

VoIP Voice Gateway



Quick Install Manual

Version: 1.0



VoIP Master - Total VoIP Solution

Soundwin Network Inc

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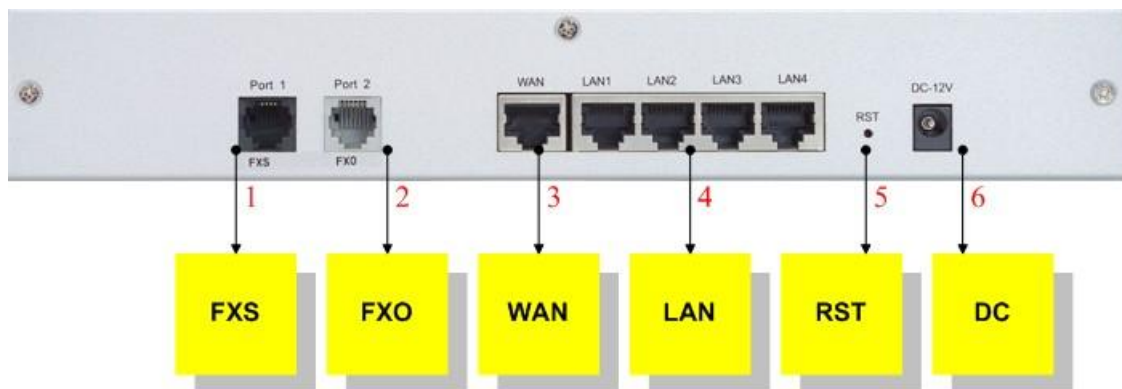
Introduce

This manual is teaching you how to quick install and setup your gateway. If you want to know more detail information about this gateway, please see the user manual.

Getting started with Web browser for VoIP Gateway involves the following general procedures:

- Installing VoIP Gateway
- Configuring VoIP Gateway
- Scenario Application

Installing Voice Broadband Gateway



1. Connecting the Power Adapter

- 1.1 Connect the power adapter to the power outlet and to the PWR power jack on the rear panel of the Gateway.
- 2.2 The **Power** LED should be lighting.

2. Connecting to a PC

- 2.1 Using an Ethernet cable to the LAN 1 port or to any LAN1 ~ LAN4 port.
- 2.2 Connect the other end of the Ethernet cable to your PC's installed network interface card (NIC).
- 2.3 The LED indicators at both the Ethernet port and the NIC should be ON.

3. Connecting to a DSL/Cable Modem

- The VoIP Broadband Gateway supports connection of a DSL modem via an Ethernet interface.
- 3.1 Locate your Ethernet cable (should be provided by your ISP or telecom).The hardware installation is now complete.
 - 3.2 Using a Ethernet cable to the Ethernet port of the DSL/Cable modem.
 - 3.3 Plug the other end of the cable into the **WAN** port of Gateway.

4. Setting Up a Management PC

- The Gateway has a built-in HTTP (Web) server for configuration. Before you use the Gateway to access the Internet, you should set up a management PC to log into the Gateway for further configuration by connecting to LAN port. The management PC may be configured with a fixed IP address.
- For a fixed IP address, use an IP address from a 222.222.222.x network, such as 222.222.222.2.Or use DHCP form Lan port of gateway.



