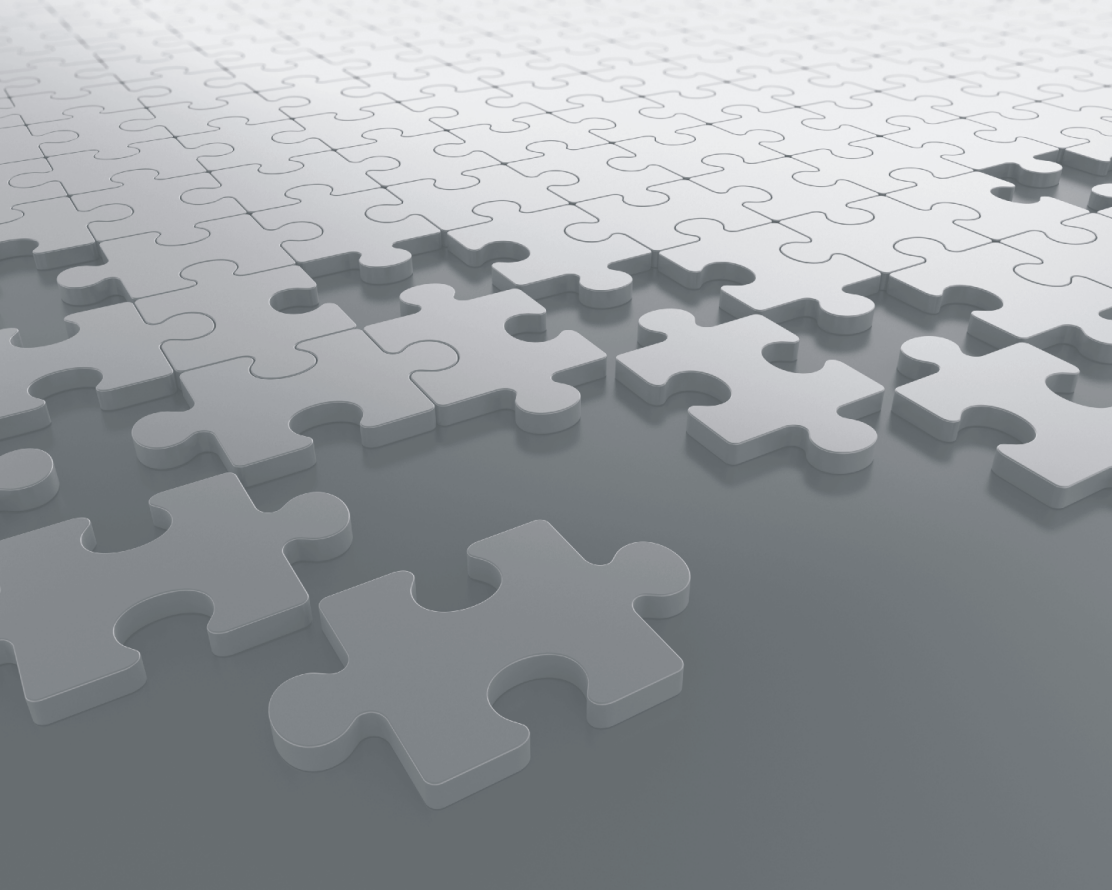


**SIMADO GFX44**  
**Quick Start**





## **SIMADO GFX44**

Multi-port Mobile-FXS Gateway with LCR

Quick Start



Thank You for choosing Matrix SIMADO GFX44! Please read the instructions given in this quick start before you install this feature rich gateway.

This quick start is meant to help you to install the basic features and parameters of the system. For the detailed information on installing and configuring SIMADO GFX44, please refer 'SIMADO GFX44 System Manual' provided to you on the CD-ROM.

- i** 1. *SIMADO GFX44 also supports SIMCOM 3G module for voice. When 3G module is installed in the system, it will have following effect:*
- a. RCOC-Busy and No Reply will not work.*
  - b. Frequency Band Selection is not supported.*
  - c. Call Waiting service must be disabled in the SIM Card inserted in the Mobile Port else the current call will be disconnected if another call is detected by the module.*

## **Know your SIMADO GFX44**

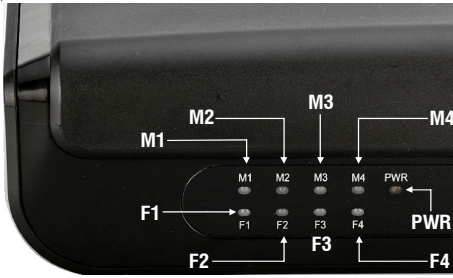
SIMADO GFX44 has 4 FXS Ports, a Communication Port, 4 Mobile Ports, an Antenna Connector, a Power Socket and 9 LEDs (8 Port LEDs + 1 Power LED).



