



VISION

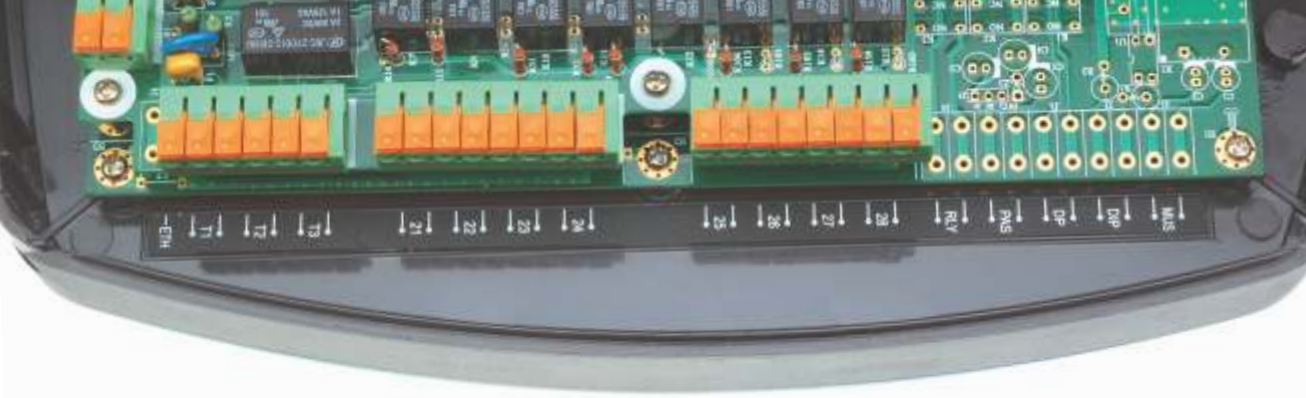
The Office Communicator

Modern offices require a completely integrated communication solution. Presenting: Matrix VISION a premium feature packed PBX specially designed for modern offices. Designed after a thorough study of the ways in which modern businesses operate, Matrix VISION offers integrated solution for office communication requirements.

Matrix VISION is packed with unique features, powered by Microcontroller-based design. SMT components used in the hardware offer very compact design and make it more power efficient. SLIC used on extensions ensures robust, reliable and maintenance free performance. The unique features of the system ensure smooth and efficient call management. Special features are provided that give professional response to the callers, hence enhancing the image of the organization.

Get the power of Matrix VISION "The PBX for Office" designed for people who don't compromise.

**MATRIX**
TELECOM SOLUTIONS



Efficient Call Management for Offices

Reliable and Maintenance-free Performance

No Additional Investment Required

Matrix VISION offers intelligent features like Abbreviated Dialing, Auto Call Back, Auto Redial, Call Follow Me, Conference, Hotline, etc. that enhance the productivity. It also offers efficient call management through features like Alternate Number Dialing, Auto-Attendant, CLI based Routing, Direct Inward Dialing and Dial-by-Name. The features like Allowed and Denied Lists, Call Duration Control, Dynamic Lock, Least Cost Routing, etc. ensure complete control over the cost of communication.

VISION is available in two variants. This provides the option of selecting the right model that suits the requirement of any organization.

Facilities like RS232C Port for PC connectivity, Digital Input Port to connect sensors, Digital Output Port for various control applications, Analog Input Port to connect external music source, Analog Output Port to connect PAS, Door Phone Port to connect Door Phone, etc. are built-in to the VISION309P. These normally ask for additional investments in most of other brands. There are no hidden costs, simply a comprehensive solution for businesses. Additional features like Auto-Attendant, Inbound Call Analysis, Dial-by-Name, Security Dialer, SMDR, etc. are available with VISION309P.

Matrix VISION is built around Microcontroller-based architecture which utilizes state-of-the-art SMT Technology thus offering robust, reliable and maintenance free performance.

Bring a winning difference to your organization. Switch-on to Matrix VISION because only those grow faster who don't compromise.

VISION MODELS

VISION308S

PBX with 3 Trunks and 8 Extensions with Standard Features

VISION309P

PBX with 3 Trunks and 9 Extensions with Premium Features



VISION308S



VISION309P

■ KEY FEATURES

3- Participants Conference

It allows 3 people to converse in a single conference. A useful feature to consult or conduct a meeting with colleagues over the phone, saving time and increase productivity.

Allowed and Denied Lists

This function prevents misuse of long distance and international dialing to control telephone cost. It allows dialing of fixed numbers and restricts dialing of other numbers in the same area. For example, an extension can dial only '22-2626-8573' but not any other number starting with '22'. A comprehensive list of numbers can be included in the Allowed and Denied Lists.

