BESTip ATA GSM

VoIP Gateway

User Manual

Projectek Networking Electronics Corp.

Mar. 2009

Copyright Notice

Projectek Networking Electronics Corp.

5F-9, No. 16, Lane 609, Sec. 5, Chung Hsin Road,

San Chung, Taipei Hsien, Taiwan, R.O.C.

TEL: (886) 2-2278-7067   Fax: (886) 2-2278-7094

Technical Support:

http://www.iptelcom.com.tw

Please fill in the following ID no. which you can find it on the bottom of your BESTip ATA GSM. You may need it in the future.

Purchase Date: (1 year warranty)

ID no:

Model no:

Distributor:

Table of Contents

Chapter 1: Overview

Congratulations on your purchase of the BESTip! With the BESTip, you will capture the power of the Internet by using your existing LAN network to communicate over the Internet, worldwide, free of long distance charges. The BESTip allows you to take advantage of the vast reach and cost reduction of the Internet for voice communication.

Lower Communication Charges

Reduced monthly phone charges are a big advantage of converging voice calls with the existing data network. BESTip can eliminate traditional circuit-switched networks, and save your company substantial amounts in long-distance charges. A BESTip network can quickly return your investment and begin paying you back.

For example, companies with overseas branches stand to reap the biggest rewards by eliminating international long-distance charges. A company with the headquater and branch located in Taipei and Los Angles could route calls to and from each office over the network, and thus a major portion of long-distance charges could be reduced.

Reduced Cost of Ownership

The lower cost associated with BESTip devices is not just to lower monthly fees. BESTip also reduces the amount of hardware needed (infrastructure overhead) by both converging voice and data networks. With BESTip, you do not need to replace your existing network connections, routers or phone systems. The BESTip is helping to drive down the total cost of business communications.

Supporting multiple telephony interfaces

BESTip ATA GSM supports 1 GSM port and the application is just like FXO port but with wireless GSM instead. With Ethernet interface for connecting to a home or office Local Area Network.

Integrating GSM and Ethernet interfaces in a single box, BESTip ATA GSM provides the users reliable and high quality voice communications only at a lower cost while compared to using PSTN.

Simplicity

A single unit of device supports both voice and data communications. With BESTip, you avoid the expense of replacing your existing network connections, routers or phone systems required by other VOIP solutions.

Simply plug your BESTip into the Ethernet network. Minimum requirements:

• Ethernet network

• LAN connection

• IP addresses

User Friendly

The BESTip ATA GSM is a standalone device, and possesses its own processor and network interface. You can easily install your BESTip device for its software and configuration can be managed easily and securely. Just enter the IP addresses into your BESTip with your phone keypads, dial the recipient's number on the telephone set, and you are ready to talk via Internet. In fact, placing calls with the BESTip is like using your existing phone system. All of the communication cost will be eliminated except a local Internet connection charge.

This manual gives you easy-to-follow instructions for installing and using the BESTip ATA GSM.

For further details on these applications, please refer to www.iptelcom.com.tw

Physical Description

This section provides physical description of BESTip ATA GSM.

Front Panel

There are five buttons on the front panel for quick and easy configuration.

LCD Display

Green LED Power Signal

Blue LED On-Line Signal

UP Button

DOWN Button

OK Button

NEXT Button

BACK Button

Rear Panel

There are four connectors on the rear panel to connect to the related equipments. The description is listed below (left to right).

DC 12V   SIM Card   LAN   ANT.

DC 12V	DC Adapter Connector: connects to the 12V DC power adapter.
SIM Card	Connector for a GSM 900/1800 MHz Dual Band SIM Card
LAN	RJ-45 Connector: cables to your IP network.
ANT.	Antenna Connector for receiving the signal of GSM SIM Card

Chapter 2: Installation

This chapter will describe how to connect your BESTip ATA GSM.

Package Contents

The package of the BESTip includes the following:

- A BESTip ATA GSM
- A DC power adapter
- A GSM SIM Card (900/1800 MHz Dual Band)
- A RJ-45 network cable
- An Antenna

Requirements to Use BESTip

Before making an Internet call with your BESTip, you also need the following items:

- A GSM SIM Card
- An 110/220V electrical outlet
- An active Internet connection (ADSL, Cable or others): The following parameters must be known about the network (LAN, WAN, Internet, etc.) to which the BSETip will connect.

|	
IP Address for BESTip	
Gateway IP Address	
IP Netmask	
DNS (Domain Name Server) IP Address	

Note: Write down the values for these IP parameters. You may need to enter these values in the following chapter.

