

GSM FIXED WIRELESS TERMINAL  
WITH G3 FAX SUPPORT, GPRS  
connection and PSTN port

USER MANUAL

# 1 Overview

## 1.1 Summary

The Fixed Wireless Voice/Data/Fax Access Terminal can be applied in GSM/GPRS digital mobile communication networks, serving as Fixed wireless access devices with functions of phone call, GSM fax sending or receiving, GPRS connection, caller ID display, power-off bypass and intelligent routing etc.. No wiring is required. It is featured with easy and quick installation, plug-and-play within network coverage.

## 1.2 Product Features

- Supporting dual-mode voice access (GSM/PSTN).
- GSM Fax function
- GSM/GPRS data function
- Supporting traditional PBX access
- Dynamic echo cancellations to ensure the perfect voice quality
- Power-off bypass functions (when AC power is off, all calls are switched to PSTN network automatically)
- Modem mode (Access the Internet by GPRS connection via the PC serial port)
- Support the phone book stored in the SIM card or in the terminal
- Intelligent routing (Able to set up dialing regulation to route voice or fax intelligently)

- Dialing control (Able to set up several special phone numbers, restricted numbers)
- Setup by Keyboard prompt line for convenient operation.
- Incoming call display function
- Auto-dialing function
- Internal call divert function
- Real time displaying of wireless network signal power
- Software upgrade

### 1.3 Technical Specification

#### Frequency Bands

- GSM 900/1800 MHz

#### Transmission Power

- EGSM 900 Class4 (2W Peak)
- GSM 1800 Class1 (1W Peak)

#### Frequency Range

- EGSM 900 890~915 MHz 935~960 MHz
- GSM 1800 1710~1785 MHz 1805~1880 MHz

#### Power Consumption

- Average power consumption < 5W

#### Working Environment

- Ambient temperature: 0°C~45°C
- Humidity: 5%~95%

#### Power Supply

- DC12V, 800mA

#### Phone port

- Impedance: 600ohm (default)
- Open circuit voltage (OCV): 63V (on-hook)
- Ringing Load : Support integrating 3 phones (3REN)
- Provide the control signal of polarity reversal

LAN Interface

- RJ-45 port
- 10M/100M auto-negotiating Ethernet port

RS232 Interface

- RJ-45 to COM serial interface

SIM Card: 3V SIM card

Dimensions (L x W x H):

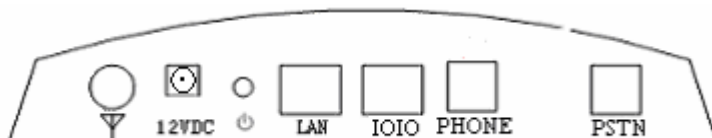
- length×Width×Highness: 20.5cm×15cm×4cm
- 0.3 kilogram

## 1.4 Safety

- 1、 Please do not use this product in areas where equipment of wireless transmission is restricted (such as hospital, health care facilities and on board of aircraft).
- 2、 Please do not use this product in gas stations, bunkers and places of chemical storage.
- 3、 Please do not use this product in chemical plants or any other places with hazard of explosion (such as gas leakage site).
- 4、 Please do not use this product on any metal surface that might weaken power of received signal.
- 5、 Please avoid using PSTN network during thunderstorm; otherwise, it might cause remote electric shock.


## 2 INSTALLATION INSTRUCTION

### 2.1 Interface Description




Rear Plate

Interface description:

 ..... Antenna port

12VDC .....Power supply

 ..... Power switch

LAN ..... Ethernet port (Optional components)

IOIO ..... Interface of serial port console

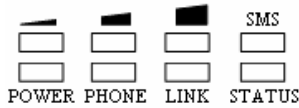
PHONE .....Phone port, connected to the regular phone/fax machine

PSTN..... External PSTN line port, connected to the PSTN line



**Caution: Do NOT plug PSTN line into PHONE socket; otherwise it may cause device damage.**


## 2.2 Indicators



### Indicators

There are 8 indicators on front panel of fixed wireless terminal, functioning as follows:

#### 1. **GSM Signal Status Indicator**

GSM has three indicators “”; they are numbered 1, 2, and 3 from left to right in sequence.

