DECT VoIP Phone

VIP-321

User's manual

Version 1.0.1

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The is a class B device, In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

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Revision

User's Manual for PLANET DECT VoIP Phone:

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Part No. EM-VIP321V101

Chapter 1

Introduction

Overview

With years of Internet telephony and VoIP manufacturing experience, PLANET now introduces the newest member of the PLANET DECT (Digital Enhanced Cordless Telecommunications) Station VoIP Phone family: the VIP-321.

As a direct response to feedback from our customers, PLANET's new DECT VoIP Phone, the VIP-321, not only provides quality voice communications and Internet sharing capabilities with other LAN users but also offers DECT interface for daily cordless telephony communications.

With advanced DSP processor and cutting edge of VoIP technology, the PLANET VIP-321 is capable of handling VoIP telephony into cordless transmission and up to 3 registrations to the SIP proxy. The VIP-321 is able to make calls to either Peer-to-Peer or voice communication in SIP proxy mode environment. The VIP-321 is the ideal choice for Voice over IP communications and providing integrated Internet sharing features, such as DHCP server, Virtual server and DMZ support. With these features, users may now enjoy high quality voice calls and secure Internet access without interfering with routine activities. To bring the most flexibility to users with the add-on RJ-11 interface for PSTN connection, users not only can make the daily PSTN communication but also enjoy the convenience brought by VoIP communications.

With built-in DECT and compatible base of GAP, up to 5 DECT handsets can be registered on the VIP-321. The pan-European users can get benefit from the DECT interface, and the voice communications can be established from anywhere in the living space. The PLANET VIP-321 comes with an intuitive, user-friendly and powerful web management interface so that users can enjoy the ease-of-use and no expertise required for the VoIP communications.

Product Features

- Feature-rich telephone service over home or public areas with Internet/Intranet connection

- Cost effective, field proven compatibility and stability

- SIP 2.0 (RFC3261) Compatible

- Peer-to-Peer / SIP proxy calls

- Up to 5 DECT Handset registering

- Voice codec support: G.711, G.723.1, G.729A/G.729B

- In-band and out-of-band DTMF support

- Call forward, call transfer and call waiting support

- Three-way conference calls and caller ID display support

- Voice processing: Voice Active Detection, DTMF detection/ generation, G.168 echo cancellation (16mSec.), Comfort noise generation.

DCET Features

- DECT and GAP Compatible

- 1.5" color LCD with backlight

- Phonebook with up to 250 entries

- 100 hours standby time, 8 hours talk time

- 12 Polyphonic ring tones and 3 ring melodies

- Transmitted distance: up to 50~200m indoor / up to 300m outdoor

Package Content

The contents of your product should contain the following items:

DECT VoIP Stand
DECT Handset
Power adapter
Quick Installation Guide
User's Manual CD
RJ-11 cable x 1
AAA Ni-HH rechargeable batteries x 3

Physical Details

The following figure illustrates the front/rear panel of VIP-321.

Front / Rear View
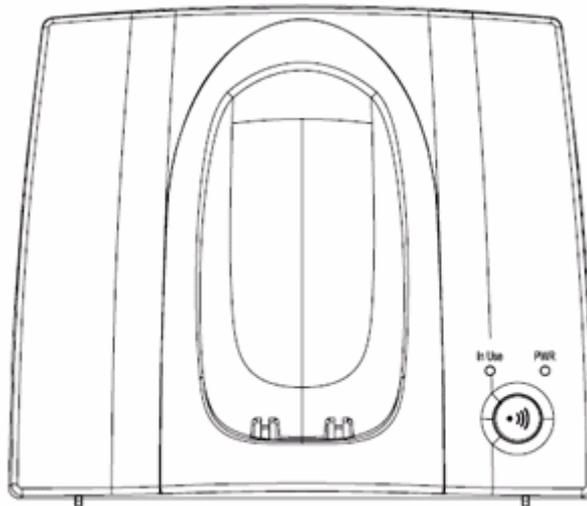
Front Panel of VIP-321
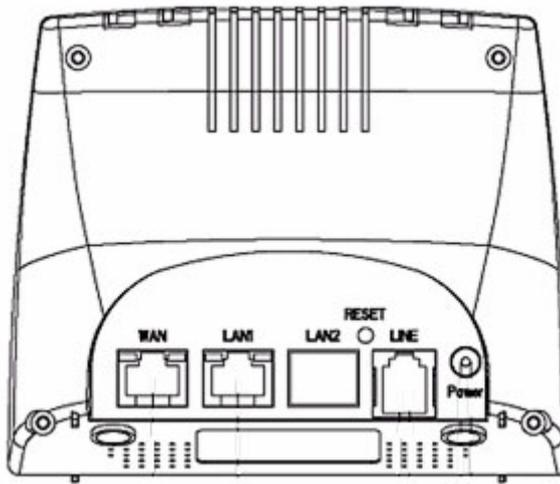
Rear Panel of VIP-321

Physical Interfaces Description

WAN	RJ-45 connector, to maintain the existing network structure, connected directly to the **xDSL/Cable modem** through **straight CAT-5** cable.
LAN	RJ-45 connector, for Internet access, connected directly to **Switch/Hub,** through **straight CAT-5** cable.
RESET	Reset to the factory default setting.
LINE	RJ-11 connector, connected directly to the PSTN analog line. Press "✳✳" to switch to PSTN mode.
Power	7.5V DC Power input outlet.

✋ **Note**

- Machine default IP is http://192.168.0.1. Press **RESET** button and hold over 10 seconds will reset the device to factory default value.
- If press **RESET** button 1~9 seconds only to enable the device reset function.

Front panel LED and Button function:

Charge PIN

In Use LED

PWR LED

PAGE / Registration Button

In Use   PWR

DECT
VoIP Phone

Top view LED function:

VoIP LED 1 / 2

LAN LED

WAN LED
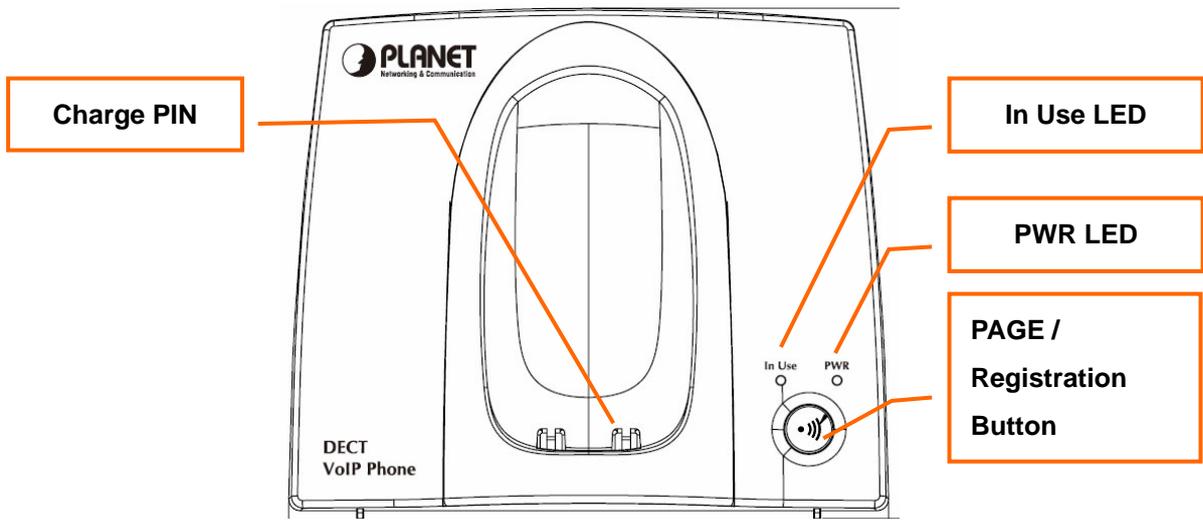
VoIP1   VoIP2   LAN   WAN
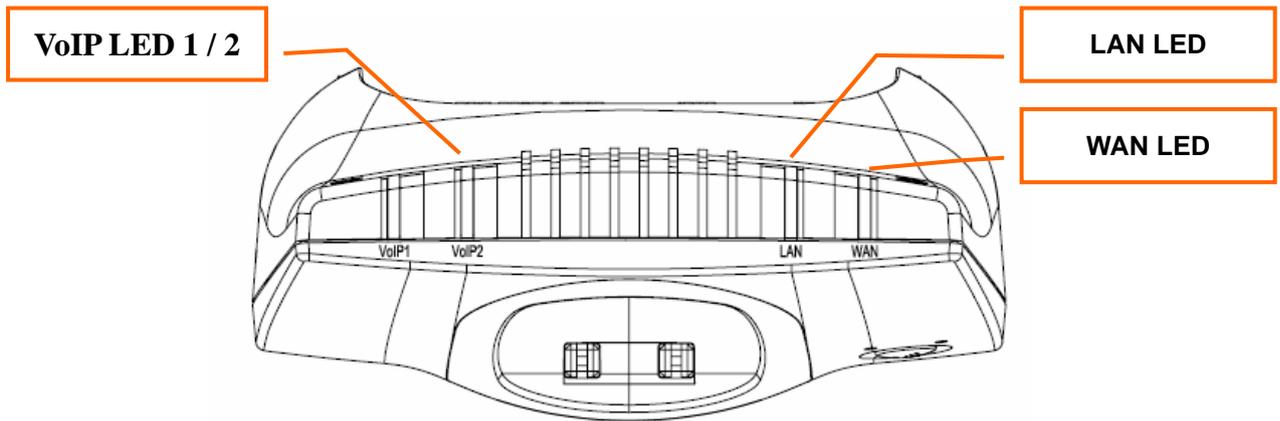
LED and Button Description

In use	An active LED indicates either Handset has been hanged off or Incoming call is ongoing.
PWR	A solid LED indicates PWR works normally.
PAGE / Registration Button	Press this button (1~9 seconds) to enable the DECT PAGE function. Press and hold this button over 10 seconds to enable DECT Registration function.
Charging PIN	To charge for DECT phone.
LAN	**Light** : connection is active. **Blink** : data transmitting or receiving. **Off** : connection is not established.
WAN	**Light** : connection is active. **Blink** : data transmitting or receiving. **Off** : connection is not established.
VoIP 1 / 2	**Light** : VoIP session has been established. **Off** : No VoIP session.