Physical Installation

Follow the instructions for correct connection:

1. Connect the antenna and Insert the GSM SIM Card to the connector on the back of BESTip ATA GSM.

2. Connect the provided network cable into the LAN port of BESTip ATA GSM. Connect the other end of the cable to your network eg. a router, hub or an ADSL modem.

3. Attach the DC power adapter cord into the DC 12V connector of BESTip ATA GSM and a live power outlet.

Hookup for BESTip ATA GSM
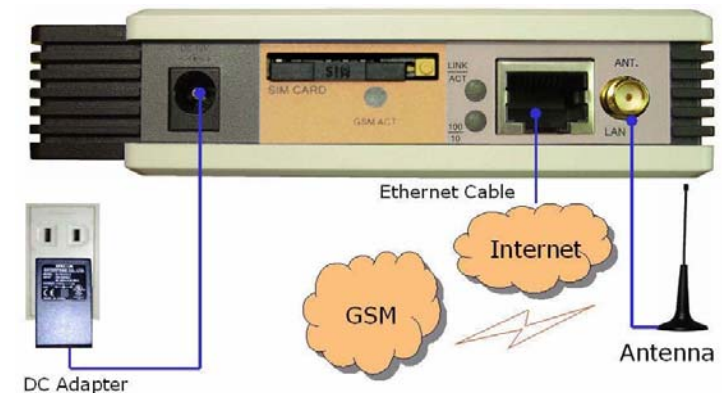
Note: A crossover network cable may be required when connecting to ADSL Modem.

Chapter 3: Setup

After connection, follow the easy instructions to setup the BESTip ATA GSM. You can establish your setup or modify it at any time by launching the BESTip.

Make sure the BESTip is well connected and you must allow the BESTip to finish booting before you enter the setup mode.

Entering Setup Mode

1. After switching on, the BESTip will start self-testing, and the LCD screen will display as shown right.	INITIALIZE _
2. After finishing initializing, the system will start up DSP.	Start Up DSP OK
3. For the first time, the LCD will display **Enter Setup Mode - Push Down=Yes**. Press ▼ DOWN button on the front panel to enter setup mode.	Enter Setup Mode Push DOWN = Yes

Note: At the BESTip finishes booting, you can always use ► NEXT or ◄ BACK buttons to scroll the menu and press ▼ DOWN button to enter the current menu.

1. You can press "DOWN" button at standby status to enter main menu.

Press "Down" button to enter main menu.

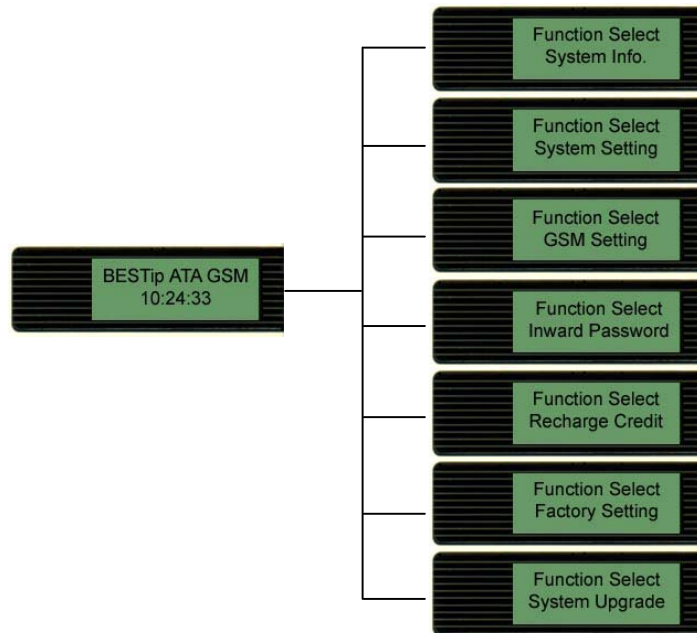2. Then, you can press "NEXT" or "BACK" button to scroll the menu.

Press "NEXT" button to scroll the menu.

Press "BACK" button to scroll the menu.

3. There are seven options in the **Function Select** menu. The options will be described in the following sections.

4. You can press "UP" button to return to standby status.

Press "UP" button to return to standby status.

Using Buttons to Setup BESTip

You can use the buttons on the front panel of the BESTip and your telephone keypads to setup the BESTip. The functions of five buttons on BESTip are described below.

1. Suppose now you want to input the "Country Code" option under "System Setting" menu. Firstly, press "DOWN" button to enter "Function Select" menu.

