

Panasonic KX-TGP500 VoIP DECT Telephones configure for Asterisk

Configuring the Panasonic KX-TGP500 Telephones for use with Asterisk.

[The Administrator's Manual](#)

[Panasonic Product Page for the KX-TGP500](#)

[Firmware and Manuals from the Panasonic Site](#)

DECT telephones offer advantages for wireless because they use different frequencies than WiFi. I have 3 telephones registered with the base unit and the base unit is registered with an Asterisk ver.13 PBX as SIP extension 7005 using voicemail box 8005. *(This means that when the extension is called, all 3 telephones ring. The phones can be configured to ring individually on different extensions. That is up to the user.)* This DECT set is working with the Asterisk ver.13 configurations found in my previous post, title: [Configuration Files for Asterisk v.13 and AllStar Link](#) . The network it is configured for is a [HSMM-Mesh Network](#), so if it were to be configured for a normal LAN the host names would change to IP addresses.

Quick Start: A newly purchased KX-TGP500 base unit that is “open” (that is not pre-configured by a provider) and a KX-TPA50 handset need to be powered on. The handset needs to be registered with the

base. To register the phone with the base you need to do the following:

1. Open the menu of the handset by pressing down on the joystick on the telephone
2. Then press #130 on the telephone dial pad
3. There is a button located on the DECT base unit. Press it down for 4 seconds
4. Then press OK on the Telephone, which will be the button to the right of the word menu just under the screen.
5. Then dial 0000 on the telephone. Once it returns to the normal screen the handset should be registered and show you a number beside the battery symbol in the screen.

This needs to be done for each phone being registered.

To open the HTML configuration for the base unit, you need to press the joystick on the telephone down and then select the "tool box", "Network Settings", "Embedded Web", and then "On". The phone will sound a long tone. Then from a web browser sharing the same LAN, type in the IP address of the DECT base unit. You can find this IP address on the telephone by pressing down on the joystick and selecting the tool box icon, then Network Settings, then IP settings. Log into the DECT Base unit HTML configuration with the default username Admin and default password adminpass. Select the VoIP tab on the top menu, and then "line 1" under "SIP Menu" from the left sidebar menu. You should now be on a page that looks like this image:

KX-TGP500B04 - Mozilla Firefox

KA7U.us - FireFTP KX-TGP500B04

10.45.111.82/CgiStart.cgi?Page Search

Panasonic

KX-TGP500B04 Status Network System **VoIP** Telephone Maintenance

Web Port Close

VoIP

- SIP Settings
 - Line 1
 - Line 2
 - Line 3
 - Line 4
 - Line 5
 - Line 6
 - Line 7
 - Line 8
- VoIP Settings
 - Line 1
 - Line 2
 - Line 3
 - Line 4
 - Line 5
 - Line 6
 - Line 7
 - Line 8

Phone Number

Phone Number: 7005

Line ID: []

SIP Server

Registrar Server Address: KA7U-2

Registrar Server Port: 5060 [1-65535]

Proxy Server Address: KA7U-2

Proxy Server Port: 5060 [1-65535]

Presence Server Address: []

Presence Server Port: 5060 [1-65535]

Outbound Proxy Server

Outbound Proxy Server Address: []

Outbound Proxy Server Port: 5060 [1-65535]

SIP Service Domain

Service Domain: KA7U-2

SIP Source Port

Source Port: 5060 [1024-49151]

SIP Authentication

Authentication ID: 7005

Authentication Password: []

DNS

Enable DNS SRV lookup: Yes No

SRV lookup Prefix for UDP: _sip_udp.

SRV lookup Prefix for TCP: _sip_tcp.

Timer Settings

T1 Timer: 500 milliseconds

T2 Timer: 4 seconds

INVITE Retry Count: 6

Non-INVITE Retry Count: 10

Quality of Service (QoS)

SIP Packet QoS (DSCP): Best Effort (default) (000 000)

SIP extensions

Supports 100rel (RFC 3262): Yes No

Supports Session Timer (RFC 4028): 0 seconds [60-65535, 0: Disable]

Keep Alive

Keep Alive Interval: 30 seconds [10-300, 0: Disable]

Security

Enable SSAF (SIP Source Address Filter): Yes No

Save Cancel

You

may want to change the addresses from ka7u-2 to your host name or IP address and the extension number is the authentication ID in my Asterisk PBX. The authentication password is the "secret" for the extension as listed in sip.conf.

This should be enough configuration for the DECT phone system to work with Asterisk ver. 13 PBX. There are many other configurations according to your needs.

Ron Morell
KA7U

CISCO SPA941 SPA942 configure for Asterisk

Configuring the SPA941/942 Telephones for use with ASTERISK.

[SPA941 Manual.](#)

The link above should load the manual for these phones.

For a quick Start: plug your telephone into the network jack and connect 5vdc power to the telephone. After the telephone



starts up, press the setup button located on the front of the telephone. Use the arrow keys to scroll through the options until you find #14 "Factory Reset". Use the select button and accept to reset the telephone to the factory defaults. The telephone should reboot and when it does use the

setup button and scroll to item #9 "Network". Select Network and you should find the IP address of the telephone. Enter this IP address into a Web Browser address bar (running on a computer served by the same network), and the telephone HTML setup screen should be displayed in the Web Browser. In the upper right menu area, select Admin and then Advanced. You should see a setup menu like the example found at this link:
[SPA941/942 Web Setup Menu](#)

The configuration example found at the above site is for the radio/telephone system described in the posts about [AllStar and Asterisk ver.13](#) in use at KA7U at the time of this writing. While you can use it and replicate what I have going on here, it is intended to be an example of how to do the configurations. By considering it and the manual, you might be able to configure the telephones to fit into other telephone networks as you wish for them to operate in that environment.

The most currently available firmware for the SPA941or SPA942 Telephones can be downloaded here:
[SPA941-Firmware](#) [SPA942-Firmware](#)

Updating firmware has risks and you should know what you are about and what those risks are before upgrading firmware on your telephone. The risks are all yours...

Ron Morell
KA7U