

# PRODUCT GUIDE AND SPECIFICATIONS

## KX-TDE600

PGMPR SOFTWARE FILE VERSION 5.0



LINE-UP :  
KX-TDE600 AND THE OPTIONAL EXPANSION SHELF KX-TDE620 (MAX3)

SYSTEM CAPACITY				
<b>MAXIMUM TRUNKS AND EXTENSIONS</b> The PBX supports the following number of trunks				
TYPE	BASIC SYSTEM	2-SHELF SYSTEM	3-SHELF SYSTEM	4-SHELF SYSTEM
<b>TOTAL NUMBER OF TRUNKS</b>	224	384	544	640
Trunk (Physical Trunk Card)	160	320	480	640
Trunk (Virtual Trunk Card)			64	
			32	
			64	
<b>TOTAL NUMBER OF EXTENSIONS</b>	432	736	1008	1152
Extension (Physical Extension Card)	304	608	880	1120
	256	512	640 <sup>1)</sup>	640 <sup>1)</sup>
	240	480	720	960
Extension (Virtual Extension Card)	304	608	880	1120
			128	
			128	
			128	

<sup>1)</sup> The maximum number of PTs in the whole system is limited to 640.

MAXIMUM TERMINAL EQUIPMENT				
The following number of items of terminal equipment can be supported by the PBX				
TERMINAL EQUIPMENT TYPE	BASIC SYSTEM	2-SHELF SYSTEM	3-SHELF SYSTEM	4-SHELF SYSTEM
<b>TELEPHONE (USING DIGITAL XDP)</b>	368 (432) <sup>1)</sup>	608 (736) <sup>1)</sup>	848 (1008) <sup>1)</sup>	992 (1152) <sup>1)</sup>
SLT	240	480	720	960
KX-DT300/KX-T7600 series DPT	256	512	640	640
Other DPT	128	256	384	512
APT	80	160	240	320
IP-PT	288	448	608	704
	160	320	480	640
			128 <sup>4)</sup>	
			128	
			64	
	32 <sup>5)</sup>	64 <sup>5)</sup>	96 <sup>5)</sup>	128 <sup>5)</sup>
	32	64	96	128
	16	32	48	64
	16	16	16	16
			512	
			8	
	16	32	48	64
	16	32	48	64
	16	32	48	64
	16	32	48	64

<sup>1)</sup> Even when Digital XDP is used, each shelf supports a maximum of 256 KX-DT300/KX-T7600 series DPTs.

<sup>2)</sup> KX-NT300 series (except KX-NT366/KX-NT305), KX-NT265, and KX-NT136

<sup>3)</sup> KX-NT400, KX-NT300 series, and KX-NT265 (software version 2.00 or later only)

<sup>4)</sup> For the KX-NT400, the maximum number of extensions that can be connected to the PBX is 64.

<sup>5)</sup> One 8-channel PT-interface CS or IP-CS counts as 2 CSs for the total number of CSs.

<sup>6)</sup> Only a single VPS can be connected to one optional service card.

