



USER MANUAL

Mobi 100

For Apple® iOS/Android™/Microsoft® Windows®





Contact Information

Mobility Sales/ Technical Support Center

Infinite Peripherals, Inc.
1641 McGaw Avenue
Irvine, CA 92614

Toll-Free: (866) 278-7860

Office: (949) 222-0300

Fax: (949) 222-0375

Headquarters/ Main Warehouse

Infinite Peripherals, Inc.
2312 Touhy Avenue
Elk Grove Village, IL 60007

Toll-Free: (800) 278-7860

Office: (847) 818-1260

Fax: (847) 818-1287

Email: info@ipcprint.com

Website: ipcmobile.com

Legal Notice

"Made for iPhone" (MFI) means an electronic accessory is designed to connect specifically to the iPhone 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. iPad, iPhone and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. Lightning™ is a trademark of Apple Inc. Android™ is a trademark of Google LLC.

Compatible Devices

Apple® iOS

Android™

Microsoft® Windows®

Trademarks

Infinite Peripherals, Mobilize Your Enterprise, Linea Pro, Infinea, Infinea Tab, and Infinea Omni are trademarks of Infinite Peripherals, Inc. All other trademarks are the property of their respective owners.



Table of Contents

Overview	4	LED Status Indicators	11
Technical Data	4-5	Developing Applications	11
Box Contents	6	Smart Card Reader	12
Getting Started	6	Contactless Cards (NFC)	12
Product Overview	7	Servicing the Mobi 100	12
Before Using Your Mobi 100	8	Troubleshooting	13
Charge Your Mobi 100	8	Warranty	13
Operation Modes	8	Disclaimer	13
Pair Bluetooth with Mobi 100	9	Product Returns and Servicing	14
Apple iOS Device with BLE (Scan-to-Pair)	9	Symbols	14
Bluetooth Pairing	10	Federal Communications Commission	15



Overview

The thin and compact Mobi 100 is perfect for mobile payment applications using secure chip cards, magnetic stripe cards, and near-field communications (NFC) contactless payments. Low energy consumption provides operation for full shifts.

In addition, two Bluetooth pairing options are available, Apple iOS device pairing or a quicker connection with BLE scan to pair.

Features

Smart Card Reader

ISO7816, EMV Level 1 and 2 certified

Bluetooth Compatible

Apple iOS device Bluetooth pairing and BLE Scan to Pair

Contactless Card Reader

Built-in tag/card reader with read/write capability at 13/56 MHz.
Reader incorporates many RFID formats, depending on the model of your Mobi 100.

Battery Status

Replaceable/rechargeable Lithium-Polymer battery

Note:

Using smart card or contactless card readers requires the installation of special software. Contact your Infinite Peripherals account representative for compatible Third-Party software solutions.

Accessories

Contact your Infinite Peripherals account representative for information about current and future product accessory offerings or visit <https://ipcmobile.com/products/accessories>.

Technical Data

Physical Dimensions

Processor

ARM Cortex® M3 Security Micro controller

Dimensions (L x W x H)

69mm x 74.9mm x 11.3mm (2.72 in x 2.95in. x 0.43in)

Compatibility

Apple iOS, Android, Windows

Weight

68g (2.4 oz) without iOS device



Connectivity

Connectivity

USB, Device, Bluetooth Low Energy 4.2

Buttons Audio Indicator

On/Off Key; Bluetooth Pairing button
Electromagnetic Buzzer

Battery

Rechargeable Li-ion Battery 3.7V /500 mAh per installed and sealed for your protection inside the unit
500,000 chip card cycles

Power Supply

DC 5V 1 A through micro USB connector

Smart Card Reader

ISO 7816, EMV L1 certified

Magnetic Stripe Reader

3-track bi-directional reader
Type: ISO 7810, 7811, 7813

Encryption Key Management

3DES-112, AES 128/256, DUKPT

(Optional) Contactless Card 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

