

INSTALLATION

ZE1, ZE2
Interface for the IS2000



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INSTRUCTIONS

Thankyou for purchasing the ZE Interface. Please read these instructions thoroughly before starting the installation.

The ZE unit will allow a Voltek IS2000 PIR to be easily and safely connected to the outside world. This product is only designed to be used with the IS2000 and should not be connected to any other hazardous area equipment.

FEATURES

- 12V DC operating voltage.
- Adjustable pulse count for each IS2000.
- Adjustable time frame period.
- 'Time Frame Active' LED for each IS2000.
- Latching 'Alarm' LED for each IS2000 to show which PIR had activated.
- Reset button to reset latched LED's (with remote wiring facility)
- Normally closed relay output for each IS2000.
- High Quality Zener Barriers for each IS2000 PIR Detector.
- Simple to install.

WHAT ELSE DO I NEED

The following parts will be required to install the ZE Interface Unit.

- 4 mounting screws & fixing plugs.
- Cable glands for the IS2000 wiring.
- Cable glands for control equipment and power supply wiring.
- 12V dc power supply.

SITING THE ZE INTERFACE UNIT

The ZE interface unit must be installed in a non-hazardous area.

INSTALLATION

1. Due to the enormous range of cables and cable glands available, the ZE Interface unit is supplied without any cable entries. The first step is to remove the lid and to punch or drill the necessary holes into the bottom of the ZE Interface Unit enclosure and attach the cable glands to be used. Be very careful to not damage any internal components or wiring.
2. Fix the interface unit to the wall in the desired position using the mounting holes positioned below the lid screws.

SPECIFICATION

Operating Voltage	12V (+3V, -2V)
Current Consumption	100mA (max)
Output	voltage free normally closed relay
Output Z (closed)	200m Ω
Output Z (open)	10 ¹⁹ Ω
Relay V max	200V d.c.
Relay I max	0.5A
Enclosure size - ZE1	280(W) x 190(H) x 130(D) mm
Enclosure size - ZE2	280(W) x 280(H) x 130(D) mm
Weight - ZE1	1.5Kg (approx.)
Weight - ZE2	3Kg (approx.)
Enclosure material	Polycarbonate

Zener Barrier Description

Barrier	DC Double
V max	15V DC
I max	150mA
Impedance	100 Ω

FURTHER PRODUCT FEATURES

VALID ALARM RECOGNITION - An alarm signal being applied to the ZE Interface Unit, must be present for 0.3 second (300mS) for it to be recognised as a valid alarm.

SETTLING DOWN TIME - The system will take approximately 3 minutes to settle down when power is first applied.

ZE INTERFACE UNIT OUTPUT - The normally closed output relays will open momentarily in an alarm condition and will then close again when the alarm has gone away. The output will be in alarm condition for a minimum of 5 seconds.

LATCHING ALARM LED'S - Whenever a zone goes into alarm, the red LED for that zone will switch on and latch on until the reset button is pressed. This is an engineer aid to show which detector has given an alarm.

FAULT DETECTION - The ZE Interface unit will detect if an IS2000 is outputting a signal permanently and will go into alarm (even if the correct number of pulses have not been received)

TAMPER DETECTION - The ZE Interface unit will detect when a IS2000 has been disconnected from the unit and the output will go into alarm.

ALARM ON POWER DOWN - If power is disconnected from the ZE Interface unit, the outputs will go into alarm state.

The system has been specifically designed so that all electronic adjustments are within the ZE interface unit, which means that you do not need to enter the hazardous area to make any changes.

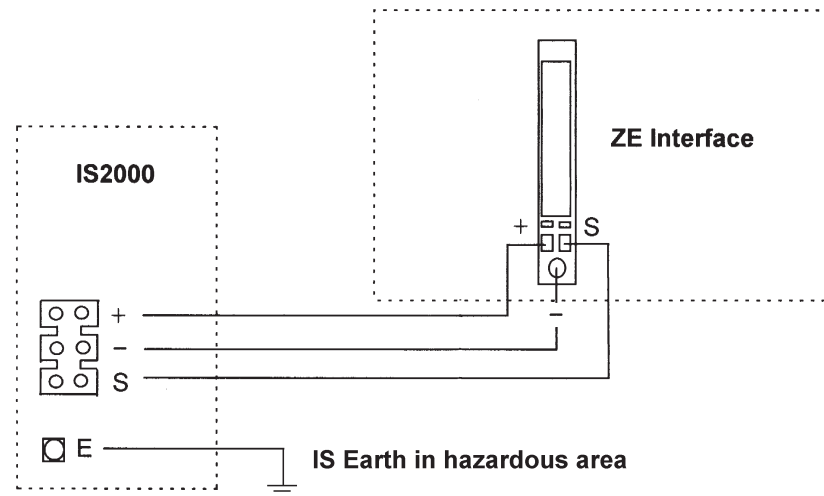
WARRANTY

The ZE Interface Unit has a 1 Year parts and labour warranty. There are no user serviceable parts within the IS2000, however, in the unlikely event that you encounter a problem with this product, it should be returned, carriage paid, direct to Voltek or the Voltek distributor from where the product was purchased.

