

Overview

PLANET IPX-1800 series IP PBX system are designed and optimized for the SMB, and SOHO daily communications. The IPX-1800 is the next generation voice communication platform for the small to medium enterprise. Designed as an open, scalable, and highly reliable telephony solution, the IPX-1800 series are able to accept 30 extension registrations, and effectively meeting scales from various enterprises. Designed to run on a variety of VoIP applications, the IPX-1800 provides centralized call control, auto-attendant, voice conferencing, PSTN, and IP-based communications. The IPX-1800 series divided into three models: the **IPX-1800N** integrates up to 4 ISDN telephony interfaces (Euro-ISDN ST-interface); the **IPX-1803** integrates up to 4 telephony interfaces, including 3 FXO (Foreign eXchange Office, FXO), 1 FXS (Foreign eXchange Station, FXS); the FXS interface in IPX-1803 provides lifeline functionality; **the IPX-1804** integrates 4 FXO telephony interfaces to become a feature-rich PBX system that supports seamless communications between existing PSTN calls, analog, IP phones and SIP-based endpoints.

The IPX-1800 series IP PBX system integrates telephony call processing, call control, voice mail, and a widely PBX application programming interface into a highly scalable architecture designed to support both traditional circuit-based and the Internet telephony service within a distributed enterprise communications network.

With IPX-1800, standard SIP phones can be easily integrated in your office; plus the auto-config feature, you may integrate our IP Phone series - VIP-153T/VIP-154T, and the ATA (analog telephone adapter) series - VIP-156/VIP-157 to build up the VoIP network deployment in minutes.

Allowing distributed IP technology to meet traditional voice services, with proactive management interface, the IPX-1800 series IP PBX system in the daily business processes, enterprises can make people more productive, more intelligent tasks, and more customer satisfaction.

Table of Contents

PREPARATION BEFORE BEGINNING ADMINISTRATION ON IP PBX SYSTEM	1
PHYSICAL INTERFACES	1
ADMINISTRATION INTERFACE	2
Web configuration access	2
LAN/WAN Interface quick configurations	3
WAN IP address configuration via web configuration interface	4
VOICE COMMUNICATION SAMPLES	5
VOICE COMMUNICATION VIA IP PBX SYSTEM – IPX-1800	5
Machine configurations on the IPX-1800	8
VOICE COMMUNICATION VIA IP PBX SYSTEM – IPX-1800 (AUTO-CONFIG)	8
Machine configurations on the IPX-1800	9
QUICK REFERENCE IN CD-ROM GUIDE	13

Document Objectives

This guide provides physical installation, network configurations, and Internet access establishment information for the IP PBX System.

Document Organization

This guide is organized as follows:

- Preparation before beginning administration on IPX-1800
- Administration interface
- Network Interface quick configurations
- Internet access setup guide

Preparation before beginning administration on IP PBX System

Physical Interfaces

1	Power cord (IPX-1803/IPX-1804)	110/220 Volt, 60 Hz	
	Power adapter (IPX-1800N)	12V DC	
2	Telephony interface ports	IPX-1800N	4 x RJ-45 (Euro-ISDN ST-interface)
		IPX-1803	3 x FXO, 1 x FXS
		IPX-1804	4 x FXO
3	USB ports	1 external port with compliance to USB 1.1/2.0. Plug in a USB hard drive for voicemail backup from the internal one	
4	WAN	Connect to a broadband modem or a WAN router	
5	LAN	Connect to a LAN switch	

Administration Interface

The IP PBX provides GUI (Web based, Graphical User Interface) for machine management and administration.

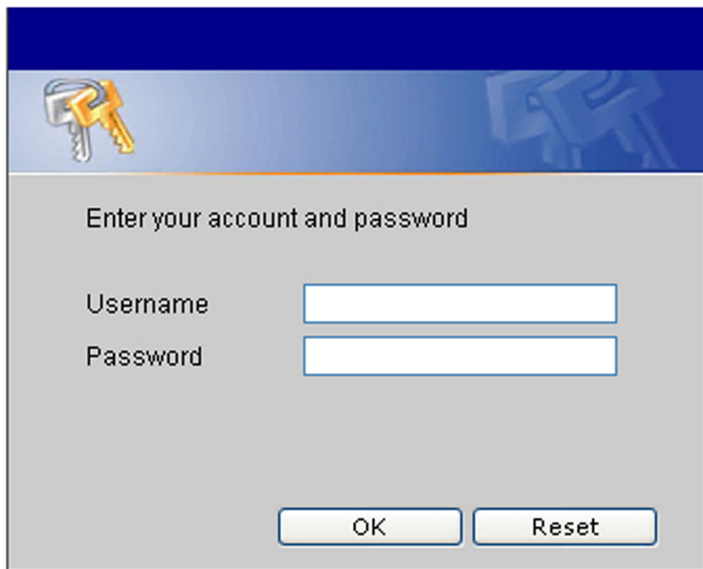
Web configuration access

To start IP PBX web configuration, you must have one of these web browsers installed on computer for management

- Netscape Communicator 4.03 or higher
- Microsoft Internet Explorer 4.01 or higher with Java support

Default LAN IP address of IP PBX is **192.168.1.1**. You may now open your web browser, and insert **https://192.168.1.1** in the address bar of your web browser to logon IP PBX web configuration page via secure web access.

