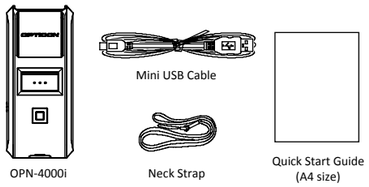
Compact 1D Barcode Scanner OPN-4000i
Quick Start Guide

What's in the Box



Introduction

- The OPN-4000i is a compact barcode scanner that reads 1D barcodes and can transmit scanned data via Bluetooth.
- 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.

Precautions

⚠ Warning

- Do not throw this device into a fire. It may cause the device rupture, injury and fire.
- Keep the device out of the reach of small children. It may cause an accident and injury.

⚠ Caution

1. Handling

- Do not disassemble the device. It may cause heat, fire and injury.
- Do not operate the device while walking or driving a vehicle. It may cause accidents.
- Do not swing the device around by the strap.
  It may cause injury, an accident and damage to the device.
- Do not put heavy items on this product and apply any shock to the device.
  The device may get broken resulting in injury.
- Do not store this device in an extremely cold or hot environment.
  It may cause fire, deformation and malfunction of the device.
- Do not put this device close to fire. It may cause fire and an accident.
- Do not use this device near combustible materials.
  It may result in rupture and ignition of the device.
- Do not use this product near water or other liquids. It may cause the device to malfunction.
- Do not insert a sharp object into the buzzer hole.
  Waterproof sheet may be damaged resulting in a loss of waterproof performance.
- Do not store this device in dusty environments and in extremely high humidity.
- Avoid static electricity and do not put this device near a radio or a TV.
  Excessive static electricity may cause malfunctions.
- If perchance condensation formed on the device, abstain from the use of the device until moisture has evaporated to prevent malfunctions.
- When cleaning this product, rub gently with either a soft dry cloth or a damp cloth with mild detergent.

2. Radio Law

This product qualifies as specified radio equipment for radio stations of 2.4 GHz band data communication system and has obtained the Certification for Construction Design of Specified Radio Equipment. Therefore, radio station license is not required in Japan.
The following activities are prohibited under the Radio Law:

- Remodeling and disassembly
- Peeling off the certificate label

The information on the Bluetooth module is described as follows:

・Classification of Specified Radio Equipment	: Article 2 Paragraph 1, Item 19 Low power data communication system in 2.4 GHz band
・Model Name	: OPA-26X1
・Certificate Number	: 201-125603

3. Bluetooth

- BluetoothR 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 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 the Bluetooth devices.
- The communication speed and distance vary depending on the interference and radio wave condition between this product and the host device.

4. Trademark Notice

- iPhone, iPad, iPod and iTunes Store are registered trademarks of Apple Inc.
- Android and Google Play are trademarks or registered trademarks of Google Inc.
- 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 iPad may affect wireless performance.

Made for iPod iPhone iPad

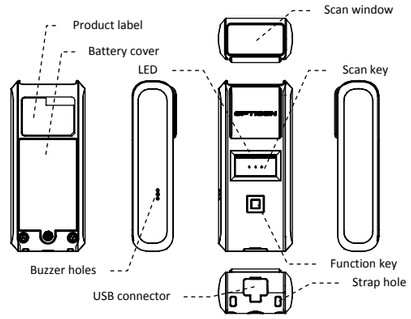
5. Basic Scanning Operation

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

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

Position the center of aiming line over the code.

Detailed View



Connection Procedure
(Refer to the User's Guide for details)

■ Operation Summary

Bluetooth disconnected

Press scan key	Immediate	Scan barcode
	Hold for 3 secs	Reconnect Bluetooth
	Hold for 10 secs	Switch Silent mode
Press function key	Hold for 3 secs	Connect (Pairing)

Bluetooth connected

Press scan key	Immediate	Scan barcode
	Hold for 5 secs	Disconnect Bluetooth
Press function key	Immediate	Send CR or Return (Refer to "Others")

