Hatine Electric Fencing







Established in Devon in 1968 we have expanded our product range from the world's first '3 speed fencer' to one that has reliable products for every modern farm and smallholding.



We endeavour to maintain strong links with the electric fence user because this results in successful product development and happy customers. Approachability and flexibility are the two key attributes with which we approach customer service.

We are proud to have a reputation for a quality, Britishmade product.

After more than 50 years we know our customers are -



Still safe behind hotline



You can find our new mains energisers on pages 15-17. We have updated the case design and added some great features!











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Although we will always try do avoid such changes, we do reserve the right to change product specifications without notice



Mains or battery? Battery energisers are extremely portable and offer a range of options from 6v and 9v models with disposable batteries to 12v rechargeable models and solar options. As energiser power levels rise, it is increasingly difficult to draw power from battery alone while maintaining a practical battery life. Mains energisers have a greater pool of power to draw from so climb to greater power levels. Installation of mains energisers is often seen as impractical as many believe a power source is required adjacent to the fence. This does not need to be the case. Using HT lead (page 15) a mains energiser operates much like a battery energiser but with extra long earth and fence leads. Ht lead operates just as an insulated, efficient extension of your fence line and can similarly be many metres in length. Mains energisers are also extremely cost effective to run.

Guidance



Voltage under load: The fence line 'loads' the energiser and brings the line voltage down. The level at which this occurs is influenced by length of fence, the type of fence line and the amount of inefficiencies along the fence. Fences with greater metal content offer less resistance to the voltage per metre so represent comparably less load over a distance. Undergrowth touching the line completes the circuit drawing power to ground, increasing the load and reducing the effective voltage on the fence line. Wooden posts will also draw power to ground if touching the fence. When choosing an energiser, consider the application and the likelihood of extraneous conditions that may influence the fence. For instance; poultry netting is very close to the ground and susceptible to grass taking power to ground and thus loads the energiser heavily. The energiser required for this application must be much higher in joules than would be needed on most fences of comparable distance.



Stored and output joules. This is the level of energy the energiser produces and releases onto the fence line. Many energisers have similar voltage levels but the higher the joule the further the voltage will be pushed and the greater 'load' the energiser will effectively cope with.



Consumption: Your power source will be used more quickly depending on the power of your energiser. Lower joule energisers can be used in applications less likely to cause extreme loading and last longer periods. As the joule rating rises so does the consumption. The need for greater input voltage is required to get a workable battery life until batteries are insufficient to get high joule performance.



Distance: The estimated maximum distance the energiser will power. This figure is based on the use of the highest metal content fence line, such as high tensile wire, and assumes perfect fence conditions and suitable earth system (see page 26)



Earthing: We recommend a minimum of one 1m earth stake with all energisers (see page 26)



Solar assist compatible: see page 12



Netting: The estimated number of nets the energiser will power. Netting is relatively low on metal content and closer to the ground than other forms of fence so generally requires more power to achieve effective fence voltage. We have based our estimations on the practical experiences gleaned from our customers in the field rather than a theoretical figure. Netting can be separated into 2 base configurations, sheep for larger spaced netting and poultry for closely spaced netting.



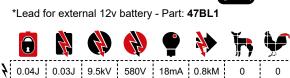
Warranty: All energisers have a 5 year warranty. Warranty cards should be filled out and returned or alternatively visit www.hotline-fencing.co.uk/warranty.aspx and fill out the online form.



Shrike

Handy low powered energiser designed to hang on the fence line, post or earth stake. Operates from two standard D-Cell batteries (included) or from external 12v battery (not included)

- 3v internal battery input
- 12v external battery option*
- Unique hanging case
- Charges up to 800m of fence
- On/off switch
- Internal batteries (Included)
- Pulse indicator





Part no. 47HLB100

2.5w Solar Panel for Shrike

Multi position 2.5w solar panel for Shrike energiser. 12v panel will power the energiser in bright conditions, extending battery life



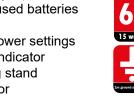


Part no. 47SP2W-S

Harrier

Strip grazing energiser with internally housed battery (not included). Highly portable unit offering very good battery life.

- 6 &12v battery input
- Internally housed batteries
- On/off switch
- High & low power settings
- Low battery indicator
- Rigid 4 prong stand
- Pulse indicator



	1		(#)		*	ħ	Y
) 0.06J	0.04J	6.2kV	1.5kV	18mA	0.6kM	0	0
// 0.1J	0.84J	7.8kV	1.6kV	28mA	1kM	0	0







Battery powered energisers

Super hawk

Strip grazing energiser with internally housed battery (not included). Highly portable unit offering very good battery life.

- 9 & 12v battery input
- Internally housed batteries
- On/off switch
- High & low power settings
- Low battery indicator
- Rigid 4 prong stand
- Pulse indicator





		1		(#)		*	ħ	Y
7	0.14J	0.12J	8kV	1.9kV	30mA	1.0kM	0	0
<i>+</i> +	0.2J	0.18J	9.5kV	2.4kV	45mA	1.5kM	0	0



Super Merlin

A 12v mid powered energiser with 6v internal battery back up.

- 6 & 12v input
- Single spike stand
- On/off switch
- Low battery/pulse indicator











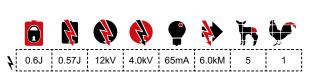
Super Hobby

Very popular single output, mid power 12v energiser. Good battery life, power balance.

- 12v input
- Single spike stand
- On/off switch
- Low battery/pulse indicator











Part no. 47HLB50

MB60

Medium power 12v energiser.

- 12v Input
- Pulse indicator
- Galvanised stand













Part no. 47MB60

Falcon

High power 12v energiser suitable for a wide range of applications where mains power is not available.

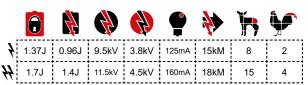
- 12v Input
- On/off switch
- High & low power setting
- Low battery/pulse indicator
- Rigid 4 prong stand

















Part no. 47HLB500

Buzzard

High power 12v energiser suitable for a wide range of applications where mains power is not available.

- 12v Input
- On/off switch
- High & low power setting
- Low battery/pulse indicator
- Rigid 4 prong stand













Part no. 47HLB525

PAGE

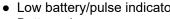
Fire Drake solar energisers

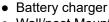
Energisers with integrated high capacity solar panels. Many solar energisers are low in power and/or utilise solar panels which are inadequate to keep the battery charged. The Fire Drake energisers operate at popular power levels, suitable for a range of applications. The energisers have been developed specifically for the UK climate and feature high efficiency solar panels carefully matched to replace the battery energy used while operating as quickly as possible. A battery charger is also included to help keep the battery charged when sunlight is in short supply.

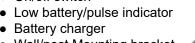
Firedrake 200

Higher power solar energiser with a unique folding 24w solar panel array. Power save technology

- 12v internal battery
- 24 watt solar panel array
- Powersave technology
- On/off switch











Firedrake 34 and 67

Single intergrated 12w panel energiser available in two power options.

- 12v internal battery
- 12 watt solar panel
- Powersave technology
- On/off switch
- Low battery/pulse indicator
- Battery charger

HLS energisers can be mounted on T' section earth stakes and onto the wall /post mounting bracket.

	part no.
Wall/post mounting bracket	47METAL0137
1M T section earth stake	47EST1
1.5m T section earth stake	47ES3





					· · · · · · · · · · · · · · · · · · ·					-
47HLS34	0.33J	0.25J	9.3kv	3.2kv	26mA	12w	7ah	2.5km	3	0
47HLS67	0.67J	0.50J	9.1kv	3.9kv	50mA	12w	12ah	5km	5	1
47HLS200	2.5J	1.8J	11kv	4.6kv	24-140mA	24w	12ah	18km	18	5

Replacement batteries

PAGE

For	part no.	Capacity
47HLS34	47L12-7	7ah
47HLS200, 47HLS67	47L12-12	12ah







Gemini dual input energisers

Gemini energisers will run from either a 12v battery or from a mains power supply, perfect for those wanting flexibility to move between a temporary, portable fence to a low maintenance mains system. Available in 0.8, 1.2 and 2.4 stored joule options.

- 220v mains input* or
- 12v DC input
- Low battery/pulse indicator
- Galvanised stand

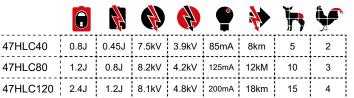






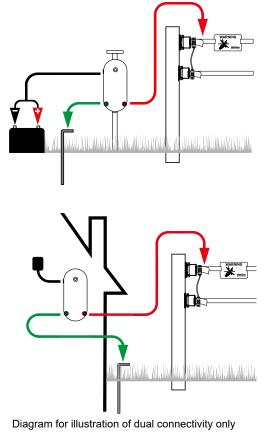














Raptor multi input energisers

The Raptor energisers have been designed to offer the highest level of flexibility, quality and simplicity of operation. Raptor will operate from 12v external battery, 230v AC adaptor and from an internal 6v spring top battery. Our innovative three colour rotating LED relays information on the health of your fence system at a glance. All of these features are housed in a ABS case of unrivalled strength. Raptor is available in 0.8 and 1.7 stored joule options.

- 6v internal battery input*
- 12v external battery power input
- 230v mains input (via adaptor)
- Three colour fence performance monitor
- Low battery indicator
- Robust, heavy duty ABS case
- Galvanised steel stand
- Weatherproof switch









*batteries not included

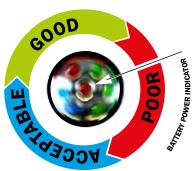
Internal 6v battery back up

In addition to 12v external battery and 230v mains adaptor input, Raptor will operate from an internally loaded 6v spring top (PJ996) battery. The standard capacity battery, commonly used in domestic torches, is widely available in most supermarkets so offers an easily accessible emergency power source. The battery can operate as a reserve back up when charging your 12v battery or when unable to check your 12v battery status. When operating from the AC adaptor the 6v internal battery will serve as an emergency battery back up. Our high capacity version (see page 11) will operate as primary power source on the lower power models and give greater longevity in a back up situation.