## LEDs

SIMADO GFX44 has total 9 LEDs:

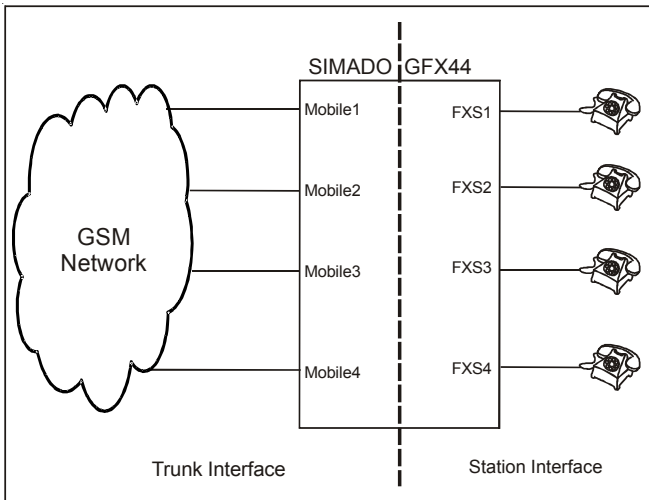
- Four LEDs for FXS ports labeled as F1, F2, F3 and F4
- Four LEDs for Mobile ports labeled as G1, G2, G3 and G4
- One LED for Power labeled as PWR



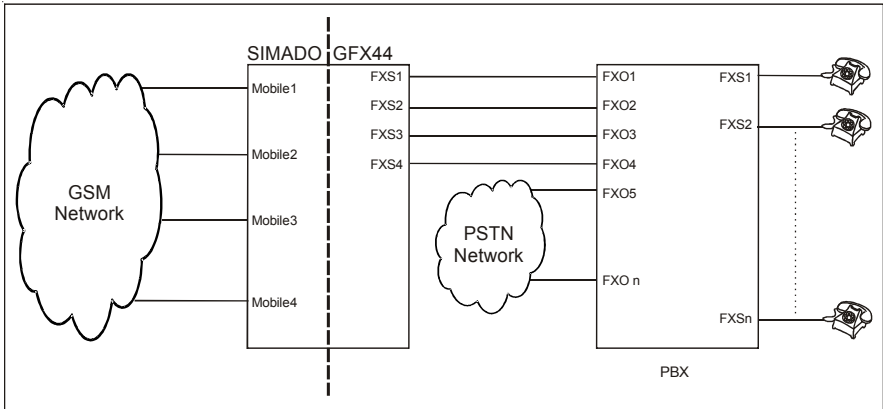
## Applications of SIMADO GFX44

SIMADO GFX44 finds its applications in corporate offices, factories, call centers, hotels and such other establishments. SIMADO GFX44 can be used as stand-alone system as well as it can also be interfaced with the PBX.

### Case 1: SIMADO GFX44 as Stand-alone



## Case 2: SIMADO GFX44 interfaced with PBX



## Before you Start

- Verify the package contents



SIMADO GFX44  
with Antenna (Rubber  
ducky(SMA))



Adaptor 12VDC, 2Amp.  
(Country Specific)



Quick Start



Line Cord (RJ11)  
(as per Configuration)



CD containing System  
Manual, Quick Start and  
Jeeves Software

- Two Screws M 7/30 with Grips
- External Cable Antenna SMA
- A Mounting Template
- A Warranty Card set

Make sure that all the above mentioned components are present when you open the Sales Kit of SIMADO GFX44. In case any of the part is damaged or is missing, contact the Vendor/Service Provider from whom you have purchased the system.

You should have:

1. Minimum one (Maximum four) SIM card from GSM service provider.
2. Minimum one analog telephone instrument (Maximum four) with LCD display.  
(For Stand-alone)
3. Connection to Mains power.

# Installing SIMADO GFX44

## **Precautions and Safety Instructions:**

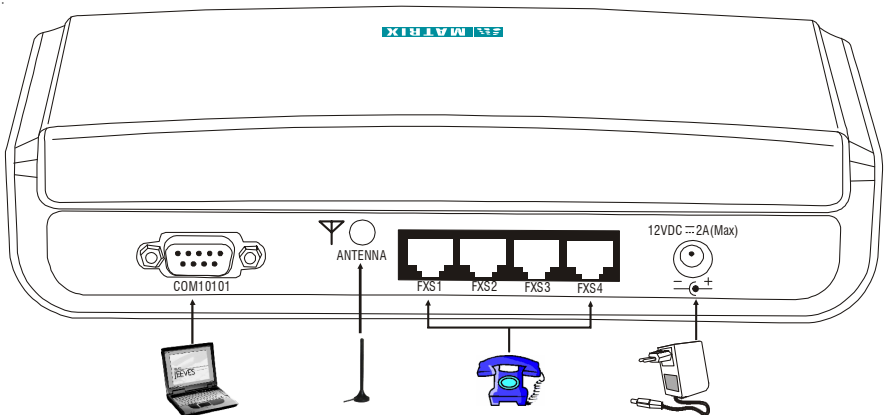
Take proper precautions while installing SIMADO GFX44 to reduce the risk of fire, electric shock and injury to the system as well as the person using it. (Refer 'Protecting SIMADO GFX44' topic in the System Manual for details)

## **Mounting SIMADO GFX44 on Wall:**

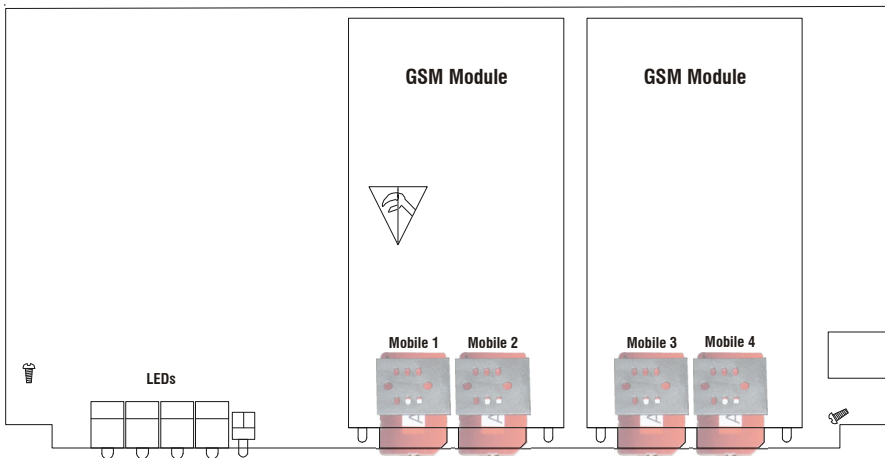
- Select a suitable place on the wall for mounting SIMADO GFX44.
- Put the mounting template on the wall and mark the nail hole.
- Drill a hole of appropriate size.
- Insert the nail grip in the hole.
- Insert the screw and tighten it leaving the screw head a few millimeters protruded of the wall.
- Check the strength of the nail.
- Hang SIMADO GFX44 on the wall.

