

# PA168V IAX2 FXS Gateway

## Telnet Setup Guide

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When PA168V IAX2 FXS gateway is properly installed, you can set each parameter through PC and Telnet commands.

Details please refer to 《PA168V IAX2 FXS gateway Spec and Install》

### ➤ Telnet Configuration

- On the PC choose **Start>Run**, type **telnet 192.168.1.100** into **Run** field in popping Run dialog. Or input **telnet 192.168.1.100** in the DOS window. Then the following information will be displayed.

---

```
PA168X V1.60 settings
Password :
```

---

Then please type password. With debug set as 0[disable], if you type ordinary password (default one is 1234), after Return, you will see:

---

```
Password : ****
P:\>
```

---

If you type super password, then you will see:

---

```
Password : *****
P:\>
```

---

The above information indicates that PA168V FXS gateway is under setting mode, and then you can set the PA168V FXS gateway by using the telnet commands.

### ➤ PA168V Telnet Commands Explanation

Command	Function
---------	----------

<b>?</b>	Supply command name and parameters
<b>get</b>	Display basic parameters of the PA168V FXS gateway
<b>set</b>	Set parameters of the PA168V FXS gateway
<b>store</b>	Save current settings to designated position
<b>load</b>	Load designated settings to current position
<hr/>	
<b>default</b>	Restore to manufactory defaults parameters
<b>exit</b>	Exit from the setting mode without saving the configuration
<b>write</b>	Exit with saving all configurations and restart PA168V

➤ **Command ?**

**Syntax description:** No optional parameter

**Usage:** Type command name and parameters by following P:\> . Be used as the keyword to supply keyword and parameters of the relevant commands.

**Relevant usage:** None

**Detailed description:**

? List help of all commands

For example:

---

```

P:\>?
set
get          list settings
store x      store current to xth settings
load x       load xth settings to current
default
exit
write        save settings
    
```

---

## ➤ Command get

**Syntax description:** No optional parameter or keywords

**Usage:** Display basic parameters of the PA168V FXS gateway

**Relevant usage:** None

**Detailed description:**

**get** Display basic running parameters of the PA168V FXS gateway. Input ordinary password without debug being set as 0[disable], or input super password with debug set as 0[disable], then following parameters of PA168V FXS gateway will be displayed:

---

```

PA168X V1.60 settings
Password: *****
P:\>get
*****Network Settings*****
iptype 0[static]
ip 192.168.1.100      subnetmask 255.255.255.0      router 192.168.1.254
dns 202.106.46.151  dns2 202.96.128.68             mac 00-0d-ea-00-00-03
*****Audio Settings*****
codec1 0[g729]      codec2 3[g711a]                codec3 2[g711u]
codec4 4[gsm]      codec5 6[null]                 codec6 6[null]
vad 1[enable]      agc 0[disable]                 aec 1[enable]
audioframes 2      6.3k 1[enable]                 ilbcpayload 98
jittersize 0      handsetin 15                   handsetout 20
dualmode 1[pstn first]  dualmodeprefix 30
*****Dial Plan Settings*****
dialplan 1[enable]  dddcode 10
iddcode 86         iddprefix 00                   dddprefix 0
innerline 1[enable]  innerlineprefix 0              callwaiting 1[enable]
fwdnumber 95963     fwdpoweroff 0[disable]
fwdalways 1[enable]  fwdbusy 0[disable]            fwdnoanswer 0[disable]
digitmap 0[disable]
*****Protocol Settings*****
service 0[disable]  registerttl 60
serviceaddr 203.93.9.57  remotodialplan 0[disable]
phonenummer 82378808  account [empty]                pin [empty]

```

```

localport 1720          dtmf 1[outband signal]      tos 0
*****Other Settings*****
superpassword 12345678  debug 1[output ]
password 1234           upgradetype 0[disable]
upgradeaddr [empty]
sntpip 0.0.0.0         daylight 0[disable]
timezone 55[(GMT+08:00)Beijing,Hong Kong,Urumqi]