Press "DOWN" button at standby status to enter "Function Select" menu.

2. Press "NEXT" or "BACK" button to select "System Setting" menu.

Press "NEXT" or "BACK" button to scroll the menu.

3. Press "DOWN" button to enter "System Setting" menu.

Function Select
System Setting

Press "DOWN" button to enter the menu.

4. Keep pressing "DOWN" button until you see "Country Code" option.

Country Code
_

Keep pressing "DOWN" button until you see "Country Code" option.

5. To input "Country Code", press "OK" firstly and the title will start flashing. Then you are able to input data.

Country Code
_

The title will start flashing

Press "OK" button to start to input data.

15

---

6. You can press "UP" or "DOWN" button to input data, please see the **Data Input Sequence** below. You can use "NEXT" or "BACK" button to select and erase the value.

(in the forward sequence) 1 2 3 4 5 6 7 8 9 0 . , @ _ % & = a A b B c C d D e E f F g G h H i I j J l L m M n N o O p P q Q r R s S t T u U v V w W x X y Y z Z (in the backward sequence)

Country Code
886

The title is still flashing

Press "UP" or "DOWN" button to input the data.

Press "NEXT" or "BACK" button to select and erase the value.

7. After entering the value, press "OK" button again and the title will stop flashing. The new value has been stored in memory temporarily. You may go to the next setting.

Country Code
886

The title will stop flashing

Press "OK" button again to stop inputting data and save the value temporarily.

16

8. After finishing all the settings, please press "UP" button one or two times until the screen displays "Update Setup" as following picture. All the setting will be saved permanently.
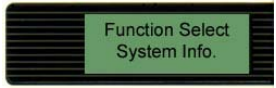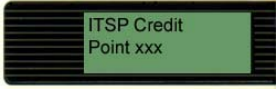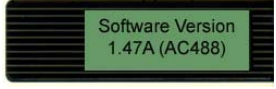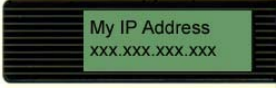

Press "UP" button 1 or 2 times until the screen displays "Update Setup".

9. It will return to standby status automatically after the configuration data has been saved. Please refer to the following chapters to setup your BESTip ATA GSM.
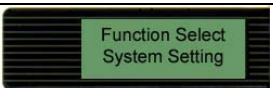
Function Select－System Info

You can always get the system information for your BESTip from the **System Info** menu.

1. Press ▼ DOWN button to enter the **Function Select** Mode. Press ▼ DOWN button to enter **System Info**.	Function Select System Info.
2. Device ID: Each BESTip device has an unique 8 digit ID#. It is the number for other BESTip users to reach you over Internet. So, you need to inform all of your friends or group who use BESTip products the 8-digit ID# to call you over BESTip.	Device ID 69000000
3. ITSP Credit: It will display the balance in your device account.	ITSP Credit Point xxx
4. Software Version:It will display the current software version of your BESTip.	Software Version 1.47A (AC488)
5. LAN MAC Address: It will display the physical internet address which your BESTip is conntected.	LAN MAC Address xxx.xxx.xxx.xxx
6. My IP Address: It will display the IP address assigned to your BESTip.	My IP Address xxx.xxx.xxx.xxx
7. NETMASK Address: It will display the Netmask IP address.	NETMASK Address xxx.xxx.xxx.xxx

8. ROUTER Adress: It will display the Router/ Gateway IP address.	ROUTER Address xxx.xxx.xxx.xxx
9. Primary DNS Address: It will display the primary DNS address.	Primary DNS Addr. xxx.xxx.xxx.xxx
10. Secondary DNS Address: It will display the secondary DNS address.	Secondary DNS Ad xxx.xxx.xxx.xxx
11. Gatekeeper Type: It will display the gatekeeper the device is registered.	Gatekeeper Type

