



**Infinite
Peripherals®**

USER MANUAL

Linea® Pro 7

For iPhone® 6/6s/7/8





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Legal Notice

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

Compatible Devices

iOS Compatibility

iPhone 6
iPhone 6s
iPhone 7
iPhone 8

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Overview

The Linea Pro 7 allows mobile employees to convert their iOS devices into powerful solutions for the retail, warehousing, supply chain, ticketing, and hospitality industries. The Linea Pro 7 includes 1D or 2D barcode scanner, Bluetooth, and 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.

Magnetic Stripe Reader (MSR)

Built-in magnetic stripe reader incorporates a three-track, bi-directional magnetic read head. A single swipe reads data from all three tracks.

RFID Reader

Built-in RFID tag/card reader with read/write capability at 13.56 MHz. The RFID reader incorporates several RFID formats, depending on the model of your Linea Pro 7.

Indicators

Four LEDs indicate battery status levels with an electromagnetic buzzer.

Bluetooth

Available Bluetooth 2.0 SPP compatibility, which allows connection to a Bluetooth peripheral, such as a printer.

Battery Status

Press the Battery Status button to verify the battery status.

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 Data

Physical Dimensions

Processor

32-bit ARM™ Cortex™ - M3 MCU

Dimensions (L x W x H)

157mm x 77 mm x 27 mm (6.2in x 3in x 1.1in)

Compatibility

iPhone 6/6s/7/8

Weight

148g (5.2 oz.) without iOS device



Connectivity

Barcode Scanner

1D/2D laser, high-speed imager, which supports all major 1D/2D barcodes

Battery Capacity

Rechargeable Li-ion Battery 3.7V /2400 mAh

*Battery management via micro-controller

Power Supply

5V through USB Type-C cable

5V through single or 5 station charger

Magnetic Stripe Reader

3-track bi-directional reader

Type: ISO 7810, 7811, 7813

1,000,000 magnetic card swipes

Buttons

Scan buttons (left and right)

Battery status button

Reset button (pin-hole entry)

Port

USB Type-C for charge/sync

Encryption/Key Management

3DES. AES 128/256 DUKPT

(Optional) RFID Reader

ISO/IEC 14443 Type-A/MIFARE:

MIFARE MINI

MIFARE CLASSIC-1K, MIFARE CLASSIC-4K

MIFARE ULTRALIGHT, ULTRALIGHT-C

MIFARE PLUS 2K/4K

MIFARE DESFire card

and others

ISO/IEC 14443 Type - B:

- Supports most cards

ISO 15693:

- Supports most cards

JIS X 6319-4:

- Compatible with FeliCa

ISO/IEC 18000-3 mode 3:

- NFC

(Optional) Bluetooth

Bluetooth 2.0, Class 2 option, Serial Port Profile (SPP)

Indicators

Visual battery status: 4 LEDs

Audio: electromagnetic buzzer

Certifications

Apple® MFI / FCC

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

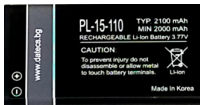
- Before using your Linea Pro 7, remove the unit and any included accessories from the shipping carton and verify the contents against the packing list.
- Retain all packing materials, invoice, and bill of lading. These may be required to return the device for servicing later, or to process a claim with 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.

These items are included with your unit:

Linea Pro 7 (1)



Standard Battery (1)



USB Type-C™ charge/sync cable (1)



Security Torx Screw (2)



Note:
Box contents and part numbers vary based on your order configuration.

Getting Started

The Linea Pro 7 allows you to scan barcodes and pass that data into compatible iOS applications.

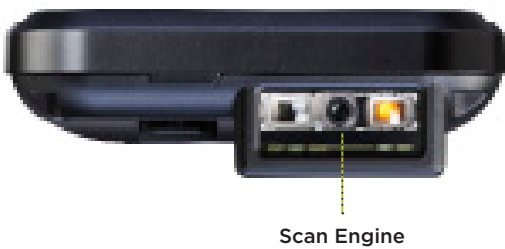
The following helps you get the Linea Pro 7 ready for use:

What to do	Section
Assemble the Linea Pro 7 with your iOS device	Assembling Your Linea Pro 7
Fully charge battery before first use	Charging Your Linea Pro 7
Software required to operate the unit with you iOS device	Developing Applications for Your Linea Pro 7
Initialize barcode scanner, magnetic stripe reader, and/or RFID functionality	Turn on Your Linea Pro 7

Note:
Use of the barcode scanning and contactless card reader features requires the installation of software. Contact your Infinite Peripherals account representative for available software.



