



The Electro-fence series of controllers are purpose built security devices. They have been designed to give the maximum possible security together with maximum safety.

All the Electro-fence controllers have been manufactured to exceed the British and European standards BS EN 60335-2-76. Making them probably the safest electrified fence controllers available. All the Electro-fence controllers will interface with any British and European certified alarm control panel, access system or CCTV system as standard.

The Electro-fence controllers are available in single, dual or 6 zone, standard are high security formats. They are supplied in IP65 rated enclosures, which can be either internally or externally mounted. If they are mounted externally adjacent to the fence there is no requirement for H.T. lead out cable ducts.

The controllers feature voltage free alarm outputs and a simple 12V control input for switching the energiser on and off. All the interconnecting cable from the controller to the alarm monitoring equipment are fully supervised. All controllers can be powered from 15-24 VDC or 110/230 VAC. A fully supervised isolation switch is fitted to the energiser.

Standard controller

Shock monitoring

When a pre-set number of shocks have been administered to a would be intruder an alarm is generated.

Voltage Monitoring

If an intruder attempts to reduce the fence voltage an alarm is generated.

Cut monitoring

If an intruder attempts to cut the wires an alarm is generated.

High Security Controller

In addition to all the standard controller features the high security controller constantly monitors all the earth wires. This monitoring is available even when the high voltage section is switched on. A separate set of alarm outputs for each zone are available for the earth wires. When the high voltage is switched off the fence, the fence is still fully protected with the following alarms being generated.

Earth wire cut

If any of the earth wires are cut an alarm is generated.

Earth wire short to live wire

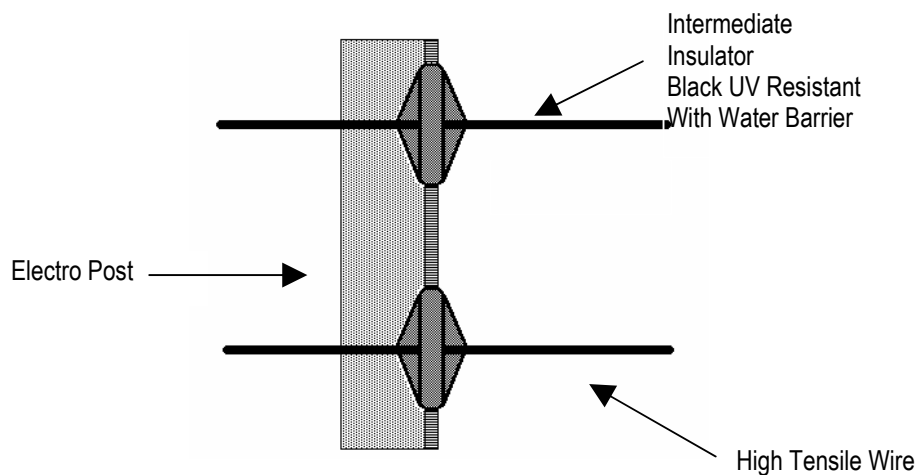
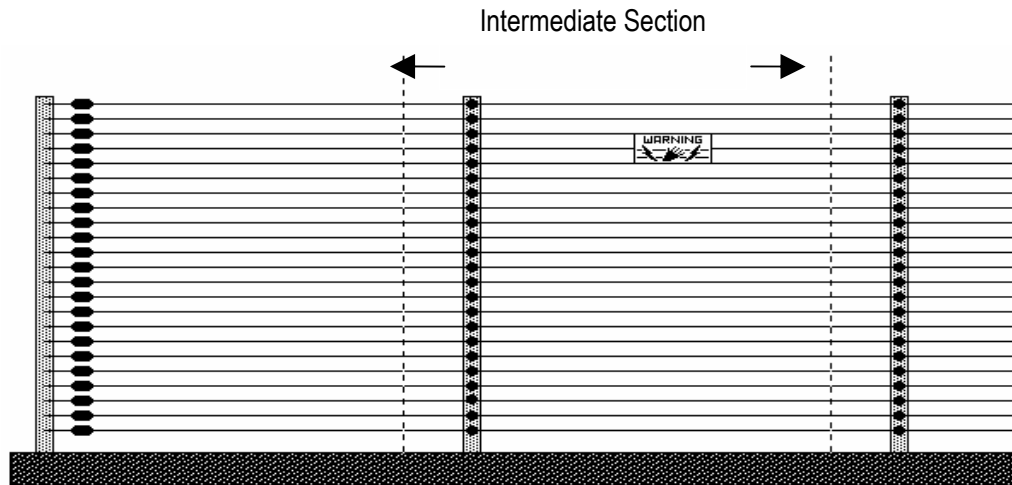
If any of the earth wires are shorted to any live wire an alarm is generated.