Chapter 2
Preparations & Installation

2

Physical Installation Requirement

This chapter illustrates basic installation of VIP-321

- Network cables. Use standard 10/100BaseT network (UTP) cables with RJ45 connectors.
- TCP/IP protocol must be installed on all PCs.

For Internet Access, an Internet Access account with an ISP, and either of a DSL or Cable modem.

Administration Interface

PLANET VIP-321 provides GUI (Web based, Graphical User Interface) for machine management and administration.

Web configuration access

To start VIP-321 web configuration, you must have one of these web browsers installed on computer for management.

- Microsoft Internet Explorer 6.00 or higher with Java support

Default LAN IP address of VIP-321 is **192.168.0.1**. You may now open your web browser, and insert http://192.168.0.1 in the address bar of your web browser to logon DECT VoIP Phone web configuration page.
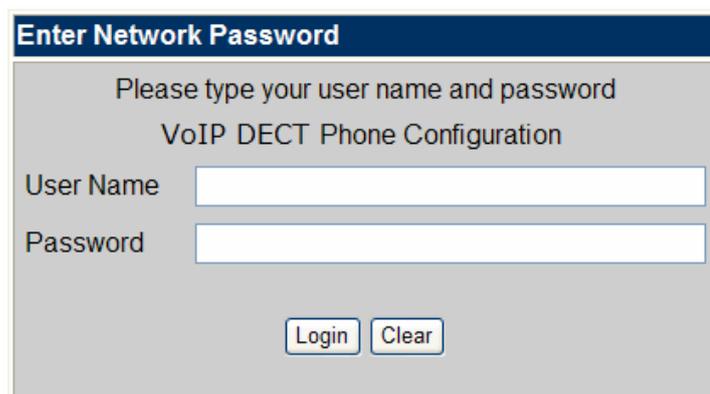
Enter Network Password

Please type your user name and password
VoIP DECT Phone Configuration

User Name [   ]
Password [   ]

[Login] [Clear]

VIP-321 will prompt for logon username/password, please enter: *root* / **null** (no password) to continue machine administration.

Installing Batteries into the Handset

You must install three AAA Ni/MH batteries (included in the package) into the VIP-321 handset and charge them in the base for **15 hours** or more before you can use your new VIP-321 Cordless IP Telephone.

1. Slide the battery cover in the direction of the arrow.

2. Insert the new batteries, as indicated, matching the correct polarity.

3. Replace the battery cover and slide it up until it snaps shut.

4. Put the Handset into the Base.

5. Connect the Base to the AC mains using the supplied AC adapter.

6. Allow the batteries to charge for 15 hours or more before using the Handset to insure a proper first time charge.

Charging the Handset

Before you use the Handset for the first time, you should fully

charge the new batteries for **15 hours** or more.

To charge the handset, simply place it on the base as shown,

you will hear a confirmation beep (charging beep).

Chapter 3
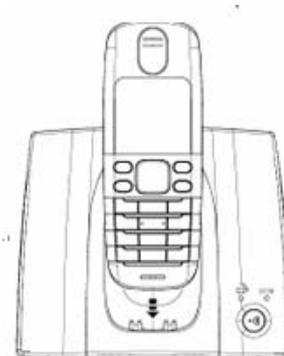
Network Service Configurations

3

Configuring and monitoring your VIP-321 from web browser

The VIP-321 integrates a web-based graphical user interface that can cover most configurations and machine status monitoring. Via standard, web browser, you can configure and check machine status from anywhere around the world.

Overview on the web interface of VIP-321

With web graphical user interface, you may have:

- More comprehensive setting feels than traditional command line interface.
- Provides user input data fields, check boxes, and for changing machine configuration settings.
- Displays machine running configuration.

To start DECT VoIP Phone web configuration, you must have one of these web browsers installed on computer for management.

- Microsoft Internet Explorer 6.00 or higher with Java support

Manipulation of VIP-321 via web browser

Execute your web browser, and insert the LAN IP address (default: 192.168.0.1), WAN IP address (172.16.0.1) of VIP-321 in the address bar. After logging on machine with username/password (default: **root / not password**), browse to "**Network**" --> "**Network Settings**" configuration menu:

WAN Settings

You could configure the WAN settings in this page.

LAN Mode:	○ Bridge ● NAT

WAN Setting	
IP Type:	● Fixed IP ○ DHCP Client ○ PPPoE
IP:	172.16.0.1
Mask:	255.255.255.0
Gateway:	172.16.0.254
DNS Server1:	168.95.192.1
DNS Server2:	168.95.1.1
MAC:	00304f5dd44e
Host Name:	VOIP_TA2S1O

Parameter Description

IP address	**WAN IP address of the VIP-321**
	Default: 192.168.0.1
Mask	**WAN mask of the VIP-321**
	Default: 255.255.255.0
Default Gateway	**Gateway of the VIP-321**
	Default: 192.168.0.254

Connection Type Description

Connection Type	Data required.
Fixed IP	The ISP will assign IP address, and related information.
DHCP Client	In most circumstances, it is no need to configure the DHCP Settings.
PPPoE	The ISP will assign PPPoE username / password for Internet access.

After confirming the modification you've done. Please click on the **Submit** button to apply settings and browse to "**Save & Reboot**" menu to reboot the machine to make the settings effective.

Save Change to Flash Memory

Most of the VIP-321 parameters will take effective after you modify, but it is just temporary stored on RAM only, it will disappear after your reboot or power off the DECT VoIP Phone, to save the parameters into Flash ROM and let it take effective forever, please remember to press the "**Save & Reboot**" button after you modify the parameters.

When users login the web page, users can see the VIP-321 system information like firmware version, company…etc in this main page.
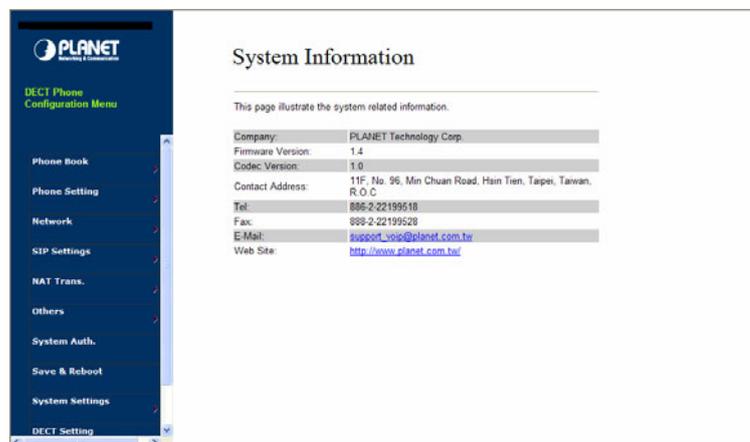
VIP-321 main page

Configurations DECT Base Settings

This device support 2 SIP phone calls simultaneously. The SIP "**Phone Setting**" menu includes **Call Forward, SNTP Settings, Volume Settings, DND Settings, Dial Plan Settings, Flash Time Setting, Call Waiting Setting, Alarm Settings and Prefix to PSTN settings**. Configuration an advanced SIP phone call environment through configuring the settings described as below:

Phone Book settings

The VIP-321 support a phone book with up to 140 sets of the SIP account in 14 pages. User can make the index number (Phone item) for speed dialing, give a phone name (Name) for reference and enter the SIP account number (or URL). Configuration procedures are described as below: User can make calls via Phone Book feature of VIP-321.

Parameter Description

Phone Book Page	The default is Page 1. It can select Page1 ~ Page 14 to look round Phone Book records
Phone	The record number from 0 ~ 139, it can set up 140 records in total
Name	The name of Phone Book records, it only can input numerals
URL	Fill in the outgoing number (Line Number) or IP address
Select	To select this record

If you need to add a phone number into the Phone Book list, you need to input the position, the name, and the phone number (by URL type). When you finished a new phone list, just click the "**Add Phone**" button.

If you want to delete a phone number, you can select the phone number you want to delete then click "**Delete Selected**" button.

If you want to delete all phone numbers, you can click "**Delete All**" button.

Phone Book

You could add/delete items in current phone book.

Phone Book Page: page 1

Phone	Name	URL	Select
0			☐
1			☐
2			☐
3			☐
4			☐
5			☐
6			☐
7			☐
8			☐
9			☐

[Delete Selected] [Delete All] [Reset]

Add New Phone

Position: _____ (0~139)
Name: _____
URL: _____

[Add Phone] [Reset]

Call forward

This page defines Call Forward function. You can setup the phone number you want to forward in this page. There are three type of Forward mode. You can choose All Forward, Busy Forward, and No Answer Forward by click the icon.

Parameter Description

All Forward	All incoming call will forward to the number you chosen. You can input the name and the phone number in URL field. If you select this function, then all the incoming call will direct forward to the speed dial number you choose.
Busy Forward	If you are on the phone, the new incoming call will forward to the number you choose. You can input the name and the phone number in URL field.
No Answer Forward	If you can not answer the phone, the incoming call will forward to the number you chosen. You can input the name and the phone number in URL field. Also you have to set the Time Out time for system to start to forward the call to the number you choosed.

Forward Settings

You could set the forward number of your phone in this page.

All Forward:	⊙ Off	○ On
Busy Forward:	⊙ Off	○ On
No Answer Forward:	⊙ Off	○ On

	Name	URL
All Fwd No.:		
Busy Fwd No.:		
No Answer Fwd No.:		

No Answer Fwd Time Out: 3 (2~8 Ring)

[Submit] [Reset]

SNTP settings

This page defines the primary and second SNTP Server IP Address, to get the date/time information.
Also you can base on your location to set the Time Zone, and how long need to synchronize again.

SNTP Settings

You could set the SNTP servers in this page.

SNTP: ⊙ On ○ Off

| Primary Server: | 192.43.244.18 |
| Secondary Server: | 208.184.49.9 |

| Time Zone: | GMT + ▾ 08 ▾ : 00 ▾ (hh:mm) |
| Sync. Time: | 1 : 0 : 0 (dd:hh:mm) |

[Submit] [Reset]

Volume Setting

Selects the "**Volume Settings**" item to configure the settings for adjust the handset volume and sending gain.

Parameter Description

Handset Volume	To set the volume for you can hear from the handset.
PSTN-Out Volume	To set the volume for you can hear from the PSTN line.
Handset Gain	To set the volume send out to the other side's handset.
PSTN-In Gain	To set the volume send out to the other PSTN side's handset.