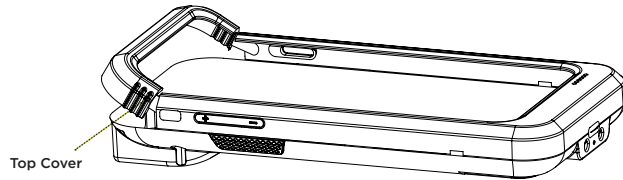
Product Description



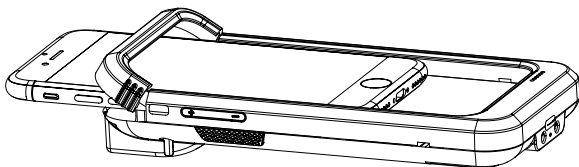


Assembling Your Linea Pro 7

1. Push the top cover forward, then up to insert your iOS device.



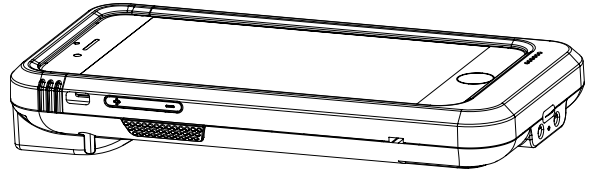
2. Connect the iOS device by firmly sliding it onto the Lightning™ connector.



3. Tilt the top cover down and slide it back until it clicks into place.

Note:

To secure the unit, insert the two TORx screws on the back of the unit near the top. The screws are provided with the Linea Pro 7.



Battery Charging

The Linea Pro 7i uses a Lithium-ion rechargeable battery and supports two modes for charging.

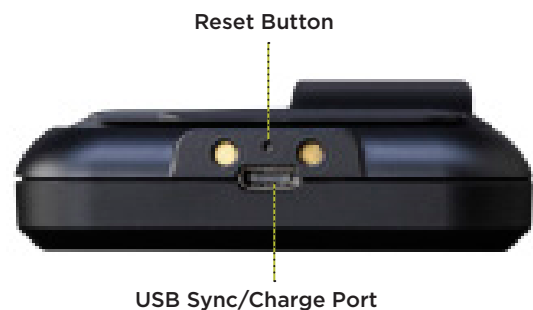
- Default Mode: Charging time is approximately 3 hours and 40 minutes.
- Slow Charging Mode: Charging time is approximately 6 hours.
- If equipped with an encrypted magnetic stripe reader, do not allow the battery to fully discharge.
- The unit disconnects from the iOS device if the battery is depleted below 3.6V.

The Linea Pro 7 supports pass through charging to the iOS device. The iOS device and Linea Pro 7 may be charged together via the USB Type-C port or by placing it in a Linea Pro 7 Single or 5-Unit Charging Station.

Due to current charging limitations, the Linea Pro 7 should not be charged via USB from a Windows computer or Apple OS connection.

How to Charge Your Linea Pro 7

1. Connect the USB Type-C charging cable into the USB port.





Battery Status

You can check the battery status by pressing the battery status button. The iOS device and the unit do not need to be connected to verify the battery status.

Note:

Numbers illuminated at the bottom of the unit identify the charge status of the battery.

Charge Percentages

1	1%-25%
2	26%-50%
3	51%-75%
4	76%-100%



Battery Status
Button & Indicators

Developing Linea Pro 7 Apps

Software is not provided with your Linea Pro 7. Please contact your reseller or Infinite Peripherals for Third Party software solutions. Integrating the Linea Pro 7 into your iOS application requires the use of the Infinite Peripherals Universal Software Developers Kit (SDK).

The SDK incorporates an API specifically for developing applications to use Linea Pro 7i functionality.

For additional details on using the Infinite Peripheral Universal SDK, please refer to the appropriate SDK documentation.

For the latest Infinite Peripheral Universal SDK, please visit our developer portal at:

<https://developer.ipcmobile.com>

Operational Status

LEDs indicate the modes of operation for the Linea Pro 7. These modes indicate the connection status plus charging and/or low battery conditions.

LED	Status
No LED	Sleep or ready mode
Multiple LEDs	Displaying battery level status
One LED flashing	Charging



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 7 can charge the iPhone using its internal battery by enabling the "setCharging" setting. When the Linea Pro 7 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 7 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 7 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 7 Using Dual Buttons

The dual-purpose scan button powers on the unit and scans barcodes.

1. With the unit turned off, press the scan button until you hear a single beep. The unit is ready to use.
2. Press a scan button a second time to activate the scanner for normal barcode scanner.

Note:

If the Linea Pro 7 is idling for an extended period of time, the power turns off automatically to preserve the charge on the internal battery pack.



Scan Barcodes

The Linea Pro 7 supports scanning 1D/2D barcode symbols. The effective reading distance of the barcode reader varies based on the barcode size.