## **Connecting SIMADO GFX44:**

SIMADO GFX44 can be used as stand-alone system as well as it can also be interfaced with the PBX. It should be installed at the airy, dust free and moisture free place.



- Place SIMADO GFX44 at a place where it can get proper power supply and network signals.
- Connect Antenna provided with the system to the antenna (TNC) connector, labeled as 'ANTENNA', of GFX44.
- Open the top cover and insert SIM card/s into the GSM modules of the system and close the cover properly.



**i** When SIMCOM 3G module is used in SIMADO GFX44 then the call waiting service must be disabled in the SIM Card inserted in the Mobile Port else it will result in call disconnection in speech condition if another call is detected by the module.

- Connect telephone instrument with CLI display to the FXS ports of GFX44 with the help of RJ11 cable.
- Connect COM Port of GFX44 to a computer using COM Port cable.
- Connect Power Socket of GFX44 to the power supply using 12V DC Adaptor provided to you with the system and switch ON the power supply.

### **Switching ON SIMADO GFX44**

After connecting the system as shown above, switch ON the power supply.

#### **At power ON:**

- Power LED glows green (continuously).
- After approximately 2 seconds all other LEDs pursue the following sequence: Glow Red for 500ms → Glow Green for 500ms → GSM initialization starts.
- GSM initialization takes approximately 50-60 seconds.
- On successful completion of GSM initialization, system explores the network.
- System takes few seconds for establishing connection with the network. After successful registration with the network, all LEDs will turn off.



The following table shows LED indications during various events and error conditions:

<b>Event</b>	<b>Colour</b>	<b>Cadence in ms (1 Cadence = approx. 3000 ms.)</b>
During GSM Initialization	Orange	200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-1200ms Off (5 Blinks)
If PUK Required	Orange	200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-1600ms Off (4 Blinks)
If SIM PIN Faulty	Orange	200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-2000ms Off (3 Blinks)
If SIM Absent	Orange	200ms ON-200ms Off 200ms ON-2400ms Off (2 Blinks)
If Network Absent/GSM Module could not establish connection with the network	Orange	200ms ON-2800ms Off (1 Blink)

### ***During Normal Functioning:***

Following table shows LED indications during various events occurring on FXS/ Mobile Ports of the system:

<b>Event</b>	<b>Color</b>	<b>Cadence in ms (1 Cadence=approx. 3000 ms.)</b>
Port Disable	--	LED Off
Port Idle	--	LED Off
Port Off-Hook	Red	Continuous ON
Ring Event	Green	400ms ON-200 ms Off 400ms ON-2000ms Off
Port Active	Red	68 ms ON-68 ms Off
Speech	Green	Continuous ON
Call Minutes*	Red	1000 ms ON 1000 ms OFF

\* *Applicable for Mobile Ports only, when mobile port is idle. (Refer 'Call Minutes' topic in system manual for details)*

## ***Programming SIMADO GFX44***

Programming of SIMADO GFX44 can be done in the following ways:

- Using Serial Jeeves
- By issuing commands from FXS Port
- By issuing commands through Mobile Port

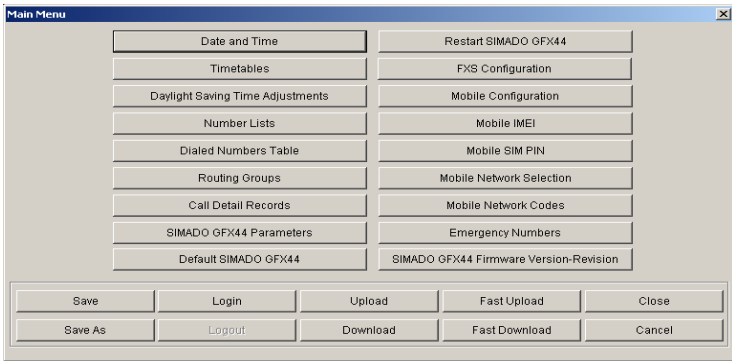
### ***Programming SIMADO GFX44 using Serial Jeeves:***

SIMADO GFX44 enables you to program the system through windows based software, known as Jeeves. Jeeves is a flexible and friendly tool with mouse operated GUI. To program the system using Jeeves, follow the steps given below:

- Insert 'Matrix SIMADO GFX44' CD provided to you along with the product in the CD Drive of your computer. It is an auto-run CD.
- CD drive window will open. It contains two folders viz. 'Documents' and 'SIMADO GFX44 Jeeves VxRy'. (If CD does not open by itself, click on 'My Computer' → 'CD Drive' to explore the CD.
- Open 'SIMADO GFX44 Jeeves VxRy' folder. Run set-up to install the Jeeves into your computer.
- Connect your computer with the system using COM Port.
- Click on Start → Programs → Matrix → SIMADO GFX44 Jeeves VxRy. SIMADO GFX44 Serial Jeeves Home page will open .