OPTION LIST	Model	Description	
IPCEMPR OPTIONAL CARDS	KX-TDE0105	Memory Expansion Card (IPCEMC)	
	KX-TDE6101	IP Convergence Main Processing Card(IPCEMPR)	
	KX-TDE0110	16-Channel VoIP DSP Card (DSP16)	
	KX-TDE0111	64-Channel VoIP DSP Card (DSP64)	
	KX-TDA0196	Remote Card (RMT)	
OPTIONAL SHELF EXPANSION CARDS	KX-TDA6110	Bus Master Card (BUS-M)	
	KX-TDA6111	Bus Master Expansion Card (BUS-ME)	
EXPANSION SHELF	KX-TDE620	Expansion Shelf	
MOUNTING KIT	KX-TDA6201	Mounting Kit for expanding to a 3- or 4- shelf System	
ACTIVATION KEY CODES <sup>1)</sup>	KX-NCS4102	2-Channel IP Trunk Activation Key	
	KX-NCS4104	4-Channel IP Trunk Activation Key	
	KX-NCS4201	1-Channel IP Softphone/IP Proprietary Telephone Activation Key	
	KX-NCS4204	4-Channel IP Softphone/IP Proprietary Telephone Activation Key	
	KX-NCS4208	8-Channel IP Softphone/IP Proprietary Telephone Activation Key	
	KX-NCS4216	16-Channel IP Softphone/IP Proprietary Telephone Activation Key	
	KX-NCS4501	1-Channel IP Proprietary Telephone Activation Key	
	KX-NCS4504	4-Channel IP Proprietary Telephone Activation Key	
	KX-NCS4508	8-Channel IP Proprietary Telephone Activation Key	
	KX-NCS4516	16-Channel IP Proprietary Telephone Activation Key	
	KX-NCS4701	1-Channel SIP Extension Activation Key	
	KX-NCS4704	4-Channel SIP Extension Activation Key	
	KX-NCS4708	8-Channel SIP Extension Activation Key	
	KX-NCS4716	16-Channel SIP Extension Activation Key	
	KX-NCS2010	Activation Key for CA Thin Client	
	KX-NCS2020	Activation Key for CSTA Multiplexer	
	KX-NCS2201	Activation Key for CA PRO for 1 User	
	KX-NCS2205	Activation Key for CA PRO for 5 Users	
	KX-NCS2210	Activation Key for CA PRO for 10 Users	
	KX-NCS2240	Activation Key for CA PRO for 40 Users	
	KX-NCS2249	Activation Key for CA PRO for 128 Users	
	KX-NCS2301	Activation Key for CA CAD Monitor for 1 ICD Supervisor	
	KX-NCS2401	Activati on Key for CA Operator Console 1 User	
	KX-NCS2901	Activation Key for CA Network 1 User	
	KX-NCS2905	Activation Key for CA Network 5 Users	
	KX-NCS2910	Activation Key for CA Network 10 Users	
	KX-NCS2940	Activation Key for CA Network 40 Users	
	KX-NCS2949	Activation Key for CA Network 128 Users	
	KX-NCS3930	Activation Key for Third Party CTI	
	KX-NCS4950	Activation Key for Software Upgrade to Enhanced Version (Software Upgrade 01)	
	PHYSICAL TRUNK CARDS	KX-TDA0182	8-Port DID Card (DID8)
		KX-TDA0184	8-Port E & M Trunk Card (E&M8)
		KX-TDA0188	E-1 Trunk Card (E1)
KX-TDA0189		8-Port Caller ID/Pay Tone Card (CID/PAY8)	
KX-TDA0193		8-Port Caller ID Card (CID8)	
KX-TDA0284		4-Port BRI Card (BRI4)	
KX-TDA0288		8-Port BRI Card (BRI8)	
KX-TDA0290		PRI Card	
KX-TDA0484		4-Channel VoIP Gateway Card (IP-GW4E)	
KX-TDA0490		16-Channel VoIP Gateway Card (IP-GW16)	
KX-TDA6181		16-Port Analogue Trunk Card (ELCOT16)	
PHYSICAL EXTENSION CARDS		KX-TDA0143	4 Cell Station Interface Card (CSIF4)
		KX-TDA0144	8 Cell Station Interface Card (CSIF8)
		KX-TDA0170	8-Port Digital Hybrid Extension Card (DHLCH8)
		KX-TDA0171	8-Port Digital Extension Card (DLC8)
		KX-TDA0172	16-Port Digital Extension Card (DLC16)
	KX-TDA0173	8-Port Single Line Telephone Extension Card (SLC8)	
	KX-TDA0177	16-Port Single Line Telephone Extension Card with Caller ID (CSLC16)	
	KX-TDA0470	16-Channel VoIP Extension Card (IP-EXT16)	
	KX-TDA6174	16-Port Single Line Telephone Extension Card (ESLC16)	
	KX-TDA6175	16-Port Single Line Telephone Extension with Message Lamp Card (EMSLC16)	
	KX-TDA6178	24-Port Single Line Telephone Extension Card with Caller ID (ECSLC24)	
	OTHER PHYSICAL CARDS	KX-TDA0161	4-Port Doorphone Card (DPH4)
KX-TDA0162		2-Port Doorphone Card (German Type) (DPH2)	
KX-TDA0164		4-Port External Input/Output Card (EI04)	
KX-TDA0168		Extension Caller ID Card (EXT-CID)	
KX-TDA0190		Optional 3-Slot Base Card (OPB3)	
KX-TDA0191		4-Channel Message Card (MSG4)	
KX-TDA0192		2-Channel Simplified Voice Message Card (ESVM2)	
KX-TDA0194		4-Channel Simplified Voice Message Card (ESVM4)	
KX-TDA6166		16-Channel Echo Canceller Card (EECH016)	
POWER SUPPLY UNITS (PSUS)		KX-TDA0103	L-Type Power Supply Unit (PSU-L)
	KX-TDA0104	M-Type Power Supply Unit (PSU-M)	
CELL STATIONS (CSS)	DECT	KX-TDA0155	
		KX-TDA0156	
		KX-TDA0158	
		KX-NCP0158	
PROPRIETARY EQUIPMENT		KX-A228	
		KX-A229	
		KX-A298	
		KX-T30865	
		KX-T7765	
		S/M-type Back-up Battery Cable	
		L-type Back-up Battery Cable	
		Blank Slot Cover	
		Doorphone	

<sup>1)</sup> Note that the types of activation keys are subject to change without notice. For CA activation keys, refer to the documentation for CA.

