CCTV

SURVEILLANCE

QUALITY SECURITY THAT YOU TRUST

Rayce Electronic Intelligence India Private Limited

Design

Supply

Install

Test

Commission
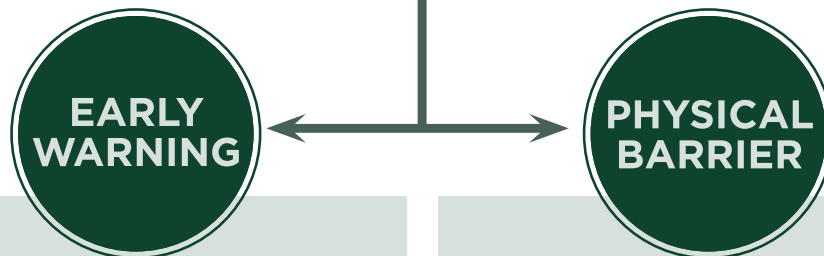
Maintain

ALL ELECTRONIC SECURITY SYSTEM
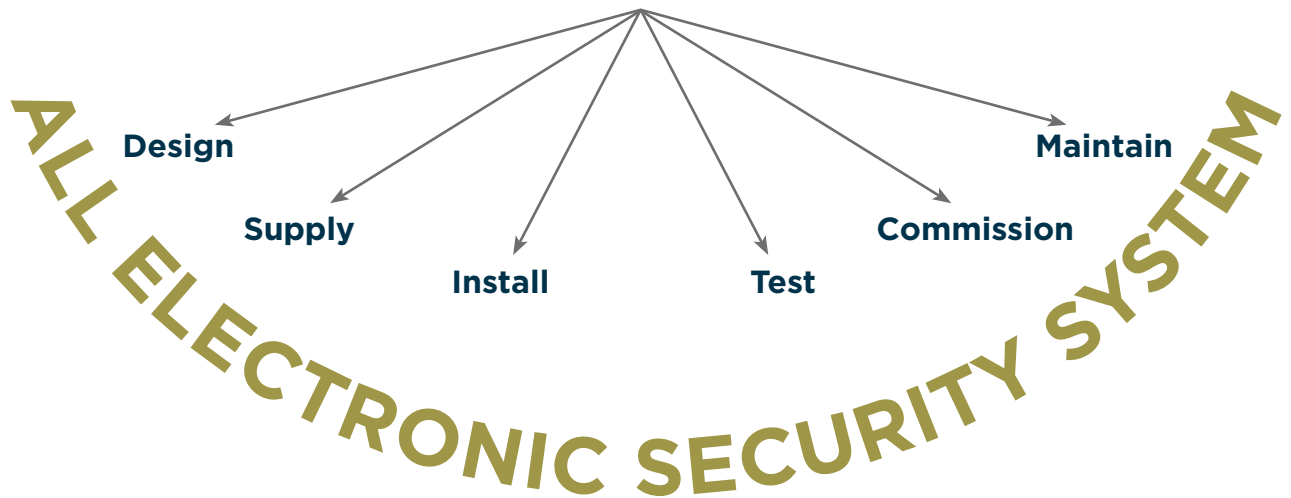
Electronic Security System

- Each type of system has its own role to play

- Each system differ as per the requirement

- Developed by the Security Industry to minimize security risk

Intruder Alarm System

Plays 2 Roll within the Security System

EARLY WARNING

PHYSICAL BARRIER

Warning of the manpower requirements -
**where and when needed at the
scene of the incident**

Alarm will sound -
when the intruder crosses the barrier

Usually installed at large sites...

...where intrusion into the grounds must be detected before access to any building has been obtained
A guard force that operates on the site itself normally responds to these system

Also installed to secure unoccupied premises

Are manufactured to eliminate false alarms as far as possible

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Also known as "Indtruder Detective System"

Its a device to identify intrusion of unauthorized person in a restricted area

Divided into three parts for the purpose of Comprehension

Controller:
Input devices
or sensors

Controller:
Output devices
to siren, blaster,
auto dialer, strobe light

**Data for Control
Room (CR)**

+ve

Essential for effective security

Can alert the security guards to instrusions at protected facilities giving them early warning

At best, it provides an earley warning of an attemped intrusion allowing time to
• respond before access to risk has achieved
• take next course of actions

-ve

However, an intruder alarm by itself does not provide any protection

Perimeter Protection System

Electronic Device used to protect a particular area by way of Transmitter and Receiver
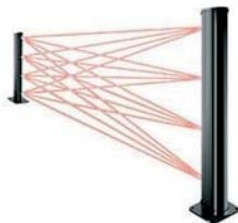
Using Photo Electric Beam Sensors

Two Types of Devices

Dual Beam   Quad Beam

It has various ranges : 30 Mtrs, 50 Mtrs, 60 Mtrs, 100 Mtrs & 200 Mtrs.

It sends out the light beam which is being received by a receiver with out any sound.

Mainly used for Security purposes, to protect buildings, stores and any other vital areas from in trusion.

Once the transmitted beam is interrupted, then it activates the Control Panel and trigger an alarm.

