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Legal Notice

"Made for iPod" means that an electronic accessory has been designed to connect specifically to the iPod 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 an iPod may affect wireless performance.

Compatible Devices

iOS Compatibility
iPod touch 5th / 6th / 7th generations

Trademarks

Infinite Peripherals, Mobilize Your Enterprise, Linea Pro, Infinea Tab, and Infinea Omni are trademarks of Infinite Peripherals, Inc. All other trademarks are the property of their respective owners.
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Overview
The Linea Pro Rugged is form fitted for an integrated iPod experience for barcode scanning and HF RFID.

Features

1D/2D Barcode Scanner
Supports one-dimensional (1D) and two-dimensional (2D) barcode symbols, which can be read in any direction (omni-directional). The effective reading distance of the barcode reader varies depending on the barcode size. The barcode scanner is also capable of reading barcodes on a LCD screen.

HF RFID
Built-in HF RFID tag/card reader with read/write capability at 13.56 MHz.

Battery Status
View the battery status in the mobile application.

Accessories
Visit our website at https://ipcmobile.com or contact your Infinite Peripherals account representative for additional information about our current and future product accessories.

Technical Specifications

Physical Dimensions

Processor
32-bit ARM™ Cortex™ - M3 MCU

Compatibility
iPod touch 5th / 6th / 7th generations

Dimensions (L x W x H)
143mm x 65mm x 24mm (2.7” x 2.56” x 24”)

Weight
147g (5.19oz.) without iOS device
Connectivity

Connectivity
Apple Lightning™ Connector
USB-C

Use only original USB-A to USB-C cable for charging iPod. Use only UL approved USB adapters. The minimum requirements of USB adapters 5V 2.1A.

HF RFID
MIFARE Mini
MIFARE Classic 1K / 4K
MIFARE Ultra-Light / Ultra-Light-C
MIFARE Plus 2K / 4K
ISO / IEC 14443 Type A/B
ISO / IEC 15693
MIFARE DESFire
JIS X 6319-4 (compatible with FeliCA)

Barcode Types Supported
1D/2D high-speed imagers

Battery
Rechargeable Lithium-Polymer battery 3.6V/2400 mAH
Precise battery management by Fuel Gauge
Micro-controller for remaining battery capacity

Power Port and Power Input
DC 5V through these sources:
○ USB Type-C
○ Single charging station
○ Dual charging station

Buttons
Two Scan Buttons

Environment

Temperature
Operation: -10°C to +40°C (14°F to +104°F)
Storage: -20°C to +50°C (-4°F to +122°F)

Relative Humidity
Operation and Storage: 5%-90%
Box Contents

◊ Before using your Linea Pro Rugged, remove the unit and any included accessories from the shipping cartoon and verify the contents against the packing list.
◊ Retain all packing materials, invoice, and bill of lading. These may be required to return the device for servicing later, or to process a claim with the shipping carrier.
◊ Carefully inspect the contents inside of the packaging for any signs of damage. If there are signs of damage, do not attempt to use the unit. Notify your account executive or contact technical support at https://ipcmobile.com/devices
◊ Ensure the battery is fully charged prior to initial use.

Note
Box contents and SKUs vary based on your order configuration.

SKUs
LPI-H2D-POD7; LPI-H2DR-POD7

Getting Started

The Linea Pro Rugged allows you to scan barcodes and pass that data into compatible iOS applications. In addition, this form-fitted solution offers the IP66 rating for protection against dust and moisture. The following helps you get the Linea Pro Rugged ready for use.

Note
The barcode scanner and HF RFID reader functionality require the installation of software. Contact your Infinite Peripherals account representative for available software.

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<td>Assemble the Linea Pro Rugged with your iOS device</td>
<td>Assembling Your Linea Pro Rugged.</td>
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<tr>
<td>Initialize barcode scanner and/or HF RFID functionality</td>
<td>Turn on Your Linea Pro Rugged.</td>
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Developing Applications

Software is not provided with your unit. Please contact Infinite Peripherals for Third Party software solutions. Integrating your unit with your mobile application requires the use of the Infinite Peripherals Software Developers Kit (SDK). The SDK incorporates an API specifically for developing applications to use the barcode scanner and HF RFID reader functionalities of the unit.

To download the InfineaSDK or IPCMPPrinterSDK, access our Development Portal at https://developer.ipcmobile.com
Product Description

1. Barcode Scan Engine
2. Back Cover
3. Right Scan Button
4. USB-C Connection
5. Left Scan Button
6. Volume Control Buttons for iOS Device
7. On/Off Button for iOS Device
8. Battery Cover Lock/Unlock Lever for Linea Pro Rugged
9. Battery Cover
10. External Connection Features
Assembling Your Linea Pro Rugged

Before assembly, ensure asset tags or labels are not applied onto the back of your iOS device. Any stickers on the unit can interfere with the performance of the iOS device and/or the assembly/disassembly with the Linea Pro Rugged.

1. Remove the top cover by loosening the security screw with a screwdriver, and then slide the unit forward and lift it up.

