

# QUALITY EQUINE ELECTRIC FENCING PRODUCTS



# A PRACTICAL GUIDE TO ELECTRIC FENCING FOR HORSES AND PONIES



#### 1. Is electric fencing legal?

There is legislation relating to electric fencing and provided it complies with the legislation, electric fencing is 100% legal. So, make sure that the energizer purchased complies with the UL-69 for Agric energizers/chargers, that the earth is as per Q9 below, and if the energizer is installed in an urban area, that its energy output is below eight joules, (see Q8 below). These are some of the most important clauses.

#### 2. How safe is electric fencing for horses?

Modern, pulsed, high-powered electric fencing is very safe for both horses and humans as long as the system is correctly erected and energizers used comply with strict international manufacturing standards. JVA Energizers are sold in over ninety countries around the world and no fatality has ever been recorded by anyone using a JVA Energizer - a safety record of which even NASA would be envious.

#### 3. How effective is electric fencing?

Electric fencing for horses is very effective and economical. However it is important that one understands the basic principles of current flow, (see opposite page), to reap the full benefits. The importance of good earthing cannot be over stressed.

# 4. Do I need to train my horses to electric fencing?

All animals need time and space to learn about electric fencing. Do not confine your horse in too small an area when introducing it to an electric fence. The first shock a horse experiences can be quite traumatic for a highly strung animal and it needs space to back off. However, once bitten, twice shy, and they will avoid the fence in the future.

# 5. Won't electric fences affect the future performance of my horses?

There is no evidence, over the past fifteen years since horse tape has been used, that horses who need to clear obstacles in their working lives, start refusing to do so. The painful shock is associated only with the tape.

#### 6. How does an electric fence work?

An electric fence can best be described as a psychological fear barrier. It works on the principle of giving an animal a short, sharp, painful, yet safe shock that is sufficiently memorable for the animal touching it not to forget. Horses, being intelligent animals, learn very quickly that their perimeters are hostile and to respect and avoid electric fences.

#### 7. Which energizer should I use?

For permanent tape fences, where mains power is available, one would use a mains powered energizer. The length of the fence will dictate the size of the energizer. For temporary or portable fencing, one would use a battery powered energizer. Solar panels can be used to charge the energizer batteries. (See page 3 for available information on energizers).

#### 8. How do I tell how powerful an energizer is?

An energizer's output energy is measured in *joules*. The higher the joule rating, the more powerful the energizer. Within an urban area, the law limits the energy output of an energizer to just eight joules under any load condition.

# 9. Having made my choice of energizer what is the next most important thing to bear in mind?

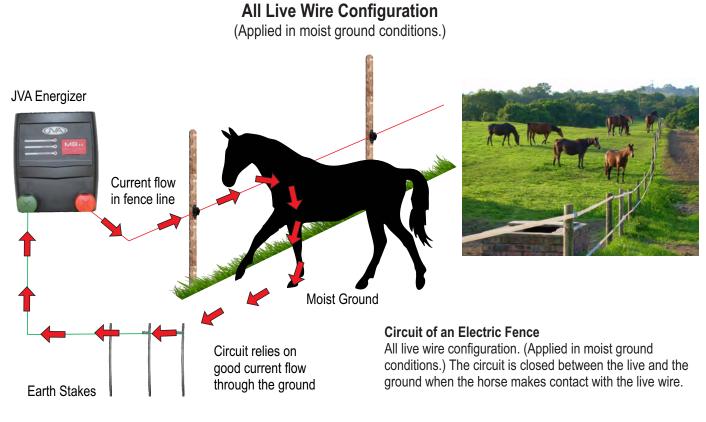
An electric fence is comprised of three things: the energizer, the earthing system and the fence itself. If any one or more of these is faulty, the whole fence will be ineffective. The one thing most often overlooked is the importance of good earthing. So having selected the energizer, make sure it is well earthed. For a permanent electric fence, the recommendation is 3 x 4 ft galvanized earth stakes at the energizer and additional stakes every 325 ft along the fence line.

