Table of Contents

Section 1

System Outline

This section provides general information on the system, including system capacity and specifications.

1.1 System Highlights

1.1.1 System Highlights

Automatic Route Selection (ARS)

Automatically selects the pre-programmed least expensive route for outgoing toll calls.

Caller ID

Allows the extension user to see the name or telephone number of a caller on the telephone display before answering the call.

Digital Proprietary Telephones (DPTs)

The system supports a wide variety of digital proprietary telephones ranging from a monitor set to a large display hands-free version.

EXtra Device Port (XDP)

Each extension port on the DHLC card supports the connection of a digital proprietary telephone and a single line device. The devices have different extension numbers and are treated as two completely different extensions.

Parallelled Telephone Connection

Each extension port on the DHLC8 card supports the parallel connection of a proprietary telephone and a single line device. They share the same extension number and are considered by the system to be one extension.

PC Console, PC Phone

The Panasonic PC Console is designed to provide access to all of the features available on a physical Panasonic KX-TD desktop telephone in a familiar, user-friendly Microsoft® Windows® based application.

The application's PC-based nature enables you to utilize the resources and graphical capabilities of your PC, providing a range of telephone features that improve and enhance your call handling efficiency.

Remote Maintenance

You can perform the remote maintenance and programming as well as the on-site maintenance by using a personal computer through the Integrated Services Digital Network (ISDN) or analogue telephone line through RMT card.

Super Hybrid System

This system supports the connection of digital and analogue proprietary telephones, DSS Consoles and single line devices such as single line telephones, facsimiles, and data terminals.

Uniform Call Distribution (UCD)

Allows incoming calls to be distributed uniformly to their specified group of extensions called UCD Group.

Voice over Internet Protocol (VoIP)

Allows delivery of voice information using the Internet Protocol.

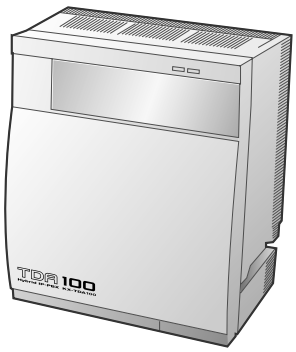
VPS Integration

The system supports Voice Processing Systems with in-band DTMF signalling as well as DPT integration.The Panasonic Voice Processing System provides automated attendant, voice mail, interview and custom services.

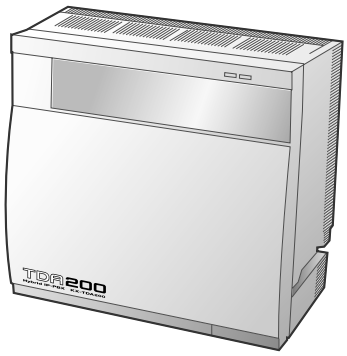
1.2 Basic System Construction

1.2.1 Basic Shelf

Basic Shelf contains its own power supply and 7 (12 for KX-TDA200) mounting spaces called "Slots." One slot is reserved for the MPR (Main Central Processing Unit Circuit) card, and a second slot is reserved for OPB3 (Option Base 3) card. The remaining 5 (10 for KX-TDA200) slots provide mounting space for various cards that can be used. Any optional service card can be mounted in any one of these free slots.