APPLICATION

■ Residence/Estagte Bunglows/ Farm House
■ Factories/Manufacturing Unit
■ Office Premises
■ Stores/Material Yards/Scrap Yard
■ Logistics

Main Advantages

■ Being invisible it is difficult to defeat system
■ The best spectral match to most phototransistors which are commonly used as the light receiving element

Additional Features

■ Flood light integration
■ Camera Integration
■ Door Control Integration
■ Auto dialet integration
■ Control Monitoring Station Integration
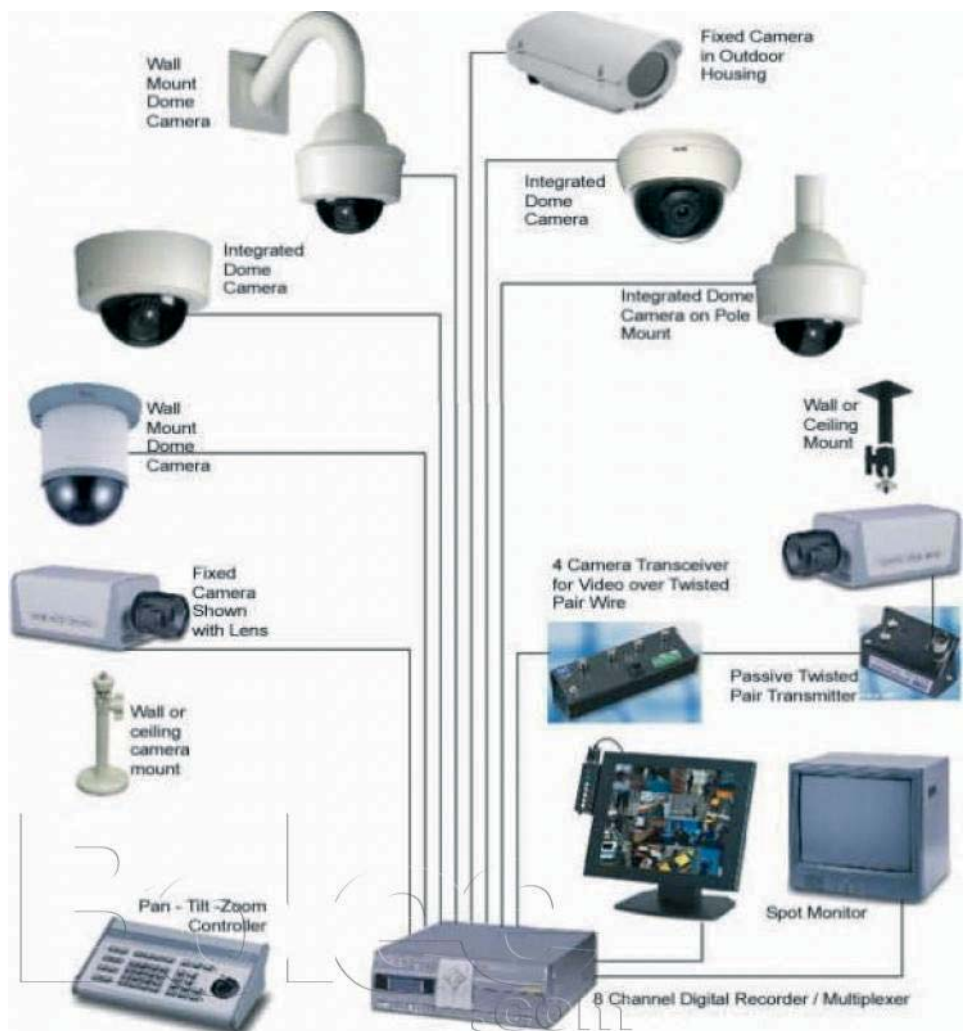
Closed-circuit television (CCTV) System
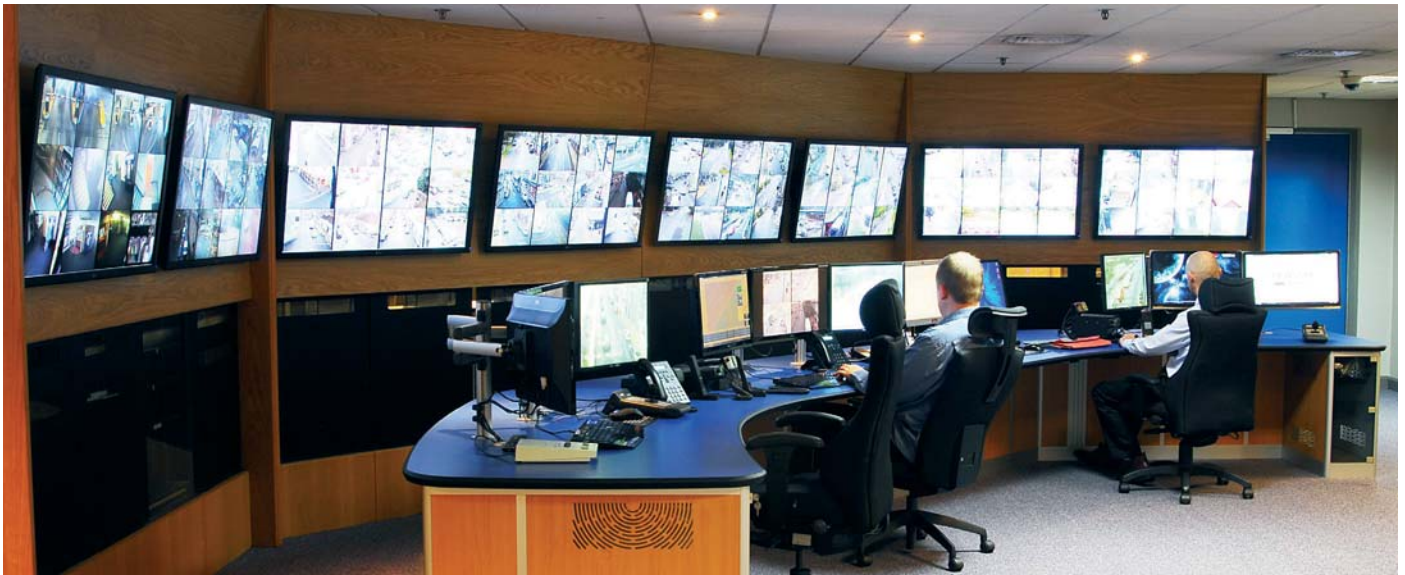
CCTV is the use of video cameras to transmit a signal to a specific place, on a limited set of monitors.

