

200 Ext.
IPX-2000

Internet Telephony PBX System

High-performance IP PBX Solution



Quick Installation Guide

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Overview

PLANET IPX-2000 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-2000 is able to accept 200 extension registrations, and effectively scales from under 100 users to as many as 200 in a standard rack-mountable unit. Designed to run on a variety of VoIP applications, IPX-2000 provides centralized call control, auto-attendant, voice conferencing, PSTN access, digital and IP-based communications. IPX-2000 integrates up to 8 calls via the IPX- FXO (Foreign eXchange Office, FXO) module to become a feature-rich PBX system that supports seamless communications between existing PSTN calls, analog, IP phones and SIP-based endpoints.

IPX-2000 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-2000, standard SIP phones can be easily integrated in your office; plus the auto-config feature, you may integrate our IP phone VIP-254T/VIP-254PT, and the analog telephone adapter – VIP-156/VIP-157 series to build up the VoIP network deployment in minutes.

Allowing distributed IP technology to meet traditional voice services, with proactive management interface, the IPX-2000 in the daily business processes, enterprises can make people more productive, more intelligent tasks, and more customer satisfaction

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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-2000
- Administration interface
- Network Interface quick configurations
- Internet access setup guide

Preparation before beginning administration on IP PBX System

Physical Interfaces

1	AC Power	AC 100-240V, 50-60 Hz
2	Telephony interface ports	4 ports per module, numbered from right to the left. The rightmost port at slot A is port 1 and the leftmost port at slot B (if installed) is port 8.
3	USB ports	2 external ports 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

- Microsoft Internet Explorer 6.0 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.

IPX-2000 will prompt for logon username/password, please enter: **admin / admin** to continue machine administration.





Note

The IPX-2000 supports HTTPs secure web session. Machine operators or system administrator may login machine via secure web connection for machine administration.

Format: **https://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-2000. 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-2000 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-2000 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-2000 are the IP address for remote calling party to connect with.

Execute your web browser, and insert the IP address (default: **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 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

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 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-2000 Default: 192.168.0.1
Subnet Mask	WAN mask of IPX-2000 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.

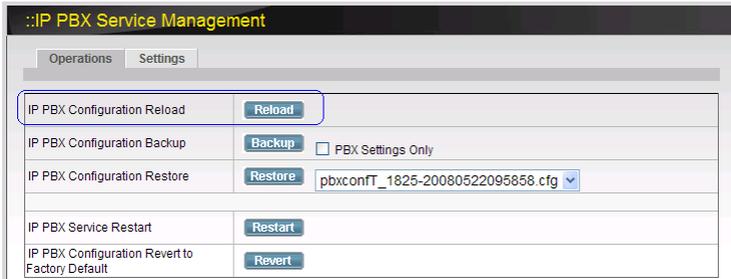


Hint

Please contact your Internet service provider to obtain the Internet access type, and select the proper network settings in IPX-2000 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.



The screenshot shows the 'IP PBX Service Management' interface. It has a dark header with the title in yellow. Below the header are two tabs: 'Operations' and 'Settings'. The main content area is a table with five rows, each containing a configuration action and a corresponding button. The first row, 'IP PBX Configuration Reload', has a 'Reload' button highlighted with a blue border. The second row, 'IP PBX Configuration Backup', has a 'Backup' button and a checkbox labeled 'PBX Settings Only'. The third row, 'IP PBX Configuration Restore', has a 'Restore' button and a dropdown menu showing 'pbxconfT_1825-20080522095858.cfg'. The fourth row, 'IP PBX Service Restart', has a 'Restart' button. The fifth row, 'IP PBX Configuration Revert to Factory Default', has a 'Revert' button.

:IP PBX Service Management	
Operations Settings	
IP PBX Configuration Reload	Reload
IP PBX Configuration Backup	Backup <input type="checkbox"/> PBX Settings Only
IP PBX Configuration Restore	Restore pbxconfT_1825-20080522095858.cfg
IP PBX Service Restart	Restart
IP PBX Configuration Revert to Factory Default	Revert

Operation path: Service ---> IP PBX service

IP PBX Basic operation guideline

Adding PSTN to IPX-2000

When inserting or removing the IPX-2000 FXO Module (IPX-FXO), please follow these operation procedure to ensure the system operating properly.

