



TONGHER
ELECTRIC FENCING

**ELECTRIC FENCING SOLUTION
PROVIDER SINCE 2007**



PROFESSIONAL MAKES PERFECT

ABOUT US

Shenzhen Tongher Technology Co.,Ltd ,also called Tongher Electric Fence,Tongher tech,is established since 2007,dedicating to provide professional products,solutions and services of electric fence system for perimeter security and agricultural livestock fields to lots of companies and governments in more than 20 provinces in China domestic market and foreign countries,such as Australia,New Zealand,South east Asia,etc.

With a experienced and active-minded R&D team and in-house quality management,more than 50 countries' customers have worked together with us for our product quality and professional solutions.

Tongher offers electric fence energizers,fence posts,wires and cables,insulators,tensioners,warning signs and more products available to different needs of customers.

The energizers are approved by ISO 9001,CMA, and CE certificate,at the same time,they conforms to IEC 60335,2-76 international standard and AS/NZS CISPR14-1.And they are non lethal to animals and people who are touching the electrified wires.

To meet different customer's need, we design solutions according to different situations. So far, these solutions are widely used in communities, residential areas, governments, schools, plants, garages, prisons, military bases, water and gas distributor, farmlands and poultry areas.

We also offer OEM/ODM service for energizer or accessories.

OUR SERVICES

- Design and installation
- Professional solution
- Custom-made product
- Integrate With other security systems
- 24/7 Technical support
- On line Training & On site supervision



What Are Clients Saying About Us

Let our clients do the talking!

— Client Testimonials —



“ Thanks for your visit, i hope we could have more business together

*EA Solar Nakornsawan
CEO(Asia)*



“ After long time testing your system performance, we decide to introducing your system to our market.

Pergau Hatchery(Malaysia)



“ Your energizer is helping our many poor farmers to protect their crops from wild animals

*Ministry of Agriculture
and Forest(Bhutan)*



“ Ok, muchas gracias, excelente trabajo

David Layana(Chile)

ENERGIZER

Perimeter security single zone electric fence energizer, generating high voltage pulse of 5-14kv to intruders touching the fence wires,establishes a physical and psychological barrier to prevent invasions.

FEATURE:

1. New generation energizer that can be used not only as a simple security fencing energizer, but can also be an alarm panel,there are two alarm input for gate magnetic contacts or Infrared detector or other kind of sensor and detector with NO/NC output
2. LCD screen indicates the zone ID\ the working state \ the voltage of live wire(Optional)
- 3.High/low voltage switch manually, long-distance equipment switch automatically
4. RS485 communication protocol offers long distance management solution(Optional)
5. DC12V, NC/NO dry contact alarm output(Relay output), can work with other modern security products
6. Set up alarm delay triggering time freely
7. Large space is left for 12V 4-7Ah back up lead acid battery
8. Multi power supply function makes the energizer working at Mains AC110-240V, Battery or Solar panel with DC12V
9. Sealed metal casing would reduce the electromagnetic radiation effectively, preventing the invisible damage to your family healths or other electrical equipments
10. Remote control(wireless) makes the arming or disarming easily from any place.(Optional)



TH- GUARD II

SPECIFICATION

- 1.Input: AC110-240V or DC12V
- 2.Output peak voltage:8-14KV
- 3.Output low voltage: 3KV
- 4.Pulse duration: ≤0.1S
- 5.Pulse interval time: 1-1.5S
- 6.Max energy of output: <5.0J



TH-G2K

SPECIFICATION

- Password operation
- Arming and disarming
- Zone number alter
- Control up to 9 energizers



REMOTER(OPTIONAL)

SPECIFICATION

- Arm/disarm the energizer



MODEL NUMBER:TH-SCD II/TH-DCD II

With Bi-polar technology, every wire of the fence is electrified, enhance the power shock generating. While the fence wires are cut, shorted or the energizer is tampered, the energizer will generate alarms.

Feature:

- Deter: electric safe shock to stop the invasions
- Prevention: physical, electrical perimeter electric fence resists invasions effectively
- Alarm: wires cut or short, tamper alarms
- Unique BI-polar technology
- Equipped with 4AH backup battery(optional)
- NO/NC, DC12V, RS 485 functions
- Conform to GB/T 7946-2008 and meet CEI-61011 international electric fence standard(IEC 60335 2-76)
- System adopts the advanced perimeter security guard theory to prevent primarily, to alarm auxiliary

Technical specification:

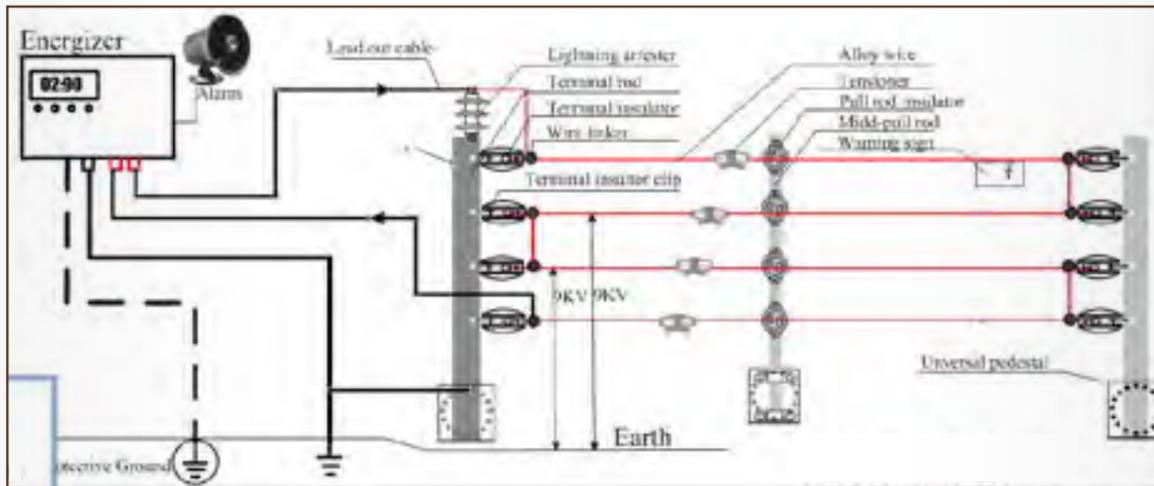
- High voltage pulse: 5000-10000V
- Low voltage pulse: 700-1000V
- Pulse period ≥1S
- Pulse duration ≤0.1s
- Peak current of pulse ≤10A
- Max quantity of electricity of pulse ≤2.5mc
- Max energy of pulse ≤5J
- System power consumption: <15W



FENCING SOLUTION

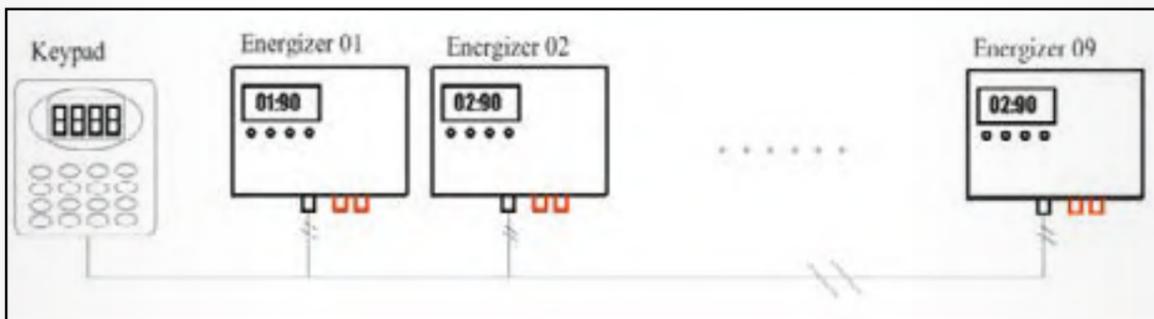
How to control the energizer and the different types of installation according to different circumstances, from small houses to large industrial projects.

Self control solution



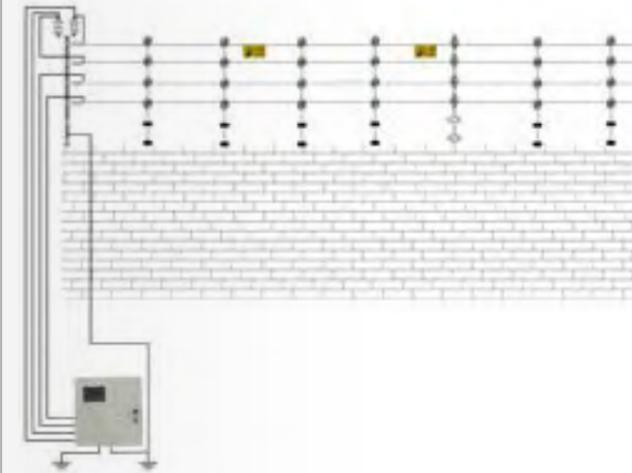
In this solution, you could arm/disarm the energizer by your hand. This is suitable for small houses or villas, the energizer is usually installed inside the houses or the villas. When the wires are cut or shorted, the energizer will alarm, which will trigger the siren to indicate there is an invasion.

Keypad control solution

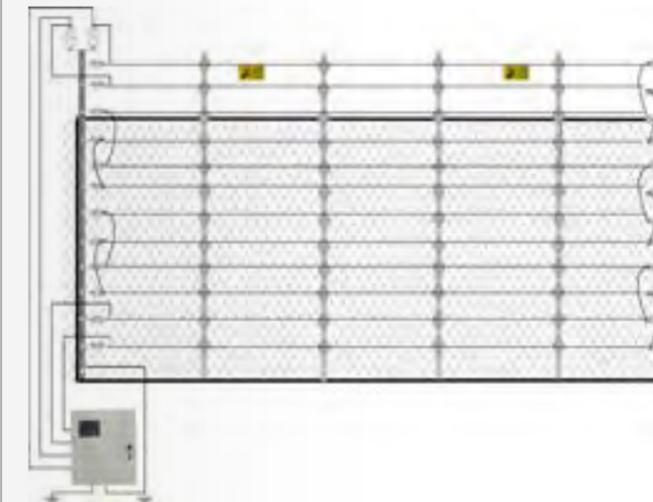


This is for large perimeter or high-level security places, with multi energizers working on the site, controlling with one keypad. The keypad can control the energizers arming/disarming, and it is usually installed inside the control room or office room, with password protection. Each energizer has a zone ID, when any one of the energizers alarms, the keypad will show the alarming zone ID, with alarm type (break, shorted, alarm in).