Alternate Number Dialing

Whenever redial or auto redial is used, the VISION dials out the next alternative number instead of the same number that was found engaged.

Auto-Attendant*

The caller can directly reach an extension without the help of an operator. The system has an Auto-Attendant that can play different messages like Welcome Message, Dial-by-Name, Dial Extension, Busy, No Reply, Transferring to Operator, etc. These messages can be recorded in a 4-minute voice module. It also allows the caller to reach a desired extension by dialing the name of the extension user.

Auto Redial - Multiple Numbers

This feature re-dials a busy number till it gets through. The user is free to concentrate on his work while the system is trying a busy number. As soon as the number is connected, the extension gets a special ring and displays the number of connected telephone when the call gets through. Each user can submit up to 3 numbers for auto redial.

Auto Call Back

When the user dials an extension, and does not get a reply, or if the extension is busy, the user can activate the Auto Call Back feature. As soon as the called extension becomes free or available, the dialed extension rings and gives a call back to the user, whereby the call is established.

Battery Charger Circuit

The system has a built-in battery charger circuit. A single battery of 12V, 7AH can be connected to it. It allows a back-up time of up to 3 hours. In case of power failure, the system power switches over to battery and on resumption it switches back to the mains power supply.

Caller Line Identification (DTMF)

The function identifies the phone number of the caller and displays it on the telephone. The CLI is displayed for both internal and external callers. Even in case of a call being transferred from one extension to another, the system informs both the numbers. For functioning of CLI, the trunk line should support DTMF CLI

Class of Service

Matrix VISION allows the supervisor to decide upon the access rights to features for each extension. Thus allowing you to configure the system as per your requirements. For example, Extension 201 (middle management executive) can have features like Conference, Auto Redial, Abbreviated Dialing, Alarms, Do Not Disturb and Call Transfer Only, whereas Extension 501 (Pantry) can be configured to dial intercom numbers only.

CLI based External Call Forwarding (ECF)

The system can forward selected incoming calls to a desired external number. Selective call forwarding is possible by defining a string of numbers. For example, the system could be programmed such that all numbers with the prefix '22' are forwarded to the residence number, however a very important number '22-2626-8573' is forwarded to the mobile number.

CLI based Routing

The system can be programmed such that particular numbers land at specified extensions directly without the assistance of an operator, thus saving time and cost of the callers.

Direct Inward Dialing (DID)

Direct inward dialing feature performs the task of an operator by greeting the external caller and transferring call to the desired station. Thus by reducing the burden of an operator, faster call transfer and saves caller's time and telecom bill.

Direct Outward System Access (DOSA)

It allows a user to access the system's resources from a remote location. Thus a user can make calls to any external number; using the trunk lines connected to the system from a remote location. The Feature has password protected access to ensure security.

Door Phone Port*

Available with VISION309P, this port gives the option of connecting a 2-Wire door phone. If this port is not used for the door phone, then it can be used as a normal extension port, thus providing an additional extension.

External Music Port (AIP)*

The external music port allows an external music source to be connected to the Matrix VISION. The desired music or jingle can be played while a person is kept on hold.

Flexible Numbering

This function allows you to define the extension numbers as per your convenience. Within the same system, you can have combinations of 1, 2, 3 and 4 digit extension numbers. You can even have conflicting extension numbers defined like 2, 22, 222 and 2222 in the same system.

Hotline

This function is of great use for those stations which make more trunk calls than internal calls. As soon as the station user picks up the receiver, he/she gets access to the desired trunk line, saving time and effort. This function also offers a variant whereby a specified telephone number may be dialed as soon as the handset is picked up, or after a pre-defined delay.

Inbound Call Analysis*

Incoming calls can be stored in the memory with details like Caller Number, Trunk, Extension, Date and Time of the Call, Duration of the Speech, etc. These calls can be analysed on the basis of filters like Caller Number, Extension, Missed Calls, Duration, etc. Result of the analysis can be sent to a computer through the RS232C port.

Internet Ready Port

A special port is provided to connect the modem to the Matrix VISION. This port connects the modem directly to the trunk line eliminating noise and increase data transfer speed. Further, this is an extra port leaving all regular extensions ports for voice calls.

Least Cost Routing

The system can be programmed to ensure that least cost is incurred for each call by choosing specific trunk lines on the basis of their prevailing tariffs. This function has great utility today with the presence of multiple service providers offering various tariff plans for diverse destinations during different timings.

Live Call Supervision

A monitoring-security feature that allows the supervisor to know the phone number with whom an extension user is talking to.