It is differs from the broadcast television in that the signal is not openly transmitted, though it may employ point to point (P2P), point to multipoint, or mesh wireless links.

It is an extension of an operators own vision used for surveillance

"More Ground" can be easily viewed and controlled.

Effectively used to provide perimeter detection through Video Motion Detection (VMD) systems and remote surveillance through Dial-inVideo System

Wall Mount Dome Camera

Fixed Camera in Outdoor Housing

Integrated Dome Camera

Integrated Dome Camera

Integrated Dome Camera on Pole Mount

Wall Mount Dome Camera

Wall or Ceiling Mount

Fixed Camera Shown with Lens

4 Camera Transceiver for Video over Twisted Pair Wire

Passive Twisted Pair Transmitter

Wall or ceiling camera mount

Pan - Tilt -Zoom Controller

Spot Monitor

8 Channel Digital Recorder / Multiplexer

Types of Camera Housings

Vandal proof housin

Explosive proff housing

Weather and dust proof housing

With cooling facility of cameras operating
in high temperature areas

Re
Rayce
Electronic
Security System

Mini Dome Colour Camera

- The 1/4 inch CCD mini colour camera
- Comprising solid state circulatory housed in a casing
- Resolution of more that 480 TV lines for better image
- Work on external 12 Volts DC power supply
- Camera c/w with built in 3.8mm lens to cover the wide are (Angle of 0-60 degree)
- Output will be connected to a 16Channel Digital Video recorder for viewing and recording

Set Camera with Fixed Lens

- High resolution camera
- 1/3" format CCD camera comprising solid state circuit housed in a IP66 weather proof housing
- Fixed with 4mm Auto Iris Lens to cover the wider area
- Work on external 12 Volts DC power supply
- Camera c/w with built in 3.8mm lens to cover the wide are (Angle of 0-60 degree)
- Output will be connected to a 16Channel Digital Video recorder

CCTV Camera

Video Management Equipments

Digital Video Recorder
Other features

■ Every alarm transaction event via the SECURITY SYSTEM (will triggers the DVR to record event, programmable by the administrator) or continuous recording (pre-defined time interval, eg. 1 or 5 minutes) of the associated CCTV camera(s)

■ True Multi Tasking Operation ⟶ Monitor, Record, Playback, Archive and Retrive at the same time allowing investigation and debriefing while recording continues.

■ Application Programming Interface (API) allowing integration with other security management systems.
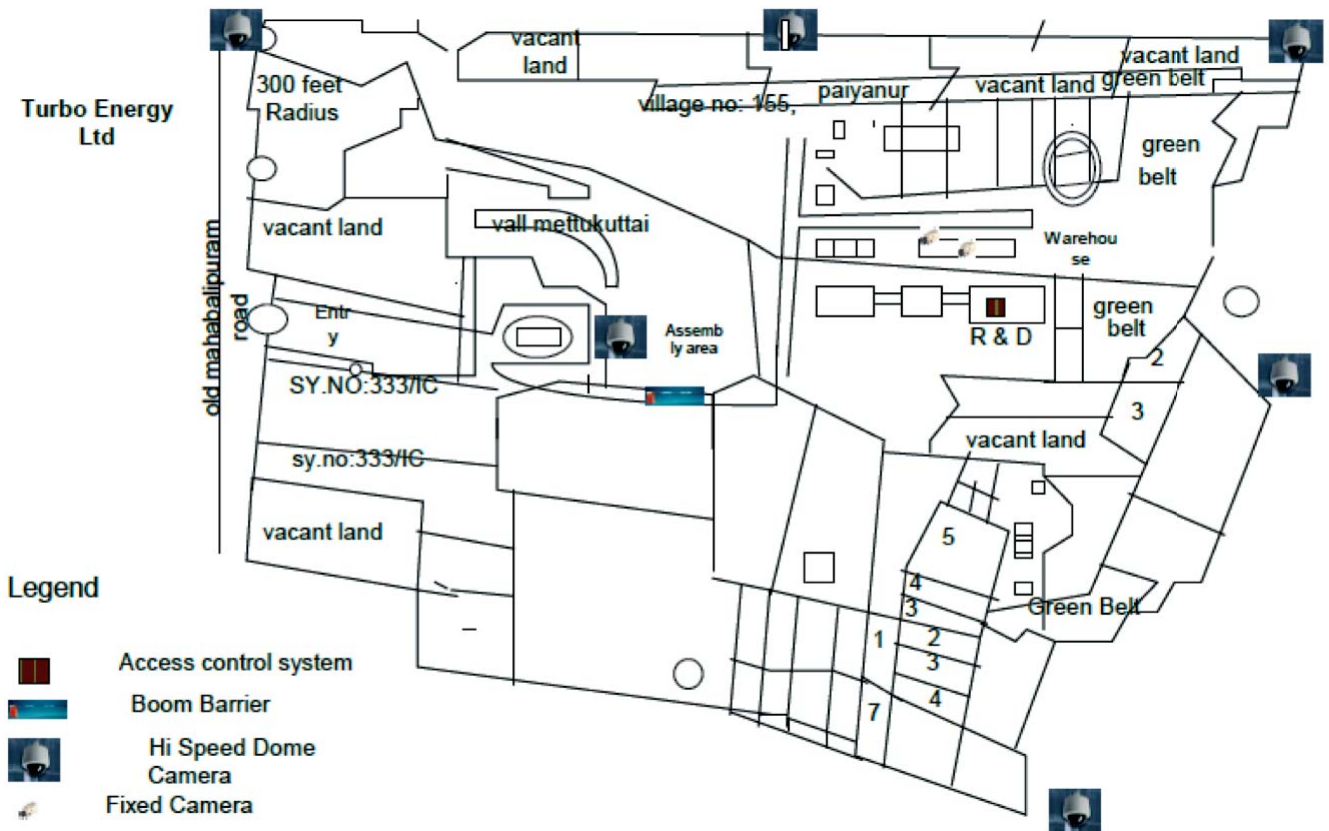
LCD Monitor and Display
LCD displays: Deliver the resolution and reliable operation you demand for head-end operations

