

Bluetooth Pocket Scanner

Quick Start Guide

FUZZYSCAN
CORDLESS SCANNER

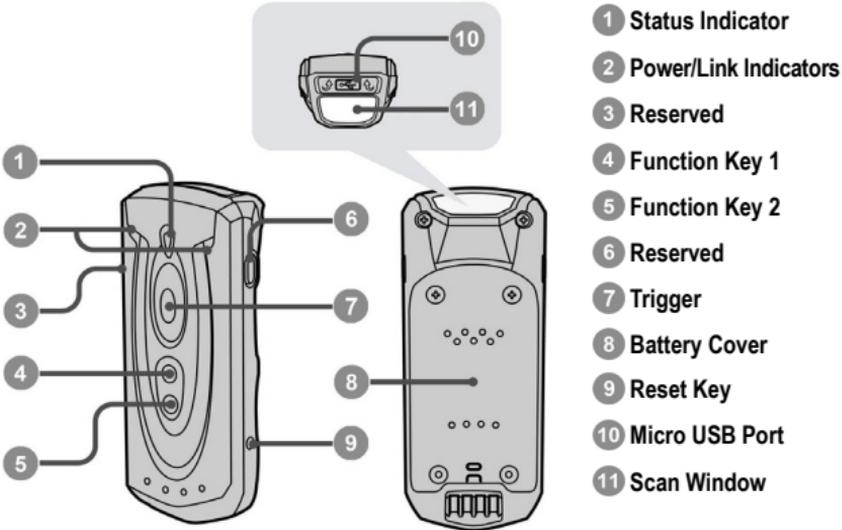
cino

Getting Familiar with Your FuzzyScan

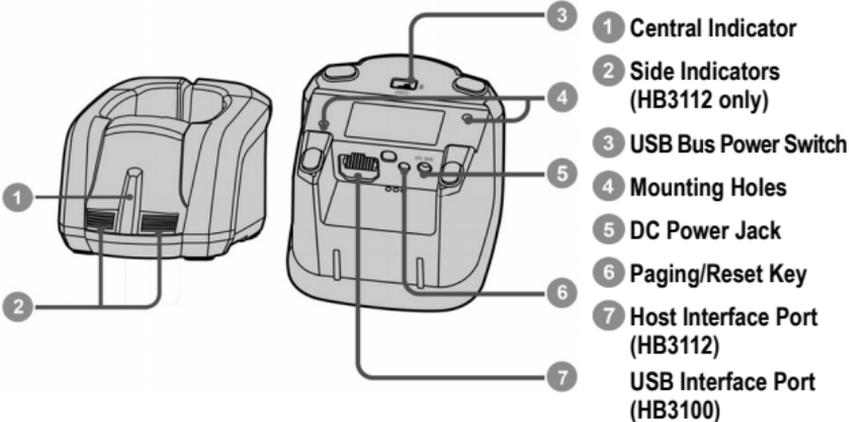
Thank you for choosing Cino FuzzyScan Bluetooth Pocket Image Scanner. Powered by the combination of cutting-edge FuzzyScan Imaging Technology and Bluetooth wireless technology, it not only provides outstanding reading performance, but also delivers the convenience and freedom of mobility. It's ideal for a broad range of applications to unleash your productivity with ease.

This document provides a quick reference for installation and operation. The complete documentation is available at www.cino.com.tw.

Px680BT Scanner

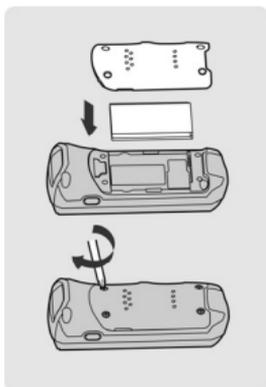


HB3112 Smart Cradle & HB3100 Charging Cradle



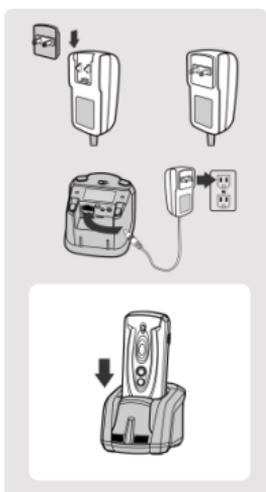
Preparations before Using

Install the Battery



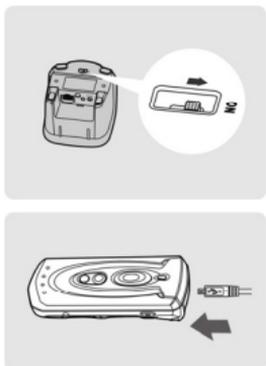
- 1 Take off the battery cover from the scanner by removing two blue tapes.
- 2 Ensure the battery contacts of the battery pack are facing the charging contacts inside the battery cavity. Then click the battery pack into the battery cavity carefully.
- 3 Place the battery cover in the right orientation onto the back of the scanner. Screw in and tighten the four shipped M2 screws in sequence by a small screw-driver in the clockwise direction.

