SIP based Video Intercom and Access Control Solution

_Not Only An Intercom System, But Also A Telecom system._
Video Intercom & Access Control Solution for Apartments

SIP solution integrates Audio, Video and Data into one seamless unit for ease of Operation, Savings, Mobility and Flexibility.

Advantages
Multifunctional devices, hence less hardware is required.
All devices work on network cable saving costs, installation is quick and easy.
Multifunctional Handsets make intercom or outbound Video/PSTN/VoIP/GSM calls from same handset.
Integrated VoIP lines for enhanced efficiency and savings.
Auto Attendant system with Voicemail and Voicemail to email notification.
Integrates with SIP surveillance cameras and NVRs.
Supports remote view and control from PC or Mobile.
System Features

- Advanced SIP Based Door Entry System Supports Both Intercom and Telecom Services.
- Talk to Visitors with Real Time Live Video and Voice.
- Forward Visitor Calls to Mobile Phone or Office Phone When You Are Out.
- Monitor Surrounding Areas on Video Phone with SIP Camera.
- Use as Emergency Phone in Particular Locations Like Basement, Parking Lot, Single Elder’s Home, etc..
- Connects to SIP VoIP Services, Use Video Phone as General VoIP Phone.
- Open Electronic Door Lock by Single Button on IP Video Phone or RFID Card.
- Embedded RFID Card Database and Entrance Log System.
- VGA CMOS Sensor with Wide Angle Lens.
- White Light-Compensator and GPIO to Trigger External Lighting for Night or Dark Environments.
- Water and Dust Resistance Mechanism.
- Wall-Mounting Box for Secure Placement.
- Friendly Web User Interface for Configuration and Management.
- Support up to 2000 Extensions with Stackable IP PBXs.
Application schematic for Residential Apartments

- Call Residents Simply by Dialing the Extension Numbers.
- Answer Visitor with Real-Time Live Video and Voice.
- Forward Visitor Calls to Mobile Phone or Office Phone if Resident is not at Home.
- Open the Door by Pressing “#” Key on Video Phone or Scanning RFID Card (Mifare ISO 14443A).
- Monitor Public Areas with SIP Cameras on Video Phone by Dialing Extension Numbers.
- Use Emergency Phones to Make Emergency Call or Alert When Necessary.
Video Intercom & Access Control Solution for Single Houses

SIP solution integrates Audio, Video and Data into one seamless unit for ease of Operation, Savings, Mobility and Flexibility.

Advantages
Multifunctional devices, hence less hardware is required.
All devices work on network cable saving costs, installation is quick and easy.
Multifunctional Handsets make intercom or outbound Video/PSTN/VoIP/GSM calls from same handset.
Integrated VoIP lines for enhanced efficiency and savings.
Auto Attendant system with Voicemail and Voicemail to email notification.
Integrates with SIP surveillance cameras and NVRs.
Supports remote view and control from PC or Mobile.
**SIP Server**

The SIP Server is a Modular Voice and Video Intercom Solution. It offers Integrated Auto Attendant, Voicemail, Voicemail to email and many other advanced functions in one single box. It can communicate with multiple devices over the LAN like IP Phones, Video Phones, Wi-Fi Phones, Door Phones, SIP Cameras etc. Telstra Lines, VoIP trunks, Mobile GSM lines etc. can also be integrated by using optional plug-in PSTN / Modules and Gateways.

**Features Include**
- Voice and Video calls support
- Automatic Route Selection
- Call Forwarding to Mobile or Landline
- Conferencing
- Call Pickup and Transfer
- Voicemail with email notification
- One touch call recording
- Do Not Disturb
- Criteria based Inbound Call Management
**SIP Phones**

SIP phones install on the computer network cabling and can share the same cable with a PC. Users can access Intercom, PSTN, VoIP and GSM services when integrated with the SIP server.

SIP 710 is a basic handset with 3 line backlit display and supports 2 lines. Features include – Message wait indicator lamp, 500 name / number directory, Hands free full duplex speakerphone, Number Note Pad, 2 integrated 10/100 Ethernet ports and built in PoE. Excellent robust design, can be wall mounted.

SIP 880 is a high end professional phone with a large LCD display. It supports up to 10 lines and also includes 16 Busy Lamp Field keys which can be programmed to display status of other extensions in the apartment. It comes with 2 integrated 10/100 Ethernet ports and built in PoE functions. It offers high quality audio with a full duplex Handsfree speakerphone and Alarm function.
**SIP Video Phones**

SIP 2.0 compliant Video phones deliver Stunning Video Quality with Excellent Voice Clarity.
The video phone opens a new world of applications. It gives you immediate face to face communication capability whether it is with a visitor at your door or a loved one thousands of miles away.
When integrated with SIP server you can answer video door phone calls, monitor SIP cameras & Door phones.

