

VE-PG3 Application Notes

CONFIGURING FOR IP TELEPHONE USE

How does the VE-PG3 Communicate with an IP Telephone?

The VE-PG3 web interface has an operating mode called Converter Mode that when properly configured, allows a radio to communicate to an IP phone over an IP network. As shown below, the radio in Area A transmits to a base station radio that is connected to the VE-PG3. The VE-PG3 connects to the IP network and to another VE-PG3 at Area B. To get the signal to the IP phone, there needs to be a LAN connection through a LAN Hub device.

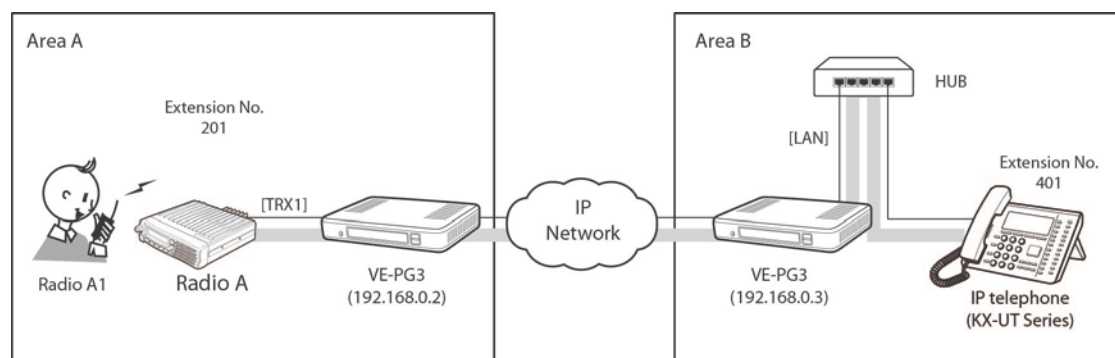


Figure 1 IP Connections

What You Will Need

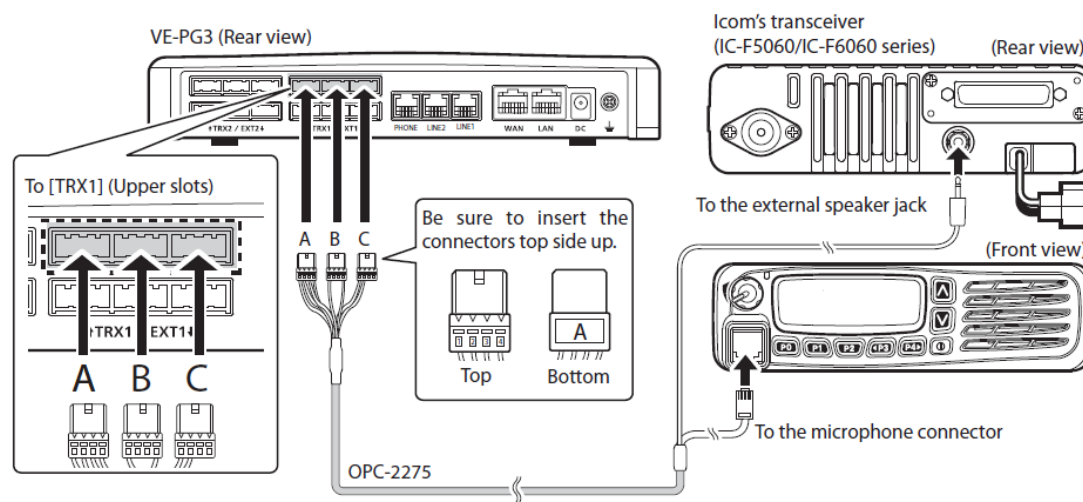
- Two or more VE-PG3 units
- Two or more F5061 mobile radios, digital mode
- Two or more F3161 handheld radios, digital mode
- One Hub (required for VE-PG3 and IP Phone communication via LAN port)
- One IP digital telephone (Panasonic KX-UT series)

- Multiple CAT-5 cables
- Two or more OPC-2275 cables (for connecting the VEPG3 and the F5061 radio)

How to Connect

Connect the VE-PG3 and the mobile radio as shown in the following diagram.

Note: Ensure that the radio and VE-PG3 are turned off before connecting.