		1				*	F	
47HLB80	0.8J	0.7J	8.1kV	4.3kV	107mA	8km	5	2
47HLB170	1.7J	1.3J	8.6kV	4.6kV	180mA	18km	15	4

Fence performance monitor

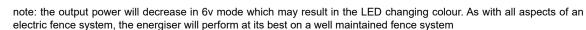
The three colour rotating LED rotates with every pulse, showing how much effective voltage you have on the fence line. A central LED flashes red when your 12v battery is low or when the energiser is running from the 6v internal battery. If operating from the 230v adaptor and have a 6v battery inserted, the LED will indicate that the energiser is operating on battery back up.











6V air alkaline spring top battery



6v 50 amp hour internal battery for Merlin and Raptor energisers



Ah	Part no.	
50	47PJ6-50	12

6V air alkaline battery



40 amp hour battery for 47HLB150. Provides up to 15 weeks power.

Ah	Part no.	
•	47P44	12

9v saline & air akaline batteries



9v batteries for 47HLB300. Non rechargeable

Ah Part no.	
55 47P31S-55	6
90 47P32-90 (ALK)*	4
90 47P32S-90	4
130 47P32S-130	4
165 47P32-165 (ALK)*	4
*air-alkaline	

12v fit one - charge one

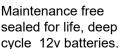
maintenance Twin. free 35ah leisure batteries with battery charger.



Package designed to allow one in use while one is on charge

Ah	Part no.		
		2	

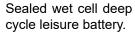
12v AGM batteries





Ah	Part no.	
36	47LS36	1
7	47L12-7	1
12	47L12-12	1

12v sealed batteries





Battery chargers

Manufacturer/brand may change dependent on availability.

Ah	Part no.	
32	47L35	1
75	47L75	1
110	47L110	1

battery

designed

Compact 4 amp battery charger



Battery charger for leisure batteries up to 48 amp hour.

Part no.

7-48 ¦ 47BCF1

Automatic charger to charge deep cycle leisure batteries. Features LED display

Size	for Ah	Part no.	
3.6 Amp	1.2 to 120	47BCL	1
7 Amp	14 to 240	47BCP	1

PAGE



Batteries

part no.	Battery (our part 47D-CELL)
47HLB100	D-cell consumer batteries
47HLB150	47P44 6v 40 amp hour disposable battery + 12v batteries
47HLB300	All 9v saline and alkaline disposable batteries + 12v batteries
47HLB25	12v batteries + 47PJ650
47HLB50	12v batteries
47MB60	12v batteries
47HLB500	12v batteries
47HLB525	12v batteries
47HLC40, 47HLC80,47HLC120	12v batteries
47HLB80, 47HLB170	12v batteries + 47PJ650

12v batteries: We recommend 12v leisure batteries for electric fence applications. This type of battery is designed to be repeatedly discharged and recharged rather than trickle charged like an automotive battery, within which the cells would begin to break down. All battery life figures quoted for 12v units are based on 75 amp hour batteries. **Ah - Amp hour:** Greater amp hour figures indicate a longer battery life.

How long will my battery last?

Take the Ah value from the battery and divide it by the consumption value (Amps - mA) of the energiser

For example - an energiser consuming a maximum of 28mA powered with a 9v battery with a capacity of 90Ah would be as follows - 90 (Amp hours) devided by 0.028 (Amps) = 3214 hours/133 days

Solar assist panels



If you are tired of expending electricity and muscle power bringing your energiser batteries in to charge then solar power is your answer. We offer simple solar assist panels which connect directly to your 12v battery, extending the period between battery charges or cutting out the need for battery charges altogether.

The level at which the panel will extend the life of your battery is dependent on the power of your fencer and the duration and strength of available light. The stronger the fencer, the more quickly it will draw power from the battery and the less time the panel has to replace the charge. The ability of the panel to produce and replace the energy used by your energiser is indicated by the watt capacity of the panel, so a 20 watt panel will replace the charge quicker than a 10 watt.

Dependent on strength of sunlight, the 10 watt panel will extend the battery life of a 0.5 joule fencer up to 400%, but to achieve an autonomous system higher watt panels can be used. The panels are fitted with a charge controller,to guard against overcharging but without over-charging the battery. Both panels are fitted charge controller to avoid overcharge and discharge of the battery. Panels are supplied with a sturdy mounting stand.



Part no.	Panel	Suggested paired energiser
47SP10W	10 watt	47HLB250,47HLB50, 47MB60, 47HLC40/80/120, 47HLB80/170, 47HLB500.
47SP20W	20 watt	All 12v energisers
47SP30W-RS	30 watt	High powered 12v energisers

Electrifiable Security box

Galvanised metal security box for battery energiser and battery. The box is live when connected to your energiser and can de configured to turn on and off when the box unlocked.

Mounted on strong 1m mounting/earthing stake which is insulated from the box. Supplied with an insulated key.

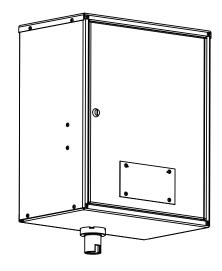
Arm mount for mounting a solar panel on the top is also available.

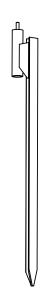
Box internal dimensions W:45 D:27 H:54 cm



Part no.	item
47VP1	security box with stand
•	solar mount for security box









Lead out cable - under-gate cable



HT lead is used to efficiently transfer power over distance or to continue power across spaces such as gates. The cable is in effect part of your live fence, like your tape, wire or net, but insulated to 18,000v to allow you to bury or run the wire without shorting. It is required when installing mains energisers.



	Length	Part no.
[10M	47HT10G
- [25M	47HT25G
	50M	47HT50G
[100M	47HT100G

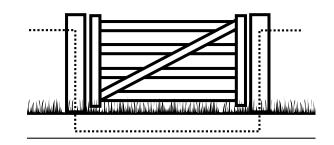
2.5mm core

		· +
1	EON4	47HTG50-25
1	DUIVI	1 47 H I G 50-25

HT connector



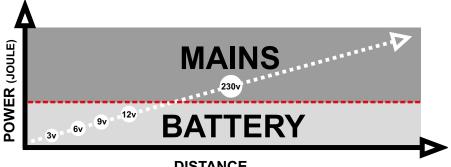
Insulated waterproof connector for HT lead. Efficient splicing for HT lead for those wishing to take power for longer distances or extend existing lead out



Further tips on choosing an energiser



Higher power energisers will fence longer distances but consume more energy. As consumtion increases, larger batteries and mains power are required.



DISTANCE

Higher power energisers can also help maintain effective voltage on inefficient fences. However, ensuring an efficient fence and using an energiser that delivers an appropriate level of power is the safer and more economical approach.

Less resistance on your fence line is akin to a wider tube allowing a better flow of water when compared to a narrower one



If your fence line is full of 'holes' (vegetation) less 'water' will be available to use.



Adding joules can be likened to applying pressure to the water to push it along the fence and past





Super Eagle

Dual output mains energiser with LED fence performance monitor and battery back up input.

- · High power output terminal
- Low power output terminal
- Dual earth terminals
- LED fence monitor
- 12v battery back up input*
- Battery back up monitor
- Wall mount







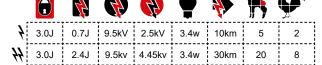












Condor

Dual output mains energiser with LED fence performance monitor and battery back up input.

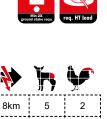
- High power output terminal
- Low power output terminal
- Dual earth terminals
- LED fence monitor
- 12v battery back up input*
- Battery back up monitor
- Wall mount















Part no.

47HM300







Peregrine

3.9J

5.0J

Dual output mains energiser with LED fence performance monitor and battery back up input.

6w

40km

High power output terminal

9.6kV

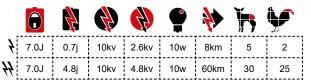
9.6kV

2.6kV

i 4.6kV

- Low power output terminal
- Dual earth terminals
- LED fence monitor
- 12v battery back up input*
- Battery back up monitor
- Wall mount











Part no. 47HM700

Roc 2500 Intelligent power boost energiser

The Roc 2500 is the first product from a new generation of Hotline intelligent, high power 230v energisers.



The Roc 2500 is a 7 stored joule energiser with a 25 joule boost mode that will handle most unforeseen problems that may bring your fence voltage down to an unsecure level. The LED fence indicator offers a quick visual guide on how efficient your fence is operating while the LCD screen gives you detailed voltage information. There are two user user defined low voltage alarms that can be set in the menu which can drive a 12v external siren* to give real time warning if your voltage drops below the required level. Battery back up connection will mean seamless use in the event of mains power loss. The indicator will monitor the battery charge level, which will be trickle charged when mains power is available**.

Time delay warning light

The blue indicator light lets you know that the energiser is entering boost mode to maintain an effective voltage on your fence.

Battery back-up indicator

Charge level indicator for 12v battery back-up

LED fence indicator

A quick visual indicator to let you know how your fence is performing.

Earth terminals

Earthing is an important but overlooked aspect of a good electric fence system. The twin terminals alow easy connection of multiple earth stakes.

LCD display

Backlit LCD screen offering easy to read fence info and visual menu for alarm settings.

Menu control

Menu options and standby interface

Return terminal

Measure your fence voltage at the point of return to give greater insight into how your fence is performing

Live terminal

Live output terminal. Closed design to protect the user.

Battery Back-up connection

Rear connection for external 12v battery back-up.

External alarm connection

Rear connection for external alarm.



* External siren is not included. ** External 12v battery required (not included) minimum 70Ah leisure battery recomended

ROC 2500

Time delay boost mode - Information

High powered energisers have a greater potential to harm humans and animals, especially if a situation arrises where multiple shocks could be recieved. Boost mode ensures an energiser can increase power to maintain effective fence voltage in a way that is safe as possible. An increase in energy is only delivered to the fence following a series of delays and alarms to ensure a temporary heavy load, which could be animal or person, has time to get clear of the fence.



Roc 2500

Single output energiser with timed power boost, fence monitoring and battery back up.

- LCD display
- Fence return terminal
- Dual earth terminals
- LED fence monitor
- Voltage alarms
- 12v battery back up input*
- · Battery back up monitor
- Wall mount





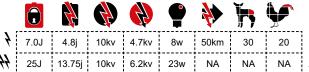
















External siren and strobe

110 decibel external siren and strobe for Roc 2500. Plugs into the rear on the energiser and activated by all alarm conditions.







