



INFINITE
PERIPHERALS

STIMARE

INFINEA[®] mPOS & mPOS Flat



INFINEA mPOS & mPOS Flat

USER MANUAL

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Note: *iOS device and other additional items shown on cover page may not be included.*

LEGAL NOTICE

“Made for iPod” and “Made for iPhone” mean that an electronic accessory has been designed to connect specifically to the iPod or iPhone respectively, 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 iPod or iPhone may affect wireless performance.

COMPATIBILITY

mPOS Made for:

- iPhone® 5S mobile digital device
- iPhone® 5C mobile digital device
- iPod touch® 6th generation mobile digital device
- iPod touch® 5th generation mobile digital device

mPOS Flat Made for:

Bluetooth® device with iOS, Android™, Windows®, Windows Phone® 8, Windows Mobile

TRADEMARK CREDITS

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Windows® and Windows Phone® are registered trademarks of Microsoft Corporation.

Android is a trademark of Google Inc.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc., and any use of such marks by Apple is under license.

Infinea® mPOS is a registered trademark of Infinite Peripherals, Inc.

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WARNINGS, CAUTIONS AND NOTES

Please observe the *Warnings, Cautions* and *Notes* presented throughout this manual. An explanation of these items is provided below:

| Symbol | | Description |
|---|-----------------|---|
|  | WARNING: | Actions may result in a serious outcome (<i>e.g., injury, death or other adverse affect</i>) to the user. |
|  | CAUTION: | Special care is required to avoid damage to the product or other property. |
|  | Note: | <i>Important points and tips about the product are being provided.</i> |

GUIDELINES FOR USE

General Warnings and Cautions

- This device is intended for indoor use only. Keep away from direct sunlight and rain.
- To prevent risk of shock or damage, do not use while wet or while located directly next to water sources.
- Avoid exposing the Infinea mPOS to excessive heat. Keep the device away from heat radiating equipment, open flame, etc.
- Do not clean the device using caustic chemicals or oils.
- Do not use the device near electrical appliances or during electrical storms.

Device Security

- Do not attempt to open the Infinea mPOS device. Attempting to disassemble an SRED encrypted Infinea mPOS device will render the unit unusable and may impact your warranty.
- Use of this device may require PIN Code entry during some transactions. Cardholders should be advised to keep the device close to them to during PIN code entry to prevent others around them from obtaining their information.
- Selecting certain options or keys in Service Mode or Application Download Mode may render the device unusable and require the device to be sent back to IPC or an authorized service center for reactivation.
- When the Infinea mPOS battery is fully discharged and enters the Tamper Detect mode, the unit may only be reactivated at IPC or an authorized service facility.

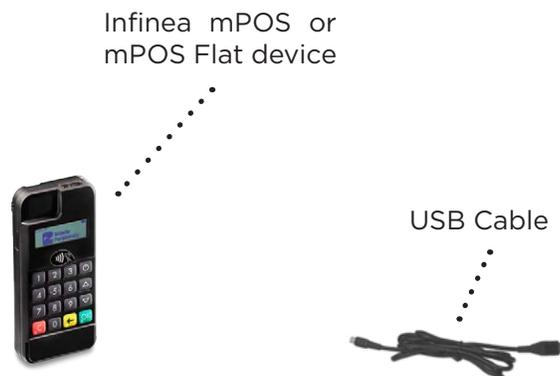
IMPORTANT: Use of the device under improper conditions could cause personal injury and/or damage to the device and may void any warranty.

GETTING STARTED

Before Using Your Infinea mPOS

- 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 carrier.
- Carefully inspect the packaging and contents for any signs of damage. If there are signs of damage, DO NOT attempt to use the unit. Notify your account executive or contact IPC technical support at support@ipcmobile.com.
- Ensure the battery is fully charged prior to initial use.