Function Select－System Setting

You can establish your setup or modify for your BESTip from the **System Setting** menu at any time.
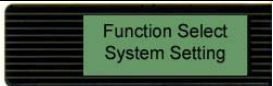
1. Press ▼ DOWN button to enter the **Function Select** Mode.	Function Select System Info.
2. Press ► NEXT or ◄ BACK button to scroll the main menu till it appears **Function Select - System Setting**. And then press to enter the option.	Function Select System Setting
3. There are three options in the **System Setting** menu: for **IP Policy – DHCP**, **IP Policy – Static IP** and **IP Policy – ADSL PPPoE**. Just choose and configure the one to which network the BESTip is connected.	
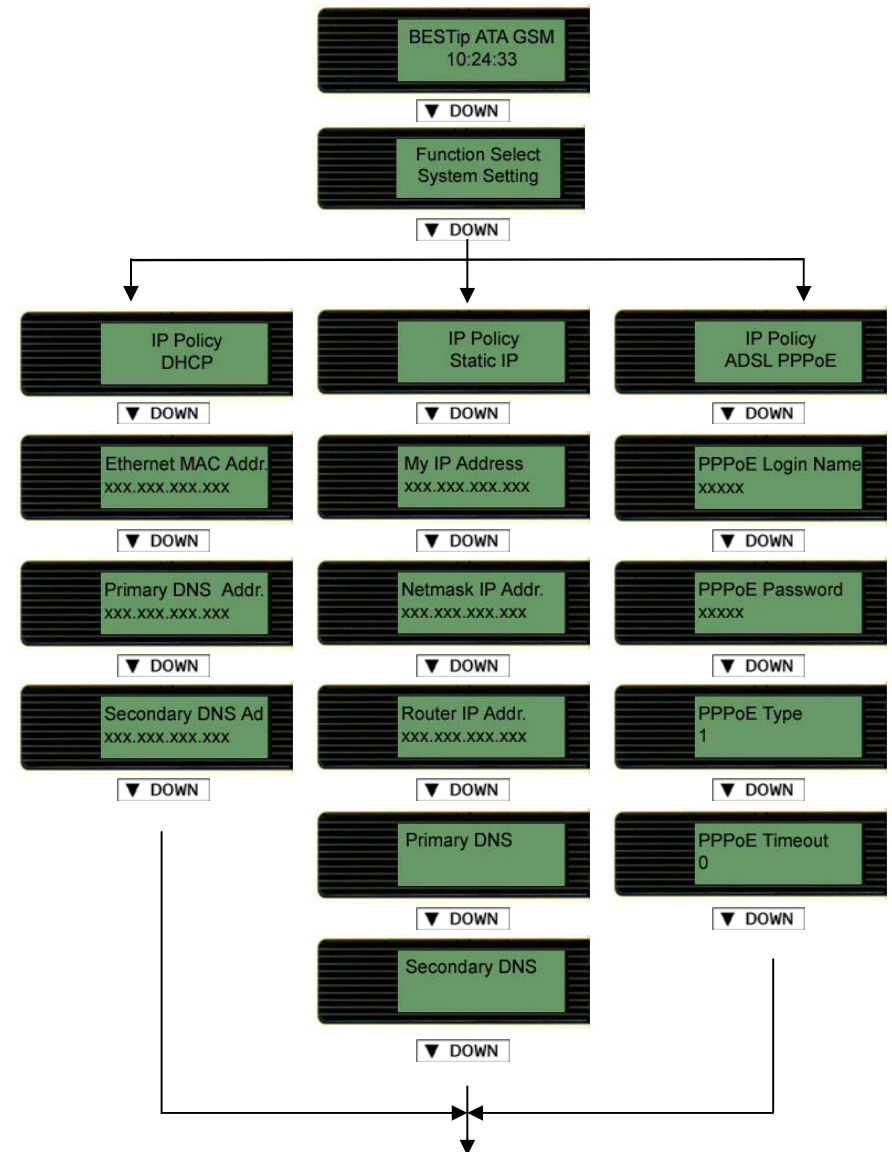
For the following setup, please consult "Other Common Setup" in this chapter.

IP Policy－DHCP

DHCP: Dynamic Host Configuration Protocol is a method for assigning IP address and other IP parameters to computers on the IP network in a single message with great flexibility. IP addresses can be static or temporary depending on the needs of the network.
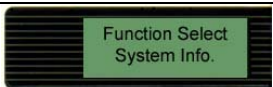
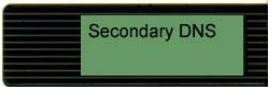|	
1. Press ▼ DOWN button to enter the **Function Select** Mode.	Function Select System Info.
2. Press ► NEXT or ◄ BACK button to scroll the main menu till it appears **Function Select - System Setting**. And then press ▼ DOWN to enter the option.	Function Select System Setting
3. Press ► NEXT or ◄ BACK button to scroll the menu till it appears **IP Policy - DHCP**. Then press ▼ DOWN to enter the option.	IP Policy DHCP
4. Press ▼ DOWN to go to the next option, and you do not need to configure the information.	Ethernet MAC Addr. xxx.xxx.xxx.xxx
Please jump to the section "Other Common Setup" in this Chapter for further instructions.	