IPX-1800 will prompt for logon username/password, please enter: **admin / admin** to continue machine administration.

The image shows a web-based login interface for the IP PBX. At the top, there is a dark blue header bar. Below it, a light blue banner features a graphic of two keys (one gold, one silver) on the left and a faint, stylized image of a telephone handset on the right. The main content area has a light gray background and is titled "Enter your account and password". Below the title, there are two labels: "Username" and "Password", each followed by a white rectangular input field with a blue border. At the bottom of the form, there are two buttons: "OK" and "Reset", both with blue borders and light gray backgrounds.

Enter your account and password

Username

Password

OK Reset



NOTE:

The IPX-1800 supports HTTPs secure web session. Machine operators or system administrator may login machine via secure web connection for machine administration.

Format: **https://LAN or WAN IP address of IP PBX**



NOTE:

In order to connect machine for administration, please locate your PC in the same network segment (192.168.1.x) of IPX-1800. If you're not familiar with TCP/IP, please refer to related chapter on user's manual CD or consult your network administrator for proper network configurations.

LAN/WAN Interface quick configurations

Nature of PLANET IPX-1800 is an IP Sharing (NAT) device, it comes with two default IP addresses, and default LAN side IP address is "**192.168.1.1**", default WAN side IP address is "**192.168.0.1**". You may use any PC to connect to the LAN port of IPX-1800 to start machine administration.



Hint

In general cases, the LAN IP address is the default VoIP router of LAN side workstations for Internet access, and the WAN IP of IPX-1800 are the IP address for remote calling party to connect with.

Execute your web browser, and insert the IP address (**https://192.168.1.1**) of IP PBX in the address bar. After logging on machine with username/password (default: **admin / admin**), browse to "**System**" --> "**LAN setup**" configuration menu:

Parameter Description

IP address LAN IP address of the IP PBX

Default: 192.168.1.1

Mask LAN mask of the IP PBX

Default: 255.255.255.0

After confirming the modifications, Please click on the **Save** button to apply settings and browse to "**IP PBX service**" page in "**Service**" menu to click the "**Reload**" button to make the settings effective



Hint

It is suggested to keep the DHCP server related parameters in default state to keep machine in best performance.

WAN IP address configuration via web configuration interface

Execute your web browser, and insert the IP address **https://192.168.0.1** (default: **192.168.0.1**) of IP PBX in the address bar. After logging on machine username/ password (default: **admin / admin**), browse to "**System**" configuration menu and select "**WAN setup**" option, you will see the configuration screen below:

Parameter Description

IP address WAN IP address of IPX-1800

Default: 192.168.0.1

Subnet Mask WAN mask of IPX-1800

Default: 255.255.255.0

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

After confirming the modification you've done. Please click on the **Save** button to apply settings and browse to "**IP PBX service**" page in "**Service**" menu to click the "**Reload**" button to make the settings effective.



Hint

Please contact your Internet service provider to obtain the Internet access type, and select the proper network settings in IPX-1800 to establish the network connections.

Save Change to reload configurations

After modifying the IP PBX parameters, the changes are temporary stored in machine memory. Please be sure to activate the modifications via reloading the machine configurations.

:: IP PBX SERVICE

Service & Configuration

Advance

IP PBX will reload configuration as soon as possible.
Currently active calls will be disconnected in 3 minutes.
Do you really want to Continue?

IP PBX Configuration Reload

RELOAD

IP PBX Configuration Backup

BACKUP

☐ PBX Settings Only

IP PBX Configuration Restore

RESTORE

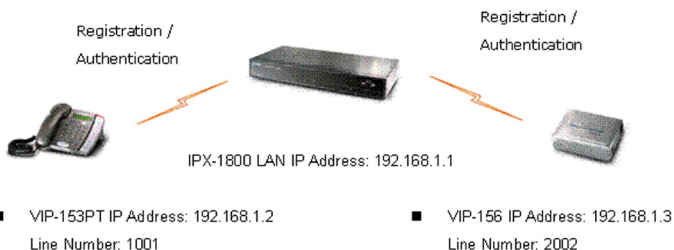
Operation path: Service ----> IP PBX serviceVoice communication samples

Voice communication samples

There are several ways to make calls to desired destination in IPX-1800. In this section, we'll lead you step by step to establish your first voice communication via keypad and web browsers operations.

