

CCTV CAMERA, SECURITY DEVICES INSTALLATION PACKAGE TRAINING

CCTV CAMERA

WHAT IS CCTV & SECURITY SYSTEMS - INTRODUCTION

- What is Security Systems,
- 1.CCTV 2.Access Control 3.Fire Alarm 4.Burgular Alarm 5.Video Door Phones
- What is CCTV Security Systems
- Peripherals available in the Security Systems,
- History of CCTV Cameras
- CCTV Advantages & Uses
- CCTV Manufacturing Companies
- Basic Units & Lux

TOOLS FOR CCTV INSTALLATION

- Cable Laying Tools
- Drilling Tools
- Nose Player
- Wire Cutter & Stripper
- Knife
- Screw Driver Kit
- Insulation tape, Tag, Screws, Sealing Plug
- CCTV Camera Tester
- Digital Multimeter
- Testing Power Adapters, Video Balun,



Site Inspection, Requirements Handling, Planning, Quotation, Rate Finalize

CCTV Installation requirements

- Cameras
- Cables & Connectors
- Harddisk
- Power Supply
- IO Box
- Bracket
- Casing (Beading)
- Rack
- VGA / HDMI Splitter & Switcher
- Housing (Outdoor Purpose)
- DVR / NVR
- Routers
- Monitors & TV
- Flash Lights (Outdoor Purpose)

CCTV CAMERA MODELS & TYPES

- Indoor (Doom) & Outdoor (Bullet) Cameras Difference
- Camera Specifications (AGC,BLC,WDR,DNR,AI,AWB,HLC,Lens, IR LED Arrays,TVL,MP)
- CCTV Lighting Concepts

MODELS:

- Day Camera
- IR Doom Cameras
- Wireless Camera
- Pan Tilt Zoom Camera (PTZ),
- Network IP Camera
- Hidden Security Camera
- Wide angle Camera ,
- Vari- Focal (Lens Zoom) Camera
- Box Zoom Camera
- Dome Cameras.
- Bullet Cameras
- Pin hole Cameras
- IP PTZ Cameras
- IP Bullet Cameras



CABLES & CONNECTORS

- What is Cables
- Types of Cables
 - 1.Co Axial
 - 2.CAT5
 - 3.CAT6
 - 4.Fiber Optic Cables Concepts
- Types of Connectors
 - 1.BNC Male –RG59 Connector
 - 2.RCA Male Connectors
 - 3.RJ45 Connectors
 - 4.Camera Power Connectors (Male & Female)
- Cable Distance guide
- What is Balun & Its uses
- How to crimping the Cables
- How to Checking the Cables Continuity
- How to use Camera Testers

HARDDISK

- Harddisk uses
- Types
- Difference between Systems HDD & AV HDD
- Recording Concepts

POWER SUPPLY

- SMPS Power Supply , Power Adapter, Various types of Power Supply

IO BOX

- Uses,types,How to Install

BRACKETS (STAND)

- Uses,types,How to Install

CASING (BEADING)

- Uses,types,How to Install

RACK

- Uses,types,How to Install
- How to Fixing the Camera into Surface
- Using IO BOX / Direct / Brackets



VGA / HDMI SPLITTER & SWITCHER

- What is Splitter
- Uses, types, How to Install
- What is Switcher
- Uses types, How to Install

HOUSING (OUTDOOR PURPOSE)

- Uses, types, How to Install

OUTPUT DEVICES

- VGA Monitor
- HDMI Monitors
- TV (AV / VGA/ HDMI)
- Monitor Resolutions Concepts
- Various Sizes of Monitors / TV
- NTSC / PAL Systems & Its Difference

DVR (DIGITAL VIDEO RECORDER)

- What is DVR & Its Functions
- Various Manufacturers of DVR
- Types of DVR
 - 4 Channel DVR
 - 8 Channel DVR
 - 16 Channel DVR
 - 32 Channel DVR
 - USB DVR
 - Tangle Supported DVR



DVR INSIDE PARTS & TROUBLESHOOTING TIPS

HARDDISK INSTALLATION METHOD

4 CHANNEL DVR INSTALLATION & ITS SETTING -PRACTICAL'S

8 CHANNEL DVR INSTALLATION & ITS SETTING -PRACTICAL'S

16 CHANNEL DVR INSTALLATION & ITS SETTING -PRACTICAL'S

USB TANGLE SUPPORT DVR INSTALLATION METHODS

USB DVR (LAPTOP / COMPUTER) INSTALLATION & TROUBLESHOOTING

WIRELESS CAMERA INSTALLATION & TROUBLESHOOTING

WHAT IS NVR (NETWORK VIDEO RECORDER)