Replacement parts for electric fence energisers

12v input leads

FOR	Part no.
47HLB100, 47P500, 47P450,47P250	47BL1
GEMINI, RAPTOR	47BL12
47HLB500, 47HLB525	47BL1-A
47HM300, 47HM500 47HM700, 47HMI2500 (BATTERY BACK UP)	47BL15-A



9v input leads

FOR	Part no.
47P300,	47WIRE0109
47HLB300	47WIRE0114



6v input leads

FOR	Part no.	
47P150,	47WIRE0073	
47HLB150	47BT2	
	0 0	9 8

Power supplies and battery chargers

FOR	Part no.
For Gemini & raptor	47PSU0009UK
47HM300, 47HM500 47HM700, 47HMI2500	47PSU0012UK
For Fire Drake*	47BCUK



* Fire Drake battery chargers are not to be used to power the fencer, only recharge the internal battery

Printed circuit boards

A wide range of replacement printed circuit boards are available for energisers old and new.

Testers

There are three main types of electric fence tester. Proximity testers such as the beeper detect energy from a short distance and emit a sound or display an LED to show the presence of power. These are useful in offering a quick indication that a fence is on, but are inadequate for

fault finding or actual voltage readings. Testers such as the 6 'lite are fitted with ground probes to connect earth and fence - much as an animal does when shocked. If designed with multiple lights, this type of tester indicates the amount of voltage present on the fence and can be used to find faults. The tester can be employed to test the fence, the energiser itself and the earth, allowing the user to single out the element causing the problem. Self earthing units such as the fence scout and digital tester use the body to make the earth connection allowing quick and accurate readings. Application of these units range from simple digital Kv reading to giving a direction indication of the fence fault. The fence scout displays Kv reading, amp reading and an arrow to lead you in the direction of the fault.



KV tester

Bright LED's indicate voltage up to 10Kv. Self earthing





pack	
	47KV10

Requires 2 x 3v CR2016 lithium batteries (included)

6 LITE fence tester



Indicates voltage levels on your fence via six neon lights.

Part no.
47P70

Indicator lamp



Flashes with each pulse of the fence.

pack	Part no.
	47P71

Fault finder

Digital directional fault finder. It works on the principle that current flows through the path of least resistance. If there is a short on the fence, larger flows of current (Amps) are detected and displayed and an arrow indicates the direction of the fault.

- Water proof design
- Integrated (removable) belt clip
- Fingers are away from high voltage
- · Bright red LED direction arrows
- One touch operation Simple to use
- Clear indications of the direction of the fault
- Digital readout which shows fence voltage and current
 No wires, no clips means no tangles, no shocks!
- Displays direction to a "high load" fault, not just current flow

Beeper fence tester

Audible power indicator

Testers



Requires 1 x 3v CR2032 lithium battery (included)

Digital volt meter



Self earthing digital Kv tester.

pack	Part no.
1	47P36

Voltage indicator

Flashes to indicate the fence is operating at an effective level. Stops flashing when voltage drops below 3kv.



pack	Part no.
	47FA20



	pack	Part no.	
1		47V10	_

PAGE

9 Plain metal post

Powder coated steel post with welded footplate.

10 Paddock pigtail post

Galvanised 6mm dia. spring steel post with tread-in and insulated pigtail .

11 Gold foot pigtail post

Galvanised 7mm dia. spring steel post with tread-in and insulated pigtail.

pack	Part no.
10	47C2Y-10

Part no. 47P3-10

Part no.	
47FPG00040	1

12 Live post

Powder coated steel live post with welded foot plate. Live shaft to deter pushing

Replacement insulator: 47PL66-3 see page 19

		Part no.
a.[ˈ	10	47PL32-10

13 Metal pigtail post

Powder coated steel post with welded foot plate and plastic pigtail insulator.

Replacement insulator: 47P5-5 see page 19

pack | Part no. | 10 | 47P2-10

14 Reel post

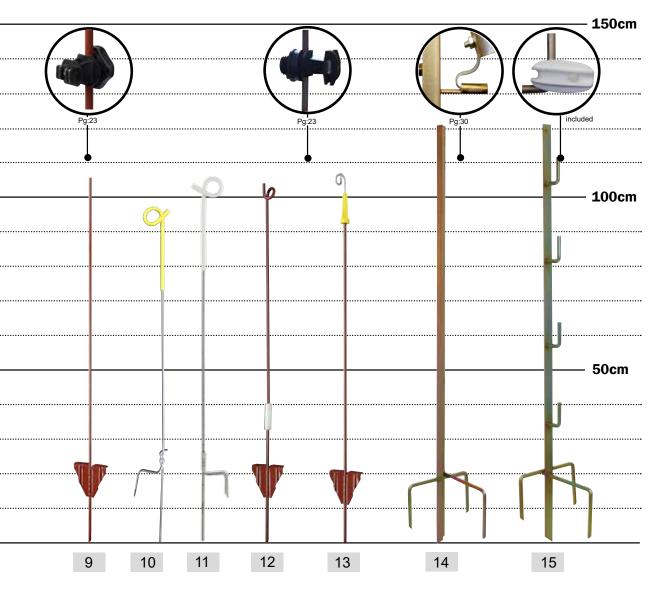
Heavy duty angle steel reel fixing post.

Part no.
47PR2

15 End/corner post

Heavy duty angle steel end & corner post. Includes insulators.

Part no.
47PR3







Guidance

The insulator's primary role is to securely hold the fence line without power leaking from post to ground. A well designed insulator will hold the line securely so that it will not wear the tape, rope or wire when buffeted around by the elements or will allow the line to freely pass through without the impedance of sharp edges.

Corner insulators and end tensioners are designed to take the strain of a tensioned fence line through changes of direction and at terminations. Using a wooden post with this type insulator in temporary situations facilitates the effective tensioning of the line and allows temporary plastic posts to be spaced at greater distances and will extend the life of the tape or wire.

Off-set insulators hold the line away from the post giving extra clearance from hedges and walls, additional insurance from rubbing and chewing or from potential arcing problems if installing on stock fence. Off-sets are also useful for outwitting pests and predators. Installed at the base of a chicken run provides a 'scare' wire for the incoming predator or can be carefully placed to catch the sensitive ears of burrowing pests. This type of insulator can be positioned at every other post as it is less likely to make contact with intervening posts.



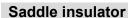
suitable for wire



suitable for tape



suitable for rope





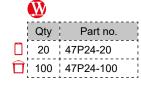
Saddle insulator with integral nail. Suitable for polywire.

W	
Qty	Part no.
50	47P13-50
100	47P13-100
	50

Bobbin insulator



Large flanged bobbin insulator. Suitable for polywire and galvanised wire



Pigtail insulator



Replacement insulator for pigtail and zig-zag posts (9mm dia. hole)



Live insulator



replacement insulator for live post.

Part no.
47PL66-3

Tape insulator for metal posts



Adjustable insulator for metal posts. Suitable for tape up to 20mm. Fits all metal posts with pigtails and plain metal posts.

Qty	Part no.
10	47P47OB-10

Adjustable insulator for metal post



Adjustable insulator for plain metal post 47P3-10. Suitable for rope and wire.

W	K
Qty	Part no.
20	47P9-20
100	47P9-100

Staple insulator



Permanent staple insulator for poly and galvanised wire. Includes staples.

	W	
	Qty	Part no.
	50	47P8-50
П	100	47P8-100

Small bobbin insulator



Small nail on bobbin type insulator for polywire. Includes nails.

W		
Qty	Part no.	
<u> </u>	47P11-50	1

Paddock ring insulator



Screw-in ring insulator. Suitable for wire and rope.



W	R	
	Qty	Part no.
	25	47C37-25



Ring insulator



Reinforced screw-in ring insulator. Suitable for wire and rope.



W	R	
	Qty	Part no.
	20	47P37-20
	100	47P37-100
	200	47P37-200

Bolt on ring insulator



Bolt on ring insulator. Suitable for wire and rope.

W (R
Qty	Part no.
20	47P37B-20

Tube insulator



Tube insulator with staples. Suitable for wire up to 3mm Also available in 2m. lengths.

lacktriangle	
Qty	Part no.
1 00	47TI100-100
2M	47TI2

PAGE

Ring insulator with tape fitting



Large snug insulator



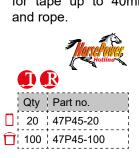
Nail on insulator with broad back plate for greater insulation from the post.

W P		
Qty	Part no.	
<u> </u>	47P39-20	
100	47P39-100	

Nail on tape insulator



Premium nail on tape insulator with overlock mechanism. Suitable for tape up to 40mm



Screw in tape insulator



Premium screw in tape insulator with overlock mechanism. Suitable for tape up to 40mm and rope.



Paddock tape insulator



Nail-on tape insulator with thumb lock clip.



Qty Part no. 1 20 47C45-25

Off-set tape insulator



Premium screw in tape insulator with 150mm off-set and over-lock mechanism. Suitable for rope and tape up to 40mm.





	-
Qty	Part no.
<u> </u>	47P45SL-20

Outrigger off-set insulator

350mm coated steel off-set insulator W OR Qty | Part no. | 10 | 47OR64-10

Double off-set insulator



Double off-set insulator. Holds the fence line 300mm off each side of the fence. Includes staples



Paddock off set ring insulator

200mm off set insulator suitable for wire and rope.







TOP	Paddock

*	
Qty	Part no.
20	47C37SO-20

Garden/pond bracket & insulator

200mm angled steel bracket with three positionable insulators. Ideal for protecting ponds and gardens. Bracket also available in 800mm lengths without



Pulley insulator



Straining insulator for corners and terminations.



Offset ring insulator with tape setting



Corner-end strainer insulator

High strain insulator for end posts and corners. Suitable for rope and wire.



Clamp insulator with buckle



Clamp for maintaining tension within the fence line, terminating and joining lines of tape and providing a gate hook. For tape

up to 4	Morse Policy,
Qty	Part no.
	47P65EB

End tensioning insulator



Insulator with tensioning buckle for securing at end posts. Suitable for tape up to 40mm.



