

KX-TDA TSP

Installation Manual

Revision: 3.3.1.0 February 2010

Introduction

About TSP

Panasonic TAPI Service Provider for TDA/TDE/NCP Series (Panasonic KX-TDA TSP) is a driver that provides you with a TAPI Interface.

KX-TDA TSP version 3.1.0.7 or later supports TDE/NCP series PBX.

KX-TDA TSP version 3.3 or later is required to use C# SDK.

About this manual

The TSP Installation Manual describes installation and setting of Panasonic KX-TDA TSP.

Trademarks

- Microsoft, Windows, Windows Server, and Windows Vista are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- All other trademarks identified herein are the property of their respective owners.
- Screen shots reprinted with permission from Microsoft Corporation.

NOTES

Description related USB in this manual is applied to TDA series PBX only.

Table of Contents

1		Before Installing	4
	1.1	1 SYSTEM REQUIREMENT	4
	1.2	2 PBX Settings	5
	1.3	3 WINDOWS FIREWALL SETTINGS	6
2		Installing TSP	8
	2.1	1 INSTALLING PANASONIC KX-TDA TSP	8
	2.2	2 UNINSTALLING PANASONIC KX-TDA TSP	14
	2.3	3 OVERWRITE INSTALLING PANASONIC KX-TDA TSP	17
3		TSP Settings	21
	3.1	1 LINK PARAMETERS	21
		3.1.1 LAN Connection	22
		3.1.2 USB Connection	23
	3.2	2 TSP LOG SETTING	24
	3.3	3 VERSION INFO	26
	3.4	4 OTHER PARAMETERS	27
	3.5	5 SETTINGS FOR MULTI PBX CONNECTION	
		3.5.1. Version Information	
		3.5.2. Before setting Multi PBX Connection	
		3.5.3. How to set Multi PBX Connection	
		3.5.4. MultiPBX Configuration Screen	
4		Frequently Asked Questions	
	4.1	1 "KX-TDA MAINTENANCE CONSOLE" CAN NOT USE USB TO COMMUNICATE WITH THE PBX	
	4.2	2 TSP CAN NOT COMMUNICATE WITH PBX VIA LAN	
	4.3	3 HOW TO CHECK IF PANASONIC KX-TDA TSP WAS ALREADY INSTALLED IN YOUR COMPUTER?	
Α	nne	ex A	40
	PA	NASONIC KXTDA TSP CONNECTION MONITOR TOOL	40

1 Before Installing

1.1 System Requirement

Required Operating System (both 32-bit and 64-bit)

- Microsoft[®] Windows[®] 7
- Microsoft Windows Server[®] 2008
- Microsoft Windows Vista⁸
- Microsoft Windows XP

Minimum Hardware Requirements

- Windows has to work on the PC
- Hardware Requirements of the application that you use with Panasonic KX-TDA TSP.
- If you use USB connection, USB Interface is needed.
 Note : USB connection is not supported on 64-bit Windows.
- If you use LAN connection, LAN Interface is needed.
- HDD 400 Mb free disk space
 Note : Additional HDD space may be required in case logging capabilities of Panasonic KX-TDA TSP are enabled.

NOTE

The total minimum free disk space you need is the Panasonic KX-TDA TSP minimum plus disk space which the application requires as minimum.

1.2 PBX Settings

Supported PBX Types

- Supported PBX Types are KX-TDA30/50/100/200/600, KX-TDE100/200/600, KX-NCP500/1000.
- Panasonic KX-TDA TSP uses USB or TCP/IP for connecting to the TDA/TDE/NCP PBX.

USB Setting

- In order to use the USB connection with TDA PBX, USB drivers (Version 2.0.0.7 or later) for TDA PBX must be installed on the computer.
- And if you use two or more USB connections, you need to assign unique USB serial number for each TDA PBX by TDA Maintenance Console. For more details about installation of the TDA PBX USB driver, please consult related installation manual.

TCP/IP Setting

- Before installation, please make sure you know the IP address of the PBX and its CTI port. By default the CTI port is 33333.
- If you use TDA series PBX, you need LAN interface card on the PBX.

PBX	LAN Interface card
NCP500/1000	IPCMPR Card
TDE100/200/600	IPCMPR Card
TDA100/200/600	CTI Link Card
TDA30/50	IP Gateway Card

 If you use CTI enhance features, you may need SD Memory Card or activation key for software upgrade depending on your application.

PBX	Required SD Card or Activation Key
KX-TDA30	KX-TDA3920
KX-TDA50	KX-TDA5920
KX-TDA100/200	KX-TDA0920
KX-TDA600	KX-TDA6920
KX-TDE100/200	KX-NCS4910,
KX-TDE600	KX-NCS4950
KX-NCP500/1000	KX-NCS3910

1.3 Windows Firewall Settings

If you install the TSP into Windows Vista and use LAN to connect to the PBX, you may need to configure Windows Firewall as follows.