IP Policy－Static IP
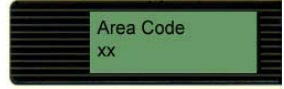
If you select Static IP mode, please consult your ISP or MIS to have the information listed below. Please use the keypad on your phone or the buttons on BESTip to input the information obtained.

1. Press ▼ DOWN button to enter the **Function Select** Mode.	Function Select System Info.
2. Press ► NEXT or ◄ BACK button to scroll the main menu till it appears **Function Select - System Setting**. And then press ▼ DOWN to enter the option.	Function Select System Setting
3. Press ► NEXT or ◄ BACK button to scroll the menu till it appears **IP Policy – STATIC IP**. And then press ▼ DOWN to enter the option.	IP Policy Static IP
4. My IP Address: The unique LAN IP address assigned to the BSETip.	My IP Address xxx.xxx.xxx.xxx
5. NETMASK Address: Please enter netmask, normally it is 255.255.255.xxx.	NETMASK Address xxx.xxx.xxx.xxx
6. Router Address: The IP address of the router/gateway device that connects your BESTip to the Internet.	ROUTER Address xxx.xxx.xxx.xxx
7. Primary DNS : Enter the IP address of the Domain Name Server.	Primary DNS
8. Secondary DNS: Secondary DNS is optional. You may leave it blank.	Secondary DNS
Afeter finishing the setup, please jump to the section "Other Common Setup" in this Chapter for further instructions.	

IP Policy－ADSL PPPoE

1. Press ▼ DOWN button to enter the **Function Select** Mode.	Function Select System Info.
2. Press ► NEXT or ◄ BACK button to scroll the main menu till it appears **Function Select - System Setting**. And then press ▼ DOWN to enter the option.	Function Select System Setting
3. Press ► NEXT or ◄ BACK button to scroll the menu till it appears **IP Addr. Policy - ADSL PPPoE**. And then press ▼ DOWN to enter the option.	IP Policy ADSL PPPoE
4. PPPoE Login Name: Enter the login name provided by your ISP.	PPPoE Login Name xxxxx
5. PPPoE Password: Enter the password provided by your ISP.	PPPoE Password xxxxx
6. PPPoE Type: There are two types you can select: Type 1 or Type 2. Normally set to 1.	PPPoE Type 1
7. PPPoE Timeout: Set the PPPoE timeout by minutes. "0" means always on-line.	PPPoE Timeout 0
After finishing the setup, please jump to the section "Other Common Setup" in this Chapter for further instructions.	

Other Common Setup

After selecting and configuring the **IP Policy**, you need to continue to set the following parameters. Remember to press ▼ DOWN button to effect the setting and go to the next option.

1. Station ID: The default value is 1. The configuration is needed to be changed only when you connect more than one BESTip devices at NAT router. You must set these BSETip devices with different Station ID.	Station ID 1
2. Gatekeeper: There are four options you can select:AUTO, Type 1, Type 2 and OFF. "Auto" is applicable most of the time. Select OFF only if your BESTip is connected in a private network.	Gatekeeper Type AUTO
3. Country Code: Please key in your country's telephone Country Code. For example, "1" for USA, "44" for U.K.	Country Code xx
4. Area Code: Please key in your state/city telephone Area Code.	Area Code xx
5. IDD Prefix: Please key in the International Direct Dial prefix code. "00" in most cases.	IDD Prefix 00

6. 2nd IDD Prefix: Please key in the second International Direct Dial code. This option is needed for some Caribbean Sea countries. Keep this option blank if it is not the case.	2nd IDD Prefix
7. DDD Prefix: Please key in the Domestic Direct Dial prefix code. "0" in most cases.	DDD Prefix 0
8. Mobile Pincode: Turn it on unless you have applied for business use. See "Mobile Pincode" in this chapter.	Mobile Pincode OFF
9. Play Volume: The default value is 0dB. You can set from -31dB to 31dB. 0 dB is suitable for most cases. Please don't make it too big or too small.	Play Volume 0 dB
10. Record Volume: The default value is 0dB. You can select from -31dB to 31dB. 0 dB is suitable for most cases. Please don't make it too big or too small.	Record Volume 0 dB
11. Show CDR: Turn it on and CDR will show on the display after call finished.	Show CDR OFF
12. LCD Contrast: The default value is 0. The adjustable range is from +5~-10.	LCD Contrast 0
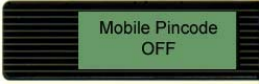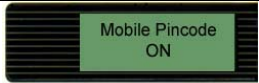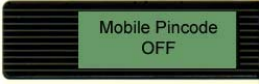
13. Network Testing: Normally set to "OFF". You can turn on to test your network.	Network Testing OFF
14. Press ▲ UP button to save configuration data in memory	Update Setup Please Wait...
15. It will return to standby state again after updated. Please restart the device to make setup changes effective.	BESTip ATA GSM 10:24:33