**Features Include**
- Handsfree speakerphone.
- High Resolution LCD Panel
- Audio Video Synchronization.
- Picture in Picture.
- Video and Audio output ports.
- Bandwidth Control Management.
- Adjustable LCD & Camera angle.
- 2 x 10/100 Ethernet LAN ports.
- Screensaver and Photo Frame.
- Point to Point Video Conferencing.
- Camera lens cover for privacy.
**SIP Wi-Fi Video Phones**

The SIP 620 Wi-Fi Video Phone supports high resolution video telephony with 10.2" touch screen LCD panel. It also offers Picture based phone book, Digital Photo Frame display, optional Bluetooth headset support, USB Keyboard interface.

When integrated with the SIP server, users can answer Video Calls from the Doorphone, Open Doors, Monitor SIP cameras, Browse the Internet and make VoIP, PSTN and GSM calls.

**Features Include**

- Full Duplex Speakerphone function
- Phone book contacts.
- Video conference 2 way and 3 way
- Support H.263 / 264 video codecs
- Integrated Web Browser
- 802.11b /g/n Wi-Fi with full security
- 10/100 Mbps RJ45 Ethernet port
- Many other applications
**SIP Video door phones**

SIP Video Door phones give you the ability to identify visitors before you open the door.

When integrated with the SIP server, these devices not only work as an intercom but can also connect to telephone services and can forward calls to your mobile or any pre-assigned number.

You can also monitor the area in front of the Doorphone by dialing through the Video Phone, Wi-Fi Handset or PC based soft phone.

**Features include**

- Hands free speakerphone
- Built in IR illumination for night visibility.
- Electronic GPIO Ports for advanced applications
- Built in Electric Relay for Door Lock control
- Water Resistant keypad
- Built in Camera with wide angle lens
- RFID security card reader with embedded database
- Integrated Microphone and Speaker
- Illuminated LCD Screen – SIP 100
- Power Over Ethernet option

Various models – Single house models, Emergency Call models & Community / Building models etc.
**SIP Video and Home Automation terminals**

The Video and Automation Terminal is wall mount type, easy to install system. It can display images from Video door phones, IP Video Phones, SIP cameras etc. with stunning voice and video clarity. It also works as a SIP phone and can be used for PSTN, VoIP or GSM calls when integrated with the SIP server.

As a Home Automation Management terminal it offers Scenes and Security settings, Alarm Management, RFID, Temperature/Humidity/Light sensors and a host of IO modules.

**Features include**
- Built in Camera with privacy cover
- Integrated VoIP video phone
- Picture in Picture
- Screen Saver
- 10/100 Ethernet LAN Port with PoE
- Built in Microphone and Speaker
- Audio Input and Output ports
- Bandwidth control management
- Web management interface

SIP 5101 Automation Gateway.
**SIP Surveillance Cameras**

The SIP surveillance cameras deliver video and bi-directional audio anywhere at anytime. You can not only monitor live video from your video phone / PC but can also give instructions / make announcements. Superior Multi-Channel video streaming allows selection of different video formats for recording and viewing whether on a PC monitor or on a mobile phone.

**Features include**

- Support for HTTP and SIP protocols
- H.264, MPEG 4 and MJPEG Video streaming
- Support for multiple Video Formats
- Motion detection with multiple areas
- Event triggered Email Alerts and FTP uploading
- Solid full metal housing water and dust resistant
- Bi directional Audio with G 726/AMR / G 711 Codec's
- Built in Microphone
- 10/100 Ethernet LAN Port
- Optional PoE and Wi-Fi models
- Web user interface for configuration and Management
Application schematic of Electronic Door Lock Control.

Step_1 Visitor dial extension number to call Resident.

Step_2 Resident press “#” key to open the door.

Step_3 Door opened.
Advantages of using SIP over traditional intercom systems

SIP is the way to the future. Unlike traditional intercom systems SIP based devices work together as a seamless single unit on the common network cable sharing resources and reducing costs. Some of the advantages include.

1. **Less Hardware Required** – Multifunctional devices, for example using a SIP video handset you can answer intercom calls, make outbound PSTN /VoIP/ GSM calls. If you have a good internet connection you could also make video calls using the same handset.

2. **Common Network Cable** - all devices work on the common network cable making installation easy and saving on infrastructure costs.

3. **Professional System** - Advanced event management enables forwarding of calls to your mobile or any designated number. The system can record and forward voice messages to email inboxes thereby keeping you updated.

4. **Modular and Scalable** - You can start with a basic System and add new components as and when required.

5. **RFID Access Control** - Integrated RFID for a higher level of security and convenience.

6. **Open Standards** - The system works on open SIP standards ensuring easy interoperability with third party devices, you are not locked in with one vendor.

7. **Mobility and Flexibility** – The SIP platform allows easy integration with Wi Fi devices, you can integrate your Iphone or load a soft phone on your Ipad or PC to answer intercom calls.

8. **All in one Future Proof solution** - SIP is the technology of the future.