Your **Infinea mPOS** includes the items listed below:



***Note:** Box contents and part numbers may vary based on ordered configuration.

The following table will help you get the Infinea mPOS ready for use:

| Step | Purpose | Additional Information |
|---|---|---|
| 1. Connect your Infinea mPOS with an iOS device | Connecting your Infinea mPOS and the iOS device. <i>Note: Assembly is not required for the Infinea mPOS Flat version. For mPOS Flat, see instructions for pairing with a Bluetooth compatible device.</i> | <i>See manual section:</i> CONNECTING YOUR INFINEA MPOS WITH THE iOS DEVICE |
| 2. Charge your Infinea mPOS | The battery pack should be fully charged before use to ensure long battery life. | <i>See manual section:</i> CHARGING THE BATTERY |
| 3. Install Software | Use of the Barcode Scanner and Card reading features requires the installation of software on your iPod or iPhone. | <i>See manual section:</i> DEVELOPING APPLICATIONS |
| 4. Power On your Infinea mPOS | Initialize scanner, MSR and/or Smart Card functions for use. | <i>See manual section:</i> POWERING ON YOUR INFINEA MPOS |

ACCESSORIES

Please visit our website at www.ipcmobile.com, or contact your Infinite Peripherals (IPC) account representative, for additional information about our current and future product accessory offerings.



DEVELOPING APPLICATIONS

Software is not provided with your Infinea mPOS. Please contact your reseller or Infinite Peripherals for Third Party software solutions.

Integrating the Infinea mPOS into your iOS application requires the use of the Infinite Peripherals Universal SDK. The SDK incorporates an API specifically for developing applications to use the barcode scanning functionality of the Infinea mPOS.

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

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

<http://www.ipcmobile.com/developer>

INFINEA MPOS & MPOS FLAT FEATURES

The Infinea mPOS unit is a hand-held PIN pad with an integrated smart and magnetic stripe card reader, offering advanced security and smart card processing capabilities.

Infinea mPOS supports both symmetric encryption algorithms (DES, 3DES, and AES) and asymmetric encryption (RSA). This device internally manages multiple keys simultaneously through either Master Session- or DUKPT-based processes, and offers high performance smart card processing, as well as support for the new generation of 3-volt cards.

The Infinea mPOS sleek and stylish ergonomic design offers power and performance in a smart card and MSR-integrated PIN pad device.

| Feature | Description |
|--|--|
| Battery | Rechargeable Li-ion Battery - 3.7 V/1300 mAh |
| Magnetic Card Reader | 3-Track Head |
| | Swipe Speed: Minimum of 1.97 in/sec |
| | MTBF: 1 million swipes |
| | Bidirectional reading capabilities |
| Barcode Scanner (Optional) | Newland 2D High Speed Imager <u>Supported Symbologies -1D Barcode Scanner:</u> <i>Code128, UCC/EAN-128, AIM 128, EAN-8, EAN-13, ISBN/ISSN, UPC-E, UPC-A, Interleaved 2 of 5, ITF-6, ITF-14, Matrix 2 of 5, Industrial 25, Standard 25, Code39, Codabar, Code 93, Code 11, Plessey, MSI-Plessey, GS1-DataBar™(RSS) (RSS-14, RSS-Limited, RSS-Expand)</i> <u>Supported Symbologies - 2D Imager:</u> <i>PDF417, QR Code(QR1, QR2, Micro QR), Data Matrix (ECC200, ECC000, 050, 080, 100, 140)</i> |
| Smart Card Reader (Optional) | Primary smart card reader support for synchronous and asynchronous smart cards. |
| I/O Connectors | MPOS: 9-pin Lightning™ Connector and 10-pin female Mini-B USB connector |
| | MPOS FLAT: 10-pin female Mini-B USB connector |
| Indicators | Visual: 4 LEDs for transaction status (<i>NFC only</i>) |
| | Audible: Internal electro-magnetic buzzer |
| Bluetooth | Available Bluetooth 3.0 SPP/iAP (or optional 2.0 SPP only) compatibility, to allow connection with a Bluetooth peripheral, such as a printer, or an iOS device. |
| Security | PCI PTS 3.x SRED certification for debit and credit card transactions with PIN entry. |

PRODUCT OVERVIEW

Front Panel

The Front Panel of the Infinea mPOS includes the following features:



Figure 1: mPOS Front View

Back Panel

The Back Panel of the Infinea mPOS includes the following features:



Figure 2: mPOS Back View



Figure 3: mPOS Back/Side View

Note: Infinea mPOS Flat model comes with flat black panel. Integraton of iOS device is not required.



Figure 4: mPOS Bottom View

CONNECTING YOUR INFINEA MPOS WITH THE iOS DEVICE

Inserting the iPod/iPhone into the Infinea mPOS

1. Slide the top section of the Infinea mPOS back cover up and then tilt it back to open, as shown in the illustration below.
2. Insert the iPod or Phone with the screen oriented away from the keypad on the Infinea mPOS unit.
3. Tilt the back cover up and slide it back down into place to close the unit.