1. Open "Windows Firewall Settings" dialog from Control Panel, and select "Exceptions" tab.

		ons an ough are mewa	ll.
indows Firewall is current	ly using settings for t	the public network loca	tion.
hat are the risks of unblo	cking a program?		
o enable an exception, se	lect its check box:		
Program or port			
BITS Peercaching			
CMSServerImpl Module	20		
Connect to a Network	Projector		2
Core Networking			
Distributed Transaction	n Coordinator		
File and Printer Sharing	3		
iSCSI Service			
Media Center Extende	rs		
Network Discovery			
🗹 pbxsimgui.exe			
Performance Logs and	Alerts		
Remote Administration			
Domete Assistance			
	d port	De	lata
Add program Ad			100.00

2. Click "Add port..." button. Then type as follows.

Name : KX-TDA TSP

Port number: 33333 (If you change the default port number, type the number you changed)

Use these setti port number an service you wa	ngs to open a port through Wind d protocol, consult the document nt to use.	ows Firewall. To find the tation for the program or
<u>N</u> ame:	[
Port number:		
Protocol:	● ICP	
What are the ris	ks of opening a port?	
Change scope.		OK Cancel

3. Click "Change scope..." button, and click "Custom list:". Then type IP address of the PBX.



- 4. Click OK to close "Change Scope" dialog.
- 5. Click OK to close "Add a Port" dialog.
- 6. Click OK to close "Windows Firewall Settings" dialog.

2 Installing TSP

2.1 Installing Panasonic KX-TDA TSP

To install or uninstall the software, you must be logged in as a user with Administrator privilege. If other version of TSP is already installed in your PC, please refer to section 2.3.

How to Install TSP

Double-click the setup file according to your operating system. If you use a 32-bit operating system, select the file "panasonic_kx-tda_tsp_instx86_331xx.exe". If you use a 64-bit operating system, select the file "panasonic_kx-tda_tsp_inst32x64_331xx.exe". And click "Next" to continue installation. Click "Cancel" to abort.

("xx" will be different number depending on time when TSP is released)



Click "Yes" to continue installation after you have read the agreement. Click "No" to abort installation. Click "Back" to go back to previous step.
 If you want to print out the agreement, click "Print".

	i sr - Instansmeid	Wizaru		V	-
cense Agreeme	ent				A DESCRIPTION OF
Please read the fo	ollowing license agreer	ment carefully.			
Press the PAGE D)0WN key to see the	rest of the agre	ement.		
END-USER LICE Definition:	NSE AGREEMENT				-
Licensed Softwa Permitted Numbe	are KX-TDA TSP er Unlimited				
Server Use	Not Acceptable				
This is a legal Ag	reement between you	and Panasonic	: System N	letworks Co., I	Ltd.
Do you accept all select No, the se accept this agree IShield	the terms of the prece tup will close. To insta ment.	eding License A all Panasonic K	igreement X-TDA TS	? If you iP, you must	Print

3. Click "**Install**" to start installation. Click "**Cancel**" to abort installation. Click "**Back**" to go back to previous step.

anasonic KX-TDA TSP - InstallShield Wiza	rd		
Ready to Install the Program The wizard is ready to begin installation.			2
Click Install to begin the installation.			
If you want to review or change any of your in the wizard.	nstallation settings, c	lick Back. Click Ca	ncel to exit
rstallShield ————————————————————————————————————	< Back	Install	Cancel

4. If KX-TDA USB driver is not installed in your computer, a dialog showing "USB Driver is not installed" may appear. Press "**OK**" to continue.

Note : USB connection is not supported on 64-bit Windows.

5. The following message will appear in order to note that TSP and CSTA Application cannot be used at the same time. Press "**OK**" to continue.

Panasoni	c KX-TDA TSP MultiPBX Configuration	×
i	If you use 'Panasonic KX-TDA TSP' and other CSTA application on the same PC to connect to same TDA, you may not be able to start CSTA application. In this case, you need to answer 'No' to 'Do you want to start TSP?' from 'Panasonic KX-TDA TSP' configuration dialog and restart your PC. Note that if you answer 'No' to 'Do you want to start TSP?' then TAPI application will not be able to use 'Panasonic KX-TDA TSP'.	
	ОК	

6. By default one instance will be installed and registered with TAPI.

After registration with TAPI is completed, following dialog will prompt you to configure parameters. Pressing "**OK**" will update settings you have just changed. Pressing "**Cancel**" will leave default configuration.

etting Categories	KX-TDA link O USB Connection
- SP Log Settings	O LAN Connection via CTI-LINK card
Cther Parameters	Address 10 . 64 . 130 . 250
	Port 33333
	Check Location

If you use LAN connection, select "LAN Connection via CTI-LINK card" even though your PBX is TDE series or NCP series and set IP address of PBX. See **3.1.1** for more detail.

If USB connection is used, select "USB Connection". See **3.1.2** for more detail.