### Compatible Panasonic Proprietary Telephones

The PBX supports the following telephones:

- IP proprietary telephones (e.g., KX-NT300 series) - IP softphones (e.g., KX-NCS8100) - Digital proprietary telephones (e.g., KX-DT300 series)
- Analogue proprietary telephones (e.g., KX-T7700 series)
- Portable stations (e.g., KX-WT115, KX-TCA355, KX-TCA275) - DSS consoles (e.g., KX-DT390) - Single line telephones (e.g., KX-T7710)

### Incompatible Panasonic Proprietary Telephones

The PBX does not support the following telephones:

- KX-T30800 series proprietary telephones and DSS consoles - KX-T61600 series proprietary telephones and DSS consoles
- KX-T123200 series proprietary telephones and DSS consoles - KX-TD7500 DECT portable station

**Note:** Some models will be exported to limited region. Please contact our dealer and confirm the availability of specific models in your region.

SYSTEM FEATURE CAPACITY			
	Item	KX-TDE600	
SYSTEM	Absent Message—Extension	1 x 16 characters	
	Absent Message—System Call Park Zone	8 x 16 characters 100	
DIALLING	Conference	Each shelf: 3-8 parties per conference (32 parties total)	
	COS	64	
	DID/DDI Table	32 digits, 1000 entries	
	Extension number	1 – 5 digits	
	Extension Personal Identification Number (PIN)	10 digits, 1 entry/extension	
	Host PBX Access Code	10 digits, 10 entries/trunk group	
	Multiple Subscriber Number (MSN)	10 entries per ISDN-BRI port	
	Number of Characters of Name	20	
	Printing message	8	
	Queuing Time Table	128	
	Ring Tone Pattern Plan	8	
	Simultaneous Programmers	• one system programmer + 63 personal programmers • one manager programmer + 63 personal programmers	
	SMDR Call Storage	• 64 personal programmers 1000 calls (20 000 calls w/PCMEC card)	
	Special Carrier Access Code	16 digits, 100 entries	
	Tenant	32	
	Time Service Holiday	24	
	Verification Code	4 digits, 1000 entries	
	Verification Code Personal Identification Number (PIN)	10 digits, 1000 entries	
	DIALLING	Emergency Call	32 digits, 10 entries
		Hot Line	32 digits
Key Pad Protocol Dial (SDN Service Access)		32 digits	
Personal Speed Dialling		32 digits, 100 entries/extn.	
Quick Dialling		8 digits, 4080 entries	
Redial		32 digits	
System Speed Dialling		32 digits, 1000 entries/tenant	
One-touch Dialling—PT/DSS		32 digits, 5000 entries/system	
One-touch Dialling—PS		32 digits, 1000 entries/system	
GROUPS		Conference Group	8 (8 members/group for Conference Group Mode, 32 members/group for Broadcast Mode)
	Call Pickup Group	96	
	Idle Extension Hunting Group	128 (16 extensions/group)	
	Incoming Call Distribution Group	128 (128 extensions/group)	
	Paging Group	96	
	PS Ring Group	32	
	Trunk Group	96	
	VM (DPT) Group	8 groups x 12 ports (24 channels)	
	VM (DTMF) Group	8 groups x 32 channels	
	TRS/BARRING	TRS/Barring Level	7
TRS/Barring Denied Code		16 digits, 100 entries/level	
TRS/Barring Exception Code		16 digits, 100 entries/level	
ARS	Routing Plan Table	48 entries	
	Leading Number Table	16 digits, 1000 entries	
	Leading Number Exception Table	16 digits, 200 entries	
	ARS Carrier	48	
	Itemised Billing Code	10 digits	
	Authorisation Code for Tenant	16 digits	
	Authorisation Code for Trunk Group	10 digits	
CALL LOG AND MESSAGE WAITING	Outgoing Call Log—PT	100 records/extn. 3200 records/system	
	Outgoing Call Log—PS	100 records/extn. 2560 records/system	
	Incoming Call Log—PT	100 records/extn. 6400 records/system	
	Incoming Call Log—PS + Incoming Call Distribution Group	100 records/extn. or group Total 6400 records/system	
	Message Waiting—PS + Incoming Call Distribution Group	640	
VOICE MESSAGE	Message Waiting—PT + SLT	1280	
	Outgoing Message (OGM)	64	
	OGM Total Recording Time	MSG4 Card: 8 minutes; MPR/ESVM2/ESVM4 Card: 20 minutes (at High recording quality)	
	Built-in Simplified Voice Message (SVM)	MPR Card: 125 messages; ESVM2/ESVM4 Card: 250 messages per card/block	
HOSPITALITY AND CHARGE MANAGEMENT FEATURES	SVM Total Recording Time	20, 60, or 120 minutes (depending on the recording quality)	
	Billing items for guest rooms	4000 records/PBX (8000 records w/PCMEC card)	
	Hotel Operator	4	
	Charge Rate	7 digits including a decimal	
NETWORKING	Charge Denomination	3 currency characters/symbols	
	TIE Line Routing and Modification Table	32 entries	
	Leading Number	3 digits	
	PBX Code	7 digits	
	NDSS: Monitored PBXs	8	
CTI	NDSS: Registered Extensions for Monitor PBX	250	
	PC Console	8	
	PC Phone	128	
PASSWORD	System Password for Installer	4 – 10 characters	
	System Password for Administrator—for PC Programming	4 – 10 characters	
	System Password for User—for PC Programming	4 – 10 characters	
	System Password for Administrator—for PT Programming	4 – 10 digits	
	System Password for User—for PT Programming	4 – 10 digits	
	Manager Password	4 – 10 digits	
	Installer Level Programmer Code	4 – 16 characters	
Administrator Level Programmer Code	4 – 16 characters		
User Level Programmer Code	0 – 16 characters		