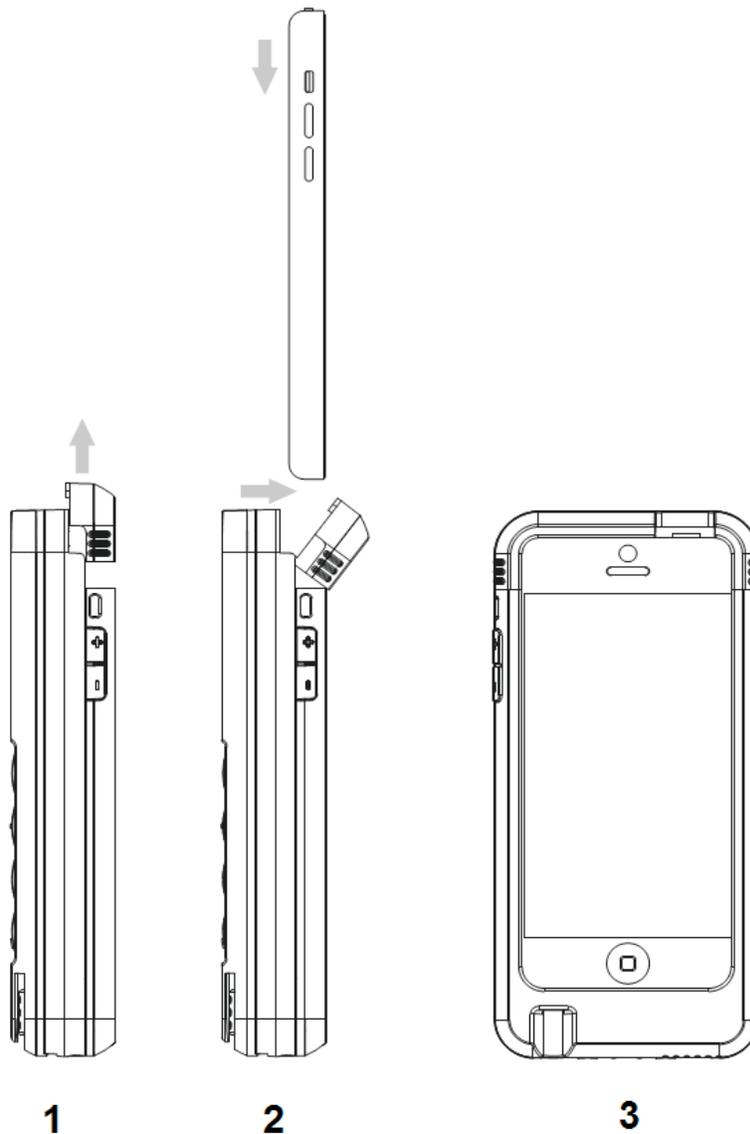


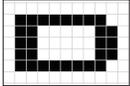
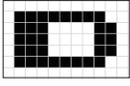
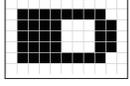
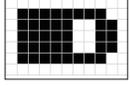
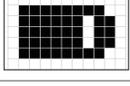
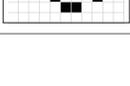
Figure 5: Inserting the iPod/iPhone into the Infinea mPOS

(Note: Integration with iOS device is not required for mPOS Flat version)

CHARGING YOUR INFINEA MPOS & MPOS FLAT

The Infinea mPOS battery may be charged using a mini USB power adapter connector through a USB cable, or by inserting it into a charging station. The time from zero charge to full charge is approximately 3 hours.