#### 10. How many strands should I install?

The number of strands is dependent on the purpose of the fence. For internal subdivision fences on pasture, a single 1/2 inch or 1 1/2 inch tape should suffice. Where better control is required, two strands are recommended and for perimeter/stallion fences, three strands.

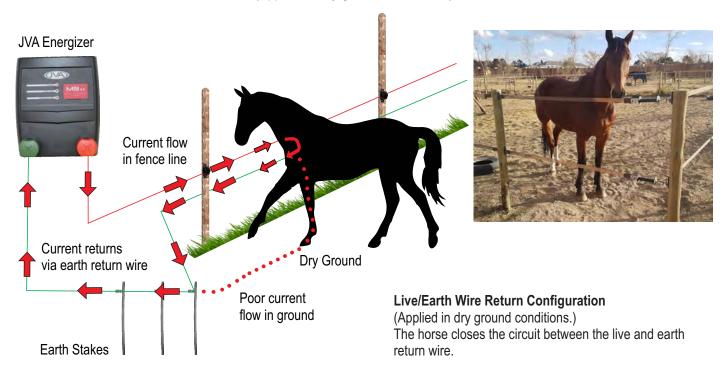
#### **Circuit of an Electric Fence**





#### Live/Earth Wire Return Configuration

(Applied in dry ground conditions.)



#### JVA Portable Energizers

JVAMBX1.5

JPTE2234



#### JVA MB Mid-Range Battery and Mains LED Energizers

The MB1.5, MB3 and MB4.5 Electric Fence Energizers have between 1.5 and 4.5 joules output energy per pulse. This innovative design means you can have versatile portable power from a 12V battery when needed, or run it from 110Vac mains electricity where that is available. Optional JVA Solar Kits and external batteries are available on request to make these units fully portable.

#### Full Solar Range Energizer SV10, SV5 & SV2

The SV Range of Solar Energizers is ready to go straight out of the box! A reliable built-in rechargeable battery and integrated solar panel means that the JVA Solar Energizers are totally portable, without the need for extra batteries and hardware.

These energizers have an LCD display so that the user can see the voltage and joules on the fence at a glance. Just slide the energizer onto any Ystandard, attach the fence and switch it on. The SV10 energizer has 1.0J output energy and the SV5 energizer has 0.5J output energy per pulse. They are suitable for permanent and temporary fencing.

#### JVA LCD Energizer Range Features:

JPTE2263

> Mains or Battery powered

JPTF216

- Power on demand
- LCD showing KV and Stored Energy
- > Ant and moisture protection
- > UV stable enclosure
- > Overload indication (audible and visible)
- Lightning protection
- Reverse battery protection
- Solar capability
- Low battery indication
- Over discharge battery protection
- > Battery life maximization
- Battery voltage measurement
- Power adaptor included
- > Audible alarm
- ➢ Bi-Polar output
- 3-year warranty.





The Wi-Fi ability of the energizers of the LCD MB Range Energizers allows you to log in and view the energizer and fence conditions from anywhere in the world.

#### JVA Mains/Battery High Power LCD Energizers

The NEW MB8, MB12 and MB16 IP Energizers have 8, 12 and 16 Joules output energy respectively and can now be controlled from anywhere in the world using your mobile phone App. The energizers have an LCD display to show fence voltage and joules.

All these newly styled energizers include an audible warning if there is a serious fault on the fence and Auto-Sync TM technology, all of which help keep your fences safe.

These universal or Mains/Battery powered energizers give you the added option of running on 12V should you not always have 110V available.

#### **JVA Energizers**



#### JVA Energizer Fence Recommended Distance for Politape/Polirope Equestrian Fences

	MB16	MB12	MB8	MB4,5	MB3	MB1.5	SV10	SV5	SV2
Stored Joules	24J	18J	12J	7,3J	4,2J	2,3J	1,2J	0,65J	0,35J
Output Joules	16J	12J	8J	4,5J	3J	1,5J	0,8J	0,5J	0,2J
Power Consumption at 12.5 Vdc	1,6A	1,25A	0,9A	0,5A	0,3A	0,15A	0,08A	0,04A	0,02A
Recommended Fence Line Distance Yard	4400	3820	3280	2280	1640	1100	820	550	330







#### JVA Fault Finder

The JVA Fault Finder is a 2-in-1 tool designed specifically for the rapid location of faults on an electric fence line.

