# **OPH-1005**

# OPTICON

## **Quick Start Guide**

- Read this quick start guide carefully before installing and/or using this product.
- Keep this quick start guide for future reference and store 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- This quick start guide may be revised or withdrawn at any time without prior notice.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 con-
- verted to any electronic or machine readable form without prior written consent of Opticon Trademarks used are property of their respective owners.
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		(Please refer to the specification manual and instruction guide for details.)
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Laser Safety
 Do not stare into the laser beam.

#### 2. Handling Instructions

- [OPH-1005]
- Do not attempt to disassemble, modify or update this device.
- Operating the scanner while operating machinery or a vehicle can be distracting.
- Do not drop this product or put heavy items on this product.
  Do not insert foreign substances into the device.
- Do not use this product in the following areas:
   In areas exposed to direct sunlight for long periods of time.
- In dusty environments.
- Near water or other liquids, or in extremely high humidity.
   Near heat sources, such as radiators, heat registers, stoves, or other types of devices that produce heat. Near microwaves or medical device.
- When cleaning this product, rub gently with either a soft dry cloth or a damp cloth with mild detergent.

#### [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 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 a 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.

### **Before Getting Started**

#### ■ What's in the Box

Confirm that you have the following items before getting started:

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No.	Item	Function
1	Portable Terminal	A laser portable terminal with a barcode scanning feature.
2	Strap	
3	Quick Start Guide	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

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#### ■ Detailed View ■ OPH-1005 Basic Specifications

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	ameter	Specifications
Physical Features	Size	(H) 136.1 x (W) 55.4 x (D) 22.8 mm
eatures	Weight	Approx. 140g (including Li-ion battery)
Control Section	CPU	32bit MCU
Section	os	Proprietary
Memory	FROM	4MB
	RAM	4MB
Display	Material	LCD (262144 color)
Section	Number of dots	320 dots x 240 dots
	Dot size	0.24mm x 0.24mm
	Dot pitch	0.18mm
	Backlight	White LEDs
	Contrast Control	Enabled
Other Display	LED	Bi-color LED (Red and Green)
Section	Buzzer	Tone and loudness can be configured
Operation Section	Keys	23 keys
Scanning	Light Source	Red laser diode
Section	Wavelength	650 ± 10nm
	Light Output	1mW or less
	Scan Rate	100 ± 20scan/sec
	Supported Symbologies	JAN, EAN, UPC-A, UPC-E, NW- "(Codaba"), Industrial 2 of 5, Interleaved 2 of 5, Code 11, Code 39, Code 93, Code 128, MSI/Plessey, UK/Plessey, IATA, Telepen, Matrix 2 of 5, 5-Code, Ti-Optic, Chinese Post, EAN 128, RSS-14, RSS Limited, RSS Expanded, PDF417, MicroPDF417
Power	Main Battery	Lithium-ion battery (3.7V 1100mAh)
Supply Section	Backup Battery	Manganese dioxide lithium-ion battery (11mAh)
	Operating Time	Approx. 40 hours (1 scan/10 sec)
	Data Retention Time	24 hours
Comm. Section	IrDA	IrDA Ver. 1.2 Baud rate: (SiR): 9600 to 115.2kbps
Clock Section	Real Time Clock (RTC)	Supports year, month, day, hour, minute, second (leap year supported)
Durability	Operating Temp.	-10 deg. C to 50 deg. C
	Operating Humidity	20% to 85% (non-condensing)
	Storage Temp.	-20 deg. C to 60 deg. C
	Storage Humidity	20% to 85% (non-condensing)
	Charging Temp.	0 deg. C to 40 deg. C
	Ambient Light Immunity	Fluorescent: up to 4,000lx Sunlight: up to 80,000lx
	Dust- and Drip-proof	IP 54
	Shock Endurance	Dropped 3 times from each of 6 angles onto concrete from a height of 150cm with no defects found. (Total 18 times)

ı	- Detailed view	
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No.	Part	Function
1	LCD	Indicates the status of program execution, scanned data and so on.
2	Status LED (Red and Green)	Alerts users the status of scanning operation and data communication.
3	Optical Window	The scan engine emits a laser beam through the optical window while scanning a barcode.
4	SCAN Key	Starts a barcode scanning operation.
(5)	POWER Key	Turns ON or OFF the power.
6	IrDA Communication Window	This portable terminal communicates with the designated cradle through the IrDA communication window.
7	Buzzer Hole	Buzzer sounds through the buzzer hole.
8	<b>Battery Cover</b>	Protects the battery pack.
9	Charging Terminals	Electrical terminals for power distribution and power management.
10	Strap Hook	

- To avoid communication problems between the portable terminal and a cradle, keep the IrDA communication window clean
- The IrDA communication performance may decline due to excessive ambient light especially under strong sunlight or inverted fluorescent light.

## ■ Key Layout



Key	Function	
SCAN	Scans a barcode.	
Q1	Navigate through the menu or toggle between options.	
Q2	(These keys can be programmed suitable for user's application.)	
SHIFT	Shifts from "number input mode" to alphabet input mode and vice versa.	
BS	CLR Cancels an input.  Turns the power ON and OFF.  10 pumeric keys to input numbers alphabets or	
CLR		
POWER		
0-9, .		
ENT Determines the input.		
F1-F4	4 function keys which can be programmed by a user.	

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

### **Using the Portable Terminal**

### ■ How to Insert or Exchange a Battery



STEP 2 Make sure that the battery contacts are in contact with the spring contacts of the



\* When the cover is not closed correctly the portable terminal will not be turned ON.