There are 3 status for indicators:

**Continuous lit:** Indicating the signal power strength

**Slow flash:** Flash once per second indicating GSM general errors

**Quick flash:** Flash 10 times per second indicating GSM serious errors

GSM general errors (Slow flash defined as “1”, off defined as “0”)

110: No SIM card

010: Network registration failure

111: In Modem mode

011: PIN required

GSM serious errors (Quick flash defined as “1”, off defined as “0”)

001: Lock Base Station

010: Lock the service provider

011: PIN code error

100: IMSI error

- 101: Require PUK
- 110: GSM/GPRS baud rate error
- 111: other errors

**2. POWER: Power supply indicator**

Light: Indicating device power on

Dark: Indicating device power off

**3. PHONE: Phone port status indicator**

Light: Indicating the status of talking or hanging up

Flash: Indicating an incoming call and phone ringing

Dark: No call or hang up

**4. LINK: The Ethernet connection status indicator**

Light: Connection via the Ethernet interface

Dark: No connection via the Ethernet interface

**5. STATUS: Device startup status indicator**

Light: Device is started up successfully

Slow Flash: Device is starting up

Quick Flash: Device startup failure.

Dark: Device not powered on or starting up. Only after around 15 seconds does the indicator start flashing slowly.

## 2.3 LCD Display

1. The LCD shows “CEL1” when user turns on the power; then the LCD will show 8888... (totally 14 digits). Another 7 seconds later, appears 16 digits of ‘8’. LCD shows ‘CEL1’ upon successful startup. Start up takes about 30 seconds.
2. When user picks up handset and makes a phone call, LCD back light is ON, screen clearing up, numbers keyed in shown up in the screen
3. When there is an incoming call, LCD displays incoming phone number. (Network or SIM card should support incoming call display function)
4. When there is incoming call or outgoing call, the LCD will show the Network which the calls will go through ( GSM/GPRS mobile network or PSTN telecommunication network) . The P indicates the PSTN voice call, G indicates GSM voice call, F indicate GSM FAX; D indicates GSM/GPRS data call. When user is on the call conference, the LCD will display the numbers that are attending the conference one by one.
5. When user hangs up, LCD displays ‘CEL1” and the backlight is off in 3 seconds.
6. When the call is on hold, the display will show the new incoming call. When user switches between two calls, the display will show the phone number that is on talk. The display will show all attendees’ number one by one when the party is on the call conference.



## 2.4 Modem Mode

GSM/GPRS has two working modes: Common Mode and Modem Mode. These two modes cannot exist simultaneously.

**Common Mode:** The wireless access terminal can provide all the functions except the GPRS under the Common Mode.

**Modem Mode:** With peripheral equipment, such as PC, the user can have access to Internet via GPRS connection in Modem Mode.

Establishing the Modem Mode:

1. When the user sets the unit into auto-switch mode (referring to the keyboard setup command below), the PC serial port needs to be connected to the IOIO port in the wireless access terminal. Open the serial port in PC, and then the device will be auto-switched to the Modem mode.
2. Under the Modem Mode, the user can control the GSM/GPRS modem through the serial port directly. And user can apply the software in PC to realize the GPRS, GSM circuit data and computer fax.
3. Using the device under the Modem Mode
  - a) Under the auto-switch mode (Get the terminal ready for working; Get the terminal connected with the telephone set; power on the terminal; pick up the telephone set and input `#*83*1#`; hang up to set the unit into the auto-switch mode ), when there is incoming call on the GSM, the user can configure the mode as "Switch to modem mode while ringing" (Get

the terminal ready for working; get the terminal connected with the telephone set; power on the terminal; pick up the telephone set; input `#*102*1#` and hang up) or “ Switch to modem mode after picking up the phone” (Get the terminal ready for working; get the terminal connected with the telephone set; power on the terminal; pick up the telephone set; input `#*102*2#` and hang up).

