

THUNDERBIRD



LIVESTOCK MANAGEMENT SYSTEMS

**ELECTRIC FENCING
EID TAG READERS**

**CATTLE PRODDERS
AGRICULTURAL SCALES**



PRODUCT CATALOGUE 2013/14

Quality Australian Made Products

THUNDERBIRD

Leading the way for AUSTRALIA.

Thunderbird has been supplying quality products to the Australian farmer for over 37 years.

Over this time Thunderbird has become one of Australia's largest and most progressive livestock management electronics manufacturer.

Thunderbird is the Australian company that manufacturers-

- *Portable and Permanent Electric Fence systems*
- *A complete range of agricultural weighing systems and accessories.*
- *Electronic cattle prodders*
- *Remote controlled fence energisers*



Surface mount electronic component robot



Automatic plastic injection moulders



Thunderbird employs many Australians, manufacturing and distributing a quality range of products utilizing the latest technologies and machinery which lower production costs.

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*Quality Australian Made
Electric Fencing Products*

Small Mains & Battery Fence Energisers



MB65 Powers up to 7.5km
MB130 Powers up to 15km

- Designed to operate from mains or battery power
- Optional solar kit is available
- LCD displays output voltage up to 15kV
- Tough, O-ring sealed enclosure
- SMD technology for maximum reliability
- Mains A.C. adaptor and 12 volt 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



2 YEAR WARRANTY

| Model | Stored Energy | Maximum Distance | Voltage @ no load | Voltage @ 500 ohms | Current Drain | Solar Kit Size 12V |
|-------|---------------|------------------|-------------------|--------------------|---------------|--------------------|
| MB65 | 0.7 Joules | 7.5km | 7.7kV | 5.2kV | 40mA | 5-8 watt |
| MB130 | 1.4 Joules | 15km | 7.7kV | 5.8kV | 80mA | 10 watt |

Medium Mains & Battery Fence Energisers



MB250 Powers up to 25km
MB350 Powers up to 35km

- Digital LCD displays output voltage up to 15kV
- 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 Energy | Maximum Distance | Voltage @ no load | Voltage @ 500 ohms | Current Drain | Solar Kit Size 12V |
|-------|---------------|------------------|-------------------|--------------------|---------------|--------------------|
| MB250 | 2.7 Joules | 25km | 8.5kV | 5.6kV | 160mA | 20 watt |
| MB350 | 3.7 Joules | 35km | 8.5kV | 5.9kV | 210mA | 20 watt |

Large Mains & Battery Fence Energisers



Remote Ready

Remote control (optional)
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

MB550R Powers up to 50km
MB1050R Powers up to 85km
MB1750R Powers up to 135km

- **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.
- **Earth monitor** - displays the condition of your earth system.
- **13 pulse speeds** to select from - 1.2 to 2.4 seconds.
- **Built in alarm** activates internal buzzer and optional strobe or siren/strobe when fence voltage drops. Alarm voltage can be set from 2 to 6kV.
- **Tough enclosure** - O-ring sealed, weatherproof, robust ABS enclosure.
- **Great back up** - 2 years warranty, 6 months lightning warranty.
- **Solar compatible** - optional solar kit can be connected to charge battery for remote areas.
- **Quality components** - SMD electronics and vacuum sealed transformer.
- **Auto battery save function** - when battery voltage level drops, system changes output level to low and pulse rate to minimum.

| Model | Stored Energy | Maximum Distance | Voltage @ no load | Voltage @ 250 ohms | Current Drain | Solar Kit Size 12V |
|---------|---------------|------------------|-------------------|--------------------|---------------|--------------------|
| MB550R | 5.1 Joules | 50km | 7.6kV | 5.6kV | 205-370mA | 40 watt |
| MB1050R | 10.2 Joules | 85km | 7.9kV | 6.6kV | 335-730mA | 80 watt |
| MB1750R | 17.6 Joules | 135km | 8.1kV | 7.0kV | 550-1180mA | 120 watt |

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 Mains Fence Energisers



M25 Powers up to 2km
M60 Powers up to 7.5km
M120 Powers up to 15km



- 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 incorporated stainless steel nuts

| Model | Stored Energy | Maximum Distance | Voltage @ no load | Voltage @ 1000 ohms | Power Usage (Watts) |
|-------|---------------|------------------|-------------------|---------------------|---------------------|
| M25 | 0.26 Joules | 2.5km | 8.1kV | 3.4kV | 2 |
| M60 | 0.7 Joules | 7.5km | 8.8kV | 5.2kV | 3 |
| M120 | 1.4 Joules | 15km | 9.5kV | 5.9kV | 4 |

Medium Mains Fence Energisers



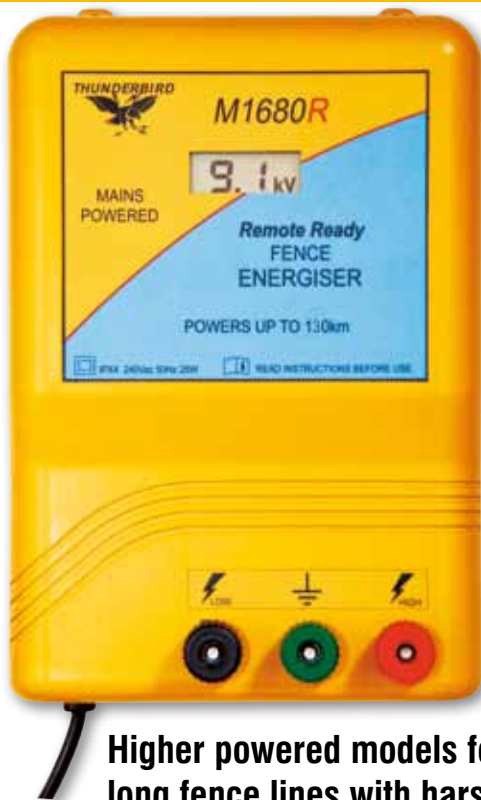
M250 Powers up to 25km
M350 Powers up to 35km

All the features of its 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.

| Model | Stored Energy | Maximum Distance | Voltage @ no load | Voltage @ 500 ohms | Power Usage (Watts) |
|-------|---------------|------------------|-------------------|--------------------|---------------------|
| M250 | 2.2 Joules | 25km | 8.4kV | 4.9kV | 5 |
| M350 | 3.1 Joules | 35km | 8.6kV | 5.3kV | 7 |

Large Mains 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.

M650R Powers up to 60km
M1150R Powers up to 90km
M1680R Powers up to 130km

Thunderbird's new 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

| Performance | Stored Joules | Max Fence Distance | Voltage @ no load | Voltage @ 250 ohms | Watt |
|-------------|---------------|--------------------|-------------------|--------------------|------|
| M650R | 5.6 Joules | 60km | 8.1kV | 5.1kV | 11 |
| M1150R | 10.3 Joules | 90km | 8.2kV | 5.7kV | 18 |
| M1680R | 14.5 Joules | 130km | 8.4kV | 6.2kV | 29 |

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 fitted !



Self Contained Systems - includes battery

S16B 1.5km Solar System
S26B 2.5km Solar System

Ideal for small fencing applications.
 Output leads are supplied.
 Fully portable - internal battery included.
 Multi coloured LED, low and high power levels.
 Slides over steel star post.
 Mains battery charger is supplied for poor weather periods.



Medium Solar Fence Energisers

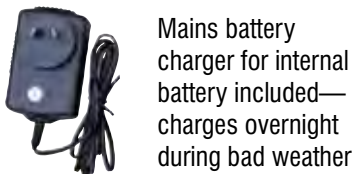
With internal batteries fitted !



Self Contained Systems - includes battery

S 20B 2km Solar Energiser
S 40B 5km Solar Energiser
S 65B 7.5km Solar Energiser

Ideal for small fencing applications.
 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.



