

## Introduction

- Read this quick start guide carefully before installing and/or using this product.
- Keep this quick start guide for future reference and store it in a safe place.

## Notice

- This quick start guide may be revised or withdrawn at any time without prior notice.
- This quick start guide may not, in whole or in part, be copied, photocopied, reproduced, translated or converted to any electronic or machine readable form without prior written consent of Opticon.
- Trademarks used are property of their respective owners.
- Under no circumstances shall Opticon be held responsible for any special, incidental, consequential or indirect damages howsoever caused.

**Caution and Warning** (Please refer to the specification manual and instruction guide for details.)**1. LED Safety**

- Do not stare into the LED light from the optical window. It may cause damage to your eyes.

**2. Use of the Product**

Radio frequency energy from wireless devices may affect some sensitive electronic medical equipment. In order to avoid interference with the operation of this equipment, wireless devices should be switched off when requested in hospitals, clinics, or health care facilities.

**3. Handling Instructions**  
[PX-35]

- Do not attempt to disassemble, modify or update this device.
- Operating the device while operating machinery or a vehicle can be distracting.
- Do not drop this product or put heavy items on this product.
- Avoid static electricity
- Do not use this device near combustible materials.
- Do not store this device in an extremely cold or hot environment.
- Scanning performance may decline due to excessive ambient light.
- Do not swing the device around by the strap.
- Do not insert a sharp object into this device.
- Keep the device out of the reach of small children.
- When cleaning this product, rub gently with either a soft dry cloth or a damp cloth with mild detergent.
- Do not use this product in the following areas:
  - In areas exposed to direct sunlight for long periods of time.
  - Near water or other liquids, or in extremely high humidity.
  - In dusty environments.
  - Near heat sources, such as radiators, heat registers, stoves, or other types of devices that produce heat.
  - Near microwaves, medical devices, or RF-emitting devices.
  - In areas where dew condenses.
  - In any other areas where serious damage is considered to occur.

**[Battery Pack]**

- Do not attempt to disassemble this battery.
- Do not expose the battery pack to liquids or allow the battery contacts to get wet.
- Do not expose the battery pack to heat sources including other devices that produce heat.
- Do not short the power leads on the battery pack. If the (+) and (-) terminals come in contact with metals (such as necklace or hairpin), a short circuit will occur.
- Do not load the battery pack with its (+) and (-) terminals reversed.
- Check the local regulations for proper battery disposal.

**4. Radio Equipment**

- Do not peel off the certification label.

**5. Bluetooth**

- Bluetooth® is a registered trademark owned by Bluetooth SIG, Inc., U.S.A. and is used by OPTICON under license.
- This product supports Bluetooth wireless communication with other Bluetooth devices that have the same profile.
- This product complies with Bluetooth version 2.0; however, its communication performance with equipment other than cradles or devices stated in this manual is not guaranteed.
- Bluetooth devices use the 2.4 GHz frequency band. Scientific, medical, and industrial devices, including radio stations, microwave ovens, wireless security (camera) systems and WLAN use the same frequency band as this product. Interference from other devices may affect the communication speed or communication range of this scanner or vice versa.

## Before Getting Started

### ■ What's in the Box

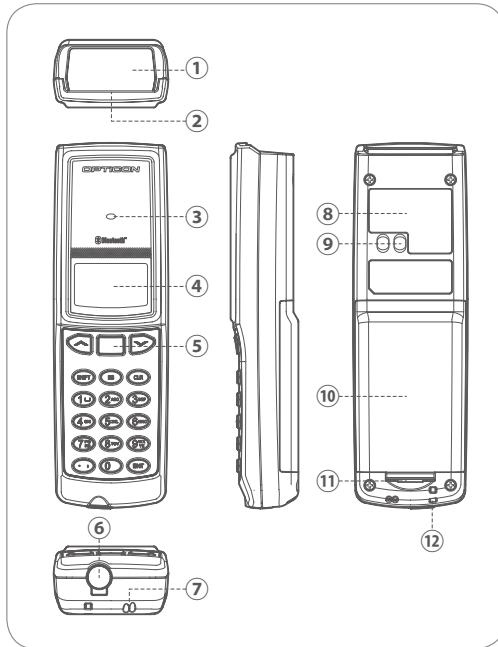
Confirm that you have the following items before getting started:

No.	Item	Product No.	Function
1	Scanner	PX-35	Data collector with Bluetooth
2	Lithium-ion rechargeable battery	BTR0400	Dedicated for PX-35
3	Hand strap	_____	
4	Quick Start Guide	PX-35019062-0-00	Provides product information and instruction guide

\* The number of accessories may differ depending on the product specification.  
Please contact the nearest dealer if accessories are damaged or missing.