- b) Under the restricted Modem mode (Get the terminal ready for working; get the terminal connected with the telephone set; power on the terminal; pick up the telephone set; input `#*83*2#` and hang up ), the device will not be switched to the Common Mode when there is incoming call. There is no use to set the priority by this command `#*102*n#`. The PRI of keyboard command “`#*83*n#`” is higher than `#*102*n#`.

## 2.5 Hardware Installation Steps

- 1、 Put one end of the attached telephone line into the telephone (Or the line port of Fax and Modem); put the other end into the ‘Phone’ socket on the rear plate.



***Caution: Do NOT plug external PSTN line into PHONE socket; otherwise it may damage the device.***

- 2、 Connect the external PSTN line to the socket marked as ‘PSTN’ on the rear plate.

- 3、 Connect and screw up firmly the companied antenna. Antenna connector is marked as “Y” .
- 4、 Make sure power switch on the rear plate is in OFF position. Afterwards, plug one end of companied power adapter into AC220V power socket, and plug the other end into “12VDC ”power interface on the rear plate.
- 5、 Switch on power. The device enters startup status. When STATUS indicator is on continuously, device startup is successful and it is ready for use.
- 6、 Connect the device to the Ethernet and input the IP address in the URL of the Internet Explore, and then the user can use the SMS function of this device. (Refer to the “4.5 Web SMS Function”)



***Caution: In order to avoid radio interference on voice communication, make sure antenna and telephone line are not twisted. Make sure telephone set is not placed too close to the antenna; a distance of over 1 meter is recommended.***

# 3 APPLICATIONS

## 3.1 Application Model 1

In this application, the unit is connected with regular telephone, FAX, Modem via phone socket, connected with external PSTN line via PSTN socket, connected with Ethernet via Ethernet port. . In normal situation, user can make calls and or receive calls via GSM network. When there is power failure, the device will be switched to PSTN network automatically

## 3.2 Application Model 2:

There are two plans for this model of application.

Plan A: The unit is connected with PBX via PHONE port. External PSTN line is plugged into the PSTN port on the unit. Under normal situation, the PBX extension users can make calls and or receive calls via GSM network. When there is power failure, the unit will be switched to PSTN automatically.

Plan B: PBX ( Private Branch (telephone) exchange ) extension access mode. This mode differs from the classic PBX trunk access. The unit is connected with any PBX extension. This mode will make the PBX access more flexible and convenient. If the user wishes to extend the fully loaded PBX trunk lines or manage the fixed trunk line and wireless trunk line separately, this mode is a better choice.

The device's external line socket is connected with PBX internal interface (EXT ports) or any extension. The PBX extensions first call the extension number of the terminal and then make calls by the terminal using GSM network.

## Operation Instruction

### **4.1 Telephone Function**

#### **4.1.1 Making a phone call**

- 1) Off-hook: Pick up the handset; you will hear a dialing tone.
- 2) Dial: Dial the phone number, the system will send out your dialed number automatically.
- 3) Conversation: When recipient picks up handset at the other end, voice communication is established.
- 4) Clear: Clear after hanging up.

#### **4.1.2 Receiving a phone call**

When phone bell is ringing, PHONE indicator is blinking; the user picks up handset to start phone talking.

## 4.2 Fax function

### 4.2.1 Sending a fax

User can send faxes by fax machine connected with the terminal via phone port.

### 4.2.2 Receiving a fax

User can receive faxes by fax machine connected with the terminal via phone port.



***Note: The terminal does NOT support automatic switching between GSM voice/Fax. This function needs GSM/GPRS network support of TS61 (allowing users to use voice and fax functions in one call). As a result, when sending a fax, please press START key immediately after you complete dialing numbers; When receiving faxes, please set fax machine to AUTO mode.***

## 4.3 Data Function

Users can transmit data through the modem connected with the terminal via the phone port; methods to use this modem are exactly the same as the wire-line modem.