Mains battery charger for internal battery included—charges overnight during bad weather



Feature Packed, all 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.
- Pulse light flashes to indicate operation of system.
- Low battery warning light - lets you know when to recharge from the mains.
- Fence and earth leads supplied with insulated grips.

| Model | Stored Energy | Maximum Distance | Voltage @ no load | Voltage @ 1000 ohms |
|-------|---------------|------------------|-------------------|---------------------|
| S16B | 0.13 Joules | 1.5km | 8.0kV | 4.5kV |
| S26B | 0.2 Joules | 2.5km | 7.9kV | 5.0kV |
| S20B | 0.13 Joules | 2km | 6.2kV | 3.7kV |
| S40B | 0.4 Joules | 5km | 7.8kV | 5.5kV |
| S65B | 0.7 Joules | 7.5km | 8.1kV | 6.0kV |

Large Solar Fence Energisers



- S70 10km Solar Energiser - All in one unit**
- S150 20km Solar Energiser - All in one unit**
- S250 25km Solar Energiser (MB250 + solar kit)**
- S350 35km Solar Energiser (MB350 + solar kit)**
- S550R 50km Solar Energiser (MB550R + solar kit)**
- S1050R 85km Solar Energiser (MB1050R + solar kit)**
- S1750R 135km Solar Energiser (MB1750R + 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 |
|--------------|----------------------------------|------------------------------|-----------------|-----------|
| S16B | 2 watts | 5.5 A/H | 12V | NO |
| S26B | 2 watts | 5.5 A/H | 12V | NO |
| S20B | 5 watts | 7 A/H | 12V | NO |
| S40B | 5 watts | 7 A/H | 12V | NO |
| S65B | 6 watts | 7 A/H | 12V | NO |
| S70 | 10 watts | 60 A/H | 12V | NO |
| S150 | 12 watts | 70 A/H | 12V | NO |
| S250/350 | 20 watts | 80 A/H | 12V | YES |
| S550R Solar | 40 watts | 100 A/H | 12V | YES |
| S1050R Solar | 80 watts | 200 A/H | 12V | YES |
| S1750R Solar | 120 watts | 200 A/H | 12V | YES |

Note : Deep cycle type batteries are recommended. Solar panel sizes may vary due to geographical locations. Larger panels may be required in some areas.

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



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.

Pulse and low battery lights. Electronics are heavily coated to minimise failure due to moisture and insect damage.

Strip Grazer

BD20

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

Small / Medium Battery Energisers



B20 Powers up to 2km

B60 Powers up to 7.5km

B120 Powers up to 15km



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.

| Model | Distance | Stored Energy | Battery Drain | Solar Option | Low Battery Indication | Voltage @ no load | Voltage @ 1000 ohms |
|-------|----------|---------------|---------------|----------------|------------------------|-------------------|---------------------|
| BD20 | 2km | 0.16 | 15mA | Yes - 2 watt | YES | 7.5kV | 4.5kV |
| B20 | 2km | 0.16 | 15mA | Yes - 2 watt | YES | 7.5kV | 4.5kV |
| B60 | 7.5km | 0.7 | 44mA | Yes - 5-8 watt | YES | 8.1kV | 5.9kV |
| B120 | 15km | 1.5 | 105mA | Yes - 10 watt | YES | 8.1kV | 6.7kV |

Garden Fence Energisers Kits

**M
A
I
N
S**

240 volt (mains) Kit

Contains:
Energiser
8 x Posts
50m wire
Sign
End insulators
Joint clamps
25 x Post clips



**B
A
T
T
E
R
Y**

12 volt (battery) Kit

Contains:
Energiser
8 x Posts
50m wire
Sign
End insulators
Joint clamps
25 x Post clips



Testers



ALL Thunderbird Testers are AUSTRALIAN MADE



EF 8

Digital Volt Meter

Reads up to 10,000 volts
Digital Display
Auto on/off function
9 volt battery lasts up to 1 year.



EF 9

Lite Volt Tester

4 lights indicate voltage level
1500, 3000, 4500 & 6000 volts
(poor, fair, good or excellent)
Requires no battery to operate



EF 4

Fence Flasher

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

EF 5A

Fault Locator

- Displays - volts, amps and direction of the fault
- Auto power off function - saves battery
- Saves time locating shorts
- Cordless design - no need for wires
- Reads up to 15kV and up to 70 amps

Earthing Kits



EF 70

Portable Galvanised Earth Stake

Hot dipped galvanized
1000mm in length
T bar top to assist removal
Termination bolt included



EF 126

Earth Clamp

Fits 12mm rod
Provides secure electrical connection



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



Australian Made

EF 18S Super strong insulator
UV stabilised heavy duty design.
Ideal for wire and poly wire.



Australian Made

EF 18C Claw steel post
Easy mounting
UV stabilised.



Australian Made

EF 18D dual purpose - fits oval and round hole posts, slot for 12mm tape, two pin option, larger shield and fence wire pin.



Australian Made

EF 23S White post cap
Ideal for wire & cord
UV stabilised
Will take 40mm tape.



EF 31B Porcelain steel post
Fire resistant and long lasting.



Australian Made

EF 106 Wide tape insulator. Takes up to 40mm tape.



Australian Made

EF 23L Long steel post cap
Maximum visibility. Use with wire or up to 40mm tape.
Secures to post.

Wood Post Insulators



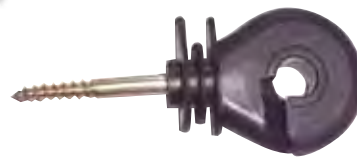
Australian Made

EF 19 Pinlock wood post
Heavy duty design
UV stabilised
Shield to prevent arcing



Australian Made

EF 19C Claw wood post
Ribbed for extra strength.
Anti arc shield
UV stabilised



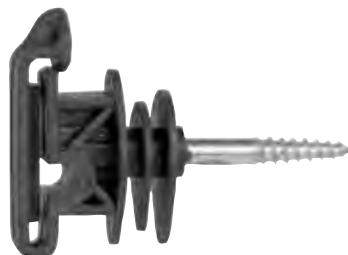
EF 17 Screw in wood post
Screws straight into soft timber. Slotted for easy wire access



EF 31A Porcelain wood post
Long lasting and robust



EF 24 Staple insulator
Clamps around wire.
Galvanised staple.



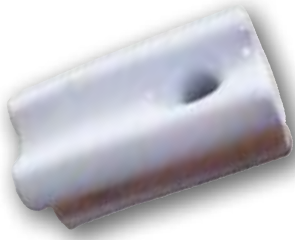
EF 151 Wide tape wood post
up to 40mm tape



Australian Made

EF 7 30 metres insultube
5mm I.D - 9mm O.D.

End Strain Insulators

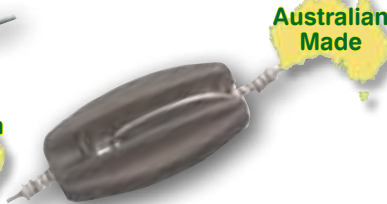


EF 25 Porcelain end strainer
Strong and long lasting
Fire resistant material.



Australian Made

EF 16W Super end strainer
Tough UV stabilised material.
Ideal for long fence strains.



Australian Made

EF 16 Medium end strainer
Extra long leakage path.
Designed for short strains.



EF 26 Porcelain reel
Ideal for corner strains
Large 41mm diameter.

Note: Wire should not be excessively strained when using 16

Standoff Brackets

Upgrading Existing Fences.



EF 31 Porcelain 300mm
Spring steel wire & C clip
Extra long life—robust



EF 29 Pinlock 300mm
Spring steel wire.
Fits to pre-strained wire



EF 17L 200mm screw in
wood post offset



EF 50 300mm fibreglass
offset and spring clip

Australian Made



EF 27 Polytube 300mm
Can be installed to pre-strained wire
Plastic tube insulator.