```

---

Input ordinary password with debug set as 0[disable], and the following information will be seen:

---

```

PA168X V1.60 settings
Password:****
P:\>get
*****Network Settings*****
iptype 0[static]
ip 192.168.1.100      subnetmask 255.255.255.0      router 192.168.1.254
dns 202.106.46.151  dns2 202.96.128.68           mac 00-0d-ea-00-00-03
*****Audio Settings*****
codec1 0[g729]       codec2 3[g711a]              codec3 2[g711u]
codec4 4[gsm]        codec5 6[null]              codec6 6[null]
vad 1[enable]        agc 0[disable]              aec 1[enable]
audioframes 2        6.3k 1[enable]              ilbcpayload 98
jittersize 0         handsetin 15                 handsetout 20
dualmode 1[pstn first] dualmodeprefix 30
*****Dial Plan Settings*****
dialplan 1[enable]   dddcode 10
idddcode 86         iddprefix 00                 dddprefix 0
innerline 1[enable] innerlineprefix 0            callwaiting 1[enable]
fwdnumber 95963     fwdpoweroff 0[disable]
fwdalways 1[enable] fwdbusy 0[disable]          fwdnoanswer 0[disable]
digitmap 0[disable]
*****Other Settings*****
password 1234         upgradetype 0[disable]
upgradeaddr [empty]
sntpip 0.0.0.0       daylight 0[disable]
timezone 55[(GMT+08:00)Beijing,Hong Kong,Urumqi]

```

---

➤ **Command set**

**Syntax description: set keywords value**

**Usage:** It is to configure password and other running parameters of PA168V FXS gateway.

**Detailed description:**

**set iptype X**

Set how PA168V FXS gateway gets relevant network parameters.

X ranges from 0 through 3. 0: authorize users to set IP address, subnet mask and router IP address of PA168V manually; 1: use DHCP mode. With this system, 2: use PPPoE mode. Those ADSL and Cable Modem users please select this item. 3: use modem mode. Those who use PA168V with modem please set the value as 3.

**set pppid XXX**

With **iptype** set as **2**, use this command to set user name of PPPoE; with **iptype** set as **3**, use this command to set user name of dial-up network.

**set ppppin XXX**

With **iptype** set as **2**, use this command to set user name of PPPoE; with **iptype** set as **3**, use this command to set user name of dial-up network.

**set ip XXX.XXX.XXX.XXX**

With **iptype** set as **0**, use this command to set IP address of PA168V FXS gateway.

**set subnetmask XXX.XXX.XXX.XXX**

With **iptype** set as **0**, use this command to set subnet mask of PA168V FXS gateway.

**set router XXX.XXX.XXX.XXX**

With **iptype** set as **0**, use this command to set router IP of network.

**set dns XXX.XXX.XXX.XXX**

With **iptype** set as **0**, use this command to set IP address of DNS server.

**set dns2 XXX.XXX.XXX.XXX**

With **iptype** set as **0**, use this command to set IP of backup DNS server.

**set mac XX-XX-XX-XX-XX-XX**

Set MAC address of the PA168V FXS gateway. Parameter xx-xx-xx-xx-xx-xx must be an HEX number.

---

**set codec1 X**

Set the priority 1of the audio compression algorithm. X ranges from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5: ilbc; 6: null.

**set codec2 X**

Set the priority 2 of the audio compression algorithm. X ranges from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5: ilbc; 6: null.

**set codec3 X**

Set the priority 3 of the audio compression algorithm. X ranges from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5: ilbc; 6: null.

**set codec4 X**

Set the priority 4 of the audio compression algorithm. X ranges from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5: ilbc; 6: null.

**set codec5 X**

Set the priority 5 of the audio compression algorithm. X ranges from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5: ilbc; 6: null.

