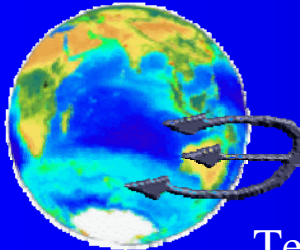


# Secure-Fence

## The Perimeter Protection System

Technical Description



**Secure-Globe Pty Ltd**

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# Introduction

- The Secure-Fence perimeter protection system works in three ways:
  - Deterring of trespassing (9000 volt, SAFE shock wire ),
  - Detection of such an attempt - warning the security personnel.
  - Scaring away the trespassers (very loud siren and flood lights).



# The System General overview

Control module (or security monitor)



wiring diagram

Alarm output



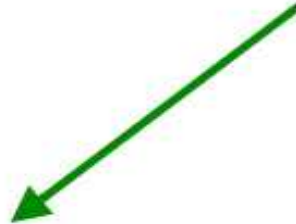
Industrial floodlights



Electrical fence



Industrial siren

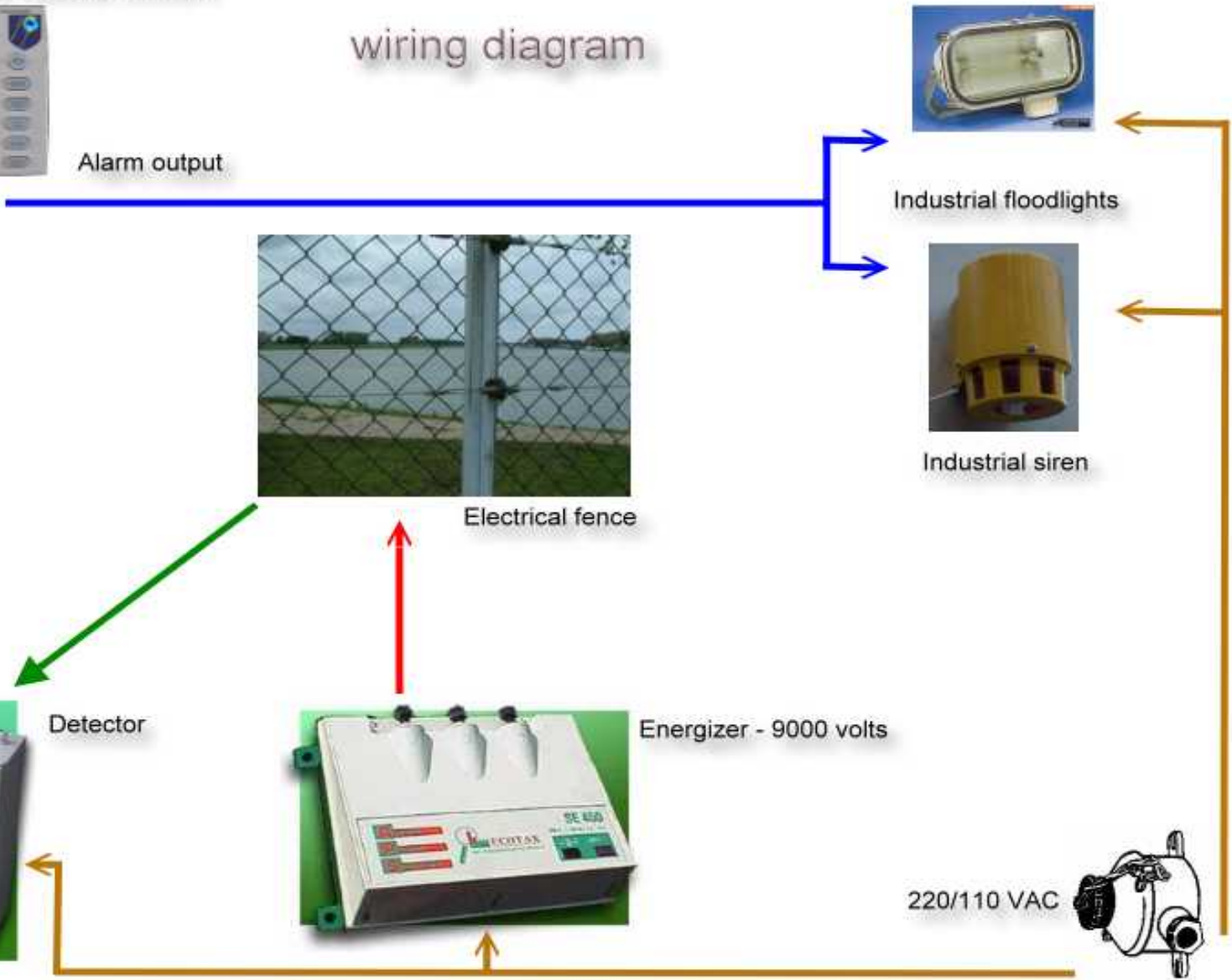


Detector



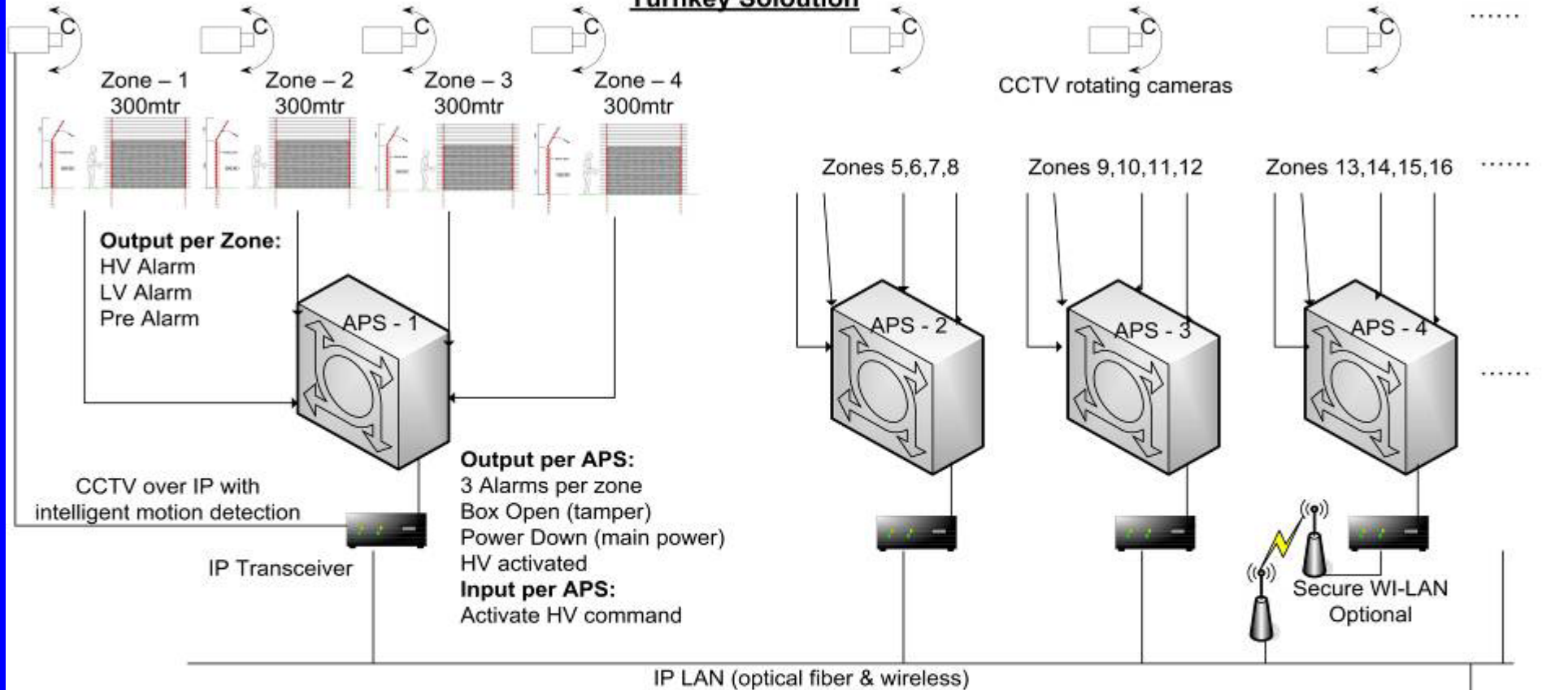
Energizer - 9000 volts

220/110 VAC



# A MORE COMPLEX VIEW

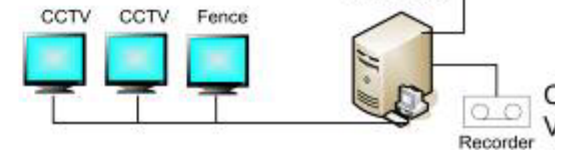
## Secure-Globe Perimeter Protection Turnkey Solution



