OPC-3301i Handheld 1D CCD Scanner

Quick Start Guide

Introduction

- The OPC-3301i is a compact wireless handheld CCD scanner that users Bluetooth for real-time data transfer.
- Read this quick start guide carefully before installing or using this product.
- Keep this quick start guide for future reference and store it in a safe place.

Precautions

Charging

- Dust or dirt on the charging terminal may prevent charging. Opticon recommends cleaning the charging terminal once or twice a month with a blower, dry soft cloth, or cotton swab.
- In general, the battery needs to be charged about once a day. When fully charged, the battery life is approximately 2 days when scanning 5000 scans per day. If necessary, use the optional STD-4101 holder.

Excessive Shock or Stress

- Do not drop this product.
- Do not push or place this product under or between heavy objects.
- Do not apply shock or excessive force to connectors.

Cable Handling and Charging Cradle

- Do not wrap the cable around a host device, such as a PC or tablet. This action may damage the cable sheath and the core wire which may cause the product to malfunction, overheat, create smoke, or catch fire.
- Do not place the cable or AC adapter under or between heavy items.
- Do not bend the cable at extremely low temperatures.
- Do not swing the cable around, as that might cause injury or damage to the device.
- If the cable sheath breaks or becomes damaged, the core wire may be exposed or break. The wire may also become exposed if there is damage at the base of the cable. If any of these conditions occur or if the cable generates heat, unplug the cable and contact the dealer. Using the product with exposed or broken wires may cause the product to malfunction, overheat, create smoke, or catch fire.
- If the charging cradle is faulty, unplug the AC adapter and contact the dealer. Failure to unplug the AC adapter may cause the charging cradle to malfunction, overheat, create smoke, or catch fire.
- Do not use this product at a voltage outside the specified range. The product may overheat, create smoke, or catch fire.
- Do not get the AC adapter wet. The AC adapter may cause a short circuit.

Bluetooth

- This product supports Bluetooth wireless communication with other Bluetooth devices that have the same profile.
- This product complies with Bluetooth standards; however, its communication performance with untested devices is not guaranteed.
- Bluetooth devices use the 2.4 GHz frequency band that is shared among other devices. It may affect the communication speed and distance between this product and the host device.
- The communication speed and distance may vary depending on the interference and radio wave condition between this product and the host device.

Frequency Band

This product uses the 2.4 GHz frequency band. Make sure you understand the following information before using this product.

Note: Scientific, medical, industrial devices, and microwaves use the 2.4 GHz frequency band. Radio stations, including local private stations that use mobile object identification requiring licensing, power-saving radio station that do not require licensing, and amateur radio stations also use the 2.4 GHz frequency band.

For best performance, follow these guidelines:

1. Before using this product, make sure that other radio stations are not using the 2.4 GHz frequency band.
2. If radio interference occurs, change the service space or stop the radio stations that are using the 2.4 GHz frequency band.
3. If you have any questions or issues, please contact our sales office.

Operating Environment

- Do not use this product at temperatures outside the specified range.
- Do not use this product near combustible materials (including gas, powder, etc.). It may cause smoke and fire.
- Do not immerse this product in water or any other liquid.
- If condensation forms on the product, do not use the product. The product may malfunction. Wait until the moisture has evaporated.
- Do not store this product in either dusty environments or in extremely high humidity.
- Do not store this product in either extremely cold or hot places. Also avoid exposure to direct sunlight for long periods of time.
- Avoid static electricity and do not put the product near a radio or a TV. Excessive static electricity may cause malfunctions.
- Do not place in an unstable place.

Battery

- To keep battery performance from decreasing during storage, the OPC-3301i is not shipped fully charged. Before you start using the product, fully charge the battery.
- The batteries used in OPC-3301i may expand as performance degrades.
- Even if the product is not in use, battery performance may deteriorate two years from the battery manufacture date.
- If the product operating time is decreasing, contact your dealer to replace the battery.
- Battery performance decreases more rapidly in extremely hot and cold environments. Opticon recommends using the product at room temperature.
- Opticon recommends charging the product at 10 - 30°C. In an environment where the internal product temperature is 5°C or less or 40°C or more, charging may stop to prevent battery failure.
- Over discharge may cause battery failure. Avoid long-term storage in a low battery state.
- Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to local regulations.

