



BESTip ATA Combo

VoIP Gateway

User Manual



Projectek Networking Electronics Corp.
Mar. 2009

BESTip ATA Combo User Manual

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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: BESTip #: 800123#
<http://www.iptelcom.com.tw>

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

Purchase Date: _____(1 year warranty)

ID no: _____

Model no: _____

Distributor: _____

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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

Reducing monthly phone charges is 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 headquarter and branch located in Taipei and Los Angeles 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

The BESTip ATA Combo supports 1 analog FXS port for connecting to an existing analog telephone or other analog terminal and an Ethernet & Dial-up interface for connecting to a home or office Local Area Network.

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

Simplicity

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 Combo 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 configuration 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 Combo.

For further details on these applications, please consult our website www.ipstelcom.com.tw

Physical Description

This section provides physical description of BESTip ATA Combo.

Front Panel

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



Rear Panel

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



DC 12V PHONE LINE LAN

DC 12V	DC Adapter Connector: connects to the 12V DC power adapter.
Phone	RJ-11 Connector: FXS interface for connecting to an analog phone set or C.O. port of PBX.
Line	RJ-11 Connector: connects to the wall phone jack.
LAN	RJ-45 Connector: cables to your IP network.

Chapter 2: Installation

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

Package Contents

The package of the BESTip includes the following:

- A BESTip ATA Combo
- A DC power adapter
- Two RJ11 phone cord
- A RJ45 network cable

Requirements to Use the BESTip

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

- 1 touch-tone phone sets
- A 110/220V electrical outlet
- A valid Internet account (Dial-Up)
- A valid Internet connection (ADSL, Cable or others):

The following parameters about the network (LAN, WAN, Internet, etc.) to which the BESTip will be connected must be known if Static IP mode will be used.

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

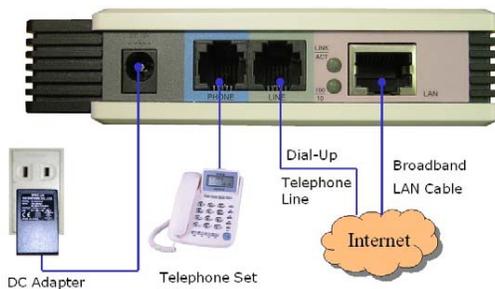
Note: Write down the values for these IP parameters. You may need to enter these values in the following chapter.

Physical Installation

Follow the instructions for correct connection:

1. Connect one end of an RJ-11 phone cord to the **Phone** connector on the back of BESTip ATA Combo. Connect the other end to the analog phone sets or C.O ports of the PBX.
2. Connect the provided network cable into the **LAN** port of BESTip ATA Combo. 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 power connector of BESTip ATA Combo and a live power outlet.

Hookup for BESTip ATA Combo



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 Combo. You can establish your setup or modify it at any time by launching the BESTip.

Be sure the BESTip is well-connected and connect the power adaptor. You must allow the BESTip to finish booting before you enter the setup mode.

Entering Setup Mode

1. After turned on, the BESTip will start self-testing, and the LCD screen will display as shown right.	
2. After system finishing initializing, the system will start up DSP.	
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.	

Note: When 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.

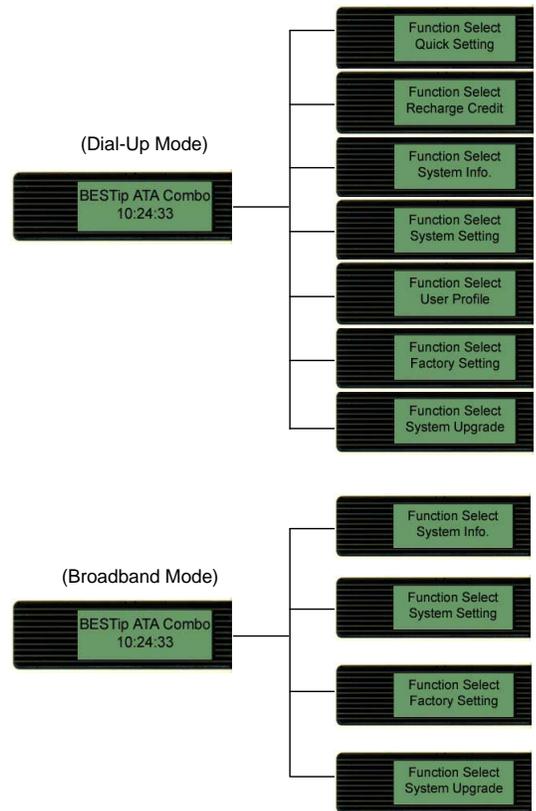


Press "NEXT" button to scroll the menu.