- There are three options on the home page of the Jeeves:
  - **File:** In File, click on 'New' to open Main menu of the Jeeves page. Click 'Open' to open the Jeeves configuration saved in your computer and click on Exit to close the Jeeves.
  - **Language:** In Language, seven different languages are displayed viz. English, Italian, Spanish, French, German, Portuguese and Russian. Select the language in which you want Jeeves content to be displayed.
  - **Help:** In Help, you will be able to access: 1) SIMADO GFX44 System Manual 2) SIMADO GFX44 Quick Start and 3) About Jeeves.
- Click File → New, main menu of the Jeeves will open up. On main menu page, links for various features is displayed.



- Click 'Login' button → Select the com port in the 'COM Port' field → Enter the default SE password, 1234 in 'SE Password' field.



- Click the given links one by one and program the parameters as per your requirement.
- Save the configurations in your computer and upload the same on to your system. (Refer SIMADO GFX44 System Manual for more details)

### ***Programming SIMADO GFX44 by issuing commands from FXS Port:***

To program the system using commands from FXS port, you must enter the programming mode. Follow the steps given below to program the system from FXS port:

- Lift the handset of the telephone instrument connected to the system.
- Dial \*19 followed by SE password (Default = 1234) to enter the programming mode. You will get programming tone.
- Enter the programming command.

- Dial **00-#\*** or just go On-Hook to exit the programming mode.

***Programming SIMADO GFX44 by issuing commands through Mobile Port (Remote Programming):***

Follow the steps given below to program the system through Mobile port:

- Ensure (through LED indication) that the SIM card installed in the GSM Module of the mobile port is registered with the network.
- Call mobile port of the system by dialing the number of the active SIM card installed in the system with another mobile or telephone instrument. You will get dial tone of the system.
- Dial **\*19** followed by SE password (Default = 1234) to enter the programming mode. You will get programming tone.
- Enter the programming command.
- Dial **00-#\*** or just go On-Hook to exit the programming mode.

1. *It is advisable to exit from programming mode by dialing **00#\***.*
2. *You will be able to program SIMADO GFX44 by issuing command through mobile port only if routing type on that mobile port is set to 'Answer-Number Based' or 'Answer-Fixed'.*

***Configuring various features of GFX44:***

You can program the system either by issuing commands or through Jeeves. However, while programming the system using commands you can enter the programming mode from both FXS and Mobile port simultaneously. (Refer 'System Manual' if you wish to configure the system by dialing commands)

Get the service provider dependent features enabled from your service provider and follow the steps given below to program various features of SIMADO GFX44 using Jeeves.

**Step 1: Mobile SIM PIN**

SIM PIN is a security feature used by the GSM network. GSM module gets initialized only if SIM PIN of the SIM Card and that of the system matches. Hence

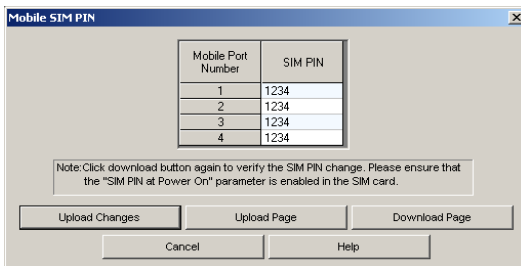
it is necessary that the SIM PIN of SIM Card and the one that is stored in the system is same. By default, SIM PIN of the system is 1234.

If the SIM PIN of SIM Card and the system is different, follow the steps given below:

- Switch Off SIMADO GFX44.
- Remove SIM Card and insert the same in the mobile instrument.
- Change the SIM PIN of the SIM Card to 1234 i.e. the default SIM PIN of the system.
- Remove SIM Card from the mobile instrument and insert it in SIMADO GFX44.
- Switch on the system and change the SIM PIN after GFX44 attains normal working position.
- SIM PIN of both SIM Card and that of the system is changed simultaneously.

To change the SIM PIN, follow the steps given below:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- In 'Main Menu' page, login into the Jeeves and click on '**Mobile SIM PIN**' button.



- By default, SIM PIN of all Mobile ports in the system is 1234. Enter the desired SIM PIN and click on 'Upload Changes' button to upload changes in the system.

**i** *SIM PIN is not set to default / does not change, if the system is set to default or the software version-revision is changed.*

(Refer 'SIM PIN' topic in the System Manual for more details)

## Step 2: Mobile Network Selection

Once the system is switched ON, it is essential to have proper network to enable GFX44 to work. By default, at each power-ON, the SIM inserted in GFX44 will start searching for the network and will register automatically with the available network. However, as per the requirement of the user, SIMADO GFX44 also facilitates him/her to select appropriate network manually.

Follow the steps given below to select the network selection mode:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- On 'Main Menu' page, login into the Jeeves and click on 'Mobile Network Selection' button.

Mobile Port Number	Network Selection Mode	Network Operator Code								
		Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Priority 6	Priority 7	Priority 8	Priority 9
1	Automatic	00000	00000	00000	00000	00000	00000	00000	00000	00000
2	Automatic	00000	00000	00000	00000	00000	00000	00000	00000	00000
3	Automatic	00000	00000	00000	00000	00000	00000	00000	00000	00000
4	Automatic	00000	00000	00000	00000	00000	00000	00000	00000	00000

- Select desired 'Network Selection Mode' for all the mobile ports. GFX44 supports two modes for network selection viz., Automatic and Manual. By default, Network Selection Mode is 'Automatic'.

If 'Manual' Mode is selected then you need to define the network operator code in priority. You can program up to 9 network operator code in the order of priority.