- The [TRX1] and [TRX2] ports (upper slots) accept the OPC-2275 connectors, however, follow the example to correctly connect the transceiver to ONLY the [TRX1] on the VE-PG3.

Programming the Radios

1. Program Radios A and A1 at Site A so that their frequencies match (Digital Simplex Mode).
2. Set the volume to the 9 o'clock position on the F5061 radios.

Programming the VE-PG3

The following paragraphs describe how to:

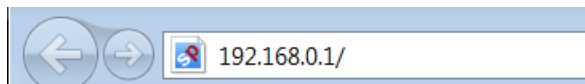
- Change the VE-PG3 IP address
- Program for IP telephone operation in the Converter Mode

Changing the VE-PG3 IP Address

You will need to change the IP address for each VEPG3 device to addresses determined by your network plan. Consult your IP professional to create a network plan.

Note: Your VE-PG3 will need to be connected as described in *How to Connect*.

1. Open your web browser. The default address is: 192.168.0.1.



2. Enter the newly assigned IP address of the VE-PG3 in your browser address field.

3. After pressing Enter, the Login Authentication window will appear.

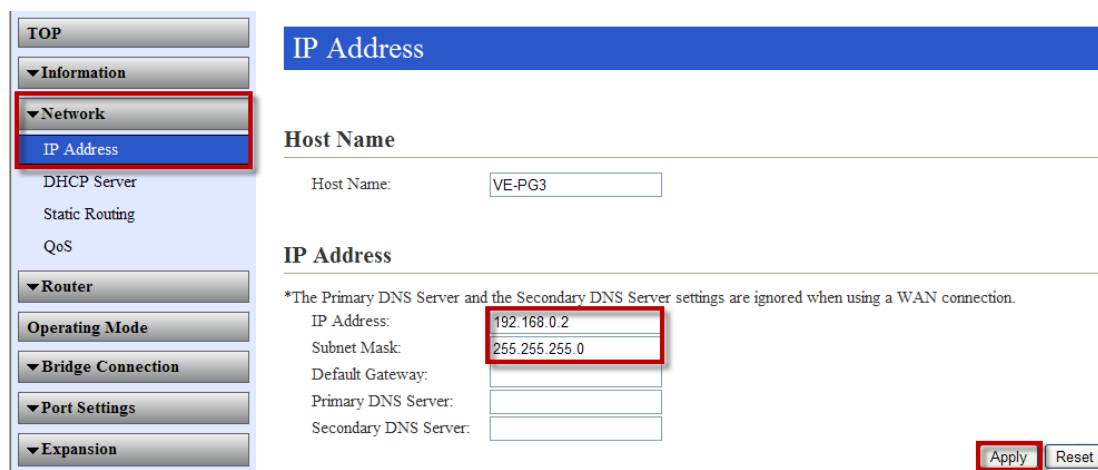


4. Enter the following (default) information:

- Username Admin
- Password Admin

Set a new IP address for your VE-PG3 according to your network plan.

5. Click **Network** and select **IP Address**.
6. Enter your VE-PG3 IP Address according to your network plan and click **Apply**.



IP Address

Host Name

Host Name:

IP Address

*The Primary DNS Server and the Secondary DNS Server settings are ignored when using a WAN connection.

IP Address:

Subnet Mask:

Default Gateway:

Primary DNS Server:

Secondary DNS Server:

7. Click Reboot to enter the new VE-PG3 IP Address (192.168.0.2 in this example)



IP Address

A reboot is required to apply all the new settings.

Host Name

Host Name:

Note: depending on your newly assigned IP address, you computer IP address may have to be changed to access the VE-PG3 again.

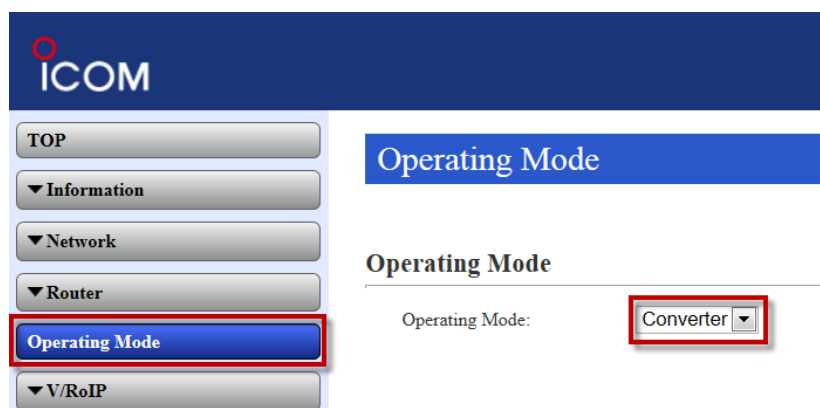
Once you have rebooted, the login window will appear. Enter the username and password again.



