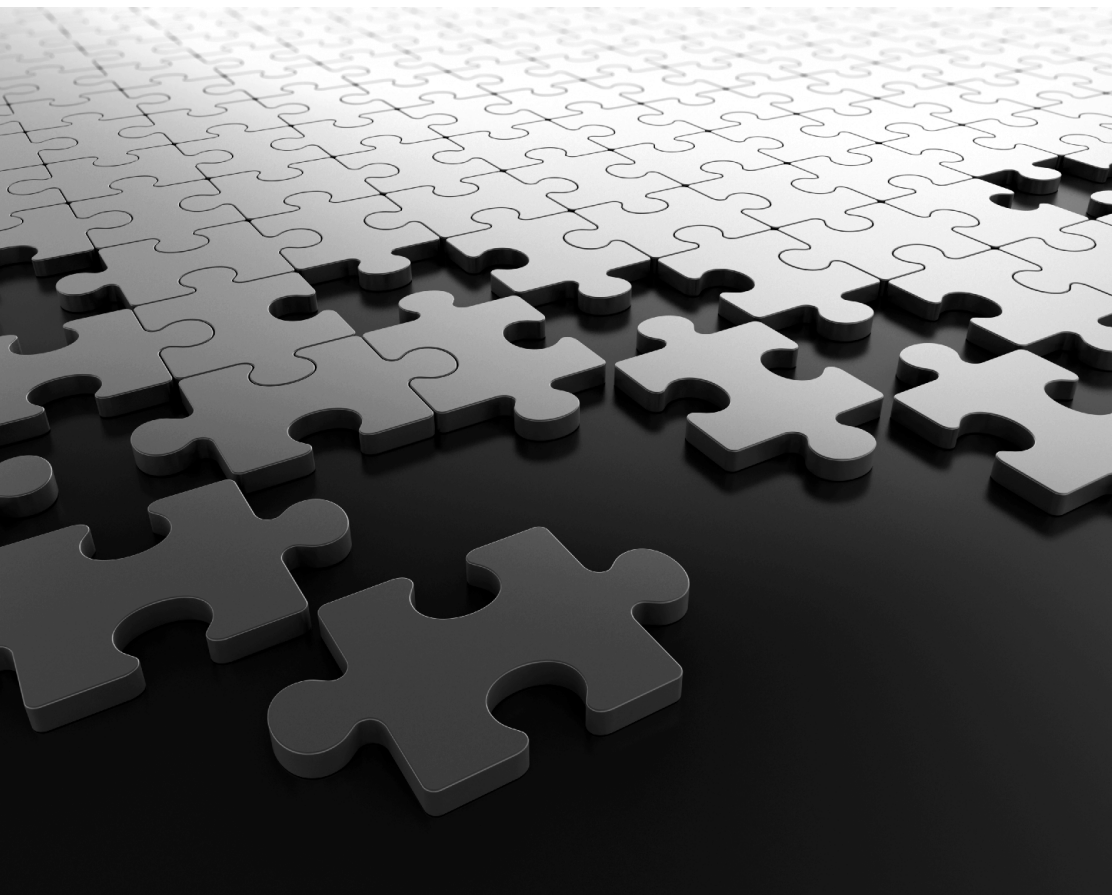


SIMADO GFX44

Quick Start



SIMADO GFX44

Multi-port Mobile-FXS Gateway with LCR

Quick Start



Documentation Disclaimer

Matrix Comsec reserves the right to change, at any time, without prior notice, the product design, specifications, components, as engineering and manufacturing may warrant.

This is a general documentation for all models/configurations of the product. The product may not support some of the features/facilities described in this document.

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Know Your SIMADO GFX44

Thank you for choosing SIMADO GFX44! Please read the instructions in this Quick Start before you install and configure your SIMADO GFX44.

