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:

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…

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