2. Attach your iOS device to the Lightning™ connector by firmly sliding it into place.

3. Align the top cover with the two hooks, and then slide it down until it clicks into place.

4. Tighten the security screw onto the back cover.
Charging the Battery

The Linea Pro Rugged uses a Lithium-ion rechargeable battery and can be charged through the USB port with the included USB adapter. In addition, the Linea Pro Rugged supports pass-through charging to the iOS device.

The charging time is approximately 4 hours and 30 minutes, if fully discharged.

Both your iOS device and Linea Pro Rugged may be charged together using the USB-C port or by placing it in a Linea Pro Rugged charging dock.

◊ Connect the USB-C charging cable into the USB port at the bottom of the unit, and then plug the other end into an appropriate power source.

Note
To prevent electrical damage to the unit or battery, ensure the charging cables are the approved USB-C.

Charging Your iOS Device

You can charge your iOS device when the USB adapter is attached to the USB connector or when the Linea Pro Rugged is placed on a charging station.

The Linea Pro Rugged can charge the iOS device from its internal battery by activating the Automated Charge functionality. The battery status must be 20% or above.

Charging can be at low (500mA) or high (1A) power based on the state of the battery and power source.

Checking the Battery Status

When the status is above 20%, set the automated charge functionality to automatically charge the iOS battery. Ensure your iOS device is connected to the Linea Pro Rugged before you check the battery status.

To check the battery status, open the application on your iOS device and view the device data.

External Power Source

Depending on the external power supply’s maximum current capability, the charge current to the iOS device will vary according to the conditions listed below.

◊ 500mA
   * Linea Pro Rugged battery is charging — iOS device cannot receive power (0A).
   * Linea Pro Rugged battery is fully charged — iOS device is provided low current.

◊ 1000mA
   * Linea Pro Rugged battery is charging — iOS device receives low power.
   * Linea Pro Rugged battery is fully charged — iOS device receives high current.

◊ 1500mA
   * Linea Pro Rugged battery is charging — iOS device receives low power.
   * Linea Pro Rugged battery is fully charged — iOS device receives high current.

◊ >1500mA
   * Linea Pro Rugged battery is charging — iOS device receives high power.
   * Linea Pro Rugged battery is fully charged — iOS device receives high current.
Programmable Options

Configure these optional settings via the SDK.

Charging Current

Charging current may be set to 500mA (default) or 1000mA.

Set Charging

The Linea Pro Rugged can charge the iPod using its internal battery by enabling the "setCharging" setting. When the Linea Pro Rugged battery is above 20%, it will then start to charge the iOS device battery.

Enable Scan Button

Select the Enable Scan button in the SDK.

Scan Mode

Linea Pro Rugged supports the following scan modes:

Single Scan
Scanning a single barcode by pressing and releasing either Scan button.

Multi Scan
Scanning multiple barcodes by pressing and holding either Scan button.

Motion-Detect
Scanner is activated automatically when barcode is placed near the barcode engine.

Multi-Scan without Duplicates
Scanning multiple barcodes without duplicates.

Pass-Through Sync

When enabled and the USB Type-C cable is plugged in, the iOS device is synced with a Windows computer or an Apple MacOS.

When syncing is required, enable the Pass-Through Sync setting in the SDK. When this setting is disabled and the USB cable is plugged in, the Linea Pro Rugged only charges, but does not scan.

To use the scanner again, the USB Type-C cable must be removed.

Idle Time

Default setting: 5400 seconds (90 minutes).
**Turn on the Linea Pro Rugged**

Two scan buttons located on each side of the unit are dual purpose, that means either button can turn on the unit or scan barcodes.

1. With the unit turned off, press one of the scan buttons on either side.
2. Press a scan button a second time to activate the scanner for normal barcode scanner.

**Note**
If the Linea Pro Rugged is idling for an extended period of time, the power turns off automatically to preserve the charge on the internal battery pack. When turned off, the unit is in sleep mode immediately.

**Scan Barcodes**

The scan engine in the Linea Pro Rugged supports one-dimensional (1D) and two-dimensional (2D) barcode symbols. The effective reading distance of the barcode reader varies based on the barcode size. For example, 15-20 cm (5.9-7.9 inches).

**Note**
Single scan and multi-scan modes are supported.

1. Press and hold the Scan button on either side of the unit to activate the Linea Pro Rugged.
2. Position the scan head as close to the barcode label as possible so the scan line crosses both ends of the barcode.
3. Slowly pull the unit back, increasing the distance between the barcode and scan head, until the barcode is read by the scanner. Data is displayed on the iOS device.

**Reading HF RFID Cards**

The optional RFID tag/card reader incorporates several RFID formats depending on the model of your Linea Pro Rugged.

1. To activate the reader, press the Scan button.
2. Place a RFID tag/card over the receiver/transmitter as indicated by the RFID label.

**Note**
The data is read from the Linea Pro Rugged RFID reader and then sent to your iOS device.
Replacing the Battery

The Linea Pro Rugged includes one 2400Ah battery, which you can replaced, when needed.

Note
Ensure you use only a new battery with SKU PL-15-110.