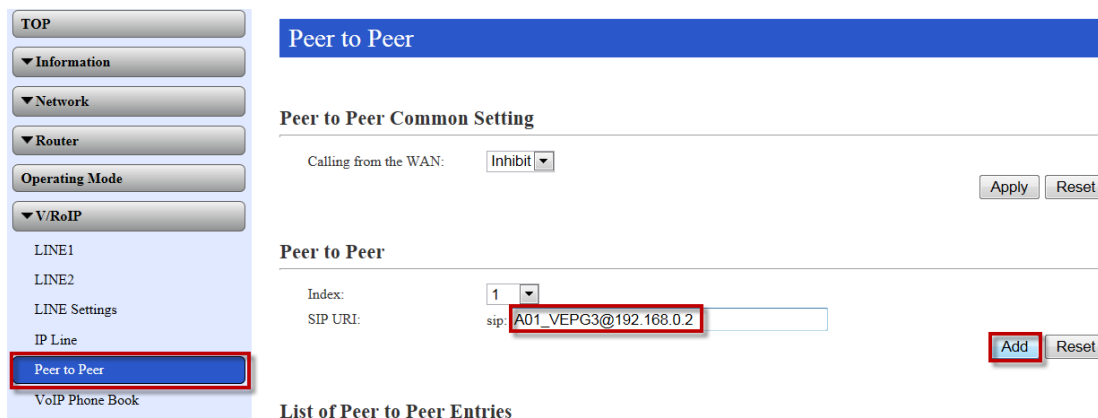
Programming VE-PG3 Area A Settings

1. Click **Operating Mode**. Select **Converter** from the dropdown box. Click **Apply**.

Note: The following procedure uses IP addresses and extensions described in Figure 1 IP Connections as examples. You can use your own addresses and extensions as desired.

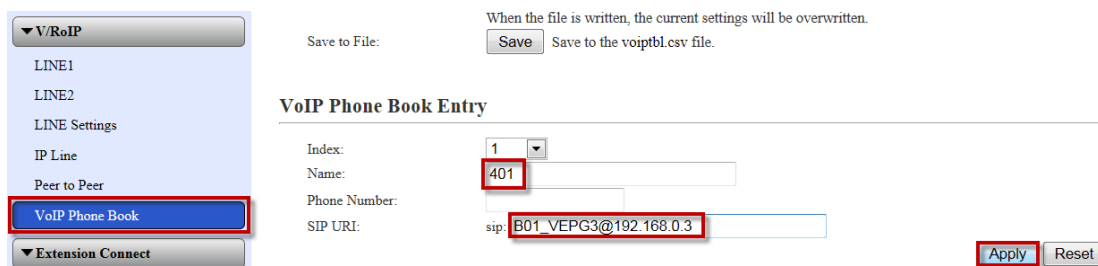


- Go to **V/RoIP** and select **Peer to Peer**.



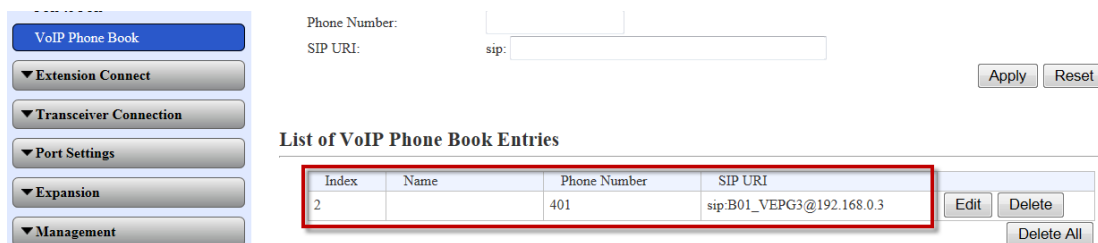
- In the **SIP URI** field, type [A01_VEPG3@192.168.0.2](#) (example) and click **Add**. This is the IP address of the VE-PG3 in area A.