Press "BACK" button to scroll the menu.

3. There are different options in the **Function Select** menu for Broad & Dial-up mode. 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 "Quick Setting" menu (Dial-up Mode). 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 "Quick Setting" menu.



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

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



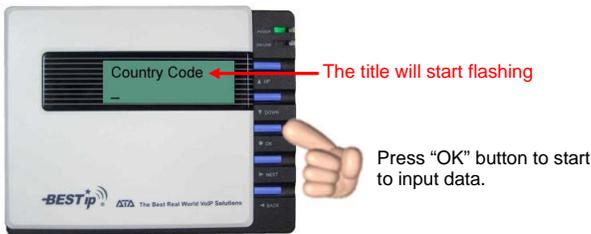
Press "DOWN" button to enter the menu.

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



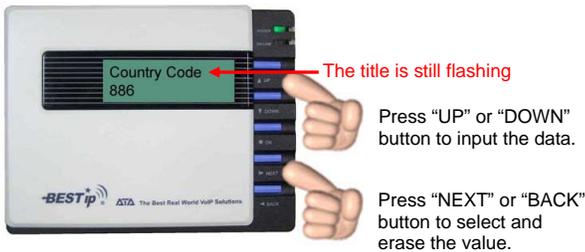
Keep pressing "DOWN" button until you see "Country Code" option.

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



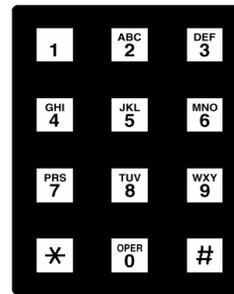
6. You can press "UP" or "DOWN" button to input data, please see the **Data Input Sequence** below. You can use "NEXT" or "BACK" button to select and erase the value.

(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 l j J I 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)



7. You can also use the keypad on the touchtone phone to input the necessary data. **Remember to pick up the phone handset while using the phone keypad to input data.** Please refer to the Typical Phone Keypad and Configuration Sheet below to enter character.

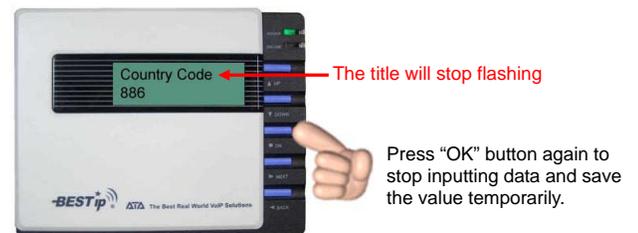
Typical Phone Keypad



Configuration Sheet

KEY PAD	Character Set
1	1 - =!#\$%^&_+!<>?!\
2	2 abcABC
3	3 defDEF
4	4 ghiGHI
5	5 jklJKL
6	6 mnoMNO
7	7 pqrsPQRS
8	8 tuvTUV
9	9 wxyzWXYZ
0	0 .@*space**
*	.
#	#

8. 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.



9. 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".

10. 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 Combo.



Switch Between Broadband and Dial-up Mode

Before configuring your BESTip ATA Combo, you have to switch between broadband or dial-up mode to fit your Internet Connection.

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



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.



3. The first option is "Network Port", it is setup as "Ethernet" for broadband by default.



4. You can changed to "modem" for dial-up connection. Press **● OK** button and then **▶ NEXT** or **◀ BACK** to select between Ethernet or Modem. Press **● OK** again and **▼ DOWN** to next option.