Configuring the Voice Broadband Gateway

1 Connecting to the Web Configurator via a Web Browser

1. Launch the Web browser. Enter <http://222.222.222.1> into the browser **Address** window and press the Enter key.

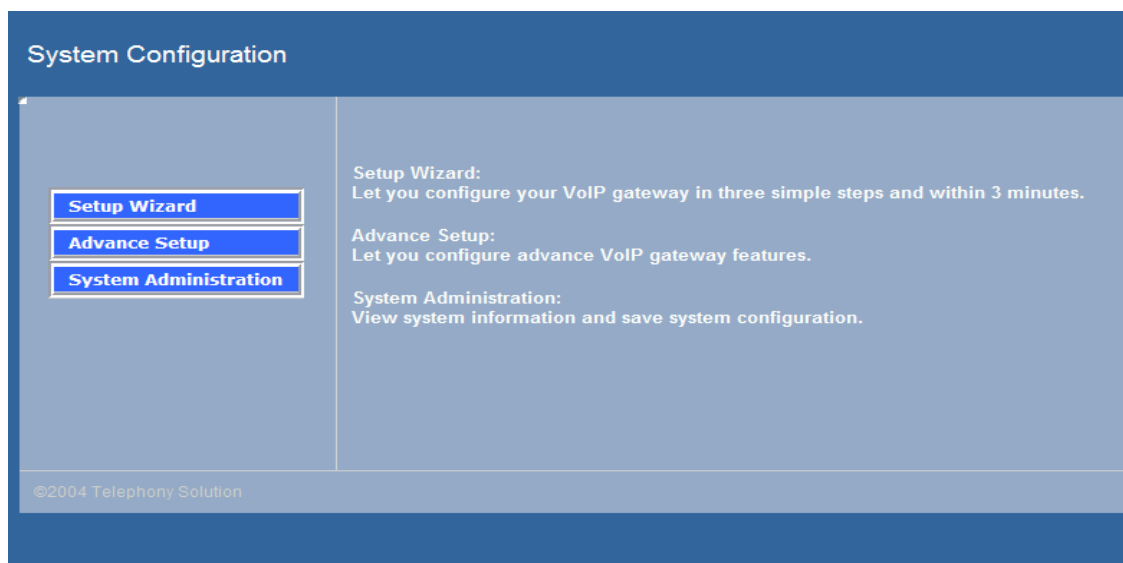


2. An authentication dialog box will open.



3. If this is a first time setup of the Gateway, type **admin** as the User Name and **admin** as the Password field. Click **OK**.

4. The Web Configurator Setup Main Menu will open as below :



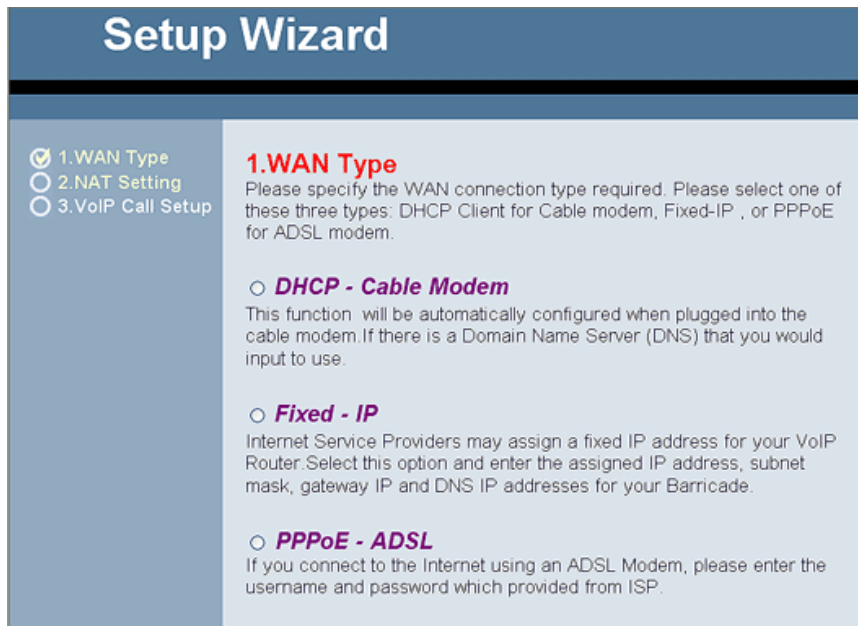
5. Please Click on “Setup Wizard” to enter Quick Start procedure:

2. Setup Wizard for Quick Start :

This Wizard will take you to complete the Basic Setting step by step:

2.1 WAN Setup: (required for Internet access) :

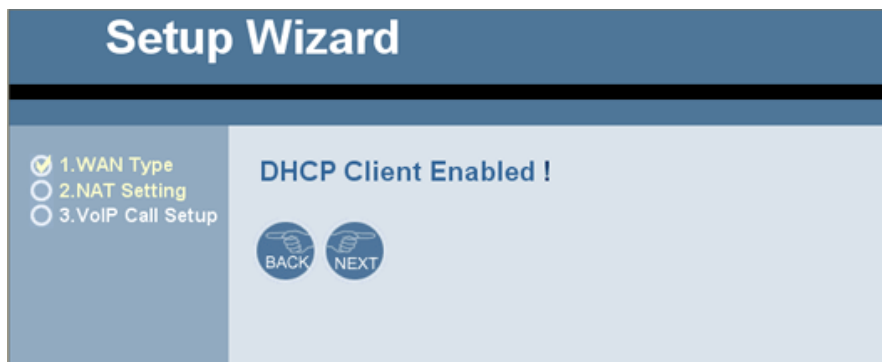
You could select one of three WAN types for access internet.



The screenshot shows the 'Setup Wizard' interface. On the left, a sidebar lists three steps: '1. WAN Type' (checked), '2. NAT Setting', and '3. VoIP Call Setup'. The main content area is titled '1. WAN Type' and contains the following text: 'Please specify the WAN connection type required. Please select one of these three types: DHCP Client for Cable modem, Fixed-IP , or PPPoE for ADSL modem.' Below this text are three radio button options: 'DHCP - Cable Modem', 'Fixed - IP', and 'PPPoE - ADSL'. Each option has a brief description of its configuration requirements.

2.2 DHCP Setting :

While you click on “DHCP – Cable Modem”, you enable DHCP Client. Please Click on “Next “, then you enter the “NAT Setting” (Please go to **2.5 NAT Setting**)



The screenshot shows the 'Setup Wizard' interface after selecting 'DHCP - Cable Modem'. The sidebar remains the same. The main content area displays 'DHCP Client Enabled !' in bold. Below this message are two circular buttons: 'BACK' and 'NEXT'.

2.3 Fixed IP Setting :

When you select “Fixed IP” option, you could see the Fixed IP setting menu to key in “IP address”, “Default Router IP Address” and “Subnet Mask”. Please Click on “Next “, then you enter the “NAT Setting” (Please go to **2.5 NAT Setting**)

Setup Wizard

- 1. WAN Type
- 2. NAT Setting
- 3. VoIP Call Setup

2 Fixed-IP Setting :

IP Address	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Default Router IP Address	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Subnet Mask	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>

Enter the IP address, Default Router IP address and Subnet Mask .

BACK
FINISH

2.4 PPPoE Setting:

When you select “PPPoE - ADSL” option, you could see the PPPoE setting menu. Please filled in Username and Password gotten from (Internet Service Provider) ISP. Please Click on “Next”, then you enter the “NAT Setting” (Please go to **2.5 NAT Setting**)

Setup Wizard

- 1. WAN Type
- 2. NAT Setting
- 3. VoIP Call Setup

3. PPPoE Type

PPPoE Detatil Configuration :

Use PPPoE Authentication	
User Name :	<input type="text"/>
Password :	<input type="password"/>
Please retype your password :	<input type="password"/>

Enter the User Name and Password required by your ISP.

BACK
FINISH

2.5 NAT Setup:

2.5.1 After completing the WAN Type Setting , you would enter “NAT Setting” menu. VoIP Broadband Gateway Provide two modes, one is Bridge Mode, the other one is NAT Mode:

2.5.2 Setting LAN IP address to provide a C-class subnet

2.5.3 Please Click on “Next”, then you enter the “NAT Setting” (Please go to **2.6 VoIP Call Setup**)

Setup Wizard

- 1. WAN Type
- 2. NAT Setting
- 3. VoIP Call Setup

NAT Settings

Birdge Mode NAT Mode

You can enable NAT to allow PCs from LAN subnet for accessing Internet, or use this device only Bridge function.