	١	Check Location
		Abot Check
		0

7. After entering the IP address and TCP port of PBX, click "**Check Location**" to verify the connection with the PBX.

If the connection is successful, the following screen will appear, containing system information gathered from PBX: CTI Version, Region Code, Sub Domain Name, Software Version and System Time Stamp. System information gathered from PBX may help you identify the PBX that you will use. When the connection is successful, the GRAY LAMP to the left of "**Check Location**" button will turn to GREEN LAMP.

To abort "Check Location", click "Abort Check" button.

Cti Version Cti Version Cti Version Cti Version Sub Domain Name Software Version System Time Stamp DecTime: 2010 1 14 10 25 18 0 0 0	TSP Log Settings	O USB Connec	ction
Address 10	Version Info	O LAN Connect	ction via CTI-LINK card
Check Location Abort Check Cti Version 5.0011 Region Code 00 Sub Domain Name Software Version 2.0100 System Time Stamp DecTime: 2010 1 14 10 25 18 0 0 0	Uther Parameters		Address 10 . 64 . 130 . 250
Cti Version 5.0011 Region Code 00 Sub Domain Name 2.0100 Software Version 2.0100 System Time Stamp DecTime: 2010 1 14 10 25 18 0 0 0			Check Location
Cti Version 5.0011 Region Code 00 Sub Domain Name			Abort Check
Software Version 2.0100 System Time Stamp DecTime: 2010 1 14 10 25 18 0 0 0		Region Code Sub Domain Name	00
System Time Stamp DecTime: 2010 1 14 10 25 18 0 0 0		Software Version	2.0100
		System Time Stamp	DecTime: 2010 1 14 10 25 18 0 0 0

If the connection with the TDA/TDE PBX was not successful, a message box will appear.



Then the GRAY LAMP to the left of "Check Location" button will turn to RED LAMP.

KX-TDA link	
O USB Connection	•
O LAN Connection via CTI-LI	INK card
Address	10 . 64 . 130 . 0
Port	33333
	Check Location

In this case, please make sure IP address of PBX is correct.

8. Click "**Finish**" to complete the installation.

InstallShield Wizard Complete Setup has finished installing Panasonic KX-TDA TSP on your computer.
< Back Finish Cancel

9. Install program prompt user to reboot PC: Press "Yes" to reboot PC.



Notes:

During installation a default folder is created under <Program Files>\Panasonic\KX-TDA TSP. This folder contains End User License Agreement.

2.2 Uninstalling Panasonic KX-TDA TSP

How to Uninstall TSP

1. To do that, go to Control Panel, Programs and Features, select Panasonic KX-TDA TSP and click "Change/Remove" or "Uninstall/Change".

Programs and Features			
Control Panel - /	All Control Panel Items 👻 Programs and Feat	ures 🔹 🐨 Search Programs and Fe	atures 😥
Control Panel Home	Uninstall or change a program		
View installed updates	To uninstall a program, select it from	the list and then click Uninstall, Change, or Repair.	
😵 Turn Windows features on or off	Organize 🕶 Uninstall Change		III 🕶 🔞
	Name 🔺	- Publisher	· Install · Size
	Panasonic KX-TDA TSP	Panasonic System Networks Co.,Ltd.	1/20/2010
	Panasonic System Netw	rorks Co.,Ltd. Product version: 3.3.1.13 Size: 14.1 MB	Þ

2. Click "Yes" to uninstall, or "No" to abort.



3. Click "**OK**" to continue.



4. If you set TSP to generate log, the following dialog is displayed. If you want to remove specified log files, check each check box and press "**OK**".

Panasonic KX-TDA TSP	×
If you want to remove TSP log files, please check each check box	
C:\Program Files\Panasonic\KX-TDA TSP\Logs0000	
🔲 Instance 0001 log file:	
C:\Program Files\Panasonic\KX-TDA TSP\Logs0001	
Instance 0002 log file:	
C:\Program Files\Panasonic\KX-TDA TSP\Logs0002	
Instance 0003 log file:	
C:\Program Files\Panasonic\KX-TDA TSP\Logs0003	
Instance 0004 log file:	
C:\Program Files\Panasonic\KX-TDA TSP\Logs0004	
Instance 0005 log file:	
C:\Program Files\Panasonic\KX-TDA TSP\Logs0005	
Instance 0006 log file:	
C:\Program Files\Panasonic\KX-TDA TSP\Logs0006	
Instance 0007 log file:	
C:\Program Files\Panasonic\KX-TDA TSP\Logs0007	
[OK]	

5. For TSP instance registered with TAPI, user is prompted to close any application that may use Panasonic KX-TDA TSP. Press "**OK**" to continue.