Charge the Battery via Power Supply Unit



- 1 Choose the right plug and slot it into the power supply unit cavity until a “click” is heard. Then plug the power supply unit into the wall outlet.
- 2 Please make sure the USB bus power switch is in “OFF” position.
- 3 Plug the DC connector of the power supply unit into the DC Jack of the cradle. The cradle emits four beeps. For the Smart cradle, the central indicator **blinks blue once** and side indicators **lights red**. For the charging cradle, the central indicator lights **blue**.
- 4 Place the scanner onto the cradle. When the battery is fully charged, the status indicator of scanner will light **green**.

Charge the Battery via USB 3.0 Port



The scanner can also be charged via the USB 3.0 port without the power supply unit. You can connect the cradle to USB 3.0 port of host device by a USB cable, then slide the USB bus power switch to “ON”. After that, place the scanner onto the cradle.

The scanner can also be charged via its micro USB port by connecting the micro USB cable to USB 3.0 port of host device or the commercial USB power supply unit connected to the wall socket.

Decide Your Radio Link Mode

The FuzzyScan Bluetooth image scanner provides several radio link modes to communicate with most host devices. When the Bluetooth-enabled host device is not available, it can work with the smart cradle in PAIR mode (peer-to-peer connection) or PICO mode (multiple connections) to provide a **plug-and-play** cordless migration of your existing non-Bluetooth-enabled devices. Moreover, you are also able to use the scanner to work with Bluetooth-enabled host devices via SPP mode or HID mode.

When the radio link is disconnected, the scanner is capable of reconnecting the radio link automatically when it returns to the communication coverage. But please note that this feature is not available in SPP slave mode. If you would like to change the radio link mode, please scan the “**Uninstall**” command to reset the scanner to uninstall state.

PAIR Mode

If the Bluetooth device is not available in your existing system, PAIR mode is the simplest plug-and-play solution. In this mode, a smart cradle can only work with one scanner. The smart cradle not only provides the Bluetooth radio link with the scanner, but also offers the legacy cabled interfaces to the host device, including USB HID, USB COM, PS/2(DOS/V) Keyboard Wedge and RS232 Serial.

PICO Mode

For the requirement of multiple connections, up to 7 scanners can be connected to one smart cradle concurrently. If you would like to un-pair all scanners paired with the smart cradle, please press and hold the paging/reset key of the smart cradle for more than 5 seconds. If you just want to un-pair part of the paired scanners, please take those paired scanners to scan the “Uninstall” command one by one.

HID Mode

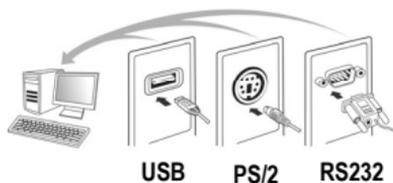
Through the most useful HID service, the scanner can work as a **Bluetooth Keyboard**. In this mode, the scanner will be discoverable by the radio connection request issued by the remote host device (desktop, laptop, Android or iOS device). For some cases, you may be requested to enter the Passkey (PIN) to establish the Bluetooth connection for security purpose.

SPP Master/Slave Mode

Through the standard SPP service, the scanner can work as a **Bluetooth Serial Device**. In SPP master mode, the scanner initiates the radio connection request to the remote slave device. In SPP slave mode, the scanner will be discoverable by the radio connection request issued by the remote host device.

Use FuzzyScan in PAIR Mode

- 1 Ensure the battery is fully charged. Please refer to the section of **Preparation before Using** for details.
- 2 Please choose your desired interface cable, then plug it into the host interface port of the smart cradle and connect it to the host device.