LAN IP Setting

IP Address	10 . 10 . 10 . 250
IP Subnet Mask	255.255.255.0

2.6 VoIP Call Setup:

VoIP Setup menu provide user a Basic Function Setting

When you use H.323 Protocol:

1 Port Setting : Configuring the port number. The maximum characters is 20

2 Register Gatekeeper: You need key in "Gatekeeper IP address" for Gateway to register if needing.

- 1. WAN Type
- 2. NAT Setting
- 3. VoIP Call Setup

VoIP Protocol Selection

VoIP Call Settings

Port number Setup :

Port 1 number	1100
Port 2 number	none
Port 3 number	none
Port 4 number	none
GateKeeper IP address	0.0.0.0

If you don't use gatekeeper, you should set the following outgoing dial plan.

3. Direct Call Plan Setting: if you don't register Gatekeeper and want to use Peer to Peer call, you must setting the dial plan. When you use the peer to peer mode, please setting the gatekeeper field to "0.0.0.0" . (About Dial plan setting, please see the Appendix Dialing Plan.)

Outgoing Dial Plan:

Item	Phone Number	Min Digit	Max Digit	Strip Len	Prefix Number	IP Address
1	10x	5	8			59.120.54.66
2						
3						

When you use the SIP protocol:

- 1 Port Setting : Configuring the port number. The maximum characters is 20
- 2 Register SIP Proxy Server: You need key in “SIP Proxy Server IP address” for Gateway to register if needing.

VoIP Protocol Selection

1. WAN Type
 2. NAT Setting
 3. VoIP Call Setup

SIP

VoIP Call Settings

Port number Setup :

Port 1 number	1100
Port 2 number	none
Port 3 number	none
Port 4 number	none
SIP Proxy Server IP address	0.0.0.0

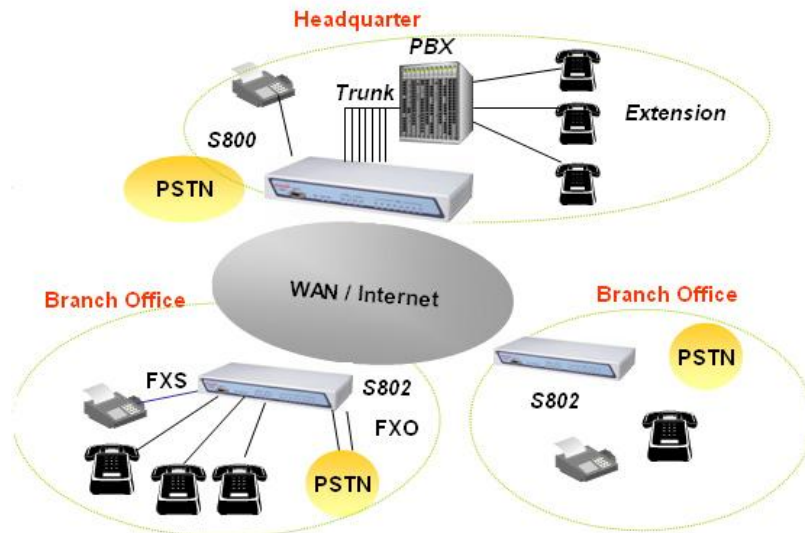
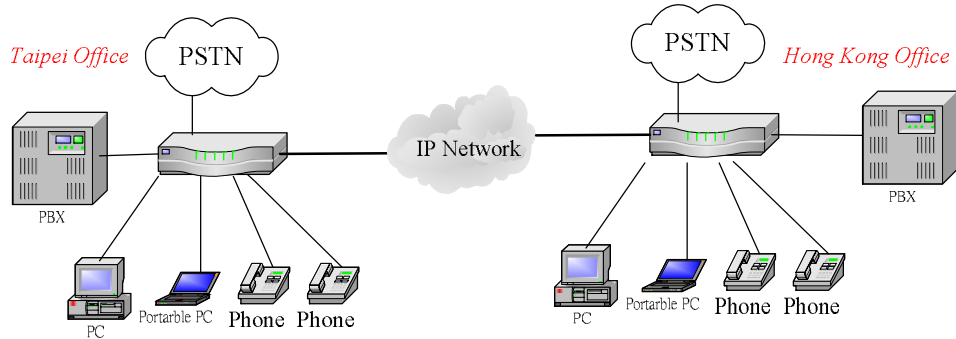
If you don't use sip proxy server, you should set the following outgoing dial plan.