SPECIFICATIONS		KX-TDE600
Control Bus		Original bus (16-bit, 8 MHz, 10 megabytes per second)
Communication Bus		H.100 bus conformity (1024 time slots)
Switching		Distributed Switching
POWER INPUT	PSU-M	100 V AC to 130 V AC; 2.5 A/200 V AC to 240 V AC; 1.4 A/50 Hz/60 Hz
	PSU-L	100 V AC to 130 V AC; 5.1 A/200 V AC to 240 V AC; 2.55 A/50 Hz/60 Hz
External Battery		+36 V DC (+12 V DC x 3, recommended maximum capacity per shelf is 28 Ah)
Maximum Power Failure Tolerance		300 ms (without using backup batteries)
Memory Backup Duration		7 years
DIALLING	Trunk	Dial Pulse (DP) 10 pps, 20 pps Tone (DTMF) Dialling
	Extension	Dial Pulse (DP) 10 pps, 20 pps Tone (DTMF) Dialling
	Mode Conversion	DP-DTMF, DTMF-DP
	Ring Frequency	20 Hz/25 Hz (selectable)
	Trunk Loop Limit	1600 Ω maximum
OPERATING ENVIRONMENT	Temperature	0 °C to 40 °C
	Humidity	10 % to 90 % (non-condensing)
Conference Call Trunk (per shelf)		From 10 x 3-party conference call to 4 x 8-party conference call
Music on Hold (MOH)		2 ports (Level Control: -11 dB to +11 dB in 1 dB steps) MOH1: External Music Source port MOH1: External Music Source port
PAGING	Internal	Level Control: -15 dB to +6 dB in 3 dB steps
	External	2 ports (Volume Control: -15 dB to +15 dB in 1 dB steps)
Serial Interface Port	RS-232C	1 (maximum 115.2 kbps)
RJ45 PORT	MNT Port	1 (for PC connection)
	LAN Port	1 (for LAN connection)
Extension Connection Cable	SLT	1-pair wire (T, R)
	DPT	1-pair wire (D1, D2) or 2-pair wire (T, R, D1, D2)
	APT	2-pair wire (T, R, D1, D2)
	PT-interface CS (2-channel)	1-pair wire (D1, D2)
	PT-interface CS (8-channel)	4-pair wire (D1, D2)
DSS Console and Add-on Key Module		1-pair wire (D1, D2)
DIMENSION	Basic Shelf	430 mm (W) x 415 mm (H) x 276 mm (D)
	Expansion Shelf	430 mm (W) x 415 mm (H) x 276 mm (D)
Weight (when fully mounted)	Basic Shelf	Under 16 kg
	Expansion Shelf	Under 16 kg

02/2001.01.UK



**Panasonic**  
ideas for life

We expressly reserve the right to make reasonable changes to models, dimensions, colours as well as to make modifications that bring our products in line with state-of-the-art technology.