Battery Level Status Display Indicators

| | |
|---|---|
| <u>1 Line =</u> Battery level is \geq 3.6V |  |
| <u>2 Lines =</u> Battery level is \geq 3.7V |  |
| <u>3 Lines =</u> Battery level is \geq 3.8V |  |
| <u>4 Lines =</u> Battery level is \geq 3.8V |  |
| <u>5 Lines =</u> Battery level is \geq 4.0V |  |
| <u>6 Lines =</u> Battery level is \geq 4.1V |  |
| Outside power from USB cable or Power station - “Plug” |  |
| Battery is charging from USB cable or Power station - “Flash” |  |
| “USB” - connection with iPhone (<i>not applicable for Flat version</i>) |  |

As a mobile device, the Infinea mPOS is battery operated. During normal operation, the device’s battery is constantly discharging. When there is not enough power to continue operation, a “BATTERY LOW” message will appear on the screen. The Infinea mPOS battery should be charged as soon as possible, but no later than 25 days after the message first displays. Failure to charge the device within 25 days can lead to deactivation of the device and deletion of all stored encryption keys, requiring the device to be sent to a secure facility for reactivation.

Note:

-  *To minimize the potential for deactivation, follow all storage and operating temperature guidelines. See section titled **TECHNICAL DATA** for additional information.*
-  *Long term storage can cause temporarily decreased battery capacity. In order to recover maximum performance, it may be necessary to go through several cycles of fully charging and discharging the battery.*
-  *When storing the device for longer than 3 months, the battery should be charged every 3 months at a minimum to prevent leakage, reduced performance and potential deactivation.*

CAUTION:

To replace the main battery of Infinea mPOS, please contact your Infinite Peripherals representative or certified service center before attempting to open the Infinea mPOS device.

Attempting to disassemble an SRED encrypted Infinea mPOS device will render the unit unusable and may impact your warranty.

KEYPAD AND MENU NAVIGATION

The following keypad buttons are used to access and navigate through the various screens and menu options:



Figure 5: Infinea mPOS Keypad

| Button | Function | Description |
|---|---------------|--|
|  | <POWER> | Powers on the Infinea mPOS unit. |
|  | <SYSTEM MODE> | Enters System Mode from home screen. |
|  | <UP> | Scrolls up through the menu options |
|  | <DOWN> | Scrolls down through the menu options |
|  | <OK> | Selects the active option |
|  | <CLEAR> | Returns to previous level or exit the service mode |

Note: The Infinea mPOS and mPOS Flat have ADA compliant keypads. The “Clear”, “OK”, Backspace and the number 5 key have distinct, raised markings at the bottom left corner of each key.

POWERING ON YOUR INFINEA MPOS

To power on the Infinea mPOS, press the **<POWER>** button at the top-right corner of the keypad. Once powered on, the name and version of the Secure Boot Loader and the firmware will be shown on the display.

WARNING:



To prevent risk of shock or damage, DO NOT use the Infinea mPOS unit near water or while you are wet.

STATUS AND OPERATIONAL MODES

The following modes are used for configuration, system test and device status:

- **SYSTEM MODE**
- **SERVICE MODE** (*Service Center use only*)
- **APPLICATION DOWNLOAD MODE** (*Service Center use only*)

The following pages describe in detail how to access and navigate available menu options.

Accessing and Navigating System Mode

System Mode may be accessed by powering on the mPOS unit and pressing the **<SYSTEM MODE>** button on the keypad. The menu options below are available in System Mode and are explained on the following pages.

- Info Version
- Info Hardware
- Settings
- Test Display
- Test Keyboard
- Test MSR
- Test SCR
- Test Font0
- Test Font1

SYSTEM MODE > Info Version

Listed in the table below are the display fields and additional menu options available through the **Info Version** menu option. A description and example of the screen is provided for each.

| Field Label | Description | Example |
|------------------|--|---|
| DEV SN: | Displays the Infinea mPOS serial number |  |
| USIP SN: | Displays the USIP serial number | |
| USIP VER: | Displays the current USIP version |  |
| ISBL VER: | Displays the current USIP Boot loader version | |
| HAL VER: | Displays the current USIP Hardware Abstraction Layer (HAL) version | |

| Field Label | Description | Example |
|------------------|---|--|
| LOAD VER: | Displays current Secure Boot Loader (SBL) version and name |  |
| FW VER: | Displays current Firmware version and name | |
| PINUTIL: | Displays current library version |  |
| PKFA VER | Displays current Version of the public key used for firmware authentication. | |
| PKAA VER: | Displays current Version of the public key used for application authentication |  |
| PKKA VER: | Displays current Version of the public key used for manufacturing keys authentication | |

SYSTEM MODE > Info Hardware

Listed in the table below are the display fields available through the **Info Hardware** menu option. A description and example of the screen is provided.

