

ELECTRIC FENCING

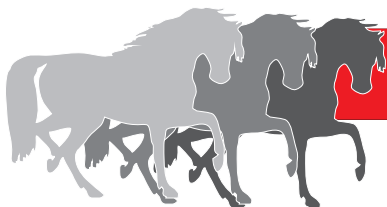
**QUALITY EQUINE  
ELECTRIC FENCING PRODUCTS**



**2019/2020**

**A PRACTICAL GUIDE TO ELECTRIC FENCING  
FOR HORSES AND PONIES**

[www.jva-fence.com.au](http://www.jva-fence.com.au)



## Frequently Asked Questions

### 1. Is electric fencing legal?

There is legislation relating to mains and mains-battery electric fence energizers. They must be tested to Australian Standards and registered with the electrical safety office, ERAC. All JVA energizers comply. Do not be tempted to buy a cheap energizer that does not comply. If there is an accident, your insurance may not cover you. You also need to put up warning signs near every gate and at intervals along the fence.

### 2. How safe is electric fencing?

Modern, pulsed electric fencing is very safe for both horses and humans as long as the system is correctly installed and the energizers used comply with the strict safety 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 which even NASA would be envious of.

### 3. How effective is electric fencing?

Electric fencing for horses is very effective and economical. However it is important that you understand how to properly install and maintain the fence. For example, a good earth is very important. You will also require a fault finder to check and repair your fence if a fault occurs.

### 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 into a small 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. Will an electric fence impact on my horses jumping performance?

Over the many years since electric tape has been used for horses, there is no evidence that horses that need to clear obstacles for sport or in their working lives, will start refusing to do so. The painful shock is linked only to the tape.

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

An electric fence can be described as a psychological barrier. It works on the principle of giving an animal a short, sharp, yet safe shock that is sufficiently painful for them not to forget.

### 6. How does an electric fence work? (Continued)

Horses are intelligent animals, so they learn very quickly that the tape is painful so they avoid it. Consider how much you hate being zapped by the static from your car seat on a cold dry winter day.

### 7. Which energizer should I use?

For permanent tape fences, where mains power is available, we suggest you use a mains powered energizer. The length of the fence will dictate the size of the energizer. For temporary or portable fencing, we suggest using a solar or 12V battery powered energizer. Integrated solar units are best for temporary fences and events.

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

An energizer's pulse output energy is measured in joules. The higher the joule rating, the more powerful the energizer. The smallest energizers have around 0.1J, the largest have around 50J. There is a rule of thumb, used by most brands, that says that every tenth (0.1J) of a Joule can power one km of ideal fence wire. This allows energizers to be compared, but in reality most fences are not ideal. JVA suggests you use 0.5J per km of fence (irrespective of the number of wires) to size the energizer.

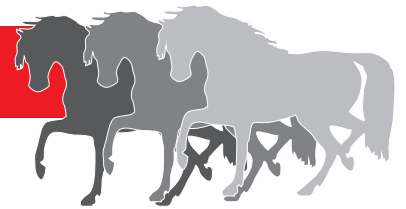
### 9. Apart from the energizer, what else do I need?

An electric fence is made up of the energizer, an earth stake (ground rod), wires or tape, posts and insulators. For the earth stake you can use a brass earth rod, or a galvanized star picket. It should be driven at least 1m into moist ground. The larger the energizer, the larger the earth system required. Also if the soil is dry or sandy, you may need more earth stakes.

