

# Internet Telephony PBX System

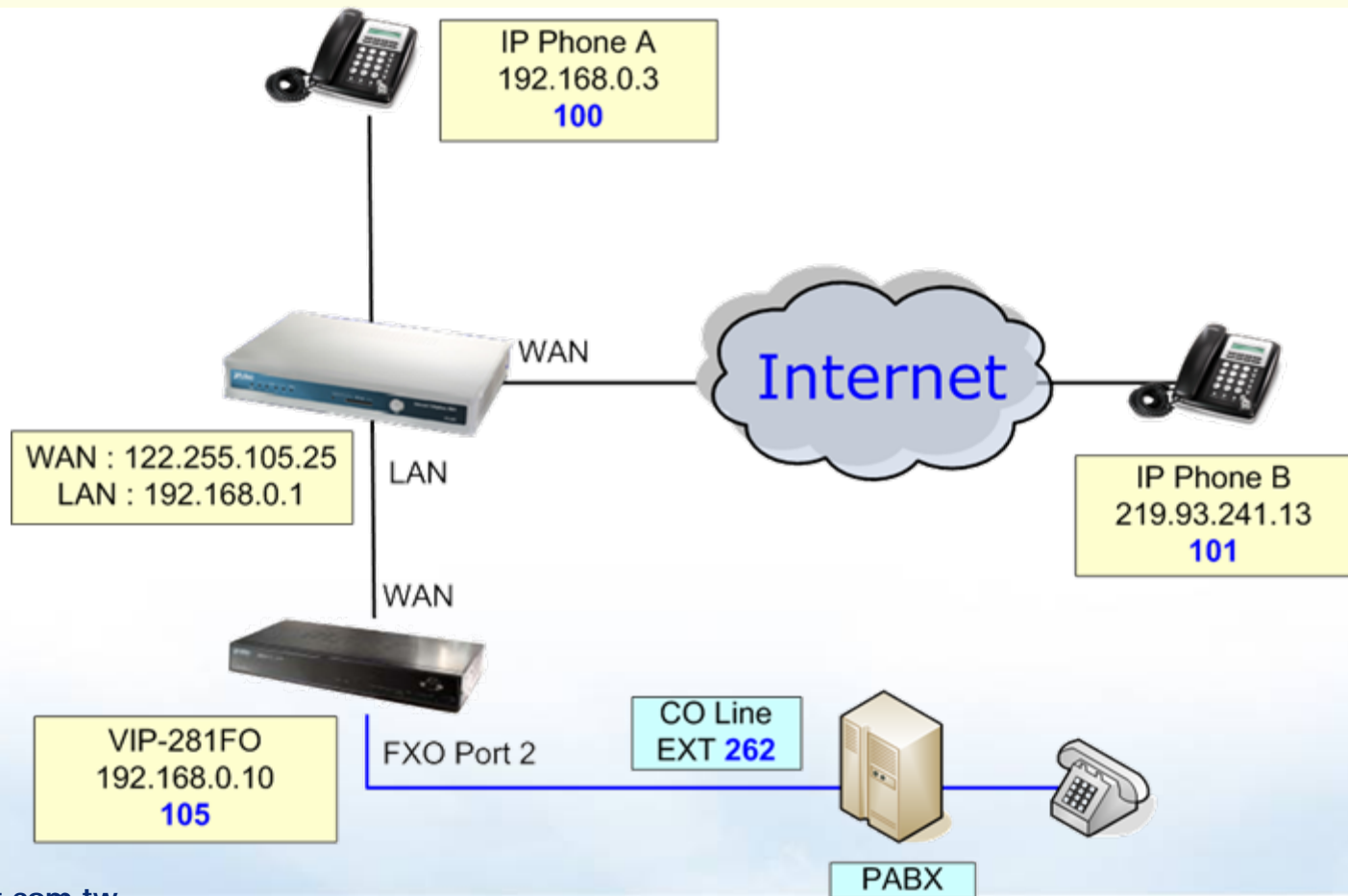
**IPX-600**

**IP PBX with Gateway Configuration**



## Scenarios explain: SIP Proxy Mode

We're using the IPX-600 and VIP-281FO to perform the calling party. Please refer to the following descriptions and insert proper parameters configurations into the each device for establish the voice communications.



Status

**Network Setup**

DHCP Server

IP PBX

NAT Advanced

Log

Management

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Click the [**Network Setup**] to set up the WAN and LAN interface for the IP PBX, If the IP PBXs not under the NAT, disable the STUN server.