Australian Made

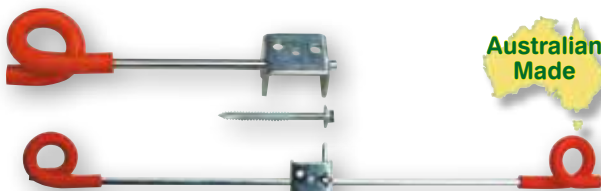


EF 28S Steel post 300mm plastic
clamps around steel Y post.
Very safe to use with horses.

Australian Made



EF 22 Steel post 150mm plastic offset
Ideal for hot tape
Fits to both sides of steel post.



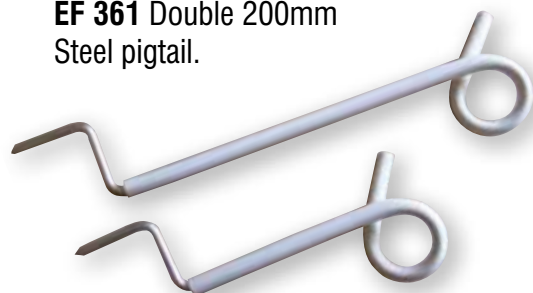
Australian Made

EF 83D Single 150mm
EF 84D Single 250mm
EF 85D Double 250mm (500mm overall)
Dual purpose, fits oval and round hole posts.
Multitrigger are designed to mount to steel or wood posts. Comes with coach screw, bolt and nyloc nut.



HOT TAIL Offset Insulators

EF 351 Single 200mm
EF 361 Double 200mm
Steel pigtail.



Wooden post drive in offsets

EF-340 150mm drive in pigtail offsets
EF-341 270mm drive in pigtail offsets

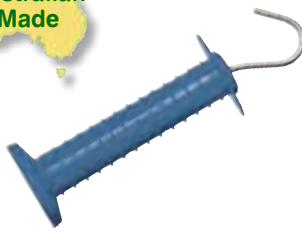
Gate Kits

Australian Made



EF 32S Gate handle
Galvanised spring and hook.
Large shield to prevent shock.

Australian Made

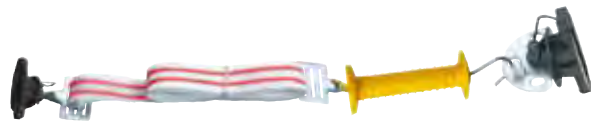


EF 32B Compression handle. Super strong
compression spring. Compression
configuration ensures spring won't stretch.

Australian Made



EF 32A Plastic hook grip
Completely insulated



EF 46 Tape gate - up to 5 metre
gateways Includes adjustable buckles,
3 way anchor, handle and insulators.

Australian Made



EF 34C Spring gate
Includes large galvanised spring,
3 way anchor, handle and insulators
Up to 5 metre gateways

Australian Made



Bungee Gate
EF 110 7m kit
EF 110L 11m kit

Australian Made



EF 34B
3 way gate
anchor

Wire Joiners & Strainers



EF 13S Wire joint clamp
Heavy duty, strong design
Galvanised finish, excellent electrical joint



EF 13 Wire joint clamp
Split bolt type
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 33 Poly ratchet strainer
Rust resistant galvanised frame
and large insulator



EF 33A Porcelain ratchet strainer
Rust resistant galvanised frame
Long life porcelain insulator

Underground Cable



Thunderbird's underground cable is double insulated for premium insulation. It is manufactured from high quality materials with a galvanised wire core.

Use as a lead out from shed to fence, under gateways, general wire connections and earth stake wires.

- EF 11E 25m x 1.6mm underground cable
- EF 11 50m x 1.6mm underground cable
- EF 11F 25m x 2.5mm underground cable
- EF 11A 50m x 2.5mm underground cable
- EF 11B 100m x 2.5mm underground cable
- EF 11D 200m x 2.5mm underground cable



Hot Tape & Poly Wire



Poly Wire

- EF 40EO - 200m orange
- EF 40EW - 200m white
- EF 40DO - 500m orange
- EF 40DW - 500m white

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



Hot Tape

- EF 40BO - 200m orange
- EF 40BW - 200m white
- EF 40CO - 400m orange
- EF 40CW - 400m white
- EF 41 100m x 40mm wide

Designed for short distances Hot Tape is 12mm wide, with 5 stainless steel wires.

Highly visible woven design.



Ultra Conductive products

- EF 48- 200m Thundertape
- EF 48A- 400m Thundertape
- EF 47 - 200m Thunderbraid
- EF 47A- 400m Thunderbraid
- EF 52- 200m Thundercord
- EF 52A- 400m Thundercord
- EF 53- 200m Thunderrope

The range of Thunder poly tapes, cords, braids and ropes feature a combination of tinned copper and stainless steel.

They have superior conductivity and strength resulting in better power transfer and longer life.



Hot Tape & Poly Wire Specifications

THUNDERBIRD POLY - Tapes, Wires and Braids Performance Chart

| Product | Item # | Length | Colour | Dia / Width | Volts at start of fence | Volts at 500m | Volts at 1km | Type of conductors |
|-------------------------|--------|--------|---------------|-----------------|-------------------------|---------------|--------------|--------------------|
| Poly tapes | | | | Width | | | | |
| Thundertape | 48 | 200m | white / black | 12mm | 8,000 | 6,400 | 5,300 | Cu + ss |
| Thundertape | 48A | 400m | white / black | 12mm | 8,000 | 6,400 | 5,300 | Cu + ss |
| Poly tape | 40BW | 200m | white | 12mm | 8,000 | 890 | 470 | ss |
| Poly tape | 40CW | 400m | white | 12mm | 8,000 | 890 | 470 | ss |
| Poly tape | 40BO | 200m | orange | 12mm | 8,000 | 890 | 470 | ss |
| Poly tape | 40CO | 400m | orange | 12mm | 8,000 | 890 | 470 | ss |
| Poly wires/cords | | | | Diameter | | | | |
| Thundercord | 52 | 200m | white / black | 3.5mm | 8,000 | 6,960 | 6,200 | Cu + ss |
| Thundercord | 52A | 400m | white / black | 3.5mm | 8,000 | 6,960 | 6,200 | Cu + ss |
| Poly wire | 40EW | 200m | white | 2.5mm | 8,000 | 1,140 | 600 | ss |
| Poly wire | 40DW | 500m | white | 2.5mm | 8,000 | 1,140 | 600 | ss |
| Poly wire | 40EO | 200m | orange | 2.5mm | 8,000 | 1,140 | 600 | ss |
| Poly wire | 40DO | 500m | orange | 2.5mm | 8,000 | 1,140 | 600 | ss |
| Poly braids | | | | | | | | |
| Thunderbraid | 47 | 200m | white / black | 3.5mm | 8,000 | 6,750 | 5,800 | Cu + ss |
| Thunderbraid | 47A | 400m | white / black | 3.5mm | 8,000 | 6,750 | 5,800 | Cu + ss |
| Poly ropes | | | | | | | | |
| Thunderrope | 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 tinned copper wire (for superior conductivity), providing a longer lasting and better performing product.

Results may vary depending on conditions and many other factors, figures are with a 500 ohms resistance to earth to represent an animal.

All figures are approximate.

Cu = tinned copper wire

ss = stainless steel

Note : Earth resistance is ignored, so performance will be worse if there is any earth resistance.

Specifications are approximate and subject to change without notice.



Wind Up Reels



EF 36 Up to 200m Polytape / 500m Polywire

EF 36A Up to 300m Polytape / 800m Polywire

Standard reels - insulated bobbins, aluminium frame, light and easy to use.

Strong, simple construction.