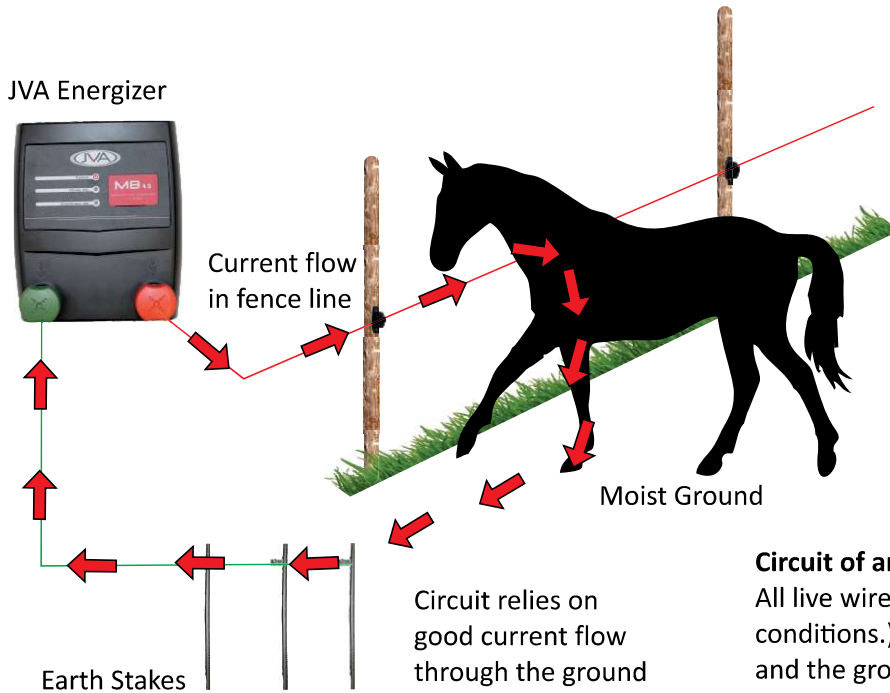
Insulators come in many shapes, colours, etc. In general black is the best colour for plastic in the sun. Choose the correct insulator for the posts and wire or tape that you intend to use.

### 10. How many strands (or live wires) should I use?

That depends on whether the fence is temporary or permanent, and what animals you are fencing in. For an internal fence, a single live wire (or strand of tape) is often enough. If you are keeping a horse away from an old fence, a single offset wire will do the job. For a boundary fence 3 live wires and 2 earthed wires are recommended. Poly tape or wire is not recommended for a boundary fence. See the following pages for diagrams on fence wiring.



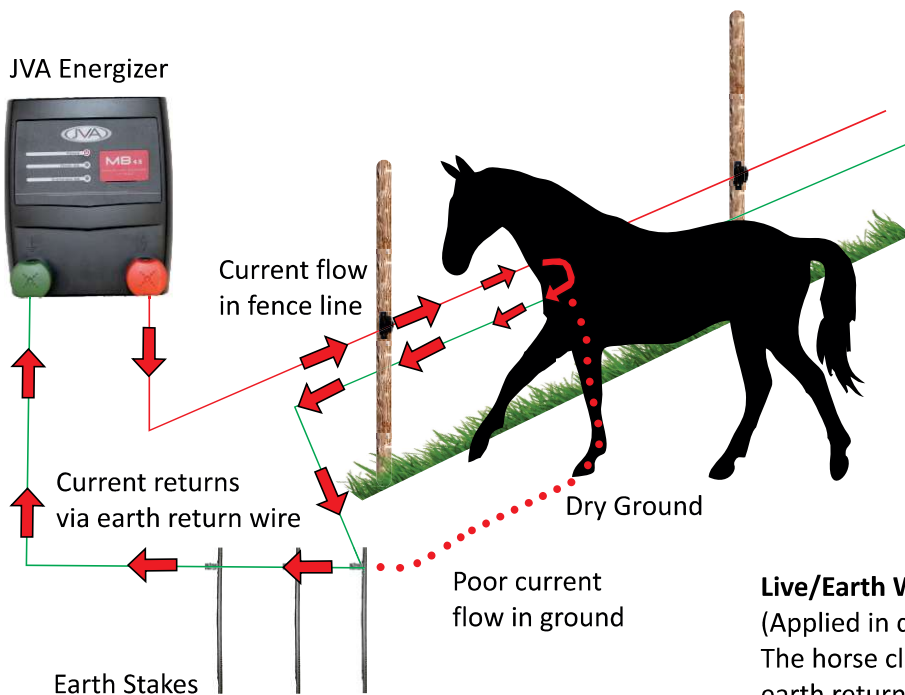
## All Live Wire Configuration (Applied in moist ground conditions.)



### Circuit of an Electric Fence

All live wire configuration. (Applied in moist ground conditions.) The circuit is closed between the live and the ground when the horse makes contact with the live wire.

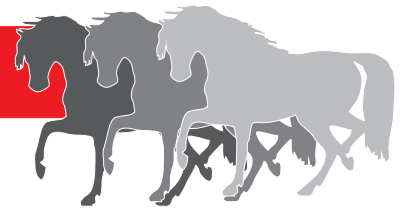
## Live/Earth Wire Return Configuration (Applied in dry ground conditions.)



### Live/Earth Wire Return Configuration

(Applied in dry ground conditions.) The horse closes the circuit between the live and earth return wire.