Clamp insulator



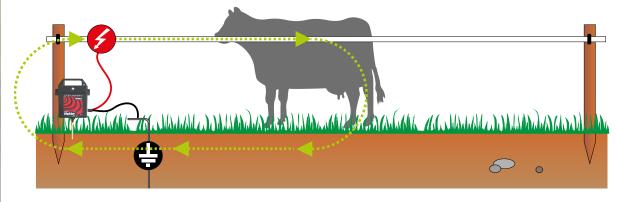
Quick release clamp insulator for tape up to 40mm.

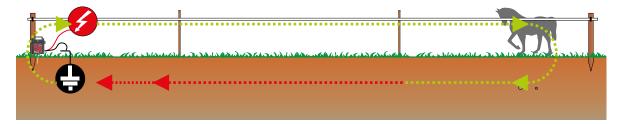


Earthing

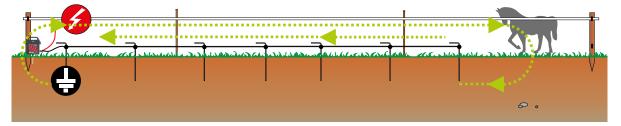
Earthing

Earthing a fence system is perhaps the most overlooked aspect of building an electric fence. This is possibly because the terminology is similar to that of household electric and implies safety role rather than an integral part of fence operation. The fence line is only one half of the circuit – the ground is the other. The two together form an open circuit which is completed, like a switch, when the animal touches both. The fence line operates efficiently as the electricity is carried through highly conductive filaments but on return the pulse is carried through the ground itself. This is a very variable medium which is affected by weather conditions, geology and the extent of the earth system installed. In dry conditions the ground conducts poorly so it is always recommended to at least install the ground stake(s) in damp soil. We recommend a minimum of one 1 metre earth stake for any fence application at at least 1m in depth as the top soil is the most susceptible to change. A fence can only be improved by adding multiple stakes linked with wire driven as deep into the earth is possible. Multiple stakes should be placed 2m apart.





Long fences may require the installation of an ground return wire along the length of the fence to provide an efficient medium for the pulse to return to the energiser. Ground stakes are installed periodically along the length of the return wire minimising the amount of actual ground the pulse needs to travel.



We supply a range of ground stakes including the new heavy duty 'T' section ground stakes. Made of robust, hot dipped galvanised steel these 1m and 1.5m stakes are supplied with bolt connectors for linking multiple stakes together



Ground stake



9mm dia, 1m long ground stake with wing nut and bolt connection.

Len/M	Part no.	
1.0	47ES2	10

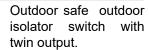
Lightning arrestor



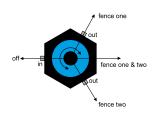
Diverter switch for lightning protection. Channels lightning to ground to minimise damage to the energiser

Qty	Part no.
1	47P74

Cut out switch







	Part no.
	47P33

Crocodile clips



Plastic crocodile clips with stainless steel jaws. New design 12v clips.

Part no.
47PCR6-4

T section ground stake



Heavy duty T section ground stake with bolt connection. 1 & 1.5 metre.

Len/M	Part no.	
1	47EST1	3
1.5	47ES3	1

Warning sign

Rigid plastic warning sign



	•	
W		\mathbb{R}

Part no.	1
47P40	1

Insulator chuck

Speed chuck for screw in insulators.



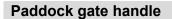
Earth and fence leads

Earth and live lead set.



	Part no.
1 SET	47HTL-EL





Compression sprung insulated gate handle





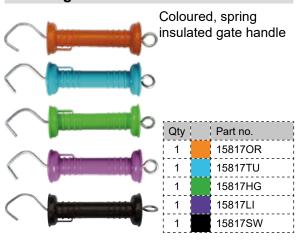
Qty | Part no. 47C17

Premium gate handle

Premium quality insulated gate handle.



farmer gate handles



Tape gate handle

Gate handle with tape fitting buckle.



Gate handle anchors

Insulating gate handle anchors. | Part no. 47P28-2

Handle anchor for tape



3 way gate anchor

Gate anchor with 3 po-



Spring gate

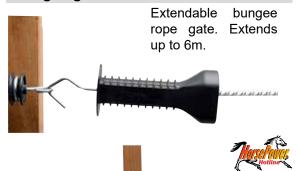
Gate handle and anchors with spring. Extends up to 5m.







Bungee gate



In-line tensioner

In-line tensioner for polywire and rope up to 7mm.



	Part no.
_	47T20

Insulated ratchet tensioner

Insulated ratchet tensioner for steel wire.

Qty | Part no.

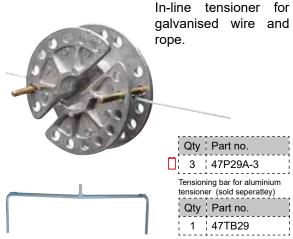
| 1 | 47P59



(N)	Strainrite
MA	FENCING SYSTEMS

Qty	Part no.
1	

Aluminium tensioner



Bolt joiner

Heavy duty Joiner for galvanised wire

Ratchet tensioner

Heavy duty ratchet tensioner for galvanised wire.

	Part no.
	47T26

Rope joiner

Connector for rope up to 6mm dia.

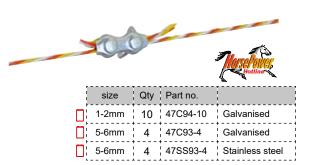




Qty | Part no.

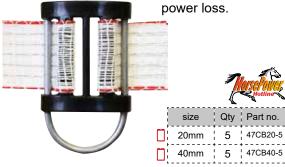
Rope and wire connector pro

Twin bolt steel connector for rope and wire.



Connecting buckle

Tape connection buckles. Essential for joining tape without power loss.



Tape to tape connector



Connector for necting 2 lines of tape. Suitable for tape up to 40mm.



Line to line connector



Multi-line connectors for rope and wire. Connects up to 3 lines.

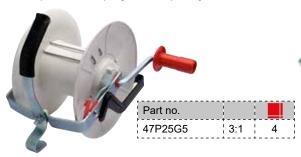
Part no

47CB40-5

Part no.
47C75-2

Premium reel

Premium reel with UV spool warranty. Available with geared 3:1 ratio for bringing the fence line efficiently and quickly or standard 1:1. Spools up to 200m (up to 20mm) tape capacity and up to 800m polywire capacity.



Paddock Essentials 3:1 reel

3:1 geared reel with steel frame, handle and wire guide. Available pre-spooled with 500m of Paddock polywire and empty.



Paddock reel

Plastic reel for dividing paddocks. Hooks onto existing fence.



Clutched reel



ABS reel with metal frame and clutch. Fits reel fixing post (47PR2) and metal posts. Compatable with 47BR1-3 bracket.

Part no.	
47P25-300	

Three reel systems

400m galvanised wire system

- 3 premium 3:1 reels
- 3 400m spools of galvanised wire
- 40 multiwire posts
- 1 reel fixing post (with reel brackets)
- 1 end post with insulators
- 1 set line connectors

Part no. 47TP400G

500m polywire wire system

- 3 premium 3:1 reels
- 3 500m spools of 6 strand polywire
- 50 multiwire posts
- 1 reel fixing post (with reel brackets)
- 2 end posts with insulators
- 1 set line connectors

Part no. 47TP500CP

500m geared **BRAIDED** wire system

- 3 premium 3:1 reels
- 3 500m spools of braided polywire
- 50 multiwire posts
- 1 reel fixing post (with reel brackets)
- 2 end posts with insulators
- 1 set line connectors

Part no. 47TP500S

Starter kit

- 47HLB100 Shrike energiser
- **Batteries**
- 200m of 10mm tape
- 10 multiwire posts
- 2 end tensioners
- 1 pocket tester · 2 gate handles with

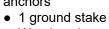


Part no. 47HK100 The practical and flexible way of protecting existing fences, hedges and walls and for subdividing fields or creating temporary enclosures. 3 reel systems come complete and packaged in one carton with the wire pre-wound for easy installation.



Handy horse kit

- 47HLB50 Hobby 12v energiser
- 200m of 10mm tape
- 20 multiwire posts
- 2 end tensioners
- 1 pocket tester 2 gate handles with





47HK450-200





Tape Rope and Wire

Tape, rope or wire, what do you choose? All conduct a charge in the same way, what differs is the medium within which the conductors are carried. The primary concern is visibility. For many animals an electric fence acts as a psychological barrier and they have to be able to see it to avoid it. This is also a consideration when considering colour - a product with a low visual impact from a human point is also much harder for an animal to see. Products which offer a higher contrast with the surrounding environment are more likely to be effective. Tapes and ropes are more common in equine applications and both have pros and cons. Tape offers the greater range of visibility as it is available up to 40mm in width and as such is often used as alternative to traditional fencing. As its profile is wide and flat it is susceptible to catching the wind which overtime can break down the conductors, as can constant moving and re-erecting. Many Hotline tapes have thick polyurethane webbing with extra thick edging to extend the life of the fence. Rope is a very good alternative to tape and what is lost on visibility is made up for in durability.

Poly-tapes, ropes and wires conduct power through thin metal conductors running through the length. The more metal in a fence line the more efficient it will be. Steel conductors have a good balance of conductivity and tensile strength and copper (usually nickel plated) conducts extremely well but has a lower tensile strength. Products with a combination of the two aim to take advantage of the strength of steel while using the copper to reduce the overall resistance of the product. Resistance is measured in Ohms, A lower Ohm value indicates the product offers less resistance to the energy flowing through it and thus will take the power further.