6. Click "**Finish**" to complete the uninstallation.

Panasonic KX-TDA TSP - Insta	illShield Wizard
	Maintenance Complete InstallShield Wizard has finished performing maintenance operations on Panasonic KX-TDA TSP.
	K Back Finish Cancel

7. User is prompted to restart computer. Press "Yes" to restart.



2.3 Overwrite Installing Panasonic KX-TDA TSP

IMPORTANT

Overwrite installation from version 3.3 to older version is NOT possible. If you wan to use version 3.2 or older version after version 3.3 is installed, uninstall version 3.3 first.

How to overwrite TSP

- 1. Double click a setup file of TSP which you want to install newly on the PC that other version of TSP is already installed on.
- 2. Click "OK" to continue the overwrite installation or "Cancel" to abort.



3. Click "Next" to continue the overwrite installation or "Cancel" to abort.

Panasonic KX-TDA TSP - Instal	IShield Wizard	X
	Welcome to the InstallShield Wizard for Panasonic KX-TDA TSP The InstallShield Wizard will install Panasonic KX-TDA TSP on your computer. To continue, click Next.	
	< <u>B</u> ack. Next > Cance	1

4. Click "Install" to start installation. Click "Cancel" to abort. Click "Back" to go back to previous step.

Panasonic KX-TDA TSP - InstallShield Wizar	d	X
Ready to Install the Program		
The wizard is ready to begin installation.		
Click Install to begin the installation.		
If you want to review or change any of your the wizard.	installation settings, click Back. (Click Cancel to exit
InstallShield		
	< <u>B</u> ack Install	Cancel

5. If you use only 1 instance, the following dialog is displayed. Please refer to section 2.1.1 for the configuration. Previous configuration is kept. If you do not need to change the configuration, press "**OK**".

Eink Parameters TSP Log Settings Get Version Info Get Other Parameters	KX-TDA link USB Connection KX-TDA100/200 LAN Connection via CTI-LINK card Address 10 . 75 Port 33333	_1 . 48 . 96
		Check Location

6. If you use multiple instances, the following dialog is displayed. Please refer to section 3.1 for the configuration. Previous configuration is kept. If you do not need to change the configuration, press "**Apply Settings**".

SP Instance List	Instances to install	Apply Settings
		Close
Instance Name	Configuration	Enable/Disable
→Panasonic KX-TDA TSP 0000	IPAddress = '127.0.0.1', IPPort = '33333'	Enable
→Panasonic KX-TDA TSP 0001	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
→ Panasonic KX-TDA TSP 0002	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
Panasonic KX-TDA TSP 0003	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
→Panasonic KX-TDA TSP 0004	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
→Panasonic KX-TDA TSP 0005	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
→ Panasonic KX-TDA TSP 0006	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
➡ Panasonic KX-TDA TSP 0007	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
ote: You may double click on instan	se name in order change settings	

7. Click "Finish" to complete the installation.



8. Install program prompts user to reboot PC. Press "Yes" to reboot PC.



3 TSP Settings

To change TSP settings, Open "**Phone and Modem Options**" from Control Panel, and select "**Advanced**" tab.

Then select "Panasonic KX-TDA TSP 0000" and click "Configure" button.

3.1 Link Parameters

The "*Link parameters*" configures how Panasonic KX-TDA TSP will establish communication with the TDA/TDE/NCP PBX.

etting Categories	KX-TDA link
TSP Log Settings	O USB Connection
🗔 Version Info	LAN Connection via CTI-LINK card
Cther Parameters	Address 10 . 64 . 130 . 250
	Port 33333
	Check Location
	Abort Check

3.1.1 LAN Connection

When Panasonic KX-TDA TSP uses LAN to communicate with the PBX, select "LAN Connection via CTI-LINK card" and enter "Address" and "Port".

"Address" is the IP address of the PBX in dot format, and "Port" is the TCP port which the PBX is listening to. By default the address is blank.

PBX	LAN Interface Card
NCP500/1000	IPCMPR Card
TDE100/200/600	IPCMPR Card
TDA100/200/600	CTI Link Card
TDA30/50	IP Gateway Card

Example of setting an IP address:

E.g.: Address=192.168.0.1 Port=33333

KX-TDA link	
 LAN Connection via CTI 	-LINK card
Address	10 . 64 . 130 . 250
Port	33333
10	Check Location

3.1.2 USB Connection

When Panasonic KX-TDA TSP uses USB to communicate with the PBX, select "USB Connection".

 USB Connection 	KX-1	DA100/20	00_1		-
O LAN Connection via	CTI-LIN	< card			
Addi	ress [14	- V.	10	

Remark:

1) In case of KX-TDA PBX Version 2.0 or later, information of connected KX-TDA PBX is displayed to next field of "USB Connection". If you use KX-TDA PBX Version 1.1 or earlier, this field is blank. (TDA TSP can be connected to PBX.)