## JVA Portable Energizers



### JVA MBx Mid Sized Mains Battery 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 240Vac mains electricity where that is available. Optional JVA Solar Kits are also available to make these units fully portable.



### Integrated Solar Energizers SV10 SV5 and SV2

The SV range of solar energizers are ready to go straight out of the box! A reliable built-in rechargeable battery and integrated solar panel means that these JVA Solar Energizers are totally portable, without the need to lug around an old car battery.

The SV10 and SV5 have an LCD which displays the fence voltage and joules used to power the fence. It also shows the battery charging voltage when the energizer is turned off. Just slide the energizer onto a star picket (Y post), attach the fence and switch it on. The SV10 energizer has 1J output energy and the SV5 energizer has 0.5J output energy per pulse. They are suitable for small, permanent and temporary fences.

### JVA MBxL Range IP Energizer® Features:

- Built in Wi-Fi for remote control
- Free Android and IOS App
- Mains or 12V Battery powered
- 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 compatible
- Low battery indication
- 240Vac Power adaptor included
- Optional Bi-Polar output
- 3-year warranty.

### JVA Mains/Battery High Power IP Energizers®

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

These energizers give an audible warning if there is a serious fault on the fence and have Auto-Sync™ technology, all of which help keep your fences safer. These universal or Mains/Battery powered energizers give you the added option of running on 12V if 240Vac is not available. Solar Kits (panel, bracket and regulator) are available.

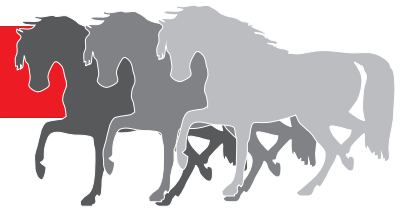


Free Android and IOS App



The inbuilt Wi-Fi in the MBxL energizers combined with our free App, allows you to log in to check and control your energizer from anywhere in the world.

Note: This may require a Wi-Fi hotspot. See [www.ipenergizer.com](http://www.ipenergizer.com).



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

	MB4,5	MB3	MB1,5	SV10	SV5	SV2
Stored Joules	7,3J	4,2J	2,3J	1,2J	0,65J	0,35J
Output Joules	4,5J	3J	1,5J	0,8J	0,5J	0,2J
Power Consumption at 12.5 Vdc	0,5A	0,3A	0,15A	0,08A	0,04A	0,02A
Recommended Fence Line Distance	2000m	1500m	1000m	750m	500m	300m



### JVA Fault Finder

The JVA Fault Finder is the original and the best. Made in Australia, by the inventor.

This is an essential tool for electric fence owners.

- Waterproof and impact resistant
- Simple to use, one-touch operation
- Backlit display
- 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

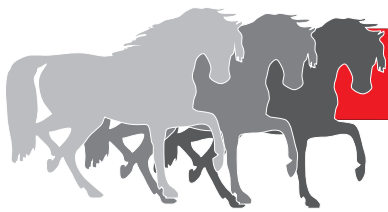
A robust easy to set up 6m x 6m Paddock. The Kit is ideal for hard or soft ground and consists of the following:

- 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

\*This product is coming soon.



## Equestrian Accessories



### Pigtail Standards

- Durable crimp foot design
- Large foot for ease of placement
- 6mm spring steel
- Ideal for strip grazing cattle

\*This product is coming soon.

S922



H124

### JVA Intermediate Corner Insulator

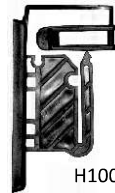
This robust, unique, versatile, easy-to-install corner insulator can be nailed or stapled to a wooden strainer post or pop-rieveted onto a metal strainer post



N730S  
N730L  
N730H

### HT Cable

Flexible and easy to work with to connect the energizer to the fence. Available in 10m and 100m rolls



H100

### Intermediate Horse Tape Insulator

- This insulator can either be nailed or stapled to wooden posts or it can be pop-rieveted to metal posts
- The intermediate horse tape insulator is suitable for both the 40mm and 12mm tape as well as the Polirope



H118

### 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-rieveted onto a metal strainer post
- It has 3-way straining capabilities and is ideal for corners and angles



H115

### JVA Horse 3-Way Activator Plate

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



H105

### Activator Clip



H101

S920

S921

### Heavy-Duty Plastic Tread-Ins

- Plastic tread-ins are ideal for temporary fencing and can be used with plastic tapes, wire or rope
- Each tread-in has positions for 40mm or 12mm politape or 8mm poliropo or poliwire
- The tread-ins are available in 1.2m (cattle and sheep) and 1.5m lengths (horses)



H116

### 12mm Tape Buckle

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



H114

### 40mm Tape Buckle

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



N770P



N786

### Combi or Maxi Tensioner

Used to tighten fence wires.