Mobile Pincode

"Mobile Pincode" function is applied for business purpose. Customer can buy "Mobile Pincode Card " from our authorized agent and "Mobile Pincode Card" is just like so-called "Pre-Paid Calling Card". The card can be used on any BESTip devices anywhere and credits consumed is deducted from the card. The device is simply a tool for calling out. Please contact our agent for further information about "Mobile Pincode Card".

Mobile Pincode Setting

1. Press ▼ DOWN button to enter the **Function Select** Mode.	Function Select System Info.
2. Press ► NEXT or ◄ BACK button to scroll the main menu till it appears **Function Select - System Setting**. And then press ▼ DOWN to enter the option.	Function Select System Setting

3. Keep pressing ▼ DOWN until you see Mobile Pincode.	Mobile Pincode OFF
4. There are 2 options for Mobile Pincode Application: **ON or OFF**	Mobile Pincode ON Mobile Pincode OFF
5. Press ▲ UP button to save configuration data in memory	Update Setup Please Wait...

For mobile pincode usage, caller will hear "beep-beep" tone when the ATA GSM answers in-coming call. It requests caller to enter mobile pincode number.

Please dial " **#11*pincode#** " to sign in. If the pincode is good, the caller will hear dial-tone, so caller can dial international number as usual.

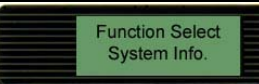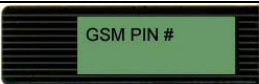Caller can make multiple calls one after one, just press " **###** " quickly to end the current call, then dial-tone will come out to notify that the device is ready to accept next call.

For sign out after last call, please dial **" #22# "** or just hang-up the call, it will sign out automatically after 8 seconds for ATA GSM.

Function Select－GSM Setting
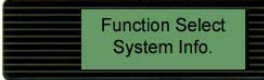
This section will show you the steps to help you setup the GSM Setting of your BESTip ATA GSM.

1. Press ▼ DOWN button to enter the **Function Select** Mode.	Function Select System Info.

2. Press ► NEXT or ◄ BACK button to scroll the main menu till it appears **Function Select - GSM Setting**. And then press ▼ DOWN to enter the option.	Function Select GSM Setting
3. Press ▼ DOWN to enter **GSM Pincode #.** Enter the GSM PIN # to activate the SIM card.	GSM PIN #
4. Press ▼ DOWN to enter **Outward Password.** Enter the password for calling out.	Outward Password
5. Press ▼ DOWN to enter **Termination GW.** Normally set to "OFF".	Termination GW OFF
6. Press ▼ DOWN to enter **GSM Callback.** Normally set to "OFF".	GSM Callback OFF
7. Press ▲ UP to enter **Hotlin.** Normally set to "OFF". If you turn hotline function, please be advised this function should be collocated with the setup on ITSP platform. Please contact our local dealer for setup hotline function.	Hot Line OFF

Function Select－Inward Password

It is recommended of setting **inward password** in case that unauthorized person steals the lines. However in some regions and PBX systems, there exists different tone mode. Please consult your retailer for further information.

1. Press ▼ DOWN button to enter the **Function Select** Mode.	Function Select System Info.
2. Press ► NEXT or ◄ BACK button to scroll the main menu till it appears **Function Select – Inward Password**. And then press ▼ DOWN to enter the option.	Function Select Inward Password
3. There are four options of **Inward Password** menu: **New, Modify, Erase** and **Application**.	

Inward Password－New

1. Press ► NEXT or ◄ BACK button to scroll the **Inward Password** menu till it appears **Inward Password – New.** And then press ▼ DOWN to enter the option.	Inward Password New
2. Pick up your handset. Key in the password using the character converter chart stated prior in this chapter. Press ▼ DOWN to save.	Password _
3. Press ► NEXT or ◄ BACK button to selcet the password ranking among **High, Medium** and **Low**. Press ▼ DOWN to save and back to the upper menu.	Rank High

Inward Password－Modify

1. Press ► NEXT or ◄ BACK button to scroll the **Inward Password** menu till it appears **Inward Password – Modify.** And then press ▼ DOWN to enter the option.	Inward Password Modify

