

PA168X IAX2 Phone Telnet Setup Guide

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When PA168X IAX2 phone is properly installed, you can set each parameter through PC and Telnet commands.

Details please refer to 《PA168X IAX2 phone Spec and Install》

➤ **Telnet Configuration**

- On the PC choose **Start>Run**, and then 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 is set as 0[disable], if 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:\>
```

Above information indicates that IP phone is under setting mode, and then you can set the PA168X IP phone by using the telnet commands.

➤ **PA168X Telnet Commands Explanation**

Command	Function
?	Supply command name and parameters

get	Display basic parameters of the PA168X IP phone
set	Set parameters of the PA168X IP phone
store	Save current settings to designated position
load	Load designated settings to current position
<hr/>	
default	Restore to manufactory defaults parameters
exit	Exit from the setting mode without saving the configuration
write	Exit with saving all configurations and restart PA168X

➤ **Command ?**

Syntax description: No optional parameter

Usage: Type command name and parameters 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 PA168X IP phone

Relevant usage: None

Detailed description:

get Display basic running parameters of the PA168X IP phone.

Input ordinary password without debug being set as 0[disable], or input super password with debug set as 0[disable], then following parameters of IP phone 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 202.106.196.152 dns 2202.106.196.115 mac 00-09-45-65-a3-e6

*****Audio Settings*****

codec1 0[g729] codec2 1[g7231] codec3 2[g711u]

codec4 3[g711a] 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 7 handsetout 20

ringtype 0[dtmf] speakerout 20 speakerin 0

*****Dial Plan Settings*****

dialplan 1[enable] dddcode 10

iddcode 86 iddprefix 00 dddprefix 0

innerline 1[enable] innerlineprefix 0 callwaiting 1[disable]

fwdnumber 82378009 fwdpoweroff 1[enable]

fwdalways 1[enable] fwdbusy 1[enable] fwdnoanswer 1[enable]

answer 30

digitmap 1[enable]

*****Protocol Settings*****

service 0[disable] registerttl 60

serviceaddr 203.93.9.57 remotodialplan 0[disable]

```
phonenumber 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], 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 1[g7231]           codec3 2[g711u]
codec4 3[g711a]       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 7              handsetout 20
ringtype 0[dtmf]     speakerout 20            speakerin 0
*****Dial Plan Settings*****
dialplan 1[enable]    dddcode 10
iddcode 86           iddprefix 00             dddprefix 0
innerline 1[enable]  innerlineprefix 0        callwaiting 1[disable]
fwdnumber 82378009   fwdpoweroff 1[enable]
fwdalways 1[enable] fwdbusy 1[enable]       fwdnoanswer 1[enable]
answer 30 digitmap 1[enable]
*****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: Used to configure password and other running parameters of PA168X IP phone.

Detailed description:

set iptype X

Set how IP phone gets relevant network parameters. X ranged from 0 through 3: 0: authorize users set IP address, subnet mask and router IP address of IP phone manually; 1: use DHCP mode. With this system, your LAN or router automatically assigns all the required network parameters to any device connected to it when the device log on. PA168X IP phone is shipped from the factory with DHCP on. So, if your LAN or router is configured to use DHCP addressing, the IP phone's LAN parameters will automatically be configured as soon as it is connected to the LAN or router and powered up; 2: use PPPoE mode. Those ADSL and Cable Modem users please select this item for it is a protocol especially designed for them. With this system, ADSL ISP automatically assigns all the required IP parameters to any device connected to it when the device log on; 3: use modem mode. Those who use IP phone with modem, please set the value as 3.

set pppid XXX

With **iptype** set as **2**, use this command to set ADSL ID; with

iptype set as **3**, use this command to set Modem ID.

set ppppin XXX

With **iptype** set as **2**, use this command to set ADSL pin; with

iptype set as **3**, use this command to set Modem pin.

set ip XXX.XXX.XXX.XXX

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

PA168X IP phone.

set subnetmask XXX.XXX.XXX.XXX

With **iptype** set as **0**, use this command to set subnet mask of

PA168X IP phone.

set router XXX.XXX.XXX.XXX

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

with PA168X IP phone.

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 PA168X IP phone. Parameter

xx-xx-xx-xx-xx-xx must be an HEX number.

set codec1 X

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

set vad X

Enable/disable VAD. X is ranged from 0 through 1: 0: disable VAD; 1: enable VAD.

set agc X

Enable/disable AGC. X is ranged from 0 through 1: 0: disable AGC; 1: enable AGC.

set aec X

Enable/disable AEC. X is ranged 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, set PA168X IP phone to use 6.3K rate or not. X is ranged from 0 through 1: 0: use 6.3K rate; 1: use 5.3K rate.

set jittersize X

Set buffer size of RTP package. X is range from 0-32.

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 is ranged from 0 through 15.

set handsetout X

Set initial volume of handout. X is ranged from 0 through 31.

set ringtype X

Set types of ring. X is ranged from 0 through 3: 0: ring as ordinary rings in different frequency; 1: do not ring; 2: ring as music saved by user; 3: Set ring used the individualized tone provided by system (need system support).

set speakerin X

Set initial volume of microphone of the base. X is ranged from 0 through 15.

set speakerout X

Set initial volume of speaker out. X is ranged from 0 through 31.

set dialplan X

Enable/disable dial plan and dial number. Parameter X ranged 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 innerlineprefix 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 ranged 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 is ranged from 0 through 1. 0: do not forward all calls; 1: forward all calls.

set fwdbusy X

Enable/disable forward calls if busy. X is ranged 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 is ranged 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 auto or forward the calls. X is ranged from 0 through 60.

set digitmap X

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

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 PA168X IP phone. XXX must be ASCII characters.

set debug X

Set open debugging message output grade for special tool. X is ranged 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 checks the mark.

set password XXXX

Set password of the PA168X IP phone. XXX must be ASCII characters.

set upgradetype X

Set auto-upgrade matching type, X is range 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 use daylight or not. X ranged 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 ranged from 0 through 4.

Usage: Save the current settings to the designated position.

Relevant Usage: store 1

➤ **Command load**

Syntax description: no keyword. Parameter ranged 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 PA168X IP phone.

Relevant usage: None

 **Note** All the Telnet commands of PA168X IP phone should be written in low case and the password is case sensitive.

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