

THUNDERBIRD



LIVESTOCK MANAGEMENT SYSTEMS



Quality Australian Made Products

PRODUCT CATALOGUE EDITION 8

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*Quality Australian Made
Electric Fencing Products*

THUNDERBIRD



Company Background

Thunderbird Ag is an Australian manufacturer of animal management and livestock weighing systems in the rural market, servicing Australian farmers with high quality products to suit harsh Australian conditions.

Thunderbird is Australia's most progressive agricultural weighing and electric fence company in both market growth and product development. This is due to the in house tooling and manufacturing teams working alongside the team of electronic design engineers.

This formula delivers the best level of compatibility for all product components with consistent quality at the most affordable price.

As an Australian manufacturer, we understand the harsh environmental conditions which our products are subjected to. We have gained the knowledge to develop products that perform at a highly reliable standard even under these testing conditions.

Our company, is totally committed to research and development. This ensures continued product development and improvement in performance, enabling us to remain a leader within the industry.

Small & Medium Mains & Battery Fence Energisers



MB-67 Powers up to 7.5km

MB-135 Powers up to 15 km

- Designed to operate from mains or battery power
- LCD displays output voltage up to 10kV
- Tough, O-ring sealed enclosure
- SMD technology for maximum reliability
- Mains A.C. adaptor and 12 volt battery lead supplied
- Quality components - 2 years warranty
- Lightning spark gap - 6 months lightning warranty
- Vacuum sealed transformer for longer life
- Low battery warning & pulse timing displayed
- Optional solar kit available

Note MB-67 and MB-135 are under development and are intended to replace MB-65 and MB-130

Model	Stored Joules	Maximum Distance	Voltage @ No Load	Voltage @ 500 ohms	Current Drain	Solar Kit Size 12V
MB-67	0.75 Joules	7.5km	8.6kV	4.6kV	40mA	5-8 watt
MB-135	1.5 Joules	15km	8.4kV	5.2kV	80mA	10 watt

MB-255 Powers up to 25km

MB-355 Powers up to 35km

- Digital LCD displays output voltage up to 10 kV
- Mains or Battery powered, (A.C. Adaptor and D.C lead supplied)
- Optional solar kit is available
- Vacuum Sealed transformer, for better reliability and longer life
- SMD electronics to provide the most reliable controls
- Quality Australian made product, with 2 years warranty
- Lightning spark gap fitted - 6 months warranty against lightning strikes
- Tough, weatherproof O-ring sealed enclosure
- Low battery voltage and output pulse indicated on LCD display



Model	Stored Joules	Maximum Distance	Voltage @ No Load	Voltage @ 500 ohms	Current Drain	Solar Kit Size 12V
MB-255	2.3 Joules	25km	7.9kV	5.1kV	160mA	25 watt
MB-355	3.4 Joules	35km	7.9kV	5.9kV	210mA	25 watt

Large Mains & Battery Fence Energisers



Features:-

- Digital display - of output voltage, earth condition, joules and amps - condition of fence - all displayed together, no toggling required.
- Mains or battery powered -12 volt lead and A.C adaptor supplied (optional solar kit)
- Remote ready - turns unit on or off, from the paddock
- Auto power boost - automatically increases energy levels as fence requires
- 3 powers levels - to select from, low – medium - high. Up to 9.9 kV
- Earth monitor - displays the condition of your earth system
- 13 pulse speeds - to select from 1.2 to 2.4 seconds

Remote ready

Remote control (optional) ERC-2

Turns energiser on or off from the fence line.

Digital function display

- Output voltage
- Earth condition – poor-fair-good
- Amps - condition of fence
- Joules - energy being used
- Mode - standby, diagnostic data

MB-560R Powers up to 50 km

MB-1060R Powers up to 85 km

MB-1760R Powers up to 135 km

MB-2750R Powers up to 200 km

MB-5600R Powers up to 350 km

- Built in alarm - activates internal buzzer when fence voltage drops. Alarm voltage can be set from 2 to 6 kV– Optional strobe light or siren plus strobe light, activates upon energiser alarm.
- Tough enclosure - o-ring sealed, weather proof ABS robust enclosure
- Great back up - 2 years warranty, 6 months lightning warranty
- Solar compatible - optional solar kit can be connected, to power, for remote areas
- Quality components - SMD electronics and transformer is vacuum sealed
- Auto battery save function - when battery voltage level drops, system changes output level to low and pulse rate to maximum.

Additional features available with the MB-2750R and MB-5600R

- Fence Return Terminal - displays end of line fence voltage
- Alarm History records - displays time and date of previous alarms
- Maintains full battery charge - for battery back up when mains power is down
- Extra large terminals, menu display, real time clock, ultra high power models

Model	Stored Joules	Maximum Distance	Voltage @ no Load	Voltage @ 250 ohms	Current Drain	Solar Kit Size 12V
MB-560R	6.3 Joules	50km	8.1kV	5.6kV	205-380mA	40 watt
MB-1060R	10.5 Joules	85km	8.3kV	6.4kV	435-730mA	80 watt
MB-1760R	16.8 Joules	135km	8.2kV	6.7kV	550-1250mA	120 watt
MB-2750R	27.8 Joules	200km	8.8kV	6.9kV @ 100 ohms	0.6-4 A	240 watt
MB-5600R	55.3 Joules	350km	8.9kV	7.9kV 100 ohms	1.2– 6.6 A	480 watt

Small Mains Fence Energisers



- Safety certified to Australian /New Zealand standards
- OK pulse light flashes with each fence pulse
- Tough o-ring sealed weatherproof case
- SMD technology - for ultimate reliability
- Lightning spark gap fitted - 6 months lightning warranty
- Vacuum sealed transformer - provides a longer life
- 2 years warranty - made from quality components
- Large fence terminal knobs, with stainless steel nuts

M-30 Powers up to 2 km

M-65 Powers up to 7.5 km

M-125 Powers up to 15 km

Model	Stored Energy	Maximum Distance	Voltage @ no load	Voltage @ 1000 ohms	Power Usage (watts)
M-30	0.29 Joules	2km	8.0kV	2.8kV	2
M-65	0.83 Joules	7.5km	7.8kV	4.0kV	3
M-125	1.4 Joules	15km	9.5kV	6.1kV	4

Medium Mains Fence Energisers



M-260 Powers up to 25 km

M-360 Powers up to 35 km

All the features of it's smaller brothers - but with more power.

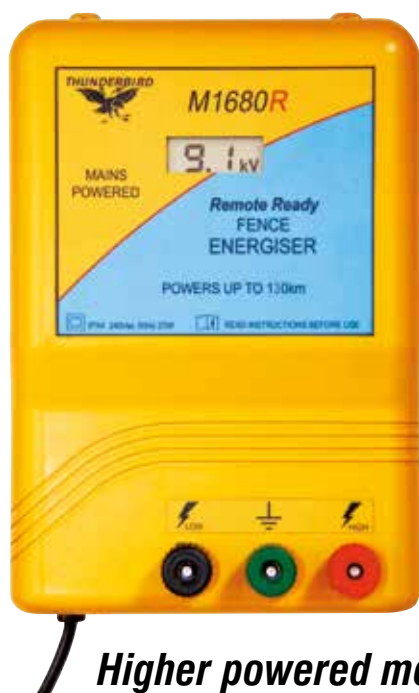
Able to supply more energy for longer fences, and deliver higher voltages.

Safety is assured with the certification to the Australian / New Zealand standards.

2 YEARS WARRANTY

Model	Stored Energy	Maximum Distance	Voltage @ no load	Voltage @ 1000 ohms	Power Usage (watts)
M-260	2.2 Joules	25km	8.4kV	4.9kV	5
M-360	3.1 Joules	35km	8.6kV	5.3kV	7

Large Mains & Battery Fence Energisers



Remote ready
Remote control (optional)
Turns energiser on or off from the fence line.

Digital voltage display
Displays voltage level being delivered to the fence line.