Follow the steps given below to program network operator code:

- In 'Mobile Network Selection' page, program network operator code in decreasing order of their priority. By default, Network Operator Code is 00000 for all Priorities i.e. from priority 1 to priority 9.
- Save the changes and upload it in the system by clicking on 'Upload Changes' or 'Upload Page' button. (Refer 'Mobile Network Selection' topic in the System Manual for more details)

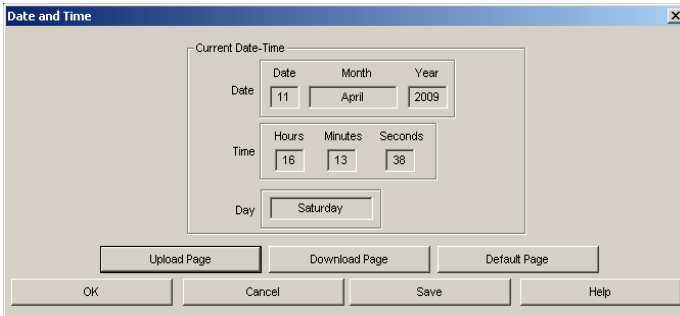
### Step 3: Date and Time

SIMADO GFX44 has its own Real Time Clock (RTC) to store the Date and Time. First set current date and time once before you start programming the system. Then it will update itself regularly.

Follow the steps given below to program Date and Time:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- Open 'Main Menu' page and login into the Jeeves.

- Click the 'Date and Time' button. Date and Time window will open as shown below.



- Click 'Upload Page' button. Jeeves will upload computers' current date and time to SIMADO GFX44 and will display the same on the screen.
- Clicking on 'Download Page' button will display the date and time of SIMADO GFX44 firmware on the Jeeves screen.
- Clicking on 'Default Page' button will display the current date and time of the computer on the Jeeves screen.

**i** *Date and Time Settings i.e. the RTC parameters will not change when you default the system.*

(Refer 'Date and Time' topic in the System Manual for more details)

#### **Step 4:** Ring and Call Progress Tones

SIMADO GFX44 supports country wise ring cadence and call progress tones (CPT). CPT standards for various tones are applied differently in different situations or countries. Also, most tone standards vary with the country of application.

Follow the steps given below for programming Call Progress Tones and Ring Types:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- Open 'Main Menu' page and login into the Jeeves. Click on 'SIMADO GFX44 Parameters' button. SIMADO GFX44 Parameters window will open.



**SIMADO GFX44 Parameters**

End of Dialing Digit: #

CLIR Feature Access Code: #31#

SE Password: 1234

Call Progress Tone Type: India

Ring Type: India

Minimum DTMF Detection Level: -30 dBm

Call Proceeding Tone Type: Network Tone

Returned Calls to Original Caller (RCOC)

Record Delete Timer: 999 (minutes)

Clear Table

Replace '+' from CLIP?

Replace '+' from the CLI with the number string:

COM Port Parameters

Speed (bps)	115200 bps
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	None

Upload Changes    Upload Page    Download Page    Default Page

OK    Cancel    Save    Help

- Select country in which SIMADO GFX44 is installed in 'Call Progress Tone Type' and 'Ring Type' field.
- Upload the changes in the system by clicking on 'Upload Changes' button.

### Step 5: Port Parameters-Mobile

SE should program various Mobile port parameters for smooth and proper functioning of SIMADO GFX44. Follow the steps given below to program various mobile port parameters:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- On the 'Main Menu' page, login into the Jeeves and click 'Mobile Configuration'.

Mobile Port Number	Port Enable?	Allow Incoming Calls?	Inter Digit Timer (seconds)	First Digit Wait Timer (seconds)	Pause Timer (seconds)	DTMF Di
1	Yes	Yes	04	06	2	Using Mod
2	Yes	Yes	04	06	2	Using Mod
3	Yes	Yes	04	06	2	Using Mod
4	Yes	Yes	04	06	2	Using Mod

- **Port Enable?:** By default, 'Yes' is selected. If you want to disable the port, select 'No'.
- **Allow Incoming Calls?:** By default, 'Yes', is selected. If you want to block incoming calls select 'No'.
- **Inter Digit Timer (seconds):** Program Inter Digit Timer in this field. Range of Inter Digit Timer is from 01 to 99 seconds. **By default, it is 04 seconds.**
- **First Digit Wait Timer (seconds):** Program First Digit Wait Timer in this field. Range of First Digit Wait Timer is from 01 to 99 seconds. **By default, it is 06 seconds.**
- **Pause Timer (seconds):** Pause Timer is used to provide delay between dialing of two digits on the mobile port. Program Pause Timer in this field. Range of Pause Timer is from 1 to 9 seconds. **By default, it is 2 seconds.**
- **DTMF Dialing Method:** GFX44 supports two methods of dialing DTMF digits on the mobile port: Using Module Resources and Using System Resources. Select appropriate method of dialing DTMF digits on the mobile port in this field. **By default, it is 'Using Module Resources'.**
- **DTMF Outdial:** The system supports sending of DTMF digits from the Mobile Ports 'In-band' or through signaling, that is, 'Using AT Command'. You can select the appropriate DTMF Outdial Option. **By default, DTMF Outdial option is 'In-band'.**
- **DTMF ON Time:** This is the time for which the DTMF digits will remain On while being dialed out by SIMADO GFX44. This timer finds its

application in *Multistage Dialing* and in *DTMF Outdialing using AT Commands*. Range of DTMF On Time is from 50 to 200 ms.  
**By default, DTMF ON Time is '100'ms.**

- **DTMF Inter Digit Timer:** This is the time for which the system waits after dialing out each DTMF digit. The range of this timer is from 20 to 200 ms.