3. Direct Call Plan Setting: if you don't register SIP Proxy Server and want to use Peer to Peer call, you must setting the dial plan. When you use the peer to peer mode, please setting the SIP Proxy Server IP field to “0.0.0.0” . (About Dial plan setting, please see the Appendix Dialing Plan.)

Outgoing Dial Plan:

Item	Phone Number	Min Digit	Max Digit	Strip Len	Prefix Number	IP Address
1	10x	5	8			59.120.54.66
2						
3						

Scenario Application



Appendix

Direct call (Peer to Peer) setup

If you don't registered Gatekeeper or SIP proxy server, you can make call by Peer to Peer. For SIP or H.323, setting the dialing plan, and can make direct call.

Overview of the Dialing Plan

The "Dialing plan" need setting when the user use the method of Peer-to-Peer H.323 (SIP) VoIP call or registering H.323 Gatekeeper (SIP Proxy Server) Mode. The H.323(SIP) Dialing Plan has two kinds of directions: Outgoing (call out) and Incoming (call in).

1. Outgoing Dial Plan:

Peer-to-Peer Call Mode: Effective

Registering to H.323 Gatekeeper (SIP Proxy Server) Mode: Effective

2. Incoming Dial Plan:

Peer-to-Peer Call Mode: Effective

Registering to H.323 Gatekeeper (SIP Proxy Server) Mode:

The leading number would **register** to H.323 Gatekeeper (SIP Proxy Server)

When you use direct call, you must setting your VoIP protocol firstly. Use direct call, you should setting the same protocol both of UA. Both of UA must support dial plan function. Some ATA don't support Dialing plan, it maybe let direct call failed.

In the "Outgoing Dial Plan Configurations" settings: Maximum Entries : 50

Outgoing Dial Plan:(Maximun 50 entries,Maximun length of Prefix Digits is 16 digit,Maximun length of number is 20 digit)

Item	Outgoing no.	Length of Number	Delete Len	Add digit no.	Destination IP/DNS	Destination Port	Operation
	<input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	ADD
DELETE Outbound Dial Plan		From <input type="text"/> To <input type="text"/>					

- "Outbound number" is the leading digits of the call out dialing number.
- "Length of Number" has two text fields need filled: "Min Length" and "Max Length" is the min/max allowed length you can dial.
- "Delete Length" is the number of digits that will be stripped from beginning of the dialed number.
- "Add Digit Number" is the digits that will be added to the beginning of the dialed number.
- "Destination IP Address / Domain Name" is the IP address / Domain Name of the destination Gateway that owns this phone number.
- "Destination Port" is port of the destination gateway use.(Default is 5060)

Example1: Normally Dial

Outgoing Dial Plan:(Maximun 50 entries,Maximun length of Prefix Digits is 16 digit,Maximun length of number is 20 digit)

Item	Outgoing no.	Length of Number	Delete Len	Add digit no.	Destination IP/DNS	Destination Port	Operation
1	001x	4 ~ 20	0	None	215.214.1.1	5060	
2	002x	4 ~ 20	0	None	h323.gw.net	5060	
	<input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	ADD
DELETE Outbound Dial Plan		From <input type="text"/> To <input type="text"/>					

1.001x leading call out, call to Destination IP address: 211.22.3.14

2.002x leading call out, call to Destination Domain Name: h.323.gw.net

Example2: Speed Dial

Outgoing Dial Plan:(Maximun 50 entries,Maximun length of Prefix Digits is 16 digit,Maximun length of number is 20 digit)