Higher powered models for those long fence lines with harsher environment conditions

M-650R Powers up to 60 km
M-1150R Powers up to 90 km
M-1680R Powers up to 130 km

Thunderbird's large mains energisers incorporate new low impedance technology to keep animals where you want them

- Digital output voltage display
- Remote control ready - handpiece can switch the energiser on or off from anywhere along the fence
- High and low output terminals—both can be used at the same time
- Tough o-ring sealed enclosure, Australian made
- Power to control all types of livestock and feral animals
- Certified to the Australian / New Zealand standards
- RFI suppression circuitry for minimum electrical interference
- 2 Years warranty plus 6 months lightning warranty
- Quality components - SMD electronics and transformer is vacuum sealed

Model	Stored Energy	Maximum Distance	Voltage @ no load	Voltage @ 250 ohms	Power Usage (watts)
M-650R	5.6 Joules	60km	8.2kV	5.1kV	23
M-1150R	10.9 Joules	90km	8.2kV	5.9kV	37
M-1680R	16.8 Joules	130km	7.8kV	5.6kV	46

Please note - energiser distances are a guide only. Factors such as proximity of live wire(s) to earth or to other parts of a fence, distance of live wire run underground, thickness of wire and earth condition will affect the effective distance. Thunderbird recommend a minimum distance of 200mm between the live wire(s) and any other conductor, otherwise effective energiser distance is reduced.

Small Solar Fence Energisers - *With Internal Batteries*



Self Contained Systems - includes battery

S -18B 1.5 km Solar System

S -28B 2.5 km Solar System

- Ideal for small fencing applications.
- Output leads are supplied. Fully portable
- Internal battery included, O-Ring sealed case, low and high power levels.
- Slides over steel star post.
- Mains battery charger is supplied, for poor weather periods.
- Magnetic switch - no holes through case.

Medium Solar Fence Energisers - *With Internal Batteries*



Self Contained Systems - includes battery

S-45B 5 km Solar System

S-75B 10 km Solar System

- Feature Packed, both models:
- Designed to slide straight over a steel star post for mounting.
- Convenient strong moulded carry handle for easy portability. Super fast to install, large easy to use fence knobs
- Ideal mould angle to maximise solar collection.
- Low battery warning - lets you know when to mains recharge.
- Fence and earth leads supplied with insulated grips. Mains charger port is covered - keeps weather out Low and high power levels for battery conservation

Large easy to view LCD display, O-Ring sealed case,

Fully portable - internal battery included. Light , easy and fast to set up. Fence leads and a mains recharger are supplied. Coated electronics, resin sealed transformer and SMD technology combine to form a high quality product. Magnetic switch - no holes through case

Model	Stored Energy	Maximum Distance	Voltage @ no load	Voltage
S-18B	0.15 Joules	1.5km	7.0kV	2.6kV
S-28B	0.23 Joules	2.5km	7.2kV	3.3kV
S-45B	0.47 Joules	5km	7.8kV	5.0kV
S-75B	0.71 Joules	10km	7.8kV	5.8kV

Large Solar Fence Energisers - *With Internal Batteries*



incorporates intelligent battery management software that monitors energy collected by the solar panel and adjusts output accordingly.

A mains charger is supplied for those extended periods of poor sunlight.

Self Contained System

S-180B 20km Solar System

- Powers up to 20 km
- Self contained package
- Digital screen displays voltage, amps and low battery
- Compact and very portable
- Easy and fast to set up
- 2 x Internal rechargeable batteries
- Earth and Fence leads supplied
- O-Ring sealed enclosure
- Magnetic switch - Full and reduced power levels
- 7,400 Volts output
- Magnetic switch - Full and reduced power levels
- 7,400 Volts output

At 1.78 joules of power the Thunderbird S180B is the most powerful Solar Energiser with built in batteries, available in Australia.

**Mounts over top of star post to install. Mains charger port is covered to keep the weather out.
Low Battery Warning - on screen - Proudly Australian Made**

Large Solar Fence Energiser - *Operates off External Battery*



S-340 35km Solar Energiser

- 12V solar panel mounted for portability
- 12V battery leads and clips supplied
- Designed for large fence applications
- Battery not included - Operates off an external 12 volt battery

Model	Stored Energy	Maximum Distance	Voltage @ no load	Voltage @ 1000 ohms
S-180B	1.78 Joules	20km	7.4kV	6.0kV
S-340	3.35 Joules	35km	7.9kV	6.4kV

Large Solar Fence Energisers - Operates off External Battery



- S-255 25 km Solar Energiser (MB-255 + solar kit)**
- S-355 35 km Solar Energiser (MB-355 + solar kit)**
- S-560R 50 km Solar Energiser (MB-560R + solar kit)**
- S-1060R 85 km Solar Energiser (MB-1060R + solar kit)**
- S-1760R 135 km Solar Energiser (MB-1760R + solar kit)**

Designed for large fence applications where no mains power is available.

Regulator and mounting supplied as standard. Thunderbird's large solar systems are designed to be connected to an external 12 volt battery.

Battery not included.

Model	Recommended Min Solar Panel Size	Recommended Min Battery Size	Systems Voltage	Regulator
S-18B	2 watts	7 A/H	12V	No
S-28B	5 watts	7 A/H	12V	No
S-45B	5 watts	7 A/H	12V	No
S-75B	5 watts	7 A/H	12V	No
S-180B	12 watts	14 A/H	12V	Yes
S-340	25 watts	80 A/H	12V	Yes
S-255/355	25 watts	80 A/H	12V	Yes
S-560R	40 watts	100 A/H	12V	Yes
S-1060R	80 Watts	200 A/H	12V	Yes
S-1760R	120 watts	280 A/H	12V	Yes

Note : Deep cycle type batteries are recommended
Solar panel sizes may vary due to geographical locations

Please note - energiser distances are a guide only. Factors such as proximity of live wire(s) to earth or to other parts of a fence, distance of live wire run underground, thickness of wire and earth condition will affect the effective distance. Thunderbird recommend a minimum distance of 200mm between the live wire(s) and any other conductor, otherwise effective energiser distance is reduced.

Battery Fence Energisers



Strip Grazer BD-20

Powers up to 2 km, operates from 4 x D cell batteries or an external 12 volt battery

- Designed for short runs of electric fencing
- Portable and low battery use are the big features of this energiser
- Designed to hang on the live fence wire
All wiring comes as standard
- OK Pulse and low battery lights
- Electronics are heavily coated to avoid failure due to moisture and Insect damage

Small / Medium Battery Fence Energisers



B-20 Powers up to 2 km

B-60 Powers up to 7.5 km

B-120 Powers up to 15 km

Coated electronics to resist moisture and insects, modular design. Pulse and low battery lights. This range is reliable and versatile - designed to operate in the harshest conditions.

Powered by 12 volt external battery.

Model	Distance	Stored Energy	Battery Drain	Solar Option	Low Battery Indication	Voltage @ no load	Voltage @ 1000 ohms
BD-20	2km	0.16	15mA	5 watt	Yes	7.5kV	1.7kV
B-20	2km	0.33	33mA	5 watt	Yes	7.1kV	4.4kV
B-60	7.5km	0.7	44mA	5-8 watt	Yes	8.6kV	5.9kV
B-120	15km	1.5	105mA	12 watt	Yes	8.7kV	6.7kV

Garden Fence Energiser Kits

Mains Kit Contains

Energiser
8 x Posts
50 m Wire
Sign
Earth Stake
End Insulators
8m U/G Cable
Joint Clamps
25 X Post Clips

MAINS



12 volt (battery) Kit Contains

Energiser
8 x Posts
50 m Wire
Sign
Earth Stake
End Insulators
Joint Clamps
25 X Post Clips

BATTERY



Testers & Energiser Accessories



EF-5A Fault Locator

- Displays: volts, amps and direction of the fault
- Auto power off function—saves battery
- Saves time locating short
- Cordless design

Designed for use with units over 1 Joule of stored energy only



EF-9 Lite Volt Tester

- 4 Lights indicate voltage level: 1,500, 3,000, 4,500 & 6,000 volts
- (Poor, fair, good or excellent) Requires no battery to operate



EF-8 Digital Volt Meter

- Reads up to 10,000 volts
- Large digital display
- Auto on/off function
- 9 volt battery, lasts up to 1 year



EF-4 Fence Flasher

- Fence Flasher
- Sealed from moisture and insect damage
- Flashes when fence voltage is over 2,500 volts
- Can be seen up to 1 km away at night



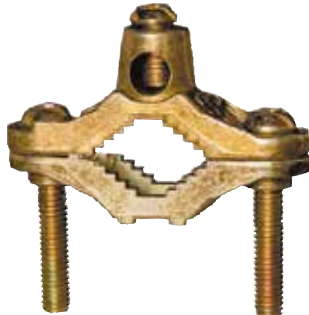
ERC-2 Remote Control

Turns energiser {with "R" suffix} on or off, from the paddock, simply connect to anywhere along the hot wire to turn on or off.