**By default, DTMF Inter Digit Timer is '100'ms.**

- **Rx Gain:** Program Rx Gain in this field to improve the audibility of the incoming speech. Valid options for Rx Gain are:
  - Very Low
  - Low
  - Normal
  - High
  - Very High

**By default, Rx Gain is Normal for each Mobile Port.**

- **Tx Gain (db):** Program Tx Gain in this field to improve the output RF signal from GFX44. Valid options for Tx Gain are:
  - Very Low
  - Low
  - Normal
  - High
  - Very High

**By default, Tx Gain is Normal for each mobile port.**

- **Frequency Band (MHz):** Select GSM frequency band from the following options:
  - 900
  - 1800
  - 1900
  - 850+1900
  - 900+1800
  - All Bands

**By default, All Bands is selected.**

**i** *Frequency Band selection is not supported if SIMCOM 3G module is installed in SIMADO GFX44.*

- **Preferred Network Mode:** Select Preferred Network Mode from the following options:
  - Dual Mode
  - GSM
  - UMTS

**By default, Dual Mode is selected.**

- Upload changes in SIMADO GFX44 by clicking on 'Upload Page' or 'Upload Changes' button.

(Refer 'Port Parameters-Mobile' in System Manual for more details)

### Step 6: Port Parameters-FXS

SE should program various FXS Port parameters for smooth and proper functioning of SIMADO GFX44. Follow the steps given below to program various FXS Port parameters:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- On 'Main Menu' page, login into the Jeeves and click the 'FXS Configuration' button.

FXS Port Number	Port Enable?	CLIP Type	Flash Timer (milliseconds)	Inter Digit Timer (seconds)	First Digit Wait Timer (seconds)	RX Gain (dB)	TX Gain (dB)
1	Yes	DTMF	600	04	06	0	0
2	Yes	DTMF	600	04	06	0	0
3	Yes	DTMF	600	04	06	0	0
4	Yes	DTMF	600	04	06	0	0

- **Port Enable?:** Select 'No' from the combo box to disable the FXS Port. **By default, 'Yes' is selected in this field.**
- **CLIP Type:** Select the type of CLIP signaling for presenting calling party number on FXS port from the following options:
  - None
  - DTMF
  - ITU-T V.23 FSK
  - Bellcore 202A**By default, DTMF is selected in this field.**
- **Flash Timer (milliseconds):** Program Flash Timer in this field. Range of Flash Timer is from 083ms to 999ms. **By default, it is 600ms.**
- **Inter Digit Timer (seconds):** Program Inter Digit Timer in this field. The range of the Inter Digit Timer is from 01 to 99 seconds. **By default, it is 04 seconds.**

- **First Digit Wait Timer (seconds):** Program First Digit Wait Timer in this field. Range of First Digit Wait Timer is from 01 to 99 seconds. **By default, it is 06 seconds.**
- **Rx Gain (db):** Program Rx Gain in this field. Valid options for Rx Gain are:
  - -1.5
  - 0
  - +1.5
  - +3**By default, Rx Gain is 0.**
- **Tx Gain (db):** Program Tx Gain in this field. Valid options for Tx Gain are:
  - -1.5
  - 0
  - +1.5
  - +3**By default, Tx Gain is 0.**
- **AC Impedance (Ohm):** Program AC Impedance in this field. Valid options for AC Impedance are:
  - 600 ohm
  - 900 ohm
  - Complex**By default, 600 ohm is selected.**
- **Minimum Current for Off-hook Detection (mA):** Program minimum current for Off-hook detection on FXS Port in this field. You can select one of the following options:
  - 10mA
  - 12mA
  - 14mA
  - 16mA
  - 18mA**By default, Minimum Current for Off-hook Detection is 12 mA.**
- **On-hook Detection Current:** Program current to detect On-hook condition on FXS Port in this field. You can select one of the following options:
  - 10mA
  - 12mA
  - 14mA

- 16mA
- 18mA

**By default, On-hook Detection Current is 10 mA.**

- Upload changes in SIMADO GFX44 by clicking on 'Upload Page' or 'Upload Changes' button.

(Refer 'Port Parameters-FXS' in System Manual for more details)

## Step 7: Time Tables

Timetable allows SIMADO GFX44 to route the calls on different routing groups at different time of each week day. SIMADO GFX44 supports four time tables. Each timetable is divided into four time zones for each day of the week. You can program this timetable as per your requirement and assign it to the desired FXS/Mobile Ports.

Follow the steps given below to program timetables:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- In 'Main Menu' page, login into the Jeeves and click on 'Time Tables' button.

Timetable Number	Time Zone 1				Time Zone 2			
	Start Time		End Time		Start Time		End Time	
	HH	MM	HH	MM	HH	MM	HH	MM
1	00	00	23	59	00	00	23	59
2	00	00	23	59	00	00	23	59
3	00	00	23	59	00	00	23	59
4	00	00	23	59	00	00	23	59

- Program 'Start Time' and 'End Time' for all time zones for each day of the week as per your requirement. **By default, 00:00 is programmed as Start Time for all time zones and 23:59 is programmed as End Time for all time zones for each day of the week.**
- Assign Time table to each FXS Port in the time table column of FXS Configuration. **By default, time table 1 is assigned to each FXS Port.**
- Assign Time table to each Mobile Port in the time table column of Mobile Configuration. **By default, time table 1 is assigned to each Mobile Port.**
- Click the 'Upload Changes' button to upload all the changes in SIMADO GFX44.