This Quick Start is meant to help you install the system, get familiar with system configuration and make test calls using the factory-default settings. For detailed information on the product, its applications, detailed configuration instructions, refer the System Manual provided to you on the CD-ROM shipped with the system.

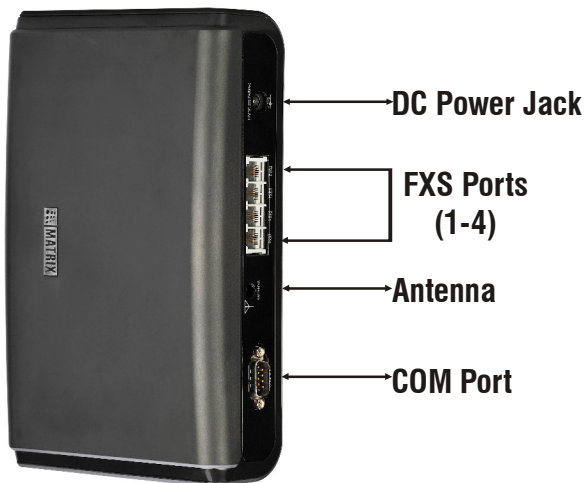
Overview

SIMADO GFX44 is a compact Mobile-FXS Gateway to interface Mobile and PSTN networks. It offers 100 percent non-blocking, universal routing on all its ports. With the Least Cost Routing (LCR) feature of SIMADO GFX44, you can have your outgoing calls routed through the most cost effective port.

For compatibility and use of Matrix GSM products (2G/3G/4G) in Russia and Iran Province connect with Matrix Sales or Technical Support Team.

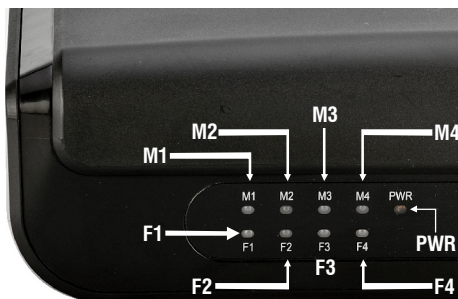
Ports and Connectors

It has a Communication Port, 4 FXS Ports, 4 Mobile Ports, an Antenna Connector, a Power Socket.



LEDs

SIMADO GFX44 has 9 LEDs, as illustrated below, for indication of port status and power.

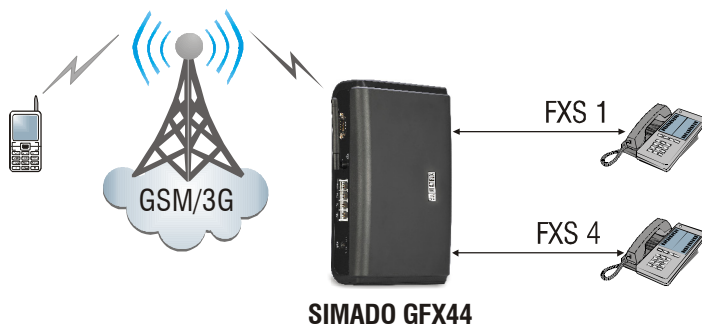


- Four LEDs for FXS Ports, labeled **F1**, **F2**, **F3** and **F4**.
- Four LEDs for Mobile Ports, labeled **M1**, **M2**, **M3** and **M4**.
- One LED for Power, labeled **PWR**.

