

Introduction

- 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- This quick start guide may be revised or withdrawn at any time without prior notice.
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- Trademarks used are property of their respective owners.
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Caution and Warning

(Please refer to the specification manual and instruction guide for details.)

1. Laser Safety

Do not stare into the laser beam. This product meets the following regulatory requirements:

- JIS C6802:2005: Laser class 2
- IEC IEC60825-1+A2:2001 Class 2
- FDA CDRH Laser class II. Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to laser notice No. 50 dated June 24, 2007.

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

[OPR-3101]

- 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, as well as in extremely high humidity.
 - Near heat sources, such as radiators, heat registers, stoves, or other types of devices that produce heat.
 - Near microwaves, medical devices, or low-power radio stations.
- 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 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.

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

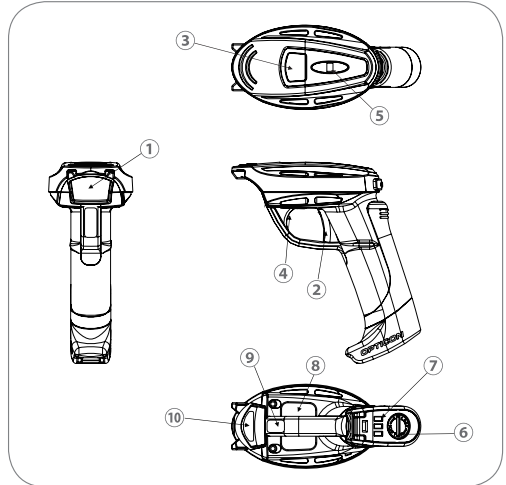
No.	Item	Product No.	Function
1	Scanner	OPR-3101	Wireless barcode scanner.
2	Lithium-ion Battery Pack	1UR18500F-OEL	Designated battery pack for OPR-3101.
3	Quick Start Guide	5J0082	Provides product information and instruction guide.

Overview

■ Basic Specifications

Parameter	Specifications
Physical Features	Size (W) 68×(D) 155×(H) 165 mm Max
	Weight 250g Max (excluding battery)
Durability	Operating Temp. and Humidity — 10 to 60 °C 5 to 95 % (non-condensing)
	Storage Temp. and Humidity — 20 to 60 °C 5 to 95 % (non-condensing)
	Ambient Light Immunity Fluorescent: up to 4,000 lx Sunlight: up to 80,000 lx
	Dust and Drip Proof IP54
	Shock Dropped 18 times onto concrete from a height of 2m with no defects found.
	Static Electricity 15kV (no destruction)
Wireless Section	Specifications Bluetooth Ver. 2.0
	Supported Protocol SPP
	Output Level Class 2 (4dBm or less)
	Communication 1 OPR-3101 : 1 BT device (cradle)
	Operation Mode OPR-3101: Master mode BT device (cradle): Slave mode
	Comm. Distance 10 m (depends on the environment)
	Security Authentication and encryption available.
Optical Section	Light Source Red laser diode
	Wavelength 650 ±10 nm
	Light Output ≤ 1.0 mW
	Scan Method Bi-directional scanning
	Scan Rate 100 ±20 scan / sec
	Supported Symbolologies EAN, JAN, UPC, Industrial 2of5, IATA, Interleaved 2of5, NW-7(Codabar), Code 39, Code 93, Code 128, MSI/Plessey, ISBN (13-digit JAN + 5-digit add on), RSS-14Family, MicroPDF417 etc...
Power Supply Section	Main Power Supply Lithium-ion secondary battery
	Battery Capacity 1620mA / hr
	Charging Temp. 0 to 40 °C
	Operating Time 25 hours (scan once every 5 sec.)

■ Detailed View



No.	Part	Function
①	Optical Window	The scanner emits a laser beam through the optical window while scanning a barcode.
②	Trigger Switch	To scan and decode a bar code, you need to press the trigger switch.
③	Status LED	The Status LED is used to alert users to the status of the scanning operation, wireless connectivity, data storage, remaining battery level and recharging time.
④	Buzzer Hole	Buzzer sounds through the buzzer hole.
⑤	Strap Hook	
⑥	Battery Cover	Designated battery pack is contained under the battery cover.
⑦	Charging Terminals	Charging terminals are used to supply power to the scanner from the cradle.
⑧	Model Name Label	
⑨	Laser Caution Label	
⑩	Serial No. Label	

Designated Cradles (Optional)*

Charging Cradle CHG-3101

Size	(H) 115 × (W) 100 × (D) 185 mm Max
Weight	250g Max
Color	Light Gray
Charging Time	5 hours (using an AC Adapter)

Communications & Charging Cradle CRD-3101

Size	(H) 115 × (W) 100 × (D) 185 mm Max
Weight	250g Max
Color	Light Gray
Charging Time	5 hours (using an AC Adapter) 10 hours (using USB bus power)