## Step 8: Routing Group

When a call is initiated from FXS or Mobile port, SIMADO GFX44 decides to route the call on the basis of routing group assigned to the port. You can program maximum 8 routing groups. Each routing group can have maximum four members. Each port can be assigned different routing groups for different time zones.

Follow the steps given below to program Routing Groups:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- On 'Main Menu' page, login into the Jeeves and click the 'Routing Groups' button.

Routing Group Number	Member Selection Method	Member 1		Member 2		Member 3		Member 4	
		Port Type	Port No.	Port Type	Port No.	Port Type	Port No.	Port Type	Port No.
01	Rotation	FXS	1	FXS	2	FXS	3	FXS	4
02	Rotation	FXS	1	FXS	2	FXS	3	FXS	4
03	Rotation	Mobile	1	Mobile	2	Mobile	3	Mobile	4
04	Rotation	Mobile	1	Mobile	2	Mobile	3	Mobile	4
05	Rotation	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
06	Rotation	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
07	Rotation	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
08	Rotation	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

- In member selection method field, select the method for selecting a member in a group for placing the call. You can select either 'Rotation' or 'First Free' method of selecting a member. **By default, 'Rotation' is selected.**
- Select Port Type and Port Number for each member in a group. Port Type can be either FXS or Mobile. Port Number can be from 1 to 4.
- Assign routing groups time zone wise to each FXS Port in FXS Configuration page and to each Mobile Port in Mobile Configuration page.
- Upload changes into the system by clicking on 'Upload Page' or 'Upload Changes' button.  
(Refer 'Routing Group' in System Manual for more details)

## Step 9: Dialed Numbers Table

Dialed number table allows SIMADO GFX44 to select the destination port on the basis of number dialed which results in the Least Cost Routing (LCR).

Follow the steps given below to program Dialed Numbers Table:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- Open 'Main Menu' page and login into the Jeeves. Click on 'Dialed Numbers Table' button and program the following parameters:

Index	Dialed Number	Routing Group
001		4
002		4
003		4
004		4
005		4
006		4
007		4
008		4
009		4
010		4
011		4
012		4
013		4
014		4
015		4
016		4
017		4
018		4
019		4
020		4
021		4

Default Dialed Numbers Table

Upload Changes    Upload Page    Download Page    Default Page

OK    Cancel    Save    Help

- **Index:** In this field, the number at which the entry is made is displayed. Maximum 250 entries can be done in dial number table.
- **Dialed Numbers:** Program the numbers that user may dial in this field. **By default, it is blank.**
- **Routing Group:** Program the routing group for routing the dialed number to the destination port. **By default, it is 4.**
- Click 'Upload Changes' to upload the changes on to the system.



## Step 10: FXS Call Routing

To route the calls from FXS port, you need to configure the following:

- Routing type for time zone
- Routing group for time zone
- Timetable

Follow the steps given below to program FXS Call Routing:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- Open 'Main Menu' page and login into the Jeeves. Click on 'FXS Configuration' button and program the following parameters:

FXS Port Number	Time Zone 1		Time Zone 2	
	Routing Type	Routing Group	Routing Type	Routing Group
1	Answer-Fixed	4	Answer-Fixed	4
2	Answer-Fixed	4	Answer-Fixed	4
3	Answer-Fixed	4	Answer-Fixed	4
4	Answer-Fixed	4	Answer-Fixed	4

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

- By default, Timetable 1 is assigned to all FXS Ports. Assign the desired timetable to the FXS Port.
- By default, Routing Type 'Answer-Fixed' is assigned to all FXS Ports for all time zones. Assign the desired routing type to the FXS Ports for all the time zones.
- By default, Routing Group '4' is assigned to all FXS Ports for all time zones. Assign the desired routing group to the FXS Ports for all the time zones.
- Click the 'Upload Changes' button to upload the changes in SIMADO GFX44.

## Step 11: Mobile Call Routing

To route the calls on Mobile port to desired destination, you need to configure the following:

- Routing type for time zone
- Routing group for time zone
- Timetable

Follow the steps given below to program Mobile Call Routing:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- Open 'Main Menu' page and login into the Jeeves. Click on 'Mobile Configuration' button and program the following parameters:

Mobile Port Number	Time Zone 1		Time Zone 2
	Routing Type	Routing Group	Routing Type
1	Direct	1	Direct
2	Direct	1	Direct
3	Direct	1	Direct
4	Direct	1	Direct

Buttons: Upload Changes, Upload Page, Download Page, Default Page, OK, Cancel, Save, Help

- By default, Timetable 1 is assigned to all Mobile ports. Assign the desired timetable to the Mobile port.
- By default, Routing Type 'Direct' is assigned to all Mobile ports for all time zones. Assign the desired routing type to the Mobile ports for all the time zones.
- By default, Routing Group '1' is assigned to all Mobile ports for all time zones. Assign the desired routing group to the Mobile ports for all the time zones.
- Click the 'Upload Changes' button to upload all the changes in the system.

## Step 12: SIM Balance and Recharge

SIMADO GFX44 facilitates user to check balance of the prepaid SIM Card and recharge the same, if required. This feature depends on the network and also on the services provided by the service provider. This feature will work only when SIMCOM-2G, -3G and Wavecom-2G module is installed in SIMADO GFX44.