Features:

High resolution image reproduction

■ 16:9 ratio wide screens

■ Wide range viewing capability

■ True Colour reproduction

■ Multiple inputs for multiple sources

■ Selectable scan size

vacant
land

300 feet
Radius

Turbo Energy
Ltd

village no: 155, paiyanur

vacant land green belt

green
belt

vacant land

vall mettukuttai

Warehou
se

green
belt

old mahabalipuram road

Entr
y

SY.NO:333/IC

Assemb
ly area

R & D

2

3

sy.no:333/IC

vacant land

vacant land

5

4
3

Green Belt

1

2
3

7

4

Legend

Access control system

Boom Barrier

Hi Speed Dome
Camera

Fixed Camera

Remote View Configuration

- The contrl centre would provide state of art surveillance technology to control all the cameras thru a single plat form including complete management of sites regard less of their location.

- Manager should be able to view pool of cameras from different system at a singly click of mouse.

- Each server or work station should be made connected to maximum 1 LCD monitors so as to provide easy accessibility of systems as and when required by the operators.
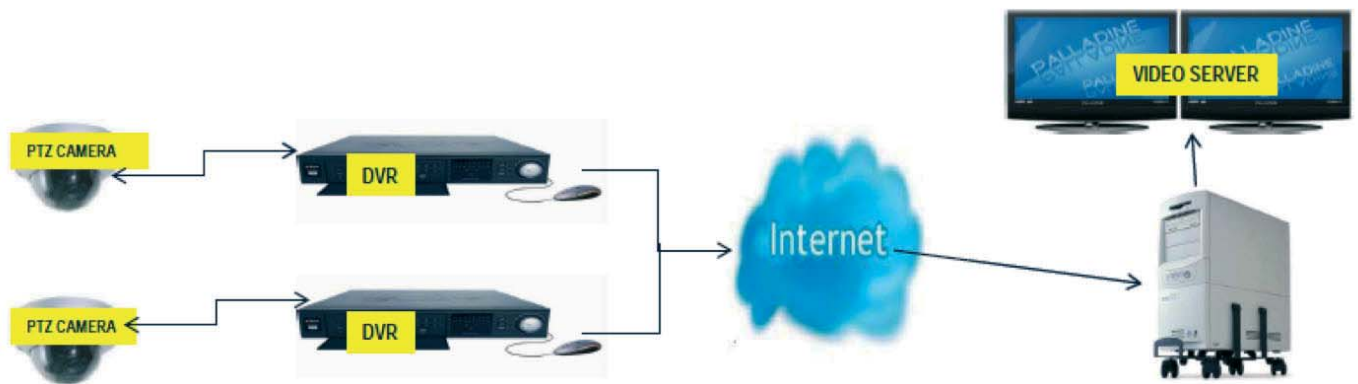
Active Devices

Access Contrl System

Designated to allow only the authorized, Personnel to restricted area

- Form an aid to the PHYSICAL BARRIERS, as manned access control does on a gate or door.

- Secondary design feature for easy locking procedure during unoccupied periods

- Access Control Points are unmanned and the system can be abused in a number of ways ⟶ the system must incorporate some form of alarm system. ⟶ Means it also plays a part in the role of EARLY WARNING.