| Field Label | Description | Example |
|----------------|--|--|
| BATT: | Displays the voltage of the 1300 mAh battery |  |
| VBUS: | Indicates if external power supply is plugged in | |
| CHARGE: | Indicates if the battery is charging | |
| BLOW: | Identifies low battery condition | |
| BLT: | Identifies Bluetooth connection | |

SYSTEM MODE > Settings

Listed in the table below are the display fields and additional menu options available through the **Settings** menu option. A description and example of the screen is provided for each.

| Field Label | Description | Example |
|------------------|---|--|
| RS SPEED: | <p>Select from the following setting options:</p> <ul style="list-style-type: none"> • 9600 • 19200 • 36400 • 57600 • 115200 (<i>Default</i>) <p><i>Default RS232 serial port communication parameters:</i></p> <ul style="list-style-type: none"> • 115200bps • 8bit • 2stop bit • No parity |  |
| USB MODE: | <p>Select from the following setting options:</p> <ul style="list-style-type: none"> • HOST (<i>for connecting with iOS device</i>) • DEVICE • DISABLE <p><i>Default USB VC serial port communication parameters:</i></p> <ul style="list-style-type: none"> • 115200bps • 8bit • 1 stop bit • No parity |  |

| Field Label | | Description | Example |
|-------------|--|--|---|
| BLUETOOTH | MODE: | Select from the following setting options: <ul style="list-style-type: none"> ENABLED DISABLED |  |
| | ADDR: | MAC ADDRESS of the Bluetooth | |
| | NAME: | Displays the Bluetooth name | |
| | PASS: | Displays the Bluetooth password | |
| PAIR: | PAIR: | Select from the following setting options: <ul style="list-style-type: none"> DISCOVERABLE HIDDEN |  |
| | AUTO: | Select from the following setting options: <ul style="list-style-type: none"> ENABLED DISABLED | |
| | VER: | Displays the current Version | |
| | MASTER RESET | Returns the unit to default settings | |
| | PAIRING | Displays the mPOS serial number for pairing. | |
| FW UPDATE | Enters the unit into Firmware Update mode. |  | |

| Field Label | Description | Example |
|-----------------------|--|---|
| AUTO OFF: | <p>Select from the following setting options:</p> <ul style="list-style-type: none"> • DISABLED • 1min • 5min • 10min • 15min • 30min • 45min • 60min (Default) • 120min • 180min • 240min |  <p>The screenshot shows the 'SETTINGS' menu with the following items: USB MODE (HOST), BLUETOOTH, and AUTO OFF (10MIN). A hand icon is pointing at the BLUETOOTH option.</p> |
| HOTSYNC | <p>Select from the following setting options:</p> <ul style="list-style-type: none"> • DISABLED • ENABLED <p><i>Note: When a USB cable is connected and HotSync is enabled, the iOS device is able to sync data with a PC. When HotSync is disabled, the iOS device will receive pass-through charge and communicate with the Infinea mPOS.</i></p> |  <p>The screenshot shows the 'SETTINGS' menu with the following items: BLUETOOTH, AUTO OFF (10MIN), and HOTSYNC (DISABLE). A hand icon is pointing at the BLUETOOTH option.</p> |
| CHARGE CURRENT | <p>Select from the following setting options:</p> <ul style="list-style-type: none"> • 0mA (Default) • 500mA • 1000mA <p><i>Note: When charging current is 0mA, charge is disabled</i></p> |  <p>The screenshot shows the 'SETTINGS' menu with the following items: AUTO OFF (10MIN), HOTSYNC (DISABLE), and CHARGE CURRENT (500). A hand icon is pointing at the CHARGE CURRENT option.</p> |

SYSTEM MODE > Test Display

To Adjust the Display Contrast:

1. Using the <UP> and <DOWN> buttons, adjust the percentage for the display contrast. The current percentage is displayed at the bottom center of the screen.
2. Press the <CLEAR> button on the keypad to exit Test Display function.



SYSTEM MODE > Test Keyboard

To Test the Keyboard:

1. Press any of the keys on the keypad to confirm recognition by the device.
2. Press the **<CLEAR>** button on the keypad to exit Test Display function.



SYSTEM MODE > Test MSR

To Test the Magnetic Stripe Reader:

1. Swipe a card, with the magnetic stripe face down (in either direction) through the MSR reader on the device. If the card is read successfully, the tracks data are displayed on the screen.
2. Press the **<CLEAR>** button on the keypad to exit the Test MSR function.

