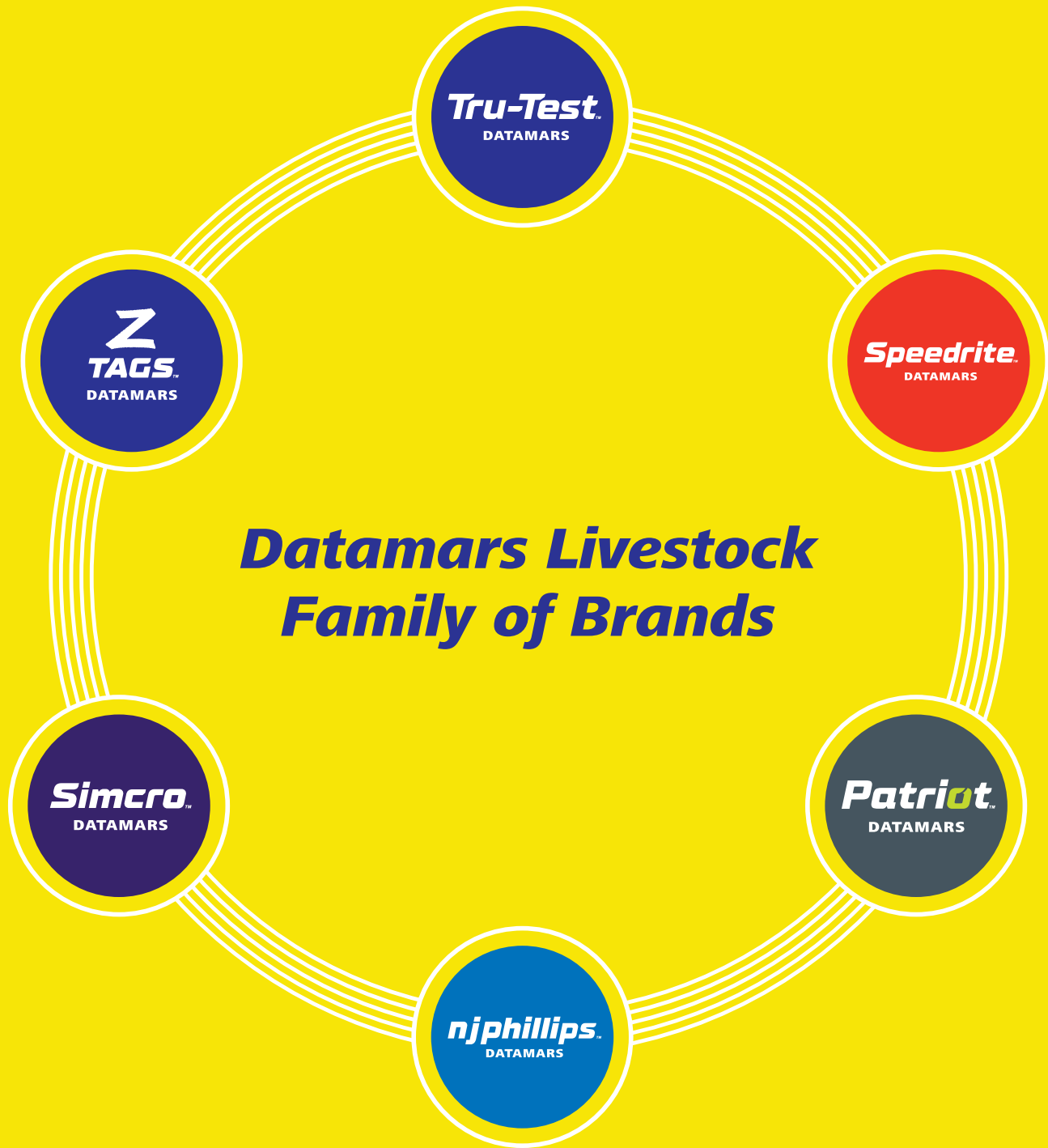
834479, 880 0003-589

Hardware for Panel Door

- Includes: 1 eye bolt, 1 washer



832894P, 880 0003-109



DATAMARS
Livestock



DatamarsLivestockNA



datamarslivestock_northamerica

Tru-Test, Z Tags, Temple Tag, Patriot, Speedrite and NJ Phillips are registered trademarks of Datamars, Inc. Although the information presented is believed to be accurate and reliable, no responsibility for inaccuracies can be assumed by Datamars, Inc. Performance data is typical only and variations due to component manufacturing tolerances are normal. Datamars, Inc. reserves the right at any time to change performance characteristics or specifications without prior notice. ©2024 Datamars, Inc. – All rights reserved.