## 4.4 Call Waiting and Three Party Conference

### Function

This device supports GSM Call Waiting and three-party conference function. (Note: Relevant services should be activated on SIM card).

In the process of conversation, if there's an incoming call from the third party, the call receiver will hear the prompt tone in the terminal and its LCD will show the new incoming call number.

- If the receiver wants to ignore this incoming call, just take no operation.
- If the receiver wants to reject this incoming call, press R button and then 0.
- If the receiver wants to end the current conversation and starts the new conversation, press R button and then press 1. Or hang up the phone to end current conversation and pick up the phone (the phone will be ringing after hang-up) for new incoming call.
- If the receiver wants to hold the current conversation and accept the new call, press R button and then press 2. The receiver can also switch between the two phone calls by pressing 2. The LCD will show the number of current phone conversation.
- In the process of conference, the user can press the button R and # to hold the current call, then he can dial a new number after hearing the dial tone.
- When the receiver makes a new call and the talk is

established, the former conversation will still be on hold. If the receiver wants to hold the three-party conference, press button R and then 3 to add the current conversation into the conference. This realizes the 3-party conference. The LCD will show in scroll the participators' number.

- Hang up the telephone set connected with the terminal to end the conference.
- Press the button R and then 1X to end the conversation with one party. (x means the sequence number of the call displayed on the LCD)
- If the receiver wants to have a private conversation with one party, press button R and then 2x (x means the sequence number of the call displayed on the LCD )



***Caution: Pressing the hook has the same effect in case some telephones do not have button R.***

## 4.5 Web SMS Function

To use web SMS function, the user needs to connect the PC with the terminal via the LAN port (Ethernet port). The user can send and receive short messages through the WEB page after connection.

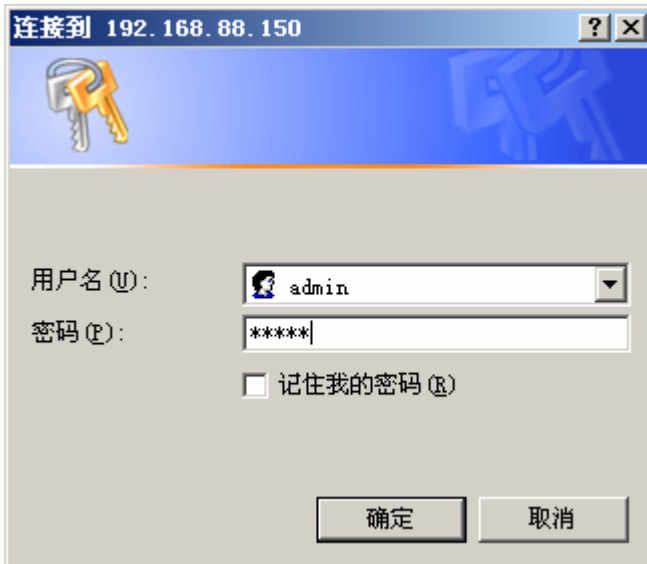
The default IP address of the Wireless Voice/Data/Fax Access Terminal is 192.168.10.1. The user can configure the IP address by the CLI and can resume the IP address to default configuration by the keyboard command. (Refer to the



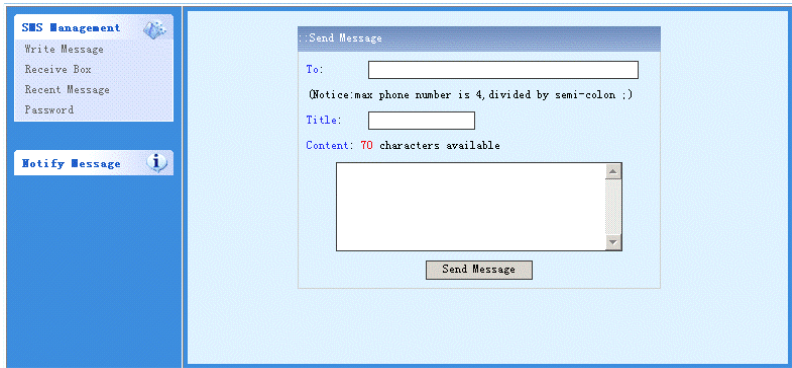
following “4.7 Keyboard Configuration Command” to learn the detailed keyboard commands)