- 3 Turn on the power of your host device.
- 4 Power on or wake up the scanner by pressing the **Trigger** key if the scanner is power-off or in sleep state.
- 5 The scanner is pre-paired with the shipped smart cradle, so you will see the link indicators of scanner **blink blue per 2.5 seconds**, and the central indicator of the smart cradle **light blue**. If the scanner and smart cradle are not paired, the status indicator of scanner and the side indicators of smart cradle **blink red and green alternatively** (in “Uninstall” state). Please follow step 6 to establish the connection.
- 6 Scan “PAIR mode” command. The status indicator of scanner will turn steady red immediately.



Place the scanner onto the smart cradle, then you will hear one short beep to indicate the pairing process is activated. The scanner will emit continuous short clicks and the link indicators of scanner will flash blue quickly during the pairing process. When you hear 4 beeps in ascending tone, the pairing process is completed. You will see that the link indicators of scanner **blink blue per 2.5 seconds** and the central indicator of the smart cradle **lights blue**.

If the scanner pairing process failed or it's not placed onto the smart cradle within 20 seconds, you will hear 2 “Di-do Di-do” beeps to warn the failure of pairing, the scanner will return to uninstall state automatically.

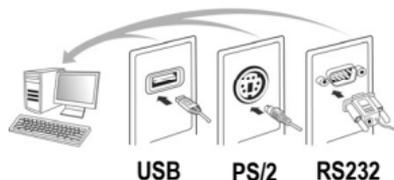
- 7 Scan the corresponding host interface quick set command to complete the installation.



The default host interface of smart cradle is preset to **USB HID**. If you want to set the host interface to **USB COM**, you have to install the USB virtual COM driver into your host device before using the scanner. Please visit CINO website to download the driver.

Use FuzzyScan in PICO Mode

- 1 Please choose your desired interface cable, then plug it into the host interface port of the smart cradle and connect it to the host device.



- 2 Turn on the power of your host device.
- 3 Ensure the side indicators of the Smart cradle **blink red and green alternatively** (in “Uninstall” state). If the Smart cradle is paired with other scanners, please press and hold the paging/reset key of the smart cradle for **more than 5 seconds** to un-pair all paired scanners. Then the smart cradle will return to uninstall state automatically.
- 4 Prepare the scanners you desire to pair with the smart cradle. Power on or wake up the scanner by pressing the **Trigger** key if the scanner is power-off or in sleep state. Ensure the status indicator of each scanner **blinks red and green alternatively** (in “Uninstall” state). If the scanner is not in uninstall state, please scan the “Uninstall” command to un-pair the scanner, then scan the “**PICO mode**” command, the status indicator of scanner will turn to light red.



Uninstall



PICO Mode

Place the scanner onto the smart cradle, then you will hear one short beep to indicate the pairing process is activated. The scanner will emit continuous short clicks and the link indicators of scanner will flash blue quickly during the pairing process. When you hear 4 beeps in ascending tone, the pairing process is completed. You will see that the link indicators of scanner **blink blue once per 2.5 seconds**, the central indicator of the smart cradle **lights blue** and its side indicators **light green**.

If the scanner pairing process failed or it's not placed onto the smart cradle within 20 seconds, you will hear 2 “Di-do Di-do” beeps to warn the failure of pairing, the scanner will return to uninstall state automatically.

- 5 Please scan the corresponding host interface quick set command to complete the installation. Then repeat the same procedures to pair other scanners with the smart cradle.



For user's convenience, the smart cradle will automatically assign the ID numbers to each scanner. Please scan the **System Information** command to check the assigned ID number of each scanner.

Use FuzzyScan in HID Mode

- 1 Power on or wake up the scanner by pressing the **Trigger** key within radio coverage if the scanner is power-off or in sleep state, and ensure the status indicator of scanner **blinks red and green alternatively** (in “**Uninstall**” state). If the scanner is not in uninstall state, please scan the “Uninstall” command first.



Uninstall

If your remote host is equipped with latest Bluetooth drivers, or it's an iOS or Android device, you are recommended to use “**HID Mode**” for quick pairing. If necessary, you may use “**HID Mode with Passkey**” to establish a more secure connection. If you frequently experienced the problem in using HID mode, please try “**HID Legacy Mode**” instead.



HID Legacy Mode



HID Mode



HID Mode with Passkey

Once you scan one of above commands, the link indicators of scanner will **blink blue 3 times per 2 seconds** during searching process. You have to execute the Bluetooth Discovery procedure to find available Bluetooth device, then select “PF(L/A)xxxBT-xxxx”.

