

# PRODUCT GUIDE AND SPECIFICATIONS

## KX-TDE100 KX-TDE200

PGMPR SOFTWARE FILE VERSION 5.0



SYSTEM CAPACITY		
<b>MAXIMUM TRUNKS AND EXTENSIONS</b> The PBX supports the following number of trunks and extensions		
TYPE	KX-TDE100	KX-TDE200
<b>TOTAL NUMBER OF TRUNKS</b>		
Trunk (Physical Trunk Card)	120	128
Trunk (Virtual Trunk Card)	64	64
	H.323 Trunks	32
	SIP Trunks	64
<b>TOTAL NUMBER OF EXTENSIONS</b>		
Extension (Physical Extension Card)	256	256
Extension (Virtual Extension Card)	160	256
	IP-PT and IP Softphone	128
	SIP Extension	128

MAXIMUM TERMINAL EQUIPMENT		
The following shows the number of each terminal equipment type supported by the PBX		
TERMINAL EQUIPMENT TYPE	KX-TDE100	KX-TDE200
<b>TELEPHONE</b>		
SLT	256	256
KX-DT300/KX-T7600 series DPT	128	168
Other DPT	128	256
APT	32	128
IP-PT	24	64
	192	192
	IP-PT <sup>1)</sup> (supported by IP-EXT16 card)	96
	IP-PT <sup>2)</sup> (supported by IPCEMPR card)	128 <sup>3)</sup>
SIP Extension	128	128
<b>DSS CONSOLE</b>		
CS	8	8
	32 <sup>4)</sup>	32 <sup>4)</sup>
	PT-interface CS (2-channel) /CS for CSIF card	32
	PT-interface CS (8-channel)	16
	IP-CS (8-channel)	16
PS	128	128
Voice Processing System (VPS) <sup>5)</sup>	2	2
Doorphone	16	16
Door Opener	16	16
External Sensor	16	16
External Relay	16	16

<sup>1)</sup> KX-NT300 series (except KX-NT366/KX-NT305), KX-NT265, and KX-NT136

<sup>2)</sup> KX-NT400, KX-NT300 series and KX-NT265 (software version 2.00 or later only)

<sup>3)</sup> For the KX-NT400, the maximum number of extensions that can be connected to the PBX is 64.

<sup>4)</sup> One 8-channel PT-interface CS or IP-CS counts as 2 CSs for the total number of CSs.

OPTION LIST	Model	Description
<b>IPCMR OPTIONAL CARDS</b>		
	KX-TDE0105	Memory Expansion Card (IPCMEC)
	KX-TDE0101	IP Convergence Main Processing Card(IPCEMPR)
	KX-TDE0110	16-Channel VoIP DSP Card
	KX-TDE0111	64-Channel VoIP DSP Card
	KX-TDA0196	Remote Card
<b>ACTIVATION KEY CODES<sup>1)</sup></b>		
	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-NCS4910	Activation Key for Enhanced Features
	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 ACD Monitor for 1 ICD Supervisor
	KX-NCS2401	Activation 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
<b>PHYSICAL TRUNK CARDS</b>		
	KX-TDA0180	8-Port Analogue Trunk Card (LC0T8)
	KX-TDA0181	16-Port Analogue Trunk Card (LC0T16)
	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)
<b>PHYSICAL EXTENSION CARDS</b>		
	KX-TDA0143	4 Cell Station Interface Card (CSIF4)
	KX-TDA0144	8 Cell Station Interface Card (CSIF8)
	KX-TDA0170	8-Port Digital Hybrid Extension Card (DHLHC8)
	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-TDA0174	16-Port Single Line Telephone Extension Card (SLC16)
	KX-TDA0175	16-Port Single Line Telephone Extension with Message Lamp Card (MSLC16)
	KX-TDA0177	16-Port Single Line Telephone Extension Card with Caller ID (CSLC16)
	KX-TDA0470	16-Channel VoIP Extension Card (IP-EXT16)
	KX-TDA1176	16-Port Single Line Telephone Extension with Caller ID and Message Lamp Card (MCSLC16)
	KX-TDA1178	24-Port Single Line Telephone Extension with Caller ID and Message Lamp Card (MCSLC24)
<b>OTHER PHYSICAL CARDS</b>		
	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-TDA0166	16-Channel Echo Canceller Card (ECH016)
	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)
<b>POWER SUPPLY UNITS (PSUS)</b>		
	KX-TDA0103	L-Type Power Supply Unit (PSU-L)
	KX-TDA0104	M-Type Power Supply Unit (PSU-M)
	KX-TDA0108	S-Type Power Supply Unit (PSU-S)
<b>CELL STATION (CSS) DECT</b>		
	KX-TDA0155	2-Channel Cell Station Unit Using a DHLHC/DLC Card (PT-interface CS) for DECT Portable Station
	KX-TDA0156	4-Channel Cell Station Unit Using a CSIF Card for DECT Portable Station
	KX-TDA0158	8-Channel High-density Cell Station Unit Using a DHLHC/DLC Card (PT-interface CS) for DECT Portable Station
	KX-NCP0158	8-Channel IP Cell Station Unit Using a V-IPCS4 Card for DECT Portable Station
<b>PROPRIETARY EQUIPMENT</b>		
	KX-A228	S/M-type Back-up Battery Cable
	KX-A229	L-type Back-up Battery Cable
	KX-A258	Blank Slot Cover
	KX-T30865	Doorphone
	KX-T7765	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-17700 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.