Built in digital volt meter

The remote is ideal for long distance fence lines - Finding and repairing faults is now made easy.

Earthing Kits & Accessories



EF-126 Earth Clamp

Fits 12mm rod, provides secure electronical connection

EF-70 Portable Galvanised Earth Stake









Hot dipped galvanised, 1000mm in length, T bar top for easy removal, Termination bolt included

EF-60 Super Earth Kit








Contains bentonite and salt to improve soil conductivity around earth rod, stainless steel rod for long life







Steel Post Insulators

	<p>EF-18S Super strong pinlock with UV stabilised plastic. Ideal for wire or polywire</p>		<p>EF-18D Dual Purpose Pinlock - Fits oval and round hole posts, slot for 12mm tape - two pin option - larger shield and fence wire pin</p>
	<p>EF-18C Claw Pinlock insulator, easy mounting & UV stabilised plastic for long life</p>		<p>EF-23L Long Steel Post Cap Insulator - maximum visibility, for wire or up to 40mm tape - secures to post</p>
	<p>EF-23C Claw Post Cap Insulator - Can take up to 40mm tape, UV stabilised plastic</p>		<p>EF-23S White Post Cap Insulator - Ideal for wire & cord, UV stabilised plastic, can take up to 40mm tape- Can be fixed to post</p>
	<p>EF-106 Wide Tape Pinlock Insulator - takes up to 40mm tape</p>		<p>EF-31B Porcelain Steel Post Insulator - Fire resistant and long lasting. Porcelain, clip, nut & bolt supplied</p>








Wood Post Insulators

	<p>EF-19 Heavy Duty Pinlock Insulator—UV stabilised plastic for long lasting, large shield to prevent arcing</p>		<p>EF-19C Claw Pinlock Insulator - Ribbed for extra strength, UV stabilised plastic, anti arc shield</p>
	<p>EF-17 Screw In Insulator—screws straight into soft timber, slotted for easy wire access</p>		<p>EF-24 Staple Insulator—Clamps around wire, galvanised staple for longer life</p>
	<p>EF-107 Screw On Insulator— ideal for wide tape up to 40mm , white UV stabilised plastic</p>		<p>EF-31A Porcelain Drive In Insulator—long lasting & robust Porcelain, clip & nail supplied</p>
		<p>EF-7 30M Insultube 5mm I.D, 9mm O.D</p>	





End Strain Insulators

 <p>EF-16 Plastic End Strainer—Extra long leakage path, designed for short strains</p>	 <p>EF-16W Super End Strainer—tough UV stabilised plastic, ideal for long fence strains</p>
 <p>EF-26 Porcelain Reel—Ideal for corner strains. Large 41mm diameter</p>	 <p>EF-25 Porcelain End Strainer—Strong and long lasting fire resistant material</p>

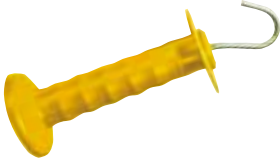
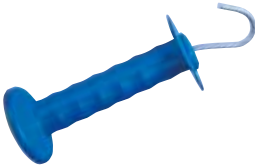




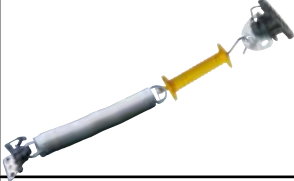


Offset Insulators

 <p>EF-31 41mm Porcelain Reel & 300mm Spring Steel Wire - C clip supplied. Strong & robust for longer life</p>	 <p>EF-29 Plastic Pinlock & 300mm Spring Steel Wire. Connects to pre-strained wire</p>
 <p>EF-30 300mm Spring Steel Wire Only. Takes pinlock or porcelain</p>	 <p>EF-27 Polytube 300mm - Can be installed to pre-strained wire. Plastic tube insulator</p>
 <p>EF-17L 200mm Screw In Wood Post Offset. Slotted for easy wire access</p>	 <p>EF-22 Steel Post 150mm Plastic Offset—Ideal for hot tape, fits to both sides of post</p>
 <p>EF-28S Steel Post 300mm Plastic Offset—Clamps around Y post. Safe to use with horses</p>	 <p>EF-50 300mm Fiberglass offset & spring clip, drives into wood posts</p>
 <p>EF-342 200mm Pinlock Y steel post offset—Ideal for wire and polywire</p>	 <p>EF-343 200mm Claw Y post offset—Ideal for wire and polywire</p>
 <p>EF-344 200mm Y post offset for 40mm tape—Takes up to 40mm tape</p>	 <p>EF-345 160mm Swivel lock Y post offset—Takes up to 6mm rope/wire and 12mm tape</p>
 <p>EF-340 150mm Drive in wood post pigtail offset</p>	 <p>EF-341 270mm Drive in wood post pigtail offset</p>







Offset Insulators

	EF-83D 150mm Single dual purpose pigtail offset—Fits oval & round hole posts. Can mount on steel or wood posts		EF-84D 250mm Single dual purpose pigtail offset—Fits oval & round hole posts. Can mount on steel or wood posts
	EF-85D 250mm Double dual purpose pigtail offset—Fits oval & round hole posts. Can mount on steel or wood posts		EF-89 150mm Flat surface off- set, can be screwed, bolted or nailed to any flat surfaces

Gateways & Gate Accessories

	EF-32SG Gate Smooth Grip Handle—Gal spring and hook with a large smooth grip handle		EF-32SGC Compression handle super strong trace spring with a large smooth grip handle
	EF-32A Plastic hook handle Completely insulated		EF-34B 3 Way gate anchor with gal connection plate - Wood post
	EF-34BS 3 Way anchor with gal connection plate—Steel post		EF-34BD 3 Way anchor with gal connection plate—Steel post
All gate kits include 3 way gate anchor for wood post insulated spring handle and wood post insulator			EF-34C Spring gate kit—up to 5 meters with large gal spring
	EF-110 7m Bungee gate EF-110L 11m Bungee gate		EF-46 Tape gate kit—Up to 5 meters

Wire Joiners & Strainers

	EF-13S Wire joint clamp - Heavy duty, strong design, galvanised finish, for an excellent electrical joint		EF-13 Wire joint clamp—Slit bolt takes up to 2.5mm wire
	EF-13C Claw wire joint clamp - reversible clamp type		EF-34 Plain ratchet strainer—Rust resistant, galvanised frame, clip lock design
	EF-33A Porcelain ratchet strainer - Rust resistant, galvanised frame, long life porcelain insulator		EF-33 Plastic ratchet strainer Rust resistant, galvanised frame with large insulator

Underground Cable



Thunderbird's underground cable is double insulated for premium insulation. It is manufactured from high quality materials with a galvanized wire core. Used as a lead out from shed to fence, under gateways, general wire connections and earth stake wires.

EF-11E 25m x 1.6mm

EF-11 50m x 1.6mm

EF-11C 100m x 1.6mm

EF-11F 25m x 2.5mm

EF-11A 50m x 2.5mm

EF-11B 100m x 2.5mm

EF-11D 200m x 2.5mm

EF-11G 400m x 2.5mm

Tape, Rope, Cord, Braid & Polywire



Poly Wire - The Poly Wire range uses 6 stainless steel wires, and is ideal for short distances.

EF-40EO - 200m orange

EF-40EW - 200m white

EF-40DO - 500m orange

EF-40DW - 500m white



Hot Tape—Designed for short distances, 12mm wide, with 5 stainless steel wires. Highly visible woven design

EF-40BO - 200m orange

EF-40BW - 200m white

EF-41 - 100m x 40mm wide

EF-40CW - 400m white

EF-40CO 400m orange



Ultra Conductive Products -The range of Thunder Poly Tapes, Cords, Braids and Ropes feature a combination of tinned copper and stainless steel. Superior conductivity and strength, resulting in better power transfer and longer life.