- 2) In case of multi PBX connection, please use USB driver Version 2.0.0.2 or later.
- If you use two PBXs by USB connection, you need to assign unique USB serial number for each PBX by TDA Maintenance Console.
 - (e.g. if USB Serial Number is "1", USB connection name will be "KX-TDA100/200_1". if USB Serial Number is "2", USB connection name will be "KX-TDA100/200_2".)

For TDA series PBX, USB serial number setting menu on the Maintenance Console is on "2.System - 9.System Option - Option6 - CTI Multi PBX Control "(see following picture).

💭 KX-TDA30 Maintenance C	onsole – [2. System	– 9. System Options]			
File(E) Connect(C) Tool(1) Utilit	y(U) View(V) Window(V	ý) Help(⊞)			
System Menu ×	2.9 System Options				
1.Configuration					
2.System	OK(Q)	Cancel(C) Apply(A)			
🚯 1.Date & Time / Daylight Saving	Option 1 Option 2	Option 3 Option 4 Option 5 Opt	ion 6 (CTI)		
1 2.Operator & BGM		-point -point - point - training			
3. Timers & Counters	-1st Party CII		CTI Multi PBX Contro	DBV Name :	
5.Holiday Table		System status retry interval timer (s).		PDA Ivanie .	
6.Numbering Plan		System status retry counter :		USB Serial Number : 1	\$
R 7.Class of Service		CDR retry interval timer (s) :	20		
8 8 Ring Tone Patterns		CDR retry counter :	CTI Make Call		
/ 9.System Options			-SLT Ring		
10.Extension CID Settings	-3rd Party CTI		O Enable	 Disable 	
,/∙¶11.Audio Gain (PagingMOH)		System status retry interval timer (s):	60		
		Sustain status ratru countar :			_
		System status reiry counter .			
		CDR retry interval timer (s) : 2	20 🗢		
		CDR retry counter :	0		
3.Group					
4.Extension					
5.Optional Device					
6.Feature					
7.TRS					
8.ARS					
9.Private Network					
10.CO & Incoming Call					
11.Maintenance					
Interactive Mode	Type : TDA30	Level : Installer	Version004-000	Region000-000	

3.2 TSP Log Setting

The "*TSP Log Settings*" configures how Panasonic KX-TDA TSP will output log with the PBX.

etting Categories	
Link Parameters TSP Log Settings Version Info Other Parameters	C Enable Log
	Raw - binary CSTA values Decoded CSTA values
	O Debug - raw + decoded + TSPI_functions
	Logs000s folder will be created in the specified path. The log file will be stored in Logs000s folder.
	C:\\Program Files\\Panasonic\\KX-TDA TSP
	🔽 Include time stamp in log
	Note:
	Log Settings may be available only after Panasonic KX-TDA TSP is reloaded by TAPI server. The log filename will have current day of the month appended.

a. Log Type

Panasonic KX-TDA TSP has logging capabilities in order to enable discovery of irregular situations that may cause problems in TSP. Panasonic KX-TDA TSP has 3 log levels:

- Raw : Contains only binary CSTA messages exchanged with PBX.
- Decoded CSTA values: Contains binary CSTA messages and their human readable form.
- Debug: Contains decoded CSTA messages as well as TSPI function calls and TSPI messages sent to TAPI. This is the most effective information to solve an irregularity.

b. Log File Path

logs<xxxx> folder is created in the path which user specified and log files are stored in the folder. Default path is <Program Files>\Panasonic\KX-TDA TSP. The log file name will be composed of the base file name and 0 through 3.

(0->1->2->3->0->1->...)

When the 4 days passed the previous log files is overwritten.

Default of log file name is "KXTDAxxxxx (**).txt. "**" is 0 through 3.

c. Log file size

When log file size grows greater than established Log file size, then the log file is restarted from the beginning.

d. Include time stamp in log

By checking this box the log file will contain a time stamp for each operation logged.

3.3 Version Info

The "*Version Info*" is **read only** and contains version information about the Panasonic KX-TDA TSP you are using.

Please see "Note" if you want to know License identification information of Panasonic KX-TDA TSP.



X.XX will be different number depending on time when TSP is released.

3.4 Other Parameters

When the "*Other Parameters*" option is selected, a message box will appear to inform the user that these settings are advanced and must be changed according to TAPI Application requirements.



The "Other Parameters" configures optional parameters.

etting Categories				
Link Parameters TSP Log Settings III Version Info	Mode Selection Standard Mode O PMS Interface Mode(KX-	A291X, A292X, A293X)		
	Account Info Buffer Size(100 -100	000) 500		
	Message Delay KX_SMDR	1000	ms	
	Message Delay LINE_ADDRESSSTATE(FORWA	RD) 1000	ms	
	Send KX_REINIT and KX_RETRIEVE			
	Number of connection	n retries is 25		
	C Number of connection retries is infinite			
	🔲 Separate DID/DDI Information	n Number/Name		
	Caller ID of Transferred Call			
	Do you want to start TSP ?	Yes		
		C No		

Note:

- Additional TSP instances is not available for "PMS Interface MODE".
- When "PMSI Interface MODE" is selected, some of options are unavailable as following dialog.

