



## New Panasonic IP PBX. The Rules Have Changed!

### Key Benefits

- ▶ SIP Telephony supporting both Trunks and IP Extensions
- ▶ Leveraging Open Standard Communications
- ▶ Desktop, Network, & Application Integration
- ▶ Business Productivity with Mobility Solutions
- ▶ Easy Migration (Upgrade from TDA to TDE)
- ▶ Reduced Total Cost of Ownership (Installation & Network call costs reduced)
- ▶ Centralised Management & Upgrades

The Panasonic KX-TDE IP PBX series are advanced communications platforms for IP networking environments, supporting SIP connectivity for desktops and networks. The system support a range of advanced IP telephones, as well as the standard digital & analogue extensions, Digital and ISDN trunks. Couple this with a Business Application environment, and you have a system ready to take your business communication needs into the 21st Century, at your own pace.

# The KX-TDE IP Telecommunication Platform



Investment in a telecommunication system requires business communication foresight. Businesses need to be able to effectively communicate today - yet want to make sure that they are properly equipped to handle the growing demands of their future communication needs. Highly modular and empowered with the latest SIP technology; the new KX-TDE IP PBXs are an ideal communication platform for customers to solve all their business telephony needs today as well as in the future as they embrace full IP telephony.

*The TDE Systems - Designed for Today and for the Future*

Enhance your business with a solution designed to meet your ever changing needs - with wireless mobility, business productivity applications, network solutions and a common infrastructure that helps connect all your users, wherever they may be.

A straight forward and smooth migration path is the key for customers upgrading to converged solutions. Existing KX-TDA systems can be easily upgraded to the KX-TDE systems by simply replacing the main processor card (IPCMR) to take advantage of all the new features and benefit from true convergence.

With KX-TDE systems, customers can manage both a stand-alone, or networked systems connected via an IP network from any location, and benefit from lower costs, and increased business productivity.

Talk to your local Panasonic dealer for all your business communication needs.

## KX-TDE 100/200: Main Features

### For users

#### Enhance User Productivity

- Hot Desking (Desktop Mobility)
- Choice of IP Telephony Solutions
- Easy Linking with Network Applications
- Integration with Desktop, and Wireless Mobility



#### Extension Scalability

- Supports Analogue, Digital, IP Phone or SIP Phone Extensions

### For Business

#### Enhance Business Productivity

- Cost Effective SIP enabled IP Trunking
- Secure Remote/Branch Site Communications
- Built-in Call Centre & Messaging



### For System Administrators

#### Reduce operation, installation and network call costs

- Easy extension moves, adds or changes
- Multi-site programming
- Centralised Application Deployment
- Flexible desk layout



#### Easy IP & Network Maintenance

- SNMP client, SNMP agent Support
- Analogue, Digital and IP Peer - Peer Interoperability
- Operates on any standards based 10/100Mbit/s network.
- Easy system expansion

## Digital, Wireless or New IP Telephone Terminals



With the new KX-TDE IP PBXs - you can choose from any type of telephone terminals - digital, DECT wireless, or the new stylish IP telephones. And with support for all the digital, analogue, IP phones, and IP Softphones designed for the KX-TDA PBX systems - the KX-TDE gives you an extensive choice of telephone terminals to suit your specific business telephony needs.

### New IP Proprietary Telephones

KX-TDE IP PBXs support the newly released KX-NT300 Series IP telephones that are stylish, intuitive, user friendly, and comfortable to use by all system telephone users.

The KX-NT300 series IP telephones take you to a new dimension in audio experience, communications productivity, broadband network connectivity and customer care. These IP telephones bring you the power of the advanced KX-TDE IP PBX systems - allowing quick access to the entire spectrum of KX-TDE advanced features and applications.

The IP telephones offer superb voice quality thanks to handsfree speakerphone and acoustic echo cancellation. The sleek, ultra-modern design, available in both black and white works well with any work environment and office decor.



*KX-NT300 series IP Proprietary Telephones*

Packed with a whole host of features, the KX-NT300 Series IP telephones could not be any simpler to use. The phones have large alphanumeric displays, electronic self-labelling keys, Bluetooth module providing wireless headset support, easy navigation key, a 2nd IP port (on certain models) to reduce costs and desktop cable clutter, and double tilt adjustment allowing separate and independent tilt control for phone base and LCD display - all to provide you with enhanced desktop usability and comfort.

### SIP Telephones

With built-in support for the latest SIP technology, the KX-TDE IP PBX can support up to 128 SIP telephones as extensions. Companies can now use standard available SIP phones and connect them to the KX-TDE IP PBX as IP extensions to support in-house office users, Remote workers and even road warriors connecting back to the office over high-speed broadband IP network from virtually anywhere.