On top of the wall installation



Attaching the existing fence installation



Stand alone installation



INSULATORS



Strain(end) insulator(TH-IDJ)

- Widely used in terminal/end post,with fixing clips to fasten the insulator on the posts
- Long creepage distance prevent arcing
- Deep grooves suitable for tensioned fences
- Anti-oxidation,corrosion resistance and anti-static
- Made of ABS/PP/PE(Options),color option



Middle insulator for round or square post (TH-IM25) with pins

- Hold the wire and reduce the pressure of post
- ABS/PP/PE/Color option
- Long creepage distance prevent arcing
- Larger clearance to eliminate power leakage
- Deep grooves suitable for water proof
- Lock pin



Middle insulator for round or square post (TH-IM70)

- Hold the wire and reduce the pressure of post
- ABS/PP/PE/Color option
- Long creepage distance prevent arcing
- Larger clearance to eliminate power leakage
- Deep grooves suitable for water proof



Middle insulator for round tube(TH-IMG21/IMB21)

- Hold the wire and reduce the pressure of post
- Gray/Blue option
- Long creepage distance prevent arcing
- Larger clearance to eliminate power leakage
- Deep grooves suitable for water proof
- Suitable for Dia.21mm round tube



Tensioner end insulator(TH-ITG/ITB32)

- Installed on terminal(end) posts,connecting the end post and electric fence wire
- Tension a wire up to Dia.2.5mm
- Suitable for Dia.32mm round tube
- Tensioner integrated



Porcelain reel insulator(TH-IPR)

- Long lifespan
- Fire resistant
- Withstand high tension
- High quality white glaze finish



Porcelain Bullnose strain insulator(TH-IPB)

- Long life Fire resistant
- Long tracking distance minimises power leakage
- Withstand high tension
- High quality white glaze finish

STRAINER/TENSIONER



Wire tensioner(TH-ITW)

- Penetrated with the alloy wire ,adjusting the tension of the fence wire
- POM material
- Suitable for aluminium/stainless steel /small galvanized wires
- Wire tensioner



Tension spring(TH-CTH)

- Allows the wire to adjust with the temperature changes and maintain tension
- Eases strains on wires and corner posts



Galvanised wire tensioner(TH-CGT1)

- Penetrated with the alloy wire ,changing the tension of the fence wire
- Hot dip Galvanized
- Suitable for aluminium/stainless steel /galvanized wire up to Dia. 3.0mm



Galvanised wire tensioner(TH-CGT2)

- Penetrated with the alloy wire ,adjusting the tension of the fence wires
- Hot dip galvanized
- Suitable for aluminium/stainless steel /galvanized wire up to Dia. 3.0mm



T post insulator(TH-RRTI)

- Installed on middle posts,connecting the end post and electric fence wire
- All kinds of fence wires are available
- Fastened by screws or rivets
- For T posts

WIRE CONNECTOR AND FERRULES



Universal bracket(TH-CDZ)

- Holding post on the wall
- Made of Stainless steel
- Rust proof and high tension
- Angle adaptable for post installation every 22.5 degree



Concrete anchor(expansion screw)(TH-CL-B8X80)

- Fasten the brackets to concrete and masonry
- wedging-treating at the end of the anchor
- Made of stainless steel, M8X80mm



Post fixation(TH-CGD25)

- Fix the post on fence bracket
- Stainless steel made
- Fasten by screw



Wire Join Clamp (TH-CX)

- Join and connect wire / cable permanently with good conductive
- Made of aluminium alloy
- Suitable for stainless steel/aluminium/galvanized wire
- Two level nuts is useful for multi-wire connection



Terminal insulator hook(TH-CDD201/304)

- Penetrates the strain insulator and fit onto the terminal end post
- Made of stainless steel
- Withstand the pressure



Aluminium Ferrules(TH-CALC24)

- Join and connect wire / cable permanently with good conductive
- Φ2.4mm,made of aluminium alloy
- Suitable for small size stainless steel/aluminium wire
- Customize the size according to requirement

GATE CONTACTS



Gate connector

- Made of SS316 Stainless steel and POM
- Adjust all kind of weather
- Strong and long Lifespan
- Large touch point to ensure good conduction
- M6 fixed screw
- Large gasket make the installation easy
- Suitable for sliding gate

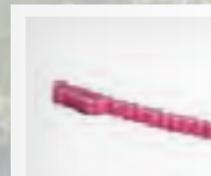


Flexible pipes

- Suitable for swing gate
- Prevent over blend of the high voltage cable
- Waterproof and rust proof

RAZOR FENCE

Electrify your razor fence



Razor concertina insulator (TH-IRAZ)

- Extensively used worldwide against force entry
- provide an intruder detection signal and a high voltage shock
- Anti UV
- Fire resistant
- Resists 16000 Volts wet condition and 25000 Volts dry condition



WARNING DEVICES



Warning sign(TH-WS)

- Brand new materials ensure long life
- Double clips are useful for installation
- Holes make the boards more stable
- Disclaimer for electric fence system
- Custom-made content