EF-48— 200m Thundertape

EF-48A— 400M Thundertape

EF-47 - 200m Thunderbraid

EF-53 - 200m Thunderrope

EF-47AB— 550m Thunderbraid

EF-52— 200m Thundercord

EF-52A— 400m Thundercord

Pre-loaded Reels



NEW!



EF-36G47A—Geared Reel with 400M Thunderbraid
— Super conductive!

EF-40BWREEL—200m Polytape pre-loaded on reel

EF-48REEL—200m Thundertape pre-loaded on reel

EF-52REEL— 200m Thundercord pre-loaded on reel

EF-47REEL— 200m Thunderbraid pre-loaded on reel

Hot Tape & Poly Wire Specifications

Performance Chart—Tapes, Wire, Cord, Braid & Rope

Product	Item #	Length	Colour	Width	Volts at start of fence	Volts at 500m	Volts at 1km	Type of conductor
Tapes								
Wide Tape	EF-41	100m	White	40mm	8,000	1,600	890	SS
Thundertape	EF-48	200m	White/red	12mm	8,000	6,400	5,300	CU + SS
Thundertape	EF-48A	400m	White/red	12mm	8,000	6,400	5,300	CU + SS
Poly Tape	EF-40BW	200m	White	12mm	8,000	890	470	SS
Poly Tape	EF-40CW	400m	White	12mm	8,000	890	470	SS
Poly Tape	EF-40BO	200m	Orange	12mm	8,000	890	470	SS
Poly Tape	EF-40CO	400m	Orange	12mm	8,000	890	470	SS
Wires & Cords								
Thundercord	EF-52	200m	White/red	3.5mm	8,000	6,960	6,200	CU + SS
Thundercord	EF-52A	400m	White/red	3.5mm	8,000	6,960	6,200	CU + SS
Poly Wire	EF-40EW	200m	White	2.5mm	8,000	1,140	600	SS
Poly Wire	EF-40DW	500m	White	2.5mm	8,000	1,140	600	SS
Poly Wire	EF-40EO	200m	Orange	2.5mm	8,000	1,140	600	SS
Poly Wire	EF-40DO	500m	Orange	2.5mm	8,000	1,140	600	SS
Braid:								
Thunderbraid	EF-47	200m	White/blue/yellow	3.5mm	8,000	6,720	5,800	CU
Thunderbraid	EF-47AB	550m	White/Blue/Yellow	3.5mm	8,000	6,720	5,800	CU
Rope:								
Thunderrope	EF-53	200m	White/black	6mm	8,000	6,960	6,200	CU + SS

Note - The Thunder range of poly products use a combination of stainless steel (for strength and durability) and copper wire (for superior conductivity), providing a longer lasting and better performance.

Recommended distances are maximum, when energiser is placed in the middle of the fence line, to reduce distance the pulse needs to travel. Results may vary depending on conditions and many other factors, figures are with a 500 ohm resistance to earth to represent an animal.

All figures are approximate

Cu = tinned copper wire

SS = stainless steel



Wind Up Reels



EF-36 - Small Reel—Takes up to 200m Tape / 500m Polywire
Insulated bobbin, aluminium frame, light and easy to use



EF-36A Large Wind Up Reel—Takes up to 300m tape / 500m Polywire
Insulated bobbin, aluminium frame, light and easy to use



EF-36G Geared 3 to 1 Wind Up Reel—Takes up to 200m tape / 500m polywire.

Easier and faster to wind up with a 3 to 1 ratio, galvanised frame, light weight, easy to use & strong robust design

Tread In Posts



EF-61 Plastic Multi Wire Tread In Post - 1080mm tall, heavy duty white plastic, light weight but robust



EF-61B Plastic Multi Wire Tread In Post Black— 1080mm tall, light weight



EF-38 Multi Wire Galvanised Post - 1100mm tall, non breakable steel foot, replaceable insulators, spring steel design



EF-38H Multi Wire Galvanised Post - 1500mm tall, non breakable foot, replaceable insulators, spring steel design



EF-37 Orange Pigtail Tread In Post - 10mm x 1000mm heavy duty steel, robust construction for longer life



EF-39 Galvanised Pigtail Tread In Post - 6mm x 1060mm spring steel design, non breakable steel foot

Fence Reel Systems

Fence Reel Systems include:

100m tape or cord preloaded onto wind up reels, 10 plastic multi wire tread in posts. Insulated hook handles & multi reel mounting post. All available in either 3 or 4 reel systems



EF-3REELTAPE
EF-4REELTAPE
EF-3REELCORD
EF-4REELCORD

Fence Accessories

 <p>EF-59 Single Fence Jumper Lead— <i>Ideal to parallel fence wires</i></p>	 <p>EF-119 Triple Fence Jumper Lead Insulated lead and clips. <i>Ideal to parallel wires</i></p>
 <p>EF-173 12V Battery Lead— 2.5mm jack with black and red insulated clips. Connects from energiser to battery</p>	 <p>EF-171 Green Earth Lead & Clip EF-172 Red Fence Lead & Clip Insulated clip with ring end for energiser terminals</p>
 <p>EF-121 Black Clip EF-120 Red Clip EF-122 Green Clip Insulated clips</p>	 <p>EF-17T00L Drill Connection Tool for EF-17 wood post offsets- Easier to apply to wood posts</p>
 <p>Tape Joining Buckles EF-103C 40mm EF-104C 12mm</p>	 <p>Double Sided Fence Signs: EF-15 Electric Fence EF-15A Keep Out EF-15B Shut The Gate EF-15D Beware Of The Dog</p>
 <p>EF-49 Flood Isolator— Reduces power loss when flood contacts the fence, prevents fence shorting out into floodway</p>	 <p>EF-10K Lightning Diverter Kit—Designed to divert lightening into the ground to protect energiser</p>
 <p>EF-14 Cut Out Switch— Swivel knife type with stainless steel contacts</p>	 <p>EF-14S Cut Out Switch— Swivel contact blade, easy to view on/off function</p>

Fiberglass Fencing



Ideal for temporary and permanent fencing

EF-55 1000mm x 10mm Fiberglass Posts

EF-54 1250mm x 10mm Fiberglass Posts

EF-56 1500mm x 10mm Fiberglass Posts

EF-57 10mm Galvanised Spring Clips

EF-51 Nylon Driver Cap

Electric Netting



THUNDERNET is available in 2 versions -

Poultry netting and Sheep / Goat netting. Both versions come in 50 metre rolls and include 14 double prong tread in posts. Multiple nets can be connected together to create larger enclosures.

The top strand is strengthened and contains high conductive copper wires.

UV stabilized plastic. Improve your soil fertility. Set up and connect in 10 minutes.

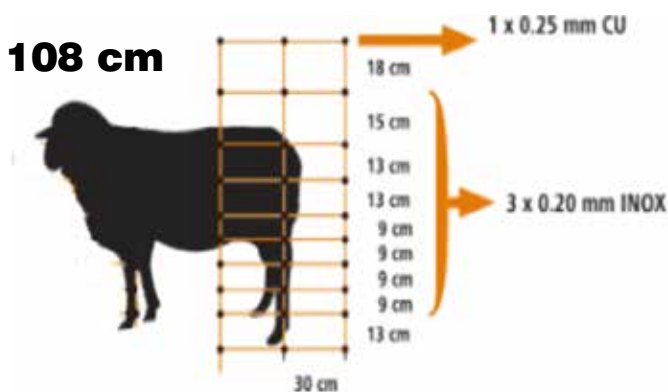
Poultry netting IDEAL FOR FREE RANGE POULTRY

- 12 horizontal wires and stands 112 cm high.
- Bottom wire is not electrified and is suitable for hens, geese and turkeys.
- Effective against foxes, dogs and goannas.