Volume Setting

You could set the volume of your phone in this page.

Handset Volume:	9	(0~15)
PSTN-Out Volume:	9	(0~15)
Handset Gain:	6	(0~15)
PSTN-In Gain:	10	(0~15)

Submit   Reset

Block Setting

This page defines the Block Setting to keep the phone slience. You can choose Always Block or Block a period.

Parameter Description

Always Block	All incoming call will be blocked until disable this feature.
Block Period	Set a time period and the phone will be blocked during the time period. If the "From" time is large than the "To" time, the Block time will from Day 1 to Day 2.

Block Setting

You could set the block period of your phone in this page.

Always Block:	○ On ⊙ Off
Block Period:	○ On ⊙ Off
From:	00 : 00 (hh:mm)
To:	00 : 00 (hh:mm)

Submit   Reset

Dial Plan Settings

This page defines the Dial Plan Setting function. This function is when you input the phone number by the keypad but you don't need to press "#". After time out the system will dial directly.

Parameter Description

Drop Prefix	The rule of add or replace code. If setup as No, it will add the prefix number prior to the identification number. If setup as Yes, it will replace the identification number.

Replace rule	The prefix number. It only accept the numeral and the max length is 8.
+	The identification number. It can accept the numeral or symbol and the max length is 40.
	■ Symbol: It only accept the [+], [x]
	■ +: It means as "or". For example, [123+456+334+5xx] even if [123 or 456 or 334 or 5xx]
	■ x: It is equal to 0~9. For example, [5xx] even if the number begin 5.
Dial Now	If the dialing number are match with this field, it will dial out and need not to press the "#" key to end the dialing. It accepts the numeral or symbol, and the max length are 124.
	Note: The starting number can't be the "0". For example, if the number is "0xxxx", because the starting number is "0", so that the system will ignore this dial plan.
Auto Dial Time	Stop dialing after seconds then send dial number out.
Use # as send key	If setup as Yes, the system sill stop to receive the dialing number when receive the [#] key. The system also will to determine the Auto Dial Time, it will carry out the calling if there isn't receive the digit after the Auto Dial Time.
	If setup as No, the system just according to the Auto Dial Time to determine the end time.
Use * for IP dialing	If setup as Yes, the system will look on [*] as [.]. For example, if dial the "192*168*0*100#", it will dial out as "192.168.0.100#".
	If setup as No, it just look on [*] as [*]. For example, if dial the "700*#", it will dial out as "700*#".

Dial Plan Settings

You could set the dial plan in this page.

Drop prefix :	○ Yes ⊙ No	
Replace rule 1:	002	+ 1234+4321
Drop prefix :	⊙ Yes ○ No	
Replace rule 2:	006	+ 002+003+004
Drop prefix :	○ Yes ⊙ No	
Replace rule 3:	007	+ 5xxx+35xx
Drop prefix :	○ Yes ⊙ No	
Replace rule 4:		+

Dial now:	*xx+#xx+11x+xxxxxx
Auto Dial Time:	5 (3~9 sec)
Use # as send key:	⊙ Yes ○ No
Use * for IP dialing:	⊙ Yes ○ No

[Submit] [Reset]

Descriptions of example:

Example_1: Drop prefix: **No**, Replace rule 1: **002**, +: **1234+4321** (No limit the digit length)

1. If the dialing number is start as "**1234**", it will add the 002 at begin. The real dialing number is [**0021234…**].

2. If the dialing number is start as "**4321**", it will add the 002 at begin. The real dialing number is [**0024321…**].

Example_2: Drop prefix: **Yes**, Replace rule 2: **006**, +: **002+003+004** (No limit the digit length)

1. If the dialing number is start as "**002**", it will replace 002 by 006. The real dialing number is [**006…**].

2. If the dialing number is start as "**003**", it will replace 003 by 006. The real dialing number is [**003…**].

Example_3: Drop prefix: No, Replace rule 3: **007**, +: **5xxx+35xx** (Has limit the digit length)

1. If the dialing number start as "**5**" and follow 3 digits, it will add the 007 at begin. The real dialing number is [**0075xxx**].

2. If the dialing number start as "**35**" and follow 2 digits, it will add the 007 at begin. The real dialing number is [**00735xx**].

Example_4: Dial Now: ***xx+#xx+11x+xxxxxx**

1. If the dialing number is match with the rule of "***xx**", it will send out the dialing number directly. For example, ***00/ *01/ *02…*99**.

2. If the dialing number is match with the rule of "**#xx**", it will send out the dialing number directly. For example, **#00/ #01/ #02…#99**.

3. If the dialing number is match with the rule of "**11x**", it will send out the dialing number directly. For example, **111/ 112/ 113…119**.

If the dialing number is match with the rule of 8 digits, it will send out the dialing number directly.

For example, **12345678**.

Flash Time Setting

When you use the PSTN Phone and you need to press the Hook to do the Flash (Switch to the other phone line or HOLD), this function is for you to set the time you press the Hook to represent the Flash function.

Beside the above settings, VIP-321 also can set the flash time of FXO port.

Flash Time Setting

You could set the flash time in this page.

FXO Flash Time		
Flash Time:	5	(3~200, 1->10ms)

Call waiting Settings

When you are talking with other people, You can choose If you want to hear the notice when there is a new coming call. If the call waiting function is On, if there is a new incomeing call, you will hear the call waiting notice in your current call. If you set the function to Off, then you will not hear any notice.

Call Waiting Settings

You could enable/disable the call waiting setting in this page.

Call Waiting: ⊙ On ○ Off

[Submit] [Reset]

Alarm Settings

This page defines the Alarm setting in this page. It provides the alarm function, and it can set up the Alarm Time to get the telephone ringed up every day.

Parameter Description

Alarm	The default is Off. If set up as On, the telephone will ringed up at the specific time.
Alarm Time	It can set up the system prompt time with 24 hours
Current time	The next alarm time

Alarm Settings

You could set the alarm time in this page.

Alarm:	○ ON ⊙ OFF
Alarm Time:	0 : 0 (hh:mm)
Current time:	2005-01-01 08:34

[Submit] [Reset]

Prefix To PSTN settings:

"**Prefix To PSTN**" defines which dialing numbers will be switch (send out) to PSTN directly. User don't need to dial "＊＊" before dialing the PSTN phone number. In the other word, when the dialing number matches to the prefix number in prefix table, it will be sent out to PSTN.

Selects the "**Prefix To PSTN** " item to edit the phone prefix table. One can configure up to 8 sets of phone prefix in the table and each **maximum length is 7 digits**.

Prefix to PSTN

Outgoing call with the prefix number in this page will be connected through PSTN.

Item	Prefix Number	Select
1		☐
2		☐
3		☐
4		☐
5		☐
6		☐
7		☐
8		☐

[Delete Selected] [Delete All]

Add Prefix Number

Position: [____] (1~8)
Prefix Number: [_____]

[Add]

DDNS Settings

This page defines the DDNS setting in this page. You need to have the DDNS account and input the informations properly. You can have a DDNS account with a public IP address then others can call you via the DDNS account. But now most of the VoIP applications are work with a SIP Proxy Server. When you finished the setting, please click the Submit button.

DDNS Settings

You could set the configuration of DDNS in this page.

DDNS:	○ On ◉ Off

Host Name:	
User Name:	
Password:	
E-mail Address:	

DDNS Server:	
DDNS Server List:	User Input
Type:	dyndns
Wild Card:	on

| BACKMX: | On Off |
| Off Line: | On Off |

[Submit] [Reset]

VLAN Setting

A **virtual LAN**, commonly known as a **VLAN**, is a method of creating independent logical network within a physical network. Several VLANs can co-exist within such a network. This helps in reducing the brocast domain and administratively separating logical segments of LAN (like company departments) which should not exchange data using LAN (they still can by routing).

Parameter Description

VLAN Packets	The default setting is OFF. When turn on the "VLAN Packet", it will enable the VLAN function.
VID, CFI	One must also set the VID (VLAN ID, supported by VLAN Server) and CFI (Canonical Format Indication) property for the VLAN operation.
User Priority	One can also set the user priority for 0~7.

VLAN Settings

You could set the VLAN settings in this page.

VLAN Packets:	○ On ◉ Off	
VID (802.1Q/TAG):	136	(2 ~ 4094)
User Priority (802.1P):	0	(0 ~ 7)
CFI:	0	(0 ~ 1)

NAT VLAN Setting

VLAN Packets:	○ On ◉ Off	
VID1:	4	(2 ~ 4094), 0->Off
VID2:	5	(2 ~ 4094), 0->Off
VID3:	6	(2 ~ 4094), 0->Off
VID4:	7	(2 ~ 4094), 0->Off

Submit   Reset

Virtual Server Settings

One can add and deletes virtual server to/from the virtual server list, which up to 24 (no. 0~23 in three pages) virtual servers could be added. User can checking the **"Select"** fields and click the "**Enable Selected**" button to enable them, opposite if want to delete the virtual server need to checking the "**Delete Selected**" and can also delete all by check the "**Delete All**" button.

Virtual Server Settings

You could set your virtual servers in this page. The usual port numbers are WEB [TCP 80], FTP (Control) [TCP 21], FTP(Data) [TCP 20], E-mail(POP3) [TCP 110], E-mail(SMTP) [TCP 25], DNS [UDP 53] and Telent [TCP 23].

Virtual Server Page: page 1 ▼

Num	Enable	Protocol	In Port	Ex Port	Server IP	Select
0	☐					☐
1	☐					☐
2	☐					☐
3	☐					☐
4	☐					☐
5	☐					☐
6	☐					☐
7	☐					☐

Enable Selected   Delete Selected   Delete All   Reset

PPTP Settings

The PPTP works by sending a regular PPP session to the peer with the Generic Routing Encapsulation (GRE) protocol. A second session on TCP port 1723 is used to initiate and manage the GRE session. PPTP is difficult to forward past a network firewall because it requires two network sessions.

Parameter Description

PPTP On / Off	To enable and disable the PPTP function by selecting this field.
PPTP Username	This is authenticated by a Username. For getting service, need to fill in PPTP Username.
PPTP Password	This is authenticated by a Password. For getting service, need to fill in PPTP Password.

Configure the SIP Service settings

The SIP Setting menu includes **Service Domain settings, Port settings, Codec settings, Codec ID settings, DTMF settings, Rport settings, and other settings (SIP QoS, etc.)** items. Please below can construct the advanced SIP settings by supplier's technical supports.