Item	Outgoing no.	Length of Number	Delete Len	Add digit no.	Destination IP/DNS	Destination Port	Operation
1	401	3 ~ 3	3	1334588712	211.22.3.14	5060	
2	402	3 ~ 3	3	2212345612	211.21.2.76	5060	
	<input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	ADD

DELETE Outbound Dial Plan From To

1. If user dial "401", Gateway automatically dial "1334588712" to Destination IP address: 211.22.3.14
 2. If user dial "402", Gateway automatically dial "2212345612" to Destination IP address: 211.21.2.76
- In the "Incoming Dial Plan Configurations" settings: Maximum Entries : 50

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 Len	Add Digit no.	Destination tele port	Operation
	<input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	ADD

DELETE Inbound Dial Plan From To

- "Inbound number" is the leading digits of the dialing number.
- "Length of Number" has two text fields need filled: "Min Length" and "Max Length" is the min/max allowed length you can dial.
- "Delete Length" is the number of digits that will be stripped from beginning of the dialed number.
- "Add Digit Number" is the digits that will be added to the beginning of the dialed number.
- "Destination Tele port" is "Tel-port"; this is for local dial plan setting phone number.

Example1: Hunting for FXS Port

Port 1: FXS

Port 2: FXS

Port 3: FXS

Port 4: FXS

H.323 (SIP) number "123" call incoming, Port 1 will be ringing.

If Port 1 is busy, Port will be ringing.

If Port 1 and 2 are busy, Port 3 will be ringing.

If Port 1, Port 2 and Port 3 are busy, Port 4 will be ringing.

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 Len	Add Digit no.	Destination tele port	Operation
1	123	3 ~ 3	0	None	1,2,3,4	
	<input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	ADD

DELETE Inbound Dial Plan From To

Example2: Hunting for FXO Port

Port 1: FXO was connected to PSTN.

Port 2: FXO was connected to PSTN.

Port 3: FXO was connected to PSTN.

Port 4: FXO was connected to PSTN.

H.323 (SIP) number "123" call incoming, Port 1 will be off-hook and hear the Dial Tone from PSTN.

If Port 1 is busy, Port will be will be off-hook and hear the Dial Tone from PSTN.

If Port 1 and 2 are busy, Port 3 will be off-hook and hear the Dial Tone from PSTN.

If Port 1, Port 2 and Port 3 are busy, Port 4 will be off-hook and hear the Dial Tone from PSTN.

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 Len	Add Digit no.	Destination tele port	Operation
1	123	3 ~ 3	0	None	1,2,3,4	
	<input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="ADD"/>
<input type="button" value="DELETE"/> Inbound Dial Plan		From <input type="text"/> To <input type="text"/>				

Example3: Termination Call to FXO for One-Shoot Call

Port 1: FXO was connected to PSTN (area code is 81xxxxxxxx).

H.323 (SIP) leading number "081x" incoming, and delete the first one digit "0", and call to PSTN number.

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 Len	Add Digit no.	Destination tele port	Operation
1	081x	4 ~ 20	1	None	1	
	<input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="ADD"/>
<input type="button" value="DELETE"/> Inbound Dial Plan		From <input type="text"/> To <input type="text"/>				

Example4: Termination Call to FXO

Port 1: FXS

Port 1: FXO was connected to PSTN (area code is 92xxxxxxxx).

Port 1 FXS call to "092x" to PSTN, FXO port will delete the first one digit "0" and call to PSTN number.

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 Len	Add Digit no.	Destination tele port	Operation
1	092x	4 ~ 20	1	None	2	
	<input type="text"/>	<input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="ADD"/>
<input type="button" value="DELETE"/> Inbound Dial Plan		From <input type="text"/> To <input type="text"/>				

([x]: mean wild card, 0~9. Speed dial: When you dial over the number, input "#" key can speed dial call, or you key in number as the length as the "length of number")

Technical Support

For technical assistance, contact the Web SENSE Technical Support team via e-mail at support@soundwin.com