General Cautions

- Do not disassemble this product.
- Do not stare into the LED light from the scan window. The LED may damage your eyes.
- Do not expose this product to oil and chemicals.
- This product may be affected by momentary voltage fluctuations caused by lightning.
- Do not let children use this product.
- Fully charge the battery before use.

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- Other product and company names mentioned herein may be trademarks or registered trademarks of their respective owners.

"Made for iPod,""Made for iPhone,"and "Made for iPad"mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone, or iPadmay affect wireless performance.

Made for iPod iPhone iPad

Europe - EU Declaration of Conformity

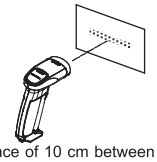
Hereby, Opticon Sensors Europe B.V. declares that the radio equipment type OPC-3301i is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address;
https://opticon.com/product/opc-3301i/

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Basic Scanning Operation

- Ensure that the scanner's position is not too close to a label when reading a 1D barcode. The scanner cannot read the barcodes properly when they are very close.
- Make sure that the green aiming line is projected over the target barcode.

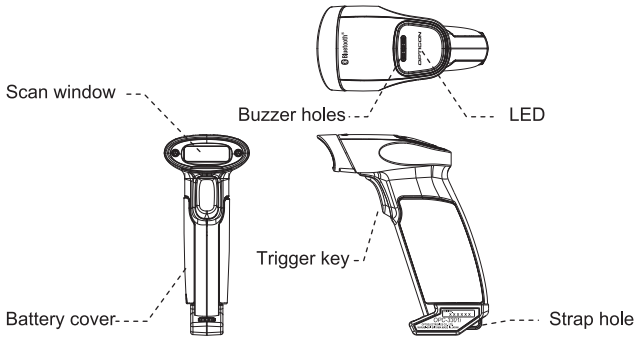


Keep a distance of 10 cm between the scanner and the label as a guide, and adjust it accordingly depending on the barcode size.



Position the center of the aiming line over the barcode.

Detailed View



Connection Procedure

■ Operation Summary

Bluetooth disconnected

Press trigger key

Immediate	Scan 1D barcode
Hold for 3 secs (Blue LED blinking)	Reconnect Bluetooth
Re-press within 1 sec after holding for 3 secs (Blue LED blinking)	Connect (Pairing)

Bluetooth connected

Press trigger key

Immediate	Scan 1D barcode
Hold for 5 secs	Disconnect Bluetooth
Double click	Show/Hide iOS keyboard

■ How to Connect

• Bluetooth-SPP

This connection mode is a serial connection mode. The OPNTerm or Microsoft HyperTerminal can be used to receive scanned data on host devices.

1. Scan "SPP mode (A)" menu codes.
2. Press the trigger key for 3 seconds and the scanner will make a short buzzer sound. Re-press the trigger key within 1 second after the buzzer sounded to start a connection (pairing) with the host device. Blue LED blinks to indicate it is now waiting for the connection from the host device.
3. Search for Bluetooth device from the host device and select "OPC-3301i".
4. When PIN is required, input "1234" to the host device.
5. When the connection is made successfully, the scanner makes a buzzer sound and the green LED lights up briefly.

* The connection may be completed after opening the serial port on the host device.

• Bluetooth-HID

These connection modes work as if a Bluetooth keyboard were attached to the host device. This means that all data scanned is transmitted to the host device as if typed.

1. Scan the “HID mode (B)” menu codes.
2. Press the trigger key for 3 seconds. The scanner makes a short buzzer sound.
3. Press the trigger key again within 1 second after the buzzer sounds to connect (pair) with the host device. The blue LED blinks to indicate that it is waiting for a connection from the host device.
4. On the host device, find and select “OPC-3301i”.
   If the host device displays the PIN code, scan the PIN Code Input menu codes with the scanner. To end the input, scan “PINE”.
5. When the connection is made successfully, the scanner makes a buzzer sound and the green LED lights up briefly.