Siren(Speaker)(TH-WS626)

- DC6-12V 10/15W
- 110dB at 12VDC 1FT
- ABS Plastic cabinet



Strobe light(TH-W5101J)

- Audible and visual
- High bright
- High transparency
- Bolt fastening
- Magnetic suction



Mini Strobe Siren(TH-W103)

- Audible and visual
- 108dB/30cm
- DC12V



Solar light(TH-SL001)

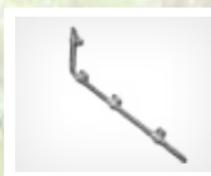
- Flash when with sunlight
- No battery needed
- Indicate high voltage danger
- Visual at night

ALUMINUM ALLOY POST



Aluminum terminal post

- Anti oxidation surface treatment
- 32mm diameter to hold the wire pressure
- 850mm/1250mm length optional
- With waterproof post cap
- Straight/L shape available



Aluminum middle post

- Anti oxidation surface treatment
- 21mm diameter to hold the wire pressure
- 850mm/1250mm length optional
- With waterproof post cap
- Straight/L shape available

ELECTRIC FENCING WIRE

Tongher tech offers a variety of electric fence wires to meet the different applications and environmental requirements.



Aluminum alloy wire(TH-AWX)

- Solid and stranded wire construction
- Wonderful conductive because of lowest resistance of all
- Available with dia. 1.27 to 2.5mm, and in range of lengths

Customization for size and lengths

Our standard range:
1.6mmx500m(Solid)
1.8mmx300m(Solid)
1.8mmx850m(Solid)
2.0mmx500m(Stranded)
2.5mmx450m(Solid)



Stainless steel wire(TH-SS012K2)

- Solid and stranded wire construction in a 304 and a 316 grade
- Soft and springy with medium resistance
- Available with dia. 1.0 to 2.0mm, and in range of lengths
- Customization for size and lengths

Our standard range:
1.2mmx2000m(Stranded)



Galvanised wire(TH-GS2025K)

- Solid and stranded hot dip wire construction
- The strongest wire and hard to cut
- Available with dia. 1.2 to 2.5mm, and in range of lengths
- Different galvanised and strength are available
- Customization for size and lengths

Our standard range:
2.0mm (25kg per roll)



LEAD OUT CABLE

A variety of electric fence lead out cables (we also call them high voltage/Undergrounding cable) are available. They are used to lead out from the perimeter fence wire to energiser or between the wires.

Aluminium inner conductor giving superior conductivity
PE coating for great protection

- Diameter range**
1.6mm to 2.5mm (other customized size)
- Length range of per roll:**
15m to 100m (other customized size)
- Our standard:**
1.8mmx50m 1.8x100m
2.5mmx50m 2.5x100m



15M ⚡ 30M ⚡ 50M ⚡ 100M



Single layer insulated



Double layers insulated

ENERGISER PROTECTIVE HOUSING(TH-CFHX)



GROUNDING, LIGHTNING AND SURGE PROTECTION



Lightning arrester/ Diverter(TH-HV12K/17K)

- Protecting the fence energizer from lightning strikes(thunder) on the fence perimeter.
- This lightning arrester creates a path of release resistance, diverting lightning surges to the ground,
- Must be separated with energizer grounding system with more than 10 meters distance



Earth grounding rod(spikes)(TH-PGR)

- Copper plating
- The earth rod is hammered into the ground and connected to the fence energiser by insulated wire
- Brass clamp to securely hold the wire against rod and does not corrode or rust.



Grounding clamp (TH-CGR)

- Easily fix the grounding cable via the clamp
- Screw on design for easy operation
- Good conductive material

SENSORS AND GSM/PSTN ALARMS

Electric fencing system sensors

- Alarm input can be connected to
- Infrared beam detector
 - Passive infrared detector(PIR)
 - Fire detector
 - Smoke detector
 - Gas leakage detector(LPG and natural gas)
 - Magnetic contact



Magnetic Contact

Infrared beam detector

Sensor detector

GSM/PSTN alarm

It is composed of one main unit and sensors or electric fence energiser,once the sensor or electric fence energiser are triggered an alarm,the main unit will dial the preset phone number or send message to the mobile number.

The user can do a series of operation to handle the system.