- > Waterproof and impact resistant case
- > Simple to use, one-touch operation
- > Clearly indicates the direction of the fault
- > Leads you quickly to the fault in the fence
- > Digital readings show the voltage and current
- > No wires or clips means no tangles or shocks
- Uses a standard 9V battery
- Low battery indicator

#### **Quality Portable Paddock Kit**

A robust easy to set up 6m x 6m Paddock. The Kit is ideal for hard or soft ground and consists of the following:

- 1 x Value Reel with 25m 40mm Horse Tape
- 1 x Reel Stand with Gate Activator
- 1 x Gate Handle and Buckle
- 3 x Corner Posts
- 4 x Robust post mounting pegs
- 4 x 1.5m Pig Tail Tread-Ins
- 4 x Guy Ropes
- 4 x Tent Pegs
- 1 x Carry Bag.

Recommended Energizer SV2



# www.jva-usa.com

NA

#### Equestrian Accessories



#### Intermediate Horse Tape Insulator

- This insulator can either be nailed or  $\geq$ stapled to wooden posts or it can be popriveted to metal posts
- The intermediate horse tape insulator is suitable for both the  $1\frac{1}{2}$  inch and  $\frac{1}{2}$  inch tape as well as the Polirope

N7325 - 3280 ft HT Cable Soft, Slimline

Flexible and easy to work with Available in 160 ft, 320 ft and 650 ft and 3280 ft



N734H - 160 ft N730H - 320 ft N733H - 650 ft N732H - 3280 ft

N734S - 160 ft

N730 - 320 ft N733S - 650 ft

HT Cable — Hard Strong and robust, ideal for under gates Available in 160 ft, 320 ft, 650 ft and 3280 ft

#### **JVA Corner Strain Insulator**

- This robust, unique, versatile, easy-to-install, multi-faceted strainer/corner insulator can be nailed or stapled to a wooden strainer post or pop-riveted onto a metal strainer post
- It has 3-way straining capabilities and is ideal for corners and angles





H105 Activator Clip

Used in conjunction with end/corner strain and gate handle, to complete the current when the gate handle is connected



#### Intermediate Corner Insulator

This robust, unique, versatile, easy-toinstall corner insulator can be nailed or stapled to a wooden strainer post or pop-riveted onto a metal strainer post

N786

N218



Used to attach tape to

strainer insulator and

in electric tape gates



1<sup>1</sup>/<sub>2</sub> Inch Tape Buckle

Used to attach tape to strainer insulator and in electric tape gates



**Tape Joiner** An aluminium buckle used to join tape

S216

#### 1/2 Inch Politape

(1/2 inch wide/650 ft rolls) Ideal for temporary subdivision of camps or for the second strand on a permanent 11/2 inch tape fence

H106

**Combi or Maxi Tensioner** Used to tighten 1/2 inch Politape

N770P

19



#### 1<sup>1</sup>/<sub>2</sub> Inch Horse Tape $(1\frac{1}{2})$ inch wide/650 ft)

Available in white, green or brown, these highly visible UV stabilized tapes are ideal for electric fencing permanent or temporary horse paddocks

S921 S920 H101

#### **Heavy-Duty Plastic Tread-Ins**

**Pivot Gate** 

fence camps

Pigtail Standards

⊳

 $\triangleright$ 

 $\triangleright$ 

Allows free movement

of centre pivot wheels

Durable crimp foot design

Ideal for strip grazing cattle

¼inch spring steel

Large foot for ease of placement

S922

through electrified

- ≻ Plastic tread-ins are ideal for temporary fencing and can be used with plastic tapes, wire or rope
- Each tread-in has positions for  $1\frac{1}{2}$  $\geq$ inch or 1/2 inch politape or 5/16 inch polirope or poliwire
- The tread-ins are available in 4 ft ≻ (cattle and sheep) and 5 ft lengths (horses)