5. Then, press **▲ UP** button to save the new setting in the memory.

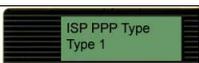
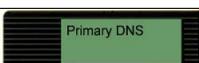


6. Then please reboot the device by unplugging power adaptor at rear panel and plug it again. After the device boots up, please do follow up setting by referring to procedures at next pages.

Note: It is a good practice to restart the device if any setting had been changed.

Function Select – Quick Setting (Dial-Up Mode)

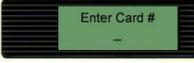
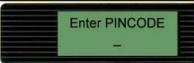
You can always set the data of the device in the **Quick Setting** menu.

1. Press ▼ DOWN to enter the Function Select Mode. Press ▼ DOWN button to enter Quick Setting .	
2. PBX Dial Prefix : Please enter the PABX dial prefix if the ATA is connected to PBX.	
3. ISP Phone : Please enter your ISP phone number.	
4. Login Name : Please enter your login name for dial-up Internet access.	
5. Password : Please enter your login password for dial-up Internet access.	
6. PPP Type : Use ▶ NEXT or ◀ BACK to select the PPP type.	
7. Primary DNS : Set the primary DNS if necessary.	
8. Secondary DNS : Set the secondary DNS if necessary	

9. ISP IdleTimeout : This mode allows auto disconnection from the Internet when no action detected continues a period of time. 0 means always online.	
10. Country Code : Please enter your country code.	
11. Area Code : Please enter your area code.	
12. IDD Prefix : Please enter the International Direct Dial code. "00" for example.	
13. DDD Prefix : Please key in the Domestic Direct Dial code. "0" for example.	
14. Press ▼ DOWN to back to the Quick Setting menu.	
15. Press ▲ UP 1 or 2 times to save configuration data in memory.	
16. The standby screen will show again after the configuration data has been saved.	

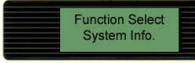
Function Select – Recharge Credit (Dial-Up Mode)

You may top up your ITSP account with recharge card. Please ask local distributor for more detail.

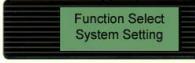
<p>1. Press ▼ DOWN button to enter the Function Select Mode. Press ▶ NEXT or ◀ BACK to scroll the main menu till it appears Recharge Credit.</p>	
<p>2. Press ▼ DOWN to enter Recharge Credit Go? Press ▼ DOWN again to confirm.</p>	
<p>3. BESTip ATA 10D will dial ISP automatically and connect to Internet.</p>	
<p>4. Once Internet Connection is established, then Enter Card # will show. Press ● OK one time, the title will start flashing. Please enter the card number. Press ● OK again, and the title will stop flashing. New value has been stored temporarily.</p>	
<p>5. Press ▼ DOWN to enter Enter PIN-CODE. Follow the same way as in step 4 to enter the code.</p>	
<p>6. Press ▼ DOWN button to confirm. Start Recharge will show on the display. The process will take a few minutes.</p>	
<p>8. When recharge finished, the total amount will be shown on the display.</p>	

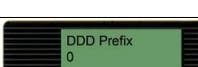
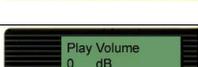
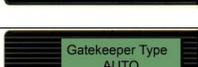
Function Select – System Info (Dial-Up Mode)

You can always consult the system information of your ATA in the **System Info** menu.

<p>1. Press ▼ DOWN to enter the Function Select Mode. Press ▶ NEXT or ▼ DOWN to scroll the main menu till it appears System Info. And then press ◀ BACK to enter the option. There are two options in the System Info menu: Device ID and Software Version.</p>	
<p>2. Device ID: Each ATA unit owns an 7-digits ID number. It is the number for other BESTip users to reach you over Internet. Please inform those who use BESTip product your ID number to call each other.</p>	
<p>3. Software Version: It displays the current firmware version of your device.</p>	

Function Select – System Setting (Dial-Up Mode)

<p>1. Press ▼ DOWN to enter the Function Select Mode. Press ▶ NEXT or ◀ BACK to scroll the main menu till it appears System Setting. And then press ▼ DOWN to enter the option.</p>	
<p>2. Country Code: Please key in the local Country Code.</p>	