**set codec6 X**

Set the priority 6 of the audio compression algorithm. X ranges from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5: ilbc; 6: null.

**set vad X**

Enable/disable VAD. X ranges from 0 through 1: 0: disable VAD; 1:

enable VAD.

**set agc X**

Enable/disable AGC. X ranges from 0 through 1: 0: disable AGC; 1:

enable AGC.

**set aec X**

Enable/disable AEC. X ranges from 0 through 1: 0: disable AEC;

1: disable AEC.

**set audioframes X**

Set audio frames in RTP package. X is Arabic numerals between 0 and 7.

**set 6.3k X**

With G.7231 codec selected; set PA168V FXS gateway to use 6.3K rate or not. X ranges from 0 through 1: 0: use 6.3K rate; 1: use 5.3K rate.

**set jittersize X**

Set buffer size of RTP package. X ranges from 0 to 32.

**set ilbcpayload X**

Set the payload type of RTP package whne ILBC codec selected to DTMF delay.X is range from 96-255.

**set handsetin X**

Set initial volume of handset. X ranges from 0 through 15.

**set handsetout X**

Set initial volume of handout. X ranges from 0 through 31.

**set dualmode X**

Set to enable or disable the PSTN line. X ranges from 0 through 2.

0: do not use PSTN line; 1: use PSTN line first. 1: use IP side call first.

**set dual modes prefix XX**

When IP first is set in the dual modes setting, setting switches to PSTN prefix; XX ranges from 0 through 99.

---

**set dialplan X**

Enable/disable dial plan and dial number. Parameter X ranges from 0 through 4: 0: disable dial plan; 1: enable dial plan; 2: use dial number; 3: use 179XX service; 4: use hotline function.

**set dialnumber XX**

When **set dialplan** value set as 2, please use this command to set **dial number**. For example, with eTalk card used, please set it as 00. When **set dialplan** value set as 4, please use this command to set **hotline number**.

**set dddcode XX**

Set the area code when set **dialplan** value set as **1** or **2**. For example, the area code of Beijing is 10; the area code of Shanghai is 21, and the area code of Chengdu is 28, etc. Parameter xxx

must be an Arabic numeral and no longer than 3 characters.

**set iddcode XXX**

Set the country code when set **dialplan** value set as **1** or **2**. For example, the country code of China is 86; the country code of USA is 1, etc. Parameter xxxx must be an Arabic numeral and no longer than 4 characters.

**set iddprefix XX**

Set IDD service prefix number when set **dialplan** value set as **1** or **2**. For example, IDD service prefix number of china is 00; IDD service prefix number of USA is 1, etc. Parameter xxx must be an Arabic numeral and no longer than 3 characters.

**set dddprefix XX**

Set DDD service prefix number when set **dialplan** value set as **1** or **2**. For example, DDD service prefix number of china is 0; DDD service prefix number of USA is 1, etc. Parameter xxx must be an Arabic numeral and no longer than 3 characters.

**set innerline X**

Set use innerline call or not. X ranged from 0 through 1: 0: disable; 1: enable innerline call.

**set innerlinepreifx X**

With **innerline** set as **1[enable]**, please set the prefix to pick up

inner line, such as 0.

**set callwait X**

Set whether to use call wait. X ranges from 0 to 1: 0: do not use call wait; 1: use call wait.

**set fwdnumber XXXXXXXX**

Set receiving forwarded calls phone number. XXXX must be an Arabic numeral and no longer than 16 characters

**set fwdalways X**

Enable/disable forward all calls. X ranges from 0 through 1. 0: do not forward any call; 1: forward all calls.

**set fwdbusy X**

Enable/disable forward calls if busy. X ranges from 0 through 1. 0: do not forward calls if busy; 1: forward call if busy.

**set fwdnoanswer X**

Enable/disable forward calls without replying. X ranges from 0 through 1. 0: do not forward calls without replying; 1: forward call without replying.