See section titled **MAGNETIC CARD READER for further instruction on using this feature.*



SYSTEM MODE > Test SCR

To Test the Smart Card Reader:

1. Insert a card in the card slot and select the corresponding menu option.
 - **RESET:** Performs card reset and returns the ATR
 - **GET CHALLENGE:** Calls the command GET CHALLENGE and returns a random number.
2. Press the **<CLEAR>** button on the keypad to exit Test SCR function.

See section titled **SMART CARD READER for further instruction on using this feature.*



SYSTEM MODE > Test Font0

To Test the Loaded Fonts:

1. Press the <CLEAR> button on the keypad to exit Test Font 0 function.



SYSTEM MODE > Test Font1

To Test the Loaded Fonts:

1. Press the <CLEAR> button on the keypad to exit Test Font 1 function.



Accessing and Navigating Service Mode

Service Mode should only be accessed by an authorized service center.

CAUTION:



Selecting certain options or keys in Service Mode may render the device unusable and require the reactivation of the device.

Accessing and Navigating Application Download Mode

Application Download Mode should only be accessed by an authorized service center.

CAUTION:



Selecting certain options or keys in Application Download Mode may render the device unusable and require the reactivation of the device.

USING YOUR INFINEA MPOS

Pairing the Infinea mPOS Flat with a Bluetooth Compatible Device

1. After your Infinea mPOS Flat device is charged, power the unit on by pressing the **<POWER>** button.
2. Turn the Bluetooth option on in your compatible device's settings.
3. Press the **<SYSTEM MODE>** button on the Infinea mPOS device to access System Mode.
4. Press the **<DOWN>** button to locate and select the **Settings** menu option.
5. Press the **<OK>** button.



6. Press the **<DOWN>** button to locate and select the **Bluetooth** menu option.
7. Press the **<OK>** button.



8. Press the **<DOWN>** button to locate and select the **Pairing** menu option.
9. Press the **<OK>** button.



10. Confirm the device being paired on your Bluetooth compatible device.

11. Press the **<CLEAR>** button once to return to the previous screen, or continue pressing to return to the home screen.

Barcode Scanner

The barcode scanning procedure can vary depending on the POS application loaded on the iPod or iPhone.

Verify the proper procedure with your POS application provider before performing a barcode scanning procedure.

To Use the Barcode Scanner:

1. Point the scanner end of the Infinea mPOS toward the barcode.
2. Press Scan button.



Figure 6: mPOS/MPOS Flat Barcode Scanner

Smart Card Reader

The smart card transaction procedure can vary depending on the application loaded on the Infinea mPOS. Verify the proper procedure with your application provider before performing a smart card transaction.

To Use the Smart Card Reader:

1. Position the smart card with the gold contacts face up.
2. Insert the card into the ICC card reader slot in a smooth, continuous motion until it seats firmly.
3. Provide the Infinea mPOS to the customer for PIN entry.
4. Remove the card when the display indicates the transaction is completed.

Note:



Do not remove smart card from the card reader until the transaction is completed. Removing the card too quickly may void the transaction.

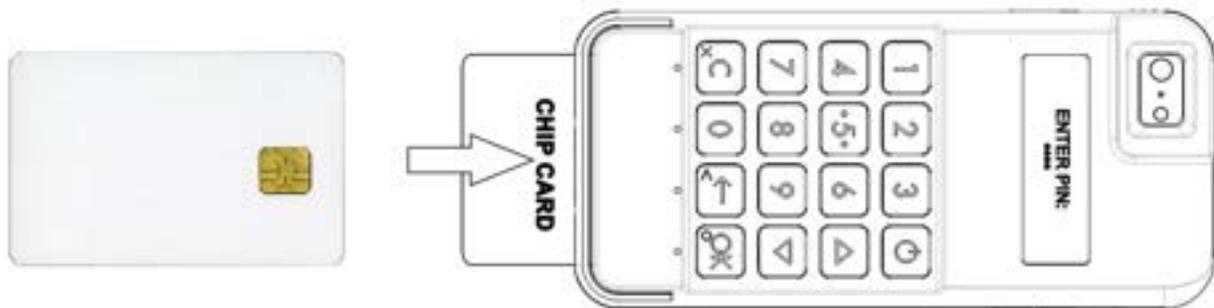


Figure 7: Smart Card Reader

Contactless Card Reader *(Optional)*

The Infinea mPOS has a built-in tag/card reader for NFC payments.