The process of using Web SMS function as follows:

1. Open the Internet Explorer on the PC and input the address <http://192.168.10.1> (The default IP address of the device). Input the user name and password. (The default values are both admin)



2. Enter the transmission interface of Web SMS, under this interface, the user can send and receive the short messages on the prompt menu.



## 4.6 Call Diversion Function

Call diversion means that the system diverts the calls of PSTN and GSM.

There are two modes of the call diversions:

- A. Diverting from PSTN to GSM ( Set by keyboard command):
  - i. Call forwarding when No Reply. When there is an incoming PSTN call, the phone begins to ring. Ring numbers can be set by telephone set keyboard command. If there is no answer, the terminal will call the appointed number via GSM (The appointed number was set by telephone keyboard commands) and link the PSTN voice channel with GSM voice channel. When the GSM call is put through, the caller (on the PSTN line) and the receiver (on the GSM line) can talk with each other. Actually it is GSM to GSM call.

- ii. Call forwarding with no condition. Call the pre-set number through GSM when there is an incoming PSTN call.
- B. Call diversion from GSM to PSTN (Set by keyboard commands), support only one diversion mode:
- i. Diversion without condition. When there is an incoming GSM call, the device will call the pre-set number through the PSTN line. (The number was set by keyboard commands.)

**Remark: Refer to the correlative commands of the call diversion in “4.7 Keyboard Configuration Command”.**



**Caution:**

1. ***The call diversion function can reduce the phone bill cost when the user is out of the relevant location.***
2. ***After activating the call diversion, the terminal cannot receive any calls via phone port. When there is no response in the terminal after you pick up the telephone handset and there is no dialing tone in the handset, it indicates that the system is in the condition of call diversion. The user should cancel call diversion when the user does not need this function to ensure the common use of the terminal.***

## 4.7 Keyboard Configuration Command

User may set command by using keyboard of telephone set connected to the phone socket. The following commands are effective for the wireless access terminal.

### 4.7.1 System Configuration

1. Set working mode

Command: `#*1*working mode#`

Description: Set the working mode of terminal, Working mode = 0 is 30 mode; 1 is 31 mode; 2 is 32a mode; 3 is 32b mode

2. Current work mode display

Command: `#*11#`

Description: Display the device's current working mode.

3. Set system date

Command: `#*20*y*m*d#`

Description: Set the system date, y means (00~99); m means month (0~12); d means day (0~31)

4. Set system time

Command: `#*21*h*m*s#`

Description: Set the system time of the device, h means hour (0~24); m means minute (0~59); s means second (0~59) .

5. Set auto-dialing delay

Command: `#*3*seconds#`

Description : Set up dialing overtime and auto sending-out time upon complete entry of numbers, default setting: 3 seconds.

<seconds> Set point range 1-20 s

6. Set external line flash key delay

Command: `#*4* delay #`

Description: Set external line flash key delay, default, 700ms delay

<delay> 0~2000 ms

7. External line flash key delay Display

Command: `#*41#`

Description: Display external line flash key delay

8. GSM/GPRS signal quality display

Command: `#*50#`

Description: Display GSM/GPRS signal quality

9. GSM IMEI Display

Command: `#*51#`

Description: Display GSM IMEI

10. SIM IMSI Display

Command: `#*52#`

Description: Display SIM card IMSI

11. Set GSM output voice volume

Command: `#*53*volume#`

Description: Set GSM output voice volume, volume

(0~4) .