- Go to **VoIP Phone Book**.



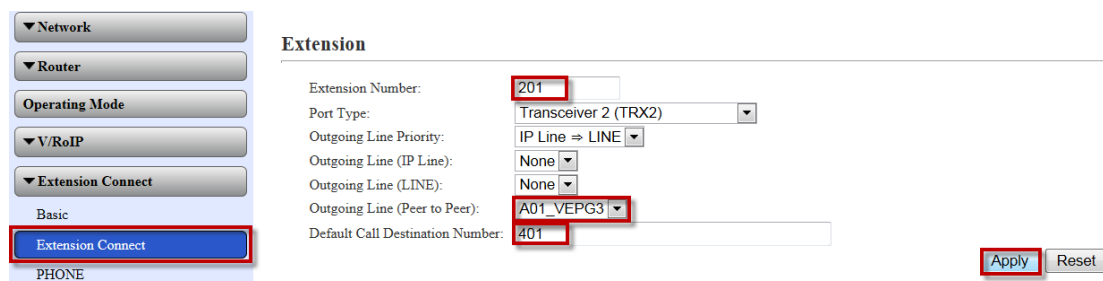
- Type 401 (example) in the **Phone Number** field.
- Type [B01_VEPG3@192.168.0.3](#) (example) in the **SIP URI** field and click **Apply**.

You will see the following Phone Book entry.



Index	Name	Phone Number	SIP URI
2		401	sip:B01_VEPG3@192.168.0.3

- Go to **Extension Connect/Extension Connect**.



Extension

Extension Number: 201

Port Type: Transceiver 2 (TRX2)

Outgoing Line Priority: IP Line => LINE

Outgoing Line (IP Line): None

Outgoing Line (LINE): None

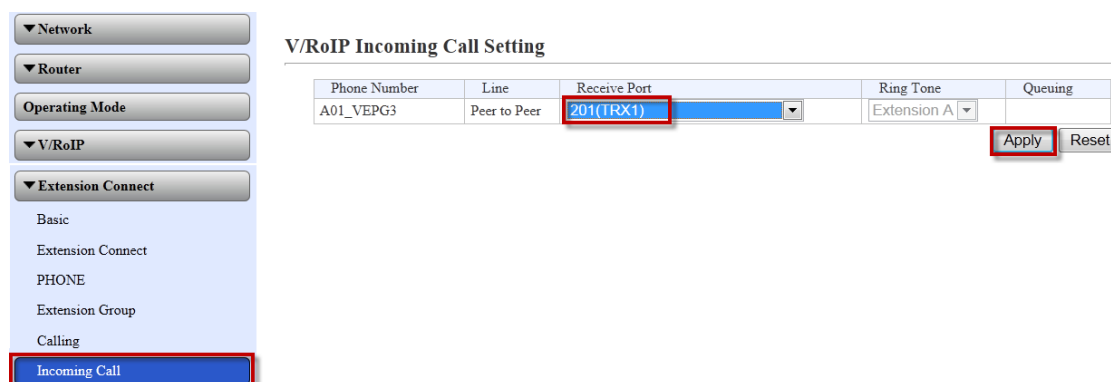
Outgoing Line (Peer to Peer): A01_VEPG3

Default Call Destination Number: 401

Apply Reset

8. Type 201 (example) in the **Extension Number** field.
9. Select A01_VEPG3 in the **Outgoing Line (Peer to Peer)** field.
10. Type 401 (example) in the **Default Call Destination Number** field and click **Apply**

11. Select **Incoming Call**.



V/RoIP Incoming Call Setting

Phone Number	Line	Receive Port	Ring Tone	Queuing
A01_VEPG3	Peer to Peer	201(TRX1)	Extension A	

Apply Reset

12. Select 201(TRX) in the **Receive Port** field and click **Apply**.

13. Go to **Port Settings** and select **Transceiver 1 (TRX)**. Be sure that your radio model is selected in the **Transceiver Model** field.



Transceiver 1 (TRX1)

Transceiver Model

Transceiver Model: IC-F5060/F6060

*Remove the transceiver from the main unit before changing this setting. All the settings on this page will be initialized if you change this setting.