#### **Equestrian Accessories**

Screw-On Insulator Can be attached at any point

an electric wire

along a dropper to support

DK18



S912W

#### Poliwire

An economic choice for temporary fencing, featuring stainless steel conductors and UV stabilized yarns; available in white or orange in 650 ft or 1640 ft rolls



#### ge a light, vertical stave in a fence, used to separate the wires of a wire fence

DK12

**Ridgeback Dropper** 

The Ridgeback Dropper is



#### Heavy Duty Compression Gate Break Handle

- > Strong robust body
- Positive non-slip grip
- High tensile, heavy-duty spring compresses under tension, preventing over stretching
- Fully galvanized

#### Value Reel and Stand

- The galvanized value reel holder can be attached to a stand
- Ideal for temporary and movable horse camps
- The reel holds 320 ft/650 ft of 1½ inch/½ inch tape or 1640 ft of poliwire
- The reel has a ratchet for superior tension control



Zammer Handle Gate Break

S792

Multi-purpose handle used

in temporary fencing as an insulated hook



- Consists of multi-stranded latex core and UV resistant sheath, for easy, quick assembly of electric gates
- > Four stainless steel wires for maximum conductivity
- Wires cross over many times for maximum shock exposure
- Heavy duty gate components included
- Standard length 11 ft 6 inch − 23 ft



Horse Post Insulator Insulator designed to fit over all common steel Y-posts



#### Spring Gates

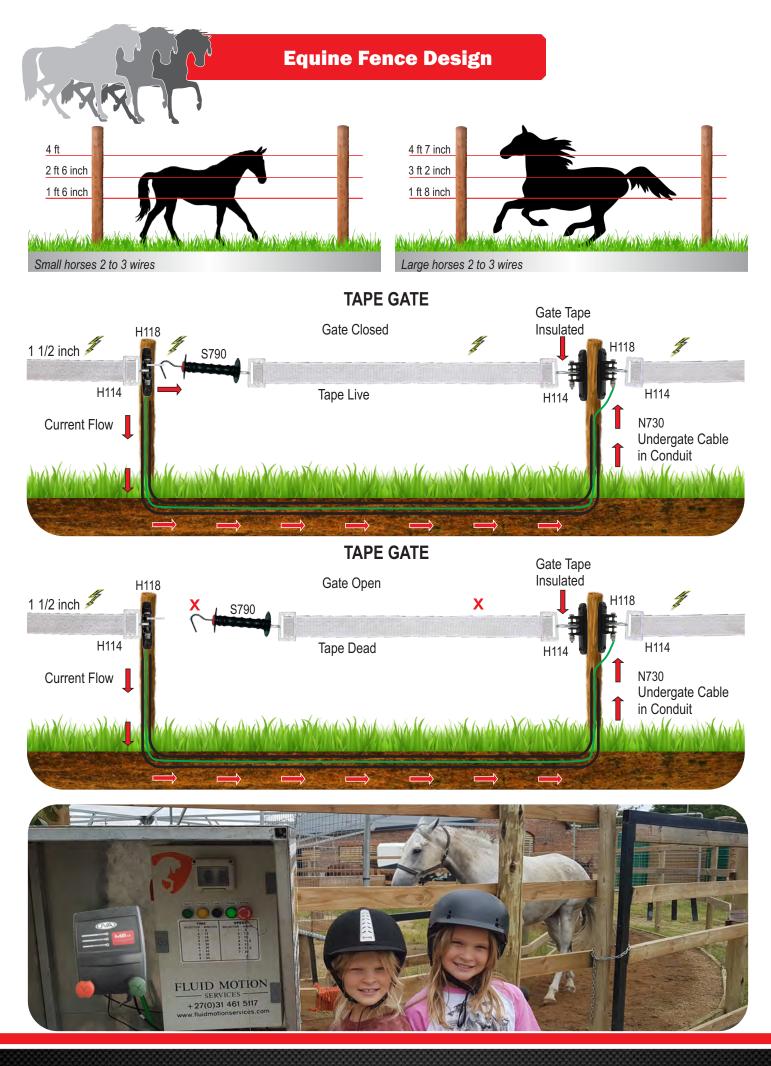
Available in Galvanized Steel or Powder-Coated White. Used for 12 ft cattle and horse electric gates