S216

### 12mm Politape

(12mm wide/200m rolls) Ideal for temporary subdivision of camps or for the second strand on a permanent 40mm tape fence



H106

### Tape Joiner

An aluminium buckle used to join tape



N218

### 40mm Horse Tape

(40mm wide/200m)

This highly visible UV stabilized tape is ideal for electric fencing permanent or temporary horse paddocks



## Zammer Handle Gate Break\*

Multi-purpose handle used in temporary fencing as an insulated hook



S9110

S912W

## Poliwire

An economic choice for temporary fencing, featuring stainless steel conductors and UV stabilized yarns; available in white or orange in 200m or 500m rolls

## Pin lock insulator for Star Pickets



SP001



Spring Gate Kit\*



Tape Gate Kit\*



Bungy Cord Gate Kit\*

- 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 10 times per centimetre for maximum shock exposure
- Heavy duty gate components included
- Standard length 3.5 – 7m



S790

## 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



S903

## 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 100m/200m of 40mm/12mm tape or 500m of poliwire
- The reel has a ratchet for superior tension control



UGS

## Spring Gates

Available in Galvanized Steel or Powder-Coated White. Used for 3,5m cattle and horse electric gates



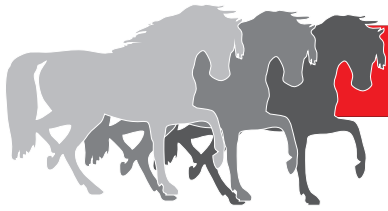
S219

## 8mm Polirope

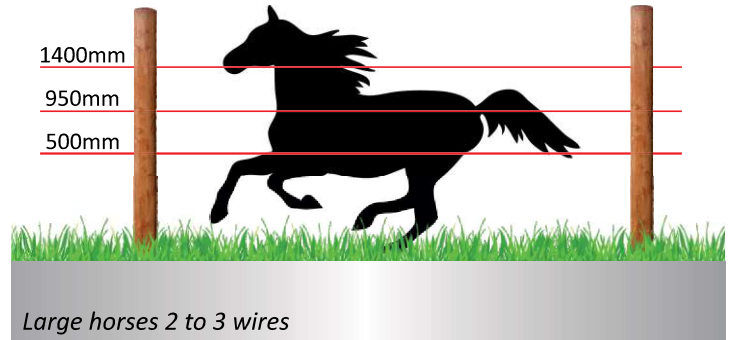
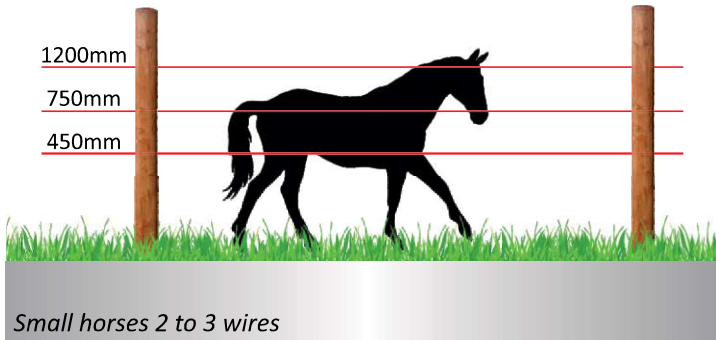
(8mm wide/200m rolls) Polirope is also suitable for second stranding a 40mm tape, permanent fence for making electric gates

\*New products, coming soon.