Transceiver Connection

Serial Communication: ☒ Disable ☐ Enable

Transceiver Control

Priority Receive: ☐ Disable ☒ Enable

14. Scroll to the bottom of the page and click **Apply**.

Release Timer

Call Cancel Timer:	15	seconds
No Voice Release Timer:	15	seconds
Forced Disconnect		
Forced Disconnect Timer:	10	minutes

The Area A settings are now programmed.

Programming VE-PG3 Area B Settings

1. Go to **Network/DHCP Server**.

TOP
▼ Information
▼ Network
IP Address
DHCP Server
Static Routing
QoS
▼ Router
Operating Mode
▼ V/RoIP
▼ Extension Connect
▼ Transceiver Connection
▼ Port Settings

DHCP Server

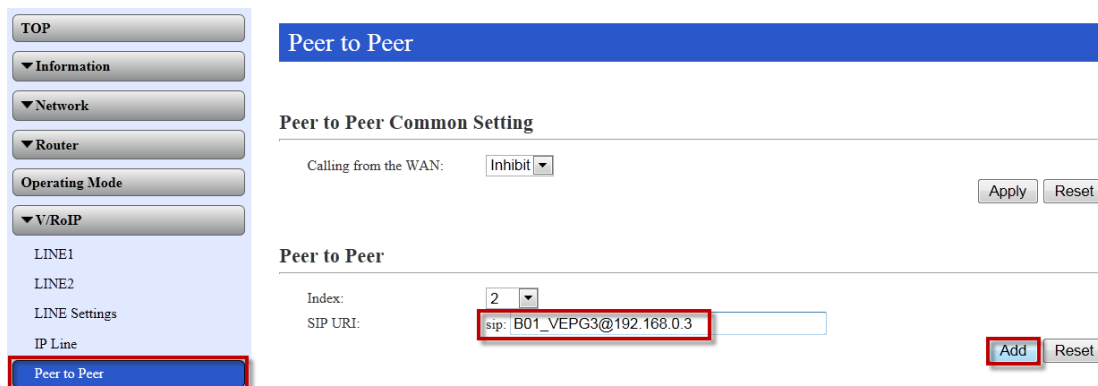
DHCP Server

DHCP Server:	☐ Disable ☒ Enable
IP Pool Start Address:	192.168.0.10
Pool Size:	30
Subnet Mask:	255.255.255.0
Lease Time:	72 hours
Domain Name:	
Default Gateway:	
DNS Proxy:	☐ Disable ☒ Enable
Primary WINS Server:	
Secondary WINS Server:	
TFTP:	☐ Disable ☒ Enable
TFTP Server:	

*If the TFTP Server setting is blank, the system IP address is used.

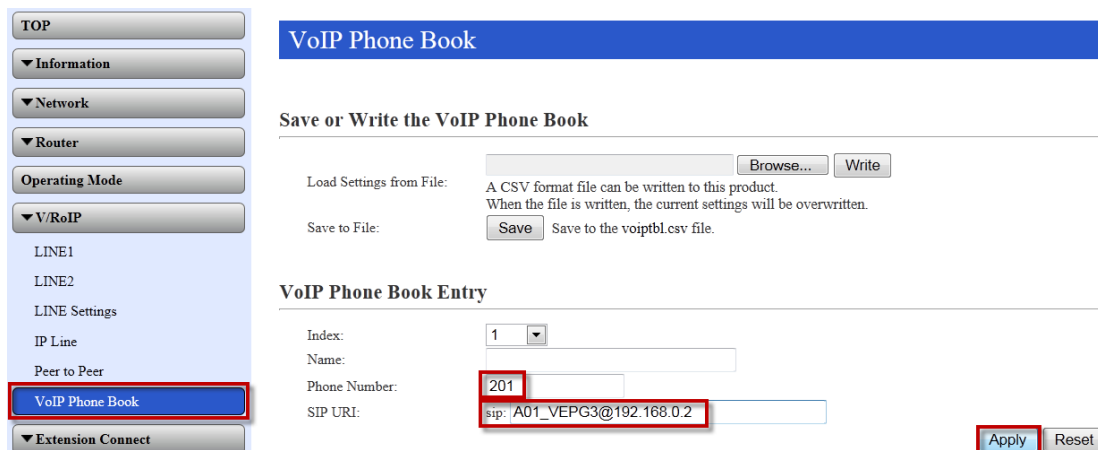
2. Click **Enable** in the **DHCP Server** field and click **Apply**.