2. Press ► NEXT or ◄ BACK buttons to find the number to modify. And then press ▼ DOWN to confirm.	Modify Password _
3.Press ▼ DOWN to confirm the password.	Password _
4. Press ► NEXT or ◄ BACK buttons to modify the password ranking among **High, Medium** and **Low**. Press ▼ DOWN to save and back to the upper menu.	Rank High

Inward Password－Erase

1. Press ► NEXT or ◄ BACK button to scroll the **Inward Password** menu till it appears **Inward Password – Erase.** And then press ▼ DOWN to enter the option.	Inward Password Erase
2. Press ▼ DOWN to confirm to erase the password and back to the upper menu.	Erase Password _

Inward Password－Application

1. Press ► NEXT or ◄ BACK button to scroll the **Inward Password** menu till it appears **Inward Password – Application.** Then press ▼ DOWN to enter the option.	Inward Password Application

2. Press ▶ NEXT or ◀ BACK buttons to scroll the options.There are four options to select: **Enabled & Disable.** Press ▼ DOWN to confirm your target option and back to the upper menu.	Application Enable Application Disable
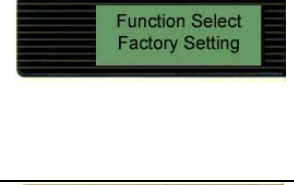
Function Select－Recharge Credit

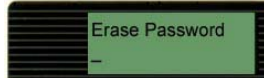|	
1. Press ▼ DOWN button to enter the **Function Select** Mode.	Function Select System Info.
2. Press ▶ NEXT or ◀ BACK button to scroll the main menu till it appears **Function Select – Recharge Credit**. And then press ▼ DOWN to enter the option.	Function Select Recharge Credit
3. Press ▼ DOWN to start recharging credit.	Recharge Credit GO ?
4. Enter Card #: Press ● OK one time, the title will start flashing and enter the card #. Press ● OK button again. The title will stop flashing and save the card #.	Enter Card # _
5. Enter PINCIDE Press ● OK one time, the title will start flashing and enter the card #. Press ● OK button again. The title will stop flashing. The new value will be stored temporarily.	Enter PINCODE _

6. Press ▼ DOWN button to confirm. Start Recharge will shows. The process will take a few minutes.	Start Recharge Please Wait_
7. When recharge finished, the total amount will be shown on the display.	New Credit XXX Points

Function Select－Factory Setting

BESTip has the auto-recovery capability. Just follow the steps below to restore the factory settings.

Note: Before proceeding to restoring, be sure that your BESTip is connected to the Internet.

1. Press ▼ DOWN button to enter the **Function Select** mode.	Function Select System Info.
2. Press ▶ NEXT or ◀ BACK button to scroll the main menu till it appears **Function Select - Factory Setting**. And then press ▼ DOWN to enter the option.	Function Select Factory Setting
3. There are one option of **Factory Setting**: **CLEAR SYS SETUP.** Press ▼ DOWN to start the process.	Factory Setting CLEAR SYS SETUP?
4. Press ● OK to to clear device setup.	Factory Setting ARE YOU SURE?

Function Select－System Upgrade

To ensure the users to always have the latest Internet telephony technologies, the BESTip has the online upgrade feature.

You can upgrade your BESTip whenever a new software version becomes available. Upgrades can enhance the performance and add more features to your BESTip.

Note: Before proceeding to upgrade, be sure that your BESTip is connected to the Internet.

To upgrade your BESTip with the newest software version, follow the followign instructions. The upgrade process will only take about 3~5 minutes depending on the Internet traffic.

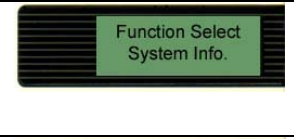|	
1. Press ▼ DOWN button to enter the **Function Select** Mode.	Function Select System Info.
2. Press ► NEXT or ◄ BACK button to scroll the main menu till it appears **Function Select - System Upgrade**. And then press ▼ DOWN to enter the option.	Function Select System Upgrade
3. Press ● OK to start the upgrading process.	Software Upgrade GO ?
4. BESTip will proceed to connect to the download Server and the screen will show the downloading process.	Downloading S-1 >>>>>>>>>>>>_
5. It will take about 3~5 minutes to finish downloading depending on the network traffic. If the new software version is downloaded successfully, BESTip will reboot itself automatically.	SYSTEM RESTART _
Please do not power off the device any time during software upgrade is in progress, otherwise the device may not boot properly.	

Chapter 4: To Make an Internet Call

After having finished the setup in Chapter 3, you are ready to operate your BESTip. Refer to the illustration below to connect your BESTip with other devices.