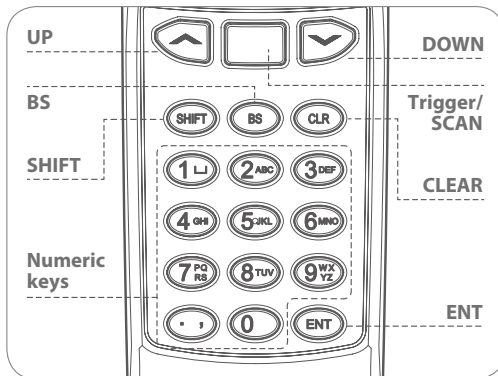
## Overview

### ■ Detailed View



No.	Part	Function
①	<b>Optical Window</b>	CMOS imager which reads 1D & 2D barcodes.
②	<b>IrDA Communication Window</b>	Port to communicate with the designated cradle.
③	<b>LED</b>	Indicates the status of scanning or communicating.
④	<b>LCD</b>	Indicates the operating function and scanned data.
⑤	<b>Trigger / Scan Key</b>	Starts the barcode scanning operation.
⑥	<b>DC jack with rubber cap</b>	To connect the dedicated AC adapter for charging.
⑦	<b>Buzzer Hole</b>	Buzzer sounds through the buzzer hole.
⑧	<b>Product Label</b>	
⑨	<b>Charging Terminals</b>	Connects the dedicated cradle for charging.
⑩	<b>Battery Cover</b>	Protects the battery pack.
⑪	<b>Battery Cover Lock</b>	Locks the battery cover.
⑫	<b>Strap hook</b>	To attaches the strap.

### ■ Key Layout



Key	Function
<b>Trigger / Scan</b>	Scans a barcode.
<b>UP</b>	Select a menu.
<b>DOWN</b>	(these keys can be programmed for the user's application.)
<b>ENT</b>	Determines the input.
<b>BS</b>	Deletes one letter before the cursor.
<b>CLR</b>	Cancels an input.
<b>0-9, .</b>	10 numeric keys to input numbers, alphabets or symbols.
<b>SHIFT</b>	Shifts from "number input mode" to "alphabet input mode" and vice versa.

\* The layout of keys may differ depending on the product specification.

## Overview

### ■ PX-35 Basic Specifications

Parameter		Specifications	Remarks
Physical Features	Size	(H)140 X (W) 44 X (D) 26 mm	
	Weight	Approx. 130g (incl. Lithium-ion Battery)	
Control Section	MPU	32 bit RISC microcomputer	For Data
	Internal Memory	ROM: 256KB + 16KB (for data)	
		RAM: 64KB	
External Memory	FLASH ROM	4MB	For OS /AP
	SRAM	2MB	For Work / Data
Display Section	LCD	Semi-transmissive Dot Matrix LCD	
	No. of Dots	112 x 64 dots	
	Backlight	White LEDs	
Operation Section	Keys	18 Keys: Numeric keys, Trigger key, BS key, Shift key, CLR key, ENT key, PW key, Up/Down keys	
Others Section	Status confirmation	Buzzer and Tri-color LED (Red/Green/Blue)	
Scanning Section	Light Source / Wavelength	Red laser diode / 630nm	
	Optical Scheme	SXGA CMOS area sensor (1280 x 1024 pixels)	
	Supported Symbolologies (2D)	PDF417, Micro PDF417, QR Code, Micro QR Code, Codablock F, Data Matrix(ECC 0-140,ECC200), Maxi Code(mode 2 to 5), Aztec Code, Composite Code, Intelligent Mail Barcode	
	Supported Symbolologies (1D)	EAN, JAN, UPC-A/UPC-E, Industrial 2 of 5, IATA, Interleaved 2 of 5, NW-7(CODABAR), CODE-39, CODE-93, CODE-128, MSI/Plessey, RSS Code	
Wireless Communication Section	Specifications	Bluetooth Ver.1.2	
	Supported Protocol	SPP, GAP	
	Output Level	Class 2 (4dBm or less)	
	Connection	1 PX-35 : 1 BT device (host)	
	Operation Mode	Master mode / Slave mode	
	Comm. Distance	10m	may be shorter depends on the environment
	Security	Authentication and encryption available	
IrDA	Specifications	Ver.1.2, Baud rate: 2400bps to 115.2kpbs*	* Theoretical value
Clock Section	Real Time Clock	YYYY/MM/DD hh:mm:ss Clock (leap year supported)	accurate within 90 seconds per month
Power Supply Section	Main Battery	Lithium-ion secondary battery (1800mAh)	BTR0400(sold separately)
	Backup Battery	Manganese silicon lithium rechargeable battery (3.4mAh)	For RAM/RTC backup
	Operating Time	Approx. 25 hours	When scanning once every 5 seconds at room temperature with a new and fully-charged main battery with always-on Bluetooth.
	Charging Method	Connects to AC adaptor or the dedicated cradle	
	Charging Temp.	0 to 40 deg.C	
	Charging Time	approx. 7.5 hours by cradle or AC adapter	
	Data Retention Time	72 hours or longer	after fully discharged
Durability	Operating Temp.	-10 to 40 deg.C	
	Operating Humidity	20 to 85 % (non-condensing)	
	Storage Temp.	-20 to 60 deg C	
	Storage Humidity	20 to 85 % (non-condensing)	
	Ambient Light Immunity	Fluorescent: up to 10,000lx Sunlight: up to 100,000lx	
	Dust-and Drip Proof	IP42	
	Shock Endurance	Dropped 3 times from each of 6 angles onto concrete from a height of 150cm with no defects found. (Total 18 times)	
	Static Electricity	15kV (no destruction)	

## Battery Pack

### ■ How to Insert or Exchange a Battery

#### STEP 1

Firstly open the battery cover.