3. Area Code: Please enter the local Area Code.	
4. IDD Prefix: Please enter the International Direct Dial code.	
5. 2nd IDD Prefix: Please enter the secondary International Direct Dial code. Leave it blank unless you are in USA.	
6. DDD Prefix: Please key in the Domestic Direct Dial code.	
7. Play Volume: The default value is 0dB. You can adjust from -31dB to 31dB.	
8. Record Volume: The default value is 0dB. You can adjust from -31dB to 31dB.	
9. Gatekeeper Type: "AUTO" for most cases.	
10. Modem Commands: Normally leave it blank.	
11. Modem Country: You can enter the country where the modem is located. "Taiwan" for example.	
12. PPP Echo CTRL: Normally set to "OFF".	

13. Show CDR: CDR will be shown on the display after call finished if you turn it on.	
14. Polarity Reverse: Normally set to "OFF" unless your device is applied for business purpose.	
16. LCD Contrast: The default value is 0dB. You can adjust from +5~-10	

Function Select – User Profile (Dial-Up Mode)

<p>1. Press ▼ DOWN button to enter the Function Select Mode. Press ▶ NEXT or ◀ BACK to scroll the menu till it appears User Profile. Press ▼ DOWN to enter the option.</p>	
<p>2. There are four options in the User Profile menu: New, Modify, Select and Erase.</p>	

User Profile – New

<p>1. Press ▶ NEXT or ◀ BACK to scroll the User Profile menu till it appears New. And then press ▼ DOWN to enter the option.</p>	
<p>2. Pick up your handset. Key in the ISP name using the character converter chart stated prior in this chapter. Press ▼ DOWN to save.</p>	

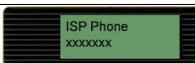
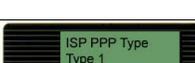
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<p>3. Enter the ISP phone number. Press ▼ DOWN to save.</p>	
<p>4. Enter the login name. Press ▼ DOWN to save.</p>	
<p>5. Enter the login password. Press ▼ DOWN to save.</p>	
<p>6. Press ▶ NEXT or ◀ BACK to select the PPP type. Press ▼ DOWN to save.</p>	
<p>7. Enter the primary DNS. Press ▼ DOWN to save.</p>	
<p>8. Enter the secondary DNS. Press ▼ DOWN to save and back to the upper menu.</p>	

User Profile – Modify

<p>1. Press ▶ NEXT or ◀ BACK to scroll the User Profile menu till it appears Modify. Press ▼ DOWN to enter the option.</p>	
<p>2. Use ▶ NEXT or ◀ BACK to find the target user profile to modify. Press ▼ DOWN to confirm.</p>	

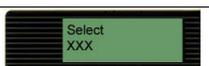
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<p>3. Pick up your handset. Modify the ISP name. Press ▼ DOWN to save.</p>	
<p>4. Modify the ISP phone number. Press ▼ DOWN to save.</p>	
<p>5. Modify your login name. Press ▼ DOWN to save.</p>	
<p>6. Modify the login password. Press ▼ DOWN to save.</p>	
<p>7. Use ▶ NEXT or ◀ BACK to select the PPP type. Press ▼ DOWN to save.</p>	
<p>8. Modify the primary DNS. Press ▼ DOWN to save.</p>	
<p>9. Modify the secondary DNS. Press ▼ DOWN to save and back to the upper menu.</p>	

User Profile – Select

<p>1. Press ▶ NEXT or ◀ BACK to scroll the User Profile menu till it appears Select. And press ▼ DOWN to enter the option.</p>	
---	---

2. Press **▶ NEXT** or **◀ BACK** to select your target ISP name. Press **▼ DOWN** to save and back to the upper menu.



User Profile – Erase

1. Press **▶ NEXT** or **◀ BACK** to scroll the menu till it appears **Erase**. And press **▼ DOWN** to enter the option.



2. Press **▶ NEXT** or **◀ BACK** to select the ISP you want to erase. Press **▼ DOWN** to confirm and back to the upper menu.



Function Select – Factory Setting (Dial-Up Mode)

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

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

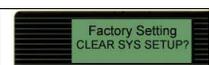
1. Press **▼ DOWN** to enter the **Function Select** mode. Press **▶ NEXT** or **◀ BACK** to scroll the main menu till it appears **Factory Setting**. Press **▼ DOWN** to enter the option.