EF 36G Up to 200m Polytape / 500m Polywire

Geared reels - 3 to 1 gear ratio to make winding faster and easier.

Takes up to 200 metres of poly tape.

Galvanized frame, lightweight but strong design.

Tread In Posts

EF 61 Plastic multi-wire post
1080mm high
Heavy duty white polymer
Extremely light

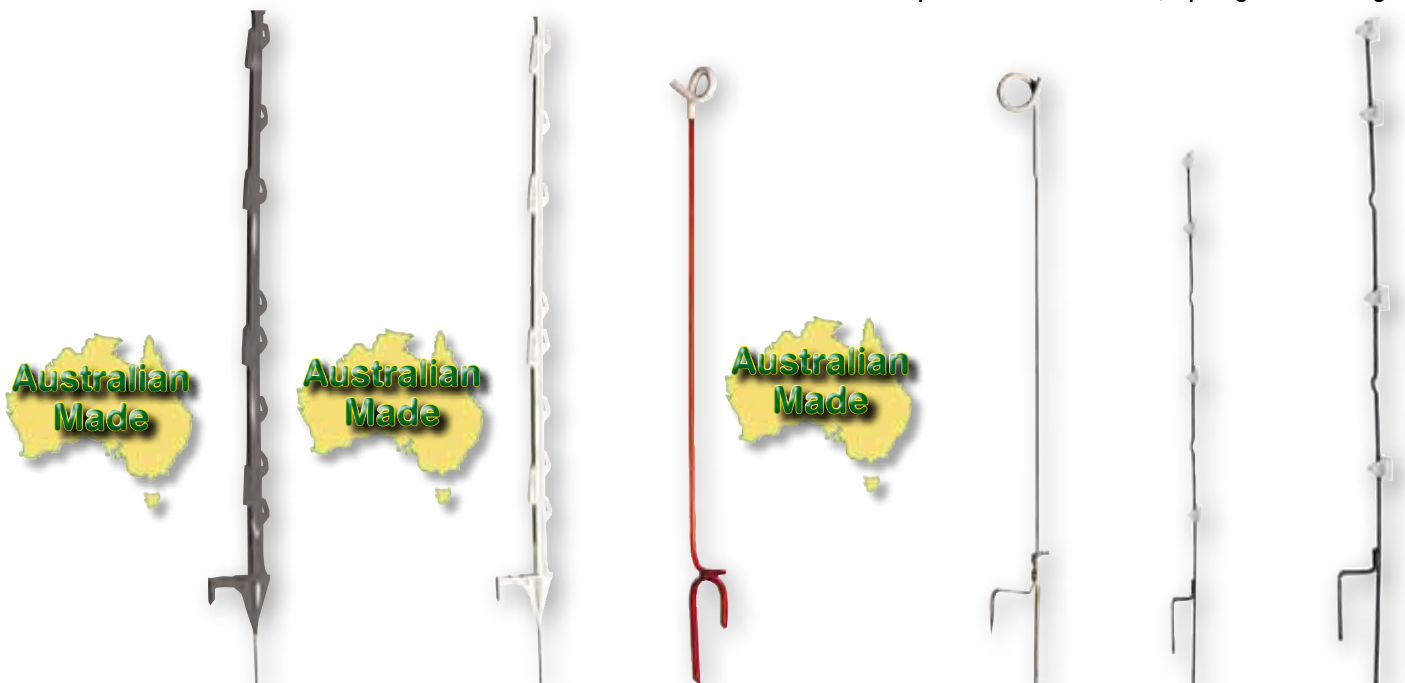
EF 37 Orange pigtail post
10mm heavy duty steel
Robust construction for longer life

EF 38 Multi-wire steel galvanised post
1100mm, non breakable steel foot
Replaceable insulators, spring steel design

EF 61B Black plastic multi-wire post
1080mm high

EF 39 Galvanised pigtail post
6mm spring steel, 1060mm
Non breakable steel foot

EF 38H Multi-wire 1500mm steel galvanised post.
Non breakable steel foot
Replaceable insulators, spring steel design



Fence Accessories



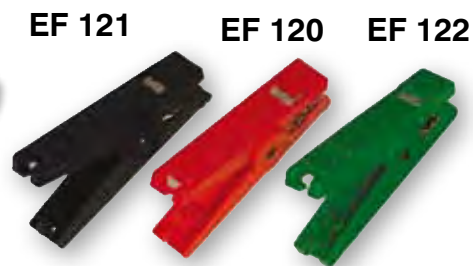
Australian Made

Jumper leads - **EF 59** single



Australian Made

EF 119 Triple leads with insulated clips

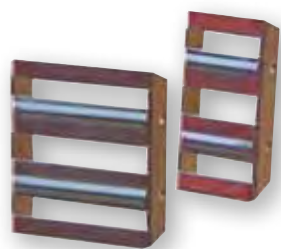


EF 121

EF 120

EF 122

Separate insulated clips available in green, black and red



Tape joining buckle
EF 103B 40mm
EF 104B 13mm



EF 105
40mm tape end buckle



EF 14S
Super cut-out switch



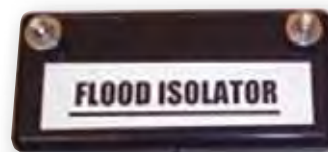
EF 14
Cut-out switch



EF 15 Fence Warning Sign
Note:- It is a legal requirement to have warning signs at frequent intervals where fence has public access



EF 10K Lightning Diverter Kit
Includes porcelain diverter, joint clamps, etc.



Australian Made

EF 49 Flood Isolator
Massively reduces power loss when flood contacts the fence.
Sealed from insect and water damage.
Prevents fence shorting out into floodwater.

Fibreglass Fencing



Ideal option for temporary and permanent fencing.

- EF 55** 1000mm x 10mm fibreglass posts
- EF 54** 1250mm x 10mm fibreglass posts
- EF 56** 1500mm x 10mm fibreglass posts
- EF 57** 10mm galvanised spring clip
- EF 51** Nylon driver cap

General Fence Products



No 43 Wire Spinner
Fully adjustable
Over-run brake



No 44 Steel Post Lifter



No 125
Wire twisting tool
Smooth comfortable handle
Accommodates multiple wire sizes



No 45 Steel Post Driver
No 45A Large Steel Post Driver



No 400
Yellow steel post safety cap.
Can be fastened to post.
Bright visible colour.
UV stabilised plastic.



No 430 Chain Wire Strainers

Cattle Prodders

TS200 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

Choice of 3 Shaft sizes for both models - 295mm, 545mm and 800mm

TS250C Rechargeable



Thunderbird's TS250C uses an internal rechargeable battery for added convenience

- Strong one piece plastic moulding
- Flexible shafts with inserted moulded brass tips
- Button safety clip supplied
- One year warranty
- Modular design, with replaceable electronic module
- 3 shaft sizes available—

Thunderbird's TS250C prodders have a built in rechargeable battery. System can be charged by an A.C. Adaptor (supplied) or an optional cigarette lighter charger.



Ag Scale Indicators

Thunderbird's range of microcomputer controlled digital indicators incorporate the latest microchips and advanced software, resulting in reliable, high performance, agricultural weighing. Thunderbird's indicators represent excellent value and can help you become a real professional, providing you important information in the yard to make better management decisions.



**NLIS COMPATIBLE
CATTLE ONLY**

SS1000 Basic indicator.

Main Features -

Giant LCD display, easy to operate, fast and accurate weighing, 4 weighing modes including 2 livestock modes to capture moving weights. Sealed keypad. Very easy to use.

Low power auto off function.

Upgradeable to PS3000. Compatible with all load bars.

PS3000 Advanced statistical/drafting indicator

Main Features -

Giant LCD display, internal rechargeable battery & charger, 4 weighing modes including 2 livestock modes to capture moving weights, RS232 communication port, hold facility.