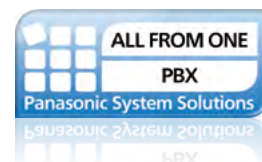
SYSTEM FEATURE CAPACITY			
	Item	KX-TDE100	KX-TDE200
<b>SYSTEM</b>	Absent Message—Extension	1 x 16 characters	
	Absent Message—System	8 x 16 characters	
	Call Park Zone	100	
	Conference	3-8 parties per conference (32 parties total)	
	COS	64	
	DID/DDI Table	32 digits, 1000 entries	
	Extension number	1 - 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	64	
	Ring Tone Pattern Plan	8	
	Simultaneous Programmers	<ul style="list-style-type: none"> <li>• one system programmer + 63 personal programmers</li> <li>• one manager programmer + 63 personal programmers</li> </ul>	
	SMDR Call Storage	<ul style="list-style-type: none"> <li>• 64 personal programmers</li> </ul> 200 calls (10 000 calls w/ IPCMEC card)	
	Special Carrier Access Code	16 digits, 20 entries	
	Tenant	8	
	Time Service Holiday	24	
	Verification Code	4 digits, 1000 entries	
Verification Code Personal Identification Number (PIN)	10 digits, 1000 entries		
<b>DIALLING</b>	Emergency Call	32 digits, 10 entries	
	Hot Line	32 digits	
	Key Pad Protocol Dial (ISDN 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, 2000 entries/system	
	One-touch Dialling—PS	32 digits, 500 entries/system	
	<b>GROUPS</b>	Conference Group	8 (8 members/group for Conference Group Mode, 32 members/group for Broadcast Mode)
Call Pickup Group		64	
Idle Extension Hunting Group		64 (16 extensions/group)	
Incoming Call Distribution Group		128 (128 extensions/group)	
Paging Group		32	
PS Ring Group		32	
Trunk Group		64	
VM (DPT) Group		2 groups x 12 ports (24 channels)	
VM (DTMF) Group		2 groups x 32 channels	
<b>TRS/BARRING</b>		TRS/Barring Level	7
	TRS/Barring Denied Code	16 digits, 100 entries/level	
	TRS/Barring Exception Code	16 digits, 100 entries/level	
<b>ARS</b>	Routing Plan Table	16 entries	
	Leading Number Table	16 digits, 1000 entries	
	Leading Number Exception Table	16 digits, 200 entries	
	ARS Carrier	10	
	Itemised Billing Code	10 digits	
	Authorisation Code for Tenant	16 digits	
<b>CALL LOG AND MESSAGE WAITING</b>	Authorisation Code for Trunk Group	10 digits	
	Outgoing Call Log—PT	100 records/extn. 1520 records/system	
	Outgoing Call Log—PS	100 records/extn. 640 records/system	
	Incoming Call Log—PT	100 records/extn. 3040 records/system	
	Incoming Call Log—PS + Incoming Call Distribution Group	100 records/extn. or group Total 2048 records/system	
	Message Waiting—PS + Incoming Call Distribution Group	256	
<b>VOICE MESSAGE</b>	Message Waiting—PT + SLT	512	
	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	
<b>HOSPITALITY AND CHARGE MANAGEMENT FEATURES</b>	SVM Total Recording Time	20, 60, or 120 minutes (depending on the recording quality)	
	Billing items for guest rooms	4000 records/PBX	
	Hotel Operator	4	
	Charge Rate	7 digits including a decimal	
<b>NETWORKING</b>	Charge Denomination	3 currency characters/symbols	
	TIE Line Routing and Modification Table	32 entries	
	Leading Number	3 digits	
	PBX Code	7 digits	
	NDS: Monitored PBXs	8	
	NDS: Registered Extensions for Monitor PBX	250	
<b>CTI</b>	PC Console	8	8
	PC Phone	64	128
<b>PASSWORD</b>	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	
<b>PROGRAMMER CODE</b>	Installer Level Programmer Code	4 - 16 characters	
	Administrator Level Programmer Code	4 - 16 characters	
	User Level Programmer Code	0 - 16 characters	



SPECIFICATIONS		KX-TDE100	KX-TDE200
Control Bus		Original bus (16-bit, 8 MHz, 10 megabytes per second)	
Communication Bus		H.100 bus conformity (1024 time slots)	
Switching		Non-blocking	
<b>POWER INPUT</b>	PSU-S	100 V AC to 130 V AC; 1.4 A/200 V AC to 240 V AC; 0.8 A (50 Hz/60 Hz)	
	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 is 28 Ah)	
Maximum Power Failure Tolerance		300 ms (without using backup batteries)	
Memory Backup Duration		7 years	
<b>DIALLING</b>	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	
<b>OPERATING ENVIRONMENT</b>	Temperature	0 °C to 40 °C	
	Humidity	10 % to 90 % (non-condensing)	
Conference Call Trunk		300 ms (without using backup batteries)	
Music on Hold (MOH)		2 ports (Level Control: -11dB to +11dB in 1dB steps). [MOH1] External Music Source port. [MOH2] Selectable. Internal/External Music Source port.	
<b>PAGING</b>	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)	
<b>RJ45 PORT</b>	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)	
<b>DIMENSION</b>	KX-TDE100	334 mm(W) x 390 mm (H) x 272 mm (D)	
	KX-TDE200	430 mm (W) x 415 mm (H) x 276 mm (D)	
Weight (when fully mounted)	KX-TDE100	Under 12 kg	
	KX-TDE200	Under 16 kg	

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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.