Service Domain Settings

In Service Domain Function need to input the account and the related informations in this page, please refer to your ISP provider. You can register three SIP account in the ATA. You can dial the VoIP phone to your friends via first enable SIP account and receive the phone from these three SIP accounts. First you need click **Active** to **On** the Service Domain, then you can input the following items:

Parameter Description

Phone No.	To switch Phone1 or Phone2 page when configuration the Service Domain Setting, that this VIP-321 is able to support two VoIP line in the some time and each phone line can register up to tree SIP account.
Display Name	Please input the name you want to display.
Line number	Please input the User Name get from your ISP.

Register Name	Please input the Register Name get from your ISP.
Register Password	Please input the Register Password get from your ISP.
Domain Server	Please input the Domain Server get from your ISP.
Proxy Server	Please input the Proxy Server get from your ISP.
Outbound Proxy	Please input the Outbound Proxy get from your ISP. If your ISP does not provide the information, then you can skip this item.
Subscribe for MWI	User can hear indicate tone in handset when have some new message.
Switch to PSTN	In direct switch to PSTN for incoming SIP call.
Status	To show up current register status.

You can see the Register Status in the Status item. If the item shows "**Registered**", then your Phone Adapter is registered to the ISP, you can make a phone call direcly.

If you have more than one SIP account, you can following the steps to register to the other ISP.

When you finished the setting, please click the Submit button.

The VIP-321 can register to three different SIP Proxies at the same time. It can receive any one of different SIP accounts incoming call, and it can switch to any one SIP accounts for making calls through input the switch code.

Realm switch code:

1*: Realm 1

2*: Realm 2

3*: Realm 3

For example: The default is realm 1, input the **2*** (Follow by the # key) from keypad and hang up the telephone set. It will switch to realm 2, and it can make the SIP calls via realm 2.

❦ **Note**

For VIP-321 can register to three different SIP Proxy servers at the same time. The Realm 2 and Realm 3 are backup purpose. It can receive any one of different SIP accounts incoming call, if users want to select the Realm 2 or Realm 3 of accounts for making outgoing calls. Please press the "***2**" or "***3**" key to switch to other SIP Proxy servers for make outgoing calls from Realm 2 or Realm3.

Meanwhile, when the Realm 1 account is failed, the Realm 2 will be available for outgoing calls services. (When the Realm 1 is effective, the Realm 2 cannot be used for dialing out.)

Port Settings

This page defines the SIP and RTP port number in this page. Each ISP provider will have different SIP/RTPport setting, please refer to the ISP to setup the port number correctly. When you finished the setting, please click the Submit button.

Parameter Description

SIP Port of Phone 1	Enter a number to define the SIP port number for the SIP phone 1. The default port number of SIP Phone1 is **5060**.
RTP Port of Phone 1	Enter a number to define the RTP (Real-time Transport Protocol) port number for the SIP Phone 1. The default setting is **60000**.
SIP Port of Phone 2	Enter a number to define the SIP port number for the SIP phone 2. The default port number of SIP Phone2 is **5062**.
RTP Port of Phone 2	Enter a number to define the RTP port number for the SIP Phone 2. The default setting is **60100**.

Port Settings

You could set the port number in this page.

SIP Port of Phone1:	5060	(10~65533)
RTP Port of Phone1:	60000	(10~65533)
SIP Port of Phone2:	5062	(10~65533)
RTP Port of Phone2:	60100	(10~65533)

Submit   Reset

Codec Settings

This page defines the Codec priority, RTP packet length, and VAD function in this page. You need to follow the ISP suggestion to setup these items. When you finished the setting, please click the Submit button.

Codec Settings

You could set the codec settings in this page.

Codec Priority

Codec Priority 1:	G.711 u-law
Codec Priority 2:	G.711 a-law
Codec Priority 3:	G.723
Codec Priority 4:	G.729
Codec Priority 5:	G.726 - 16
Codec Priority 6:	G.726 - 24
Codec Priority 7:	G.726 - 32
Codec Priority 8:	G.726 - 40
Codec Priority 9:	GSM

RTP Packet Length

G.711 & G.729:	20 ms
G.723:	30 ms

G.723 5.3K

G.723 5.3K:	○ On ⊙ Off

Voice VAD

Voice VAD:	○ On ⊙ Off

Submit   Reset

Codec ID Setting

This page defines the Codec ID. Sometimes 2 VoIP devices with different Codec ID will cause the interoperability issue. If you are talking with others got some problems, you may ask the other one what kind of Codec ID he use, and then you can change your Codec ID. When you finished the setting, please click the Submit button.

Codec ID Setting

You could set the value of Codec ID in this page.

Codec Type	ID		Default Value
G726-16 ID:	23	(95~255)	☑ 23
G726-24 ID:	22	(95~255)	☑ 22
G726-32 ID:	2	(95~255)	☑ 2
G726-40 ID:	21	(95~255)	☑ 21
RFC 2833 ID:	101	(95~255)	☑ 101

Submit   Reset

DTMF Setting

This page defines the RFC2833 Out-Band DTMF, Inband DTMF and Send DTMF SIP Info in this page. To change this setting, please following your ISP information. When you finished the setting, please click the Submit button.

RPort Settings

This page defines the RPort Enable/Disable in this page. To change this setting, please following your ISP information. When you finished the setting, please click the Submit button.

Other Settings

This page defines the Hold by RFC, Voice/SIP QoS and SIP expire time in this page. To change these settings please following your ISP information. When you finished the setting, please click the Submit button. The QoS setting is to set the voice packets' priority. If you set the value higher than 0, then the voice packets will get the higher priority to the Internet. But the QoS function still need to cooperate with the others Internet devices.

A Domain Name Server (DNS) SRV record helps connecting to a SIP user in a similar way that an MX record helps email delivery. When you send email to "john@example.com", the MX record for example.com might tell the mail transfer agent to deliver email to a completely different machine, such as "zaphod.foobar.com". Similarly, when you want to make a SIP phone call to john@example.com, the SRV record might tell your computer that it should connect to "galaxy.starsystem.tw" to do so. Dialing by domain names lets a SIP user have a single public "SIP address" which can be redirected at will to their current location. SRV records maintain stability and also opens up the possibility to use your own domain, regardless of the domain of the SIP service you are using.

DNS SRV resource records indicates how to find services for various protocols.

Other Settings

You could set other settings in this page.

Hold by RFC of Phone1:	○ On ⦿ Off
Hold by RFC of Phone2:	○ On ⦿ Off

Voice QoS (Diff-Serv):	40	(0~63)
SIP QoS (Diff-Serv):	40	(0~63)
SIP Expire Time:	60	(15~86400 sec)

Submit Reset

STUN settings

This page defines the STUN Enable/Disable and STUN Server IP address in this page. This function can help your Phone Adapter working properly behind NAT. To change these settings please following your ISP information. When you finished the setting, please click the Submit button.

STUN Settings

You could set the IP of STUN server in this page.

STUN: ○ On ⦿ Off

STUN Server:		
STUN Port:	3478	(1024~65535)

Submit Reset

Auto Configuration

This page defines the Auto Configuration (Auto Provision) setting. ATA supports TFTP, FTP, HTTP and IP PBX auto configuration function in total. In IP PBX Auto Configuration Setting you need to check with your service provider if they have provided this function. Usually this function will be boundle with an IP PBX to use in the office.

Parameter	Descriptions	Default Setting	Selection Range
Auto Configuration	Set to enable the Auto-Provision and select the configuration through **TFTP, HTTP** or **FTP**.	Off	**Off, TFTP, HTTP**

			FTP
TFTP Server	TFTP Server domain name (or IP address).	None	Max. length: 128
HTTP Server	TFTP Server domain name (or IP address).	None	Max. length: 128
HTTP File Path	The file path under HTTP server, for example /aps_cfg/123/	None	Max. length: 128
FTP Server	FTP Server domain name (or IP address)	None	Max. length: 128
FTP Username	FTP user name for logging in to the FTP Server.	None	Max. length: 64
FTP Password	FTP user password for logging in to the FTP Server.	None	Max. length: 64
File Path	The file path under FTP server, for example /aps_cfg/123/	None	Max. length: 64

Auto Configuration Settings

You could enable/disable the auto configuration setting in this page.

Auto Configuration: ⊙ Off ○ TFTP ○ FTP ○ HTTP ○ IP-PBX

TFTP Server:		
HTTP Server:		Exp. 60.35.187.30
HTTP File Path:		Exp. /download/

FTP Server:		Exp. 60.35.17.1
FTP Username:		
FTP Password:		
FTP File Path:		Exp. /file/load

Submit   Reset

PTT Settings

This page defines the PTT settings. When VIP-321 connected to different country's PSTN Line, you have to set the country's setting to meet the requirement. When you finished the setting, please click the Submit button.

PTT Settings

You could select the PTT setting for different country in this page.

PSTN-PTT: USA ▾

Submit   Reset

MAC Clone Settings

This page defines the MAC Clone Settings. Some ISP servers check the MAC address for the authentication on the PPPoE interface, so if PC is setup internal in the VIP-321, the MAC Clone Setting must to be enabling, that this VIP-321 will copy the PC's LAN MAC address to the WAN of VIP-321 for communicating with ISP server properly. When you finished the setting, please click the Submit button.

MAC Clone Setting

You could enable/disable the MAC clone setting in this page.

MAC Clone: ○ On ⊙ Off

[Submit] [Reset]

Advanced Settings

This page defines the extra Advanced Settings. Allow user to configure the ICMP (Internet Control Message Protocol), Send Anonymous CID (Caller ID), SIP Encryption, PPPoE retry and System Log Server settings.

Parameter Description

ICMP Not Echon	Set "Yes" to disable the ICMP response, that this Ping response function is enable as setting to "NO".
Send Anonymous CID	Enable the device to send the anonymous caller ID.
SIP Encrypt	To enable the SIP encryption function. The default is set to "Disable". **Please contact to supplier technical support for changing this setting.**
System Log Server	Please input Log Server IP address and select Server type. This feature is reserved for the further applications.

Advanced Setting

You could change advanced setting in this page.