With SIP telephone as extensions - businesses can now support their dynamic workforce - and still keep a centralised view of call management even if they are geographically distributed.

### DECT Wireless Mobility



*KX-TCA series DECT wireless handsets*

The KX-TDE PBX supports wireless mobility solution via an integrated Multi-Cell DECT System. This system provides automatic hand-over between installed wireless cells - enhancing coverage and giving you true communication mobility even across large premises.

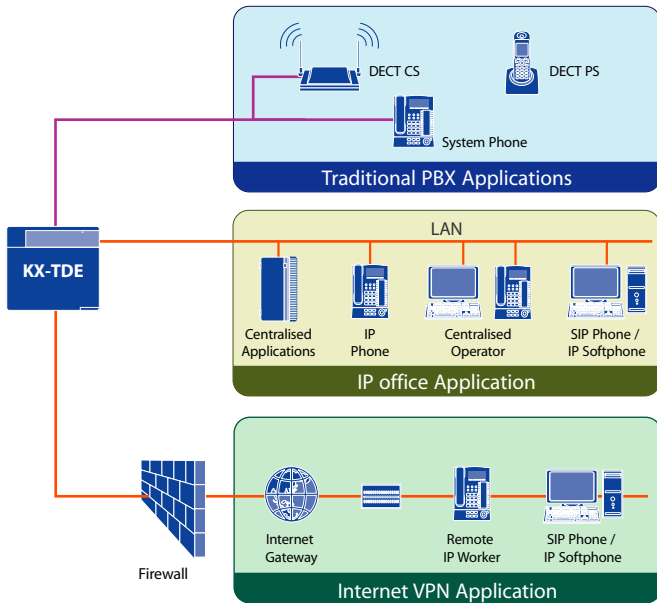
Enjoy superb mobility no matter where you work, whether it is in an office, factory, warehouse, supermarket, or other large facilities. The Panasonic Multi-Cell DECT System keeps you in constant touch with colleagues and key customers even when you roam within your work area.

### Digital Telephones

The KX-TDE IP PBX continues to support KX-T76xx series digital telephones.

Developed specifically to meet the needs of businesses of all sizes, the Panasonic digital telephones incorporate sleek design, improved ergonomics, flexibility and enterprise-class voice quality.

## System Connection Diagram



## System Capacity

		KX-TDE100	KX-TDE200	
Extension	System Total	256	256	
	Built-in	IP Proprietary Telephone (IP-PT)	64	64
		SIP (RFC 3261) IP Telephone (Basic) <sup>#1</sup>	128	128
		Total	128	128
	Additional	IP Proprietary Telephone (IP-PT)	96	128
		Single Line (a/b) Telephone (SLT)	96	128
		Digital Proprietary Telephone (DPT) - DXDP	128	256
		Analogue Proprietary Telephone (APT)	64	64
		Direct Station Select (DSS) Console	8	8
		Voice Processing System (VPS)	2	2
Total		128	256	
System Total	128	128		
Trunk	Optional	VoIP Channel Card - DSP16 <sup>#2</sup>	16ch	16ch
		VoIP Channel Card - DSP64 <sup>#2</sup>	32ch	32ch
		Total	32	32
	Additional	Analogue Trunk	96	128
		ISDN Trunk - BRI	96 (48BRI)	128 (64BRI)
		ISDN Trunk - PRI	120 (4PRI)	120 (4PRI)
		IP Trunk	64	64
		Total	120	128
		Portable Station (PS)	128	128
	Cell Station (CS)	32	32	
Extension Total <sup>#3</sup>	304	304		

#1 Only tested SIP telephones are guaranteed to work. Please contact your local Panasonic dealer for list of tested SIP telephones.  
 #2 One card per system. Connects to IPCMPR card  
 #3: SLT+PT+IP Ext. + ISDN-Ext. (D-CH) + T1-OPX

## Feature List

### Incoming Call Features

- Direct In Line (DIL)
- Direct Inward Dialling (DID)/Direct Dialling In (DDI)
- Multiple Subscriber Number (MSN) Ringing Service
- Calling Line Identification (CLI) Distribution
- Intercept Routing
- Intercept Routing-No Destination
- Internal Call Block
- Ring Tone Pattern Selection
- Call Waiting

### Receiving Group Features

- Idle Extension Hunting
- Group Call Distribution
- Queuing Feature
- VIP Call
- Overflow Feature
- Log-in/Log-out
- Supervisory Feature

### Call Forwarding (FWD)/Do Not Disturb (DND) Features

- Call Forwarding (FWD)
- Do Not Disturb (DND)