#### 5/16 Inch Polirope

(5/16 inch wide/650 ft rolls) Polirope is also suitable for second stranding a 1½ inch tape, permanent fence for making electric gates





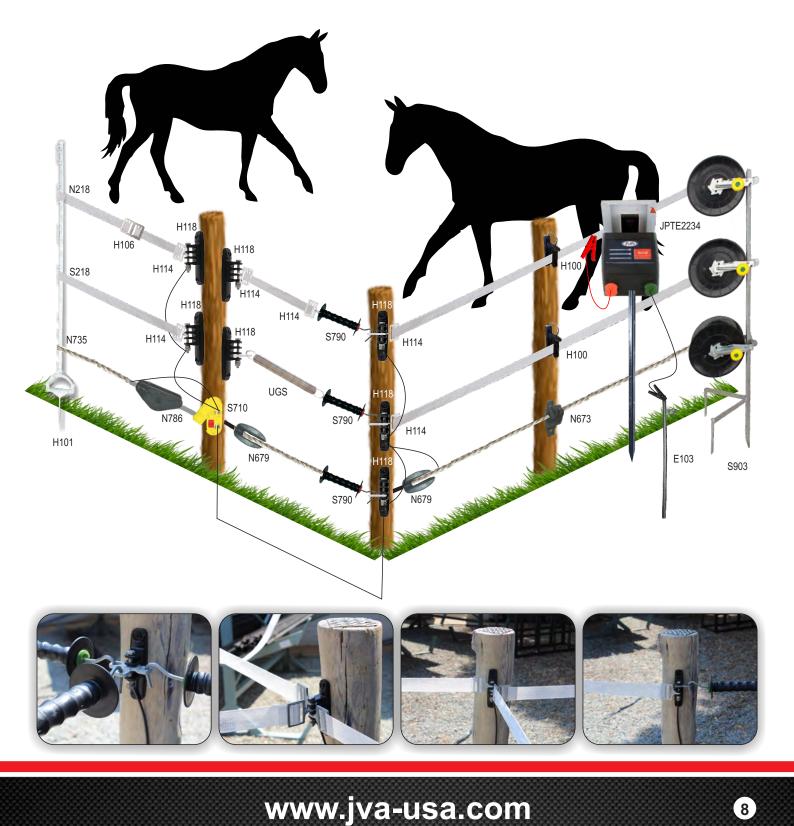
#### **Equestrian Fence Designs**

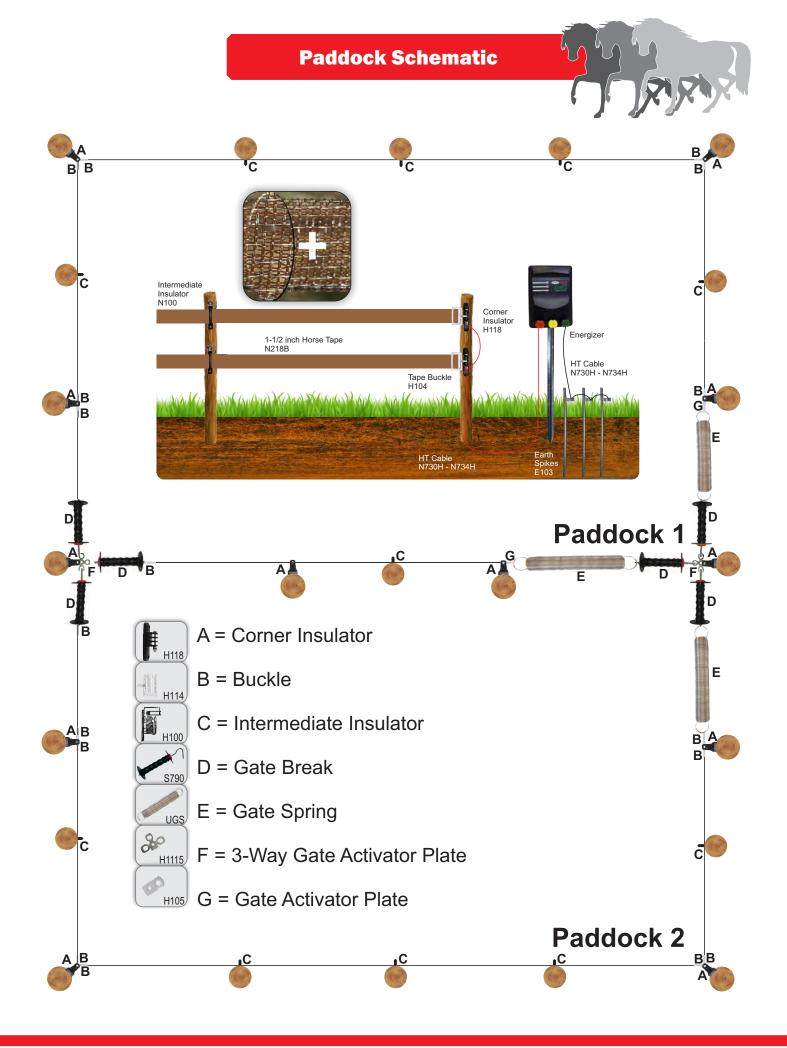


#### How far will an energizer power?

The energy output of the energizer is determined by its joule rating. The higher the joule rating the more powerful the energizer. Equestrian tapes are composed of braided plastic tape interwoven with stainless steel wires to produce a conductive ribbon tape. The thinness of stainless steel strands, plus the physical properties of stainless steel, result in the tape having a very high resistance. Equestrian fences are generally wired in parallel to reduce this fence line resistance.

For this reason, we recommend choosing an energizer based on fence length rather than the amount of tape. Having a network of paddocks also helps reduce the fence load as the energizer now has multiple paths through which the energy can flow. (See recommended distances page 4)