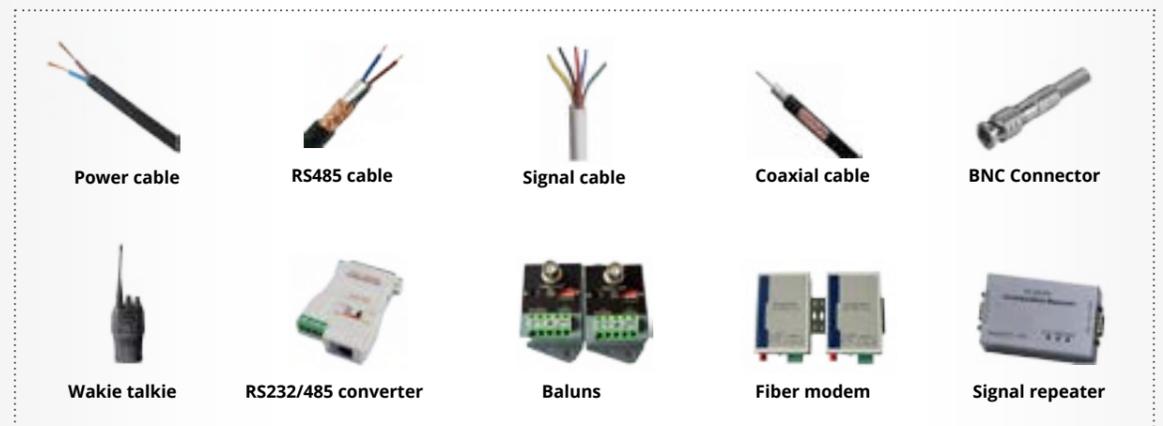
CCTV SYSTEMS

Can be integrated with electric fencing system by dry contact signal(NO/NC),enable any home,business or factory warehouse to be closely monitored, these systems range from basic fix camera, IP camera, DVR,NVR.



Accessories

There are other accessories you will need to install the CCTV systems,which of them are easily to buy.



Power cable

RS485 cable

Signal cable

Coaxial cable

BNC Connector

Wakie talkie

RS232/485 converter

Baluns

Fiber modem

Signal repeater

ANIMAL FENCING ENERGISER

Generating the electric shock to the fence wires.

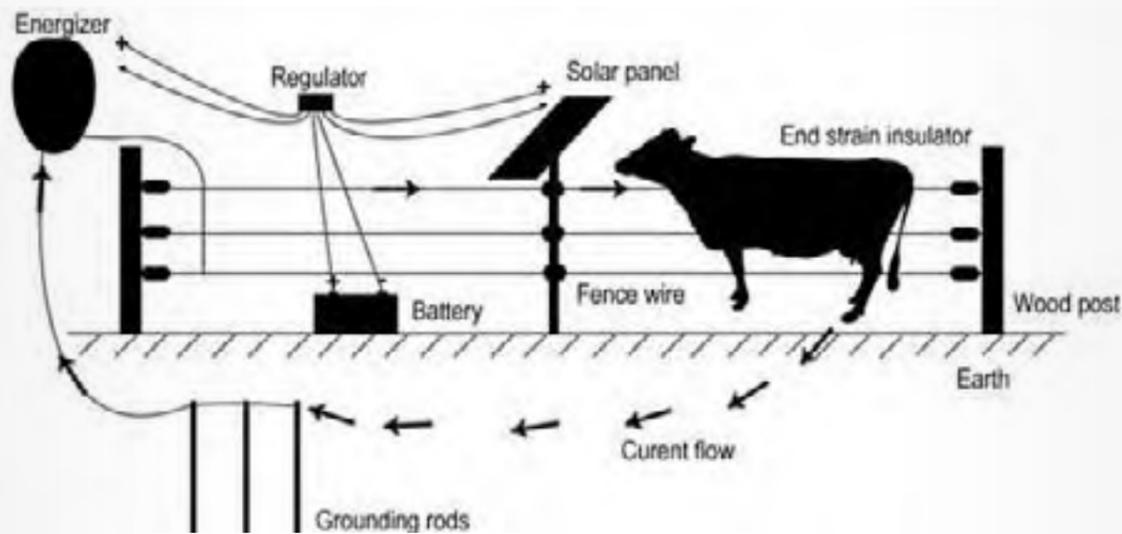
It meets the needs of all animal management or protection and rotational crop grazing requirement. It is easy to install and the power options include AC(110V-240V) mains power, 12 volt (V) deep cycle lead-acid/gel battery or in conjunction with a (10-60 watt) solar panel, making this a suitable system for larger scale settings where mains power is either unavailable or impractical.

As a combination, fixed or portable system, the Electric Fence Energiser provides flexibility with pasture management and is the ideal solution for short or long-term animal control or rotational crop grazing.



**DC/Solar/mains power energiser
TH-TE X 0.2-5 Joules energiser**

1. Powered by:
 - a) AC mains power (using adaptor)
 - b) 12V deep cycle lead-acid/gel battery (not included)
 - c) 15W or above solar panel (not included) in conjunction with a 12V battery
2. Powers up to 10-15 km with max 5joules output
3. Pulse intervals: 1.5 seconds
4. LED display shows the status of the fence



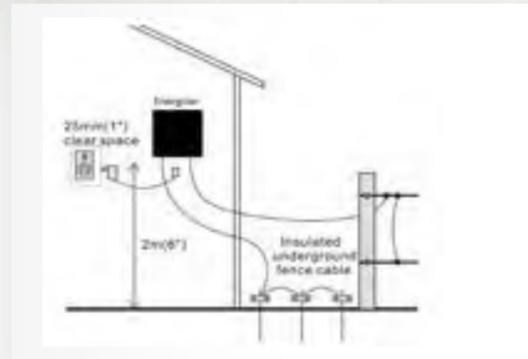
Electric Prodder (TH-EP)

- With automatic cut-off mechanism
- Complies to regulations of animal transport and slaughtering
- Electronic control and very durable
- Operates on 2 pcs rechargeable lithium battery(included)
- Exclusively for use in animal husbandry as per applicable animal protection legislation