 A	()			C'S	0	
 dimension (mm)	dimension (m)	colour	PE filaments	conductors	braking strain (kg)	resistance (ohms)

Specifications W Cu **∢** ▶ 60kg 47TC49-1 10mm 100m 0.45/0.33 0.28 4ss0.20 18 5.8 47TC41-2 200m 0.45/0.33 0.28 4ss0.20 5.8 16 10_{mm} 60kg 47TC43-2 20mm 200m 0.5 0.38 3ss0.20 3Cu0.22 68kg 0.3 8 47TC46-2 0.50/0.9 0.38 5ss0.20 5Cu0.22 40mm 200m 125kg 0.07 6 40mm 47TC46G-2 200m 0.50/0.9 0.38 5ss0.20 5Cu0.22 125kg 0.07 6 47C42-2 12MM 200M 0.33 0.33 4ss0.15 8.98 10 52kg 47C43-2 20mm 200m 0.33 0.33 4ss0.15 76kg 8.98 8 47C43G-2 20mm 200m 0.33 0.33 4ss0.15 76kg 8.98 8 47C46-2 200m 0.33 40mm 0.33 8ss0.15 146kg 4.5 4 200m 47PR40-200 40mm 0.5/0.9 0.5 10ss0.4 238kg 0.48 4 47PR40G-200 40mm 200m 0.5/0.9 0.5 10ss0.4 238kg 0.48 \bigoplus 47C21-250 1.2mm 250m 0.30 6ss0.15 55kg 7.4 4 47C21-500 1.2mm 500m 0.30 6ss0.15 55kg 7.4 4 100m 47P10-100G 50 1.2mm 0.30 4ss0.15 47kg 9.0 47P10-200 200m 0.33 3ss0.15 40kg 12.0 50 1.2mm 47P10-400 400m 0.33 3ss0 15 40kg 12.0 24 1.2mm 6ss0.20 47P21-250 2mm 250m 0.33 85kg 3.9 16 85kg 47P21-500 500m 0.33 6ss0.20 3.9 12 2_{mm} 47P62-250 250m 0.3 6ss0.15 3Cu0.22 77kg 0.26 16 2mm 0.3 6ss0.15 3Cu0.22 77kg 0.26 12 47P62-500 2_{mm} 500m 47B9-200 200m 0.28 6ss0.15 3Cu0.25 105kg 0.06 15 3mm 47B9-500 3_{mm} 500m 0.28 6ss0.15 3Cu0.25 105kg 0.06 6 200m PP1000 47C51-2 6mm 6ss0.20 248kg 3.8 6 47P51-2 200m 0.41 3ss0.20 2Cu0.22 187kg 0.39 6mm 6 47P51G-2 6mm 200m 0.41 3ss0.20 2Cu0.22 187kg 0.39 47P51G-4 6mm 400m 0.41 3ss0.20 2Cu0.22 187kg 0.39 3 200m 4 47PR7 6mm 0.41 9ss0.28 357kg 1.24 47P22 1.6mm 200m 7s 0.01 1.6mm 400m 4 47P23 7s 0.01 47HT650 2.5mm 650m 1s2.5 0.035 1

Paddock electro tape



12

20 200

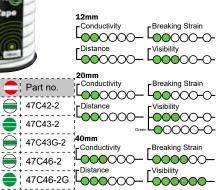
20 200

40 200

40 200

200 ¦

White or green tape with stainless steel conductors.

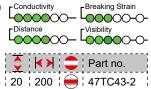


20mm turbocharge tape

Part no.



Premium white tape with copper and steel conductors,

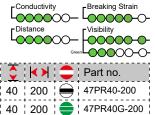




40mm professional tape



Premium super durable tape with thick stainless steel conductors. Available in white or green.





6mm supercharge rope



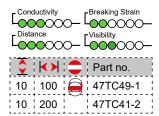
Premium white/ green & white rope with stainless steel and copper conductors.

Conductivity Breaking Strain Distance Visibility
Part no.
6 200
6 200 6 47P51-2G
6 400 6 47P51-4G

10mm turbocharge tape



Premium white tape stainless with steel conductors.

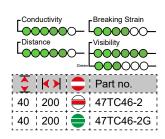




40mm turbocharge tape



Premium white tape with copper and steel conductors.

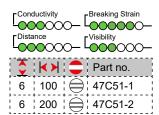




6mm paddock electro rope

White paddock rope with stainless steel conductors.









6mm professional rope



Premium heavy duty 6mm rope with thick stainless steel conductors.



-Cond	ductivity	→ Breaking Strain	
400	0000	O— LOOOOOO	_
r Dista	ance	r Visibility	
400	0000	0— 6000 000	_
<u> </u>	114 51		
		╎ <mark> </mark>	j
6	200		
: -		: 🔾 :	







4 strand supercharge wire

Polywire with 4 stainless steel conductors.



Conductivity Distance	Breaking Strain Visibility
♦ ♦ ♦	Part no.
1.2 100	47P10-1G

6 strand paddock wire

Polywire with 6 stainless steel conductors.



Conductivity Breaking Strain
<u></u>
rDistance rVisibility r

TATION AT BUT
💆 📢 👅 Part no.
1.2 250
·+
1.2 500 47C21-500

6 strand supercharge wire

Polywire with 6 stainless steel conductors



Conductivity Distance	Breaking Strain Visibility
C K ≯ C	Part no.
2.0 250	47P21-250
2.0 500	47P21-500

9 strand turbocharge wire

Polywire with 3 copper and 6 stainless steel conductors



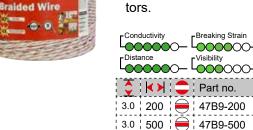
Conductivity Distance	Breaking Strain Visibility
<u> </u>	Part no.
2.0 250	47P62-250
2.0 500	47P62-500

Braided wire

Hetline

Turbocharge

3mm Braided polywire. Higher breaking strain and greater visibility than poly wire. 6 stanless steel conductors and 3 copper conductors.



3.0 ¦ 500

Galvanised wire

7 strand galvanised steel wire. Malleable wire which is easy to work with and highly conductive.



A	()	Part no.
1.5	200	47P22
1.5	400	47P23

2.5mm high tensile steel wire





Part no. ¦ 47HT650 2.5 ¦ 650 ¦€

Fence pliers



Multi function fence tool.

Qty	Part no.
1	47FP25

Spinning jenny



High tensile wire dispenser . With ground spike

Part no.	
47SJ25	

Gripple plus

For connection of high tensile wire, barbed wire and stock fence.

Medium - 2 - 3.25mm wire. 400 kg max. load. **Large** 3.25- 4.2mm. 600kg max. load.

Barbed 2.5mm. max. load 330kg

size	Qty	Part no.
М	20	47GRIP0001
L	20	47GRIP0009
; B	20	47GRIP0010

t -gripple



For rapid tying off of high tensile wire, barbed wire and stock fence. Suitable for 2.00 -3.25mm wire

Qty	Part no.	
20	47GRIP0006	1

Gripple Contractor Tool



All metal construction, 10:1 mechanical advantage helps you apply the same tension, with less effort. Gear driven, long handles for increased leverage. Quick release cam and ergonomic grips for added comfort

Qty	Part no.
1	47GRIP0008

Gripple tool



Lightweight Gripple gear-drive tension tool with torq tension gauge.

Part no.
47GRIP0004

35

Strainrite contractor range



Ezecrimp 5 in one tool

Crimps ALL Strainrite Wire Crimp Sleeves

Wire cutting & wire stripping of underground cable Staple pulling

Hardened cutlery grade stainless steel jaws

Lightweight and compact handles

Strong double action with over-centre lever for superior strength crimps



Product	Part No.
Ezepull 5-in-1 Tool	47FEZ00060

Ezecrimp 4 in one tool

Crimps Strainrite 2.50mm Crimp Sleeves

Wire cutting & wire stripping of underground cable Staple pulling

Hardened cutlery grade stainless steel jaws Lightweight and compact handles

Strong double action with over-centre lever for superior strength crimps

Product	Part No.
Ezepull 4-in-1 Tool	47FEZ00050

Ezecrimp 3 in one tool

Crimps 2.50mm, 3.15mm, 4.00mm electric and barbed wire crimps

Wire cutting & wire stripping of underground cable

Staple pulling

Heat treated tool steel jaws

Strong double action with over-centre lever for superior strength crimps

Product	Part No.
Ezecrimp 3-in-1 Tool	47FEZ00055

Wire crimps

Crimp sleeves make fast, easy wire joins that exceed the breaking strain of the wire!

All regular crimp sleeves now with waterresistant grit adhesive for all-weather application.

NZ made.

Product	Part No.
2.50mm Crimp Pottle 100	47FWC00024
3.15mm Crimp Pottle 50	47FWC00034
4.00mm Crimp Pottle 50	47FWC00044
Barbed Wire Crimp Pottle 50	47FWC00018
Electric Fencing Crimp Pottle 50	47FWC00014

2.50mm Crimp Sleeves For use on 1.6mm - 2.5mm fencing wire

3.15mm Crimp Sleeves For use on 3.15mm or 10 gauge and 1.6mm HT barbed wire

4.00mm Crimp Sleeves For use on 3.55mm—4.00mm (9 to 8 gauge) fencing wire & 2.00mm HT barbed wire

Barbed Wire Crimp Sleeves For use on 2.50mm (12 to 12 gauge) mild steel barbed fencing wire

Electric Fencing Crimp Sleeves For use on 1.6mm—2.7mm (16 to12.5 gauge) fencing wire











Knipex wire cutters

Exceptional cutting performance with minimum effort because of unsurpassed effective lever action design.

Induction-hardened precision cutting edges for soft, hard, and piano wire.

Cutting edge hardness approximately 64HRc.

Cuts components such as bolts, nails, rivets, etc. up to 5.2mm dia.

Chrome vanadium heavy-duty steel, forged, oil-hardened.

Scalloped jaw for improved cutting performance.



Product Part No. Knipex Scalloped Jaw 47FKX00010 Knipex Straight Jaw 47FKX00011

HT Wire cutter



Product	Part No.
Strainrite HT Wire Cutter	47FKX00060

Fencing pliers

Cuts and twists wire Single tooth jaws for lifting and pulling staples. Quality Chrome



Product	Part No.
Fencing Pliers	47FKX00152

Staple puller



Wire twister

Used for neat and easy wire tying. Compact & easy to carry around. Gold passivated for increased

corrosion protection.

Part No.
47FTW00020
47FTW00030

Easy wire puller

Easily tie off/staple wire hands free! Quick and easily tensions either fencing or netting wire around strainer posts





Product	Part No.
Easy Wire Puller	47FWT50010

Easycut chisel

Enhanced durability. Designed specifically for fence construction. Optimum strength and cutting performance. Ergonomic PVC hand grip.





