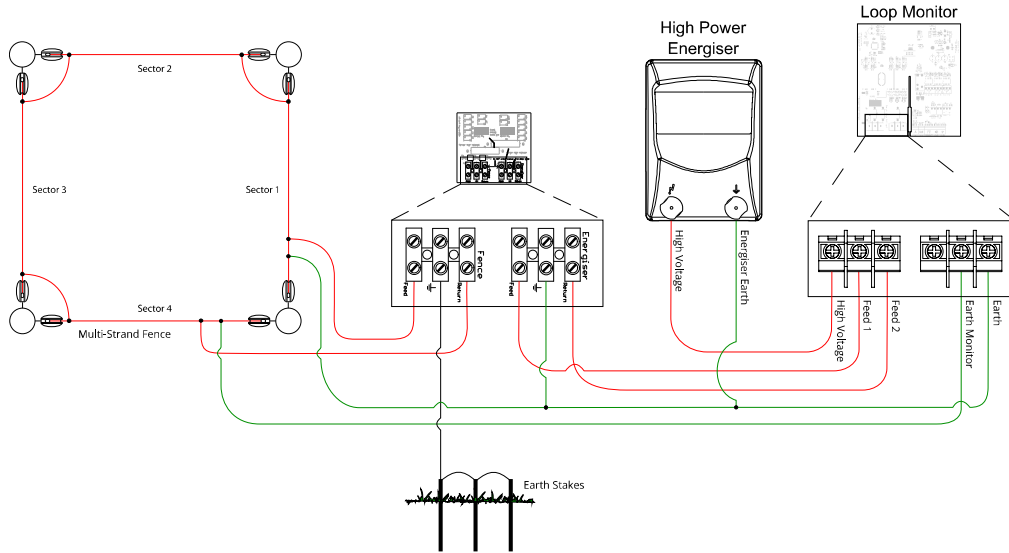


ZM20



Electric Fencing Products



## PAE231/PTE0231 Dual Channel Lightning Diverter

The JVA Dual Channel Lightning Diverter provides protection for an energiser on both the Feed and Return wires, ensuring that a lightning strike on, or near the fence, is safely diverted to Earth. Its two stage protection has been designed to withstand a lightning pulse of up to 3000 Amps while limiting the voltage to the Energiser to within 20kV of Earth.

Note: The Lightning Diverter is designed to sacrifice itself to protect the energiser it is connected to. If the lightning surge is greater than the Dual Channel Lightning Diverter can handle, it will be damaged and require replacement.

Tel : 082-783-8449 Fax : 011-469-1206

<http://www.jvasecurity.com/>

### How does lightning damage electric fence energisers?

There are 3 possible paths for high voltage surges to get to the energiser.

1. Via the electric fence line, usually from a strike to your fence, a nearby tree or ground.
2. Via the mains electricity line due to a strike to power poles or lines.
3. From differing voltages on the electric fence and mains earths, due to a more direct strike to ground near either earth.

The Lightning Arrestor can only protect your energiser from the first type. A mains surge arrestor will protect it from the second.

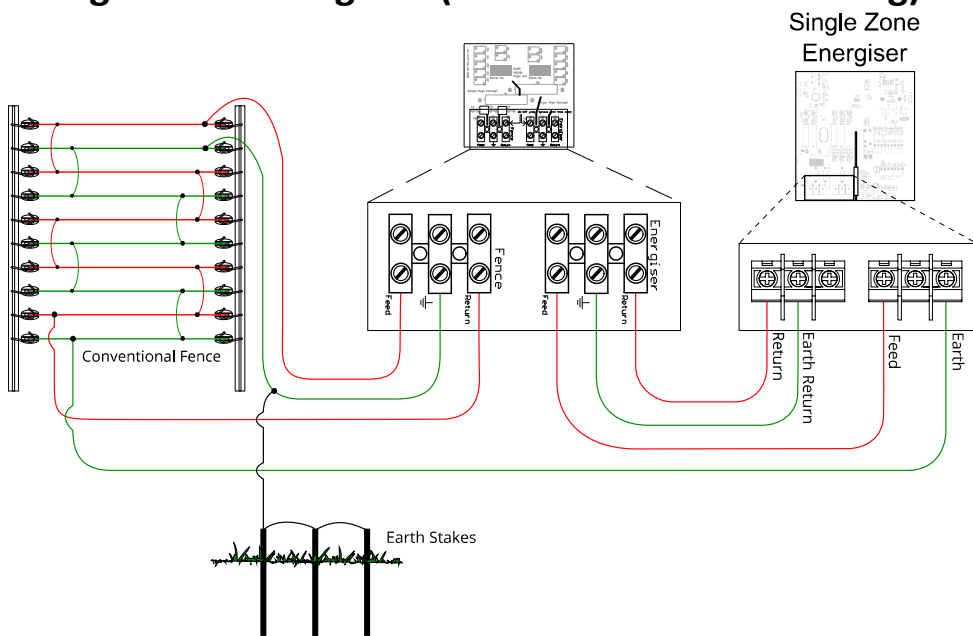
# Installation Instructions

To protect the energiser, the Dual Channel Lightning Diverter must be placed between the Energiser and the fence. For detailed instructions on wiring the Dual Channel Lightning Diverter to a Z14, Z28 or ZM20 Energiser, please see the diagrams on the following pages.

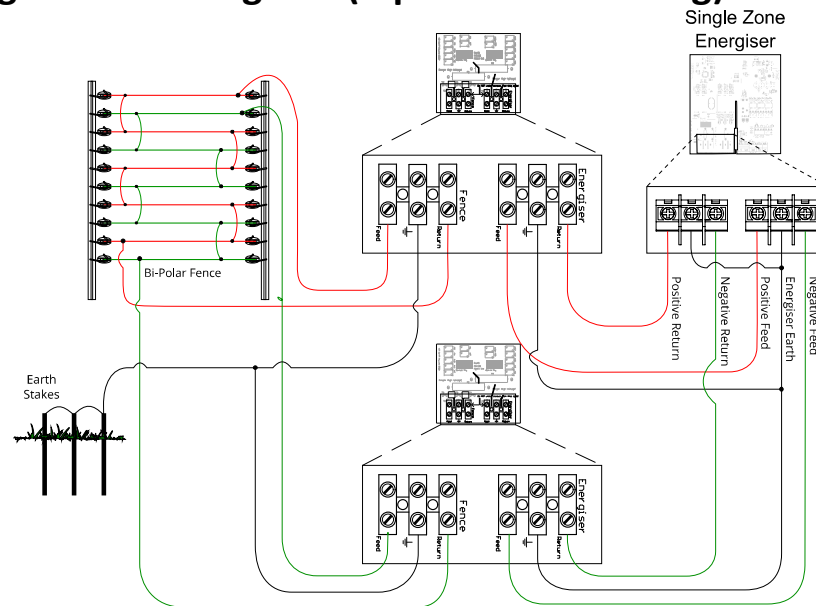
Only one connection should be made to Ground; this should be connected to "Earth" on the "Fence" terminal of the Dual Channel Lightning Diverter. Make sure that the Earth stake used for ground is well sized, is connected using wire of a gauge equal to or greater than the fence wires, and is not placed near the mains Earth stake. Earth for the Energiser is provided through the "Earth" on the "Energiser" terminal.

**NOTE: Do not mount the PTE0231 directly onto a metal surface, it must be insulated.**

## Single zone energiser (conventional fence wiring)



## Single zone energiser (bipolar fence wiring)



## Dual zone energiser