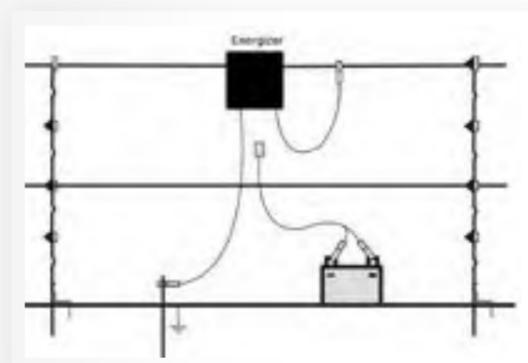
INSTALLATION



INDOOR INSTALLATION

1. An appropriate place for fixing the energizer
2. Out of touch of children and animals
3. Link the black grounding icon with clip to grounding
4. Link the red pulse output icon with clip to wire
5. connect with transformer and choose the mode

Notice: the power adapter could replace the battery to provide power to energizer. If the customer do not have special requirement



OUTDOOR INSTALLATION

1. In most cases, the energizer should be fixed on the wooden bar
2. Link the black grounding icon with clip to grounding
3. Link the red pulse output icon with clip to wire.
4. Connect with transformer and choose the mode

Notice: the energizer could be powered by lead-acid, 12V DC solar panel

TYPICAL SOLUTIONS:

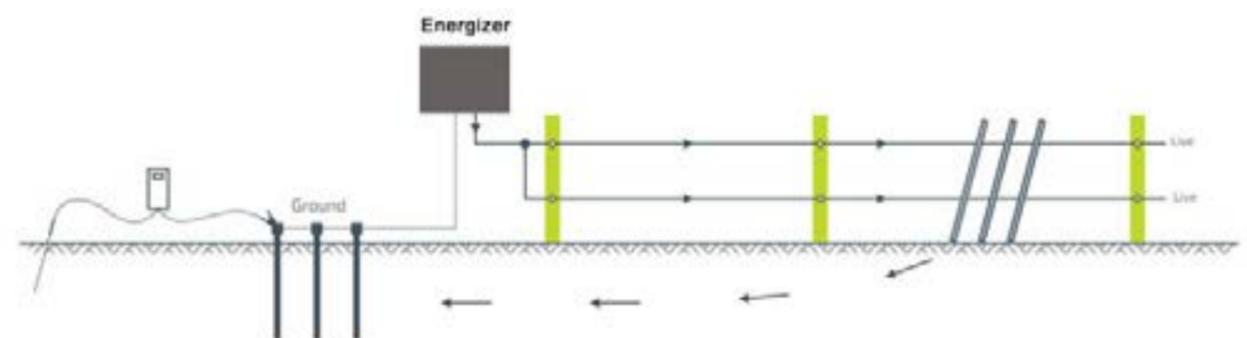
If the conductivity of grounding is not good because of dry soil or sand. The pulse circuit will not form even when animal touches the wire. Then we make adjustment of fixing the earth wire to bars also. By doing so, the system could work as efficiently as it does in common cases besides, the line design will very greatly due to animal height, weight, and trait difference, please check below typical line design for different animals.

GROUNDING CONNECTION

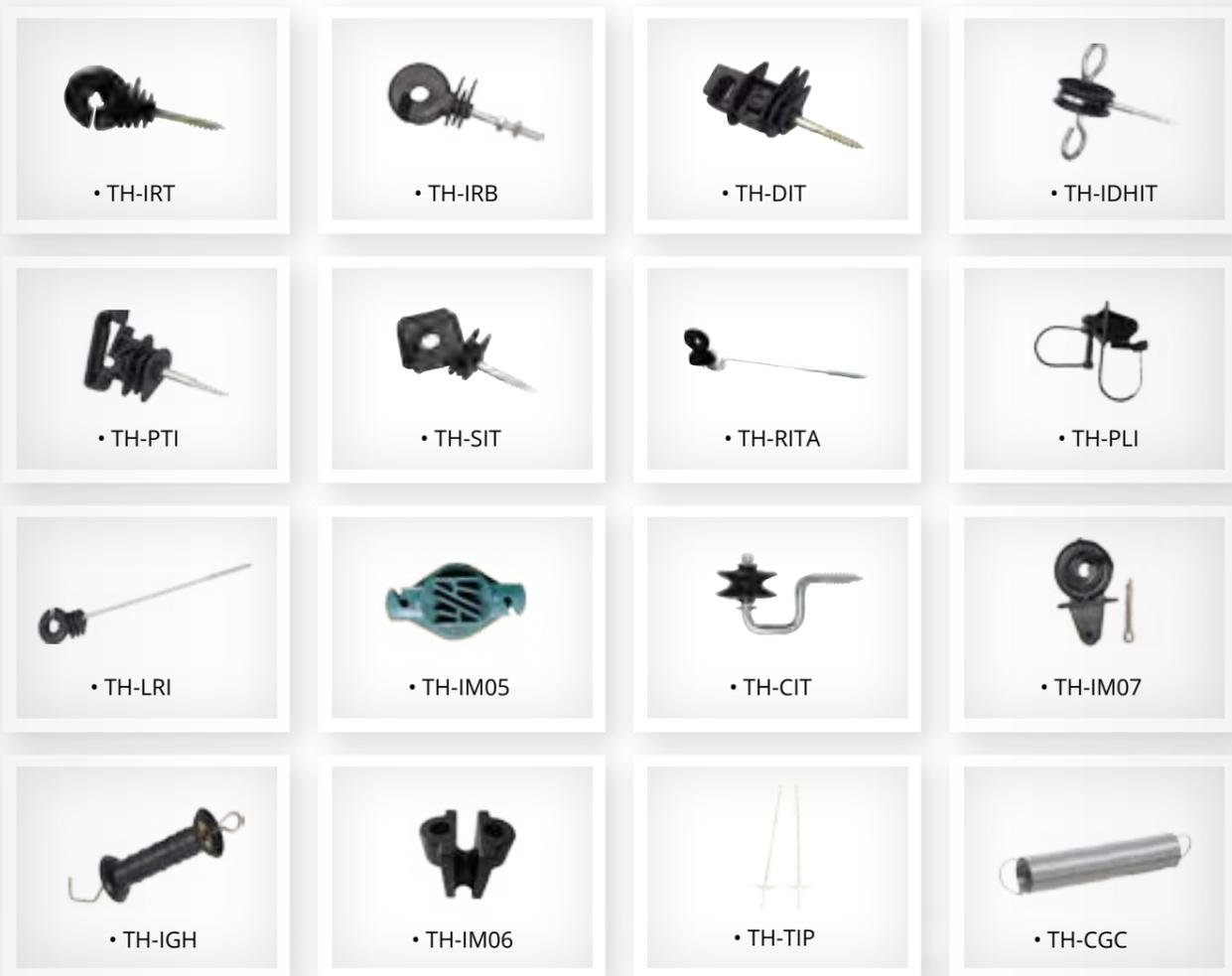
Stick two steel bars into grounding. Make sure the length between two bars is more than 300mm, then connect the red pulse icon with the other, put on the power and choose the mode. If the right number is less than 4kv. The grounding connection is good.