2. There are six options of **Factory Setting: CLEAR SYS SETUP, CLR PHONE BOOK, ISP #1 SETUP, ISP #2 SETUP, ISP #3 SETUP, ISP #4 SETUP, ISP #5 SETUP and ISP #6 SETUP**. Press **● OK** or **▶ NEXT** to select the option. Press **▼ DOWN** to start the process.

Factory Setting – Clear System Setup

1. Press **▼ DOWN** to enter the option.



2. Press **● OK** to clear system setup.



Factory Setting – Clear Phone Book

1. Press **▼ DOWN** to enter the option.



2. Press **● OK** to clear phone book.



Factory Setting – Clear ISP Setup

1. Press **▶ NEXT** or **◀ BACK** to select the target ISP setup to clear, and then press **● OK** to enter the option.



2. Press **● OK** to clear ISP setup.



Function Select – System Upgrade (Dial-Up Mode)

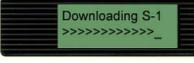
To ensure the users always have the latest Internet telephony technologies, the BESTip offers online upgrade feature.

BESTip can be upgraded 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 latest software version, follow the following instructions. The process will take 5 minutes or so depending on the Internet traffic.

System Upgrade – Software Upgrade

<p>1. Press ▼ DOWN button to enter the Function Select Mode. Press ▶ NEXT or ◀ BACK to scroll the main menu till it appears System Upgrade. And then press ▼ DOWN to enter the option.</p>	
<p>2. Press ▼ DOWN to start the the process of software upgrade.</p>	
<p>3. Press ● OK to confirm the process.</p>	
<p>4. BESTip ATA 10D will dial ISP automatically and connect to Internet.</p>	
<p>5. Once Internet Connection is established, BESTip ATA 10D will connect to the Server and the screen will show the downloading progress.</p>	

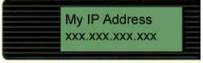
6. It will take about 5 minutes to finish downloading depending on the network traffic. If the new software version is downloaded successfully, BESTip will reboot itself automatically.

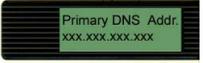
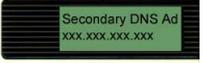


Please do not power off the device any time during software upgrad is in progress, otherwise the device may not boot properly.

Function Select – System Info (Broadband Mode)

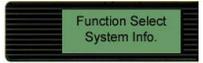
You can always get the system information for your BESTip from the **System Info** menu.

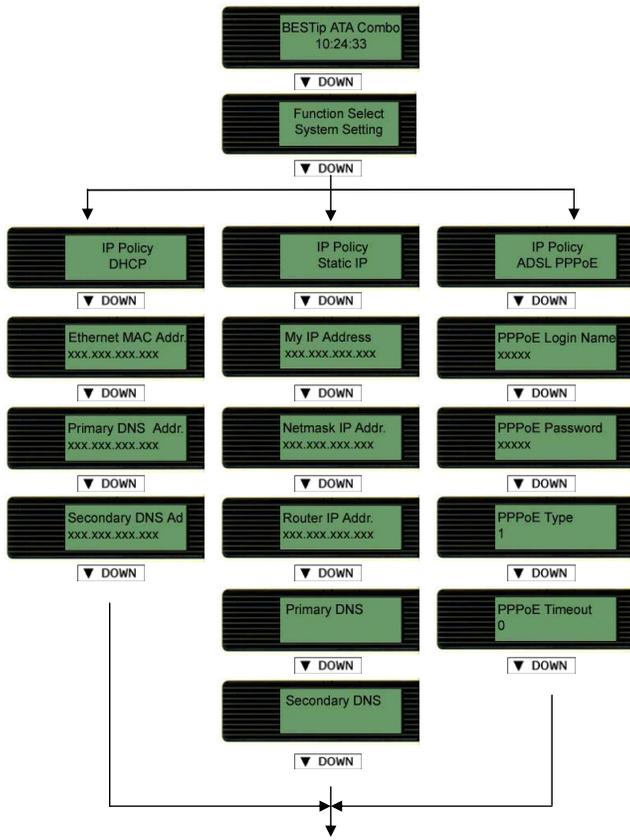
1. Press ▼ DOWN button to enter the Function Select Mode . Press ▼ DOWN button to enter System Info .	
2. Device ID : Each BESTip device has a unique 8 digit ID#. It is the number for other BESTip users to reach you over Internet. So, you need to inform all of your friends or group who use BESTip products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

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

Function Select – System Setting (Broadband Mode)

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 .	
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.	
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**.