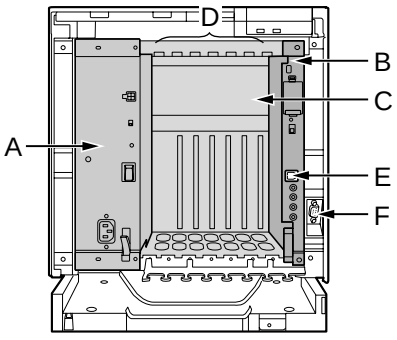
KX-TDA100



KX-TDA200

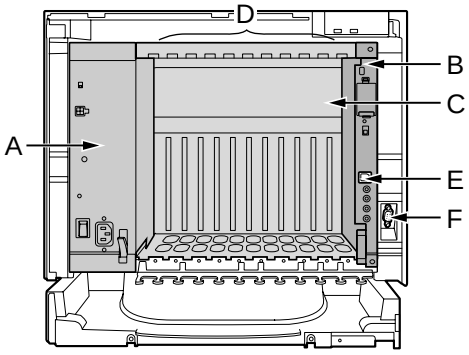
Construction of Basic Shelf

KX-TDA100

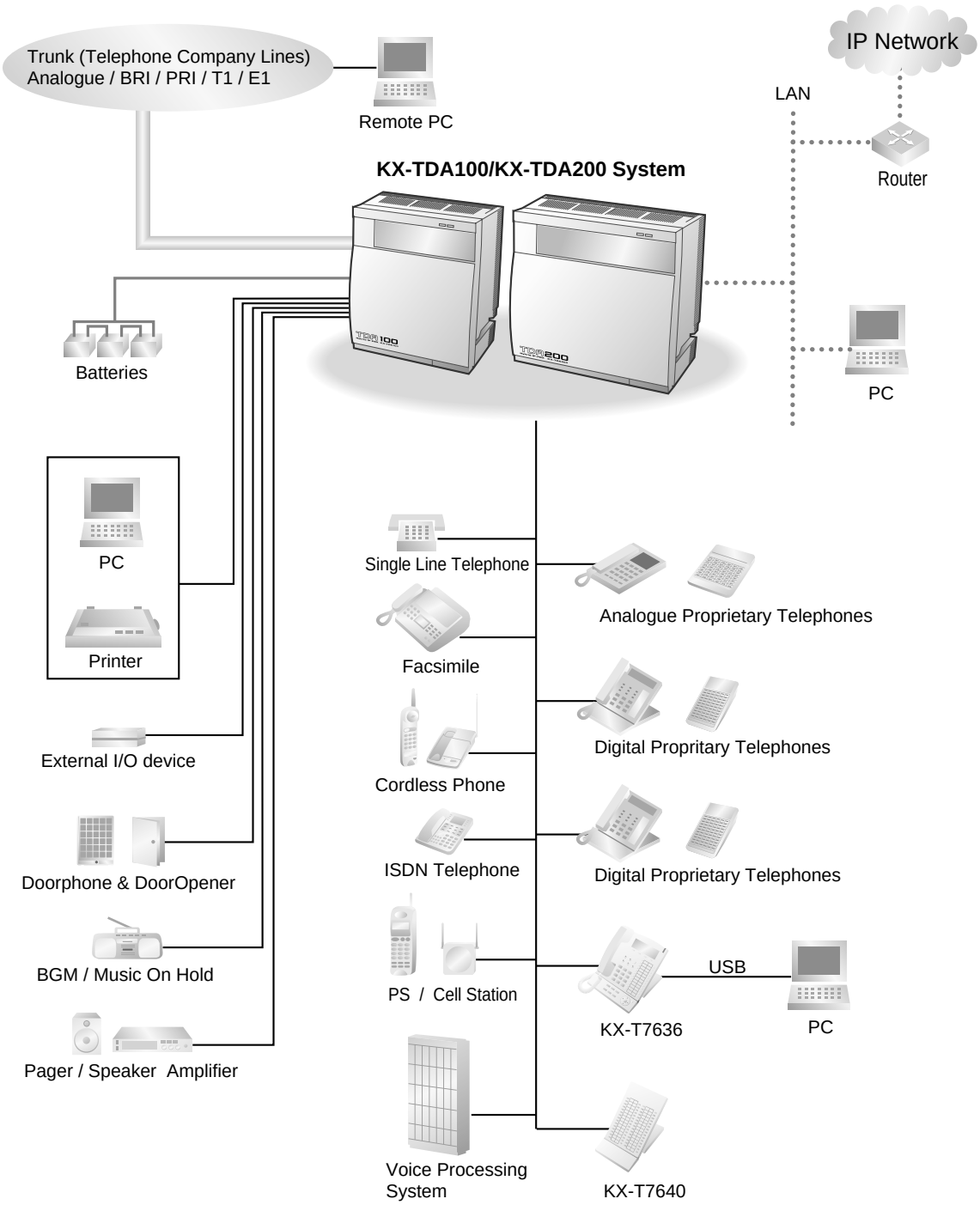