Standard Chain Strainer with Spring

Wear-resistant smooth grip SG iron jaws Heavy duty rivets and high tensile pivot bolt.

Computer-designed geometry provides effective grip on zinc/aluminium fencing wire.

One piece gold zinc passivated handle. Large 27mm dia, easy on the hands.

Available with spring-loaded claws for one hand operation.

Product	Part No.
Std Chain Strainer MK2 (With Spring)	47FCS00700

Boundary Strainer (hook type)

Features Hook Type

Complete with a 6-metre chain and hook Recommended for use with Netting Fence Strainer Boards





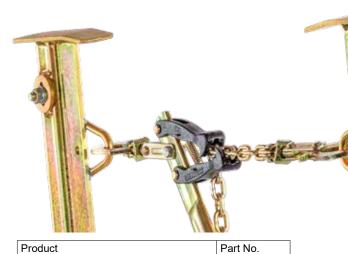
Product	Part No.
Boundary strainer	47FBY00020

900mm netting strainer board - Wedge type

Design press formed steel strainer boards Compatible with most mesh & netting Features the Wedge clamp design Overall Height – 900mm



900mm netting strainer board



47FNB00014





Joulesheild High strain insulator

Large surface area and shielding Rounded surfaces shed water faster 75% increased insulation performance Patented design, guaranteed for 12 years



Product	Qty	Part No.
JS high strain insulator	25	47FIN00017

Heavy duty underground cable

Manufactured from soft 12.5 ga galvanised wire

Easy to work with

Double-insulated, high quality UV resistant LDPE.



Product	Qty	Part No.
Underground cable	100M	47FCA00292

Gate handle for bungee connection

LDPE, UV stabalised gate handle. Virtually unbreakable! Box of 10



Product	Qty	Part No.
Gate handle for bungee	10	47FGH00075

Joulesheild pinlock insulator

Large surface area and shielding
Heavy duty jaws cope with maximum wire
loads. 75% increased insulation performance



Product	Qty	Part No.
JS Pinlock insulator	200	47FIN00088

Electric bungee cord

Premium Quality Industrial Strength Electric cord

Unique, specially formulated 8mm rubber polymer solid core

Braided with 4 stainless steel wires



Product	Qty	Part No.
Bungee cord	50m	47FCO00050

Brianex bungee connector

Quick connector to join bungee cord to gate handle 47FGH00075



Product	Qty	Part No.
Brianex connector	10	47FCL00175

Paddock Essentials

MB60

Medium powered 12v energiser.

- 12v input
- Pulse indicator
- Galvanised stand



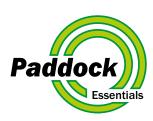




Paddock posts

Lightweight multiwire plastic posts. Pack of 10.

Length	Part no.
90cm	14995
120cm	14996



Part no.
47MB60



Paddock geared reel

3:1 geared reel with steel frame and handle and wire guide. Available pre-spooled with 500m of Paddock polywire and empty.



Paddock reel

Empty

Plastic reel for dividing paddocks. Hooks onto existing fence.



Part no.		
47R25	i	2

6 strand paddock wire

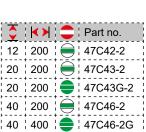
Polywire with 6 stainless steel conductors.



¥	K ≯	Part no.
		47C21-250
1.2	500	47C21-500

Paddock electro tape

White or green paddock tape with stainless steel conductors.





Paddock tape insulator

Part no.

6mm Paddock rope

White paddock rope

with 6 stainless steel

conductors.

Nail on tape insulator with locking thumb tab.



	1
Qty	Part no.
<u> </u>	47C45-25

Paddock off set insulator



Paddock gate handle

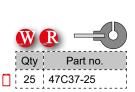
Compression sprung gate handle.





Paddock ring insulator

Screw-in ring insulator. Suitable for wire and rope.





Paddock gate handle anchors

Insulated gate handle anchor.



Qty | Part no.



Poultry netting

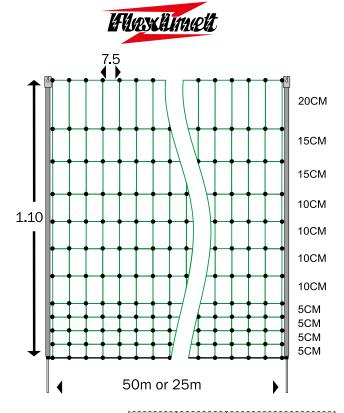
Electric netting is the ideal option for those keeping a small amount of birds in a domestic setting, preferring a solution which can be moved and stored easily and has a low visual impact. Available in green and orange, poultry net has 14 integral posts and a gate post allowing a small section of net to be hinged out for access.

Includes

15 posts (9 in 25m, 6 in 16m) ● 13 ground pins ● 4 corner guys ● repair kit.

How it works

The net is manufactured from polyurethane with metal filaments running through the horizontal strands (apart from the bottom base line). This is mounted on posts. To 'charge' the net an energiser is connected to the net and to the ground via an earth stake. This forms an open circuit. When an animal comes into contact with the net and ground it completes the circuit and gets a shock. This is why the net itself does not need to be erected in a loop and can be erected in a straight line if required. The energiser produces a high voltage pulse approximately once every second. Foxes, like most animals, investigate unfamiliar additions to their environment and it is at this point the shock is delivered. Although the net is not of insurmountable height, once the animal has been shocked the net will be a sufficient enough psychological barrier that the animal will be unlikely to attempt a breech.



Length	Colour	Part no.
25m	green	47MH2LG
50M	green	47MH5LG

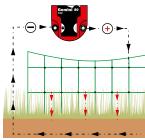
replacement posts. 47PMPBL (black)

Considerations

As the live lines of poultry netting are very close to the ground they are susceptible to 'leakage'. This is where undergrowth completes the loop and draws power from the fence to ground. We recommend a minimum of 3,500v on your fence to provide an effective deterrent. The higher the joule rating on your energiser the greater level of 'leakage' your system will cope with and maintain an effective voltage. The bottom line is not live but all other horizontal lines are. The key is trying to keep the live ones clear of any external contacts. This can be difficult, especially on undulating ground as your bottom line is effectively covering a shorter linear distance to the top line which causes the net to sag. You may need to add extra posts and/or corner posts to achieve better tension. In some cases keeping the lowest live line free from vegetation is impossible and isolation from the live matrix may be needed. This is achieved by simply cutting the line at the first and last post. You can reconnect if needed by using the ferrules in the supplied repair kit.







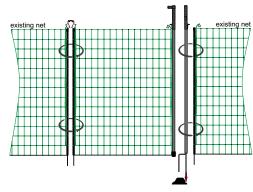
The increasing popularity of electric poultry netting in domestic settings has highlighted potential dangers for some small animals. Amphibians and small mammals have been known to get trapped while attempting to navigate through the lowest section of net and in some cases have died as a result of receiving multiple shocks. This problem can be resolved by erecting a low barrier in front of the net or by disconnecting the lowest line as outlined above.

Flexible poultry gate system

The Hot Gate system allows access without the need to disconnect the energiser or untie fiddly cords. When topping up feed and water the Hot Gate can even be operated with one hand. The Hot-Gate can be added to any existing poultry net system and we now include the gate system into all poultry kits

To view an installation video visit https://youtu.be/psymayBbMaQ or scan the QR code with your smart phone







Length		Part no.	-
		47PGS-1	

Rigid poultry gate system

Our rigid poultry gate is a framed, hinged gate gateway for your poultry net. The insulated top bar alows safe access without the need to turn off your energiser.



Length	Height	Colour	Part no.
0.8m	1.2m	green	47RGS-120





Poultry kits with Hot-Gate

Electric netting kits are the ideal option for those keeping a small amount of birds in a domestic setting and prefer a solution which can be moved and stored easily and has a low visual impact. The poultry net has 14 integral posts. Electrified poultry netting kits provide an effective deterrent against most predators and can be powered from 230v or from 12v battery.

25M Poultry Kit Contents

- 47MH2LG 25m green poultry net
- 4 x 47CP112 Double spike corner posts
- 47HLC80 Gemini Energiser
- 47PGS-1 Hot Gate system
- 47KV10 tester
- 47ES2 earth spike
- Ground skewers, pegs and corner guys & warning sign.

50M Poultry Kit Contents

- 47MH5LG 50m green poultry net
- 4 x 47CP112 Double spike corner posts
- 47HLC120 Gemini Energiser
- 47PGS-1 Hot Gate system
- 47KV10 tester
- 47ES2 earth spike
- Ground skewers, pegs and corner guys & warning sign.

Length	Colour	Part no.
25m	green	47GPK25
50m	green	47GPK50



Corner posts

Extra rigid, double spike corner posts for poultry nets. 19mm dia. PVC posts made slightly higher than the net to help lift to top line and reduce sagging.



Repair kits for netting

2 x top post caps

2 x bottom post clips

4 x ferrules crimps

2 x approximate 3m

white guy wire (not pictured)

1 x approximate 3m live wire

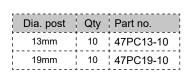
1 x approximate 3m non live

wire

Col	Part no.
Green	47RKG
Orange	47RKO

Post clips

Intermediate clips for 13 and 19mm netting posts. Enables individual lines to be lifted to help account for undulating ground.





Fibreglass poultry posts

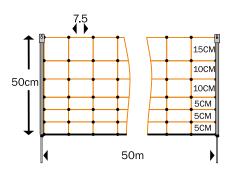
Replacement doulble spike 13mm poultry posts manufactured from rigid fibreglass. White with intergrated wire fittings.



