



USER MANUAL

# Mobi 200

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





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## Compatible Devices

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Apple® iOS

Android™

Microsoft® Windows®

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# Overview

The thin and compact Mobi 200 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

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### Smart Card Reader

ISO7816, EMV Level 1 and 2 certified

### 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 200.

### Magnetic Card Reader

Built-in MCR with a 3-track magnetic read head

#### Note:

Using smart card reader, magnetic stripe reader, and contactless card reader requires the installation of special software. Contact your Infinite Peripherals account representative for compatible Third-Party software solutions.

## Accessories

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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

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### Processor

ARM Cortex® M3 Security Micro controller

### Compatibility

Apple iOS, Android, Windows

### Dimensions (L x W x H)

69mm x 74.9mm x 14mm (2.72 in x 2.95in. x 0.55in)

### Weight

75g (2.65 oz) without iOS device



## Connectivity

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### 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 and 2 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

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

## Environment

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### 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 200 ships with these items:

## Mobi 200 (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 200, review these sections for details.

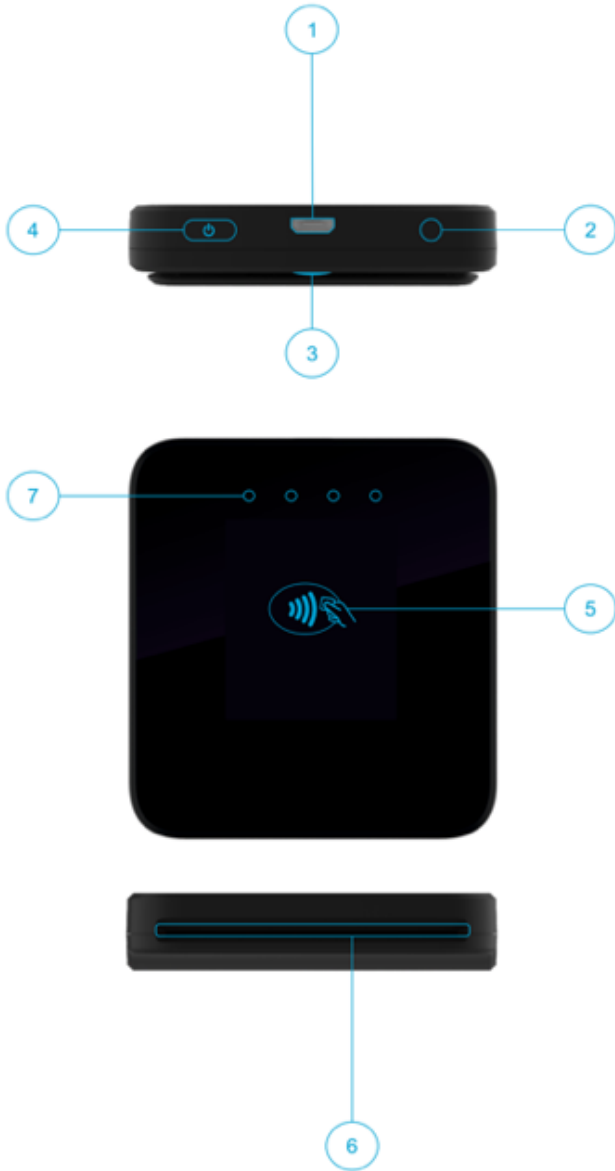
**Note:**

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 200 battery is fully charged before first use	Charge Mobi 200
Software required to operate Mobi 200	Developing Applications
Understand status indicators	Status LEDs
Connect Mobi 200 to a computer and/or iOS devices	Two methods are available: BLE / Apple Scan to Pair Bluetooth / Windows Pairing
Accept payments using NFC	Contactless Cards (NFC)
Using the magnetic card reader	Magnetic Card Reader
Accept smart cards with Mobi 100	Smart Card Reader



# Product Overview



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

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



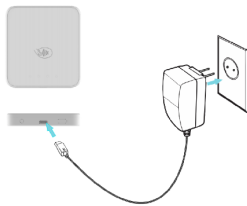
# Before Using Your Mobi 200

- 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 200

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 200 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



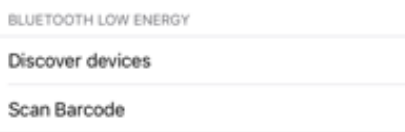


# Pair Bluetooth with Mobi 200

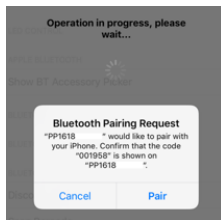
- Before using your unit, pair it with a Bluetooth device and the installed software.
- Download the latest SDK from <https://developer.ipcmobile.com> or contact your Infinite Peripherals' account representative.
- Two methods are available to pair Mobi 200 with Bluetooth Apple iOS Device or BLE (Scan 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 200 and your iOS device.



5. Tap Pair.



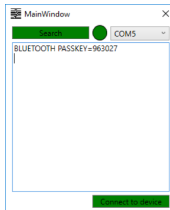
# Bluetooth Pairing

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

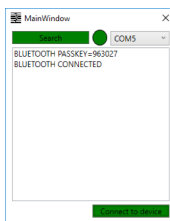
**Note:**

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

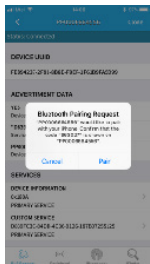
1. Turn on Mobi, then connect it to a computer using the USB cable to create a virtual COM port.
2. Verify which port is connected via the device manager.
3. On the app, tap Search, and then locate the COM port.
4. Once located, tap Connect to device.



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
<b>Press and Maintain Power Button</b>	
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
<b>Bluetooth Status</b>	
Waiting to confirm Bluetooth status	All four with LEDs are flashing one after another
Bluetooth is connected	Fourth red LED is flashing
<b>System Errors</b>	
Unit in tampered state	First and second red LEDs flashing continuously
General exception error	All four red LEDs are on continuously
<b>Operation</b>	
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 200.

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 200 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:

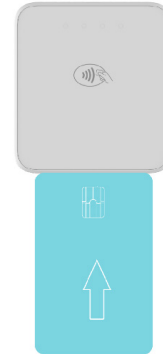
[developer.ipcmobile.com/](http://developer.ipcmobile.com/)



## Smart Card Reader

Reading smart cards can vary based on the application loaded onto your Mobi 200. Verify the correct procedure before performing a smart card transaction.

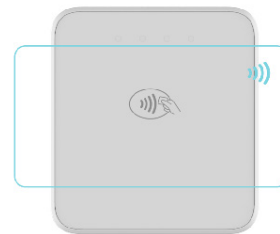
1. Place the smart card with the gold contacts facing upward.
2. Insert the card into the smart card reader slot in a smooth, continuous motion until it seats firmly.
3. Remove the card when the transaction is complete.



## Contactless Cards (NFC)

You can accept payment using near field communication (NFC) with the Mobi 200. 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.



## Magnetic Card Reader

The built-in magnetic card reader incorporates a 3-track magnetic read head, which requires a single swipe to read data from all three tracks.

1. Face the read head downward toward the top of the bottom cover of the cradle.
2. With the magnetic stripe facing upward, swipe the card through the reader.

### Note:

To ensure the magnetic stripe passes over the read head evenly, keep the edge of the card flat on the inner base of the reader.





# Servicing the Mobi 100

## Battery Replacement

The Mobi 200 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 200.

## Inspection After Installation

On a regular basis, after the initial installation of Mobi 200, visually inspect the Mobi 200 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 200

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

# Warranty

Infinite Peripherals does not warrant, and is not responsible for, any damage to the Mobi 200 (“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.
	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.