HELPLINE

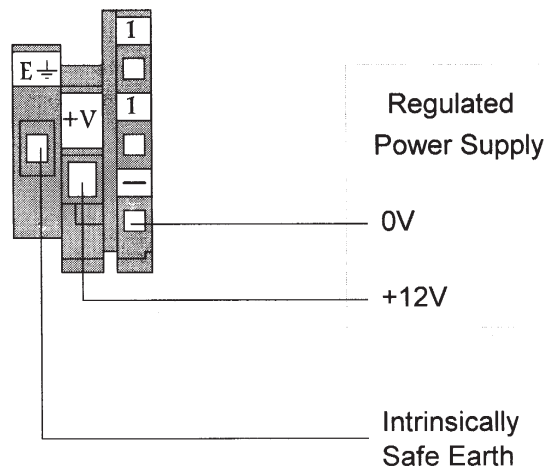
If you have any questions about any Voltek products, please phone Voltek on (01282) 695500.

3. Connect the wires from the IS2000 PIR detector to the corresponding terminals on the barrier within the interface unit.



For multiple sensors, the ZE Interface Unit will have a barrier for each IS2000. Repeat step 3 for each IS2000 detector, ensuring the wires go to the corresponding connector block.

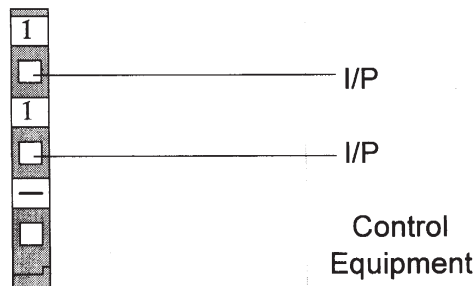
4. Connect the power supply and the intrinsically safe earth to the corresponding terminals as follows :



Only one 0V connection needs to be made to the ZE Interface Units, even though their may be other white labels marked 'I'.

Warning : If the power supply requires an Earth connection, it must be connected to an I.S. Earth. The power supply must only be used for powering hazardous area products. i.e. it must not be used for an intruder alarm panel or other similar equipment.

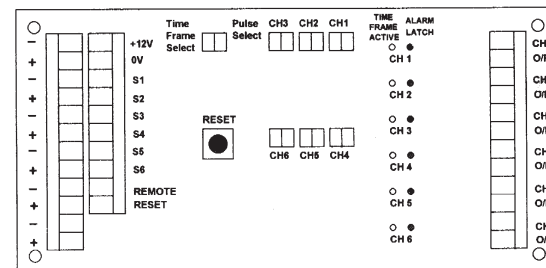
5. Connect the ZE Interface Unit, normally closed relay outputs to your control equipment...



The ZE Interface Unit has an output for each IS2000 connected. The output terminals will be labelled 1 through to 6, depending upon the model purchased.

ZE INTERFACE UNIT SETTINGS

The ZE Interface Unit incorporates a micro-controlled signal processor which will dramatically reduce the possibility of false alarms from the IS2000 PIR Detectors.



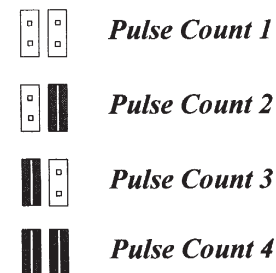
1. PULSE COUNT SELECTORS

Each time a person moves from one zone to the next within a detectors field of view, a pulse is sent from the IS2000 to the ZE Interface Unit.

By setting the pulse count selector to the desired position, the ZE Interface Unit output will not go into alarm condition until the correct number of pulses are received.

This will protect the system from false alarms due to environmental problems.

Each IS2000 connected to the ZE Interface unit has it's own pulse count selector and you may select pulse count 1,2,3 or 4. The IS2000 is very immune to false alarms and we therefore recommend a setting of pulse count one for most applications.



2. TIME FRAME SELECTOR

The Time Frame Selector is a timer which is switched on when the first pulse is received. The correct number of pulses must be received within the duration of this timer for the ZE to go into alarm condition.

Each detector has it's own Time Frame timer and a green LED shows when this is active. This is a useful engineer aid to help setting up. We recommend a setting of 20 seconds for most applications.