**Secure-Globe Pty Ltd**  
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System Limits:	
Zones length	10 -> 750 m
CCTV detection	300 m
Optic fiber Lan	80 km
Wi-Lan	5-8 km
IP Tranceivers	128 relays
APS units	No limit
Number of zones	No limit
Power consume APS	250-500 watt

**Control of:**  
 All Fence zones  
 CCTV - Smart detect  
 Alarms & Dispatch



# The System in more detail

- The Energizer unit:

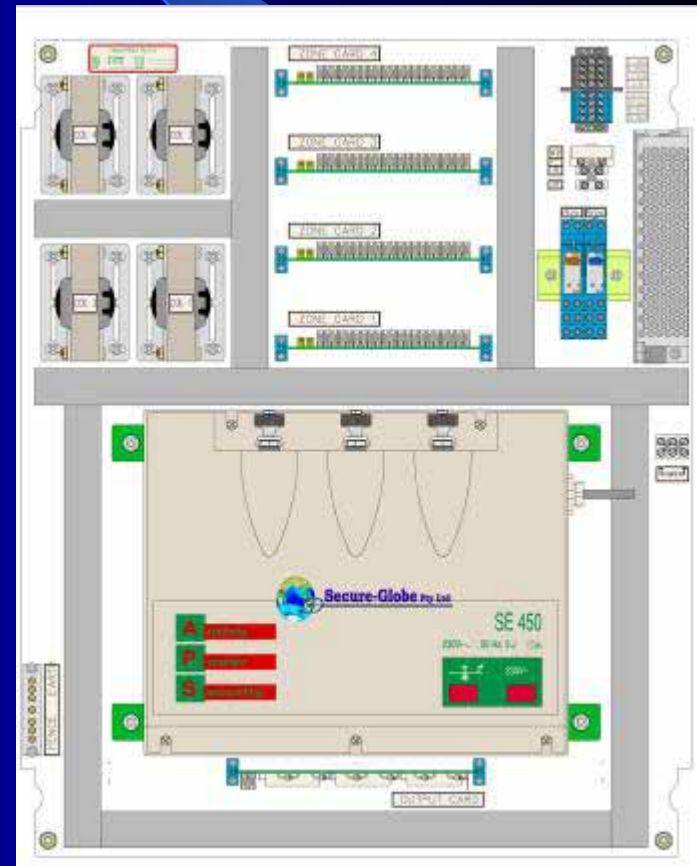
- High voltage peaks with a maximum of 9000 Volts 50 times per minute.
  - shock is totally harmless (animals and humans)
  - extremely low current
  - shock of 5 Joules, within the legal limit
- Complies with the European norms IEC1011, NEN5237, IEC60335-2-76 and EN61011. ANPI Lab certified, Tested by National Aerospace lab - NLR
- On short circuit 9000 volts stops, but resumes immediately when short circuit has ended.
- Low 12 volt current continues detection.
- The high voltage can be turned on automatically or manually.



# The System in more detail

- The Detection unit:

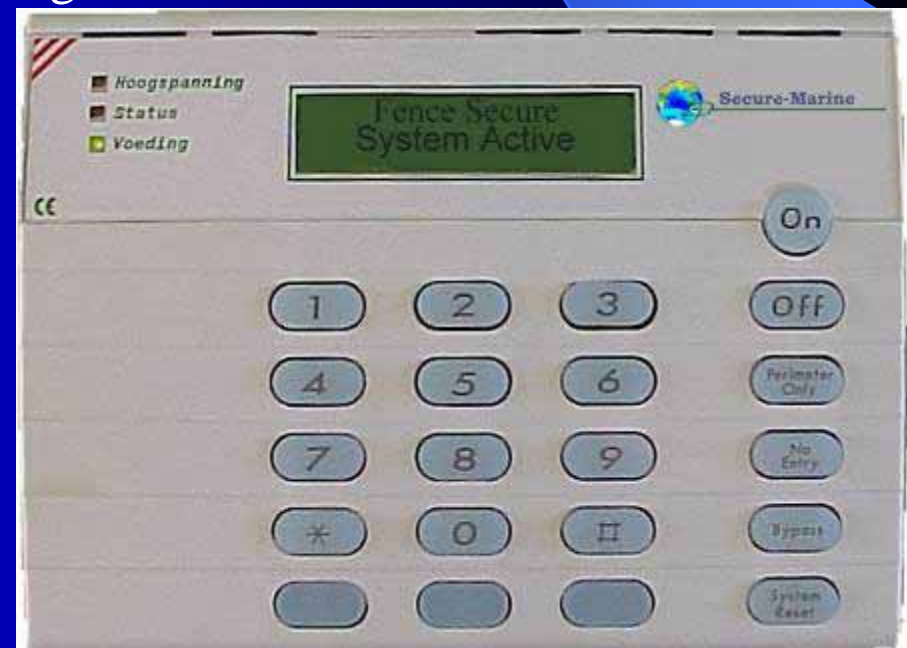
- Sudden drop in the high voltage will sound the alarm,
- High voltage and low voltage detection (e.g. night and day time),
- Short touch will not trigger alarm,
- Cutting the wire will immediately sound the alarm,
- Alarm is sounded immediately if the shock wire is grounded,
- Insensitive to all types of weather variations,
- Low voltage can run up to 24 hours without main power.
- High voltage power consumption approx 200 watts