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.



3. Press **▶ NEXT** or **◀ BACK** button to scroll the menu till it appears **IP Policy - DHCP**. Then press **▼ DOWN** to enter the option.



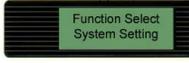
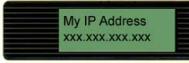
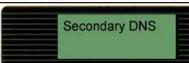
4. Press **▼ DOWN** to go to the next option, and you do not need to configure the information.



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 .	
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.	
3. Press ▶ NEXT or ◀ BACK button to scroll the menu till it appears IP Policy - Static IP . Then press ▼ DOWN to enter the option.	
4. My IP Address: The unique LAN IP address assigned to the BSETip.	
5. NETMASK Address: Please enter netmask, normally it is 255.255.255.xxx.	
6. Router Address: The IP address of the router/gateway device that connects your BESTip to the Internet.	
7. Primary DNS : Enter the IP address of the Domain Name Server.	
8. Secondary DNS: Secondary DNS is optional. You may leave it blank.	
After 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 .	
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.	
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.	
4. PPPoE Login Name: Enter the login name provided by your ISP.	
5. PPPoE Password: Enter the password provided by your ISP.	
6. PPPoE Type: There are two types you can select: Type 1 or Type 2. Normally set to 1.	
7. PPPoE Timeout: Set the PPPoE timeout by minutes. “0” means always on-line.	
After finishing the setup, please jump to the section “Other Common Setup” in this Chapter for further instructions.	

Other Common Setup (Broadband Mode)

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.



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.



3. Country Code: Please key in your country's telephone Country Code. For example, "1" for USA, "44" for U.K.



4. Area Code: Please key in your state/city telephone Area Code.



5. IDD Prefix: Please key in the International Direct Dial prefix code. "00" in most cases.



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.



7. DDD Prefix: Please key in the Domestic Direct Dial prefix code. "0" in most cases.



8. Direct City Call: Normally set to "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.



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.



11. Show CDR: Turn it on and CDR will show on the display after call finished.



12. Polarity Reverse: Normally set to "OFF" unless your device is applied for business purpose.



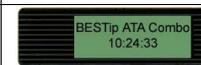
13. LCD Contrast: The default value is 0. The adjustable range is from +5--10.



14. Press **▲ UP** button to save configuration data in memory



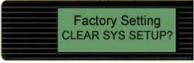
15. It will return to standby state again after updated. Please restart the device to make setup changes effective.



Function Select – Factory Setting (Broadband Mode)

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.	
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.	
3. There are one option of Factory Setting: CLEAR SYS SETUP . Press [▼ DOWN] to start the process.	
4. Press [● OK] to clear system setup.	

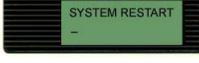
Function Select – System Upgrade (Broadband Mode)

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.

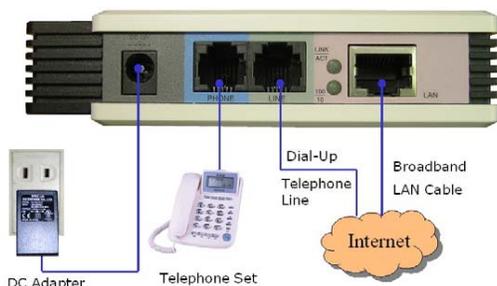
1. Press [▼ DOWN] button to enter the Function Select Mode.	
2. Press [▶ NEXT] or [◀ BACK] button to scroll the main menu till it appears Function Select - System Upgrade . And then press [▼ DOWN] to enter the option.	
3. Press [▼ DOWN] to start the upgrading process.	
4. BESTip will proceed to connect to the download Server and the screen will show the downloading process.	
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.	
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 Combo



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. Dial-Up Mode

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



2. Once the system testing finishes, it will go for standby status.



3. Please press **▲ UP** to dial ISP to establish Internet connection.



4. Once Internet connection is established, you will see **Blue LED On-Line signal** will be on. The display will show the balance and the message "Ready for Dial" as well.