Over Internet or TCP/IP networks, BESTip provides two modes of voice communication: BESTip-to-BESTip and BESTip-to-Phone modes. It allows BESTip users to save greatly on long-distance and international call charges.

Hookup for BESTip ATA GSM

Testing Before Making a Call

After finishing the connection and configuration of your BESTip, be sure the BESTip is turned on and well connected. You must allow the BESTip to finish booting before operating.

1. BESTip will start self-testing, and the LCD screen will display as shown right.	INITIALIZE _

2. Once the system testing finishes, the screen will display the local time according to the country code you set and Blue LED On-Line signal will be on.	BESTip ATA GSM 10:24:33
3. You can press ▲ UP to see the balance and the message "Ready for Dial" will be shown on the display as well.	Point xxx Ready for Dial
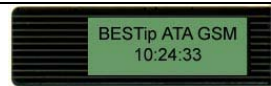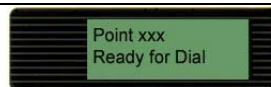
Note: The LCD screen will show the current time of your country according to the country code pre-configured. If the time displayed is counted from 00:00:00, it means your BESTip is not successfully registered to the Gatekeeper and your network connection or configuration might be incorrect. Please refer to "Chapter 3: Setup**"** in this manual for network configuration.

If you see the **DNS Lookup Fail** flashing, it means your BESTip has not successfully connected to the Internet. Please also refer to "Chapter 3: Setup**"** in this manual to configure your network.

How To Make Calls Through BESTip ATA GSM

1. Please follow the dialing sequence below for calling any real phone number through ATA-GSM from the other BESTip device.

[ATA GSM device ID#] + ＊ + [Phone Number] #

Suppose your ATA-GSM device ID# is 69000123#, so someone can dial from his BESTip device by dialing "**69000123＊12345678#**" to ring someone's mobile phone.

2. With Internet Telephony Service Provider (ITSP) service function ready, BESTip is able to call any real telephone around the world. You need to have an active ITSP account to make BESTip-to-Phone call. Please contact our local distributor to recharge your device account.

Suppose you want to call to other BESTip device or international number through your ATA-GSM.

2.1 Please call the SIM card number you put in your ATA-GSM device by using land line or mobile phone.

2.2 The ATA-GSM device will answer the call and give dial tone (if you don't set up the inward passwords). Then, you can dial the other BESTip ID number or international number.

For Other BESTip Device

Dial the eight-digit device ID number

For Domestic Long-Distance Calls

[DDD prefix code] + [Area code + Telephone number] + #

For International Calls

[IDD prefix code] + [Country code + Area code + Telephone number] + #

Note: Every BESTip has a unique eight-digit ID number found at the bottom of the device.

Appendix A: Specifications

Interface

Phone Interface	SMA Antenna connector
	GSM 900/1800 MHz Dual Band (can support 850/1900 MHz and CDMA per request)
SIM Card Interface	SIM Card Slot at rear panel
Network Interface	RJ45 port, 10/100M Ethernet
	2LED, 100/10 and LINK/ACT
Display	16x2 lines LCD display
	2 LED POWER and ON LINE
Switch button	5 buttons

Voice Codec

Channel Capability	1 Channels
Voice Codecs	G.723.1 6.3 Kbps,
Silence Compression VAD/CNG	G.723.1 Annex A
Echo Canceller	G.168-2000 Compliant
Signaling	DTMF(TIA464B),
	Call progress and user defined tone pairs
Input/output Gain	Programmable

Software/ Hardware

CPU	Embedded High Perfrmance 100MHz 16-bit CPU
Memory	8Mb FLASH ROM, 16Mb SDRAM,
DSP Chip Set	High Quality/Performance DSP for Voice Compression
Front Control Panel	16 characters x 2 Lines LCD, 5 Push Button Switches
Operating System	Embedded Real-Time Operating System
Networking Protocol	IP, TCP, UDP, DHCP, PPPoE, PAP, CHAP, DNS
Front Panel Self-Configuration function	Configure BESTip ATA GSM through front panel. No additional software or hardware required
Voice Over IP Gateway Protocol	BESTip Gateway Protocols Only 10k bps abndwidth is required when using G.723.1 6.3K codec

Physical

Power	12VDC, 1.25A External Power Supply
Environmental	Operational : 0 to 45°C, Storage : -10 to 70°C Humidity: 10 to 90% non-condensing
Dimensions	128 x 88 x 27 mm (W/D/H)
Weight	300 g Approx.

Note: Specifications may subject to change without prior notice.