LAN	
Domain	
IP Address	192 . 168 . 0 . 1
Subnet Mask	255 . 255 . 255 . 0
WAN	
Wan Connection Type	Static IP
IP Address	122 . 255 . 105 . 25
Subnet Mask	255 . 255 . 255 . 224
Default Gateway	122 . 255 . 105 . 1
DNS1 IP Address	61 . 31 . 233 . 1
DNS2 IP Address	211 . 78 . 215 . 200

Setup the WAN and LAN interface of **IPX-600** follow the information of IP that provides by ISP

IP PBX

- System
- Proxy Server
- Gateway
- Call Route
- Block List
- Users Mgmt.
- Call Status
- Hunt Group
- Call/Pickup Group
- CDR
- Auto Attendant
- Upload Voice File

Select the [IP PBX->Users Mgmt.] of IP PBX and click Batch Add button in main page to create user account for the SIP client.




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User Attributes	Values
First Number	100
Number of Users	2 users
Password	100 <input checked="" type="checkbox"/> Auto-increase
Call Group	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20
Pickup Group	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20
Route Group	Default
Call Forward Immediate	<input checked="" type="radio"/> Disable <input type="radio"/> Internal 10 <input type="radio"/> External
Call Forward on Busy	<input checked="" type="radio"/> Disable <input type="radio"/> Internal 10 <input type="radio"/> External
Call Forward on No Answer	<input checked="" type="radio"/> Disable <input type="radio"/> Internal 10 <input type="radio"/> External
MAC Address	00 : 00 : 00 : 00 : 00 : 00
APS	NO
T.38 Fax Relay	NO
Disturb	<input checked="" type="checkbox"/> Forward to VM
	Disable
E-mail	
	<input type="checkbox"/> Delete VM after Send Attachment via E-mail
Goto VM after Ringing	30 seconds (10~60)

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First Number: 100  
 Number of users : 2  
 Password: 100  
 Check Auto-increase  
 GoTo VM after Ringing: 30  
 (As you requirement to create users counts.)

**User Management** DHCP Only for IP Phones: Total: 5 Users, Registered: 0 Users.

Index	<input type="checkbox"/>	Call Status	Disp. Name	Number	Password	Call Group	Pickup Group	Hunt Group	Call Type	IP:Port	APS	VMWI (new/old)	Action
001	<input type="checkbox"/>		100	100	100	1	1	-	-	-	N	0/0	<input type="button" value="Edit"/>
002	<input type="checkbox"/>		101	101	101	1	1	-	-	-	N	0/0	<input type="button" value="Edit"/>
006	<input type="checkbox"/>		105	105	105	1	1	-	-	-	N	0/0	<input type="button" value="Edit"/>

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Click the [[Apply](#)] button to reload the IP PBX User Management configuration.

**IP PBX**

- System
- Proxy Server
- Gateway**
- Call Route
- Block List
- Users Mgmt.
- Call Status
- Route Group
- Hunt Group

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Select the [IP PBX->Gateway] of IP PBX and click **Apply** button in main page to add gateway for the IP PBX.

Add Gateway	
Entry Attributes	Values
Name	VIP-281
Gateway IP	192.168.0.10
Gateway Port	5060 (1~65535)
Number of Analog Ports	2
Gateway Location	LAN

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**Apply** **Cancel**

Please fill in that gateway information

Name : **VIP-281FO**

Gateway IP : **192.168.0.10**

Gateway port : **5060**

Number of Analog Ports : **2**

Gateway Location : **LAN**

After confirming the modification you've does, please click on the [**Apply**] button to add the gateway, then will be return to gateway list please click [**Apply**] again to make the gateway effective.

- IP PBX
- System
- Proxy Server
- Gateway
- Call Route**
- Block List
- Users Mgmt.
- Call Status **8**
- Hunt Group
- Call/Pickup Group
- CDR
- Auto Attendant
- Upload Voice File

Select the [IP PBX->Call Route] of IP PBX to create a call route which connect with gateway.

### Add Call Route (Dial Plan)

Route Attributes	Values
Name	PABX
Pattern	0.
Primary Route via	<input type="radio"/> Proxy Server OTS <input checked="" type="radio"/> Gateway VIP-281
Backup Route via	<input type="radio"/> Proxy Server OTS <input checked="" type="radio"/> Gateway VIP-281
Drop Digits	0
Prefix	

Apply Cancel **9**

Create a Call Route : **PABX**  
 Pattern : **0.** (The '.' is represent the unlimited length of wildcards.)  
 Drop Digits: **0** (The first few digit of the dialer number will be removed after going out the device when the dialed number matches pattern.)  
 Primary / Backup Route via: **VIP-281FO**  
 This Route is for user can to dial **0 + PABX ext. number** for convenient to make a call.