12. Set SMS center number

Command: `#*58*n*number#`

Description: Set SMS center number (When n=0, do not add prefix before the number. When n=1, add the prefix “+” before the number)

13. SMS center number Display

Command: `#*59 # SMS center number`

Description: Display SMS center number

14. Software version display

Command: `#*60#`

Description: Display software version

15. GSM version display

Command: `#*61#`

Description: Display GSM version

16. The parameter of echo cancellation display

Command: `#*62#`

Description: Display parameter of echo cancellation

17. Set echo cancellation switch

Command: `#*63*n#`

Description: Set echo cancellation switch , When n is 0 means echo cancellation off, 1 is on.

18. Set the emergency call number

Command: `#*65*emergencyNumber#`

Description : Set the emergency call number , emergencyNumber is the emergency call number.

19. Set the emergency dialing time

Command: `#*66*seconds#`

Description : Set the time from picking up to auto-sending of the emergency number by the device. Seconds (0~10) is the time that defined by user. It indicates that the user do not dial the number after picking up, the device will dial the emergency number after Seconds automatically. If Second is 0, that indicate the emergency dialing function has been off.

20. Set FAX and Voice Ring both

Command: `#*68*n#`

Description: Set FAX and Voice Ring both, when n is 0 means off, and 1 means on. This function will not be effective on the hardware board version 2.0.

21. Set PSTN line type

Command: `#*8* type #`

Description: Set PSTN line type, default is long

type	0, long
	1, short
	2, pbx600
	3, pbx900

22. MODEM Test function

Command: `#*9#`

Description: Test MODEM function

23. Force switch to Modem mode

Command: `#*100#`

Description: Switch the serial port to Modem mode.

24. Resume the IP address on the Ethernet port to 192.168.10.1

Command: `#*101#`

Description: Resume the IP address on the Ethernet port to 192.168.10.1.

25. Set GSM MODEM PRI

Command: `#*102*n#`

Description: Set GSM MODEM PRI (0=do not switch, means modem PRI is high; 1=switch, means that common mode PRI is high, 2=switch after response).

26. Minute Prompt

Command: `#*110*n#`

Description: n=1, the device will send a prompt tone per one minute during user's conversation.

n=0, this function is off.

#### **4.7.2 set the call diversion of interface**

i. Set the diversion from FXO to GSM

Command: `#*70*n#`

Description: Set the diversion switch from FXO to GSM(n=0: Off; n=1: On).



- ii. Set the diversion number from FXO to GSM  
Command : `#*71*number#`  
Description: Set the diversion number from FXO to GSM. It is the number dialed from GSM port.
  
- iii. Set the appointed incoming call number by FXO  
Command: `#*72*number#`  
Description: Set the appointed incoming call number by FXO. When the incoming call number is the appointed number on FXO port the device will regard this incoming call as special.
  
- iv. Clear the incoming call number appointed by FXO  
Command: `#*73#`  
Description: Clear the appointed incoming call
  
- v. Set no answer delay for FXO  
Command: `#*74*time#`  
Description: Set no answer delay time for FXO
  
- vi. Set the FXO call diversion type  
Command: `#*75*n#`  
Description: Set the FXO call diversion type (0=divert always; 1=divert when no answer)
  
- vii. Set the call divert from GSM to FXO  
Command: `#*76*n#`  
Description: Set the call divert from GSM to FXO(0=no dialing from FXO ; 1= dialing from FXO)

- viii. Set the call divert number from GSM to FXO  
Command: `#*77*number#`  
Description: Set the call diversion number from GSM to FXO. When the function of call diversion from GSM to FXO is on, GSM dials this number from FXO port.
  
- ix. Force the call in as the FAX switch  
Command: `#*78*n#`  
Description: When  $n=0$  , the incoming call will be regarded as common call by the device,  
When  $n=1$  , the incoming call will be regarded as FAX by the device,

#### **4.7.3 Detecting the caller ID format:**

1. Detect the current caller ID format  
Command: `#*99#`  
Description: Detect the current caller ID format. After completing this command, the user should hang up the phone immediately. If the current caller ID format is complied with local standard, the user's CLI display will show "0123456789". If the device can not display this character string, the user will need to change the current standard of caller ID by command "`#*81*n#`".
  