ICMP Not Echo:	○ Yes ⊙ No
Send Anonymous CID:	○ Yes ⊙ No
SIP Encrypt:	Disabled
PPPoE retry period:	5 Seconds
System Log Server:	
System Log Type:	None

[Submit] [Reset]

System Authority

In System Authority you can change your login password. Please fill the new user name and password then click "Submit" to save the change and reboot the device. That the "Reset" be used clear to typeing characters.

System Authority

You could change the login username/password in this page.

Username:	root
New password:	
Confirmed password:	

Submit   Reset

Firmware Upgrade

In Firmware Upgrade function you can update new firmware via HTTP or TFTP methods in this page.

Firmware Upgrade

You could update the newest firmware.

Method: ⊙ Local PC   ○ TFTP

Local PC
Code Type:	AP
File Location:	Browse..

TFTP
TFTP Server:	192.168.1.250

Update   Reset

For technological consideration, we've strongly suggested refering to the following upgrade methods for update your device.

Auto Upgrade

The device can update new firmware with the auto upgrade file format automatically by the Auto Upgrade function.

Configuration Settings	Descriptions	Default Setting	Selection Range
Auto Update	Set to enable the Auto-update and select the configuration through TFTP, HTTP or FTP.	Off	**Off, TFTP, HTTP, FTP**

TFTP Server	TFTP Server domain name (or IP address).	None	Max. length: 128
HTTP Server	TFTP Server domain name (or IP address).	None	Max. length: 128
HTTP Path	The file path under HTTP server, for example /aps_cfg/123/	None	Max. length: 128
FTP Server	FTP Server domain name (or IP address).	None	Max. length: 128
FTP Username	FTP user name for logging in to the FTP Server.	None	Max. length: 64
FTP Password	FTP user password for logging in to the FTP Server.	None	Max. length: 64
File Path	The file path under FTP server, for example /aps_cfg/123/	None	Max. length: 64
Check New Firmware	Select the timing to update the F/W as **"Power ON"** or by **"Scheduling"**	**Power ON**	**Power ON**, **Scheduling**
Scheduling (Days)	Enter scheduling days for periodical update.	14	1 ~ 33 days
Scheduling (Time)	Select the duration time for periodical update.	AM 00:00 – 05:59	AM 00:00 – 05:59 AM 06:00 – 11:59 PM 12:00 – 17:59 PM 18:00 – 23:59
Automatic Update	Select the operation type: **"Notify only"** for just notifying or **"Automatic"** for updating automatically.	**Notify only**	**Notify only, Automatic**
Firmware File Prefix	TA2S1O	TA2S1O	Max. 32 bytes ASCII

If the **Check new firmware** field selected to Power On, the machine will chck the new firmware accoeding the scheduling time/date and power on. If there are new firmware can be upgraded, the machine don't carry firmware update out automatic. The machine will send the prompt sounds when pick up the handset, and it needs to update firmware by manual.

Auto Update Settings

You could set auto update settings in this page.

Update via: ⊙ Off ○ TFTP ○ FTP ○ HTTP

TFTP Server:		
HTTP Server:		Exp. 60.35.187.30
HTTP File Path:		Exp. /download/
FTP Server:		Exp. 60.35.17.1
FTP Username:		
FTP Password:		
FTP File Path:		Exp. /file/load

Check new firmware:	○ Power ON ⊙ Scheduling
Scheduling (Date):	14 (1~30 days)
Scheduling (Time):	AM 00:00- 05:59 ▼
Automatic Update:	⊙ Notify only ○ Automatic
Firmware File Prefix:	TA1S
Next update time:	

[Submit] [Reset]

Reset to Default

In Default Setting you can restore the DECT VoIP Phone to factory default in this page. You can just click the Restore button, then the DECT VoIP Phone will restore to default and automatically restart again.

Save & Reboot

In Save & Reboot page you can save the changes you have done. If you want to use new setting in the DECT VoIP Phone, You have to click the Save button. After you click the Save button, the DECT VoIP Phone will automatically restart and the new setting will effect.

Configure the Registration settings

This chapter illustrates DECT handset of VIP-321 configuration, to enable the DECT

registering/deregistration and paging process for registering/deregistering and paging a handset.

DECT Registration Setting

In DECT Registration Setting page, allow user enable registering mode for VIP-321 via Web browser.

To do the Registering through the push button:

> User can also push and keep the PAGE/Registration push button over **10** seconds and then
>
> release the push button to enable the DECT registering process.
>
> Atter enable registering mode, the PWR (red) LED will flash ON-OFF(each 0.5sec) continuously
>
> to indicate that the device has entered the registering state.

DECT De-registration

In this DECT De-registration page. Allow user to de-registration the DECT handset.

DECT Handset Page Setting

In DECT Handset Page Setting page, user can press **"Submit"** to enable DECT Page.

DECT Handset Page Setting

You could page the DECT handset in this page.

Page: ○ On

[Submit]

To do Paging through the push button:

One can also push and keep the PAGE/Registration/RESET push button **1 ~9** seconds and then release the push button to page the DECT handsets.

Start Configuration the DECT Phone

Turning Handset ON/OFF

When you place the handset on the base, it automatically turns on.

To turn the handset on (when it's off), press the ☐ button then you switch the display on.

To turn the handset off, keep the ☐ button pressed until **"Goodbye!"** message appears, then the display turns off.

> ↳ **Note**
> ```
> Nothing will appear on the display when battery power is
> very low. You should fully charge the handset before using
> it.
> ```

Registering a New Handset

You can register to your base additional handsets in order to share the same line with other people. To do that you should assign a number to each new handset you will register. As you know, the supplied handset is already registered with the number **1**; in fact it shows **HS (1)**. For security reasons, the registration procedure can be done only by people who are nearby your base and know the base PIN which acts as phone's authentication code.

Step1.   Please press and hole ⌒ on the DECT Base unit for about 3 second, then releases the button.

Step2.   Press **MENU** key to display the main menu items.

Step3.   Press the **navigation key** ☐ repeatedly to choose, ✂ and then press the **SELECT** key.

Step4.   Press the **Up** or **Down** key to choose **Register H/Set**, then press the **SELECT** key.

Step5. Press the **Up** or **Down** key to choose the base number you want. Press the **SELECT** key in order to search the base. The display shows **"Searching:"**

Step6. Press **SELECT** key to confirm, then the display asks you to enter the base PIN code (preset to **1590**) which acts as phone's authentication code (AC). Enter this code and press the **SELECT** key.

Step7. If the registration has performed successfully, the new handset will show the phone and base numbers (e.g. HS (2) BS (1)) and returns to Standby mode.

> ↳ **Note**
> _____
> The handset can be registered to up to four different base
> units in order to extend the radio coverage.
> _____

Deactivating a Handset

If necessary, you can clear the registration of a registered handset in order to stop its access to one or more base units, but you can not deactivate the handset you are using. Just follow these steps.

Step1. Press **MENU** key to display the main menu items.

Step2. Press the navigation keys 🔲 repeatedly to choose 🔘, and then press the **SELECT** key. Enter the current base **PIN Code** (preset to 1590) , then press the **SELECT** key.

Step3. To select **BASE Cfg** item, then press the **Up** or **Down** key to choose **Remove Handset** and then press the **SELECT** key.

Step4. Press the numeric key related to the handset number you want to clear the registration, and then press the **SELECT** key.
The display of the handset which you have cleared the registration shows **NOT SUB** and it cannot be used anymore with the base.

Setting Date & Time

In Standby mode, the unit can show the current date and time to help you keep your appointments. However, you need to set the date and time so that the date and time when messages or calls are received can be displayed correctly.

Step1. Press **MENU** key to display the main menu items.

Step2. Press the navigation keys 🔲 repeatedly to choose 🕐 , then press the **SELECT** key to choose **Clock**, the current settings are displayed: the time on the upper line in the **Hours: Minutes** format and the date in the **Day – Month** format in.

Step3. Please enter the current date and time using the number keypad (4 digits for each as explained)

Step4. Press the **SELECT** key to save the setting.

Handset Basic Functions

Making a Call

You can dial numbers up to 25 digits which are shown in the display. If the number is longer than 8 digits, the display automatically switches a smaller font in order to accommodate the whole number. You can make your calls in two ways.

Traditional Mode

Step1.   Please pick up the handset and press the 🔲 key to engage the line. Then you will hear a
         dial tone and that ✐ icon appears in the icon area.
Step2.   Please dial a telephone number and the display shows the number as you have entered it.
         When you hear your called party, speak with a normal voice.
Step3.   To end the call, either press the 🔲 key or replace the handset on the base.

High Featured Mode

This procedure is more convenient and reliable; because you can check the number you have entered and eventually make corrections.

Step1.   Please enter a telephone number and check the number on the display. If you have made
         mistakes (i.e. the number you dialed is not the one you wanted to call) modify it by using the
         Left key.
Step2.   When the number correctly appears, press the 🔲 key to dial it out.

Receiving a Call

When a call is received, the phone rings and the display show **"Incoming Call".** If the incoming call can be identified (i.e. caller's information is transmitted from the network on which the call was made and the caller doesn't hide it) you will also see the caller's number in the display.

Answer the call, by pressing the 🔲 key or the **ACCEPT** key, or if the handset is on the base and you have activated the **"Auto Answer"** function , simply pick it up to answer the call, you don't need to

press any key. During the conversation, the display shows the elapsed time.

To end the call, either press the ☎ key or replace the handset on the base.

✏ **Note**

```
The caller's identification can work only if your telephone
network supports the service as well as the caller's one.
However the caller can still hide his/her number.
```

Adjusting Voice Volume

During a conversation, press the **Up** or **Down** key to adjust the level of the earpiece volume (or the hands free speakerphone one, if activated). You can adjust the volume in five levels which are showed by the bars of the icon 📶 ,the more bars filled blue, the louder the volume. When the last bar is filled red, this means the voice volume reach the maximal level.

Muting a Call

During a conversation, you can temporarily mute the microphone so that the party on the other end of the line cannot hear you. During the period you can still hear the him/her. This mode allows you to have a conversation with someone near you and avoid that the party at the phone is hearing what you are saying.

To mute you microphone, just press the **Right** key during the conversation: the icon ⊗ will appear on the display.

To un-mute the microphone, just press again the **Right** key: the icon ⊗ will disappear and you will restore the normal condition.

Using Speakerphone

During a call, you may turn on the speakerphone built in the handset. In this mode you can simply put your handset on a surface (e.g. a desk) and enjoy the comfort of the hands free conversation.