Part no.	
47PMPBL-FP /	

Rabbit net

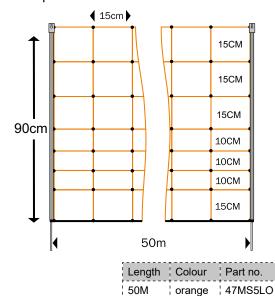
Small mesh netting for rabbits. Includes 14 13mm posts, 13 ground pins, 4 corner guys and repair kit



Colour	Part no.
	47MR5LO

Sheep net

Sheep netting. Includes 14 posts, 2 corner guys and repair kit



Repair ferrules

Repair ferrules for connecting replacement lengths of wire

QTY	Part no.
10	47NETFEU



Netting warning sign

Flexible warning sign

Part no

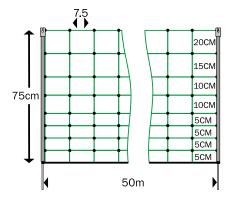
47N40

13mm



Super rabbit net

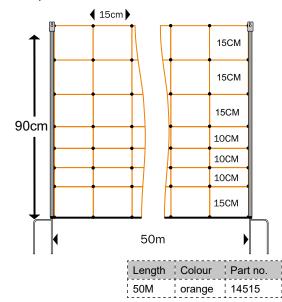
Small mesh netting for rabbits. Includes 14 13mm posts, 13 ground pins, 4 corner guys and repair kit



Length	Colour	Part no.		
50M	green	47MSR5LG		
50M	orange	47MSR5LO		

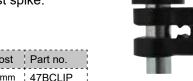
Sheep net with double spike posts

Sheep netting. Includes 14 posts, 2 corner guys and repair kit



Bottom clips

Replacement wire clips for the post spike.



13mm ¦ 47BCLIP

Pegs

Replacement plastic corner pegs and galvanised base pegs

Туре	Qty	Part no.
Plastic	2	47PEGSPRS
Galv.	each	47SK1



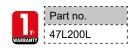
Explorer Lithium rechareable torch

Dual beam LED torch with soft feel case.

- 10w high power LED
- Lithium battery
- Two main beam levels
- Flashing mode
- 15 LED work lamp
- Up to 15 hour battery life
- Mains charger
- Carry strap







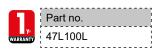
Explorer Mini Solar torch

Multi-functional torch with solar charging.

- Twin level main beam
- Fold up work light
- Solar charging
- 3.7V 3000mAH Lithium battery
- Mini USB port









Tail tape

Coloured identification tape. Reinforced with fibre but easy to tear. Available in four colours and in 10m and 50m rolls..

Colour	length	Part no.
Red	10m	47P60R
!	50m	47P60R-50
Blue	10m	47P60B
	50m	47P60B-50
Green	10m	47P60G
	50m	47P60G-50
Yellow	10m	47P60Y
	50m	47P60Y-50







Battery and solar pump



There is an increasing requirement for land owners and managers to keep livestock away from watercourses. The European Water Framework Directive (WFD) has been establishing a framework for the protection of inland waters, transitional waters (estuaries), coastal waters and groundwater. This is covered in the UK by The Water Environment Regulations 2003 for England and Wales; the Water Environment and Water Services (Scotland) Act 2003 and The Water Environment Regulations 2003 for Northern Ireland.

Diffuse water pollution from agriculture accounts for 61% of nitrogen entering rivers, up to 40% of phosphorus and 75% of sediment. Fencing off watercourses protects from river bank erosion and relieves poaching so contributes greatly to cleaner water and promotes growth of healthy native flora and fauna. We can all agree that this is great for our environment, but for land owners who rely on watercourses to water their livestock, it can be very problematic. Our battery and solar water pumps have been developed in response to this problem.

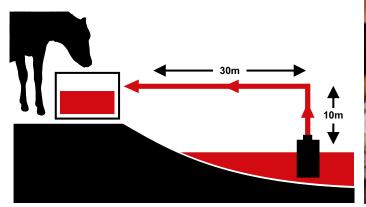
We have been working with livestock farmers, Natural England and the Catchment Sensitive Farming initiative (CSF) to provide an easy, reliable and self sufficient way of providing water to livestock when watercourses are fenced off. We have been manufacturing electric energisers for over 40 years and so we are accustomed to making and supplying products which need to operate out in the elements, in remote areas and from independent power sources. Like our energisers, the system needed to be reliable, easily transportable and capable of catering for large numbers of different types of animals.

The solar and battery kits easily integrate with all standard water troughs so there is no need to train animals as with traditional pasture pumps which are also limited in the number of animals they can supply. The solar kit has supplied groups of 90 cattle with all their water requirements, without any need to change or charge batteries. Although, the kit is marginally more expensive than a pasture pump, it is far more flexible in application and compared with the cost of mains water, they are very economical.

The Pump kits

The water pump kits are simple 12v pumping systems based upon proven water-pumping technology which allows the transference of large volumes of water. The trough is fitted with float switch which turns on the submersible pump as the water level drops. There is no need for balancing tanks or header tanks, just a standard water trough. The pump is connected to 30m of hose which feeds back from the water source to the trough. The kit is powered by 12v battery* which sits in a weatherproof control box. The basic solar option includes a high efficiency 60w solar panel.** The system is compatible with a solar array of up to 300w.

Example: for 4 hours run time per day we would recommend 3 x 60w solar panels





*Battery not included. We recommend a minimum of 75ah.**Depending on daily run time and time of year, a 60w panel alone may not be sufficient to achieve complete self sufficiency. Additional panels may be required.

Contents



Capacity

per pump

Water requirements vary greatly for livestock and are influenced by temperature, humidity and feed source. Always make allowances for this. The majority of grazing animals are herd animals and will want to drink socially together so trough size should allow for this. Increasing head will reduce pump outputs. At 10m head the pump will run at approximately 65% of peak output. Increasing the distance the pump works over will also increase head and therefore reduce pump output. Solar recharge times vary with weather conditions. The below recommendations allows for 4 hrs recharge time daily and so outputs in summer are likely to be much higher. If not using solar option the periods between battery charges will depend on the level of usage.

Head (m)	0	1	2	3	4	5	10
Output litres per hour	320	305	300	285	275	265	210

	Cattle<200kg	Cattle>400kg	Dry cows	Milking Beef	Milking Dairy	Horses	Sheep
Approx. Water Requirement	10-35L	30-50L	30-50L	70-80L	80-200L	30-50L	2-5L
Animal capacity per pump	up to 120	up to 40	up to 40	up to 17	up to 15	up to 40	600
	20kg pigs	50kg pigs	90kg pigs	Pigs dry sow	pig milking		
Approx. Water Requirement	1L	5L	9L	9-18L	18-36L		
Animal capacity	up to 1200	up to 240	up to	up to 130	66		

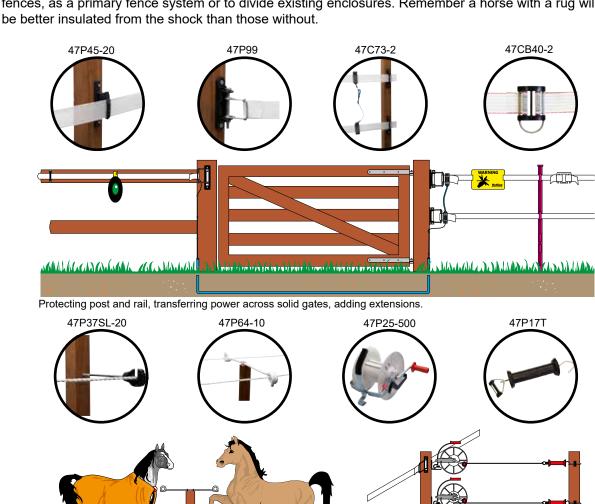
133

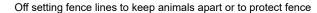
Building a system

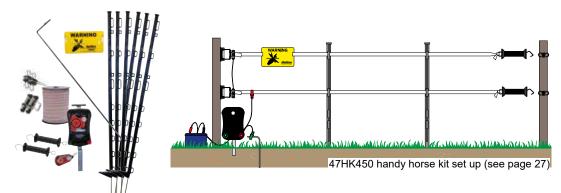
We hope the following pages will help to show how products combine to form systems. The examples are by no means exhaustive or specific to the animals we have suggested, so you can take different elements to provide a solution that is best for you. The wire heights are also a guide, these to can be modified to best suit your animals or combined if you wish to keep or to protect from more than one type of animal. All animals behave differently, use electric fencing to out wit them and take into consideration how the animal is likely to contact the fence. For example, when rabbits jump they are free from earth contact and immune from shock. By wiring a line to earth the animal will receive a shock from 2 wires rather than the ground and wire. The key elements of an electric fence are sufficient voltage to provide a deterrent and visibility, so the animal can learn to avoid the fence.

Horses

Horses are intelligent and will avoid a fences if they have had experience of been shocked. Visibility of fence is an important aspect. Electric fences can be used to prevent rubbing and chewing on existing fences, as a primary fence system or to divide existing enclosures. Remember a horse with a rug will be better insulated from the shock than those without.

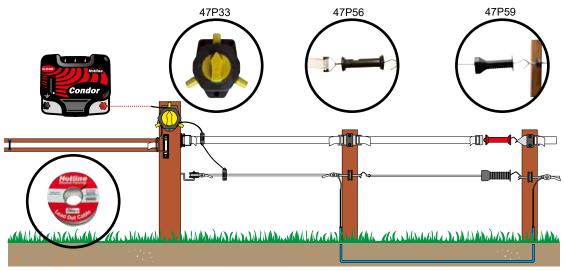






Using reels for temporary divisions.

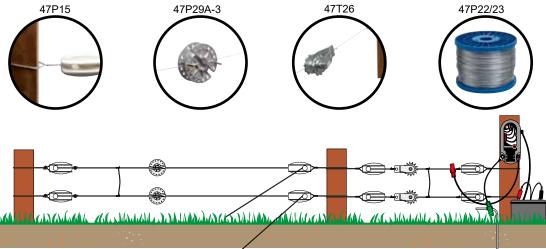




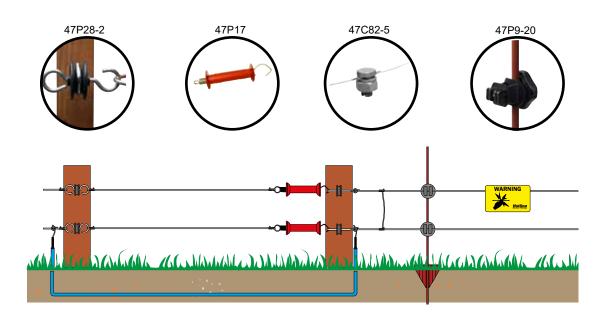
Twin zone isolation switch with indoor mains insulation, tape and rope gates (with power transference).