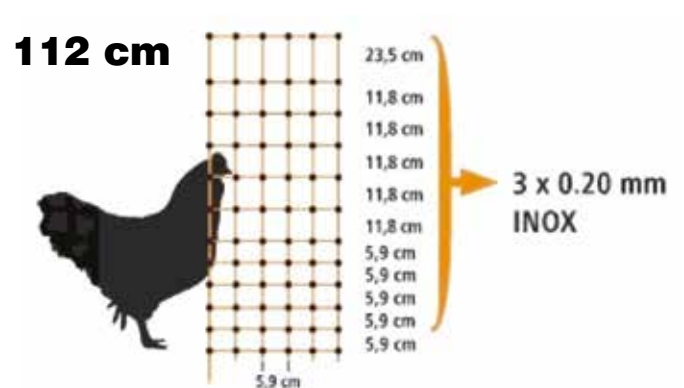
Sheep / Goat netting

- 10 horizontal wires, 108 cm in height. Strong plastic struts every 30 cm provides stability.
- Designed for uneven terrain. Bottom wire is not electrified.
- Suitable for sheep, goats, calves and free range pigs.

EF-SGCNET Sheep/Goat/Calf Netting



EF-PNET Poultry Netting



Horse Sighter Wire

NEW!!! 4mm x 650m Horse Sighter Wire

EF-502



- Highly visible, smooth and attractive
- UV stabilised, last for years in the sun
- SAFE—capable of stretching up to 24%
- 7 times lighter than steel wire
- Strong—300 to 400kg breaking force
- Non conductive, 650m rolls, 4mm thick
- Resistant to sunlight, crop chemicals, acids, extreme temperatures and salt water.

Solar Netting Kits

Thunderbird supply solar powered netting kits, packaged up and ready for work. Both Poultry and Sheep/Goat netting kits are available.

Kit contains: **S-26B** 2.5km solar energiser, 1m galvanised earth stake, electric fence warning sign, 50m length of netting

Solar Poultry Netting Kit: **EF-PNET-KIT**

Solar Sheep/Goat Netting: **EF-SGCNET-KIT**



Horse Fence Kits

Select from Solar or Battery powered kits.

Each kit includes: Energiser, 1m galvanised earth stake, electric fence warning sign, 10 x 1.5m multi wire tread in posts, pre-loaded reel with 200m poly tape and an insulated hook handle

Solar kit: **EF-SHORSE-KIT**

Battery kit: **EF-BHORSE-KIT**



OR



Rechargeable Sheep Shear



NEW!
RSS-12V

THUNDERBIRD are proud to introduce the new 12 volt rechargeable Sheep Shearing device, powered by a quality lithium battery.

Offering portability and flexibility to shear or crutch small mobs of animals anywhere!

- Around 1.5 hours operation on each battery charge
- 240 volt charging system supplied—fast 2.5 hour charging
- BONUS (extra) battery supplied, 4000mah lithium
- Nicely balanced, low noise levels and low vibration design.
- Powerful 180 watt 12 Volt motor operating at 2800 RPM, with effective venting system
- Tools supplied—brush, lubricating oil bottle and screwdriver with comb and cutter
- Blade pressure adjustment with rotation knob
- Convenient carry case supplied to keep everything tidy and together
- Can use standard combs and cutters

Cattle Prodders

TS-200 4 x C Cells



- Operates on 4 x Alkaline C cells - supplied
- 12 months warranty
- Strong flexible shaft
- O-ring sealed end cap, helps resist water entry
- State of the art electronics
- Works with wet or dry animals
- Button safety clip supplied
- lightweight and well balanced
- Modular design, with replaceable electronic module

Shaft sizes:

295mm

545mm

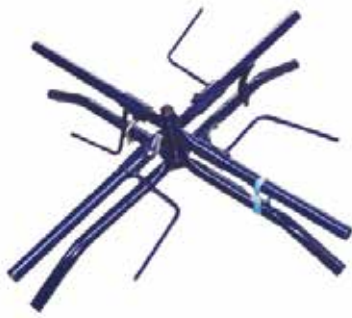
800mm

TS-250C Rechargeable



- Strong one piece plastic moulding
- Flexible shafts with inserted moulded brass tips
- Button safety clip supplied
- 12 Months Warranty
- A/C mains charger supplied
- 3 shaft sizes available

General Fence Products



EF-43 Wire Spinner
Fully adjustable, over-run brake



EF-44 Steel Post Lifter



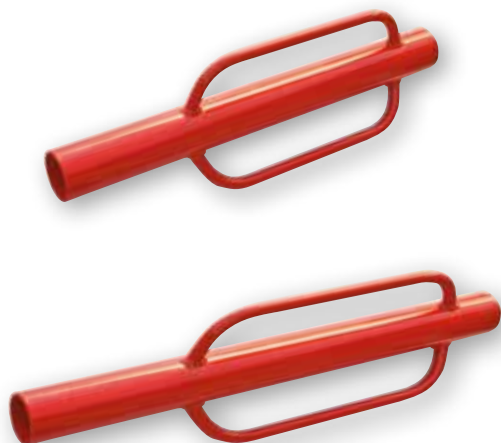
EF-400
Yellow Steel Post
Safety Cap— Can
be fastened to post,
bright visible colour,
UV stabilised plastic



EF-125
Wire Twisting Tool
Smooth comfortable handle,
accommodates multiple
wire sizes



EF-430
Chain Wire Strainer
Insulated grip handle,
swivel for left and right hand
operation, built to last



EF-45
Steel Post Driver
710mm Length

EF-45A
Large Steel Post Driver
1070mm Length
Heavy duty strong design

Ag Scale Systems



T10-2000

T10 Indicator with 2000 kg loadbar (2 x 580mm bars)
Easy to set up and use with a large, easy to view display.
Only needs 4 x AA batteries.

Ideal for weighing livestock and produce all round the farm.

T30-2000

T30 Indicator with 2000 kg loadbars (2 x 580mm bars)
Weights can be collected and displayed on screen as statistics.

Animal weights can be drafted in 5 groups

Very portable, robust and easy to set up.



T10-3000

T10 Indicator with
3000 kg loadbars (2 x 1000mm Bars)
Ideal for setting up under cattle crushes.
Easy to weigh cattle or farm produce.

Strong structure of loadbars has been proven over many years.



T30-3000

T30 Indicator with the 3000 kg Loadbars
Ideal for setting up under cattle crushes
or weigh bins.

Weights can be collected and displayed on
screen as statistics

Can provide statistics on the mob.



Thunderbird loadbars are fitted with rodent protection mesh, cable hose protection, are of galvanized construction and use high quality o-ring sealed connectors

Ag Scale Systems

Ag Scale Systems – Indicator Features

T10 Indicator

Large, easy to view display. Fast and accurate.

3 weighing modes including Thunderdamp for weighing restless animals.

Operates from 4 x AA alkaline batteries for up to 30 hours.

Simple keypad operation.

Tough o-ring sealed enclosure, with a sealed control keypad.

Low power auto off function. Can hold weights on the display.

Can be used with Thunderbird 2000 and 3000 kg Loadbars.

Indicator can be mounted to vertical or horizontal posts or rails, with mounting bracket supplied.



T30 Indicator

All of the T10 features PLUS -

Power supply options—Internal rechargeable battery, external 12 volt battery or 4 x AA alkaline batteries. Internal batteries can be recharged by mains charger supplied.

Statistics displayed—average, total, number min and max. 5 drafting ranges—low, low-mid, mid, mid-high and high. Statistics available on each drafting range



Ag Scale Systems – Loadbar Features

2000 kg Loadbars

2 bar system, 580mm long

Designed for portability, lightweight yet strong. Can be used with a range of platforms and weigh crates.

500 kg Load bars (2 x 580mm) available on request.



3000 kg Loadbar system

2 bar system 1000mm long Suitable for mounting under cattle weigh boxes and crushes.

Can also be used under weigh bins.



Thunderbird load bars are of galvanised construction are supplied with cable protection and anti rodent grid mesh. Thunderbird's loadbar technology has proven reliability and performance for near 3 decades.