### Call Route (Dial Plan)

Name	Pattern	Route via	Drop Digits	Prefix	Action
default route	.		0		Edit
<input type="checkbox"/> PABX	0.	VIP-281	0		Edit

Delete Add **Apply**

Click the [Apply] button to reload the IP PBX Call Route configuration. **10**

IP PBX

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Select the [IP PBX->Route Group] of IP PBX to create a route rule which connect with gateway.

- System
- Proxy Server
- Gateway
- Call Route
- Block List
- Users Mgmt.
- Call Status
- Route Group**
- Hunt Group
- Call/Pickup Group
- CDR
- Auto Attendant
- Upload Voice File

Edit Route Group	
Group Attributes	Action
Name	Default
Allowed Call Route	Activated Call Route
Route Members	<div style="border: 1px solid red; padding: 2px;">Default PABX</div>

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Add "PABX" call route to **Activated call Route** field, than leave after click [Apply] then will be return to Route Group list please click [Apply] again for activate the configuration.



Network Setup
<b>WAN Setting</b>
LAN Setting
Virtual Server
Network Filter
Dynamic DNS/DNS
Network Management

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Select the [Advance Setup->WAN Setting] of Gateway to settings the WAN interface IP address

WAN Port Type Configuration:

WAN Type Setting	Static IP <input type="button" value="Select"/>
IP Address	<input type="text" value="192.168.0.10"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Default Router	<input type="text" value="192.168.0.1"/>

WAN Type Setting :  
**Static IP**  
IP Address :  
**192.168.0.10**  
Subnet Mask :  
**255.255.255.0**  
Default Router :  
**192.168.0.1**

Click the [Apply] button to complete the WAN Port Configuration

VoIP Setup
<b>VoIP Basic</b>
Dialing Plan
Advance Setting
Hot Line Setting
Port Status

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Select the [Advance Setup->VoIP Basic] of Gateway to settings the FXO port SIP account

VoIP Protocol Setting :  
**SIP**  
 Number : 105  
 Check the Reg  
 Account : 105  
 Password : 105

Check Enable Use Public Account (Port 1)

Check Hunting Member port 1 and Port 2

VoIP Basic Configuration

VoIP Protocol Setting SIP

Port Number / Password Setting(MAX 20 digit) :

No.	Number	Reg	Account	Password	Register Status	Reason
1	105	<input type="checkbox"/>	105	...		
2		<input type="checkbox"/>				

Use Public Account (PORT 1)  Enable  Disable

SIP Hunting Table :

No.	Hunting Member
1	<input checked="" type="checkbox"/> Port 1 <input checked="" type="checkbox"/> Port 2
2	<input checked="" type="checkbox"/> Port 1 <input checked="" type="checkbox"/> Port 2

**SIP Proxy Setting :**

Domain/Realm	192.168.0.1
SIP Proxy Server	192.168.0.1/5060 <input type="checkbox"/> use <b>Net2Phone</b> Service
Register Interval (seconds)	100
SIP Authentication	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Outbound Proxy Server	0.0.0.0/0

**NAT Pass Setting:**

NAT Pass Method	<input type="radio"/> STUN <input checked="" type="radio"/> Symmetric RTP
STUN Server IP Address	64.69.76.21
STUN Server port	3478

**Local Setting:**

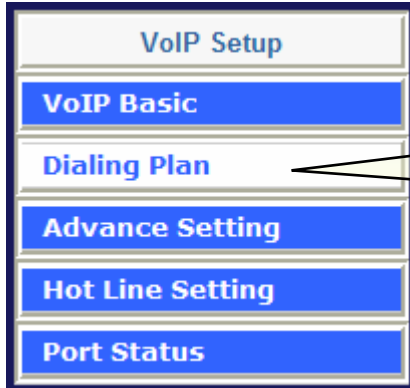
Local SIP Port	5060
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Apply

SIP Proxy Settings :  
Domain/Realm :  
**192.168.0.1**  
SIP Proxy Server :  
**192.168.0.1/5060**  
SIP Authentication :  
**Enable**

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Click the [**Apply**] button to complete the VoIP Basic Configuration



Select the [Advance Setup->Dialing Plan] of Gateway to added the dialing plan number.

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**Incoming Dial Plan :**  
 Incoming no : 0  
 Length of Number : 1 ~ 4  
 Delete Length : 1  
 Prefix no : Null  
 Destination telephone Port : 1,2

And click on the **ADD** button to loaded into the list.

Incoming Dial Plan: (maximun 50 entries, maximun length of prefix digits is 16 digit, maximun length of number is 20 digit):

Item	Incoming no.	Length of Number	Delete Length	Prefix no.	Destination telephone port	Operation
1	0	1 ~ 4	1	None	1,2	
	<input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<b>ADD</b>
<b>DELETE</b>		Inbound Dial Plan		From <input type="text"/>	To <input type="text"/>	

VoIP Setup
<b>VoIP Basic</b>
Dialing Plan
Advance Setting
<b>Hot Line Setting</b>
Port Status

Select the [Advance Setup->Hot Line Setting] of Gateway to settings the hotline number.