2. Broadband Mode

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



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.



3. You can press **▲ UP** to see the balance and the message "Ready for Dial" will be shown on the display as well.



Pick up your telephone handset now, and you can hear a ready tone that means the basic installation is finished successfully.

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 is not successfully connected to the Internet. Please also refer to "Chapter 3: Setup" in this manual to configure your network.

To Make a BESTip-to-BESTip Call

If the receiver you call is equipped with an BESTip, you may enter the Device ID # directly and talk to the remote BESTip receiver.



1. Make sure the receiver you want to call is equipped with a BESTip connected to the Internet.
2. Pick up the handset, and you will hear a ready tone. Dial the ID No. of the receiving party and ended with a # key.

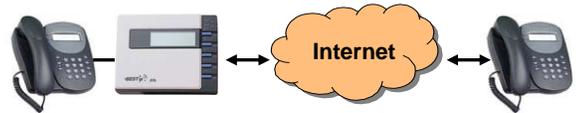
Note: Every BESTip has a unique eight-digit ID number found at the bottom of the device.

For example : The ID number of the receiving party is 19990023, so you need to dial 19990023#.

3. Hold the handset, and wait for the connection. You will hear a ringback tone indicating that your remote BESTip is ringing. Otherwise, you will hear a busy tone if your remote BESTip user is on the phone.
4. Once the connection is established, you can enjoy your communication with your receiving party.
5. Hang up the phone once the conversation is done.

To Make a BESTip-to-Phone Call

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.



In this mode, the receiver can answer an Internet phone call with a regular phone.

1. Make sure that your BESTip is setup properly, and connected to the Internet
2. Pick up the handset and you will hear a ready tone.
3. Dial your destination number as you normally do from your touch-tone phone.

For Domestic Long-Distance Calls

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

For International Calls

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

4. Hold the handset and wait for the connection.
5. Once the receiving party picks up the call, you will hear a short beep tone that advises you the billing is start. You can enjoy the cheap long distance conversation now.
6. Once the conversation is done, simply hang-up the phone. You can check the Call Detail Record on the ITSP Platform. Please get login ID and password from your local dealer.

To Receive a BESTip Call

Once your BESTip is connected to the Internet, you may accept the calls from other BESTip devices. You cannot receive calls only when you are in the BESTip Setup mode.

Appendix A: Specifications

Interface

Telephone Interface	RJ-11 ports, 1x FXS for phone set
LAN Interface	RJ-45 port, 10/100M Ethernet 2 LED, 100/10 and LINK/ACT
Line Interface	RJ-11 port, FXO for built-in 33.6K modem
Display	16x2 lines LCD display 2 LED Power and ON LINE
Switch button	5 setup buttons

Voice Codec

Channel Capability	1 Channel
Voice Codecs	ITU-T G.723.1 6.3 Kbps
Silence Compression VAD/CNG	ITU-T G.723 Annex A
Echo Cancellor	ITU-T G.168-2000 Compliant
Signaling	DTMF(TIA464B), Call progress and user defined tone pairs
Input/output Gain	Programmable

Software/ Hardware

CPU	Embedded High Performance 100MHz 16-bit CPU
Memory	8Mb FLASH ROM, 16Mb SDRAM
DSP Chip Set	High Quality/Performance DSP for Voice compression

BESTip ATA Combo User Manual

WAN Interface	Built-in 33.6K Analog Modem
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, PPP, PAP, CHAP, PPPoE, DNS
Front Panel Self-Configuration function	Configure BESTip ATA 10D through front panel. No additional software or hardware required
Voice Over IP Gateway Protocol	BESTip Gateway Protocols Only 10k bps bandwidth is required when using G.723.1 6.3K codec

Physical

Power	12VAC, 0.6A 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.