Pig

Pigs can heap soil up onto the fence line, shorting power to ground so choose a durable fence material such as galvanised wire which will allow you to clear the lines without fear of breakage. Pigs also have a tendency to run forward when shocked so a well tensioned system will provide a solid physical barrier. The down side of a wire system is that is is less visible so you may wish to run a line of tape or rope as well, at least in training stages.



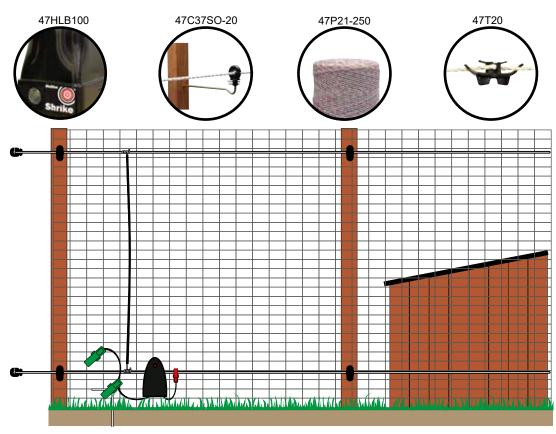
Tensioned galvanised pig system with two methods of tension



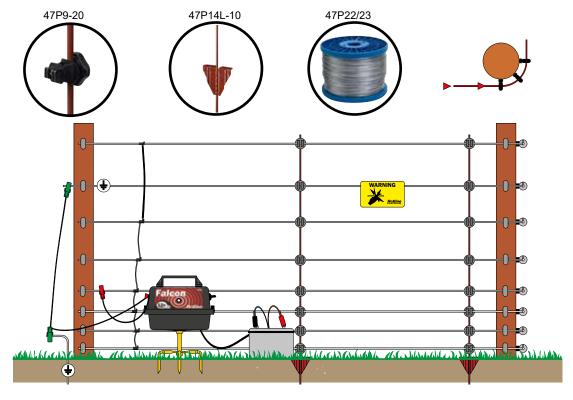


Fox protection

For those wishing to protect a small number of poultry and want to move the enclosure from time to time, netting is the best solution (page 28). It is also easy to re-enforce an existing mesh run with two offset wires, linking the mesh to the earth stake to provide a good contact for climbing animals. It is crucial to site your enclosure away from hedges, walls or out buildings which may provide a handy launch pad into your birds. Keeping the fence energised at all times will ensure the fox does not have the freedom to find a way in.

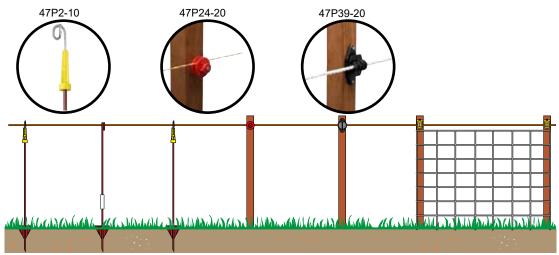


Predator systems using galvanised wire and metal posts are highly efficient and offer the flexibility to alter wire heights and add both hot wires and earth wires as needed. Using simple ring insulators around the outside of strainer posts will deter climbing.



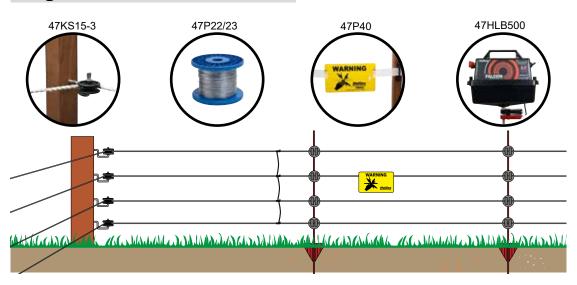


Livestock



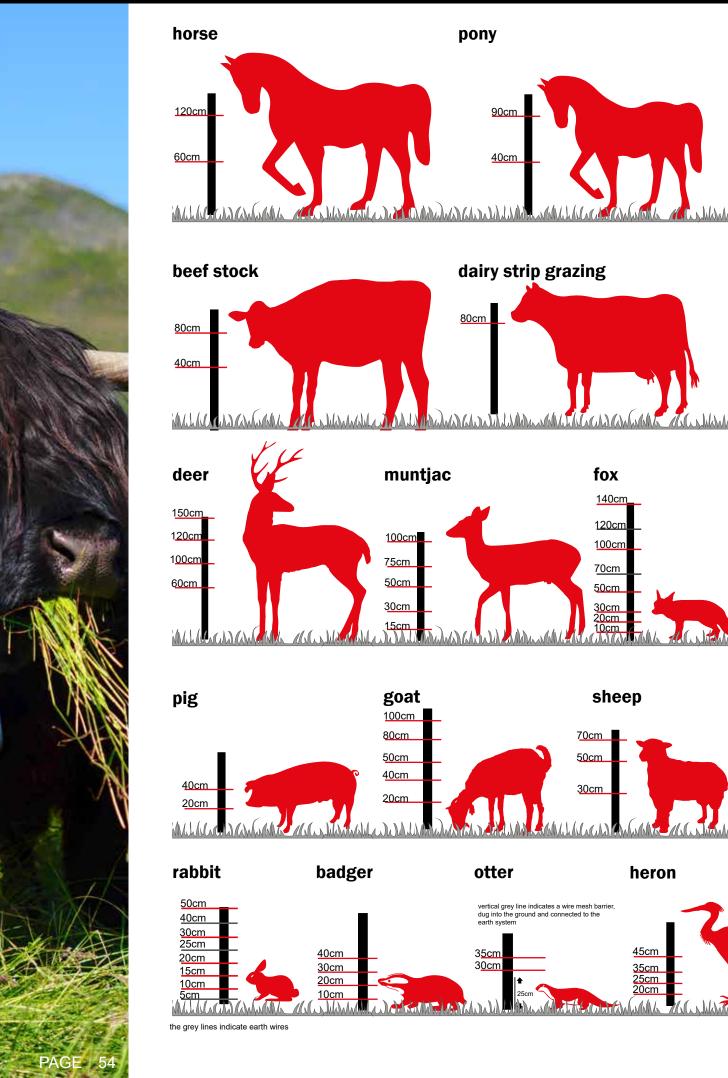
Metal posts for strip grazing*, insulators for polywire, short off sets for clearance for safe clearance of stock fence. *Live posts are used intermittently to deter animals pushing over posts.

Badger



Area guide

Distances and areas are approximate only.						
65 Hectares (160 Acres)	33 Hectares (80 Acres)	200m (220 yds) (210 Mectares (20 Acros) (20 Acros)	1 Hectare (2½ E Acres) (2 100m) 2 Hectares (5 Acres) (2			
800m (¹ / ₂ Mile)	(¹ / ₂ Mile)	(20 Acres) E 004	4 Hectares 5 (10 Acres) 8 200m (220 yds)			
) m008) m008		octares (1/4 Mile)			
800m (¹ / ₂ Mile)	400m (¹ /4 Mile)	400m (¹ /4 Mile)			



Fence checker

If you are having problems with your fence the check list below should help you find the problem. Having a fence tester will help rule out elements of your system as problematic. It is not advisable to test the fence by touching it especially as your footwear will insulate you and misrepresent the true impact



check

What type of fence are you using? Is your energiser powerful enough to power your fence requirement?

Refer to the energiser guidelines to see if it is operating within distance parameters. Certain type of wires/tapes are also only suitable over limited distances as they are higher in resistance. Netting is particularly thirsty for power, we recommend a minimum of 0.5 stored joules for 50m of poultry net.

Is the fence line touching something that is taking power to earth?

Your wire, tape, rope or net needs to be as clear as possible from any external contact which is not insulated from the ground. This includes wooden posts, sheds, arks. Check the line is positioned in the insulators correctly, that all insulators are intact and undergrowth is as free as possible from the live lines. Any contact will draw power from your fence.

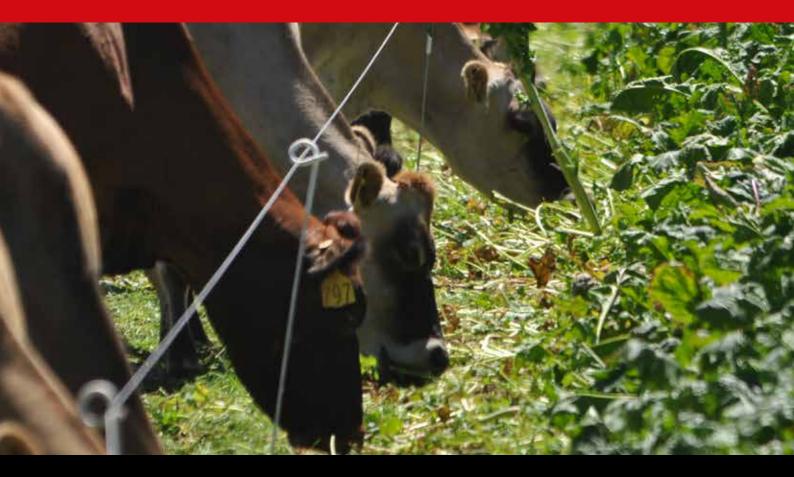
Have you joins and/or breaks in the fence line?

When joining sections of plastic tape, rope or wire it is preferable to use the correct connector or buckle. This ensures all of the metal conductors in one side connects with all of the conductors in the next and power is efficiently transferred without loss. The metal conductors can also break over time reducing efficiency, walk the line looking for patches of wear which may be causing a constriction in the voltage flow.

Do you have an ineffective earth system?

Poor earthing results in loss of voltage. We recommend a minimum of one independent, 1 metre stake. Using the metal stand on an energiser will be variable because of the changeable topsoil conditions. A building earth should not be used or the frame of metal buildings. If you detect voltage on or get a shock from your earth stake it is indicative of a ineffective earth and can be rectified by adding further earth stakes and linking them together. Increasing the earth stakes in your system can only improve the performance of the fence.





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