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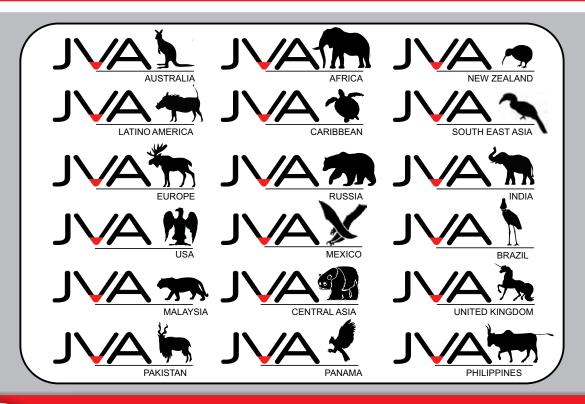
#### Fence Estimate

Fence Specification: Equestrian

Quantity	Item Code	Description	Unit Price	Net Amount	Tax
		Energizer System			
		Energizer			
		Battery			
		Solar Panel			
		Undergate Cable			
		Earth Spike			
		1½ Inch Tape Fence			
		320 ft 1½ Inch Horse Tape			
		Corner Insulator with Bolt and Nut			
		Corner Tape Insulator			
		Intermediate Insulator			
		Tape Buckle			
		Tape Joiner			
		<sup>1</sup> / <sub>2</sub> Inch Tape or Polirope Fence			
		320 ft/3280ft Polirope			
		320 ft ½ inch Politape			
		Intermediate Nail-On Insulator			
		Jumbo Strainer			
		Maxi Tweaker			
		Catao			
		Gates Gate Handle			
		Activator			
		Three-Way Activator			
		Gate Spring /Tape/ Rope/ Bungi Cord			
		Buckle			
		Other			
		Reel			
		Reel Stand			
		4 ft/5 ft Horse Tread-In			
		Horse Post Insulator			
		Fence Tester			
		Fasteners/Tex Screws/Nails			
SALES	SALES TAX		SUB		
TAX	AMOUNT		TOTAL		
			SALES TAX		
			TOTAL		



# QUALITY EQUINE ELECTRIC FENCING PRODUCTS



#### JVA Monitored Fencing USA

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