3. Go to **V/RoIP** and select **Peer to Peer**.



4. Type B01_VEPG3@192.168.0.3 (example) in the **SIP URI** field and Click **Add**.

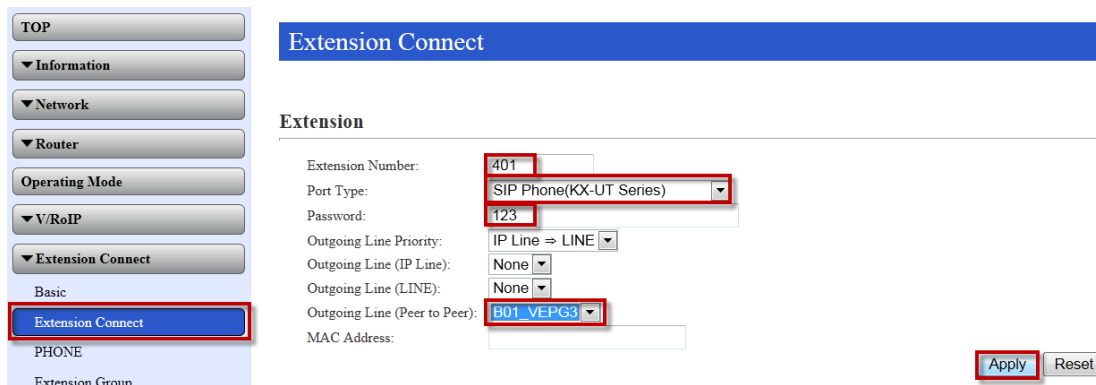
5. Go to **VoIP Phone Book**.



6. Type 201 in the **Phone Number** field.

7. Type A01_VEPG3@192.168.0.2 (example) in the **SIP URI** field and click **Apply**.

8. Go to **Extension Connect/Extension Connect**.



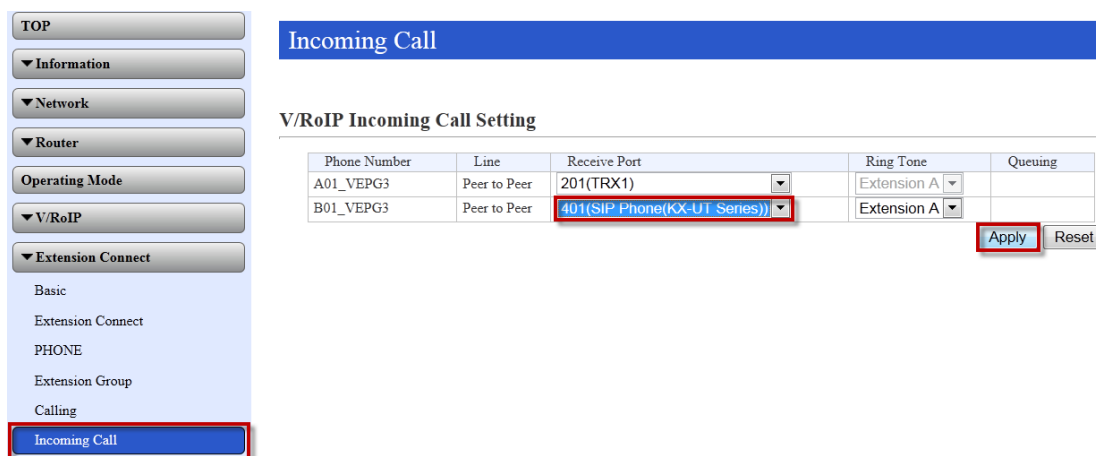
9. Type 401 (example) in the **Extension Number** field.

10. Select **SIP Phone (KX-UT Series)** in the **Port Type** field.

11. Type a password (can be any number) in the **Password** field.

12. Select B01_VEPG3 in the **Outgoing Line (Peer to Peer)** field.

13. Go to **Extension Connect/Incoming Call**.



Phone Number	Line	Receive Port	Ring Tone	Queuing
A01_VEPG3	Peer to Peer	201(TRX1)	Extension A	
B01_VEPG3	Peer to Peer	401(SIP Phone(KX-UT Series))	Extension A	

14. Select 401 (**SIP Phone (KX-UT Series)**) in the **Receive Port** field and click **Apply**.