Follow the steps given below to check SIM balance and Recharge SIM:

- Open Jeeves of SIMADO GFX44. (Refer 'Programming SIMADO GFX44')
- In 'Main Menu' page, login into the Jeeves.
- Click on 'SIM Balance and Recharge' button and program the following parameters.

Mobile Port Number	Balance Inquiry			Recharge	
	Number	Request	USSD Reply	Number	PIN
1		?			
2		?			
3		?			
4		?			

Upload Changes    Upload Page    Download Page    Default Page

OK    Cancel    Save    Help

### **Balance Inquiry**

- **Balance Inquiry Number:** Program the number provided by your network operator for checking the balance of your SIM Card in this field. Balance Inquiry Number can be of maximum 8 digits. Characters 0 to 9, # and \* are allowed.
- **Request Button:** Click this button to make request to check the SIM Card balance.
- **USSD Reply:** Status of network response to the balance check request is displayed in this field.

## **Recharge**

- **Recharge Number:** Program recharging service number provided by your network operator in this field. You can add balance to your prepaid SIM Card using this number. Recharge number can be of maximum 8 digits. Characters 0 to 9, # and \* are allowed.
- **Recharge PIN:** Program PIN number printed on the Recharge Voucher in this field. Program # at the end of the Recharge PIN number. Recharge PIN can be of maximum 20 digits. Characters 0 to 9, # and \* are allowed.
- **Request Button:** Click this button to make request to add balance in the SIM Card i.e. recharge the SIM Card.
- **USSD Reply:** Status of network response to the recharge SIM Card request is displayed in this field.

### **Step 13: Reinstate the Default Settings**

SIMADO GFX44 is supplied with a pre-defined set of variables like Mobile Port Parameters, FXS Port Parameters, SIM PIN, Call Progress Tones etc. These pre-set settings are called default settings.

You may need to restore the default settings of the system in case of programming or operation errors.

Follow the steps given below to set default settings in the system:

- Open Jeeves of SIMADO GFX44. (*Refer 'Programming SIMADO GFX44'*)
- On 'Main Menu' page, login into the Jeeves and click on 'Default SIMADO GFX44' button. Dialog box with following message will appear on the screen:  
  
"This option will overwrite current system configuration with default values. All user features will be cleared and Jeeves will Log-Out. Do you want to continue?"  
  
"Yes/No"
- Click 'Yes'. SE Password window will appear on the screen. Enter Reverse SE Password in the relevant field and click on 'OK'.
- System will restart and all the parameters will be assigned default values.

## **Step 14:** Default SE Password

It is very important to remember the SE password. It is advisable to note this password at a safe place. However, if the SE password is forgotten or lost, it can be set to its default value.

- To reset default Password, switch Off the system,
- Locate the mini jumper J9 on the main board.
- Put the jumper in A-B position.
- Switch on the system.
- Wait for 15 seconds.
- Switch Off the system.
- Restore the jumper in its original position (B-C).
- Switch it On again.
- SE password gets defaulted (1234).

## **Test Calls**

You will need a cell-phone to make and receive the test call and an analog phone to connect the FXS Port of SIMADO GFX44.

### ***Making a call from FXS to Mobile***

- Lift the handset of the analog phone connected to FXS Port (ANY) of SIMADO GFX44.
- Dial the number of the cell-phone you are using for this test after you get the dial tone.
- You will hear the Ring Back Tone (RBT) on analog phone and cell-phone will also ring.
- Answer the call on cell-phone and talk.
- Replace the handset of analog phone to disconnect the call.

### ***Receiving a call from Mobile to FXS***

- From the cell-phone, dial the number of the SIM Card (inserted in SIMADO GFX44) provided by the GSM Service Provider.
- The analog phone connected to the SIMADO GFX44 will ring. Please make sure that analog phone should be connected to FXS1 Port of SIMADO GFX44.
- Lift the handset. You will be in speech with the cell-phone.
- Replace the handset of analog phone to disconnect the call.

If the system consists of 4 SIM Cards and 4 analog phones connected then the call will follow the below mentioned route:

### ***Incoming Calls on Mobile port***

The 1st calls from GSM network (on any Mobile Port) will land on the FXS1 Port (if free). The next consecutive call on any Mobile Port will select the next free FXS Port in ascending order of selection.

### ***Outgoing Calls from FXS port***

The call made from any FXS Port will select the 1st Mobile port (if free). The next consecutive call from any FXS Port will select the next free Mobile Port in ascending order of selection.

## **Appendix**

### ***FAQs***

**Q.1.** LED is not glowing after power up?

**Ans.** Check the power supply between mains and DC jack of SIMADO GFX44.

**Q.2.** I do not have PC to use serial Jeeves for configuration. Can I still change the system configuration?

**Ans.** Yes, you can enter into programming mode using command **#-19-1234** followed by SE Password 1234 either from FXS or Mobile port and change configuration by issuing system commands.

**Q.8.** I have EPABX with FXS and FXO interface. Can SIMADO GFX44 be integrated with existing EPABX and also reduces the call cost?

**Ans.** Yes, you can connect SIMADO GFX44 with your existing EPABX. When installed with FXO ports of EPABX, it enables you to make calls from the extensions of EPABX, directly to GSM network which bypass the PSTN exchange and results in significant saving in call costs.

**Q.9.** I have FXO-VoIP gateway. Can SIMADO GFX44 be intergraded with existing gateway and also reduces the call cost?

**Ans.** Yes, you can connect SIMADO GFX44 with your existing FXO-VoIP gateway. When installed with FXO ports of VoIP gateway, it enables the direct routing of call between GSM and VoIP network which bypass the PSTN exchange and results in significant saving in call costs.



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