

IP400 Quick Guide

The IP400 is a four port FXO gateway designed to integrate traditional telephone lines with your IP PBX. The following guide is intended to help you configure the IP400 and the PBX together in as few steps as possible.

Accessing the IP400

1. Connect the IP400 to your network via the LAN port
2. Log into the PBX
3. Navigate to Destinations=>Extensions
4. Click Auto Discovery
5. Search the page for the IP400 MAC and note the IP address of the IP400

Configuring the IP400

SIP Service

1. In your web browser, enter the IP address for the IP400
2. Login to the IP400
Username: Admin
Password: <nothing>
3. Navigate to Setup=>SIP Service
4. Enter the IP address for the PBX under SIP proxy address
5. For SIP proxy port enter 5060
6. Leave the rest of the settings at their defaults. Minor changes may need to be made in the future once everything is tested (eg. Sometimes the DTMF method needs to be set to SIP Info)
7. Click Save

SIP Service

SIP Server

SIP proxy address:
SIP proxy port:
Registration time: (seconds)

Outbound Proxy

Enable outbound proxy
Outbound proxy address:
Outbound proxy port:

Signaling

Signaling port:

RTP

RTP port:

IP ToS/DiffServ

Call signaling packets: (2 Hex digit byte value)
RTP packets: (2 Hex digit byte value)

Session

Enable session timer
Desired refresh time: (sec)
Minimum refresh time: (sec)

DTMF Relay

RFC2833
 SIP INFO method

NAT Traversal

None
 UPnP
 Enable STUN server
Address:
Port:

Save

Cancel

Help

Line Settings

1. Navigate to Setup=>Line Settings
2. For each analog line connected, enter the phone number for that line (Telephone number 1 is for the cable connected to Line 1, etc) **Only enter numbers; no spaces, no hyphens, no dashes, no periods, no parenthesis**
3. Enter a unique User Name for the IP400
4. Enter a unique Password for the IP400

4 FXO Line Settings

DID	Telephone number 1:	<input type="text" value="9411234567"/>
	Telephone number 2:	<input type="text" value="1234567890"/>
	Telephone number 3:	<input type="text" value="9876543210"/>
	Telephone number 4:	<input type="text" value="5555555555"/>
	Fax number:	<input type="text" value="FAX"/>
	Register	
	User name:	<input type="text" value="ip400"/>
	Password:	<input type="password" value="•••••"/>

5. Click Save

Voice

1. Navigate to Setup=>Voice
2. Set the VAD for the four Voice Coders to OFF
3. Leave the rest of the settings at their defaults for now. Minor changes may need to be made in the future once everything is tested (eg. Caller ID Detection Time is a typical field that requires tweaking)
4. Click Save

Voice

Preferred Coder G.711U G.711A G.729 G.726

Voice Coders

	Packetization	VAD
G.711U	20ms	OFF
G.711A	20ms	OFF
G.729	20ms	OFF
G.726	10ms	OFF

Calling Timers

Wait-for-Answer time : sec

Call limit : sec

Dialing Parameters

Tone out on: msec

Tone out off: msec

DTMF power: (-400 ~ 30) * 0.1 dB

Dial out wait : msec

Gain

Transmit gain: dB

Receive gain: dB

Rebooting

1. Navigate to Administration=>Reboot

Reboot

Reboot

2. Click Restart System

Configuring the SIP Provider in the PBX

1. Log into the PBX
2. Navigate to Providers=>SIP Providers
3. Click Add Provider

SIP Provider	
Name:	<input type="text" value="ip400"/>
User Type:	<input type="text" value="friend"/>
DTMF Mode:	<input type="text" value="auto"/>
Host:	<input type="text" value="dynamic"/>
Register:	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Custom <input type="text"/>
Authorization:	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Custom <input type="text"/>
From Domain:	<input checked="" type="radio"/> Default <input type="radio"/> Custom <input type="text"/>
Outbound Proxy:	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled <input type="text"/>
Username:	<input type="text" value="ip400"/>
Secret:	<input type="text" value="ip400"/>
Inbound Caller ID:	<input type="text"/>
Outbound Caller ID Name:	<input type="text"/>
Outbound Caller ID Number:	<input type="text"/>
Call Limit:	<input type="text" value="1"/>
Qualify:	<input type="text" value="30000"/>
Default Destination:	<input type="text" value="Groups"/> <input type="text" value="Ring Group: Ring All"/> ...
Dial Prefix:	<input type="text"/>
Area Code:	<input type="text"/>
Generate Ringing on outbound calls:	<input type="checkbox"/>
Allow Outbound Caller to transfer:	<input type="checkbox"/>
Allow Call Recording:	<input type="checkbox"/>
Ext CID Override:	<input type="checkbox"/>
Restrict CID Override:	<input type="checkbox"/>
Can Reinvite:	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A

4. Under Name and Username, enter the unique User Name entered earlier in the IP400 Line Settings page
5. Set User Type to Friend
6. Set DTMF Mode to Auto
7. Enter dynamic as the Host address
8. Set Register to No
9. Set Authorization to No
10. Set From Domain to Default

11. Set Outbound Proxy to Disabled
12. Under Secret, enter the unique Password entered earlier in the IP400 Line Settings page
13. Set Call Limit to equal the number of analog lines connected to the IP400
14. Leave the rest of the fields set to their defaults, or change them in accordance with your system
15. Click Save Changes
16. Click Apply Changes

Congratulations, your IP400 FXO gateway should now be configured with your PBX, check Reporting=>Monitoring and you will see it is registered, has an IP address, and the status is OK. All you need to do at this point is set your incoming and outgoing routing in regards to the IP400 and you will be making and receiving calls using your analog lines.