2. Set the device to support the three different standards of caller ID:  
Command: `#*81*n#`  
Description: Set the device to support the three different standards of caller ID identification.  
(0=Off; 1= ETSI DTMF; 2= ETSI V.23; 3= Bellcore)

(Default value is 3)

3. Set keyboard command for transmitting caller ID during calling

Command: `#*82*n#`

Description: You can decide by yourself to transmit your numbers when you are making phone calls by this command. (0=Not transmitting your numbers when making a phone call; 1= Transmitting your numbers when making a phone call).

#### **4.7.4 Set series port switch**

1. Set series port switch

Command: `#*83*n#`

Description: Set series port switch (0=Off; 1=CLI; 2=MODEM).

#### **4.7.5 Set overtime of Button R**

1. Set overtime of Button R

Command: `#*85*n#`

Description: Set overtime of Button R

#### **4.7.6 Set SIM Card**

1. Input PIN code

Command: `#*86*n#`

Description: Input PIN code, n is the PIN code to be input by the user.

2. Modify PIN code

Command: `#*88*oldpin*new*newV#`

Description: Modify PIN code. The “Oldpin” is old PIN code, the “New” is new PIN code, the “NewV” is confirm new PIN code.

3. Input PUK code

Command: `#*89*PUK*PIN#`

Description: Input PUK code, PUK is input by user, PIN is new PIN code input by user

4. Set PIN code function

Command: `#*90*n*pin#`

Description: Set PIN code function (n=0 PIN function disabled; n=1 PIN function enabled)

5. Query PIN function status

Command: `#*91#`

Description: Query whether PIN function status on or off

#### **4.7.7 Phone book Function**

1. Store the number into the SIM card

Command: `#*120*pos*n#`

Description: Store the number “N” into the position “Pos” in the phonebook in the SIM card

2. Delete the number stored in the SIM card

Command: `#*121*pos#`

Description: Delete the number on the position “Pos” in the phonebook in the SIM card

3. Query the number stored in the SIM card

Command: `#*122*pos#`

Description: Query the number on the position “Pos” in the phonebook of SIM card

4. Dial the number stored in the SIM card

Command: `Pos#`

Description: Dial the number on the position “Pos” in the phonebook in the SIM card

5. Store the number into the device

Command: `#*125*pos*n#`

Description: Store the number on the position “Pos” in the phonebook

6. Delete the number stored in the device

Command: `#*126*pos#`

Description: Delete the number stored on the position “Pos” in the phonebook

7. Query the number stored in the device

Command: `#*127*pos#`

Description: Query the number on the position “Pos” in the phonebook

8. Dial the number stored in the device

Command: `pos*`

Description: Dial the number on the position “Pos” in the phonebook

#### **4.7.8 Call charging function**

1. Call charging function  
 Command: `#*95*n#`  
 Description: Call charging function switch on or off (0=Off; 1=on)
  
2. Set charging mode  
 Command: `#*96*n#`  
 Description: Set charging mode (0=FEE\_APR\_S ; 1=FEE\_APR\_D; 2= FEE\_APR\_NO)
  
3. Set the frequency of detecting polarity reversal signal on the FXO port per second  
 Command: `#*98*n#`  
 Description: Set the frequency of detecting polarity reversal signal on the FXO port per second (n=2~10)

#### 4.7.9 GSM network configuration

Command code	Function
*	Activate
**	Register and activate
*#	Status check
#	Disable
##	Un-registered and disabled