- 2 If you use “**HID Mode**”, please go to step 5.
- 3 If you use “**HID Mode with Passkey**”, you will be requested to enter the Passkey (PIN) on the remote host. Please enter the Passkey (PIN) accordingly by scanning the “**Option Code**” (page 13), and then scan the “**FIN (Finish)**” to end the Passkey entry, then go to step 5.
- 4 If you scan “**HID Legacy Mode**”, the Passkey (PIN) may be requested. Please enter “**00000000**” (default setting), you will see “Keyboard on “PF(L/A)xxxBT-xxxx”. Please double click this HID service to establish the connection between scanner and remote host device.
- 5 The scanner will emit 4 beeps in ascending tone to indicate the connection is established. At the same time, the link indicators of scanner will **blink blue once per 2.5 seconds** to indicate the scanner is in radio-connected state.

Please note that if the scanner is not connected to the host device within 1 minute after scanning the above command, the scanner will go to sleep automatically. You can just press the trigger to wake up the scanner to continue the installation.



The installation procedure may vary depending on different remote host devices, operating systems and the Bluetooth drivers. Please consult your professional IT consultant to obtain necessary support.

Use FuzzyScan in SPP Mode

Establish SPP Master Connection

- 1 Please go to the folder “**Hardware**” located in Bluetooth Advanced Setting of the remote host device to check its device **MAC address**. Then prepare a 12-character Code 128 barcode of the remote host device MAC address, or follow the step 4 to input MAC address by scanning 12 option codes.
- 2 Ensure a virtual COM port is available in your remote host for connecting the scanner. If not, please go to the folder “**Local Services**” located in Bluetooth Advanced Setting. Click the “**Add Serial Services**” to add one more Bluetooth COM port.
- 3 Power on or wake up the scanner by pressing the **Trigger** key if the scanner is power-off or in sleep state and ensure the status indicator of scanner **blinks red and green alternatively** (in “**Uninstall**” state). If the scanner is not in uninstall state, please scan the “Uninstall” command first, then scan the “SPP Master Mode” command. The status indicator of scanner will turn steady red immediately.



Uninstall



SPP Master Mode

- 4 Scan the 12-character MAC address barcode. The scanner will emit continuous short clicks and link indicators of the scanner will **blink blue** quickly during the radio connecting process. If the Passkey (PIN) is requested, please enter “**0000000**” (default setting).
- 5 The scanner will emit 4 beeps in ascending tone to indicate the radio is connected. Meanwhile, the link indicators of scanner will **blink blue once per 2.5 seconds** to indicate the scanner is in radio-connected state.

Please note that if the scanner failed to connect to the host device within 30 seconds, the link indicators will **blink blue 3 times per 2 seconds**. But the scanner is still continuing to discover the host device for another 30 seconds before go to sleep. In the interim, you still can scan “Uninstall” command to resume the scanner to uninstall state. If the scanner went to sleep already, you can just press the trigger to wake up the scanner to continue the installation.



The above procedures are based on Windows environment. But the installation procedure may vary depending on different remote host devices, operating systems and the Bluetooth drivers. Please consult your professional IT consultant to obtain necessary support if any problem has been encountered during the installation processes. For more detailed information, please visit CINO website.

Establish SPP Slave Connection

- 1 Ensure a virtual COM port is available in your remote host for connecting the scanner. If not, please go to the folder “**Client Applications**” located in Bluetooth Advanced Setting. Click the “**Add COM Port**” to add one more Bluetooth COM port.
- 2 Power on or wake up the scanner by pressing the **Trigger** key within radio coverage if the scanner is power-off or in sleep state, and ensure the status indicator of scanner **blinks red and green alternatively** (in “**Uninstall**” state). If the scanner is not in uninstall state, please scan the “Uninstall” command first, and then scan the “SPP Slave Mode” command. The link indicators of scanner will **blink blue 3 times per 2 seconds** during searching process.



Uninstall



SPP Slave Mode

- 3 You have to execute the Bluetooth Discovery procedure to find all available Bluetooth device list in your remote host. You will see “PF(L/A)xxxBT-xxxx” is shown in the list if the scanner is successfully discovered.
- 4 Double click the “PF(L/A)xxxBT-xxxx” on the discovered Bluetooth devices. If the Passkey (PIN) is requested, please enter “**00000000**” (default setting). You will see “Serial Port on PF(L/A)xxxBT-xxxx”. Please double click this SPP service to establish the connection between scanner and remote host device.
- 5 The scanner will emit 4 beeps in ascending tone to indicate the connection is established. At the same time, the link indicators of scanner will **blink blue once per 2.5 seconds** to indicate the scanner is in radio-connected state.