Voice communication via IP PBX system – IPX-1800

In the following sample, we'll introduce how to integrate the client with our IP PBX system IPX-1800 via general settings.



Machine configurations on the IPX-1800

STEP 1:

Please browse to the “**Device → IP Phone**” menu and create new device for the general configuration.

:: DEVICE PHONE MANAGEMENT

Device ID	Device Administration URL			ADD
VIP156				

DEL

Device ID	Associated Extension	Device Administration URL	Auto Client Conf	
<input type="checkbox"/>	VIP153	1001		LINK
			Disabled	EDIT
				APPLY

1

STEP 2:

Please browse to the “**Device → Extension of IP Phone**” menu and press the **ADD** button to create the two extension accounts/password: 1001/123 (for VIP-153PT), and 2002/123(for VIP-156) for the voice calls.

:: EXTENSION MANAGEMENT

DELADD

Extension Number	Associated Device	Pickup Group	Unavailable Timeout	Line Type	User	Voicemail Enable	Language	Allow LAN Use Only	DTMF Mode	Try Peer-to-peer RTP	Rejects Caller
<input type="checkbox"/>	1001	VIP153	UG_DEF	10	wired	admin(admin)	yes	en	no	rfc2833	NO

1

:: EXTENSION MANAGEMENT

Extension Number	1001
Associated Device	VIP153
Password	...
User	admin(admin)
Pickup Group	UG_DEF
Line Type	Wired
Language	English
Voicemail	Enable
Voicemail PIN	...
Unavailable Timeout	10 sec.
<input type="checkbox"/> Allow LAN Use Only	
Try Peer-to-peer RTP	NO
DTMF Mode	rfc2833

UPDATEBACK

Status:

STEP 3:

After setting up the parameters, please refer to the path to activate the settings:

Service ---> IP PBX service ---> IP PBX Configuration Reload

The screenshot shows a web interface titled "IP PBX SERVICE". It has two tabs: "Service & Configuration" and "Advance". The "Advance" tab is selected. Below the tabs, there is a warning message: "IP PBX will reload configuration as soon as possible. Currently active calls will be disconnected in 3 minutes. Do you really want to Continue?". Below this message, there are three rows of configuration options:

IP PBX Configuration Reload	RELOAD	
IP PBX Configuration Backup	BACKUP	<input type="checkbox"/> PBX Settings Only
IP PBX Configuration Restore	RESTORE	<input type="button" value="v"/>

Machine configurations on the VIP-153PT

STEP 1:

After creating accounts on the IP PBX system, please log in VIP-153PT via web browser, browse to the **SIP Configuration**, and refer to the account settings of the IP Extension to complete the SIP parameters. After these configurations, be sure to click the **"DONE"** button to apply settings and browse to **"System Configuration"** menu to reboot the machine to make the settings effective.

The screenshot shows a web interface titled "SIP Configuration". Below the title, there is a section titled "SIP Parameters:" followed by a list of six parameters, each with a text input field:

1. Username: 1001
2. Telephone Number: 1001
3. Password: ●●●
4. Proxy mode: ☒
5. Proxy Server Address: 192.168.1.1
6. Proxy Port: 5060

Machine configurations on the VIP-156

STEP 1:

Please log in VIP-156 via web browser, browse to the **SIP Settings** menu. In the setting page, please browse to the **Service Domain** page, and insert the SIP parameters for IP PBX system.

Realm 1 (Default)	
Active:	<input checked="" type="radio"/> On <input type="radio"/> Off
Display Name:	2002
Line Number:	2002
Register Name:	2002
Register Password:	...
Domain Server:	192.168.1.1
Proxy Server:	192.168.1.1
Outbound Proxy:	
Register Period:	15 (0~99) [0: 30 sec, 1~99 min]
Status:	Registered

Test the scenario:

To verify the VoIP communication, you may make calls from extension side (VIP-153PT) 1001 to the number 2002 (VIP-156) or reversely make calls from extension client (VIP-156) 2002 to the number 1001 (VIP-153PT)

Voice communication via IP PBX system – IPX-1800 (Auto-config)

In the following sample, we'll introduce how to integrate the client with our IP PBX system IPX-1800 via Auto-config feature.



Machine configurations on the IPX-1800

STEP 1:

Log in IPX-1800 and browse to the **DHCP** menu and create new options list for the auto configuration.