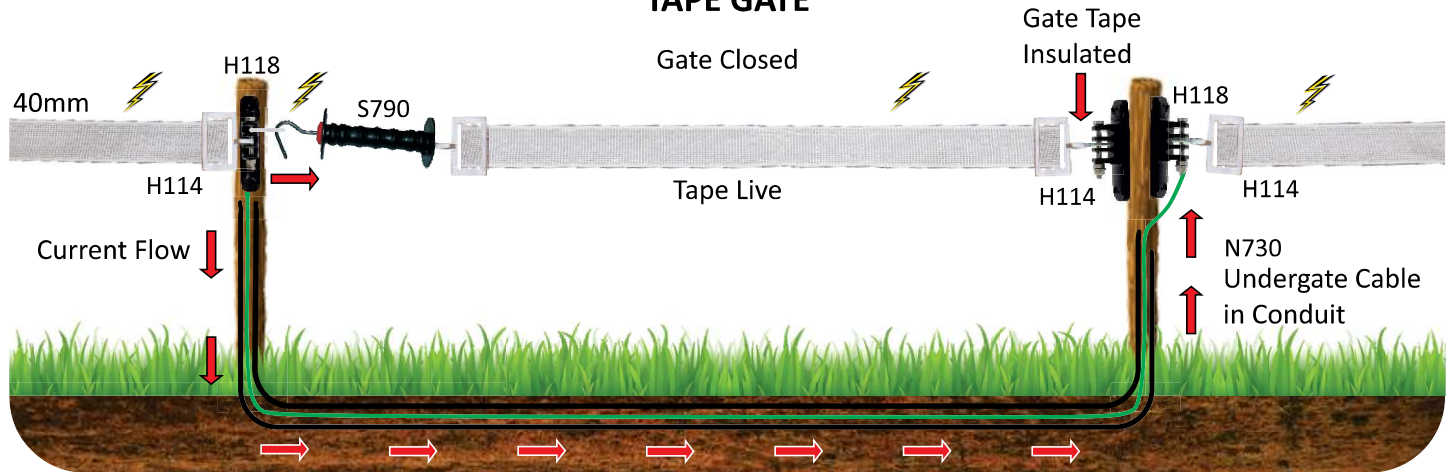




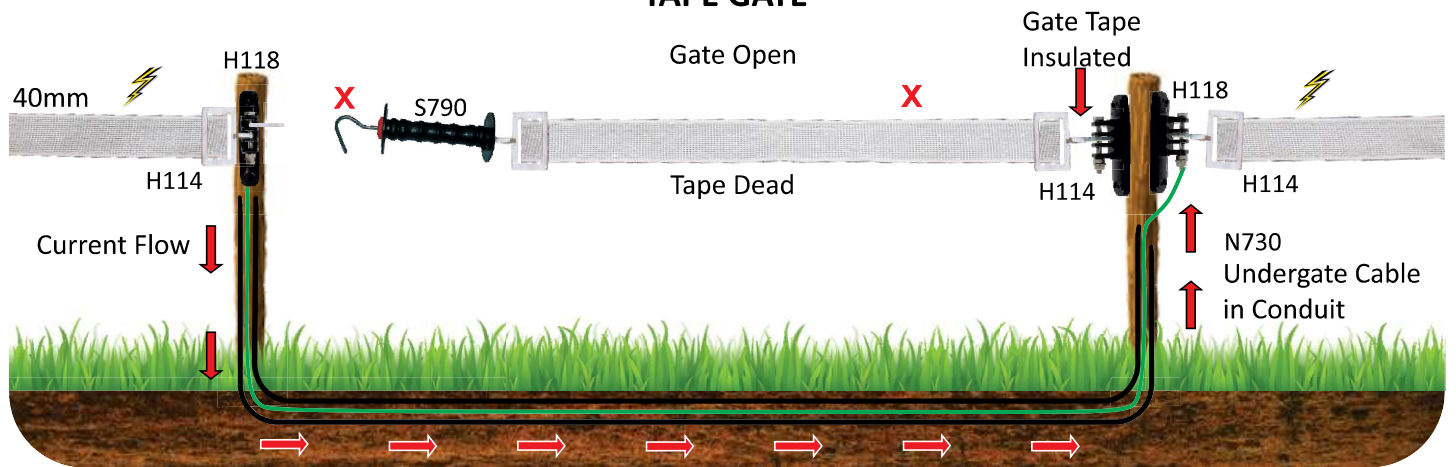
# Equine Fence Design



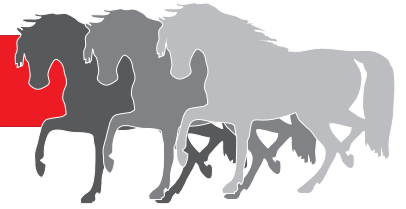
## TAPE GATE



## TAPE GATE





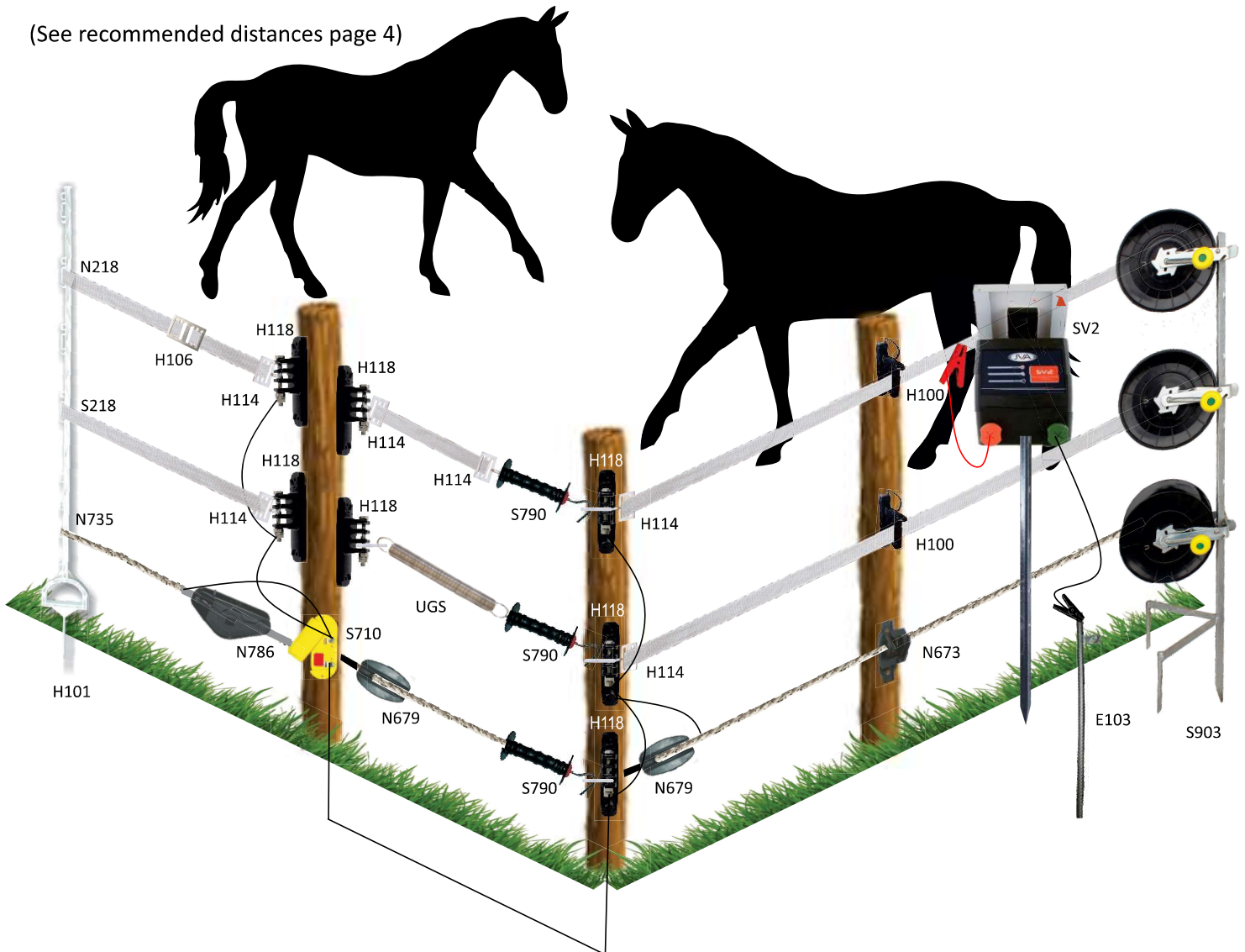


## How far will an energizer power?

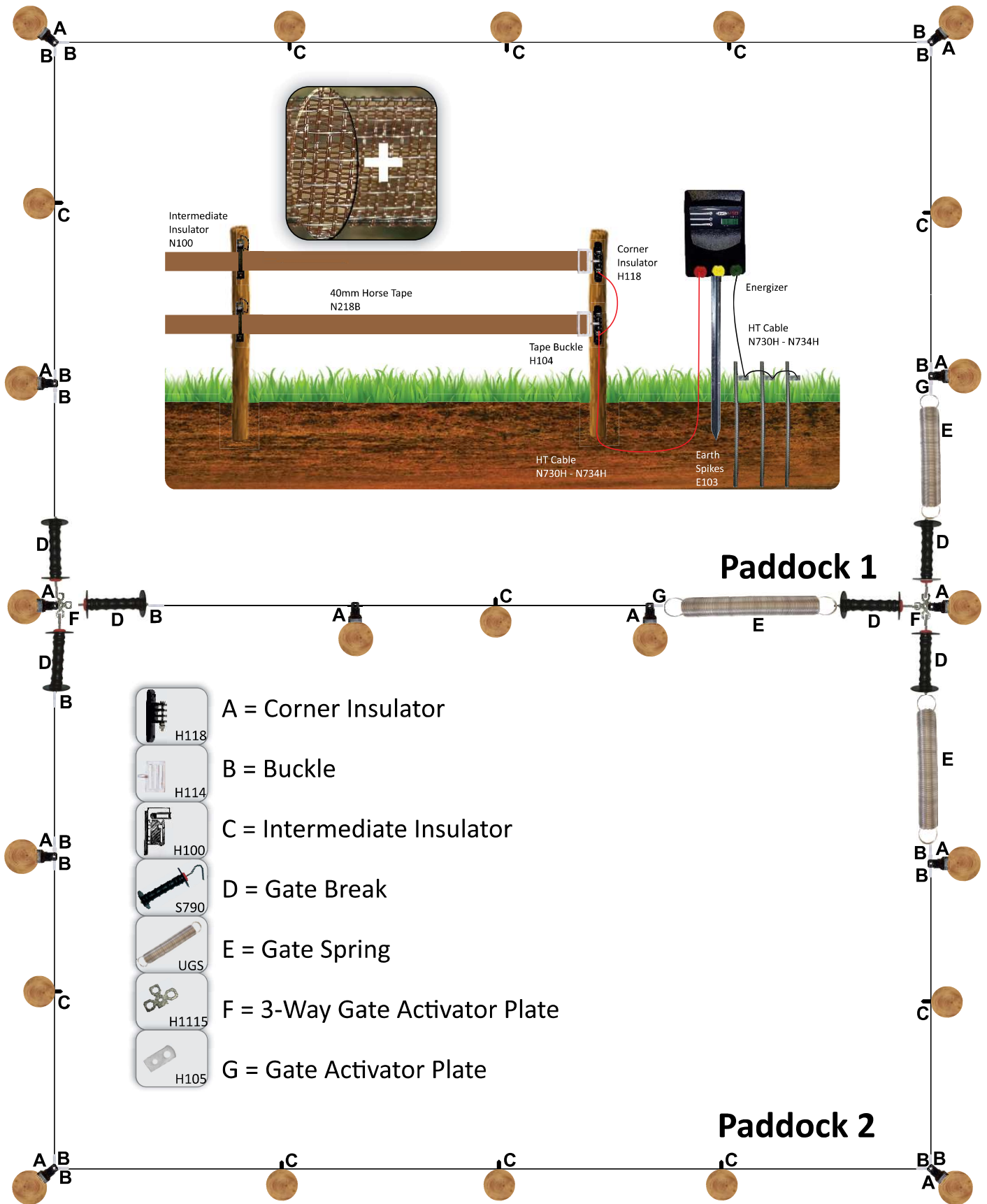
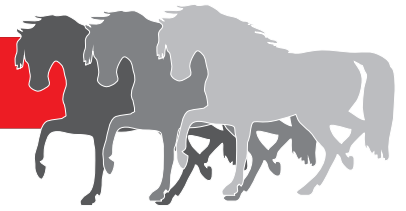
The energy output of the energizer is determined by its joule rating. The higher the joule rating the more powerful the energizer.

Electric fence tapes are composed of braided plastic tape interwoven with stainless steel wires to produce a conductive tape. The small thickness of these strands, plus the electrical properties of stainless steel, result in the tape having a high resistance when compared with 2.5mm galvanized steel wire. Equestrian fences are generally wired in parallel to reduce this fence line resistance. This means that you must connect the live wires (tape strands) at the start AND end of each fence. For this reason, we recommend choosing an energizer based on fence length rather than the amount of live wire or 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)