Specifications

No. of zones	or 6 4 ,2
Voltage Alarm	100V -10Kv Variable
Communication Protocol	Rs485-TCP/IP
High Standard	Variable 3 ,2 ,1
Maximum Output Voltage	10Kv
Maximum Power	Joules 2.5
Output Alarm Outputs	Normally Closed Dry Contact &TCP/IP
Control Input	18V DC – 9
Power Supply Enclosure	24V DC @ 300mA or 110/230V AC @ 10 – 15 watt 500 x 400 x 150mm
Size Enclosure Rating	IP 65

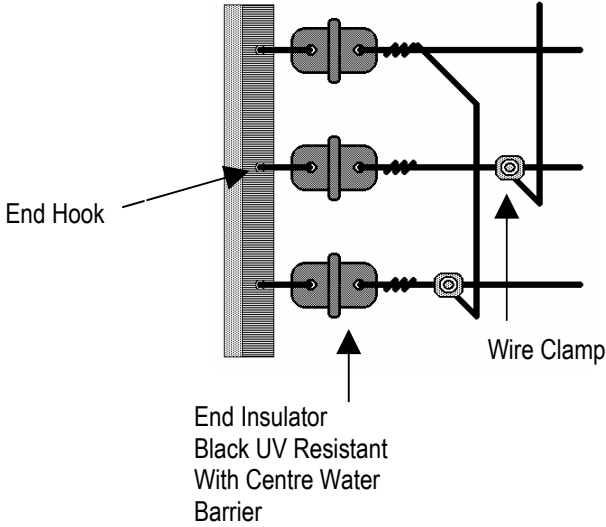
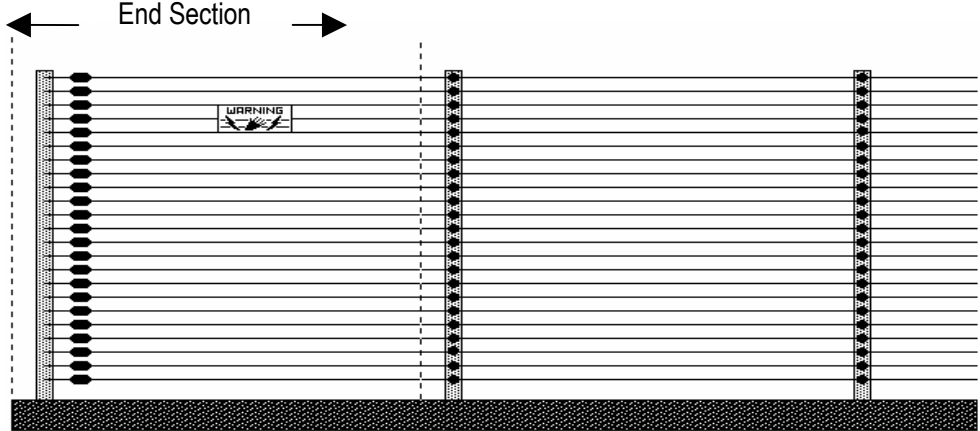
INTERMEDIATE SECTION

Intermediate sections are used to support the Electro-Fence wires. They are not capable of taking any great strain and should not be used if the fence changes direction by more than 20 degrees. The Electro-Fence posts are attached to the existing fence posts and extend above the original fence.