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

Connect to the Host via Option Communication Cradle



OPTION 1: Connect via RS-232C Interface

- 1 Connect the AC adapter and the RS-232C interface cable to the cradle.
- 2 Confirm that the cradle status LEDs light up correctly.
- 3 Connect the cable to the host and open the COM port in the host application.
- 4 Scan **Menu Barcode Set A** from the top to the bottom to connect to cradle (RS-232C). (You can skip this procedure if it is set to RS-232C in default.)
- 5 Carry out one of the following to connect to the cradle.
 1. Scan 12-digit address label attached to the cradle, or
 2. Scan **Menu Barcode Set B** to connect. (If the "Press Trigger Switch Time to Connect" is enabled, hold down the trigger switch for the set time.)
- 6 The Status LED flashes BLUE when making a connection.
- 7 The Status LED turns solid BLUE and the good read buzzer sounds when a successful connection is made. (The Status LED flashes RED and the buzzer sounds when the connection is not successful.)
- 8 Confirm if barcodes can be read correctly.
- 9 The Status LED turns solid RED when the COM port is closed while this product is still connected to the host.
- 10 Scan **Menu Barcode Set C** to disconnect. (If the "Press Trigger Switch Time to Disconnect" is enabled, hold down the trigger switch for the set time.)
- 11 When this product is disconnected, the Status LED turns solid RED and the buzzer sounds.

OPTION 2: Connect via USB Interface

- 1 Connect the USB interface cable to the cradle.
- 2 Confirm that the status LEDs light up correctly.
- 3 Scan **Menu Barcode Set D** from the top to the bottom to connect to cradle (USB-HID). (You can skip this procedure if it is set to USB in default.)
- 4 Carry out Procedure ⑤ to ⑧ and ⑩ to ⑪ of "OPTION 1".

Connect to the Host via 3rd party Bluetooth Device



OPTION 3: Connect without Authentication

- 1 Scan **Menu Barcode Set E** from the top to the bottom to connect to PC.
- 2 Scan the numbers and characters of the Bluetooth device address from **Menu Barcode Set F**.
- 3 Scan **Menu Barcode Set B** to connect. (If the "Press Trigger Switch Time to Connect" is enabled, hold down the trigger switch for the set time.)
- 4 The Status LED flashes BLUE when making a connection.
- 5 The Status LED turns solid BLUE and the good read buzzer sounds when a successful connection is made. (The Status LED flashes RED and the buzzer sounds when the connection is not successful.)
- 6 Confirm if barcodes can be read correctly.
- 7 Scan **Menu Barcode Set C** to disconnect. (If the "Press Trigger Switch Time to Disconnect" is enabled, hold down the trigger switch for the set time.)
- 8 When this product is disconnected, the Status LED turns solid RED and the buzzer sounds.

OPTION 4: Connect with Authentication

- 1 Carry out Procedure ① and ② of "OPTION 3".
- 2 Scan **Menu Barcode Set G** from the top to the bottom to configure the Bluetooth security to "Authentication if not paired". *Please refer to the Universal Menu Book or the instruction guide for other Bluetooth security configurations.
- 3 Scan numbers of the PIN code from the **Menu Barcode Set H**.
- 4 Scan **Menu Barcode Set I** from the top to the bottom to configure the Bluetooth security to "Enable encryption".
- 5 Scan **Menu Barcode Set B** to connect. (If the "Press Trigger Switch Time to Connect" is enabled, hold down the trigger switch for the set time.)
- 6 The Status LED flashes BLUE when making a connection.
- 7 Input the same PIN code to the Bluetooth device.
- 8 Carry out Procedure ⑤ to ⑧ of "OPTION 3".

Trouble Shooting

- *If you cannot connect this product to the PC, please confirm the following:
- Did you input the correct bluetooth address?
 - Did you set the cradle DIP switch correctly?

Trouble Shooting

- *If you cannot connect this product to the PC, please confirm the following:
- Did you input the correct bluetooth address?
 - Did you confirm the Bluetooth Security options?

Menu Barcodes for the Configuration

Menu Barcode Set A

SET		ZZ
Bluetooth address	Connect to cradle (RS-232C)	CNCR
END		ZZ

Menu Barcode Set B

Manually connect		+CONN+
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Menu Barcode Set C

Manually disconnect		+DISC+
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Menu Barcode Set D

SET		ZZ
Bluetooth address	Connect to cradle (USB-HID)	CNC2
END		ZZ

Menu Barcode Set E

SET		ZZ
Bluetooth address	Connect to PC	CNPC
END		ZZ

■ Menu Barcode Set F

SET		ZZ
Set bluetooth address label		BDAS
0		
		9
1		
		A
2		
		B
3		
		C
4		
		D
5		
		E
6		
		F
7		Note: If you make mistake in reading the menu barcodes, you must restart the procedure again from Set bluetooth address label.
8		
End bluetooth address label		BDAE
END		ZZ

■ Menu Barcode Set G

SET		ZZ
Bluetooth security	*Authentication if not paired	AUTO
END		ZZ

■ Menu Barcode Set H

SET		ZZ
Set pin-code label		PINS
PIN code		0
		1
		2
		3
		4
		5
		6
		7
		8
		9
End pin-code label		PINE
END		ZZ

■ Menu Barcode Set I

SET		ZZ
Bluetooth security	Enable encryption	ENCE
END		ZZ

- * Please refer to the instruction guide on how to change the battery pack.
- * Please refer to the Universal Menu Book for details about the other configuration.

Contact

Please contact OPTICON or your local dealer.

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