Link Parameters	Mode Selection			
Version Info Other Parameters	O Standard Mode			
	PMS Interface Mode(KX	-A291X, A292>	(, A293X)	
	Account Info Buffer Size(100 -10	000) 50	0	
	Message Delay KX_SMDR	10	00	ms
	Message Delay LINE_ADDRESSSTATE(FORW/	ARD) 10	00	ms
	C Send KX_REINIT and KX_RE	TRIEVE		
	Number of connection	n retries is 25		
	C Number of connection	n retries is infin	ite	
	🔲 Separate DID/DDI Informatio	n Number/Nar	ne	
	📕 Caller ID of Transferred Call			
	Do you want to start TSP ?	🕼 Yes		
		C No		

Configurable parameters are as follows:

a. Mode Selection

- Standard Mode The KX-TDA TSP works in native mode.
- PMS Interface Mode The KX-TDA TSP works in compatibility mode with the PMS Interface application

Note:

If you plan to use KX-TDA TSP for PMS Interface application please use only "PMS Interface mode" because Standard mode contains features that are **not compatible** with the PMS Interface application.

Also, if you use PMS Interface mode, multiple instances cannot be used.

b. Account Info Buffer Size

This parameter configures the number of account information records that the KX-TDA TSP can store on the HDD. If TSP cannot reserve its needed space to save on the HDD all account info records, then an error message will be displayed and KX-TDA TSP will not start.

c. Message Delay (KX_SMDR)

KX-TDA TSP can be configured to queue LINE_DEVSPECIFIC (KX_SMDR) events sent to TAPI in order to let the application have enough time to process each event. Each line device that supports this kind of message has its own queue. It is recommended to use default value of 1000 ms.

d. Message Delay LINE_ADDRESSSTATE (LINEADDRESSSTATE_FORWARD)

KX-TDA TSP can be configured to queue LINE_ADDRESSSTATE (LINEADDRESSSTATE_FORWARD) events sent to TAPI in order to let the application have enough time to process each event. Each line device that supports this kind of message has its own queue. It is recommended to use default value of 1000 ms.

e. Send KX_REINIT and KX_RETRIEVE

If this option is checked and TSP works in *Standard MODE*, in case if TSP loses connection with PBX, it sends LINEDEVSPECIFIC (KX_REINIT) and begins recovery procedure. However, TSP may fail recovery in some case. (e.g. "When PBX Setting changed between KX_REINIT and KX_RETRIEVE." etc.).

Call event is not notified while TSP sends KX_REINIT event and KX_RETRIVE event.

Otherwise TSP sends LINE_DEVSTATE (REINIT) and enters in an unknown condition waiting all Applications to reinitialize use of TAPI.

f. Number of Connection Retries

Number of Connection Retries is 25 - When TSP loses connection with PBX, TSP try to reconnect 25 times (same as previous version).

Number of Connection Retries is infinite - When TSP loses connection with PBX, TSP try to re-connect infinitely.

g. DID/DDI Information Number/Name

If this option is checked, TSP fills CALLINFO.DEVSPECIFIC structure with DID/DDI number and name in separated format (the number is set into dwDIDDDISize/DIDDDIOffset area and the name is set into dwDIDDDINameSize/dwDIDDDINameOffset area).

Also CLIP information including CLIP Name in transferred call is set in separated format (the number of CLIP information is set into dwTranCLIPSize/ dwTranCLIPOffset area and name of CLIP information is set into dwTranCLIPNameSize/dwTranCLIPNameOffset area).

h. Caller ID of Transferred Call

By checking this option, parameter value of LINECALLINFO.CallerID and CallerIDName for transferred to line (LINE1) becomes original callerID(CLIP) only when transferring line (LINE2) is DISA or voice unit for both screened and unscreened transfer. If transferring line is other than DISA or voice unit, CallerID and CallerIDName parameter value is actual transferring line (LINE2).



i. Enable connection to TDA PBX "Do you want to start TSP ?"

If "Panasonic KX-TDA TSP" and "KX-TDA Maintenance Console" are set to connect to PBX by USB connection, both software cannot be used at the same time. If you use USB connection, you cannot use "Panasonic KX-TDA TSP" and "KX-TDA Maintenance Console" at the same time.

If "Panasonic KX-TDA TSP" is installed and computer is restarted, Windows may start "Panasonic KX-TDA TSP" automatically. Therefore, "KX-TDA Maintenance Console" may not be started by installation of "Panasonic KX-TDA TSP". For this reason, to start TSP or not, you can set the switch ("Yes" or "No") in "Do you want to start TSP?".

(1)In case of "Yes"

After computer is restarted, you can use "TAPI Application". However, "Panasonic KX-TDA TSP" may be started automatically after computer restart and you may not be able to start "KX-TDA Maintenance Console".