Programmable Access Codes

This function allows you to define feature access codes as per your convenience. This feature offers the users great convenience as they do not have to remember the new codes in case of change of the system.

Public Address System (PAS)*

The Public Address System Port allows any station user to make announcements on external speakers.

Remote Programming

Matrix VISION can be programmed from a remote location by means of SLT or Mobile.

Schedule Dial Facility

Matrix VISION can be programmed to enable/disable dialing Trunks at a pre- specified time. This facility is of great use to lock long distance and international lines at set timings, thereby preventing misuse. For example, if it has been left open accidentally.

Security Dialer and Reporting*

Matrix VISION309P provides built-in digital port to connect to any type of sensors like, glass break sensor, smoke detector, motion detector, etc. In case of any emergency, the system dials 3 different numbers and plays a pre-recorded message. The called person can also be asked to confirm that the message has been heard.

SMDR*

Matrix VISION309P allows detailed report generation and printing for all outgoing and incoming calls with strong filtering capability and separate buffer capacity for each category - 250 incoming and 500 outgoing calls.

■ FEATURES LIST

- 3-Participants Conference
- Abbreviated Dialing (Global, Personal)
- Alarms (Duration, Remote, Daily, Time)
- Allowed and Denied Lists
- Alternate Number Dialing
- Analog Input Port (External Music Port)*
- Analog Output Port (AOP- PAS Port)*
- Auto-Attendant*
- Auto Call Back (Busy, No reply)
- Auto Redial-Multiple Numbers
- Dynamic Lock (Auto, Manual)
- Barge-In
- Battery Charger Circuit
- Call Forward (All, Busy, No reply)
- Call Park
- Call Pick Up (Group, Selective)
- Call Privacy
- Call Splitting
- Call Transfer (On Ringing, Busy, Screened, Trunk to Trunk)
- CLI (Caller Line Identification-DTMF)
- CLI based ECF
- CLI based Routing
- RS232C Port*
- Conference (3 Party, Unsupervised)
- Continued Dialing
- Day Night Mode (Auto, Manual)
- Dial-by-Name*
- Digital Input Port* (Sensors)
- Digital Output Port (Control Applications)*
- Direct Inward Dialing (DID)
- Direct Inward System Access (DISA)
- Distinctive Rings
- Door Lock Connectivity*
- Door Phone Connectivity*
- Executive/Secretary
- Extension Groups
- External Call Forward (ECF)
- Flash Timer
- Flexible Numbering
- Department Call (Pilot Number)
- Hotline (With Delay, With Number)
- Hunting Schemes
- Inbound Call Analysis*
- Interrupt Request
- Internet Ready Port
- Least Cost Routing
- Live Call Supervision
- Live System Programming
- Programmable Feature Access
- Programmable Timers
- Public Address System Port*
- Raid
- Relay Port*
- Remote Programming
- Scheduled Dialing
- Security Dialer*
- Selective Trunk Access
- Station Message Detail Recording (SMDR)*
- Toll Control
- Trunk Groups
- Trunk Reservation
- Voice Greetings for Alarms*
- Voice Message for Auto Redial*
- Voice Message for Night Services*
- Voice Message for Security*
- Walk-in Class of Service

* Available with VISION309P

■ TECHNICAL SPECIFICATIONS

TECHNOLOGY

Type of Switching : Space Division (Cross Point)

SLT(ANALOG STATION)

Signaling : Loop Start
Dialing : DTMF and Pulse (10/20PPS)
Off Hook AC Impedance : 600Ω
Off Hook Current : 42mA Max.
Loop Limit : 500Ω Max (Excluding Telephone)
On-Hook Voltage (Tip/Ring) : 36V
DTMF detection : ITU-T Q.24
Return Loss : > 18dB
Longitudinal Balance : >40dB
Ringing : Trapezoidal 50Vrms/30Hz
REN : 3
CLI Presentation : DTMF
Protection : Over Voltage Secondary Protection
Physical Connector : Push Type (Single Pair Wire, 0.5mm)

CO (2-WIRE TRUNK)

Signaling : Loop Start
Loop Limit : 1200Ω
Off Hook AC Impedance : 600Ω
Pulse Dialing : 10/20 PPS
DTMF Dialing and Reception : ITU-T Q.23 and Q.24
Return Loss : > 18dB
Longitudinal Balance : >40dB
CLI Reception : DTMF
Call Maturity : Delay
Protection : Over Voltage and Over Current Secondary Protection
Physical Connector : Push Type (Single Pair Wire, 0.5mm)

Transmission Parameters (Between FXO-FXS)