Please note that if the scanner is not connected to the host device within 1 minute after scanning the “**SPP Slave Mode**” command, the scanner will go to sleep automatically. You can just press the trigger to wake up the scanner to continue the installation.



The above procedures are based on Windows environment. But the installation procedure may vary depending on different remote host devices, operating systems and the Bluetooth drivers. Please consult your professional IT consultant to obtain necessary support if any problem has been encountered during the installation processes. For more detailed information, please visit CINO website.

Out-of-range Scanning

When the radio connection is established between scanner and remote host device, the scanner will transmit each scanned data right after scanning the barcode. However, the default of the scanner is unable to scan any barcode data when it loses the radio connection with the remote host device.

If you enable the out-of-range scanning function, the scanner is able to continue scanning barcode data while it is out of radio coverage. All scanned data will be temporarily stored into the memory buffer until radio link resumed.



Enable Out-of-range Scanning



Disable Out-of-range Scanning ◆

In case of the scanner is out of radio coverage, you will hear 4 beeps in descending tone to indicate the radio connection lost. The link indicators of scanner will **blink blue 3 times per 2 seconds**. Once the scanner is back to radio coverage, you will hear 4 beeps in ascending tone to indicate the radio connection rebuilt and the link indicators of scanner will **blink blue once per 2.5 seconds**. At the same time, all stored scanned data will be transmitted automatically right after the radio link is resumed.

Sleep Mode & Power Off

The scanner will enter “Sleep Mode” if the scanner is not used after the user-defined time-out duration. The scanner can also be entered “Sleep Mode” instantly by pressing the **Function Key 1** twice (each time lasts more than one second).

When the scanner is under sleep mode, it is preset to enter “Power Off” automatically if it’s not woke up after time-out duration. You can power off the scanner by pressing and holding the **Function Key 1** for more than 3 seconds.

You can also have your scanner entered “Sleep Mode” or “Power Off” by scanning the following “Sleep Mode” or “Power Off” command.



Sleep Mode



Power Off

If you would like to power on or wake up the scanner, please press the trigger key.

Batch Scanning (Inventory Mode)

Thanks to the specially designed Batch Scanning function, the scanner is capable of storing up to **80,000 (PF/PL)** or **100,000 (PA)** EAN-13 barcode data. It is an ideal cost-saving solution for inventory applications.

Press and hold the **Function Key 2** for more than 3 seconds to enter Batch Scanning, by which 3 beeps will be heard and the status indicator of the scanner will **blink green** at regular interval during batch scanning

In this mode, all scanned barcode data will be stored into the memory storage. You can scan and store the barcode data till the memory storage is full. If the storage is full, you will hear 2 long beeps and the status indicator will **blink red twice** to indicate **out of storage**. To exit the batch scanning, press and hold **Function Key 2** for more than 3 seconds.

You can also have your scanner entered or exited the batch scanning by scanning the following commands.



Use Quantity Feature

The scanner supports quantity feature when it enters batch scanning. When you use quantity feature, the quantity information and scanned barcode data will be stored into the memory storage together. You can enter the quantity information from 1 to 9999 by scanning the following quantity commands right after you scan the barcode data.



Quantity 0



Quantity 3



Quantity 7



Quantity 1



Quantity 4



Quantity 8



Quantity 2



Quantity 5



Quantity 9



Quantity 6

There are three ways to output the stored barcode data and quantity information. The preset output format is to transmit stored barcode data as many times as the quantity indicated. But you still can set the scanner to output the stored barcode data together with quantity information in two fields, and a preset delimiter “,” will be output in between. To fulfill different application requirements, both the delimiter and output sequence can be changed as well.



As many times as the quantity indicates ◆



<Quantity><Field Delimiter><Scanned Data>



<Scanned Data><Field Delimiter><Quantity>

How to Transmit Stored Data

The scanner is preset to transmit all stored data by scanning the “Transmit Stored Data” command. During the transmission, the scanner will emit continuous short clicks and the link indicators will **blink blue**. Then the scanner will emit two short beeps after data transmission is completed.