Electronic Access Control System

Main Gate Barrier

Entrance Gate Barrier
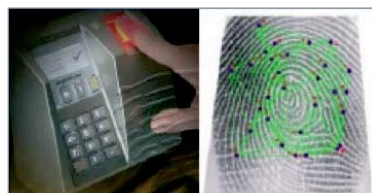
Biometric Time Attendance

Readers and Controllers

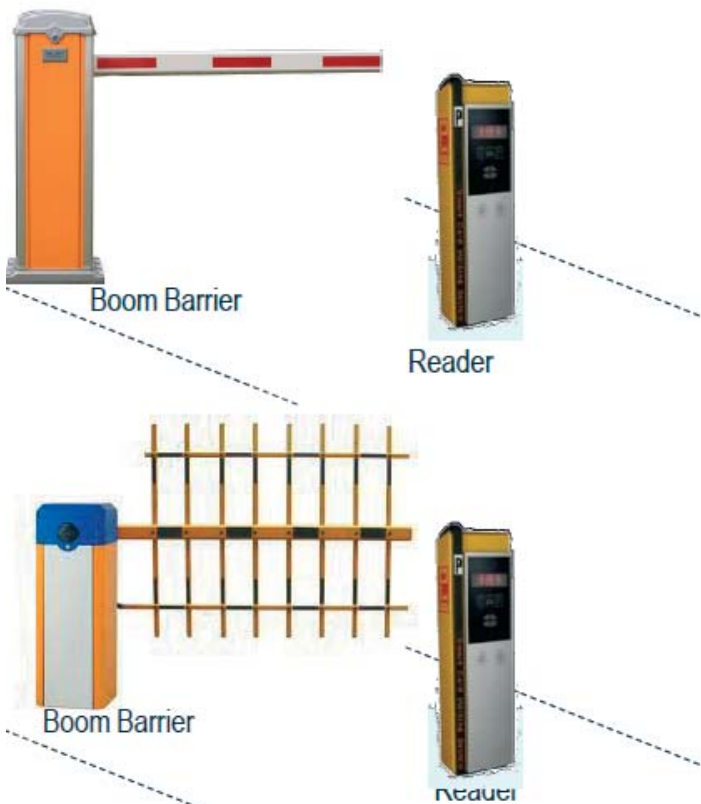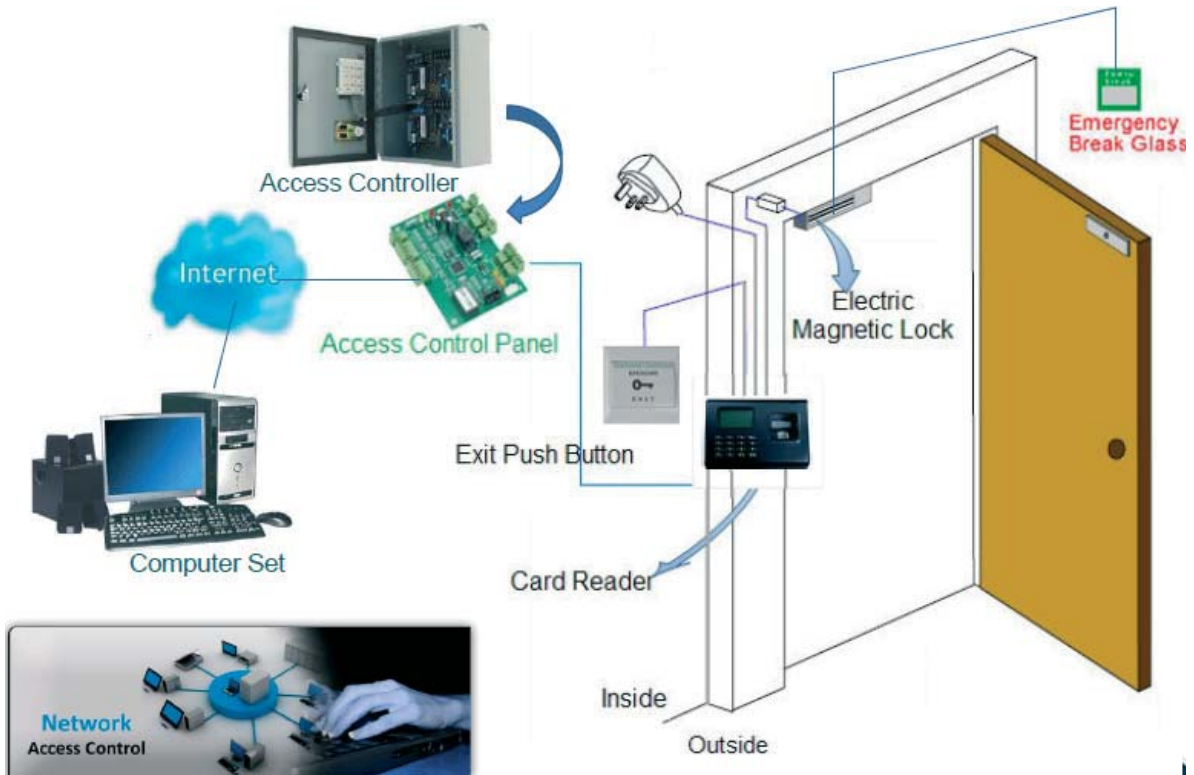Proximity Card