Insertion Loss : <2dB
Inter-Channel Cross Talk : <-65dBm
Idle Channel Noise : <-65dBmOp

Auxiliary Ports

Analog Input Port : 0.7 Vrms, Isolated, 1KΩ, Push-Type Connector
Analog Output Port : 0.7 Vrms, Isolated, 1KΩ, Push-Type Connector
Digital Input Port : Loop Sensing-Open/Close, 5mA, Push-Type Connector
Digital Output Port : 0.2A at 125VAC, 0.7A at 30VDC, Push-Type Connector
Door Phone Port : 2-Wire Door Phone

Power Supply

Input : 90-265VAC, 47-63Hz
Power Consumption (Typical) : 10W
Battery Back-up : 12VDC, 7-10AH

Mechanical

Dimensions (WxHxD) : 26.7x28.5x8.0cm (10.5"x11.2"x3.1")
Unit Weight : 2.0kg (4.4lbs)
Shipping Weight : 3.5kg (7.7lbs)
Installation : Wall Mount

Environment

Operating Temperature : 0°C to 50 °C (+32°F to +122°F)
Operating Humidity : 5-95% RH, Non-Condensing
Storage Temperature : -20°C to 60°C (-4°F to +140°F)
Storage Humidity : 0-95% RH, Non-Condensing

SYSTEM RESOURCES

System Resources	Description	VISION	
		308S	309P
Total Ports	Number of User Ports	11	12
Analog Extensions (FXS)	To Connect Single Line Telephones	8	9*
Two Wire Trunks (FXO)	To Connect Two Wire Trunk Lines	3	3
Door Phone Port (2-Wire)	To Connect Door Phone. it can be used as an Extension if not used as a Door Phone	-	1
Internet Port	Direct Trunk Connection from External Modem for Internet Connectivity	1	1
Speech Paths	Number of Simultaneous Calls	7	7
RS232C Port	To Connect Computer for Programming or SMDR Output	-	1
Analog Input Port	To Connect External Music Device	-	1
Analog Output Port	To Connect Public Address System	-	1
Digital Input Port	To Connect Sensor or Panic Switch	-	1
Digital Output Port	To Connect External Devices like Door Lock or Relay Port	-	1
Security Dialer	Dials Pre-defined Numbers in Case of an Emergency	-	Yes
Voice Module	To Configure as Auto-Attendant and/or for Recording Voice Messages to be used in other Voice Messaging Applications	-	240 Sec
Conference	3-Participants Conference	Yes	Yes

* Including Door Phone Port as an Extension

SMB PRODUCTS FROM MATRIX

PROTON103	1 Trunk Line and 3 Extension Lines PBX
PROTON206	2 Trunk Lines and 6 Extension Lines PBX
PROTON308	3 Trunk Lines and 8 Extension Lines PBX
VISION308S	3 Trunk Lines and 8 Extension Lines PBX with Standard Features
VISION309P	3 Trunk Lines and 9 Extension Lines PBX with Premium Features
ETERNITY NE2	SOHO IP-PBX with 2 CO, 2 Digital and 4 Single Line Telephone Ports
ETERNITY NE3	SOHO IP-PBX with 3 CO, 2 Digital and 6 Single Line Telephone Ports
ETERNITY NE4	SOHO IP-PBX with 4 CO, 2 Digital and 10 Single Line Telephone Ports
ETERNITY NE6	SOHO IP-PBX with 6 CO, 2 Digital and 14 Single Line Telephone Ports
ETERNITY PE3SS	SMB IP-PBX with GSM and VoIP, Expandable up to 24 Ports
ETERNITY PE3SP	SMB IP-PBX with GSM, VoIP and ISDN Expandable up to 24 Ports
ETERNITY PE6SP	SMB IP-PBX with GSM, VoIP and ISDN Expandable up to 48 Ports



ABOUT MATRIX



ISO 9001 Company, Matrix is a leader in Telecom and Security solutions for modern businesses and enterprises. An innovative, technology driven and customer focused organization; the company is committed to keep pace with the revolutions in the telecom and security industries. With around 30% of its human resources dedicated to the development of new products, Matrix has launched cutting-edge telecom products like IP-PBX, Universal Gateways, VoIP Gateways and Terminals, GSM Gateways, Access Control and Time-Attendance Systems and Fire Alarm Systems. These solutions are feature-rich, reliable and conform to the international standards. Having global foot-prints in Asia, Europe, North America, South America and Africa through an extensive network of more than 500 channel partners, Matrix ensures that the products serve the needs of its customers faster and longer. Matrix has gained trust and admiration of more than 150,000 customers representing the entire spectrum of industries. Matrix has won many awards for its innovative products.

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