Statistics displayed - min, max, number, total, and average weights - as well as statistics on each weight range.

Auto Memory - remembers last weight when turned on.

Auto Tally - automatically adds weight to statistics.

5 Way drafting, and many more features.

ES6000 Alphanumeric recording Indicator

Main Features -

Records - ID (tag), weight, date, file, 24 characters of comments and 12 condition codes on each animal.

Operator can download all data stored at a later time to a PC.

50,000 animals can be stored with 10 records per animal.

5 operation modes, daily weight gain, back lit display,

3 x ID fields, auto recording, search menu, graphic display,

statistical functions, 2 communication ports, sealed qwerty keypad and many more functions.

EID cross reference - assigns visual tag number against EID number.

Thundersoft animal monitoring and performance software program is supplied free.

Directly connects to a suitable electronic ID reader, storing all data, and eliminating the need for a computer in the field.

Not for trade use.

Ag Scale Load Bars

Thunderbird's Australian built load bar systems are built to handle restless animals and perform in tough agricultural conditions. Portable or permanent applications, when coupled with one of our digital indicators you will find the best value Ag weighing system available.



Easymove Bars (2 bars, 580mm long)

Portable load bars available in 500kg and 2000kg capacities. Lightweight, yet robust with galvanised construction. Sealed transducers with rodent protection mesh.



Extender Bars (2 bars, 1000mm long)

3000kg permanent load bars ideal for under cattle crushes. Heavy Duty design that's made to last. Sealed transducers mounted in solid, thick galvanised housings, fitted with cable hose protection.



Quad Bars (4 bars, 580mm long)

4000kg load bars suitable for under weigh bins and mixers, providing excellent stability.



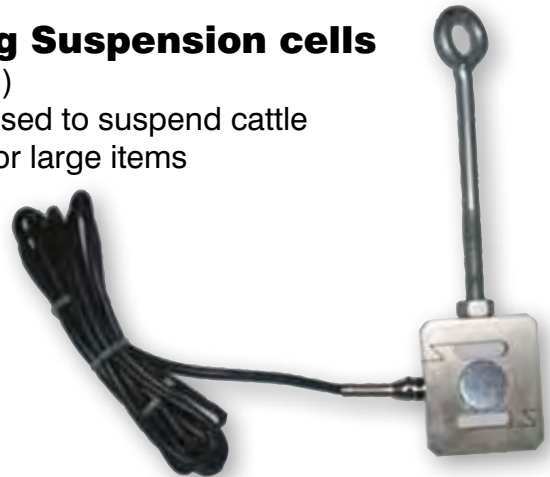
100kg Suspension cell (1)

Ideal for weighing fleeces and small weight items in hanging situations.

3000kg Suspension cells

(set of 4)

Can be used to suspend cattle crushes or large items



| Recommended Applications | Easymove Bars | Extender Bars | Quad Bars | Suspension 100kg | Suspension |
|--------------------------|---------------|---------------|-----------|------------------|------------|
| Sheep crates | YES-500kg | | | | |
| Cattle platforms | YES-2000kg | | | | |
| Cattle crushes | | YES* | YES | | YES |
| Feed bins | | | YES | | YES |
| Mixers | | | YES | | |
| Woolpress | YES** | YES* | | | |
| Fleeces | | | | YES | |

Note : *preferred option **2000kg only

Not for trade use.

Ag Scale Accessories



Cattle Platform CS 2P

Strong, robust construction makes for easy weighing in a race, using anti-slip grid mesh. Available painted or in hot dipped galvanised finish.

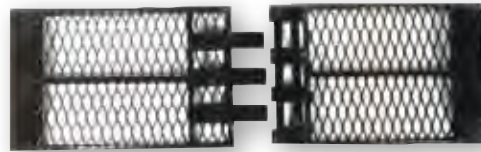
Dim 2050mm x 640mm

Cattle platform V race and rump bar also available. Used with easymove bars.

TwoPiece Cattle Platform CS 2P2

Interlocking halves make it easier to transport. Designed to be used with easymove bars.

Dim 2000mm x 640mm



Sheep Crates CS 2C

Thunderbird's sheep crate provides fast, accurate weighing with its automatic open/close gate system. Rear gate closes behind the animal automatically. After the animal leaves the crate and the operator closes the front gates, rear gates then re-open automatically.

All steel construction.

Used with easymove bars.

Dim 1450mm long x 580mm wide x 1000mm high.

Pig and goat crates also available, with V sides.

3 way manual draft module CS DRA

Bolts straight onto the front of sheep crate.

Allows operator to draft animals 3 different ways.



Ag Scale Specifications

| FEATURES | SS1000 | PS3000 | ES6000 |
|---------------------------------------|--------|--------|-----------|
| Auto and Manual Tare | YES | YES | YES |
| 4 Weighing Modes | YES | YES | YES |
| Low Voltage Indication | YES | YES | YES |
| Fast Stable Software | YES | YES | YES |
| Drafting | | 5 WAYS | 7 WAYS |
| On Screen Statistics | | YES | YES |
| Keypad Weight Calibration | YES | YES | YES |
| Internal Battery and Charger | | YES | YES |
| Auto Tally | | YES | YES |
| Auto Memory | | YES | YES |
| Lock (hold) Screen Display | | YES | YES |
| Sealed Keypad | YES | YES | YES |
| Point Set Programming Function | | YES | YES |
| Auto Drafting Option | | YES | YES |
| RS232 Computer Connection | | YES | YES |
| External Power Connection | YES | YES | YES |
| Direct EID (electronic ID) Connection | | | YES |
| Low Power Auto Off Function | YES | YES | YES |
| Group Files | | | 100 |
| ID (tag) Recording | | | 16 DIGITS |
| Condition / Operator Codes | | | 12 DIGITS |
| Animal Records | | | 50,000 |
| Back and Forward Keys | | | YES |
| Ability to Edit Records | | | YES |
| Alpha/Numeric Recording | | | YES |
| Deleting Facility | | | YES |
| Date Entries | | | YES |
| On Screen Prompting Instructions | | | YES |
| Various Load Bar Capacities | YES | YES | YES |
| Previous Weights Displayed | | | YES |
| Previous Codes Displayed | | | YES |
| 2 YEARS Warranty | YES | YES | YES |
| Total weighing records | | | 500,000 |

| Load Bar Specifications | Easymove Bars | Extender Bars | Quad Bars |
|-------------------------|---------------|---------------|-----------|
| Portable use | YES | NO | NO |
| Permanent use | YES | YES | YES |
| Gross capacity (kg) | 500/2000 | 3000 | 4000 |
| 2 year warranty | YES | YES | YES |
| Fine mode | YES | NO | NO |
| Bolt down plates | YES | YES | YES |
| Cable protection | YES | YES | YES |

EID Tag Readers

PR20 Portable Tag Reader

Thunderbird's PR20 portable RFID tag reader. Suitable for reading NLIS ear tags and bolus, made robust for agricultural conditions.



Features -

- * stores 6,500 tag numbers
- * audible beeper indicator
- * duplicate search facility
- * delete last ID function
- * 2 scanning modes
- * 6 menu functions
- * communication software
- * Blue tooth connection using serial adaptor (optional)
- * NLIS compatible, Cattle only
- * digital LCD two line display
- * uploads a tag bucket file
- * 30 ID files
- * internal rechargeable battery Ni-MH
- * sealed keypad
- * RS-232 computer connection

Thunderbird's PR20 is supplied complete with a downloading software disk, a 12 volt external power lead, a 5 metre serial cable and a 240 volt mains adaptor to charge the internal battery.

The PR20 has been designed with the rigours of agricultural use in mind. It has a moisture resistant computer port and switch, constructed from robust ABS and fibreglass and has a sealed keypad to avoid moisture or dirt entry.