Types of Access Control System

Palm

Finger

Eye

Networkable Access Control System

Access Controller

Internet

Access Control Panel

Computer Set

Network
Access Control

Emergency
Break Glass

Electric
Magnetic Lock

Exit Push Button

Card Reader

Inside

Outside

Boom Barrier

Boom Barrier

Reader

Boom Barrier

Reader

Boom Barrier

- It denotes access control device for vehicles.
- The system works on motor mechanism
- The readers will be placed near the barrier
- The owner of the vehicle has to show the card in front of the long range card reader to open the barrier
- The boom barrier will have the sensor, in case the vehicle doesn't pass the barrier within the programmed time the barrier will not come to the normal stage until the vehicle passes the barrier.
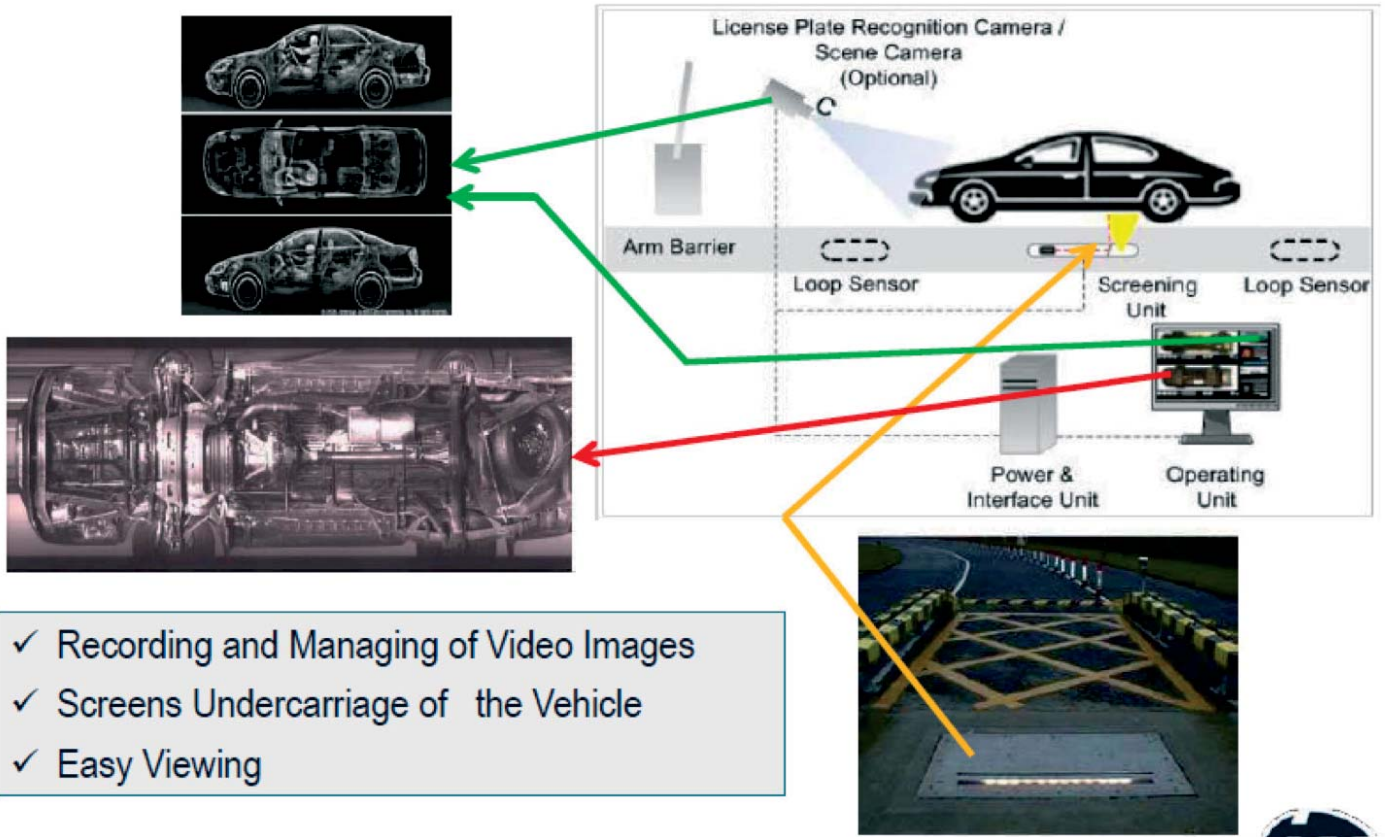
Networkable Access Control System

Biometrics-Finger print access control

The Network Fingerprint Recognition system for Door-Access, Time & Attendance Employee Management and combination with Voice Identification

- Message transfer by LCD screen and Voice
- Alarm Sound during a forced open
- Automatic Lock status Checking
- Real time monitoring on Central server
- Manages employees time and attendance
- Supports both TCP/IP and State-alone condition
- Central access controlling by using the existing LAN facilities
- Voice and Video communication through various Videophones

Under Vehicle Screening System

License Plate Recognition Camera /
Scene Camera
(Optional)

Arm Barrier

Loop Sensor   Screening   Loop Sensor
               Unit

Power &   Operating
Interface Unit Unit

- ✓ Recording and Managing of Video Images
- ✓ Screens Undercarriage of the Vehicle
- ✓ Easy Viewing

Turnstiles-Access Control

Campact Flap Barrier

High Security Portal

Waist-HighTurnstile

Full Height Turnstile

Passive Security Solutions –
Anti Terrorism

CCTV Surveillance and Video Analytics

Under Vehicle Surveillance Systems

Baggage Screening

Intrusion Detection, Alarm Systems Evacuation Systems

Bollards Boom gates

Perimeter Surveillance

Command and Control Vehicle

License Plate Recognition

Access Control
Staff, Workers, Labour & Visitors Management

Fire Detection & Suppression

Public Address System

Electronic Guard Tour Monitoring System

The Electronic Guard Tour Monitoring System is designed to provide an efficient and effective Management of Guard patrolling / routing maintenance activities at a reasonable price

Features

- Simple to use and easy to install

- Eliminates close supervision on guards

- High performance and consistent error free reading

- Latest in touch memory chip technology with extremely durable touch probe data collector and user friendly window based system managment software.