### Answering Features

- Line Preference - Incoming
- Call Pickup
- Hands-free Answerback

### Making Call Features

- Pre-dialling
- Automatic Extension Release
- Intercom Call
- Emergency Call
- Account Code Entry
- Dial Type Selection
- Reverse Circuit
- Trunk Busy Out
- Pause Insertion
- Host PBX Access Code (Access Code to the Telephone Company from a Host PBX)
- Special Carrier Access Code
- Line Preference - Outgoing
- Trunk Access

### Memory Dialling Features

- One-touch Dialling
- Last Number Redial
- Speed Dialling - Personal/System
- Quick Dialling
- Hot Line

### Busy Line/Busy Party Features

- Automatic Callback Busy (Camp-on)
- Executive Busy Override
- Call Monitor
- Second Call Notification to Busy Extension
- Call Waiting Tone
- Off-hook Call Announcement (OHCA)<sup>\*1</sup>
- Whisper OHCA

### Toll Restriction (TRS)/Call Barring (Barring) Features

- Toll Restriction (TRS)/Call Barring (Barring)
- Budget Management
- Extension Lock
- Dial Tone Transfer
- Walking COS
- Verified Code Entry

### Automatic Route Selection (ARS) Features

- Automatic Route Selection

### Conversation Features

- Hands-free Operation
- Off-hook Monitor
- Mute
- Headset Operation
- Data Line Security<sup>\*1</sup>
- Flash/Recall/Terminate
- External Feature Access (EFA)
- Trunk Call Limitation
- Paralleled Telephone
- Calling Party Control (CPC) Signal Detection

### Transferring Features

- Call Transfer

### Holding Features

- Call Hold
- Call Park
- Call Splitting
- Music on Hold

### Conference Features

- Conference<sup>\*2</sup>
- Privacy Release

### Paging Features

- Paging

### Broadcasting Features

- Broadcasting

### Optional Device Features

- Door phone Call
- Door Open
- Trunk Answer From Any Station (TAFAS)
- Background Music (BGM)
- Outgoing Message (OGM)
- Direct Inward System Access (DISA)
- External Sensor
- External Relay Control

### Caller ID Features

- Caller ID
- Incoming Call Log

### Message Features

- Message Waiting
- Absent Message

### ISDN Service Features

- Calling/Connected Line Identification Presentation (CLIP/COLP)
- Advice of Charge (AOC)
- Call Forwarding (CF) - by ISDN (P- MP)
- Call Forwarding (CF) - by ISDN (P-P)
- Call Hold (HOLD) - by ISDN
- Call Transfer (CT) - by ISDN
- Three-party Conference (3PTY) by ISDN
- Malicious Call Identification (MCID)
- Completion of Calls to Busy Subscriber (CCBS)
- ISDN Extension
- ISDN Service Access by Keypad Protocol

### E1 Line Service Features

- E1 Line Service

### Portable Station (PS) Features

- Portable Station (PS) Connection
- PS Ring Group
- PS Directory
- PS Feature Buttons
- Wireless XDP Parallel Mode

### Administrative Information Features

- Station Message Detail Recording (SMDR)
- Printing Message
- Call Charge Services

### Hospitality Features

- Room Status Control
- Call Billing for Guest Room
- Extension Personal Identification Number (PIN)
- Extension Feature Clear

- Walking Extension
- Timed Reminder
- Remote Extension Control by User
- Enhanced Walking Extension

### Audible Tone Features

- Dial Tone
- Confirmation Tone

### Networking Features

- TIE Line Service
- Virtual Private Network (VPN)
- QSIG Network
- Calling/Connected Line Identification Presentation (CLIP/COLP) and Calling/Connected Name Identification Presentation (CNIP/CONP) - by QSIG
- Call Forwarding (CF) - by QSIG
- Call Transfer (CT) - by QSIG
- Completion of Calls to Busy Subscriber (CCBS) - by QSIG
- Network Direct Station Selection (NDSS)
- Voice over Internet Protocol (VoIP) Network

### IP Proprietary Telephone (IP-PT) Features

- New IP Proprietary Telephone (IP-PT)
- Peer to Peer communication (NT300 series)

### SIP Extension Support

- Outgoing
- Incoming
- HOLD
- Transfer

### SIP Trunk Support

- SIP 2.0, RFC3261 (UDP)
- Outgoing
- Incoming
- CLIP (Caller ID), and DDI.

### LAN Configuration Function

- LAN Configuration Setting Function
- Ping

\*1: This feature is unavailable with the IP-PT.  
 \*2: A SIP extension cannot originate a conference call, but can be a member of a conference call.

IP-PT: IP Proprietary Telephone  
 DPT: Digital Proprietary Telephone  
 APT: Analogue Proprietary Telephone  
 SLT: Single Line Telephone