#### STEP 2

Confirm the direction (indicated on the surface of the battery pack) and insert the dedicated lithium ion battery pack in the battery bay.



#### STEP 3

Put the battery cover back and confirm if the cover is firmly locked.

## ■ System Menu Screen

The system menu screen starts when turning the power on. If you do not have user applications, then "figure 1" appears on the screen. Use the Up or Down keys to move, then Trigger or ENT key to choose the menu. To move back to the top screen, push the CLR key.

## □ figure 1

SYSTEM MENU	SYSTEM MENU
>Restart	>Settings
Power off	Diagnostics
Download appl.	List files
Upload appl.	Show version

## ■ Function List

\* The System Menu may be revised or withdrawn at any time without prior notice.

System menu	Function
Cancel	Returns to the application to resume user activities.
Restart	Closes the main menu to restart the application. When no application loaded, the system menu will start.
Download appl.	Application can be downloaded and started after the successful installation.
Set contrast	Adjust display, brightness and contrast.
Show version	Displays the version of OS, ROM, Bluetooth and MDI (scan engine).
List files	Displays the contents of the RAMdisk and has option to format RAMdisk.
Terminal id	Sets and confirms the terminal id.
Diagnostics	Tests (and sets conditions where applicable) in a fixed sequence: 1. Display, 2. Memory, 3. Time & Date, 4. Keypad, 5. Scanner
Input address	Sets Bluetooth address
Input PINcode	Sets Bluetooth PINcode
BLT Local name	Sets Bluetooth local name
BLT com port	Sets Bluetooth com port
MDI download	Updates scan engine software

## AC/DC Adapter (Optional)

To recharge the battery, AC/DC adapter (SFP0602000P-PSE) can be directly connected to the PX-35.

Size		(H) 75.0 × (W) 47.5 × (D) 28.0 mm max
Input	Power Voltage	AC 90V to 265V
	Supply Current	0.5A max
Output	Power Voltage	5.7V to 6.3V
	Maximum Current	2.0A max
Charging Time		Approx. 7.5 hours

## Designated Cradles (Optional)

Communication & Charging Cradle

**CRD-9723**

RS-232C USB

Communication Method (Cradle to Host)	Communicates with the host via RS-232C or USB interface.
Size	(H) 67.5 × (W) 71.5 × (D) 98.5 mm Max
Weight	85g Max (excluding AC adapter and cable)
Charging Time	Approx. 7.5 hours

### ■ Line-up of CRD-9723 series:

- single-bay cradle (1 x charging, 1 x communication)
- multi-bay cradle (5 x charging, 1 x communication)
- multi-bay cradle (5 x charging, 5 x communication)

### ■ Charging Cradle CRD-9722:

- single-bay cradle (1 x charging, no communication)

\* To connect the cradle to a host using a dedicated USB cable, you must first install a dedicated USB driver on the host.

\* Please refer to the specification manual or the instruction guide for details of designated cradles.

## Contact

Please contact OPTICON or your local dealer.

<b>The Netherlands</b>	Opticon Sensors Europe B.V. tel: +31 (0)23-5692700 / email: sales@opticon.com	<b>Sweden</b>	Opticon Sensors Nordic AB tel: +46 (0)8-58548560 / email: henrik@opticon-sensors.se
<b>U.S.A.</b>	Opticon Inc. tel: 800-636-0090 / email: opticon@opticonUSA.com	<b>United Kingdom</b>	Opticon Limited tel: +44 (0)1582-635100 / email: sales@opticon.co.uk
<b>France</b>	Opticon S.A.S. tel: +33 (0)1-41461260 / email: opticon@opticon.fr	<b>Taiwan</b>	Opticon Far Eastern Ltd. tel: +886 2-27597444 / email: taiwan@opticon.com
<b>Germany</b>	Opticon Sensoren GmbH tel: +49 (0)6074-91890-0 / email: sales.de@opticon.com	<b>China</b>	Opticon Sensors Europe B.V., Shanghai Representative Office tel: +86 21-64480881 / email: china@opticon.com
<b>Italy</b>	Opticon s.r.l. tel: +39 (0)051-6321800 / email: opticon@opticonitalia.it	<b>Australia</b>	Opticon Sensors Pty. Ltd. tel: +61 (0)2-43402666 / email: sales@opticon.com.au
<b>Spain</b>	Opticon Sensores S.L. tel: +34 (0)902-747469 / email: info@opticon.es	<b>Brazil</b>	Opticon Sensors Europe B.V., Latin American Office tel: +55 11-5081 2088 / email: sales.la@opticon.com