- Generates real time clear concise management reports with time-stamping recording of guard identily, check point location and exception events recording.

Fire Alarm Systems

Types of FIre Panel

Conventional Type

- It is the older economical version

- In this area to be protected is divided into number of zones.

- The Fault is analyzed zone wise and indicated at the panel.

- Exact location of the fire in the affected zone may not be known till on site inspection is carried out by the fire officer (but it may be too late to take action)

- Suitable for small installations where some personnel are always available to complement the flow of information by their visual observation.

Components: Fire Control Panel

- It is the Main Processor to identify fire and trigger the alarm.

- In built Amplifier with pre-programmed voice message to trigger

- If announce location of fire and where to exit and how to exit without panic

- Equipped with intercom Facility for talking to fire officers at different locations to co-operate the fire fighting

- Equipped with Visual Indications on the panel of various fault conditions and status of various input devices during fault condition

- Self check facility

- Output to trigger relays which in turn can operate Pumps, Hydrants other devices like lifts to be brought to ground floor automatically

- Shut AC air circulation unit to kill fire

- Trigger gas based fire fighting equipment to open gas cylin der to spew gas and squeleh to operate sprinklers.

Fire Alarm Systems

Components: Detectors

- They are Sensors fitted above and below false ceiling

- It detect smoke and intimate the control panel about prevailing environment 3 sqm around it.

- Three types of Detectors

  - Optical Smoke Detector (OSD)

  - Lonisation Detectors (ISD)

  - Heat Detectors (HD):
    - Fixed Temperature Type
    - Risen Temperature Type

- Each one detectors tie condition as per their design characteristics

Hooters

Different decibe levels for external warning
(Sound Level)

Fire Alarm Systems

Sirent

For internal audio alert

EMS Wireless Fire Alarm Sensors

Radio Fire Alarms

**EMS Wireless
Fire Alarm Controllers**

EMS Ancillaries

Hotel Fire Alarms

Fire Alarm Systems

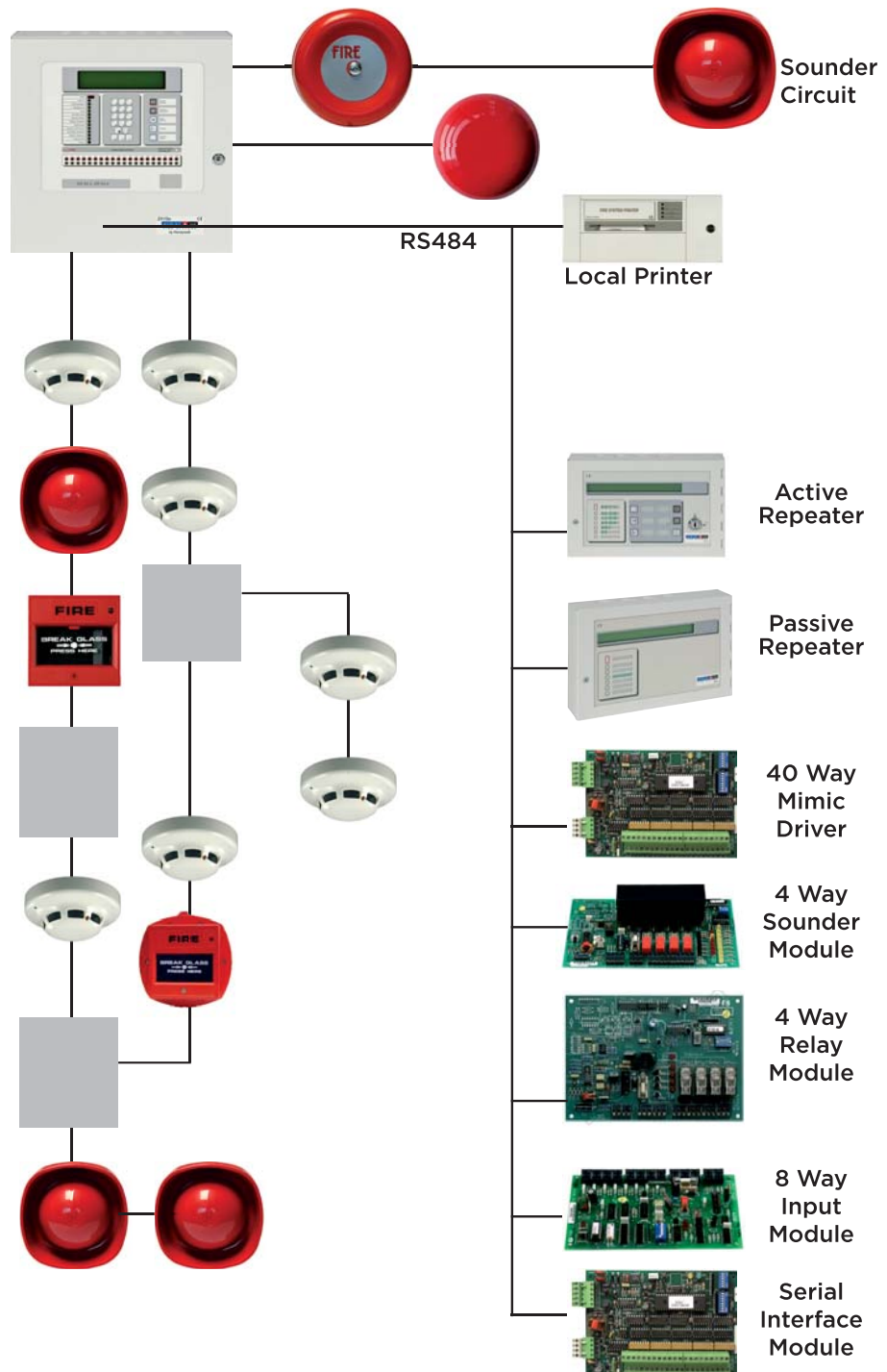## Analogue addressable Fire Alarm Control Panel