(Optional) Contactless Card Reader for Payment Apps

AMEX ExpressPay, Discover D-PAS, MasterCard Contactless, VISA PayWave

Certifications

PTS PCI 5.x EMV Level 1 and 2, Contactless Level 1, CE

Environment

Temperature

Operation: -10°C to +40°C (14°F to +104°F)
Storage: -15°C to +50°C (5°F to +122°F)

Relative Humidity

Operation and Storage: 5%-90%



Box Contents

Your Mobi 100 ships with these items:

Mobi 100 (1)



Micro USB/Sync Cable (1)

Bulk shipments may come without cables in each box



Getting Started

To get you up and running with your new Mobi 100, review these sections for details.

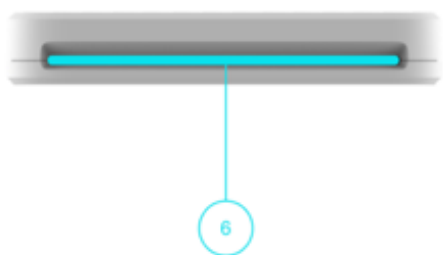
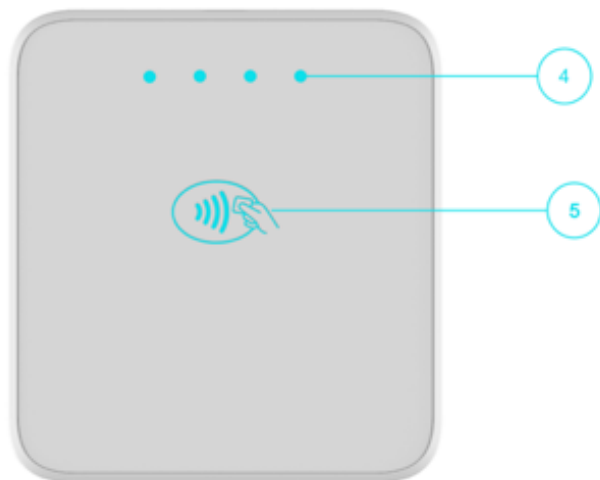
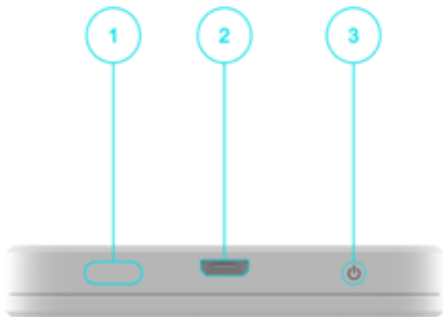
Note:

Observe any notes, cautions, or warnings throughout this guide for additional information, special care required, or important points to prevent injury or adverse affects.

What to do	Section
Ensure the Charge Mobi 100 battery is fully charged before first use	Charge Mobi 100
Software required to operate Mobi 100	Developing Applications
Understand status indicators	Status LEDs
Connect Mobi 100 to a computer and/or iOS devices	Two methods are available: BLE / Apple Scan to Pair Bluetooth / Windows Pairing
Accept payments with Mobi 100	Accept Payments with Near-Field Communication (NFC)
Accept smart cards with Mobi 100	Using the Smart Card Reader



Product Overview



1. Bluetooth pairing button
2. Micro USB port
3. On/Off button
4. LED indicators for contactless transactions and status
5. Contactless reader
6. Smart card slot

Note:
Ensure the original USB-A to USB-B micro cable is used.
Minimum requirement for USB adapters is DC 5V/1.A.



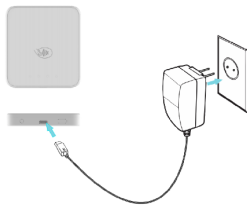
Before Using Your Mobi 100

- Remove the device and any included accessories from the shipping carton and verify contents against your 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 Infinite Peripherals technical support at <https://ipcmobile.com/devices>.
- Ensure the battery is fully charged.
- If the battery is fully discharged, the charging time is approximately 1 hour and 30 minutes.