:: DHCP SERVICE

DHCP POOL
[lan](#)

☒ Enable ☐ Disable
On-board LAN

Show Leased Clients

☒ Range ☐ Single-host

Pool Name: lan

IP: 192.168.1.101 ~ 192.168.1.200

Options: 151, http://192.168.1.1/tftpboot/

Code, Value: 151 http://192.168.1.1/tftpboot/

Status :

Code: please insert **151** as the DHCP server option.

Value: http://LAN IP for IPX-1800/tftpboot

If you'd like to enable auto-config for IP extension features in IPX-1800, please be sure to setup the DHCP option code and the value information.

In most case, insert the optional code 151 and the value=http://192.168.1.1/tftpboot/



NOTE:

- 192.168.1.1 is the IP address of IPX-1800

STEP 2:

Please browse to the **Device** → **IP Phone** menu and create new device for the auto configuration.

:: ENABLE AUTOMATIC CLIENT CONFIGURATION MANAGEMENT

Enable Automatic Client Configuration

Device: VIP153

Vendor Prefix: abc201s (a-zA-Z0-9_)

MAC Address: 00 30 4f 12 34 aa

Supplementary Configuration:

Codec Preference

1st codec: g711ulaw

1st packet time: 10

2nd codec: g711ulaw

2nd packet time:

3rd codec: g711ulaw

3rd packet time:

☐ Enable Voice Activity Detection (VAD)

DTMF Mode: RFC2833

STEP 3:

Please press the **Show extensions** button to create the two extension accounts/ password: **1001/123** (for VIP-153PT), and **1002/123**(for VIP-156) for the voice calls.

:: EXTENSION MANAGEMENT

Extension Number: 1001

Associated Device: VIP153

Password: ●●●

User: admin(admin)

Pickup Group: UG_DEF

Line Type: Wired

Language: English

Voicemail: Enable

Voicemail PIN: ●●●

Unavailable Timeout: 10 sec.

☐ Allow LAN Use Only

Try Peer-to-peer RTP: NO

DTMF Mode: rfc2833

Status:

STEP 4:

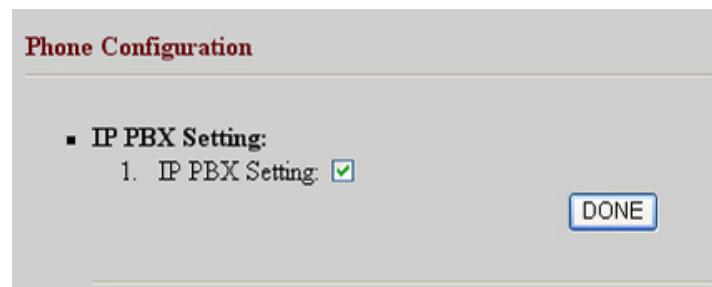
After setting up the parameters, please refer to the path to activate the settings :
Service ----> IP PBX service ----> IP PBX configuration reload



Machine configurations on the VIP-153PT

STEP 5:

Please log in VIP-153PT via web browser, please browse to the **Phone Configuration** page, and enable the IPX PBX setting features for IP PBX system. After these configurations, be sure to click the **"DONE"** button to apply settings and browse to **"System Configuration"** menu to reboot the machine to make the settings effective.



STEP 6:

After enabling the Auto-config feature, the VIP-153PT shall be able to obtain IP address and SIP extension information from IP PBX system IPX-1800 information. The VIP-153PT will perform registration to IPX-1800 after obtaining the extension config file.

Machine configurations on the VIP-156

STEP 7:

Please log in VIP-156 via web browser, browse to the **Advanced Settings** menu. In the setting page, please browse to the Auto-config page, and enable the Auto Configuration features for IP PBX system. (Your may connect telephone set to VIP-157, press **#136** to enable the Auto configuration, or press **#137** to disable the Auto Configuration setting.)

Auto Configuration Setting

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

Auto Configuration:

☒ On ☐ Off

Submit

Reset

STEP 8:

After enabling the Auto-config feature, the VIP-156 shall be able to obtain IP address and SIP extension information from IP PBX system. To verify the auto-config results, you may connect telephone set to VIP-156; press **#120#** to check if the IP address is obtained from IPX-1800. And **#122#** can be used to verify the extension number as-signed by IPX-1800.

Test the scenario:

To verify the VoIP communication, you may make calls from extension side (VIP-153PT) 1001 to the number 1002 (VIP-156) or reversely make calls from extension client (VIP-156) 1002 to the number 1001 (VIP-153PT)

Quick reference in CD-ROM guide

This guide is used to help you startup your IP PBX system settings. It is also recommended to check the user manual CD-ROM for more details likes the “Web Setup”, and how to set the device back to default value.

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