The new PR20 electronic tag reader stores the IDs in its memory, and the data can be downloaded to a computer at a later time. The PR20 can also be directly connected to scale indicators, transferring the ID data to be stored by the scale.

Specifications

Read range - approx 950mm from operators hand, or up to 270mm from reader - depending on tag orientation.

Operating Current - 90-100mA average

Display - 16 character x 2 line back lit display

Internal Battery - Ni-MH 4.8V 2000mAH nominal

External Supply - 5-12Vdc

Charge Current - 120mA approx.

Number of files - 30

Read indication - Audible beeper and ID display

Duplicate search - will not read same tag twice in a row

Memory - stores 6500 IDs

Dimensions - Length 765mm - Shaft Dia 32mm

Weight - 876g

Rated - IP44

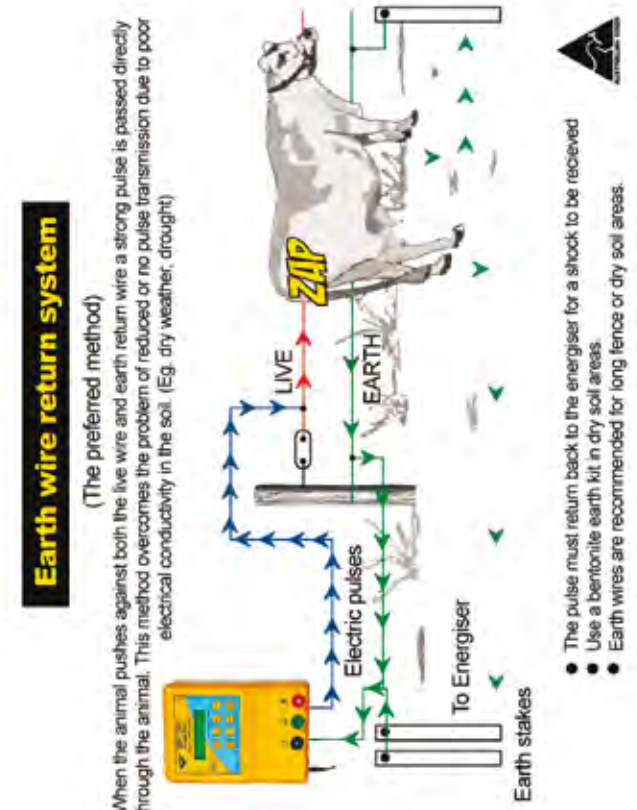
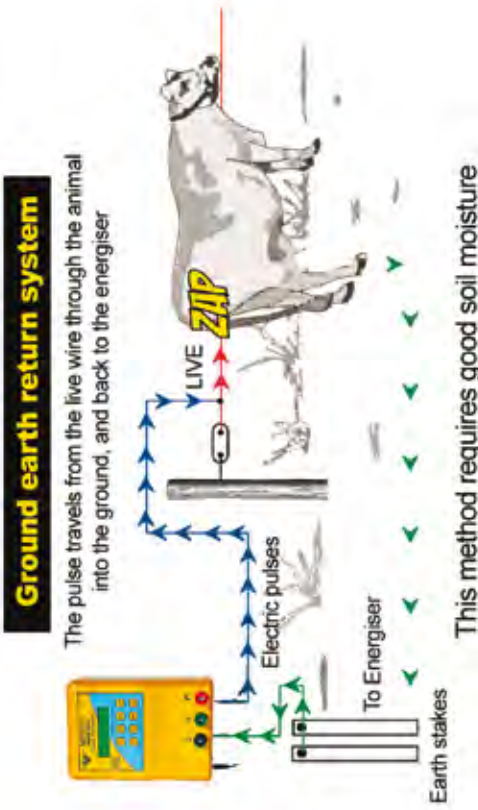
Transponder Types - 134.2 kHz HDX/FSK

Baud rate - 4800, 9600, 19200 & 57600.

Blue tooth - optional

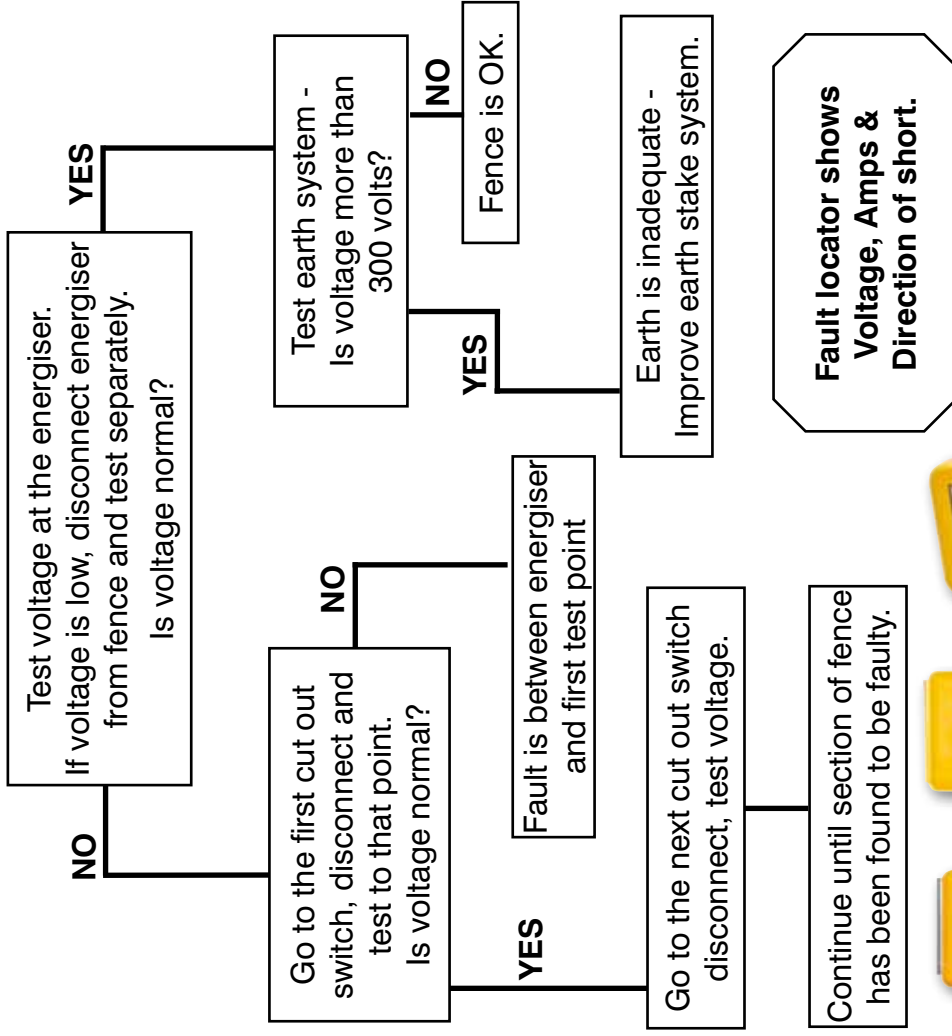
NLIS compatibility - can store tag bucket file for all 6500 tags and display ID on a match. Software imports tag bucket file and exports NLIS notification file.

Electric fence operation using different earth systems



Fence Testing / Fault Finding

TEST PROCEDURE.

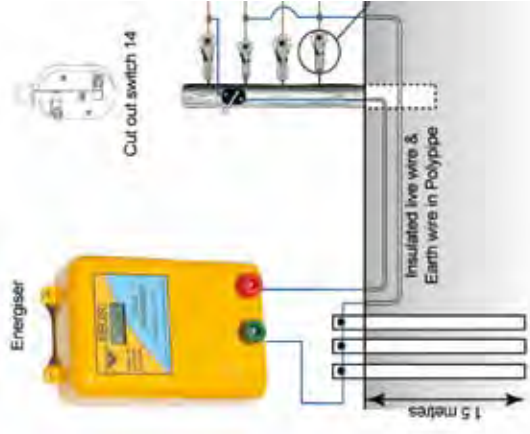


No 5A Fault Locator
No 8 Digital Volt Meter
No 9 Lite Volt Tester

Fault locator shows Voltage, Amps & Direction of short.