Loop

- The FIRE ALARM CONTROL PANEL will be a 4 loop panel

- Each loop will be able to address 126 addressable detectors/devices.

Day / Night Setting

- The FIRE ALARM CONTROL PANEL will have the facility to set each smoke sensor sensitivity remotely.

- It will also be possible to set the sensitivity to a global high or global low based on night or day time.

Sake Test:

- The FIRE ALARM CONTROL PANEL will have the facility to perform soak test such that an operation can be periodically checked out for all initiating devices.

- As each device is connected to the FIRE ALARM CONTROL PANEL it will log the condition and automatically reset the device

Sounder Circuit

RS484

Local Printer

Active Repeater

Passive Repeater

40 Way Mimic Driver

4 Way Sounder Module

4 Way Relay Module

8 Way Input Module

Serial Interface Module

Sprinkler System

- The System designed generally based on the requirements of TAC regulations.

- The System consists of Alarm Valve, Sluice Valve, Strainer, Piping, Sprinklers etc.

- Sprinklers are provided in such a way that the proposed area is covered by adequate water supply.

Dry Powder Stored Pressure Fire Extinguisher

We offer a wide range of dry powder stored pressure type extinguisher, which are useful for class A B C & D fires involving combustible material like wood, paper, cloth, flammable gas, liquid petrol, paints solvents & electricity started fires & all classes of fire.

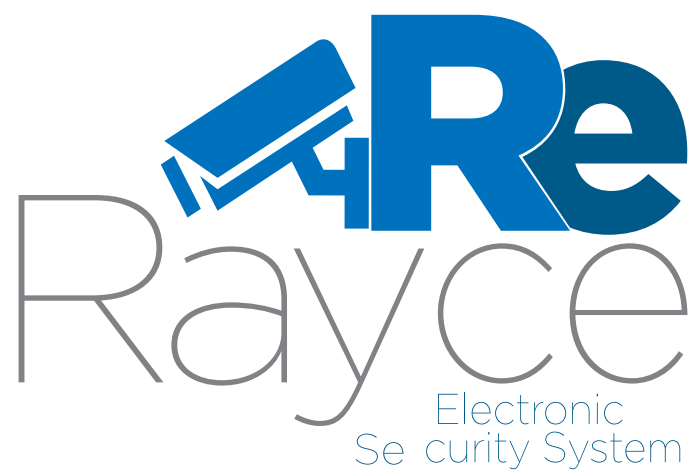## Fire Fighting & Fire Protection System for high rise building

Sprinkler Piping Network

Raiser

Pump Room

Yard Hydrani Valve
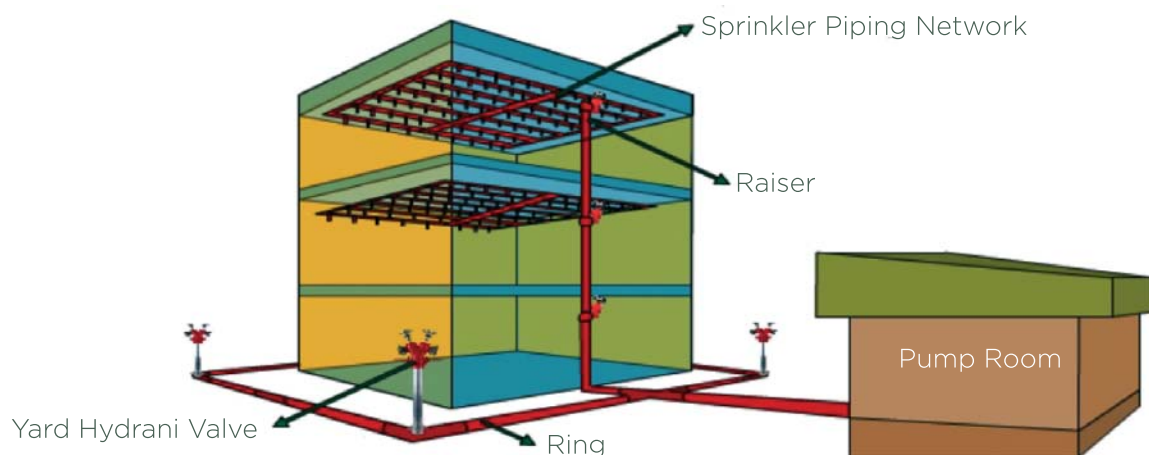
Ring

HD over Coax 2.0
HDCVI-always leading HD innovation

HDCVI 2nd Generaion cameras completes its portfolios with 1080P/720, vari-focal, transmission accessories as well as brand new TX-chip embedded with ISP, ushering a new stage of HD over Coax 2.0.

Rayce

**Electronic
Se curity System**