Abbreviation	Meanings	Value
DN	Dialing number (number)	String of digits 0~9
BS	Voice (wave)	11
	FAX	13
	SMS (short message service)	16
	SMS+FAX	12
	Data circuit asynchrony	25
	Data circuit synchron	24
	Dedicated PAD access	27
	Dedicated Packet access	26
	Data circuit asynchron+PAD	21
	Data circuit synchron+Packet	22
	Data circuit asynchrony +Synchron+Packet+PDA	20
	All Services	--
T	Time in seconds	

1. GSM divert always  
Command: (\*|#|\*#|\*\*|##) 21\*DN\*BS#  
Description: GSM diversion always
  
2. GSM diverting on busy  
Command: (\*|#|\*#|\*\*|##) 67\*DN\*BS#  
Description: GSM diverting on busy
  
3. GSM diverting No Reply  
Command: (\*|#|\*#|\*\*|##) 61\*DN\*BS#  
Description: GSM divert when no one reply
  
4. GSM diverting No Signal

Command: (\*|#|\*#|\*\*|##) 62\*DN\*BS#

Description: GSM divert if there is no signal in service area

5. GSM diverting all calls

Command: (\*|#|\*#|\*\*|##) 002\*DN\*BS#

Description: GSM diverting all calls

6. GSM diverting All Conditions

Command: (\*|#|\*#|\*\*|##) 004\*DN\*BS#

Description: GSM diverting call under all conditions

7. GSM outgoing call limited

Command: (\*|#|\*#) 33\*PW\*BS#

Description: GSM outgoing calls are limited

8. GSM international call restricted

Command: (\*|#|\*#) 331\*PW\*BS#

Description: GSM restricts the outgoing international call

9. GSM international call restriction except in the homeland

Command: (\*|#|\*#) 332\*PW\*BS#

Description: GSM restricts all the international call except in the homeland

10. GSM all incoming call restriction

Command: (\*|#|\*#) 35\*PW\*BS#

Description: GSM restricts all the incoming call



11. GSM all incoming call restriction roaming

Command: (\*|#|\*#) 351\*PW\*BS#

Description: GSM restricts all incoming call during roaming

12. GSM enables/disables call waiting

Command: (\*, #, \*#43#)

Description: GSM enables/disables call waiting function

## 5 Frequently Asked Questions

*Q: How long do I wait till I am able to make a phone call or fax?*

*A: It takes 30 seconds for start-up. System goes into normal operation after LCD and indicators showing “CEL1”.*

*Q: What will happen if I make a wrong connection to phone socket and External line socket?*

*A: No mistake is allowed for connections of phone socket (for the connection of telephone set or fax machine) and External line socket (TRUNK, for PSTN line). Wrong connection may cause system failure and even burns down hardware chips seriously.*

*Q: Why does the device always send the FAX as a voice outgoing call?*

*A: Some outdated FAX machine cannot send the identification tone, the user must add the “\*01\*” before the number to prompt the system that this call is a FAX call (Such as \*01\*Number).*

*Q: Why does the device always make the voice outgoing call when user makes the data call?*

*A: Some outdated Modem cannot send the CNG identification tone, so the user should add the “\*02\*” before the number to prompt the system that this call is Data call (Such as \*020\*Number).*

*Q: Is it possible to transmit fax via GSM by any SIM card?*

A: Before using GSM fax function, the user makes sure that:

- (a) For sending faxes, ensure SIM card data transmission service is available (GSM network support is required)
- (b) For receiving faxes, ensure SIM card fax receiving service is available. (GSM network support is required; usually this function needs dual number with one SIM card – one voice number and one fax number. For fax receiving, only fax number is used. Voice number is not used for fax receiving.)

*Q: What type of fax machine do I need to use?*

A: Any G3 standard fax machine with AUTO mode available is OK.

*Q: When I use GSM fax, is it possible to fax like desktop fax machine, i.e. make a phone call before sending faxes?*

A: Not possible. This terminal does not support GSM voice/ fax switching function. This function requires GSM/GPRS network supporting TS61 (allowing user to make phone call while faxing). So, when sending faxes, please press down Start key immediately after completing your number; when receiving faxes, please set fax machine to Auto mode.