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.

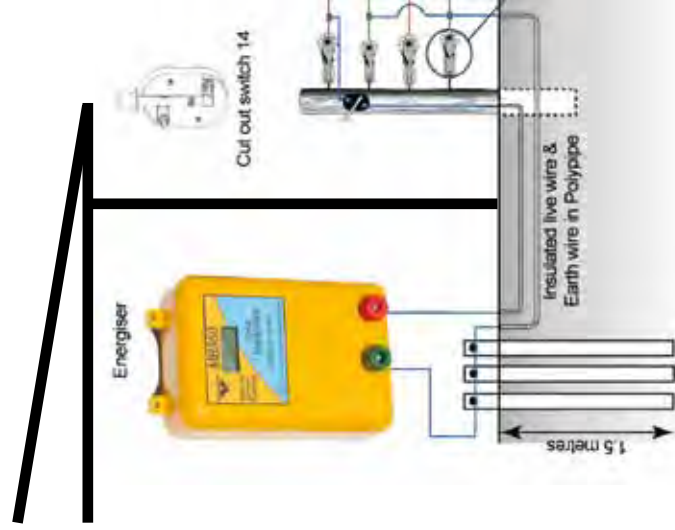
Position in a moist area if possible. Connect to energiser with double insulated cable, and clamp connections tightly using bolts or wire joint clamps.
 Drive additional earth stakes into the ground every 1km of fence run, and connect the stakes with wire joint clamps to non electrified wires in the 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.



11
Double insulated Cable - 2.5mm



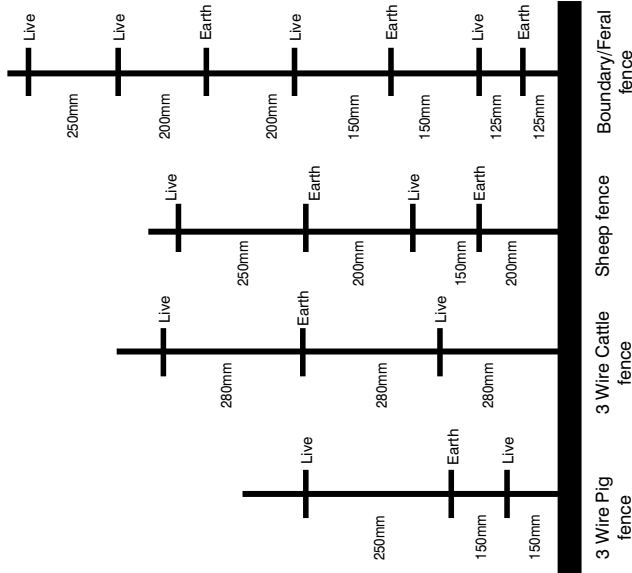
13
Wire joint clamp

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

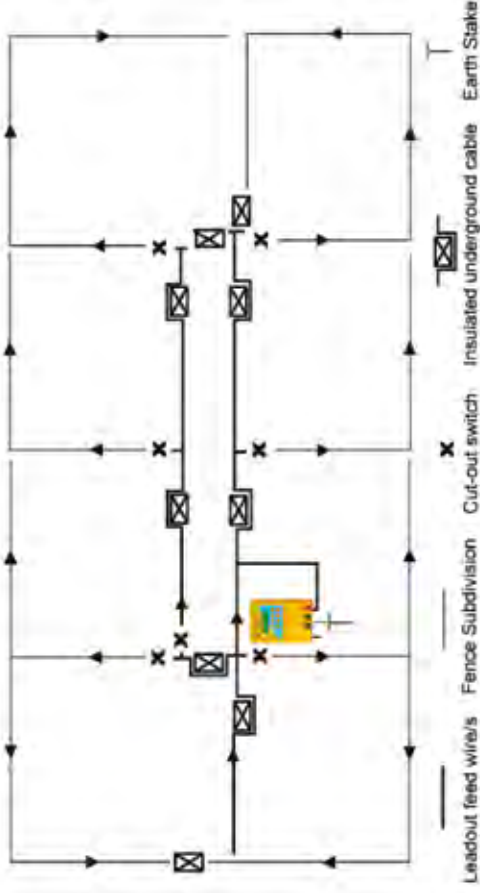
Fence Design

Recommended wire spacings for different animals.

Requirements may vary a little in some conditions.



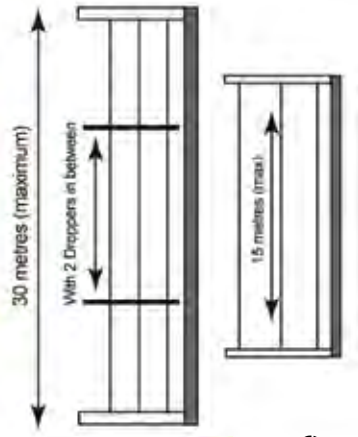
Suggested basic layout for area of operation.



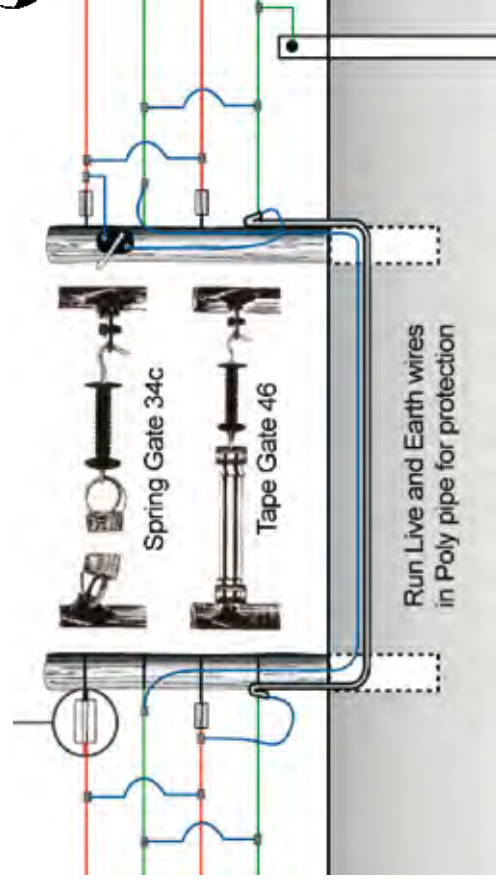
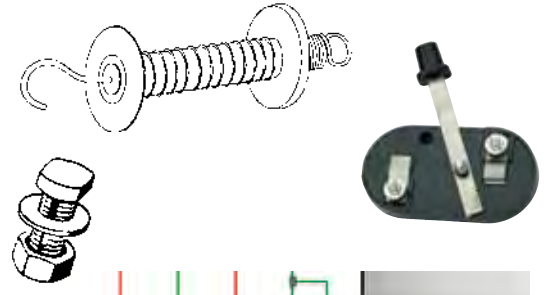
Use THUNDERBIRD double insulated underground cable buried to a depth of 300mm inside poly pipe for protection. Bend down poly pipe ends to avoid rainwater entering. This is done for both live and earth wires, using joint clamps on all connections. Cut out switches can be positioned at gateways to isolate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

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

Post Spacing



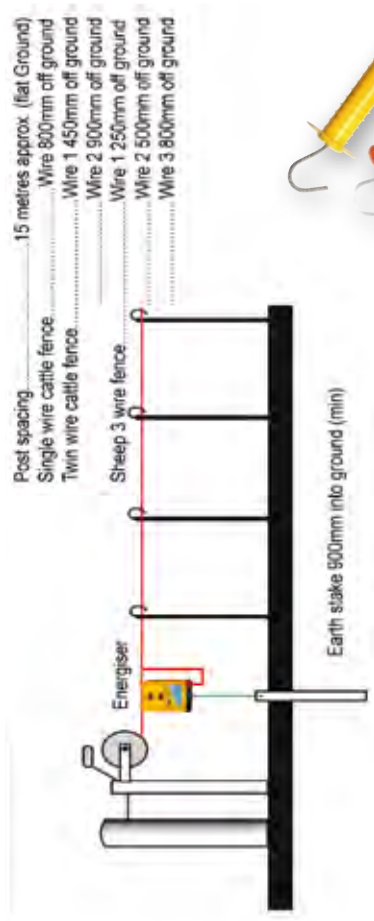
Steel or wooden posts require insulators, or use fibreglass posts with clips.