Ag Scale Specifications

INDICATOR		
FEATURES	T10	T30
Auto and Manual Tare	YES	YES
3 Weighing Modes	YES	YES
Sealed Weather resistant Keypad	YES	YES
Low Battery Indicator	YES	YES
Large easy to view display, 40mm Digits	YES	YES
Fast Stable Software	YES	YES
O-ring sealed case	YES	YES
Weigh and Hold function	YES	YES
Operates up to 30 hours on 4 x AA batteries	YES	YES
Lock (hold) Screen Display	YES	YES
Keypad Weight Calibration	YES	YES
Low Power Auto Function	YES	YES
2 YEARS Warranty	YES	YES
On screen statistics		YES
Drafting up to 5 weighs		YES
Statistics displayed on each drafting range		YES
Internal Battery and Recharger		YES
Manual Tally and Auto Tally		YES
External Power Connection		YES

Loadbar		
Specifications	Easymove Bars	Extender Bars
Portable use	YES	NO
Permanent use	YES	YES
Gross capacity KG	500/2000	3000
2 year Warranty	YES	YES
Bolt down plates	YES	YES
Cable protection	YES	YES

500 kg Loadbars

Thunderbird can supply (on request) 500kg loadbars, in a set of 2 bars, each 580mm long.

The 500 kg Load Bars are more sensitive to small weights and deliver a more accurate result, when weighing small articles.



Platforms and Crates



CS-2CE

Collapsible Weigh Crate Suitable for Sheep, Pigs and Goats

Collapsible design makes for easy portability
Adjustable from small to large animals

1200 x 580 x 1250mm



CS-2C

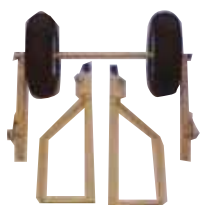
Super Sheep Weigh Crate Auto rear closing gates,
Optional wheel kit

1450 x 580 x 1000mm



CS-DRA

3way Draft Module
Drafts in 3 directions
Connects to the CS-2C
Sheep Crate
775 x 550 x 1040mm



CS-WHEELS

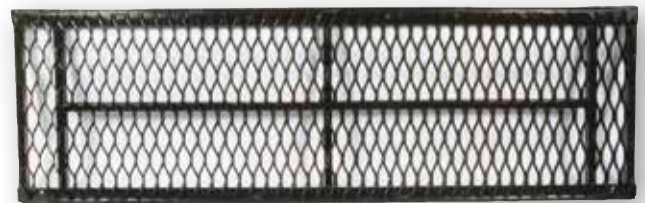
Attachable wheels and handles
for CS-2C sheep crate for
portability



CS-2PSMALL

Sheep, Pig and Goat Weigh Platform -
Checker plate finish

1200 x 580mm



CS-2P

Cattle Platform - Strong steel construction
expanded grid mesh

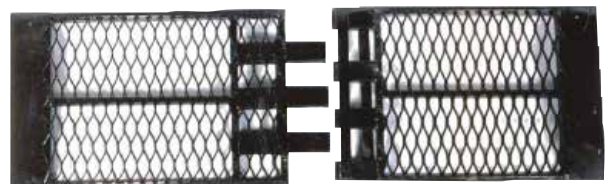
2050 x 640mm



CS-2PG

Galvanised Cattle Platform—Hot dipped
galvanised finish for longer lasting

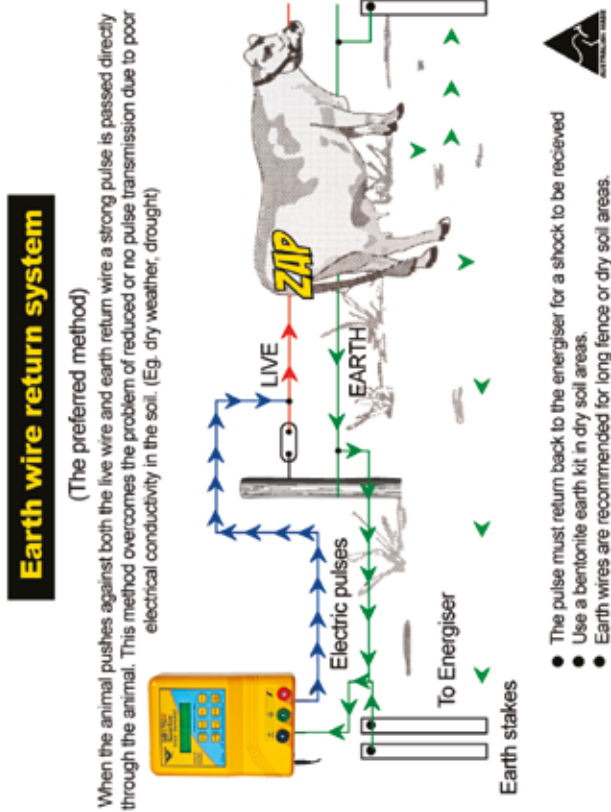
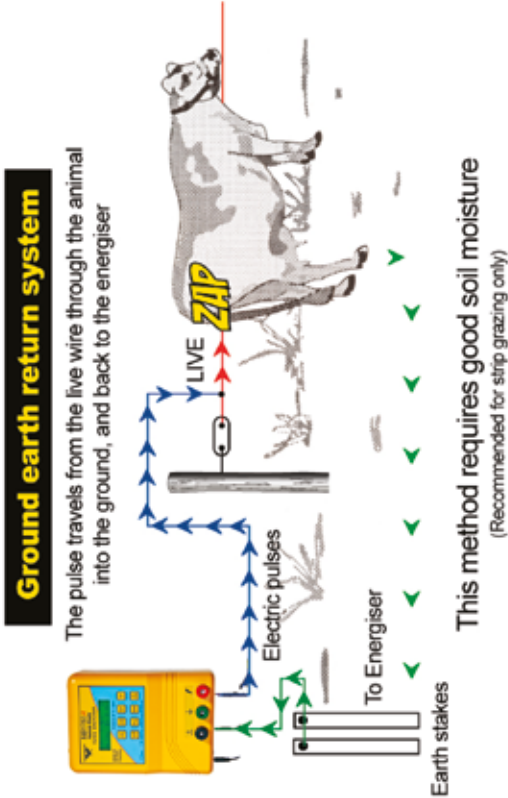
2050 x 640mm



CS-2P2

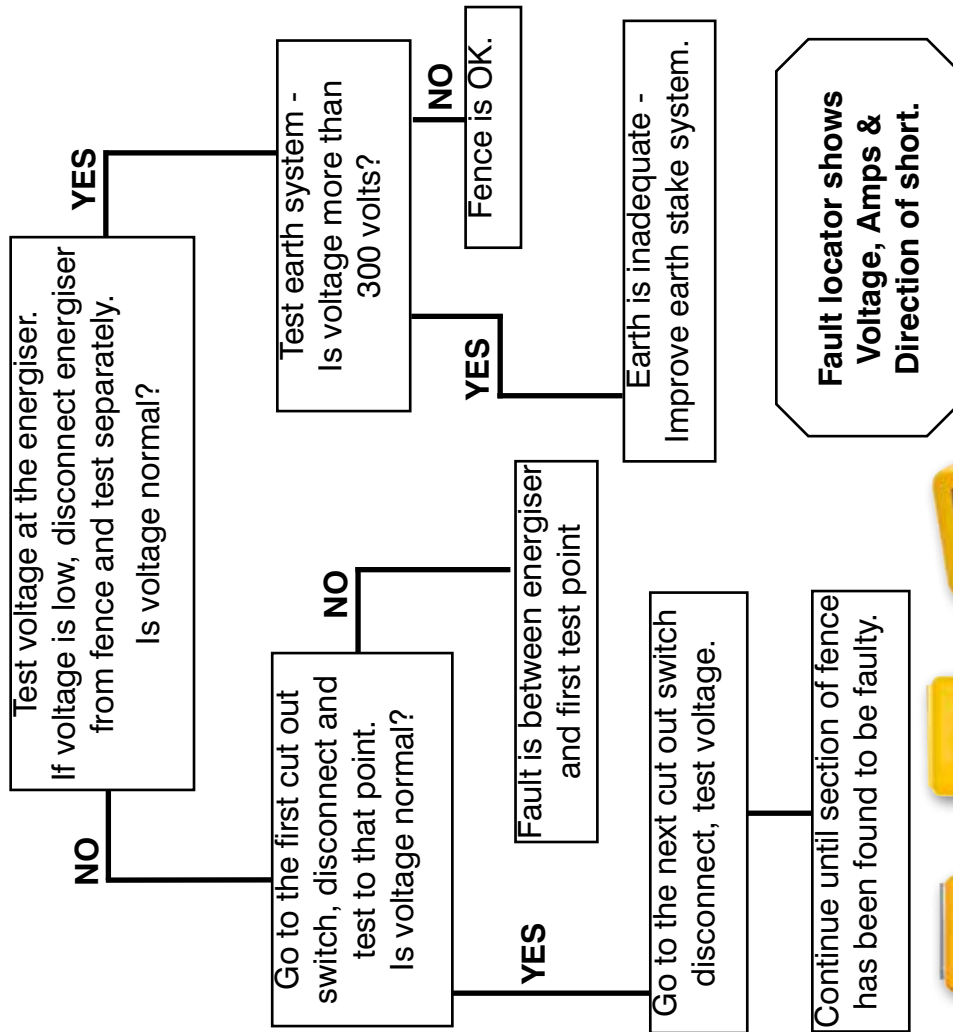
Two Piece Cattle Platform - Expanded grid mesh
Split/lock together
halves 2000 x 640mm