(2)In case of "No"

After computer is restarted, you can use "KX-TDA Maintenance Console". However, you cannot start "TAPI Application" after computer restart.

Note:

All settings will effectively take effect after the next restart of computer.



3.5 Settings for Multi PBX Connection

3.5.1. Version Information

- 1) In case of multi PBX connection, please make sure to use PBX Version 2.0 or later.
- 2) Please use USB driver Version 2.0.0.2 or later, if you use USB.

3.5.2. Before setting Multi PBX Connection

- 1) Please connect PC and PBX by LAN or USB for multi connection.
 - Note) In case of LAN connection, please configure IP Address of PBX.
- 2) Please install TDA-TSP in advance.

3.5.3. How to set Multi PBX Connection

 In order to start Panasonic KX-TDA TSP Multi PBX Configuration, you need to follow: "Start->Program->Panasonic->KX-TDA TSP->MultiPBX Configuration" like in the next image.



The following message will appear in order to note that TSP and CSTA Application cannot be used at the same time. Press "**OK**" to continue.

Panasonio	: KX-TDA TSP MultiPBX Configuration	×
i	If you use 'Panasonic KX-TDA TSP' and other CSTA application on the same PC to connect to same TDA, you may not be able to start CSTA application. In this case, you need to answer 'No' to 'Do you want to start TSP?' from 'Panasonic KX-TDA TSP' configuration dialog and restart your PC. Note that if you answer 'No' to 'Do you want to start TSP?' then TAPI application will not be able to use 'Panasonic KX-TDA TSP'.	
	ОК	

Panasonic KX-TDA TSP MultiPBX Configuration dialog will appear:

Select "Panasonic KX-TDA TSP 0001" and double click.

SP Instance List		Apply Setting:
Instance Name	Configuration	Llose
Panasonic KX-TDA TSP 0000	IPAddress = '10.64.130.250' IPPort = '33333'	Enable
→ Panasonic KX-TDA TSP 0000	IPAddress = '0.0.0' IPPort = '33333'	Disable
→ Panasonic KX-TDA TSP 0002	IPAddress = '0.0.0.0'. IPPort = '33333'	Disable
→ Panasonic KX-TDA TSP 0003	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
Panasonic KX-TDA TSP 0004	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
Panasonic KX-TDA TSP 0005	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
→ Panasonic KX-TDA TSP 0006	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
➡ Panasonic KX-TDA TSP 0007	IPAddress = '0.0.0.0', IPPort = '33333'	Disable

4 If "Panasonic KX-TDA TSP 0001" setting screen is opened, configure KX-TDA Link in Link Parameters and press "**OK**".

 Link Parameters TSP Log Settings Version Info Other Parameters USB Connection via CTI-LINK card Address 10 64 130 25 Port 33333 	
TSP Log Settings Image: Version Info Address 10 64 Address Port 33333	T
Address 10 . 64 . 130 . 25 Port 33333	
Port 33333	50
Port 33333	

5 After finishing to setup configuration press "Apply settings"

SP Instance List	Instances to install	Apply Settings
		Close
Instance Name	Configuration	Enable/Disable
→ Panasonic KX-TDA TSP 0000	IPAddress = '10.64.130.250', IPPort = '33333'	Enable
➡ Panasonic KX-TDA TSP 0001	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
➡Panasonic KX-TDA TSP 0002	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
➡ Panasonic KX-TDA TSP 0003	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
➡Panasonic KX-TDA TSP 0004	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
➡ Panasonic KX-TDA TSP 0005	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
➡ Panasonic KX-TDA TSP 0006	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
➡ Panasonic KX-TDA TSP 0007	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
→ Panasonic KX-TDA TSP 0006 → Panasonic KX-TDA TSP 0007	IPAddress = '0.0.0.0', IPPort = '33333' IPAddress = '0.0.0.0', IPPort = '33333'	Disable Disable

6 MultiPBX Configuration Tool will show operation progress:



7 MultiPBX Configuration Tool will exit after finishing. Then please **reboot PC manually**.

3.5.4. MultiPBX Configuration Screen

6P Instance List	Instances to install	Apply Setting:
		Close
Instance Name	Configuration	Enable/Disable
→ Panasonic KX-TDA TSP 0000	IPAddress = '127.0.0.1', IPPort = '33333'	Enable
🖶 Panasonic KX-TDA TSP 0001	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
→Panasonic KX-TDA TSP 0002	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
→Panasonic KX-TDA TSP 0003	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
→Panasonic KX-TDA TSP 0004	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
➡ Panasonic KX-TDA TSP 0005	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
→Panasonic KX-TDA TSP 0006	IPAddress = '0.0.0.0', IPPort = '33333'	Disable
➡Panasonic KX-TDA TSP 0007	IPAddress = '0.0.0.0', IPPort = '33333'	Disable

TSP Instance list contains following information:

- "Instance Name" This is TSP Instance Name same as Control Panel Phone and Modems Options - Advanced displays.
- o "Configuration" Informative of configuration string.
- o "Enable/Disable"

"Enable": TSP instance is registered with TAPI

"Disable": TSP instance is unregistered with TAPI.