Temporary Electric Fencing

Strip Grazing

Strip Grazing Wire & Post Spacing



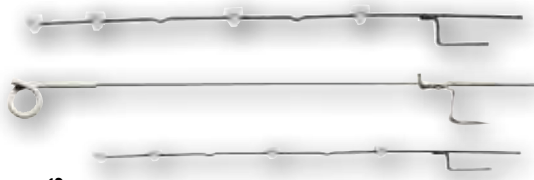
Wind up Reels



Gate handle
 Compression gate handle



Tread in posts



Hot tape & Poly wire



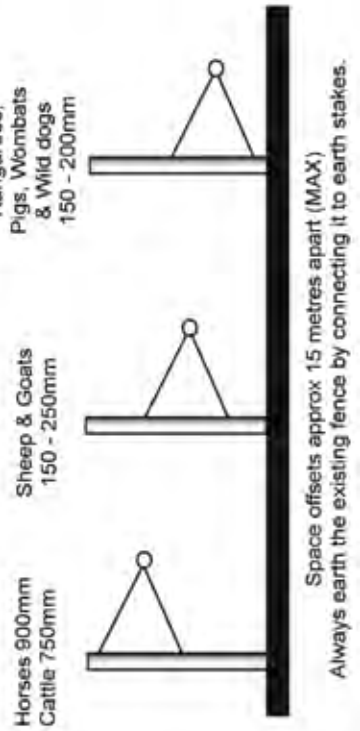
Hot tape and polywire can be used up to 500 metres effectively.
 Super polytape and polywire can be used for runs up to 1500 metres.
 For longer runs use galvanised fencing wire.

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



31

29



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.

Installing Energisers

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

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.

Wire

2.5mm high or medium Tensile galvanised wire is recommended.

DO NOT USE BARBED WIRE IN ELECTRIC FENCING

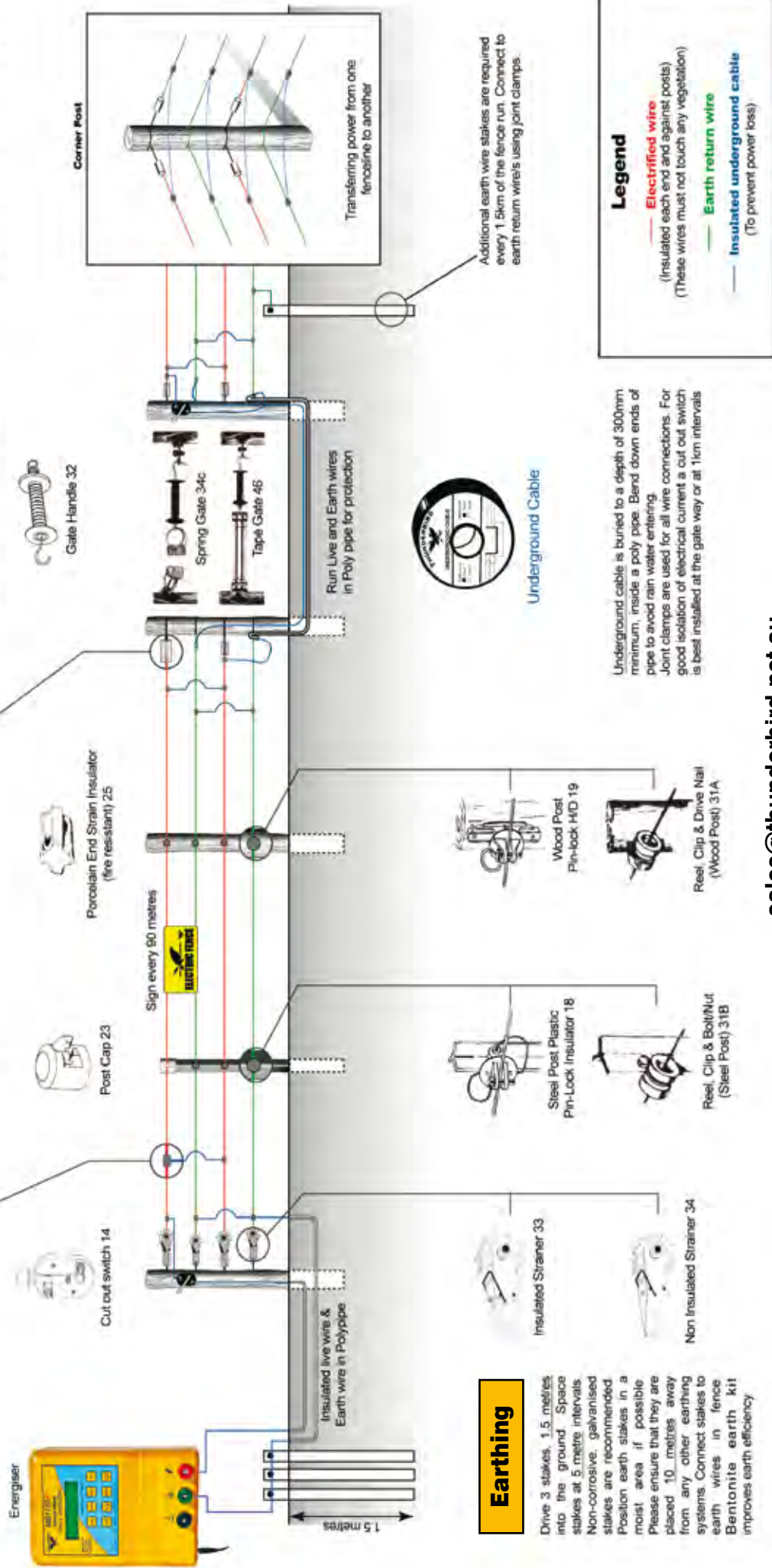
Paralleling Common Wire

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

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.



THUNDERBIRD



***THUNDERBIRD the REAL Australians!
Australian Designed, Tested and Made.***

***The Development Continues -
for Quality Australian made products***

Over the last decade, Thunderbird has developed over 50 new products.

Our Company's commitment to research and development has been the key to our recent success.

Thunderbird, in addition to continually improving existing products in the range, is designing new innovative products for the man on the land.

THUNDERBIRD is Australia's leading Ag livestock management manufacturer. We are the only company in Australia that manufactures -

- Electric fence geared and non geared wind up reels
- Plastic moulded tread-in multi lug posts
- Dedicated range of low cost mains/battery fence energisers
- Remote controlled fence energisers with keypad and display
- Electronic stock prodder range
- Dedicated complete agricultural weighing systems, NLIS compatible
- Underground electric fence cable
- Complete NLIS EID and AG Scale package
- Dedicated angle moulded enclosure for solar fence energisers

***Look for the Australian made symbol inside -
and secure Australian jobs***



THUNDERBIRD



PRODUCT CATALOGUE 2013/14