To turn the speakerphone on, press the 🔊 key during a call (line engaged). The icon 🔊 appears on the display.

To turn the speakerphone off, and keep on talking in normal mode, press again the 🔊 key. The icon 🔊 will disappear.

Redialing Last Dialed Number

Your phone allows you to quickly call again the last dialed number.

Pick up the handset and press the key 🔊 to engage the line. Then press the **REDIAL** key to dial out the last dialed number.

Flash Signal

When the line is engaged, the **R** key sends the Flash signal. This key is used in conjunction with special

services (e.g. call waiting, conference etc.) which can be available in your phone network. For further details please contact your network telephone company. Moreover, if you are connected to an extension of a switchboard (PABX), you can use the **R** key to locally transfer a call to another extension.

To transfer a call, or use the said special services, just press the **R** key while the line is engaged.

Using a Pause

A pause is useful when you access an interactive voice response system, such as an automated banking system. A pause provides a delay of 3 seconds.

When you are dialing a number in Standby mode and need to insert a pause, please press the **PAUSE** key one time.

Out of Range Indication

The bars at the right of the ⊤ icon continuously show the signal strength received from the base. If you are too far from the base, the radio signal might become too weak and the phone might not access the telephone line. In these conditions you can't make or receive phone calls, for this reason, the ⊤ icon turns to red.

Locking the Handset Keypad

This function is useful to avoid unwanted function activations by accidentally pressing any keys when you are carrying your handset. If you activate the key lock, the keys are inhibited, except for the **ACCEPT** key.

If you switch the handset off and on again, the key lock is automatically disabled.

In this condition, when a call comes in, you can answer the call by pressing the **ACCEPT** key. When the call ends, the keys will be locked again.

To lock the keys, in the Standby mode just keep the ✳➡ key pressed till the display shows the key lock icon ⊓().

To unlock the keys, keep the ✳➡ key pressed again till the key lock ⊓() icon disappears from the display.

Temporary Tone Dial Switchover

If you are using the pulse dialing because your telephone line doesn't support tone dialing, you might not be able to access certain external services (e.g. automatic call centers, voice mailboxes, interactive telephone systems etc.), because they need the tone dialing. You can avoid this limitation and access them anyway doing this:

Step1.   Please pick up the handset and press the 🔲 key to engage the line.

Step2.   Please press and hold the 🔲 key until "━" is displayed: your phone is temporarily to the tone dial mode.

Step3.   Please enter the number of the service you need to access as you do normally.

Step4.   When you hang up, the phone automatically returns to the pulse mode.

Intercom

If you connected more than one handset to a base (you can connect up to 5 handsets to the same base), you can have a conversation between two people using two different handsets.

1. Please pick up the handset and press the **Left** key, the display shows **" INT->".**
2. Please press the number of the handset you want to contact (from 1 to 5). Then the called handset starts to ring.
3. If the called party can answer your call, he/she can press the 🔲 key and start talking. You can see the number of the handset of your called party and the 🔲 icon in your LCD display
4. At the end of the conversation press the 🔲 key to return to Standby mode.

Call Transfer between Handsets

If you have more handsets registered to the same base, you can transfer an outside call between the registered handsets.

1.   When you are connected to an external call, press the **Left** key and the number of the handset you want to contact (from 1 to 5).

2.   If the called party can answer your call, he/she can press the 🔲 key and start talking.

3.   If you want to transfer the incoming call before the called party answer, just press the **Left** key of your handset. The call will be transferred.

Setting Up a Three-way Conference Call

When you have both an external call and an intercom call in progress, you can set up a three-way conference call, like this:

Press and hold 🔲 key of your handset for more than 2 seconds to set up a three-way conference call.

Call Lists

Incoming Calls

When you receive a call, if the caller's information is transmitted from the network on which the call was made (and the caller doesn't hide it), the caller's phone number is displayed. Moreover, when there is a received call which you missed, the pop up message **"Missed Call"** followed by the number of missed calls (01, 02, etc.) and the icon ↵ will appear on the LCD until you view the details of the missed call. The last 30 received (or missed) calls are stored in the Incoming Calls list, and you can call the said numbers back, delete or store them in the phonebook. To view the number you can go to the Incoming Calls list.

Review/Dialing a Number in Incoming Calls List

Step1.   In Standby mode, press the **LIST** key.

Step2.   Press the **SELECT** key to access Incoming Calls, then the list of incoming calls is displayed on the screen. That if the list is empty the display will show "**No Call**"**.**

Step3.   Scroll through the incoming calls list using the **Up** or **Down** key until you find the desired number, and press the **SELECT** key. You will see the date/time in which you received the call.

Step4.   To place a call to the number, press the [☎] key.

Calls Display Messages Description

Missed Call xx	When the LCD display shows the message, you can press the **OK** key to access the Incoming Calls list to view the details or press the **CANCEL** key to return to the Standby mode.
Private	The message shows on screen and it will be stored in the incoming call list, if the caller has exercised the option to prevent his name and number from being sent.
Out of area	The message will show and be stored in the incoming call list when someone calls from an area where the telephone company is not offering the caller identification services or an area that is not yet providing name and number delivery to your area via the long distance net work.
Error	The message will show if the phone can not recognize the information within the caller display messages properly.

⚲ Note

1. Date and time of the calls can be seen only if you have previously set the date and time.

2. If an incoming call number is longer than 16 digits, the >> icon shows at the right side of the time.

Using Incoming Calls Options

You can save, delete or dial a number in the incoming calls list as follows:

Step1.   Please find the desired number in the incoming calls list.

Step2.   Press the **SELECT** key to display the information of the call.

Step3.   Press the **SELECT** key to display the option menus.

Step4.   Press the **Up** or **Down** key to choose the desired option:

Incoming Calls Options Description

Add to Phonebook	Allows you to save the number in the phonebook. If the number is longer than 16 digits, the display shows **"Copy 16 digits?"** press the **SELECT** key to copy 16 digits of the number to the phonebook.
Delete	To deletes the selected incoming call number.
Delete All	Allows you to delete the whole incoming calls list (a message asks if you really want to delete all the entries). Press the **SELECT** key to confirm or **CANCEL** to exit without deleting the entries.

Outgoing Calls

The last 20 outgoing calls are stored in the Outgoing Calls list. You can review, redial and save the last 20 dialed numbers.

Step1.   In Standby mode, press the **LIST** key.

Step2.   Press the **Up** or **Down** key to choose Outgoing Calls, then press the **SELECT** key, that last dialed number is displayed on the screen. If the list is empty, the display will show **"No Call"**.

Step3.   Press the **Up** or **Down** key to find the desired number.

Step4.   Press the **SAVE** key to add it to phonebook. Or press the ⌨ key to redial it.

Step5.   To exit, please press **Left** key to delete the number digits one at a time or wait for the.

⤷ Note
----
1. If you want to insert a pause, you only need to move the cursor to the desired location and then press the **PAUSE** key.
2. If you want to edit the number, move the cursor to the wrong digit and press the **Left** key to delete it, and then enter the right digit or press and hold the ☎ key to delete it.

Phonebook

The phonebook built in your cordless phone allows you to store frequently used numbers so that you can easily make a call without having to remember or enter the phone number. Moreover, it reduces the risks of wrong dialing. You can store up 250 entries in your internal phonebook.

You can store the phonebook entries in the below stated modes, by using the phonebook menu or in Standby mode.

Storing Phonebook Entries

By Using the phonebook menu

Step1.　Press **MENU** key to display the main menu items.

Step2.　Please repeatedly the ⬚ key choose 🟥 , and then press the **SELECT** key.

Step3.　Press **Up** or **Down** key to choose **Add entry**, then press the **SELECT** key.

Step4.　Please enter a name that you want to use for details of entering a name and please see the "Character Map", to shift the case, press the **#** key while entering text.

Step5.　Press the **Down** key in order to move the cursor to number field, and then enter the appropriate phone number, the a or A icon is changed to the 1 icon. It indicates that you can only enter digits.

Step6.　Press the **Down** key in order to highlight the ring type number at the right of 🎵 icon, then press the **Left** or **Right** key to select the ring you like to associate to the number. Every time you select a ring, the phone sounds with it.

Step7.　Press the **SELECT** key to save the setting.

> ⚓ **Note**
> If you make a mistake while entering a number or name, please press the **CLEAR** key to clear the last character. You can also use the **Left** or **Right** key to move on others wrong characters and then press the **CLEAR** key to clear them.

Storing phone book in Standby mode

Step1.　Enter a phone number in Standby mode, and then press the **SAVE** key.

Step2.　Complete storing the entry by starting from Step 4 described in the last paragraph of the previous method.

> ⚓ **Note**
> When you are entering the number in Step1, you can also insert one or more dialing pauses in order to store them in the phonebook as well.

Character Map

To enter a specific alphanumeric character, press one or more times the relevant key for the required character according to the following table: once for the first character, twice for the second and so on.

Key	Characters in the display order
0	（spc） € ￥ $ ¡ £ ¿ 0
1	. , ? ∗ ! － # @ & / : ( ) " 1
2	A B C a b c ä à 2
3	D E F d e f é è 3
4	G H I g h I ì 4
5	J K L j k l 5
6	M N O m n o ñ ö ò
7	P Q R S p q r s 7 β
8	T U V t u v ü ù 8
9	W X Y Z w x y z æ ã ø Æ

Review/Dialing a Number in Phonebook

You can search the entries stored in the phonebook by entering the first initial characters of their names (alphabetical search). You can also scroll through the whole list of the phonebook entries in Standby mode without accessing the Phonebook menu.

By alphabetical search

Step 1.   Press **MENU** key to display the main menu items.

Step 2. Press repeatedly the ⌷ key to choose ▮ , and then press the **SELECT** key.

Step 3. Press the **SELECT** key to access Review.

Step 4. Please enter the first few letters of the name by using the alphanumeric keys, and press the **SELECT** key. You can view the details of the selected entry.

Step 5. Press the ⌷ key to dial it.

Searching by scrolling the phonebook list

Step 1. Please press the **Down** key in Standby mode. The display shows the whole list of all of the entries in alphabetical order.

Step 2. Repeatedly press the **Up** or **Down** key to scroll to the desired.

Step 3. Press the **SELECT** key to view the details of the selected entry.

Step 4. Press the ⌷ key to dial it.