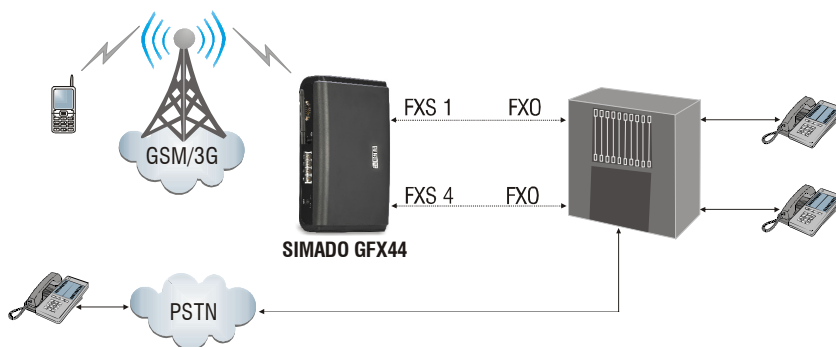
Applications

SIMADO GFX44 finds its applications in corporate offices, factories, call centers, hotels and such other establishments. SIMADO GFX44 can be used as a stand-alone device to make calls over GSM/UMTS networks. It can also be interfaced with a PBX as a gateway between GSM/UMTS and PSTN network for cost savings.

Case 1: SIMADO GFX44 as Stand-alone device



Case 2: SIMADO GFX44 interfaced with PBX



Installing SIMADO GFX44

Before You Start

- Unpack and verify the package contents. Make sure that your package contains the following items.
 - SIMADO GFX44 Unit with Rubber Ducky Antenna (SMA)
 - Power Adapter 12VDC, 2Amp (Country Specific)
 - Two M7/30 Screws with grips
 - External Cable Antenna with SMA Connector
 - Line Cord (RJ11) as per configuration
 - Wall Mounting Template
 - SIMADO GFX44 CD containing the System Manual, Quick Start and Jeeves Software

If any of the above listed items is missing or damaged, please contact the source from where you have purchased the system.

- Select a suitable location to install the system. Make sure that the site you select has proper power supply source close by and sufficient network signal strength.

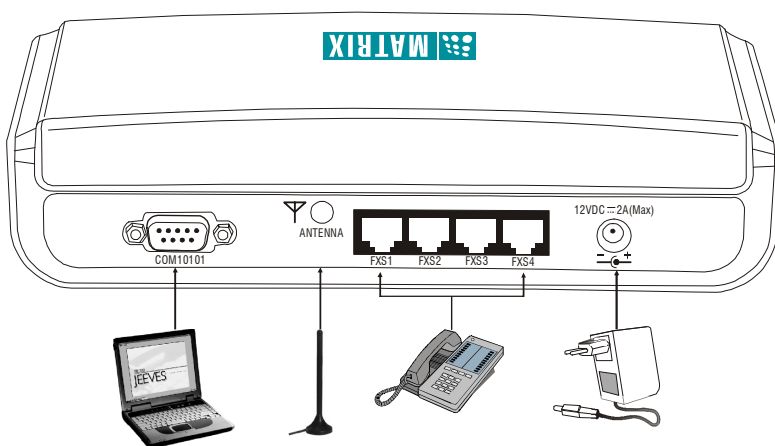
If you want to mount the system on a wall, use the mounting template provided to you in the product package, for drilling the holes on the wall.



Do not install the system at the places where shocks or vibrations are frequent or strong.

- To install the system, you will need:
 - Atleast one SIM Card from GSM/UMTS service provider to be inserted into a Mobile Port. You can insert as many as four SIM Cards in the system.
 - Atleast one telephone instrument with LCD display to connect to a FXS Port. You can connect as many as four such telephones.
 - A Computer with a free COM Port to access the windows based configuration tool, *Jeeves*.
 - Connection to Mains power.

Connecting SIMADO GFX44



- When installing SIMADO GFX44, you will need to open the top cover and handle the internal parts. You must take appropriate electrostatic discharge prevention measures to prevent damage to the modules you handle. You may wear an electrostatic discharge preventive wrist strap or belt and use a grounding mat.
- Unscrew and remove the top cover of SIMADO GFX44 and keep it aside.



For compatibility and use of Matrix GSM products (2G/3G/4G) in Russia and Iran Province connect with Matrix Sales or Technical Support Team.

Before inserting the SIM Card in the SIM Holder of SIMADO GFX44, you may enable PIN protection in the SIM to protect it from any unauthorized use.