Testing the Ground System



- 1, Turn off the charger/energizer
- 2, Short-circuit the fence by leaning enough metallic rods against it about 330 ft away
- 3, Turn the energizer on. Use a fence tester/voltmeter to read the voltage on the fence. It should be below 2 kV. (Lean additional metallic rods against the fence if needed).
- 4, Insert the fence tester probe into the soil and the other end against the last ground rod. The voltage should be less than 0.3 kV. If it is higher than 0.3kV, a better grounding system may be needed.



POLYETHYLENE TAPE/WIRE



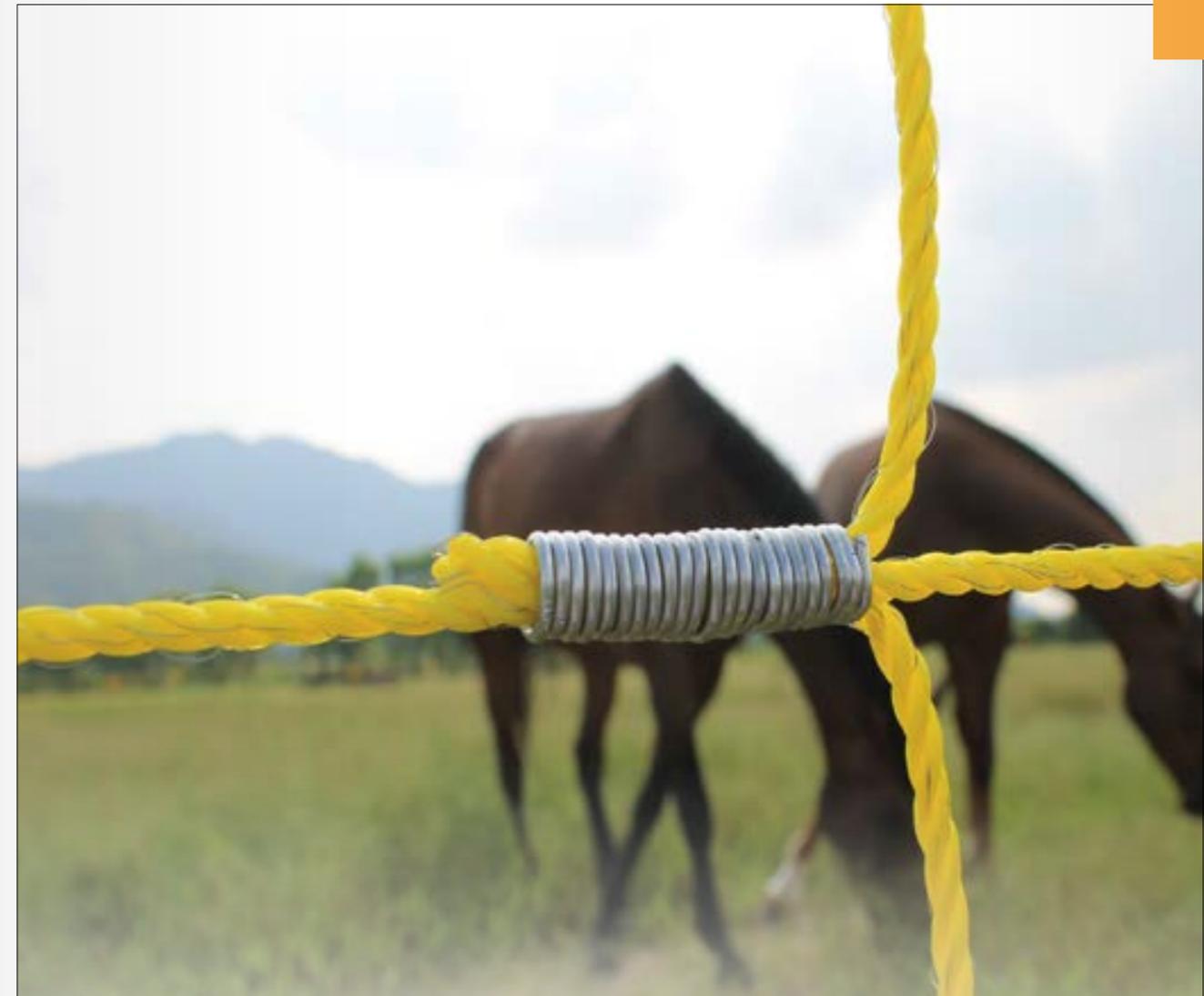
Polyethylene tape

- Width: 13-40 mm
- Resistance: 0.9-24 ohms per meter
- Strength: 38-382kg
- Package: reel, carton
- Specifications: UV, multi strands
- 0.15/0.2/0.25mm stainless steel wire



Polyethylene wire

- Diameter: 2.5/5.0 mm
- Resistance: 0.03-16.7 ohms per meter
- Strength: 38-412kg
- Package: reel, carton
- Specifications: UV, multi strands
- 3/6 pieces of stainless steel wires



OTHER ACCESSORIES



LED voltmeter TH-VME

- Detect range: 2000-8000V
- Metal probe
- No battery needed
- Light weight



Cut out switch TH-COS

- Large metal contact
- Plastic insulated from high voltage
- Used in electric fence circuit
- On/off the entire fencing system



PVC warning sign TH-WS03

- Dimension: 200x100mm
- Double printed
- PVC material
- OEM language available
- Indicate electric shock danger



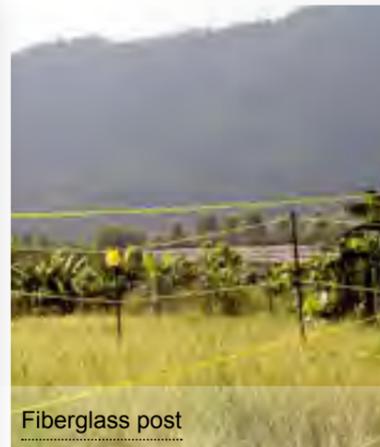
Digital voltmeter TH-VMC

- Auto on/off
- Dry battery power supply
- 100-12,000V detect range
- Designed for electric fence

POLES/POSTS



Stainless steel pole



Fiberglass post



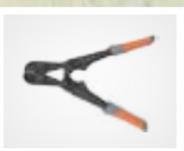
Galvanized steel pole



PERCUSSION DRILLING



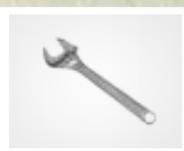
RIVETER



CRIMPER