1. On the back of the unit, slide the battery latch into the unlocked position, and then pull the battery cover upwards.
2. Remove the old battery by pulling it up gently.
3. Insert one side of the new battery near the contact pads, and then press it downwards slowly.
4. Before closing the battery cover, press the battery latch downwards.
5. Press the battery cover in place, and then slide the battery latch into the lock position.
**Troubleshooting**

### Barcode Scanner

<table>
<thead>
<tr>
<th>Issue</th>
<th>Possible Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scanner does not turn on</td>
<td>◊ Battery is too low.</td>
</tr>
<tr>
<td></td>
<td>◊ Software is not powering on the unit.</td>
</tr>
<tr>
<td></td>
<td>◊ Faulty scan engine.</td>
</tr>
<tr>
<td>Data/partial data not returned during scanning</td>
<td>◊ Unreadable barcode.</td>
</tr>
<tr>
<td></td>
<td>◊ Battery is too low.</td>
</tr>
<tr>
<td></td>
<td>◊ Faulty scan engine.</td>
</tr>
<tr>
<td></td>
<td>◊ Software decoding incorrectly.</td>
</tr>
<tr>
<td>Unable to perform multi-scanning</td>
<td>◊ Multi-scan not enabled.</td>
</tr>
<tr>
<td></td>
<td>◊ Multi-scan not supported by software.</td>
</tr>
<tr>
<td>Unable to scan specific barcodes</td>
<td>◊ Barcode type not enabled.</td>
</tr>
<tr>
<td></td>
<td>◊ Barcode type not supported.</td>
</tr>
</tbody>
</table>

Refer to [Technical Specifications](#) for additional information.

### HF RFID Reader

<table>
<thead>
<tr>
<th>Issue</th>
<th>Possible Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF RFID reader does not turn on</td>
<td>◊ Battery is too low.</td>
</tr>
<tr>
<td></td>
<td>◊ Software is not powering on the unit.</td>
</tr>
<tr>
<td></td>
<td>◊ Faulty reader.</td>
</tr>
<tr>
<td>Data/partial data not returned during reading</td>
<td>◊ Unreadable HF RFID tags/cards.</td>
</tr>
<tr>
<td></td>
<td>◊ Battery is too low.</td>
</tr>
<tr>
<td></td>
<td>◊ Faulty HF RFID reader.</td>
</tr>
<tr>
<td></td>
<td>◊ Software decoding incorrectly.</td>
</tr>
<tr>
<td>Unable to scan specific tags or cards</td>
<td>◊ HF RFID type not enabled.</td>
</tr>
<tr>
<td></td>
<td>◊ HF RFID type not supported.</td>
</tr>
<tr>
<td></td>
<td>◊ Refer to <a href="#">Technical Specifications</a> for additional information.</td>
</tr>
</tbody>
</table>

Symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>![i]</td>
<td>Refer to the instructions before using this product</td>
</tr>
<tr>
<td>![m]</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>![d]</td>
<td>Manufacture Date</td>
</tr>
<tr>
<td>![c]</td>
<td>Caution</td>
</tr>
<tr>
<td>![sn]</td>
<td>Serial Number</td>
</tr>
<tr>
<td>![p/n]</td>
<td>Part Number</td>
</tr>
<tr>
<td>![w]</td>
<td>Waste Electrical and Electric Equipment</td>
</tr>
<tr>
<td>![fcc]</td>
<td>Complies with part 15 of the FCC rules</td>
</tr>
</tbody>
</table>

**Product Returns /Servicing**

Use the link in step 1 to create an account and gain access to our Knowledge Base and online support services. Through our online support center, you’ll be able to download files, open a Support Ticket, manage your RMAs, view your account Profile and subscribe to Alerts.

To request a RMA
2. Login to your user account, and then click Create RMA Request.
3. Read the instructions provided and complete the online request form.
4. Note the assigned RMA number and write it clearly on your shipping carton.
5. Ship your equipment back to us using the address provided.

If problems persist with your Linea Pro Rugged, contact a Mobility Expert at [https://ipcmobile.com/devices/](https://ipcmobile.com/devices/)
Federal Communications Commission

Federal Communications Commission (FCC) Statement

15.21
You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user’s authority to operate the equipment.

15.105(b)
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

◊ Reorient or relocate the receiving antenna.
◊ Increase the separation between the equipment and receiver.
◊ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
◊ Consult the dealer or an experienced radio/TV technician for help.

Operation is subject to the following two conditions:
1. This device may not cause interference and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Warranty

Infinite Peripherals does not warrant, and is not responsible for, any damage to the Linea Pro Rugged (“Product”) or the assembled iOS device as a result of liquid or solid particle intrusion into the Product, or damaged caused by dropping the Product with the assembled iOS device. If a material or workmanship defect arises with regard to any Infinite Peripherals product, and a valid claim is received within the Warranty Period, Infinite Peripherals (at our sole discretion) will repair the Product using new or refurbished parts, or replace the Product with a new or refurbished Product.

For purposes of this limited warranty, “refurbished” means a product or part that has been substantially returned to its original specifications. In the event of a defect, these are your exclusive remedies.

Disclaimer

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