Electric fence operation using different earth systems



Fence Testing / Fault Finding

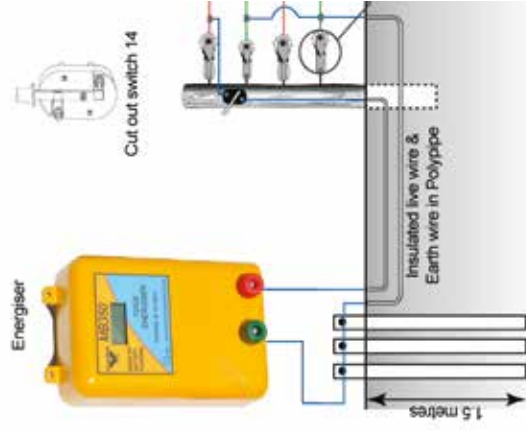
TEST PROCEDURE.



No 5A Fault Locator
No 8 Digital Volt Meter
No 9 Lite Volt Tester

Earthing.

Most problems with electric fencing are associated with POOR earthing!
The live wire is only half the circuit, earthing is just as important.
The fence will not be effective if the earth is unsatisfactory.



An electric fence earth system should be more than be 10 metres away from other earth systems.

Use THUNDERBIRD Super Earth Kits in dry soil areas. (bentonite type)

Drive 3 stakes 1.5 metres into the ground. Place the stakes 5 metres apart. Use galvanised steel or stainless steel stakes. - DO NOT USE COPPER.

Copper connected to other metals creates electrolysis, causing poor contacts.

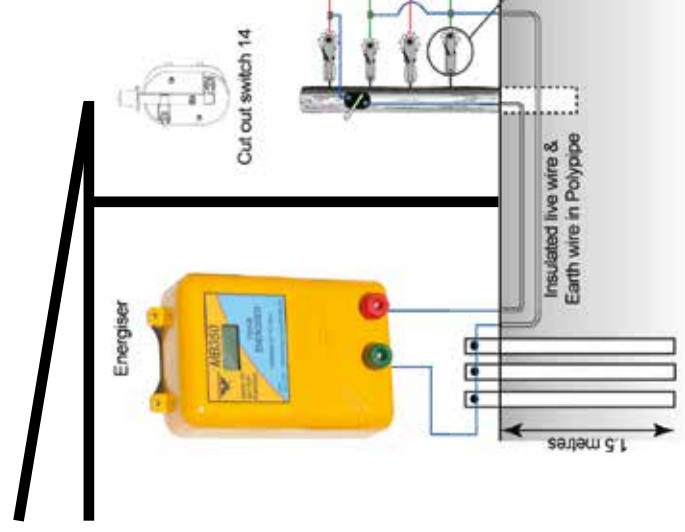
Position in a moist area if possible. Connect to energiser with double insulated cable, and clamp connections tightly using bolts or wire joint clamps.

Drive additional earth stakes into the ground every 1km of fence run, and connect the stakes with wire joint clamps to non electrified wires in the fence.

Energiser Installation

Installing Energisers

Thunderbird energiser are supplied with a full set of instructions - please read these instructions before installation.
Install mains energisers and MB energisers powered from the mains indoors, and protect permanently installed battery energisers from the weather where practical.
Strip grazer energisers do not require covering.
Install energisers in a dry, well ventilated position out of the reach of children.
Use THUNDERBIRD double insulated cable from energiser's terminals to earth system and live wire, and terminate with wire joint clamps.
Solar and battery energisers should be installed in the middle of the fence line.
Solar panels need to face the equator (face north if in the southern hemisphere)
Correct earthing is essential, read and follow earthing instructions for best results.



Double insulated Cable - 2.5mm



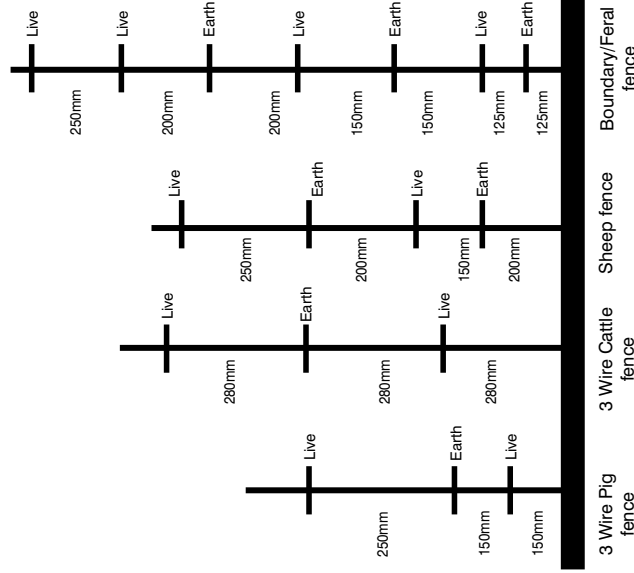
Wire joint clamp

Caution : young children and infirm persons should not be left unsupervised in the vicinity of an operating energiser.

Fence Design

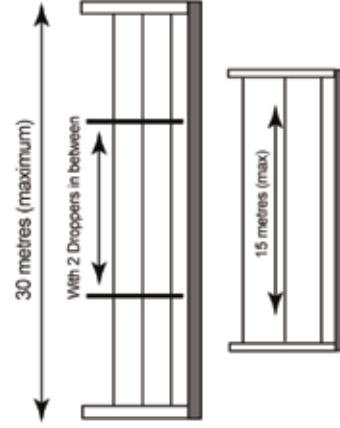
Recommended wire spacings for different animals.

Requirements may vary a little in some conditions.



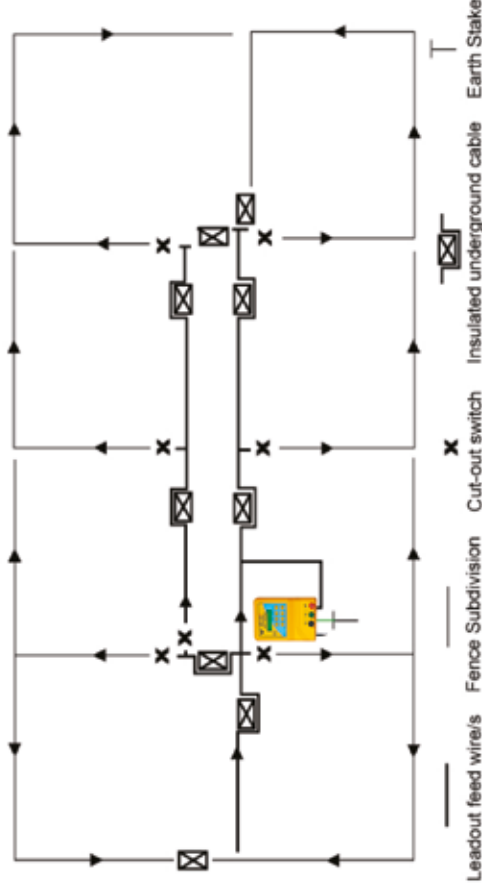
Posts spacing recommendations are for flat country (max). Reduce distance according to type of terrain.