• Bluetooth-MFi

This connection mode is a serial connection mode similar to BT-SPP through Apple’s proprietary interface for iOS devices. The OPNTerm can be used to receive scanned data.

1. Scan the “MFi mode (C)” menu codes.
2. Press the trigger key for 3 seconds. The scanner makes a short buzzer sound.
3. Press the trigger key again within 1 second after the buzzer sounds to connect (pair) with the host device. The blue LED blinks to indicate that it is waiting for a connection from the host device.
4. On the host device, find and select “OPC-3301i.” When the connection is successfully made, the scanner makes a buzzer sound and the green LED briefly turns on.
   If OPNTerm is used as an iOS application, press “Connect” to start communicating with the OPC-3301i.

■ How to Disconnect

1. Press and hold the trigger for 5 seconds.
2. When the connection closes, the red LED turns on and the buzzer sounds 3 times.

■ How to Reconnect

The scanner has a function to reconnect to the last connected host device.
Use either one of the following two methods to reconnect:

- Press the trigger key for 3 seconds.
- Read a 1D code.

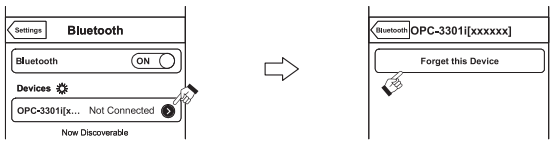
■ How to Switch to Silent Mode

To use the scanner in a quiet environment, you can switch it to silent mode. To switch the scanner to silent mode, scan the “Silent Mode” menu barcode.

■ Other Features

- When no operation has been performed for 3 minutes, the Bluetooth connection closes automatically.
- Wait time for the Bluetooth connection (pairing) is up to 3 minutes.
- A flashing orange LED indicates a low battery level. Recharge the battery with the enclosed charger immediately.
- When the scanner tries to connect (pair) to a host device that was previously connected, the connection may fail since the old connection information remains in the host device. Delete the scanner information from the host before making a connection (pairing).

E.g.



Demo Application

The following demo applications are offered for the operation check in SPP mode and MFi mode, which are available for download from the App Store or Google Play.

■ OPNTerm

This is a dedicated terminal application which can show scanned data in real time and configure the scanner.

For iOS
https://apps.apple.com/app/opnterm/id556827245

For Android
https://play.google.com/store/apps/details?id=jp.co.opto.opn.opnterm2

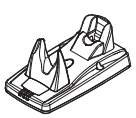
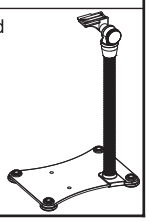
■ OPNIME

This is an input method editor (IME) for the host device that does not have the Bluetooth HID profile. This IME enables the scanner to work as a virtual keyboard and to input data into existing applications, such as a Web browser form.

For Android
https://play.google.com/store/apps/details?id=jp.co.opto.opn.opnime2

* The URLs are subject to change without notice.

Basic Specifications

Dimensions	Approx. 113 x 56 x 132 mm (DWH)	
Weight	Approx. 127 g (Excluding accessories)	
Bluetooth	SPP / HID, 2402 MHz - 2480 MHz, 4 dBm max. (25 ˚C)	
Power Supply	Lithium-ion battery 1,100 mAh	
Environmental Specs	Operation temperature : 0 to 50 ˚C Storage temperature : -20 to 60 ˚C (non-condensing)	
Others	Compliant with RoHS	
Enclosed	• Hand Strap • Quick Start Guide (this paper)	
Option	Holder : STD-4101 	Charging Cradle : CHG-3201 
	Charging and Communication Cradle : CRD-3301B 	Auto Trigger Stand : STD-0171 Attach CHG-3201 to use. 

Menu Codes for Configuration

To configure your scanner for your application, scan the menu barcodes from the top [ZZ] through the bottom [ZZ]. After the scanner is configured, the configuration is saved on the scanner so that you can use the scanner without having to read the menu barcodes again.

Connection Mode



SPP mode (A)



MFi mode (C)



HID mode (B)

Silent Mode



Enable buzzer



Disable buzzer

Default



This resets the scanner’s configuration back to the factory default settings.

PIN Code Input



Contact

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