At startup this field contains current registration status of TSP Instance. "Enable": TSP instance is registered with TAPI. "Disable": TSP instance is not registered with TAPI.

MultiPBX Configuration Tool allows to:

- Specify parameters of each instance
- Register/Unregister each TSP instance with TAPI (Telephony System).

4 Frequently Asked Questions

4.1 "KX-TDA Maintenance Console" can not use USB to communicate with the PBX

Windows operating system may start Telephony Service (TSP) automatically when the computer is started.

Specially, if you install "TSP" and "KX-TDA Maintenance Console" on the same computer and select the same connection way (USB) for "KX-TDA LINK" of "TSP" and "KX-TDA Maintenance Console", the problem that "KX-TDA Maintenance Console" can't connect to PBX using USB drivers may occur.

"TSP" is automatically started when the computer is started, "KX-TDA Maintenance Console" can't use USB port of PBX because "TSP" has already been using it. For this reason, the problem occurs. If this problem occurs on your computer, please restart "KX-TDA Maintenance Console" in following procedure.

At first please restart "KX-TDA Maintenance Console" in following Procedure A. [Procedure A]

(1) Unplug USB cable for communication between the computer and TDA.

(2) Plug in again.

(3) Start "KX-TDA Maintenance Console" and select "USB" on "Connection" to connect to PBX.

If you still can't connect "KX-TDA Maintenance Console" to PBX, please restart it in following Procedure B.

[Procedure B]

(1) Unplug USB cable for communication between the computer and TDA.

- (2) Restart the computer.
- (3) After the computer is restarted, connect the computer to TDA by USB cable.
- (4) Start "KX-TDA Maintenance Console" and select "USB" on "Connection" to connect to PBX.

Note:

Even though you could connect "KX-TDA Maintenance Console" to PBX with USB driver after

[Procedure A], you still might need to restart PC in case after operation with "KX-TDA

Maintenance Console" is completed in order to operate again with TSP.

4.2 TSP can not communicate with PBX via LAN

In case firewall protection software is installed on your PC and TSP is configured to use "LAN Connection via CTI-LINK card" then make sure that firewall protection software is not restricting communication with PBX. Therefore you may need to configure firewall protection software to permit communication with IP address and IP port that you have used in TSP configuration.

In case communication is restricted by firewall protection software then you will not be able to "Check Location" from TSP configuration GUI. Also TSP will report to TAPI a number of zero line devices and zero phone devices. Therefore communication is restricted by firewall protection software TAPI application will not be able to control and monitor devices on respective PBX.

4.3 How to check if Panasonic KX-TDA TSP was already installed in your computer?

To do so, go to Control Panel, Programs and Features, and see if the item labeled "Panasonic KX-TDA TSP" can be found in the "Currently installed programs".

Programs and Features			
Control Panel + A	All Control Panel Items 👻 Programs and Features	👻 🌠 🛛 Search Programs an	d Features 🛛 😰
Control Panel Home	Uninstall or change a program To uninstall a program, select it from the li	st and then click Uninstall, Change, or Repair	
Turn Windows features on or off	Organize 🔻 Uninstall Change		= • 🔞
	Name -	 ▼ Publisher 	- Install Size
	Panasonic KX-TDA TSP	Panasonic System Networks Co.,L	td. 1/20/2010
	<u>د ا</u>		
	Panasonic System Networks	Co.,Ltd. Product version: 3.3.1.13 Size: 14.1 MB	

Annex A

Panasonic KXTDA TSP Connection Monitor Tool

This tool is provided to show state of each TSP instance.

You may use provided shortcut under "Start Menu-> Programs-> Panasonic-> KX-TDA TSP -> Connection Monitor."

🗷 Panasonic KX	-TDA TSP Monitor		_ 🗆 🗙
РВХ	Panasonic KX-TDA TSP 0000 IPAddre	ss = '10.64.130.250', IPPort = '333	33' 💌
Connection Status	Disconnected	Beceive	
Packets	0	0	
	J		Close

Use "PBX" combo box to select instance for which you to want to see status.

Connection may be:

Now Connecting – TSP instance is initializing connection with PBX.

Connected - TSP instance is connected with PBX. It is possible to control/monitor with TAPI application(s).

Disconnected – TSP instance is not communicating with PBX.

Not Registered with TAPI – TSP instance is not registered in TAPI (Telephony System).

Copyright:

This material is copyrighted by Panasonic System Networks Co., Ltd., and may be reproduced for internal use only. All other reproduction, in whole or in part, is prohibited without the written consent of Panasonic System Networks Co., Ltd.

© Panasonic System Networks Co., Ltd. 2010

G-AAC-G-E-21000