To enable SIM PIN protection,

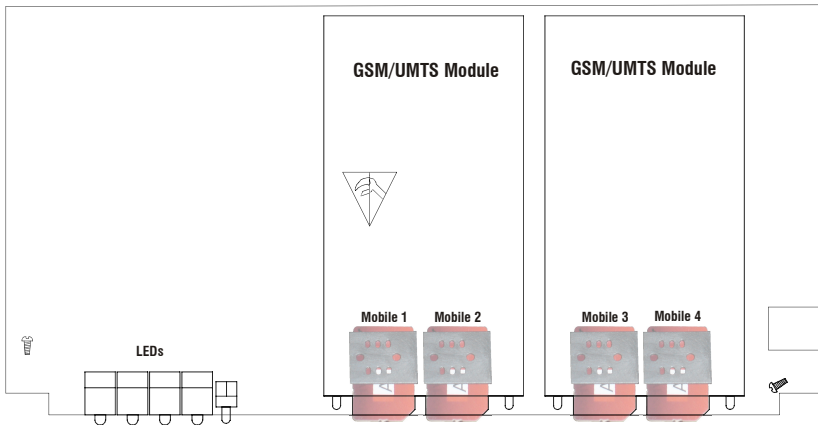
- Get a mobile handset. Insert the SIM into the mobile handset.
- From the mobile handset, enable PIN Protection on the SIM.
- Change the SIM PIN to **1234**. This is the default SIM PIN of SIMADO GFX44.



You can change the SIM PIN to the desired value while configuring the system. For instructions on changing the SIM PIN, refer the topic **SIM PIN** in the SIMADO GFX44 System Manual.

- If your SIMADO GFX44 has a 3G module, you must also disable Call Waiting on the SIM Card. This will prevent current calls from being disconnected whenever there is a waiting call on the Mobile Port.
- Remove the SIM from the mobile handset.

- Insert the SIM Card in the SIM Holder of SIMADO GFX44 with the contact side facing down. The SIM Holders are located on the GSM/UMTS modules as illustrated in the diagram below.



- Replace the cover and secure it with the screws.
- To the **FXS Port**, connect a standard telephone using the Line cord provided to you in the product package.
- Connect the **COM Port** of SIMADO GFX44 to a computer using a standard COM Port cable.
- Connect the Antenna provided to you in the product package to the **Antenna Connector** of SIMADO GFX44.
- Connect 12V DC Power Adapter provided to you in the product package to the **Power Socket** of SIMADO GFX44. Plug the adapter into the power outlet.



Use only the power adapter included in the SIMADO GFX44 package. Using an alternative non-qualified power adapter may damage the unit.

Power On SIMADO GFX44

After connecting the system as described above, switch ON the power supply and observe the LED sequence.

At Power ON:

- The 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 the GSM initialization, SIMADO GFX44 attempts network registration.
- It takes a few seconds to establish connection with the network.

- After successful registration with the network, all LEDs are turned off.

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

Event	Color	Cadence in ms (1 Cadence = approx. 3000 ms.)
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 is Required	Orange	200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-1600ms Off (4 Blinks)
If SIM PIN is Faulty	Orange	200ms ON-200ms Off 200ms ON-200ms Off 200ms ON-2000ms Off (3 Blinks)
If SIM is Absent	Orange	200ms ON-200ms Off 200ms ON-2400ms Off (2 Blinks)
If Network is Absent/GSM Module could not establish connection with the network	Orange	200ms ON-2800ms Off (1 Blink)

The following table shows the LED indications during various events occurring on FXS/Mobile Ports of the system, during its normal functioning.