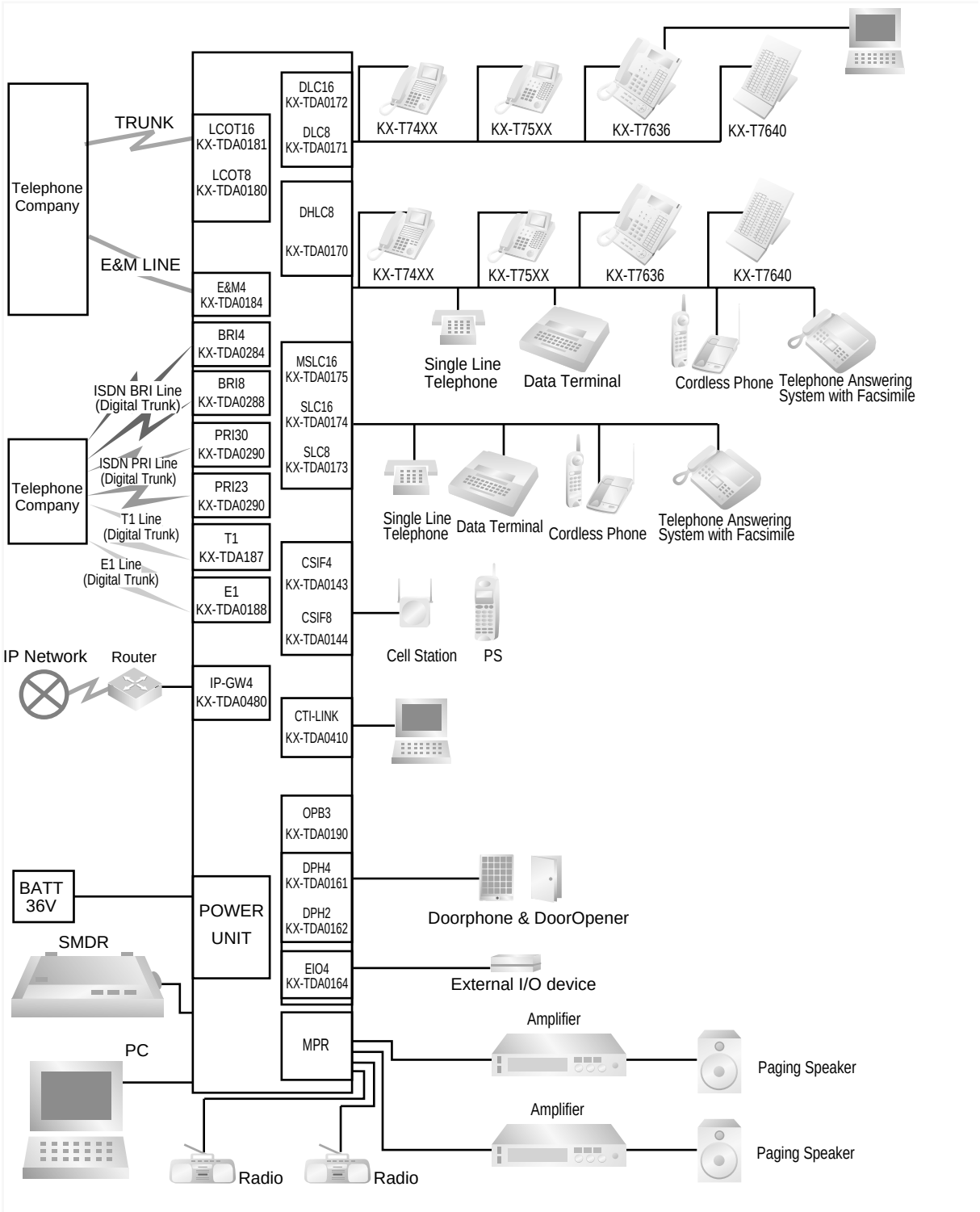
A: Power supply unit
B: MPR card slot
C: OPB3 card slot
D: Free slots
KX-TDA100: 5 slots
KX-TDA200: 10 slots
E: USB port
F: RS232C port