# The System in more detail

- The Control unit:

- The control module is optional, since normally the fence detection would be connected to the central alarm monitor.
  - Connection via RS 232/ RS422
  - Connection via NC/NO alarm connections
- Connection between the detection unit and the control module can be wireless or using physical wires.
- The control module includes the following features:
  - Control over zones,
  - High voltage / Low voltage on/off,
  - Control of alarms, sirens and lights,
  - Memory of last 400 alarm events.



# The System in more detail

- The shock wire fence

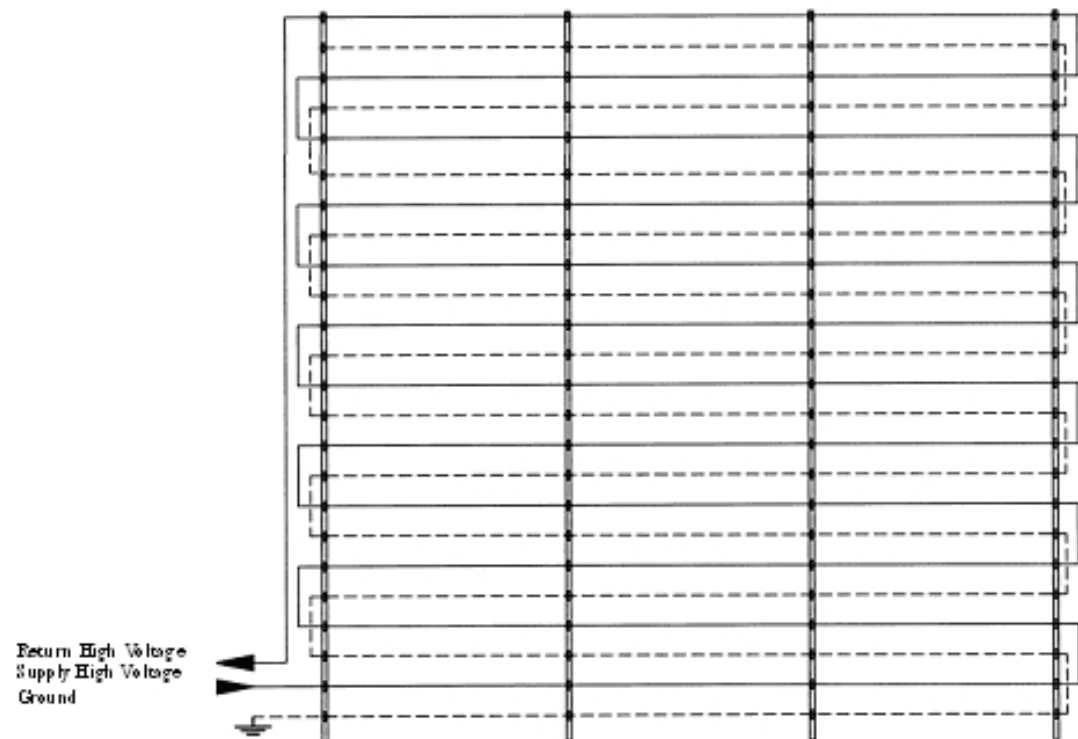
- The wires of the Secure-Fencing system are fitted on the inside of the fence.
- The wire is insulated from the fence so that the fence itself is not electrified.
- The shock wires are attached to struts fitted to the fence poles. Depending on the type of the fence, a number of guides will be fitted.
- The shock wires are tensioned using our patented tensioning springs.
- The shock wire itself is made of 1.6 mm zinc / aluminum coated steel and will not rust or oxidize.