Post Spacing

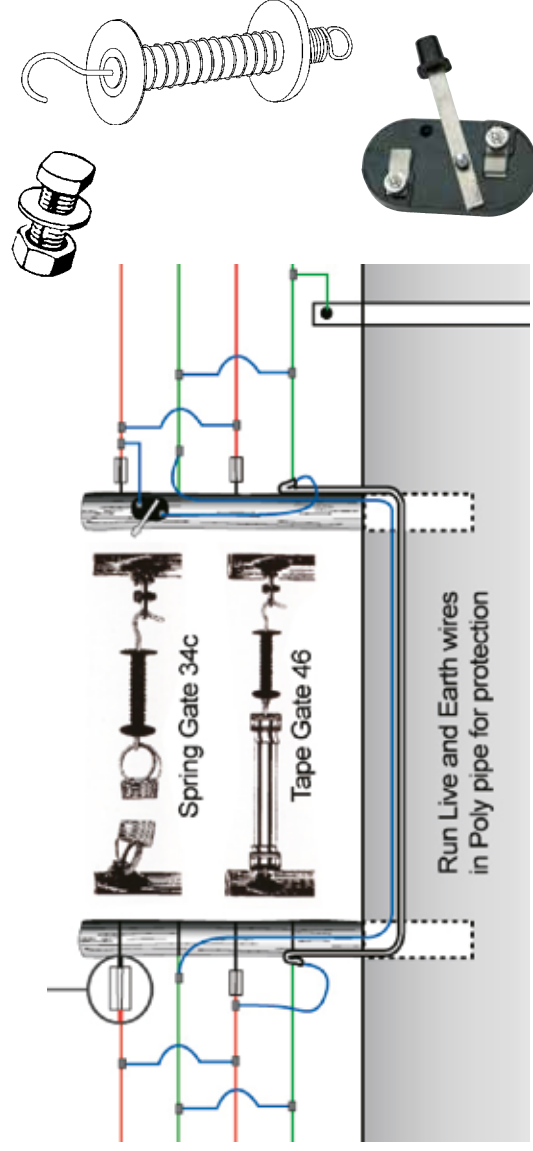


Steel or wooden posts require insulators, or use fibreglass posts with clips.

Suggested basic layout for area of operation.



Use THUNDERBIRD double insulated underground cable buried to a depth of 300mm inside poly pipe for protection. Bend down poly pipe ends to avoid rainwater entering. This is done for both live and earth wires, using joint clamps on all connections. Cut out switches can be positioned at gateways to isolate fence runs.



Installing Energisers

Install Mains Energisers inside a shed. Cover Battery Energisers from weather. Use insulated underground cable for connection from energiser to live wire/s. Do not use COPPER WIRE or copper earth stake.
USE GALVANISED WIRE/S AND EARTH STAKES.



Wire Connector 13



Energiser

Cut out switch 14

Wire Connectors

To achieve a good electrical joint, use a wire joint clamp. Twisting wires is not recommended. For joining Earth Return wires, we recommend that a joint clamp be used also.



Post Cap 23c



Post Cap 23

Wire

2.5mm high or medium Tensile galvanised wire is recommended.

DO NOT USE BARBED WIRE IN ELECTRIC FENCING



Plastic End Strain Insulator 16



Porcelain End Strain Insulator (fire resistant) 25

Paralleling Common Wire

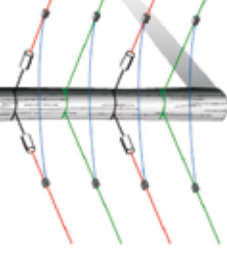
To reduce voltage loss, join all live wires and earth wires together (live to live, earth to earth). Use underground cables and joint clamps. Parallel wires from start to finish of each strain.

Thunderbird Spring gates and Tape gates can be used across gateways but should not be used to feed power to the next section of fence.



Gate Handle 32

Sign every 90 metres



Transferring power from one fence line to another

Earthing

Drive 3 stakes, 1.5 metres into the ground. Space stakes at 5 metre intervals. Non-corrosive, galvanised stakes are recommended. Position earth stakes in a moist area if possible. Please ensure that they are placed 10 metres away from any other earthing systems. Connect stakes to earth wires in fence. Bentonite earth kit improves earth efficiency.

Additional earth wire stakes are required every 1.5km of the fence run. Connect to earth return wire/s using joint clamps.

Legend

- **Electrified wire**
(Insulated each end and against posts)
(These wires must not touch any vegetation)
- **Earth return wire**
- **Insulated underground cable**
(To prevent power loss)

Underground cable is buried to a depth of 300mm minimum, inside a poly pipe. Bend down ends of pipe to avoid rain water entering. Joint clamps are used for all wire connections. For good isolation of electrical current a cut out switch is best installed at the gate way or at 1km intervals



Underground Cable

Run Live and Earth wires in Poly pipe for protection



Spring Gate 34c

Tape Gate 46



Wood Post Pin-lock HD 19



Reel, Clip & Drive Nail (Wood Post) 31A



Steel Post Plastic Pin-Lock 18



Reel, Clip & Bolt/Nut (Steel Post) 31B



Insulated Strainer 33

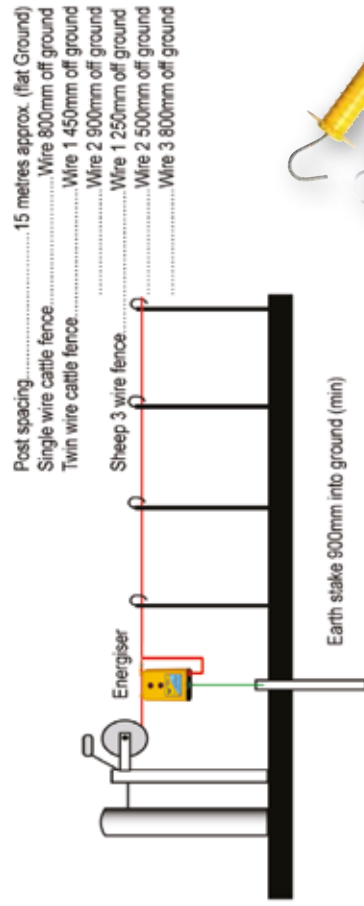


Non Insulated Strainer 34

sales@thunderbird.net.au

Temporary Electric Fencing

Strip Grazing



Strip Grazing Wire & Post Spacing

- | | |
|-------------------------------|---|
| Post spacing..... | 15 metres approx. (flat Ground) |
| Single wire cattle fence..... | Wire 800mm off ground |
| Twinn wire cattle fence..... | Wire 1 450mm off ground
Wire 2 900mm off ground |
| Sheep 3 wire fence..... | Wire 1 250mm off ground
Wire 2 500mm off ground
Wire 3 800mm off ground |



Gate handle
Compression gate handle



Tread in posts



Wind up Reels



Hot tape & Poly wire

Hot tape and polywire can be used up to 500 metres effectively. Super polytape and polywire can be used for runs up to 1500 metres. For longer runs use galvanised fencing wire.

Upgrading Existing Fences

Offset wires

Offset wires are used to upgrade existing fences, extending fence life and reducing damage. Installed on one or both sides of fence, improves stock control.

Approx. wire height settings

Horses 900mm
Cattle 750mm



Space offsets approx 15 metres apart (MAX)
Always earth the existing fence by connecting it to earth stakes.



Testing the fence earth system.

Short the fence out 100 metres away from the fence earth stakes. Make sure voltage is around 1500 volts at the energiser. Drive a stake 100mm into the ground around 1 metre away from the last earth stake. Test voltage between the test stake and the fence earth. Voltage should be less than 300 – 600 volts. If voltage is higher additional earth stakes are required.

THUNDERBIRD'S Super bentonite earth kits may be required in poor earth situations. (sandy soil types or rocky ground)

THUNDERBIRD'S Fault Locator is an ideal test instrument.

THUNDERBIRD



All specifications are subject to change
without notice, as our company is
committed to product improvements.

www.thunderbird.net.au

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