Event	Color	Cadence in ms (1 Cadence = approx. 3000 ms.)
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* (Free minutes utilized)	Red	1000 ms ON-2000 ms Off

Applicable for Mobile Ports only, when Mobile Port is idle. Refer **Call Minutes topic in the System Manual for details.*

Configuring SIMADO GFX44

You can configure SIMADO GFX44 in the following ways:

- Using its windows-based software, Jeeves.
- By dialing commands from the phone connected to its FXS Port.
- By dialing commands after making a call to its Mobile Port.

Configuring SIMADO GFX44 using Jeeves

SIMADO GFX44 enables you to configure the system through the windows based software, *Jeeves*. To configure the system using Jeeves, follow the steps given below:

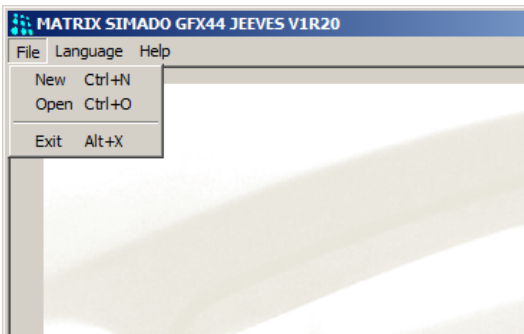
- Insert the 'Matrix SIMADO GFX44' CD provided to you along with the product in the CD Drive of your computer. It is an auto-run CD.
- The CD drive window will open. It contains two folders: 'Documents' and 'SIMADO GFX44 Jeeves VxRy'. If the CD does not open by itself, click 'My Computer' → 'CD Drive'.
- Open the 'SIMADO GFX44 Jeeves VxRy' folder. Run the set-up to install Jeeves on your computer.
- Now, make sure you have connected SIMADO GFX44 to your computer.

- Click Start → Programs → Matrix → SIMADO GFX44 Jeeves VxRy. SIMADO GFX44 Jeeves Home page will open.

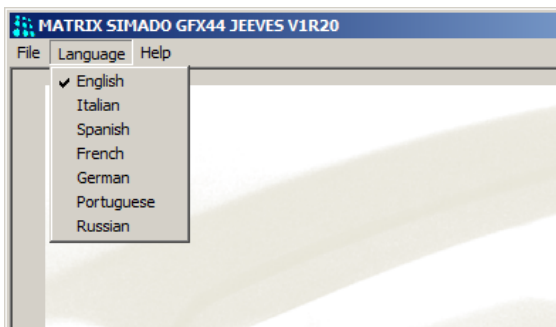


There are three options on the home page of Jeeves.

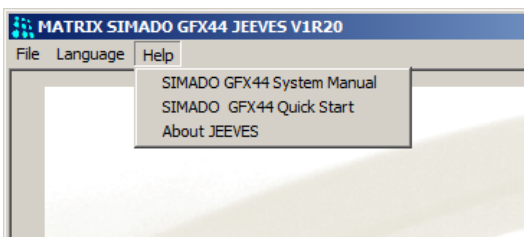
- **File:** In File, click **New** to open Main Menu of *Jeeves*. To open the configuration saved on your computer, click **Open**. To close Jeeves, click **Exit**.



- **Language:** In Language, seven different languages are displayed, namely, English, Italian, Spanish, French, German, Portuguese and Russian. Select the language in which you want the Jeeves content to be displayed.