# The System in more detail

- The electrical wire setup
  - 3 wires are connected per zone:
    - HV IN
    - HV OUT
    - Ground
  - The wires alternate between GRND & HV
  - If the fence is installed on a wall, then the lowest wire can be HV

24 wire diagram



# The System in more detail

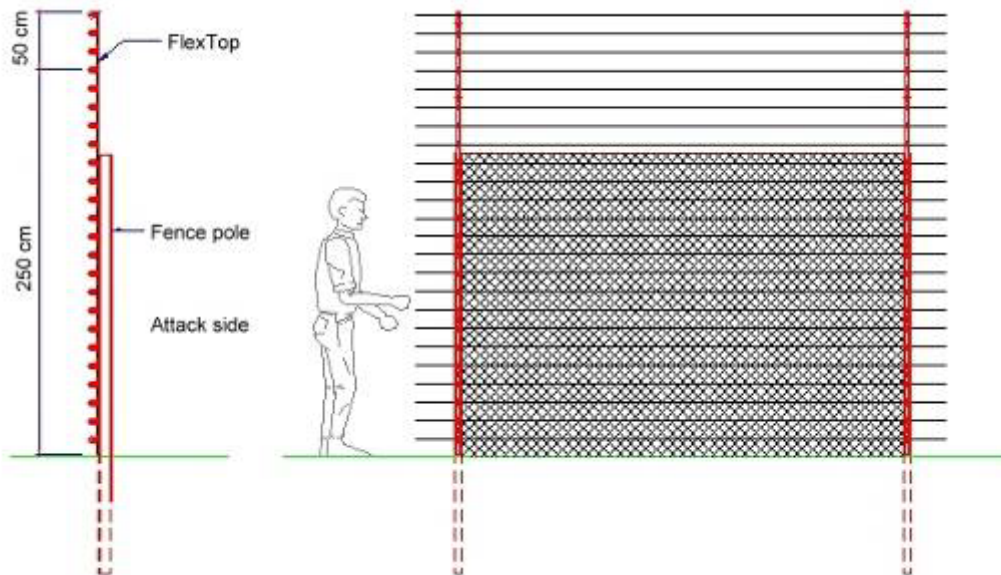
- The required maintenance
  - The only maintenance required is removal of foliage and garbage.
  - The Pre-Alarm gives indication by zone if maintenance is required.
  - System is operational for many years in stormy salt water ports!
  - No cleaning, spraying with water or other operations are required.



# Several installations

Turin International Airport  
Host of the 2006 Winter Olympics

- 8 km perimeter
- Safe for VOR navigation systems
- Connected to CCTV and central security system



# Several installations

Major Oil Storage facility

- Rotterdam



# Several installations

## International ports

- Port of Rotterdam
- Port of Antwerpen
- Port of Zeebrugge
- Port of Scheveningen
- Port of Tilburg
- Port of Verrebroek
- Port of Vlissingen
- Port of Hong Kong



# Several installations

## Others

- Car dealers – over 35 installations,
- Beer breweries – Heineken, Interbrew, Grolsch and others,
- High profile installations – International court of Justice, Radio Holland antenna farm...
- Prisons and high security installations,
- Military installations (airport too) and Police stations
- Garden centers warehouses and more...



# Some more pictures

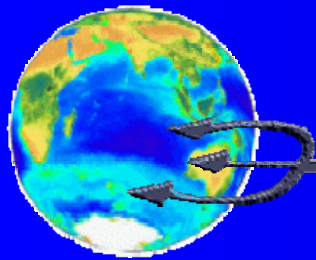


# To Summarize

- Secure-Fencing - A Security system that deters trespassing using SAFE 9000 v.
- Can be installed on existing fences.
- Minimize the costs needed to secure your perimeter.
- Over 1600 installations including prisons and high security locations.
- No False alarms, including during severe weather conditions.
- Virtually maintenance free.
- Maximum operational flexibility - high / low voltages and multiple zones.

# The End

## THANK YOU!



**Secure-Globe** Pty Ltd

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