Transmit Stored Data

But you are able to set the scanner to transmit the stored data by placing the scanner onto the cradle as well.



Scan Barcode Command ◆



Place Scanner onto the Cradle



Scan command or Place Scanner onto the Cradle

How to Delete Last Scanned Data

If you scanned a wrong barcode, the last scanned and data can be deleted by pressing the **Function Key 2** twice to delete.

You can also delete last scanned data by scanning the following command.



Delete Last Scanned Data

Link Mode Quick Set



PAIR Mode



UNINSTALL



PICO Mode



SPP Master Mode



SPP Slave Mode



HID Legacy Mode



HID Mode



HID Mode with Paskey

Host Interface Quick Set (Smart Cradle only)



USB HID
Standard Mode ◆



RS232 Serial



PS/2 (DOS/V) KBW
Standard Mode



USB HID Turbo Mode



USB Com Port
Emulation



PS/2 (DOS/V) KBW
Turbo Mode



USB HID Legacy Mode



PS/2 (DOS/V)
Keyboard Replacement

Keyboard Layout Quick Set



USA ◆



Latin America



France



United Kingdom-UK



Netherlands



Germany



Canadian French



Japan



Spain

System Commands



Paging



System Information



Master Default



Sleep



PowerTool Host Link



Save Configuration



Power Off



Factory Default



Clone

Option Codes



0



8



4



C



1



9



5



D



2



A



6



E



3



B



7



F



FIN (Finish)

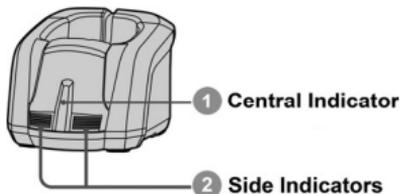


END (Exit)

Indications

Scanner Indication

Items	Link Indicators	Beeping
Radio connection	1 blue blink per 2.5 sec.	Off
Radio disconnection	3 blue blinks per 2 sec.	Off
During connection	Quick blue blinks	Short clicks
Radio connection built	1 blue blink per 2.5 sec.	4 beeps in ascending tone
Radio connection lost	3 blue blinks per 2 sec.	4 beeps in descending tone
Data Transmission	Quick blue blink	Short clicks
Items	Status Indicator	Beeping
Under charging (on cradle)	Steady red	Off
Fully charged (on cradle)	Steady green	Off
Under batch scanning	1 green blink per 2.5 sec.	Off
Pair failure	Steady red	2 Di-do Di-do beeps
Out of memory	2 red blinks	2 long beeps
Battery power low	1 red blink at regular interval	1 beep at regular interval
Battery power extremely low	8 red blinks	8 beeps
Good read	1 green blink	1 good read beep
Under Configuration	Steady red	Off
Uninstall state	Alternative red and green blinks	Off
Upgrade state	Steady red	Short click
Time out warning	Off	3 long beeps
Paged by smart cradle	Off	6 page beeps
Sleep state / Battery no power	Off	Off
Power Off	Off	Off



HB3112 Smart Cradle Indication

Items		Indicators		Beeping
		Central	Side	
Power on		Blink blue once	Off	Power on beeps
Smart Cradle Upgrade State		Off	Steady red	Short clicks
Uninstall state		Off	Alternative red-green blinks	Off
PICO Mode	Radio Connected	Steady blue	Steady Green	Off
	Radio Disconnected	Off	Steady red	Off
PAIR Mode	Radio Connected	Steady blue	Off	Off
	Radio Disconnected	Off	Steady red	Off
Smart cradle paged by scanner	PICO Mode	Steady blue	Steady green	6 page beeps
	PAIR Mode	Steady blue	Off	6 page beeps

HB3100 Charging Cradle Indication

Items	Central Indicator	Beeping
Power on	Light blue	Off

FuzzyScan Bluetooth Pocket Scanner Quick Start Guide International Edition, Rev. A1



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Regulatory



FCC part 15B, FCC part 15C



EN55022 EN55024
EN301 489-1 & 489-17, EN300 328
EN61000-3-2, EN61000-3-3, EN60950-1



Clause 2, Article 58-2 of Radio Waves Act.



V-3/2011.04, TECHNICAL REQUIREMENTS,
Class B ITE



MIC T401



AS/NZS CISPR 22:2009 Class B



CNS13438, CNS14336



LP0002

LED Eye Safety IEC62471 Exempt group

Laser Eye Safety IEC60825-1 Class 1