#### ■ How to Scan a Barcode

Please refer to the following examples of a scanning operation. Make sure that the barcode is within the width of the laser aiming pattern.

- [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 a 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.

### **Before Getting Started**

#### ■ What's in the Box

Confirm that you have the following items before getting started:

No.	Item	Function
1	Portable Terminal	A laser portable terminal with a barcode scanning feature.
2	Lithium-ion Battery Pack	Designated battery pack for the OPH-1004.
3	Strap	
4	Quick Start Guide	Provides product information and instruction guide.

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

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		RSS-14, RSS Limited, RSS Expanded, PDF417, MicroPDF417
Power	Main Battery	Lithium-ion battery (3.7V 1100mAh)
Supply Section	Backup Battery	Manganese dioxide lithium-ion battery (18mAh)
	Operating Time	Approx. 80 hours (2 scans/10 sec)
	Data Retention Time	More than 7 days
Comm. Section	IrDA	IrDA Ver. 1.2 Baud rate: (SiR): 9600 to 115.2kbps
Clock Section	Real Time Clock (RTC)	Supports year, month, day, hour, minute, second (leap year supported)
Durability	Operating Temp.	-10 deg. C to 50 deg. C
	Operating Humidity	20% to 85% (non-condensing)
	Storage Temp.	-20 deg. C to 60 deg. C
	Storage Humidity	20% to 90% (non-condensing)
	Charging Temp.	0 deg. C to 40 deg. C
	Ambient Light Immunity	Fluorescent: up to 4,000lx Sunlight: up to 80,000lx
	Dust- and Drip-proof	IP54
	Shock Endurance	Dropped 3 times from each of 6 angles onto concrete from a height of 150cm with no defects found. (Total 18 times)

		scanning a barcode.
4	SCAN Key	Starts a barcode scanning operation.
(5)	POWER Key	Turns ON or OFF the power.
6	IrDA Communication Window	This portable terminal communicates with the designated cradle through the IrDA communication window.
7	Buzzer Hole	Buzzer sounds through the buzzer hole.
(8)	Battery Cover	Protects the battery pack.
9	Charging Terminals	Electrical terminals for power distribution and power management.
10	Strap Hook	



**Using the Portable Terminal** 

- To avoid communication problems between the portable terminal and a cradle, keep the IrDA communication window clean
- The IrDA communication performance may decline due to excessive ambient light especially under strong sunlight or inverted fluorescent light.

### ■ Key Layout



Function	
Scans a barcode.	
Navigate through the menu or toggle between options.	
(These keys can be programmed suitable for user's application.)	
Shifts from "number input mode" to alphabet input mode and vice versa.	
Deletes one letter before the cursor.	
Cancels an input.	
Turns the power ON and OFF.	
10 numeric keys to input numbers, alphabets or symbols.	
Determines the input.	
4 function keys which can be programmed by a user.	

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

### Designated Cradles (Optional)\*

We offer a series of communication and charging cradles with different communication methods. Please select the most suitable cradle for the desired operation.

Communication & Charging Cradle
CRD-1001

(Cradle to Host)	Communicates with the host via RS-232C or USB interface.
Size	(H)70.0 × (W)68.0 × (D)96.0 mm Max
Weight	110g Max (excluding AC adapter and cable)
Charging Time	2 hours and 10 minutes

Communication & Charging Cradle CRD-1002

RS-232C USB

Communication Method (Cradle to Host)	Communicates via telephone line and connects to the Public Switched Telephone Network (PSTN)
Size	(H)70.0 × (W)68.0 × (D)96.0 mm Max
Weight	100g Max (excluding AC adapter and cable)
Charging Time	2 hours and 10 minutes

Communication & Charging Cradle **CRD-1003** 

MODEM

GSM

Communication Method (Cradle to Host)	Communicates with the host via GSM (Global System for Mobile Communications) Network.
Size	(H)70.0 × (W)68.0 × (D)96.0 mm Max
Weight	115g Max (excluding AC adapter and cable)
Charging Time	3 hours

Communication & Charging Cradle **CRD-1004** 

Charging Cradle	(Cradle to Host)	Communicates with the host via Ethernet or USB.
CRD-1004	Size	(H)70.0 × (W)68.0 × (D)96.0 mm Max
	Weight	115g Max (excluding AC adapter and cable)
ETHERNET USB	Charging Time	3 hours

\* Please refer to the specification manual or the instruction guide for details of designated cradles. \* A designated SIM card will be needed to use the CRD-1003 GSM cradle.

How to Inser	or Exchange	a Battery
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\* When the cover is not closed correctly the portable terminal will not be turned ON.

#### ■ How to Scan a Barcode

STEP 1

Please refer to the following examples of a scanning operation. Make sure that the barcode is within the width of the laser aiming pattern.



### **Trouble Shooting**

The portable terminal does not get powered ON.

- A. The battery level of the portable terminal may be extremely low or empty. Please try again after you charge the portable terminal.
   B. Check if the battery cover is closed tight.

The portable terminal does not read a specific type of barcode.

- A. That specific type of barcode may not be supported by the portable terminal. Please confirm the specification manual of the portable terminal for details of supported symbologies.
   B. The specific type of barcode may not be enabled in the application. Change the settings in your application.

The portable terminal does not read a barcode smoothly.

A. The scanning performance of the portable terminal may decline due to inappropriate scan angle. Please adjust the angle of the portable terminal and try again. Make sure that the barcode is within the width of the laser aiming pattern.

Please contact OPTICON or your local dealer.

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More product details, additional support, and configuration options (from the Universal Menu Book) are available at www.opticon.com