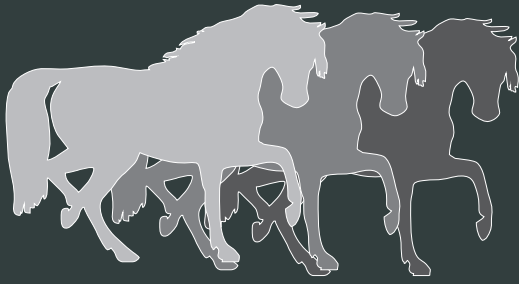


# Paddock Schematic



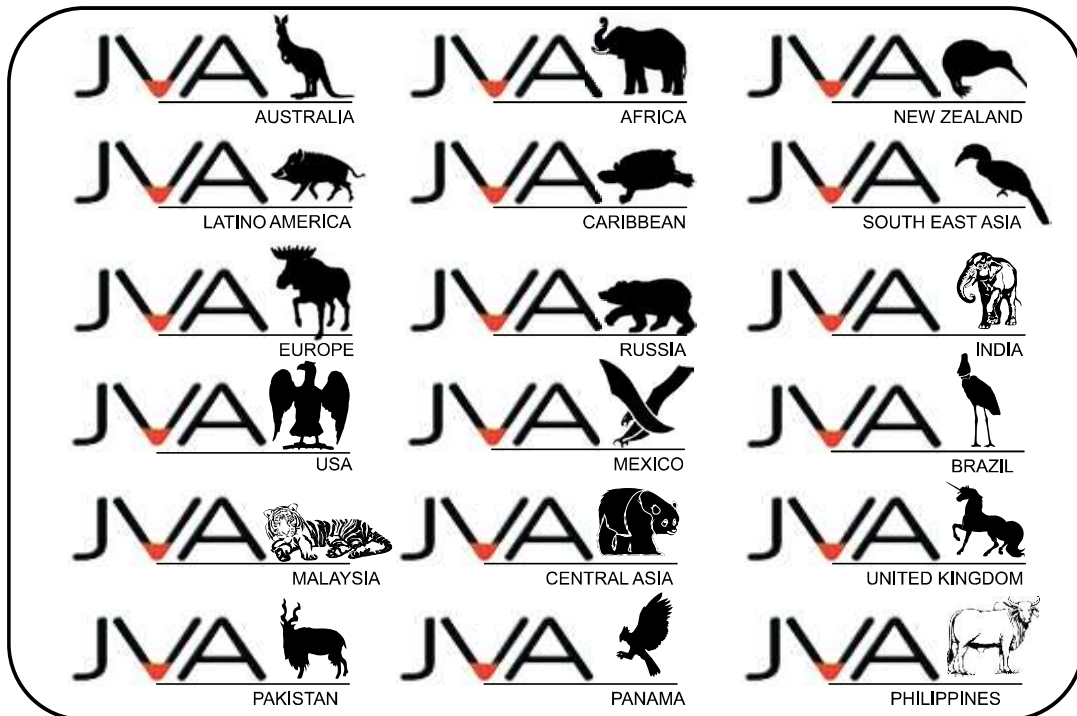


Quantity	Item Code	Description	Unit Price
		<b>Energizer System</b>	
		Energizer	
		Solar Panel	
		Undergate Cable	
		Earth Spike	
		<b>40mm Tape Fence</b>	
		200m 40mm Horse Tape	
		Corner Insulator with Bolt and Nut	
		Corner Tape Insulator	
		Intermediate Insulator	
		Tape Buckle	
		Tape Joiner	
		<b>12mm Tape or Polirope Fence</b>	
		200m/500m Polirope	
		200m 12mm Politape	
		Intermediate Nail-On Insulator	
		Jumbo Strainer	
		Maxi Tweaker	
		<b>Gates</b>	
		Gate Handle	
		Activator	
		Three-Way Activator	
		Gate Spring /Tape/ Rope/ Bungie Cord	
		Buckle	
		<b>Other</b>	
		1.2 / 1.5 Horse Tread-In	
		Horse Post Insulator	
		Fence Tester	
		Fasteners/Tex Screws/Nails	
		<b>TOTAL</b>	



ELECTRIC FENCING

## QUALITY EQUINE ELECTRIC FENCING PRODUCTS



JVA is manufactured and distributed by Pakton Group Pty Ltd  
Trading as JVA Technologies

### Head Office Australia

**Phone (primary):** 0499 000 455 or +61 499 000 455  
**Phone (secondary):** (07) 3103 0582 or +61 7 3103 0582  
**E-mail:** sales@jva-fence.com.au  
**Skype:** jva.technologies

**Address:** 1 Helium Street  
Narangba  
Queensland  
Australia

### South Africa

**Phone:** 011 397 3507  
**E-mail:** swilliamson@jva-fence.com.au  
**Postal Address:** PO Box 13898, Cascades 3202  
**Website:** www.jvasecurity.com

**Address:** 219 Jet Park Road  
Aerostar Business Park  
Johannesburg

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[www.jva-fence.com.au](http://www.jva-fence.com.au)