- Install the FXO module securely into machine.
- Login the GUI as administrator.
- Enter FXO Setup page. (**Trunk → POTS Setup**)
- Select the proper Country Setting for each port.
- Press **APPLY** to save the change.
- Enter IP PBX Service page. (**Service → IP PBX service**)
- Press **Restart** to restart IP PBX service.



The screenshot shows the 'POTS Setting Management' interface. At the top, there is a title bar with the text '::POTS Setting Management'. Below it is a table titled 'FXO/FXS Setup'. The table has three columns: 'Port', 'Type', and 'Impedance/CP Tone'. The 'Port' column contains numbers 1 through 8, each with a small blue square icon to its left. The 'Type' column contains 'FXO' for all rows. The 'Impedance/CP Tone' column contains 'USA' for all rows.

Port	Type	Impedance/CP Tone
1	FXO	USA
2	FXO	USA
3	FXO	USA
4	FXO	USA
5	FXO	USA
6	FXO	USA
7	FXO	USA
8	FXO	USA

After the PSTN physical installation, please browse to **"Analog PSTN trunk"** page in **"Trunk"** menu, and refer to the following configuration steps for more understandings:

- a) Press **<Add new>** button from the left panel to add a new PSTN trunk.
- b) Insert ID number of this PSTN **"Trunk group (1~31)"** and FXO port indices grouped by this PSTN **"Trunk ports"** in the field for management the PSTN trunk.



Hint

- Maximum port index depends on the number of physical ports available. Such as 1 or 1,2 or 1-4.
- Please make sure the FXO module is connected properly; the sequence from left to right: Slot A -> Slot B; Port 4 → Port 3 → Port 2 → Port 1



Outbound routegroup: select a routegroup to associate routes with this trunk. Outbound calls match included route patterns could employ this trunk to access PSTN.

Language: preferred language for system instructions heard from the trunk.

Usergroup of privilege: when disabled DID, select a usergroup whose reachability to other usergroups and trunks will be used as the privilege of inbound calls from this trunk.

The screenshot shows a web interface titled "Analog PSTN Trunk Management". It features a "Trunks" tab and an "Add New" button. The main form contains the following fields and values:

Trunk Group	1
Trunk Type	FXO
Trunk Ports	<input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 3
Description	PSTN Trunk
Port Selection	Des & Not Rotating
Language	English
DID Type	None DID
IVR List	ivr_9F_ENM
Usergroup of Privilege	UG_DEF
Delay Before Answering	<input type="text"/> sec.
Delay After Answering	<input type="text"/> sec.

At the bottom right, there are "Back" and "Add" buttons.

1) Please browse to "**Route management**" page in "**Route**" menu to add routes ID in IP PBX system.

2) Press **<Add new>** button from the left panel to add a new routes table and Insert following data:

Route ID: a unique ID containing alphabets, numbers, and underscore only without spaces; 32 characters maximum.

Destination number pattern: a destination number pattern consisting of digits, digit set, and wildcard character

Number of stripped digits: number of leading digits to be stripped from the original dialed number when matches this route.

- 3) Please browse to **"Route group"** page in **"Route"** menu and select PSTN route associated routes by this route group.

::Route Management

Route Management

Route ID: Description:

Destination Number Pattern: Number of Stripped Digits: 0 Prefix:

::Route Group Management

Route Group Management

Group ID:

Search: Group ID:

	Group ID	Description	Associated Routes
<input type="checkbox"/>	RG_DEF		FXO, FXO_2
1			

- 4) Please browse to **"User group"** page in **"User"** menu, and select outbound **"pstn1"** trunks accessible by this user group.

::User Group Management

UG_DEF

RG_DEF	Group ID	Group	Weight
<input type="text"/>	0 <input type="button" value="v"/>	pots1	<input type="text"/>

- 5) After these configurations, be sure to press to **"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

After any configurations, be sure to press to **"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.

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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