KX-TDA200



1.2.2 System Connection Diagram




Telephone Company
TRUNK
E&M LINE
ISDN BRI Line (Digital Trunk)
ISDN PRI Line (Digital Trunk)
T1 Line (Digital Trunk)
E1 Line (Digital Trunk)
Telephone Company
IP Network
Router
BATT 36V
SMDR
PC
POWER UNIT
LCOT16 KX-TDA0181
LCOT8 KX-TDA0180
E&M4 KX-TDA0184
BRI4 KX-TDA0284
BRI8 KX-TDA0288
PRI30 KX-TDA0290
PRI23 KX-TDA0290
T1 KX-TDA187
E1 KX-TDA0188
IP-GW4 KX-TDA0480
DLC16 KX-TDA0172
DLC8 KX-TDA0171
DHLC8 KX-TDA0170
MSLC16 KX-TDA0175
SLC16 KX-TDA0174
SLC8 KX-TDA0173
CSIF4 KX-TDA0143
CSIF8 KX-TDA0144
CTI-LINK KX-TDA0410
OPB3 KX-TDA0190
DPH4 KX-TDA0161
DPH2 KX-TDA0162
EIO4 KX-TDA0164
MPR
KX-T74XX
KX-T75XX
KX-T7636
KX-T7640
KX-T74XX
KX-T75XX
KX-T7636
KX-T7640
Single Line Telephone
Data Terminal
Cordless Phone
Telephone Answering System with Facsimile
Single Line Telephone
Data Terminal
Cordless Phone
Telephone Answering System with Facsimile
Cell Station
PS
Doorphone & DoorOpener
External I/O device
Amplifier
Paging Speaker
Amplifier
Paging Speaker
Radio
Radio

2.9 Connection of 2.4G FHSS

2.9.1 Overview

To connect the wireless system, the following equipment is required.

Cell Station Interface Card (KX-TDA0143)

One KX-TDA0143 supports up to four Cell Stations (KX-TDA0142).
Four KX-TDA0143 can be connected to the KX-TDA100 and up to eight KX-TDA0143 can be connected to the KX-TDA200.

Cell Station Interface Card (KX-TDA0144)

One KX-TDA0144 supports up to eight Cell Stations (KX-TDA0142).
Two KX-TDA0144 can be connected to the KX-TDA100 and up to four KX-TDA0144 can be connected to the KX-TDA200.

CS: Cell Station (KX-TDA0142)

This unit determines the range of the supporting PSs. Up to three calls can be made at the same time in one range.

PS: 2.4G Portable Station (KX-TD7690)

Up to 64 PSs in the KX-TDA100 system and up to 128 PSs in the KX-TDA200 system can be used as extensions. For more details about the PS, please refer to the User Manual.

2.9.2 RF Specification

Item	Description
Radio Access method	Multi Carrier TDMA-TDD
Frequency Band	2400—2483.5MHz
Number of Carriers	91
Carrier Spacing	864kHz
Bit Rate	576kbps
Carrier Multiplex	TDMA, 8(Tx4, Rx4) slots per frame
Frame Length	10ms
Modulation Scheme	GFSK
	Roll-off factor=0.5 50% roll-off in the transmitter.
Data Coding for Modulator	Differential Coding
Voice CODEC	32kbps ADPCM(CCITT G.721)
Transmission Output	Maximum 250mW