■ 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" menu barcodes.
2. Press the function key for 3 seconds to start a connection (pairing) with the host device. The scanner makes a short buzzer sound and the 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 "OPN-4000i".
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 / Bluetooth-HID (for iPhone/iPad/iPod touch)

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" menu barcodes.
   When iOS device is used in HID mode, scan the "HID (for iPhone/iPad/iPod touch) mode" menu barcodes.
2. Press the function key for 3 seconds to start a connection (pairing) with the host device. The scanner makes a short buzzer sound and the 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 "OPN-4000i".
4. When PIN code is displayed on the host device, input it by scanning the "PIN code input" menu barcodes and scan "PINE" to end the input.
5. When the connection is made successfully, the scanner makes a buzzer sound and the green LED lights up briefly.

• Bluetooth-iPhone (excluding HID) * OPN-4000i only

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 "iPhone mode" menu barcodes.
2. Press the function key for 3 seconds to start a connection (pairing) with the host device. The scanner makes a short buzzer sound and the 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 "OPN-4000i".
4. When the connection is made successfully, the scanner makes a buzzer sound and the green LED lights up briefly.
   When OPNTerm is used as an iOS application, press [Connect] button to start communication with the OPN-4000i.

• USB-HID / USB-COM

When USB communication is enabled with the menu barcodes, scanned data can be transmitted through the USB-HID/COM interface in the same way as handheld scanners.

■ How to Disconnect

1. Press the scan key for 5 seconds.
2. When the connection is closed, red LED lights up and 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 scan key for 3 seconds.
- Read a barcode.

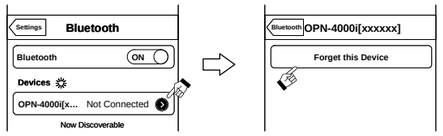
■ How to Switch to Silent Mode

This product has Silent mode for use in quiet environments.
Press the scan key for 10 seconds to switch the buzzer enabling and disabling when the Bluetooth is not connected.

■ Others

- 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.
- While the scanner is connected and the function key is pressed;
  "CR" is sent to the host device in SPP mode, "Enter" is sent to the host device in HID mode and the software keyboard is displayed on the host device's screen in HID (for iPhone/iPad/iPod) mode.
- A flashing orange LED indicates a low battery level. Recharge the battery with the enclosed USB cable 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.



- Charging with the USB cable can be done independently of the "USB Communication Setting".
- While the USB Communication is enabled and the USB cable is connected, it is not possible to make a Bluetooth connection.

Demo Application

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

■ OPNTerm

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

For iPhone, iPad, iPod touch (can be used with OPN-4000i)
https://itunes.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	36 x 83 x 21.5 mm (WDH)
Weight	Approx. 53 g
Bluetooth	SPP / HID / iPhone
Power Supply	Lithium-ion polymer battery 600 mAh
Exterior Plastics	Molded ABS plastics, Rubber USB cover
Environmental Specs	Operation temperature : 0 to 50 ºC Storage temperature : -20 to 60 ºC (non-condensing)
Others	Compliant with RoHS

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Menu Labels for Configuration

Scan menu barcode labels from the top [ZZ] through the bottom [ZZ] to configure your scanner for your particular application. Once the configuration is done, it will be saved on the scanner and you can use the scanner without reading the menu labels again from the next time.

Connection Mode

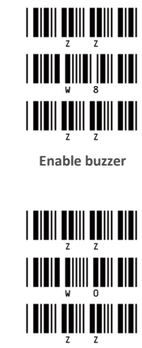
SPP mode

iPhone mode
(only available for OPN-4000i)

HID mode

HID mode
(for iPhone / iPad / iPod touch)

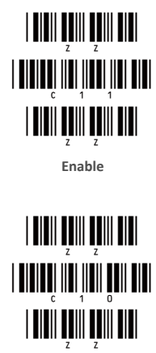
Silent Mode



Enable buzzer

Disable buzzer

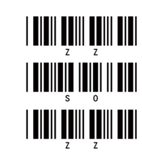
USB Communication



Enable

Disable

Default



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

PIN Code Input