WIRE CUTTER



SPNNAER



SCREWDRIVER

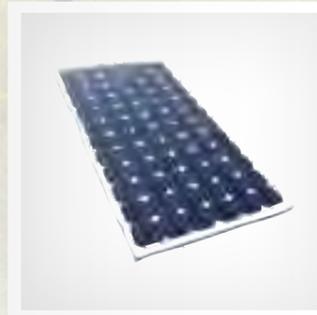
SOLAR SYSTEM:

The solar fence system includes solar panel, charge regulator and battery, the energizers accept power supply of DC12V, so in the area where mains power is either unavailable or impractical, solar power system is practical and cost effective, especially for ranch. Mono crystalline panels provide superior conversion efficiency of sunlight to electrical current, charge regulators are engineered to high performance with minimal loss through internal circuitry, the end result is lower current consumption that minimises the drain on batteries, meaning faster charging of batteries. A full range of solar panel sizes is available to ensure solar panel wattage can be customised to your individual requirement.

The capacity of battery depends on the consumption of energizer and its working time, for perfect performance.

One suitable charge regulator is required to make the voltage, current steady, and protect the battery from preventing over-charging.

SOLAR PANEL



	TH-SP30W	TH-SP40W	TH-SP50W	TH-SP60W
Pm(W)	30W	40W	50W	60W
Voc(V)	21.6V	21.6V	21.6V	21.6V
Isc(A)	1.8A	2.57A	2.9A	3.5A
Vmp(V)	18V	18V	18V	18V
Imp(A)	1.66A	2.22A	2.77A	3.33A
Cell type	Mono -crystalline silicon	Mono -crystalline silicon	Mono -crystalline silicon	Mono -crystalline silicon

SOLAR CONTROLLER



Model	TH-SC	TH-SCW
System voltage	12V/24V Auto	12V/24V Auto
System current	10A	10A
Solar energy input voltage	< 55V	< 55V
Overload and short circuit protection	YES	YES
Working temperature	-35-to +65	-35 to +65
Protection level	IP68	IP30
Weight	140g	106g

LEAD ACID BATTERY



- Deep cycle marine type
- 12V 60AH/80AH/120AH
- Charge/discharge many times
- Overload protection





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