Using Phonebook Entries Options

You can edit, delete or dial it in the Phonebook as follows:

Step 1.   Please find the desired number in the phonebook.

Step 2.   Press the **SELECT** key to view the details of the selected entry.

Step 3.   Press the **SELECT** key to display the option menus.

Step 4.   Press the **Up** or **Down** key to choose the desired option:

Phonebook Options Description

Edit	Allows you to edit the number in the phonebook.
Delete	Deletes the selected phonebook entry.
Delete All	Deletes all the phonebook entries.

Caller ID on Call Waiting

When you have subscribed to call waiting service from your local company, this telephone will indicate the name and number of the second caller while you are having a conversation with the first caller. Press the **R** key to answer the second caller. When you want to transfer to the first call, press the **R** key again to continue your conversation with the first caller.

Handset & Base Setting

Selecting Ring Type & Volume

You can select your own external and internal ring sound and adjust the volume. There are 12 polyphonic ring tones, 3 ring melodies and 4 volume levels for choosing. You can also adjust the volume **"0"** to turn off the ringer.

Step 1. Press **MENU** key to display the main menu items.

Step 2. Press the navigation keys ⌐⌐ to choose ✂ , and then press the **SELECT** key.

Step 3. Press the **SELECT** key to choose **Ext Calls Ringer**, or press the **Down** key to choose **Int Calls Ringer**, and then press the **SELECT** key.

Step 4. Press the **Left** or **Right** key to select the ring tone you like. Each time you press the **Left** or **Right** key, the handset sounds with the selected ring.

Step 5. Press the **SELECT** key to save the ring tone setting and enter the ring volume setting.

Step 6. Press the **Left** or **Right** key to choose the volume level you want. Each time you press the **Left** or **Right** key, the handset sounds with the selected loudness.

Step 7. Press the **SELECT** key to save the setting and return to the previous menu.

Setting Key Tone

Every time you press a key, your handset acknowledges it with a key tone. You can disable the key tones for a silent use.

Step 1. Entered to the **MENU > H/Set Setting** item.

Step 2. Press the **Up** or **Down** key to choose **Key Tone**.

Step 3. Press the **SELECT** key to activate the function, the icon ✔ will appear at the right of the Key Tone item.

Step 4. Press again the **SELECT** key to deactivate the function, and the icon ✔ will disappear.

Changing Handset PIN

Handset PIN's are required to protect your phone against unauthorized use. There are set to 1590 at the factory. You can change the PIN's as follows:

Step 1. Entered to the **MENU > H/Set Setting** item.

Step 2. Press the **Up** or **Down** key to choose **PIN Code**, then press the **SELECT** key.

Step 3. Enter the current PIN code, and then press the **SELECT** key.

Step 4. Enter the new four-digit PIN you want to use, and press the **SELECT** key.

Step 5. Enter the new PIN code again to confirm it, and then press the **SELECT** key to save the setting.

🔖 **Note**   At Step 4 , If you enter the wrong PIN code, your phone will generate a warning sound.

Reset Handset PIN

If you forget the handset PIN code you have set, you can change the PIN codes into the default ones (1590) as follows:

Step 1. Turn off the handset.

Step 2. Turn on the handset then hold the **"0"** key immediately before the handset shows "**Searching**". The display will show "**Reset PIN?**" press the **right soft key** to confirm. After "**Saved!**" shows on the LCD display, the PIN is reset successfully.

Base Selection

Your handset can be used with up to 4 base units, provided that it has been previously registered with them. This menu option allows you to select the base you want to use:

Step 1. Entered to the **MENU > H/Set Setting** item.

Step 2. Press the **Up** or **Down** key to choose **Select Base**, then press the **SELECT** key.

Step 3. Press the **Up** or **Down** key to select the base you want, then press the **SELECT** key. The icon will appear at the right of the selected base.

Step 4. Press the ⌂ key to return to Standby mode.

↳ Note

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1. The icon ✓ will appear at the right of the selected base.
2. If the selected base has not been registered with your handset, the display will show "**NOT SUB x**" (The **x** is the base number 1 - 4).
3. At select base, you can select "**Best Base**". It will automatically find the first available unit when you lose contact while moving around.

Resetting the Handset

If you reset the handset, all the user selectable features restore to the factory preset initial settings, all the numbers in phonebook will be erased, as well as the incoming/outgoing call lists etc. But the following are not reset:

Flash time, Key tone, Handset PIN, contrast, Window style, Language

If you have made many wrong settings and you want to restore the handset to the factory preset initial settings.

Step 1. Entered to the **MENU > H/Set Setting** item.

Step 2. Press the **Up** or **Down** key to choose **Handset Reset**.

Step 3. The handset asks you to enter the current handset PIN code (the default PIN is **1590**). Use the numeric keys to enter and press **SELECT** key, then the display shows "**Reset?**" press the **SELECT** key to confirm.

Step 4. Press the ⌂ key to exit.

Setting Auto Answer

With this feature, you can answer a call by just picking up the handset from the base without pressing any key.

Step 1. Entered to the **MENU > H/Set Setting** item.

Step 2. Press the **Up** or **Down** key to choose **Auto Answer**, then press the **SELECT** key to activate the feature, and the ✔ icon will appear at the right of the **Auto Answer** item.

Step 3. Press again the **SELECT** key to deactivate the function, and the icon ✔ will disappear.

Setting Display

Using this feature, you can customize the standby display according to your taste and needs (wallpaper and color).

Adjusting the Display Contrast

This adjustment will allow you to optimize the visibility of the display by changing its contrast according to the environment conditions.

Step 1. Entered to the **MENU > H/Set Setting** items and then selected "**Display Setting**"

Step 2. Press the **Up** or **Down** key to choose **Contrast**, then press the **SELECT** key.

Step 3. Press the navigation keys 〔 〕 repeatedly to choose among the 11 available contrast levels, and then press the **SELECT** key.

Selecting the Wallpaper

Step1. Entered to the **MENU > H/Set Setting** items and then selected "**Display Setting**".

Step2. Press the **Up** or **Down** key to choose **Wallpaper**, then press the **SELECT** key. The current setting appears on the display.

Step3. Press the navigation keys 〔 〕 to choose among 10 pre-defined wallpaper images, and then press the **SELECT** key.

Selecting the Windows Style

Step 1. Entered to the **MENU > H/Set Setting** items, and then selected "**Display Setting**".

Step 2. Press the **Up** or **Down** key to choose **Windows Style**. The current setting appears on the display.

Step 3. Press the navigation keys to choose among 8 pre-defined color styles, and then press the **SELECT** key.

Setting a Handset Name

Step 1. Entered to the **MENU > H/Set Setting** items, and then selected "**Display contrast**".

Step 2. Press the **Up** or **Down** key to choose **Handset Name**, then press the **SELECT** key.

Step 3. At this time, enter the name, up to 16 characters long, you want to assign to the handset and then press the **SELECT** key. You will see the icon ✓ at the right side of the Handset Name item.

Step 4. Press the key to return to Standby mode. You will see the result of your settings (name of the handset instead of the number of the base followed by the number of the handset).

Step 5. To deactivate this feature, press the **SELECT** key again when the LCD display shows the icon ✓ at the right side of the Handset Name item.

Selecting a Language

You can change the language used to display the menu messages.

Step 1. Entered to the **MENU > H/Set Setting** items.

Step 2. Press the **Up** or **Down** key to choose **Language**, then press the **SELECT** key. The current language appears on the display.

Step 3. Press the navigation keys to select the language you want, and then press the **SELECT** key.

Extra Setting

Alarm

This option allows you to set one alarm that can ring once.
Activating the Alarm Feature.

Step1. Press **MENU** key to display the main menu items.

Step2. Press repeatedly the key to choose icon, and then press the **SELECT** key.

Step3. Press the **Up** or **Down** key to choose **Alarm**, then press the **SELECT** key.

Step4. You are now on the time field. Set the time with hh:mm format by using the numeric keys.

Step5. Press the **SELECT** key to save the alarm time setting and enter the alarm ring type setting.

Step6. Press the **Left** or **Right** key to select the ring type for the alarm.

Step7. Press the **SELECT** key to save the setting and exit to the previous menu. You can see the icon ✔ appears at the right of the Alarm item and the 🔔 icon will appear at the left of the time.

Step8. When the alarm sounds, press any key to switch it off.

Setting Sleep Mode

This feature allows you to not be disturbed by the ring sound at night. If the sleep mode is activated, the ring volume automatically switches to minimum volume level during time from **23:00 to 6:59.**

Step1. Entered to the **MENU > Extra** items.

Step2. Press the **Up** or **Down** key to choose **Sleep mode**.

Step3. Press the **SELECT** key to turn on this feature you can see the ✔ icon appears at the right of the Sleep mode item and in Standby mode the 🌙 icon will appear at the right of the date.

Game-Sudoku

There is a game for you playing in the leisure time.
The game's instruction: You should input digits (1 to 9) in the empty grids one at a time in order to fill in the whole layout, but it does not allow inputting the same digit in one row or one line.

Step1. Entered to the **MENU > Extra** items.

Step2. Press the **Up** or **Down** key to choose **Game-Sudoku**, then press the **SELECT** key to start playing.

🔖 **Note**

During playing the game, press ⟦ ✱➡ ⟧ key for help and press again
to return to the game.

Calculator

Using this feature, you can use the phone as a calculator. You can perform calculations including addition, subtraction, multiplication and division on your phone.

Step1. Entered to the **MENU > Extra** items.

Step2. To select **Calculator**, then press the **SELECT** key.

Step3. Enter the first number (operand) using the numeric keys.

Step4. To select the operation for four calculations, press the **Left** or **Right** keys to choose the required arithmetic symbol appears:

Step5. Enter the second number (second operand) using the numeric keys

Step6. To get the result, press the **SELECT** key.

↳ Note

To insert a decimal point, press 　✳➙　 key or use the **Left** or **Right** key to select the "." symbol.

Setting Access Code

Some telephone systems, such as PABX (Private Automatic Branch of eXchange) or KTS (Key Telephone Systems), require an access code (e.g. 9 or 0) to access an external line and listen for the outside dial tone before dialing the outside number. You can set your phone in order to automatically insert one-digit access code when you use a phone number from the received calls list. For details about the received calls list, see the 'Incoming calls".

Step1. Entered to the **MENU > Extra** items.

Step2. To select **Access Code**, then press the **SELECT** key.