END SECTION

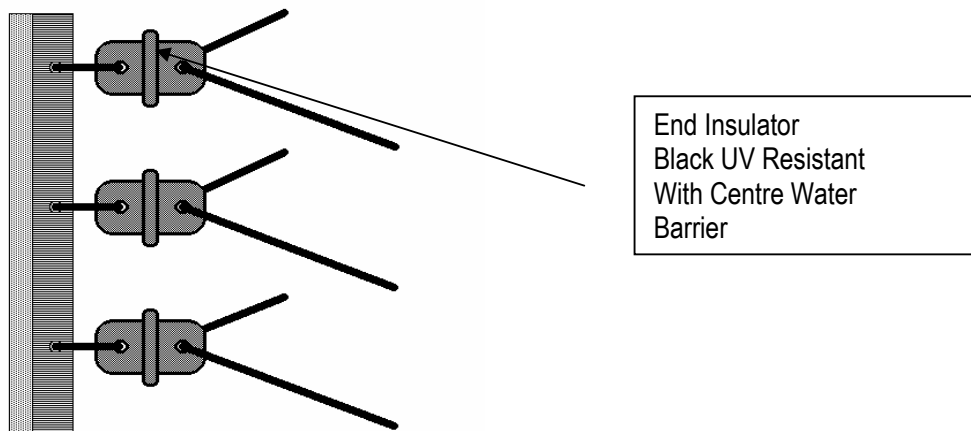
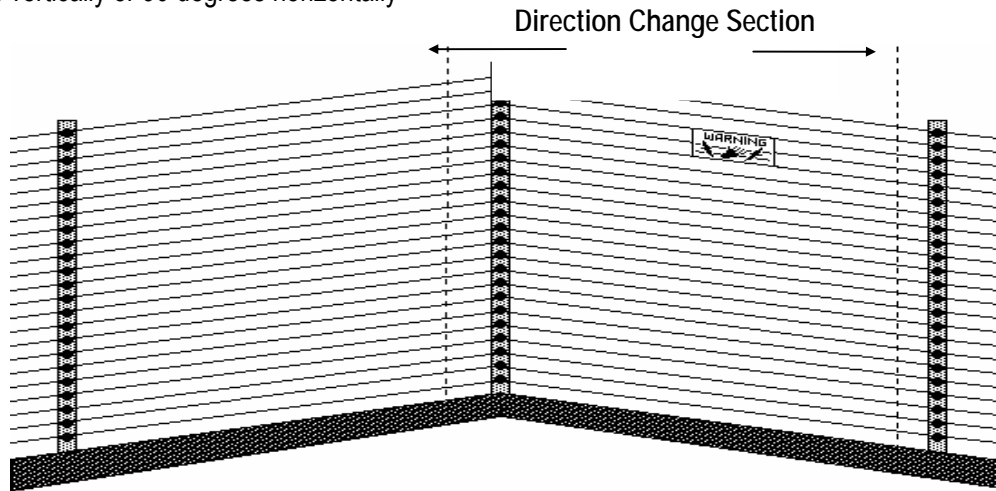
In order to take the tension of the Electro-Fence wires at the beginning or end of a fence section, end sections are used. They are also used for internal or external corners of less than 90 degrees and where the fence height changes.



DIRECTION CHANGE SECTION

Fence System

Direction change sections are used where the fence wire changes direction by more than 20 degrees vertically or 90 degrees horizontally



UNIT MS200/MS201 Features

- or 16 zone supervised alarm inputs 8
- TCP/IP & 8 or 16 zone programmable alarm outputs
- LED communication status display
- TCP/IP & RS485 Communication
- Input transient protection
- Rechargeable battery backup



The PAS K-MS200 series of Alarm Control Units are microprocessor controlled and have up to 16 supervised

alarm input circuits and 16 programmable alarm output circuits and TCP/IP standard protocols

The Alarm Control Units can be remotely located around the site and are connected via an RS485 data cable & over TCP/IP to the software

Full alarm reporting, sensor status monitoring and programmable output control functions are available from the software. These inputs can be used individually or interconnected to configure an alarm network of up to 2032 alarm input points. Supervised inputs are provided for N.C. alarm contacts

The 16 programmable output control circuits can be used to drive an alarm buzzer, audio switching, bell or relay to control low voltage or display devices. All outputs can be individually programmed and controlled by PAS K-Software system computer

Unit Characteristics			Communication Specifications	
Communications Ports:	One	Protocol:	RS-485& TCP/IP	
Alarm inputs, outputs (Programmable)	8 (MS200)	:Transmission Rate-RS485	9600	
	16 (MS201)	:Transmission Distance-RS	1.2Km	
		RS485 Data Cable: Twisted pair	Single pair overall shield	
Alarm outputs	Programmable			
Mechanical Specification	Height:	400mm	Electrical Specifications	
	Width:	300mm	Input Voltage:	230VAC
	Depth:	150mm	Current Consumption	10W

PAS K-SMS is a unique modular PC based Security Management System. It uses a common communication protocol to integrate and control the Electro-Fence controllers and other alarm devices .

This integration allows the system designer the flexibility to construct many different perimeter intrusion detection systems with multiple network configurations



The system is controlled using programmable icons on the GUI making the system extremely easy to programme and operate. All alarms are displayed on maps showing the operator exactly where on the site the alarm has occurred.

Electro-Fence Control



The EF132 Electro-Fence Controller can be controlled by the TBK-SMS using RS485 & TCP/IP communication. Individual zones can be switched on or off, . pulse count varied and voltage levels set at the click of the mouse



The fence voltage on each zone can be displayed and monitored on screen in .real time

Alarm Control Module



Up to 2032 alarms can be connected into the system. Alarm control Modules, each with 8 programmable inputs and 8 programmable outputs can be addressed.

Camera Control



Camera preset commands can be linked to alarm activations so that a camera or group of a cameras will move automatically to preset positions on receiving an alarm activation.