1. Press and hold the scan button to activate the Linea Pro 7.
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.





Magnetic Stripe Reader (MSR)

The built-in magnetic stripe reader (MSR) has a three-track bi-directional encryption-capable magnetic read head. A single swipe reads information from all three tracks.

MSR functions as an unencrypted MSR until an encryption key is injected into the read head by a designated Infinite Peripherals key injection facility. Contact your Infinite Peripherals account representative for information.

1. To activate the MSR functionality, press either Scan button.
2. With the magnetic strip face up, swipe the card through one end of the card slot to the other end.

Note:

Keep the edges of the card flat on the inner edge of the reader. This ensures the magnetic stripe passes over the read head evenly.



Contactless Card Reader (RFID)

The optional RFID tag/card reader incorporates several RFID formats depending on the model of your Linea Pro 7.

1. To activate the unit, press the Scan button.
2. Place the RFID tag/card over the receiver/transmitter as indicated by the RFID label. The data is sent from the unit to the iOS device.

Note:

Keep the face of the card/tag flat, with the receiver/transmitter as close as possible. Depending on the type of tag/card, it may be necessary to make direct contact with the surface of the RFID receiver for proper reading and writing.





Servicing the Linea Pro 7

When the 2400mAh battery is low, you can replace it in the Linea Pro 7.

Be aware that the encrypted functionality special key protection features and card reading ability may be erased and disabled if the battery is removed from the unit for more than one hour.

How to Replace the Battery

1. Using T5 x 40mm Torx screwdriver, remove the Torx screw from the back cover. The T5 x 40mm Torx screwdriver is not included.
2. Gently pull the tab in, then up to remove the back cover.
3. Lift up the battery to remove it, and then insert the replacement battery ensuring the battery contacts are aligned.
4. Replace the battery cover, and then insert the two Torx screw into place and tighten using the Torx screwdriver.



Reset Your Linea Pro 7

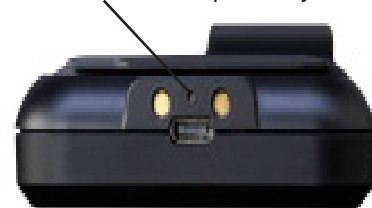
You can perform a soft-reset without removing the iOS device using the battery status button and the scan button together.

This feature cycles through the power and allows the unit to restart.

How to Reset

1. Locate the small pinhole near the USB port.
2. Insert the end of a pin or paper clip to restart the device.

Reset Status button pin entry



SRED Encrypted MSR Information

The Linea Pro 7 requires proper maintenance to ensure long and trouble-free operation to integrate the PCI PTS 3.x SRED-certified unit into your solution. This includes maintaining a proper battery charge to prevent the Linea Pro 7 from entering Tamper Detect mode. When the battery is depleted or removed, the magnetic read head security feature is disabled and renders the unit unusable.

To prevent downtime, do not allow the battery to fully deplete, or remove the battery from the unit, and always place it on a charging station when not in use for extended periods.

Note:

If the security features are disabled or the battery is fully discharged and is in Tamper Detect mode, the unit must be sent back to Infinite Peripherals for servicing.



Troubleshooting

Barcode Scanner

Issue	Possible Cause
Scanner does not turn on	<ul style="list-style-type: none"> Battery is too low. Software is not powering on the unit. Faulty scan engine.
Data/partial data not returned during scanning	<ul style="list-style-type: none"> Unreadable barcode. Battery is too low. Faulty scan engine. Software decoding incorrectly.
Unable to perform multiscanning	<ul style="list-style-type: none"> Multiscan not enabled. Multiscan not supported by software.
Unable to scan specific barcodes	<ul style="list-style-type: none"> Barcode type not enabled. Barcode type not supported. Refer to Technical Specifications for additional information.

Magnetic Stripe Card Reader

Issue	Possible Cause
Card data is not returned during swiping	<ul style="list-style-type: none"> Card is inserted incorrectly Swipe method is incorrect Faulty read head Unreadable magnetic strip
Partial card data is returned during swiping	<ul style="list-style-type: none"> Swipe method incorrect Faulty read head Unreadable magnetic strip

Note:

If problems persist with your Linea Pro 7, contact a Mobility Expert at <https://ipcmobile.com/devices/linea-pro-7>.

Warranty

Infinite Peripherals does not warrant, and is not responsible for, any damage to the Linea Pro 7 ("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.



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Product Returns and 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

1. Create a user account in the RMA Support Portal at <http://ipcmobile.com/support/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.

Symbols

Symbol	Description
	Refer to the instructions before using this product
	Manufacturer
	Manufacture Date
	Caution
	Serial Number
	Part Number
	Waste Electrical and Electric Equipment
	Complies with part 15 of the FCC rules



Federal Communications Commissions

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.