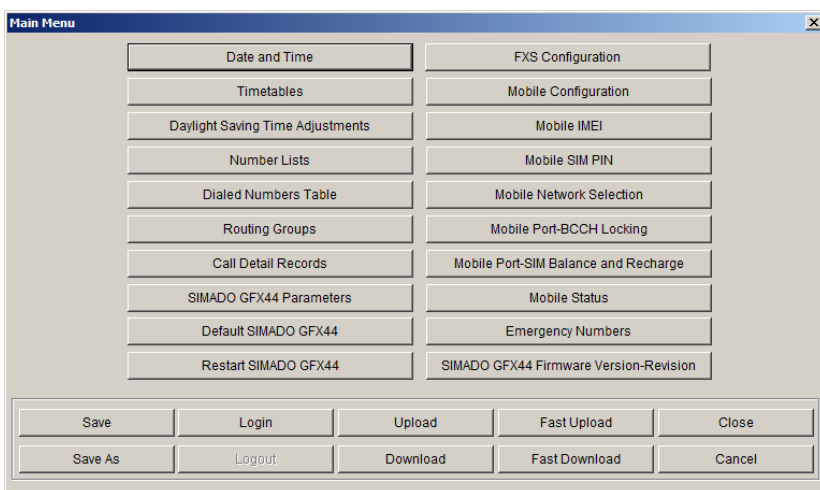


- **Help:** In Help, you will be able to access, SIMADO GFX44 System Manual, SIMADO GFX44 Quick Start, and information About Jeeves.



To begin system configuration, follow these steps:

- Click File → New. The Main Menu of the Jeeves will open. On the main menu, links to the various features are displayed.



- Click the **Login** button. The **Login to SIMADO GFX44** window opens.
- In **COM Port**, select the COM Port on the Computer to which SIMADO GFX44 is connected. In the **SE Password** field, enter the default System Engineer (SE) password **1234**.

- On the Main Menu page, click the buttons one by one and configure the system as per your requirement.

For example, to configure FXS Port parameters,

- Click the **FXS Configuration** button. The FXS Configuration window will open.

FXS Port Number	Port Enable?	CLIP Type	Flash Timer (milliseconds)	Inter Digit Wait 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

- Configure the FXS Port Parameters as per your requirement and click the **Save** button to save your configuration.
- Click **Upload Changes** or **Upload Page** button to upload the changes on to the system.
- To exit, click the **OK** button.

Similarly, you can configure other parameters and features of SIMADO GFX44. For detailed instructions, see the respective topics under the chapters *Configuring SIMADO GFX44* and *Features of SIMADO GFX44* in the System Manual.

Configuring through FXS Port

You can also configure SIMADO GFX44 by dialing command strings from the telephone connected to the FXS Port.

To do this, you must enter the programming mode using the **System Engineer (SE) Password**. The default SE password is **1234**.

To enter the programming mode through the FXS Port:

- Lift the receiver of the telephone connected to the FXS Port of SIMADO GFX44.
- Dial **#*-19-SE Password**. The default SE Password is **1234**. You will get the programming tone.
- Dial the command string.



While dialing command strings, you must dial the digits and characters in a continuous sequence. For example, to enter programming mode you must dial the command string as **#*191234**.

- To exit programming mode, dial **00-#***
- Replace the receiver of the telephone.

Configuring through Mobile Port

You can also configure SIMADO GFX44 through the Mobile Port.

To be able to configure the system through the Mobile Port,

- The routing type for the Mobile Port must be set as either **Answer-Fixed** or **Answer-Number Based**. By default, it is set as **Answer-Fixed**.
- The SIM Card installed in SIMADO GFX44 must be registered with the network. You can check this through LED indication.
- Call the Mobile Port of the system by dialing the number of the active SIM Card installed in the system. You will get dial tone of the system.
- Dial **#*-19-SE Password**. The default SE Password is **1234**. You will get the programming tone.
- Dial the command string.



While dialing command strings, you must dial the digits and characters in a continuous sequence. For example, to enter programming mode you must dial the command string as **#*191234**.

- To exit programming mode, dial **00-#***

Test Calls

Making a Call

- Lift the handset of the telephone instrument connected to the FXS Port of SIMADO GFX44. You will get the dial tone.
- Dial the desired number. You will hear the RBT.
- Talk when the called party answers the call.
- Replace the handset to disconnect the call.

Receiving a Call

- Make a call to the Mobile Port.
- The telephone connected to the FXS Port of SIMADO GFX44 will ring.
- Lift the handset to talk.
- You will be in speech with the calling party.
- Replace the handset to disconnect the call.



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