- What is NVR & Its Functions
- Various Manufacturers of NVR
- What is IP Camera & its Explanation

- Types of NVR
 - 4 Channel DVR
 - 8 Channel DVR

IP CAMERA INSTALLATION & TROUBLESHOOTING (2 TYPES)

ZOOM CAMERA & HIDDEN CAMERA INSTALLATION & TROUBLESHOOTING

PTZ CAMERA INSTALLATION & TROUBLESHOOTING (2 TYPES)

RECORDING PRACTICAL'S

- Normal Recording
- Motion Recording

PLAYBACK DEMO PRACTICAL

EXPORT THE DATA

SECURITY SETTING

- Tamper Proof
- Motion
- Video Loss
- Harddisk Over right
- Privacy Mask

MOBILE / TAB / LAPTOP VIEW CONFIGURATIONS

MAINTENANCE OF CCTV

ACCESS CONTROL (BIO METRIC)

- What is biometric
- Frauds in industry happens in the following situations
- Why Biometric Application
- Identification vs. Authentication
- Types of Biometrics
- 2D Biometrics (CCD,IR, Laser, Scanner)
- Hand Geometry
- Iris Code
- Face
- Access control required tools
- Identification,
- Authentication
- Authorization
- Fingerprints
- Retina scan
- Iris scan
- Voice print
- Facial scan process
- Biometric performance
- Types of Access control
- Administrative control
- Technical control
- Physical control
- Categories of access control
- Proximity cards
- Introduction proximity cards
- Biometric technique
- RS 485 communication line
- Smart Card
- Types of smart card
- Face Recognition and Fingerprint Identification Standalone Controller
- Wireless GPRS & Embedded Web server Fingerprint Identification Standalone Controller
- Total security solution provider
- Proximity Reader series
- Cards and Tag
- Advantages of swipe card door entry systems
- Disadvantages of door entry systems
- Finger print based access control systems
- Fingerprint introduction
- Fingerprint based systems
- What is a fingerprint Recognition
- Fingerprint principle
- Fingerprint Classes
- Arches



- Loops
- Whorls
- Identify each fingerprint pattern.
- Fingerprint SWAD
- Fingerprint Identification
- Fingerprint Technology
- Fingerprint Advantages & Disadvantages
- Face Recognition
- Types of Biometric
- Facial Recognition
- What is Face Detection?
- Importance of Face Detection
- Face Detection: current state
- Face Detection: challenges
- Template Matching Methods
- Face and Non-Face Exemplars
- Exhaustive Search
- How Facial Recognition system work
- Facial expression recognition
- Preprocessing
- Facial Features Detection
- FERET Database
- Face and Facial Feature Detection
- Side-View Face Detection
- Color-Based Face Detector
- Applications of Face Recognition
- Applications of Face Recognition
- Face Detection + Recognition
- Facial Recognition Advantages & Disadvantages
- Iris recognition Advantages & Disadvantages
- Software installation
- SQL SERVER – 2008 –Installation
- eTimeTrack Lite
- What is etime Track Lite Time attendance and payroll software
- Why you should use Time attendance and payroll
- eSSL- eTimeTrack Lite Feature
- eSSL- eTimeTrack Lite Software installation
- Networking
- Internet protocol addressing
- What is IP address
- Range of IP
- Loop Back IP Address
- Sub netting
- Configuring Tcp-Ip



VIDEO DOOR PHONE

- What is video door phone
- How to install it
- Its applications etc.....



FIRE ALARM

- What is fire alarm
- Application of fire alarm
- How to select the input and output device and control panel
- Input devices means having smoke detector, heat detector
- How to install the input devices and control panel, how many devices to connect
- Control panel settings etc.....



BURGLAR ALARM

- What is burglar
- Usages
- How to connect
- Panel settings
- PIR details etc....



CHIP SYSTEMS

Old No.107, Lake View Road, West Mambalam, Chennai-33. (Near Postal colony 3rd Street)
Phone: 044-2474 3860. Cell: +91-98410 99911, 94440 34246. Email: admin@chipsystems.in