HotLine number settings  
Port 1 number : **9997**  
Port 2 number : **9997**  
Auto dialed 9997 for incoming calls.

Hot Line Number Setting (Hotline Setting)  
**17**

Hotline Delay	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Hotline Delay Time(Max. 20 sec)	<input type="text" value="3"/> sec
Port 1 number	<input type="text" value="9997"/>
Port 2 number	<input type="text" value="9997"/>

Apply

Main Menu **Reboot Save Configuration** Logout

Click the [**Save Configuration**] **18** button to save parameter and then click the [**Reboot**] button to restart after save configuration.

Click the [**Apply**] button to complete the Hot Line Configuration

## ● VIP-154T Network Settings

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WAN Setting	
IP Type:	<input checked="" type="radio"/> Fixed IP <input type="radio"/> DHCP Client <input type="radio"/> PPPoE
IP:	192.168.0.3
Mask:	255.255.255.0
Gateway:	192.168.0.1
DNS Server1:	168.95.192.1
DNS Server2:	168.95.1.1
MAC:	00304f5dd44e
Host Name:	VOIP_TA1S10

IP Phone A

WAN Setting	
IP Type:	<input checked="" type="radio"/> Fixed IP <input type="radio"/> DHCP Client <input type="radio"/> PPPoE
IP:	219.93.241.13
Mask:	255.255.255.0
Gateway:	219.93.241.1
DNS Server1:	168.95.192.1
DNS Server2:	168.95.1.1
MAC:	00304f5dd44e
Host Name:	VOIP_TA1S10

IP Phone B

### IP Phone A

IP Type : Fixed IP

IP: 192.168.0.3

Mask: 255.255.255.0

Gateway: 192.168.0.1

### IP Phone B

IP Type : Fixed IP

IP: 219.39.241.13

Mask: 255.255.255.0

Gateway: 219.93.241.1

After confirming the modification you've done, Please click on the **Submit** button to apply settings.

- **VIP-154T Settings for register IP PBX**

Realm 1 (Default)	
Active:	<input checked="" type="radio"/> On <input type="radio"/> Off
Display Name:	104 IP Phone A
Line Number:	104
Register Name:	104
Register Password:	●●●
Domain Server:	192.168.0.1
Proxy Server:	192.168.0.1
Outbound Proxy:	
Status:	Registered

Realm 1 (Default)	
Active:	<input checked="" type="radio"/> On <input type="radio"/> Off
Display Name:	105
Line Number:	105 IP Phone B
Register Name:	105
Register Password:	●●●
Domain Server:	122.255.105.25
Proxy Server:	122.255.105.25
Outbound Proxy:	
Status:	Registered

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### IP Phone A

Active : **On**Display Name: **104**Line Number : **104**Register Name: **104**Register Password: **123**Domain Server: **192.168.0.1**Proxy Server: **192.168.0.1**

### IP Phone B

Active : **On**Display Name: **105**Line Number : **105**Register Name: **105**Register Password: **123**Domain Server: **122.255.105.25**Proxy Server: **122.255.105.25**

After confirming the modification you've done, Please click on the **Submit** button to apply settings.

SIP Phone  
Configuration Menu

Phone Book

Phone Settings

Network

SIP Settings

NAT Trans.

Advanced settings

System Auth.

**Save & Reboot**

System Settings

Reboot without saving

This page inform user important information.

**Configure OK.**

System will reboot automatically to effect those changes and please wait for a moment while rebooting....

Browser to **Save & Reboot** menu to reboot the machine to make the settings effective.

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### **For example:**

#### **1.From PABX make call to IP Phone A or B**

Step 1. Pick up the handset and input number **262** when listen to dial-tone.

Step 2. You will be listen to the greeting prompt voice from IP PBX.

Step 3. Enter an IP Phone extension number **100** or **101**

Step 4. Then the IP Phone should be ring at this time.

Step 5. You pick up handset establish voice communication begin.

#### **2.From IP Phone make call to PABX Ext.**

Step 1. Pick up the handset and hearing the dial-tone

Step 2. Enter a extension number of the PABX system, such as **0263** and end with **#**.

Step 2. Then the ext.263 Analog phone of the PABX, should be ring at this time.

Step 3. You can pick up handset establish voice communication begin.

### **NOTE:**

The mentioned parameters and network settings in this sample be carefully modified to meet the real-world applications.

# ACTIVATING IP POWER