**set answer X**

Set the ring seconds before the phone answers the call automatically or forward the calls. X is ranges from 0 through 60.

**set digitmap X**

Set whether to use digitmap. X ranges from 0 to 1: 0: do not use

digitmap; 1: use digitmap.

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**set service X**

Set register Asterisk server or not. X ranged from 0 through 1. 0: do not register; 1: register.

**set registerttl X**

Set register TTL. X is range from 10 through 65535 Sec. default value is 60 Sec.

**set serviceaddr XXXX**

Set IP address or domain name of asterisk server.

**set remotodialplan X**

Set whether to use remote dialplan. X ranged from 0 to 1: 0: do not use remote dialplan; 1: use remote dialplan.

When X valued 1, the called number will be sent to Asterisk server one by one through DPREQ command when you press the keypad.

And it's the Asterisk server's responsibility to decide if it has collected enough number to make a call.

**set phonenumber XXXXXXXX**

Set a local ID of PA168X IP phone. Value xxxxx must be an Arabic numeral and no longer than 16 characters.

**set account XXXXXX**

Set the account; Value xxxxxx must be an Arabic numeral and no

longer than 32 characters.

**set pin XXXXXXXXXXX**

Set the account; Value xxxxxx must be an Arabic numeral and no longer than 32 characters.

**set localport XXXX**

Set the local port. Value XXXX default is 4569.

**set dtmf X**

Set DTMF relay type. X is ranged form 0 through 1: 0: inband audio; 1: outband audio.

**set tos X**

Set TOS segment of IP head package in RTP digital follow. X is range from 0 through 224.

---

**set superpassword XXXX**

Set super password of the PA168V FXS gateway. XXX must be ASCII characters.

**set debug X**

Set open debugging message output grade for special tool. X ranges from 0 through 5: 0: close debugging output; 1: output the operation information to the window; 2: output all the bug information and data in test window; 3: save the bug information into SDRAM; 4: disable checking the mark.

**set password XXXX**

Set password of the PA168V FXS gateway. XXX must be ASCII characters.

**set upgradetype X**

Set auto-upgrade matching type, X ranges from 0 through 5,  
0-----disable; 1-----all ; 2----- mac; 3-----ppp id; 4----- account;  
5----- phone number。

**set upgradeaddr HTTP://XXX.XXX.XXX.XXX:PORT**  
**FTP://XXX.XXX.XXX.XXX: PORT**  
**TFTP://XXX.XXX.XXX.XXX: PORT**

Set IP address or domain name of upgrade server supplying upgraded program and configurations of PA168X IP phone.

**set sntpip XXX.XXX.XXX.XXX**

Set IP address of time server.

**set daylight X**

Set to use daylight or not. X ranges from 0 through 1: 0: do not use daylight; 1: use daylight.

**set timezone XX**

Set time zone.

➤ **Command store**

**Syntax description:** no keyword. Parameter ranges from 0 through 4.

**Usage:** Save the current settings to the designated position.

**Relevant Usage:** store 1

➤ **Command load**

**Syntax description:** no keyword. Parameter ranges from 0 through 4.

**Usage:** Load the designated settings to the current position.

**Relevant Usage:** load 1

➤ **Command default**

**Syntax description:** no keyword and parameter

**Usage:** Restore to manufactory defaults parameters.

**Relevant usage:** None

➤ **Command exit**

**Syntax description:** no keyword and parameter

**Usage:** Exit from Telnet command window without saving the configuration.

**Relevant usage:** None

➤ **Command write**

**Syntax description:** No keyword and parameter

**Usage:** Save the configuration and restart the PA168V FXS gateway.

**Relevant usage:** None

---

 **Note** All the Telnet commands of PA168V FXS gateway should be written in low case and the password is case sensitive.

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*Reserves the right to make changes in technical and product specification  
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*PA168V IAX2 FXS Gateway Telnet Setup Guide (V1.60)*

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