

# PA168V SIP FXS Gateway

## Telnet Setup Guide

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

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

### ➤ Telnet Configuration

- On the PC choose **Start>Run**, type **telnet 192.168.1.100** into **Run** field in popuing 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 Retun, 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 of 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 1[enable]     registerttl 60
servicetype 0[common] sipproxyc 203.93.9.57         domain 203.93.9.57
natTraversal 2[stun]

```

```

nataddr [empty]          natttl 30
phonenummer 272727      account [empty]          pin [empty]
registerport 5060       rtpport 6002             tos 0
dtmfpayload 101        dtmf 0[inband audio]
prack 0[disable]        outboundproxy 0[disable]
*****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
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]
*****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: enable 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 when 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 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.

---

### **set service X**

Set register the SIP proxy 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 service type X**

Enable/disable the prepaid and service system .choose the prepaid server provider. Parameter x ranged from 0 through 15:

0: common: disable prepaid card or specially system ;

1: use huawei's system;

2: use ZTE's system;

3: use harbour's system;

4: use utstarcom's system;

5: use uptech system;

6: use keimen's system;

7: use meidaring's service;

8: use italkBB service;

9: use nortel system;

- 10: use net2phone SIP service;
- 11: use fwd(freeworlddialup) service;
- 12: use inphonex system;
- 13: use sipphone system;
- 14: use ngstel system ;
- 15: use ayctel system
- 16: use callserve system
- 17: use qmaster system
- 18: use ringchat system
- 19: use t-online system

**set sipproxy XXXX**

Set IP address or domain name of SIP Proxy Server.

**set domain XXXXX**

Set the domain name of SIP proxy server.

**set nattraversal X**

X ranged from 0 through 2: 0: do not use NAT traversal. When the log in server and IP phone in the same LAN, or the log in system supports the IP phone working behind the LAN; 1: Use NAT traversal. When the login system does not support IP phone working behind the LAN, With this item selected, please make port mapping on NAT device; 2: stun.


**set nataddr XXXXX**

When “**nattraversal**” is set to “**1**”;set IP address of NAT device wan port or URI of free assistant service (Such as [www.showmyip.com](http://www.showmyip.com) etc.) in Internet.

When “**nattraversal**” is set to “**2**”, set IP address or URI of the stun server, in the format as “domain name/IP address : service port”.

The default service port for stun is 3478.

---

 **NOTE** The free service list of Internet: [www.ip-calculator.com](http://www.ip-calculator.com); [www.ipchicken.com](http://www.ipchicken.com); [www.ipchicken.com](http://www.ipchicken.com); [www.showmyip.com](http://www.showmyip.com); [www.whatismyip.com](http://www.whatismyip.com); [www.myipaddress.com](http://www.myipaddress.com); [www.whatismyipaddress.com](http://www.whatismyipaddress.com); [ip.sbbs.net](http://ip.sbbs.net); [www.whatismyipaddress.net](http://www.whatismyipaddress.net); [checkip.dyndns.org](http://checkip.dyndns.org)

---

### **set natttl XX**

Set NAT TTL XX is an integer between 10 and 65535 sec. default value is 20 sec.

### **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 registerport XXXX**

Set register port. Value XXXX default is 5060.

**set rtpport XXXX**

RTP port is the port transferring and receiving voice flow using UDP protocol. XXXX is an even number between 1024 and 65535.

**set tos X**

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

**set dtmf X**

Set DTMF relay type. X is ranged form 0 through 2: 0: inband audio; 1: rfc 2833; 2: sip info.

**set dtmf payload X**

When **dtmf X** select 1(**rfc 2833**).This parameter can be used indicating type of RTP payload type. The value can be use integer 96-101.

**set prack X**

Set enable/disable support pre-ack(RFC3262) . X is ranged form 0 through 1: 0: disable; 1: enable.

**set outboudproxy X**

Set enable/disable Outbound proxy support. X is ranged form 0 through 1: 0: disable; 1: enable.When X is 1(enable), please set the

URI of the Outbound proxy into “**sip proxy**” and set the domain name of SIP proxy server into “**domain**” . The default service port is 5060.

---

### **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 SIP FXS Gateway Telnet Setup Guide (V1.60)*

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