Step3. Use the **Left** or **Right** key to select the access code from **0** to **9**.

Step4. Press the **SELECT** key to save the setting.

↳ Note

The ✉ item is reserve for SMS message feature in next version DCT-101, that unavailable for current version.

Appendix A   Voice Communication Samples

There are several ways to make calls to desired destination in VIP-321. In this section, we'll lead you step by step to establish your first voice communication via web browsers operations.

Case 1: (Peer-to-Peer mode) VIP-321 to VIP-321 connection via IP address

Assume there are two VIP-321 in the network the WAN IP address are 172.16.0.1, 172.16.0.2 DECT VoIP Phone is registering to the base of the VIP-321 respectively.
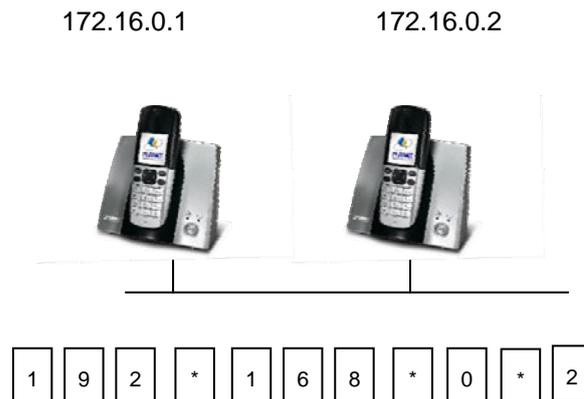
Test the scenario:

1. Press the ☎ button on <u>VIP-321 A</u>

2. Press the keypad: **172*16*0*2** shall be able to connect to the <u>VIP-321 B.</u>

3. Then the phone in 172.16.0.2 should ring. Please repeat the same dialing steps on <u>VIP-321 B</u> to establish the first voice communication from <u>VIP-321 A</u>

Case 2: (Intercom Call) VIP-321 Handset 1 to Handset 2 communications

If you connected more than one handset to a base (you can connect up to 5 handsets to the same base), you can have a conversation between two people using two different handsets.

DECT VoIP Phone are registering to the base already of the some VIP-321.

VIP-321

HS1

HS2

Test the scenario:

1. Please pick up the handset and press the **Left** key, the display shows **" INT->".**
2. Please press the number of the handset you want to contact (from 1 to 5). Then the called handset starts to ring.
3. If the called party can answer your call, it can press the 🔲 key and start talking. You can see the number of the handset of your called party and the ✆ icon in your LCD display.
4. At the end of the conversation press the 🔲 key to return to Standby mode.

Case 3: Voice communication via IP PBX server – IPX-2000

Registration /
Authentication

Registration /
Authentication

IPX-2000 LAN IP Address: 172.16.0.200

- VIP-321 <u>A</u> IP Address: 172.16.0.1
  Line Number: 100

- VIP-321 <u>B</u> IP Address: 172.16.0.2
  Line Number: 200

Device configurations on the VIP-321:

STEP 1:

Log in IPX-2000 and create two testing accounts/password: **100** / **123** (for ATA <u>A</u>), and **200** / **123** (for VIP-321 <u>B</u>) for the voice calls.

STEP 2:

Please log in VIP-321 via web browser, browse to the **SIP settings** menu and select the **Service Domain Settings** menu. In the setting page, please insert the account/password information obtained from your service provider (in this sample, we're using PLANET IPX-2000 as the PBX server for SIP account, call authentications), and then the sample configuration screen is shown below:

Service Domain Settings

You could set information of service domains in this page.

Phone No.:	Phone 1

Realm 1 (Default)	
Active:	⊙ On ○ Off
Display Name:	100
User Name:	100
Register Name:	100
Register Password:	•••
Domain Server:	172.16.0.200
Proxy Server:	172.16.0.200
Outbound Proxy:	
Subscribe for MWI:	○ On ⊙ Off
Switch to PSTN:	○ On ⊙ Off
Status:	Registered

STEP 3:

Repeat the same configuration steps on <u>VIP-321 B</u>, and check the machine registration status, make sure the registrations are completed.

Test the scenario:
1. Pick up the telephone and press the 🗇 key on <u>VIP-321 A</u>.
2. Press the keypad: **200** shall be able to connect to the <u>VIP-321 B</u>.

Then the telephone set in <u>VIP-321 B</u> should ring. Please repeat the same dialing steps on <u>VIP-321 B</u> to establish the first voice communication from <u>VIP-321 A</u>.

Case 4: Call Forward Feature

In the following samples, we'll introduce the Call Forward Feature applications.

In this example, there are three VIP-321 register to IPX-2000 and VIP-321_A had set Call Forward function to VIP-321_B.
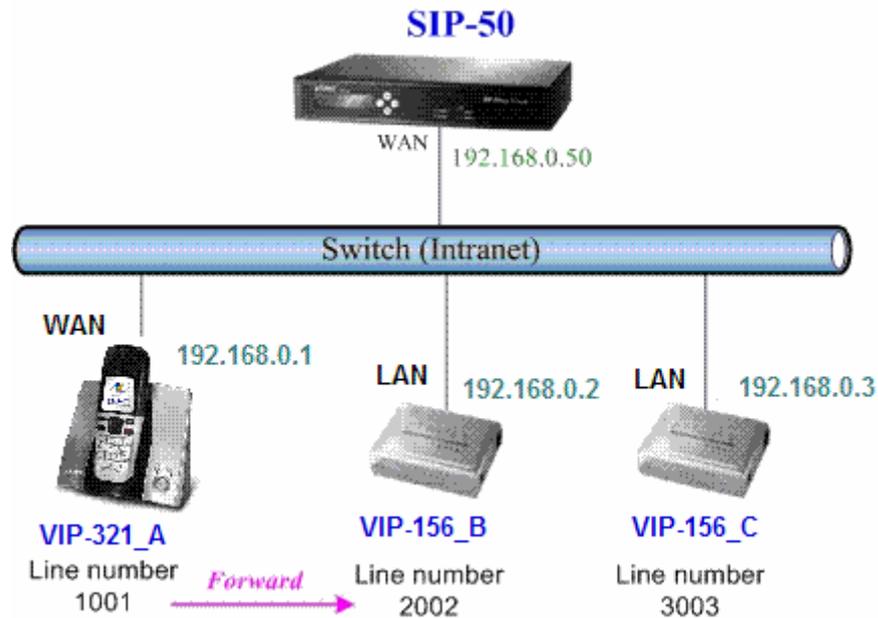
Machine configuration on the VIP-321:

Please log in VIP-321_1 via web browser, browse to the **Phone Settings** menu and select the Call **Forward Setting** menu. In the setting page, please enable the **All Forward** function and fill in the **Name** and **URL** of VIP-321_B, then the sample configuration screen is shown below:

Test the scenario:

1. VIP-321_C pick up the telephone and press key 📞 .
2. Dial the number 1001(VIP-321_A).
3. Because VIP-321_A had set up All Forward function to the number 2002(VIP-321_B).
4. The number 2002(VIP-321_B) will ring up then it pick up the telephone and communication with the number 3003(VIP-321_C).

Appendix B The method of operation guide

In this section, we'll introduce the features method of operation, and lead you step by step to establish these features.

Call Transfer

A. Blind Transfer

1. B call to A and they are in the process of conversation.
2. A carry the transfer function out (Press "**R**" soft-button) to hold the conversation with B.
3. A press "**#510#**" and hear the dial tone, then input the number of C (Follow by the "**#**" key).
4. C will ring up and A will get the busy tone for prompting to hang up.
5. C picks up the handset and conversation with B.

B. Attendant Transfer

1. B call to A and they are in the process of conversation.
2. A carry the transfer function out to hold the conversation with B.
3. A press "**#511#**" and hear the dial tone, then input the number of C (Follow by the "**#**" key).
4. C will ring up.
5. C picks up the handset and conversation with A.
6. A hang up and C conversation with B.

Call Transfer between Handsets

If you have more handsets registered to the same base, you can transfer an outside call between the registered handsets.

1. A call to B and they are communicating.
2. B press **Left** key and saw "**INT - >**" show on screen; then input the handset C HS number, such as HS(1) please press **1** key.
3. C would ring up, please press the "**APPECT**" soft-key to communicate with B, and after B hang up, the call would be transfer automatically.

3-Way Conference

1. A and B are in the process of conversation.
2. A want to invite C to join their conversation.
3. A press "**R**" soft-button button to hold the conversation with B at first, then press "**#512#**" and hear the dial tone, then input the number of C (plus the "**#**" key).
4. C will ring up and pick up the handset to conversation with A.
5. A press "**R**" soft-button again, and they will entry the 3-Way conference mode.

Call Waiting

1. A and B are in the process of conversation.
2. C call to A and A will hear the prompt sounds.
3. A press "R" soft-button to hold the conversation with B, and switch to conversation with C.

Appendix C VIP- 321 Specifications

Product	DECT VoIP Phone
Model	VIP-321
Hardware	
LAN	1 x 10/100Mbps RJ-45 port
WAN	1 x 10/100Mbps RJ-45 port
FXO (PSTN connection)	1 x RJ-11 connection
DECT	1 x DECT GAP compatible base
Protocols and Standard	
Standard	SIP 2.0 (RFC3261)
Voice codec	G.723.1 (6.3k/5.3k), G.726, G.729A, G.729B, G.711
Voice Standard	Voice activity detection (VAD)
	Comfort noise generation (CNG)
	Acoustic echo canceller (AEC)
	G.168: Line echo canceller (LEC)
	Jitter Buffer
Protocols	SIP 2.0 (RFC-3261), TCP//IP, UDP/RTP/RTCP, HTTP, ICMP, ARP, DNS, DHCP, NTP/SNTP, PPP, PPTP, PPPoE
Supplementary services	Call transferring between DECT handsets
Internet features	Built in NAT firewall, DDNS, VLAN, PPTP Access
	Built-in PPPoE function to support dial-up connection for broadband technology
	Virtual server, DMZ, Remote administrator authentication
	Silence suppression to reduce bandwidth consumption. (QoS)
Network and Configuration	
Access Mode	Static IP, PPPoE, DHCP, Bridge Mode
Management	Web, keypad
Dimension (W x D x H)	128 x 110 x 60 mm
Operating Environment	0~40 degree C, 10~95% humidity
Power Requirement	7.5V DC
EMC/EMI	CE, FCC Class B