Charge Mobi 100

Before first use, the rechargeable lithium-Polymer 3.7 / 500mAH battery must be fully charged.

- Plug the included USB-A to USB-B micro cable into the micro USB port, and then into the appropriate power outlet.



Note:

To replace the main battery, contact your Infinite Peripherals' account executive or access <https://ipcmobile.com/support> for help.

Operation Modes

Before Mobi 100 is ready to use, you must pair it with another Bluetooth BLE device with the application.

The LEDs status indicators in the table describe which modes are active after pressing and holding the power button.

- Application Download Mode
- System Mode
- Clear Bluetooth Pairing Information

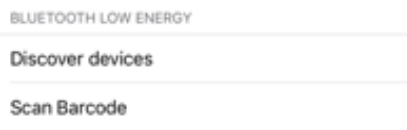


Pair Bluetooth with Mobi 100

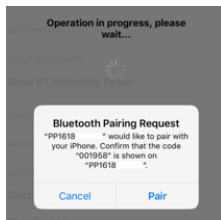
- Before using your unit, pair it with a Bluetooth device and the installed software.
- Download the latest SDK from <https://developer.ipcmobile.com> or contact your Infinite Peripherals' account representative.
- Two methods are available to pair Mobi 100 with Bluetooth Apple iOS Device or BLE (Scan to Pairing).

Apple iOS Device with BLE (Scan-to-Pair)

1. Turn on the Mobi 100 by holding the On/Off button for approximately two seconds.
2. Activate the iOS app in Settings > Scan Barcode. The camera is ready to use.



3. Turn to iOS device over to point the camera at the serial number on the label of the Mobi 100. The Bluetooth Pairing Request indicates the pairing operation is in progress.
4. Confirm the passkey is correct on both the Mobi 100 and your iOS device.



5. Tap Pair.



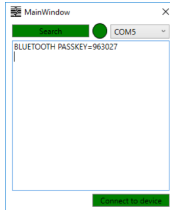
Bluetooth Pairing

Before using your Mobi, pair it with a Bluetooth 4.2 device and the installed software.

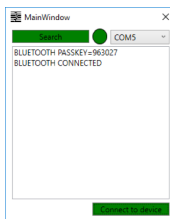
Note:

Download the latest SDK from <https://developer.ipcmobile.com> or contact your Infinite Peripherals sales representative.

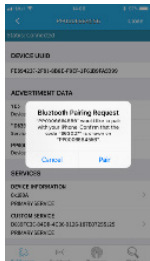
1. Turn on Mobi, then connect it to a computer using the USB cable to create a virtual COM port.
2. Verify which port is connected via the device manager.
3. On the app, tap Search, and then locate the COM port.
4. Once located, tap Connect to device.



5. Select Connect to device from Bluetooth management on the device. The passkey is displayed.



6. When the white LEDs light one at a time continually and display the passkey, tap the Pairing button, if correct. The Devices are Connected message is displayed.



Note:

If the passkey is not correct, press the On/Off button on Mobi to cancel and start over.



LED Status Indicators

Status	Description
Press and Maintain Power Button	
Application download mode	First white LED on continuously
Boot loader mode	Second white LED on continuously
System mode	Third white LED on continuously
Clears Bluetooth mode	Fourth white LED on continuously
Unit is turned on	First red LED flashing
Battery is charging	Second red LED continuously on
Bluetooth Status	
Waiting to confirm Bluetooth status	All four with LEDs are flashing one after another
Bluetooth is connected	Fourth red LED is flashing
System Errors	
Unit in tampered state	First and second red LEDs flashing continuously
General exception error	All four red LEDs are on continuously
Operation	
No LED	Unit is turned off
Turned on	First red LED is flashing
Battery is charging	Second red LED is continuously on

Developing Applications

Using the Software Developers Kit

Software is not automatically provided with your Mobi 100.

Integrating the device into your application requires the use of the Infinite Peripherals Universal SDK. The SDK incorporates an API specifically for developing applications to use Mobi 100 functionality.

For additional details on using the Infinite Peripheral Universal SDK, please refer to the appropriate SDK documentation. You can contact your Infinite Peripherals account representative for third-party software solutions.

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

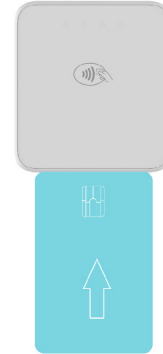
developer.ipcmobile.com/



Smart Card Reader

Reading smart cards can vary based on the application loaded onto your Mobi 100. Verify the correct procedure before performing a smart card transaction.

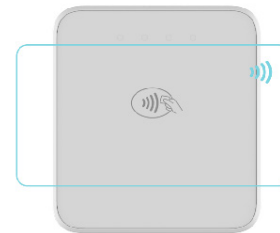
1. Place the smart card with the gold contacts facing upward.
2. Insert the card into the smart card reader slot in a smooth, continuous motion until it seats firmly.
3. Remove the card when the transaction is complete.



Contactless Cards (NFC)

You can accept payment using near field communication (NFC) with the Mobi 100. Before using this functionality, ensure the software from the SDK is installed.

1. Place the contactless card on the contactless symbol on the back of the unit.
2. Remove the card when the display shows the transaction is complete.



Servicing the Mobi 100

Battery Replacement

The Mobi 100 does not have user serviceable parts. The battery is installed and sealed in the unit. When needed, access <https://ipcmobile.com/support> or contact your account executive to replace the battery inside your Mobi 100.

Inspection After Installation

On a regular basis, after the initial installation of Mobi 100, visually inspect the Mobi 100 for these items:

- No attempt to open the unit.
- No unusual wires connected to the smart carder reader slot or on any port on the unit.
- No shim device is in the smart card reader slot.
- Serial number on the label corresponds to the one on your receipt and inventory paperwork.



Troubleshooting

Refer to these possible causes and resolutions if you encounter issues when using the Mobi 100

Note:

If problems persist and not resolved by the resolutions indicated, contact technical support at <https://ipcmobile.com/devices>

Issue	Resolution
Battery is not working.	<ul style="list-style-type: none"> Battery is depleted. Charge battery
Reader does not turn on	<ul style="list-style-type: none"> Battery is too low Unit is not turned on by the software
Card data not returned or partially returned during reading	<ul style="list-style-type: none"> Unreadable tag/card Battery is too low Faulty scanning or reader Software decoding incorrectly
Unable to read barcode or card/tag	<ul style="list-style-type: none"> Card type not enabled or supported See Technical Specifications for more information

Warranty

Infinite Peripherals does not warrant, and is not responsible for, any damage to the Mobi 100 ("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

NO WARRANTY. This technical documentation is provided AS-IS. Further, the documentation does not represent a commitment on the part of. Infinite Peripherals, Inc does not warrant that it is accurate, complete or error free. Any use of the technical documentation is at the risk of the user. Infinite Peripherals, Inc reserves the right to make changes in specifications and other information contained in this document without prior notice, and the reader should in all cases consult Infinite Peripherals, Inc to determine whether any such changes have been made. Infinite Peripherals, Inc shall not be liable for technical or editorial errors or omissions contained herein; nor for incidental or consequential damages resulting from the furnishing, performance, or use of this material. Infinite Peripherals, Inc does not assume any product liability arising out of or in connection with the application or use of any product or application described herein.












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.
	Manufacturer
	Manufacture Date
	Caution
	Serial Number
	Part Number
	Waste Electrical and Electric Equipment
	Complies with part 15 of the FCC rules
	Near-field communication (NFC)



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.