To Use the Contactless Card Reader:

1. Place the RFID tag/card over the receiver/transmitter as indicated by the NFC label on the front of the mPOS unit.
2. Press the reading RFID card button on the application. The data will be sent from Infinea mPOS reader to the iOS Device. **Note:** See *NFC LED Indicator table below for an explanation of the status indicators.*

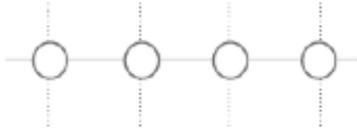
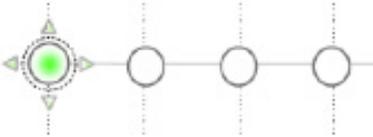
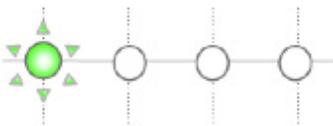
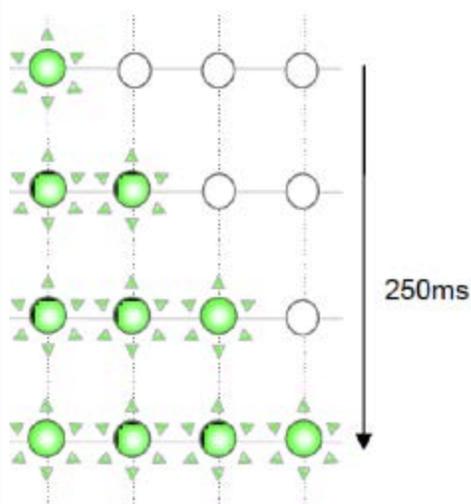
Note:

- i** Do not remove the card from the receiver/transmitter until the transaction is completed. Removing the card too quickly may void the transaction.



Figure 8: Contactless Card (RFID) Reader

RFID LED Indicators

| Status/ Event Name | Short Description | Indicators |
|-------------------------------|--|---|
| Not Ready | The reader is not powered on. |  |
| Idle | The first indicator blinks every five seconds. The reader is powered on, but is not ready to read a card. |  |
| Ready to Read | First indicator displayed is solid green. The reader has all the required information to initiate a contactless payment transaction. |  |
| Card Read Successfully | Contactless application process was completed successfully. The cardholder may remove their card from the reader. |  |

Magnetic Stripe Reader

The magnetic card transaction procedure can vary depending on the application loaded on the Infinea mPOS. Verify the proper procedure with your application provider before performing a magnetic card transaction.

To Use the Magnetic Stripe Reader:

1. Position a magnetic card with the stripe face down.
2. Insert the card into the MS card reader slot and then quickly swipe it through.
3. Provide Infinea mPOS to the customer for signature or PIN entry.

IMPORTANT: Cardholders should be advised to keep the device close to them to during PIN code entry to prevent others around them from obtaining their information.



Figure 9: Magnetic Card Reader

SERVICING YOUR INFINEA MPOS

The Infinea mPOS unit contains no user-serviceable parts. Please contact your Infinite Peripherals representative or certified service center before attempting to open the Infinea mPOS device.



Figure 10: Servicing

CAUTION:



Attempting to disassemble an SRED encrypted Infinea mPOS device will render the unit unusable and may impact your warranty.

SRED INFORMATION

Integrating the PCI PTS 3.x SRED certified Infinea mPOS into your solution requires proper maintenance. To ensure long and trouble free operation of the Infinea mPOS and to prevent the device from entering a tamper state includes:

- Maintaining proper battery charge. The shelf life from full charge to battery discharge may be several years, however it is important that battery levels be continually monitored because once the battery power is depleted or the battery is removed, the security system will erase all sensitive data, requiring a re-deployment of the unit.
- Protect the unit from any potential physical damage such opening the unit, cutting, drilling, dropping or any similar type of action.
- Use of approved chargers which supply sufficient charging current. Connecting an unapproved charger may lead to electrical damage and/or cause security sensor malfunction.

To prevent downtime caused by the security feature becoming disabled:

- Always place the Infinea mPOS on charging station when not in use for extended periods.
- Do not allow the Infinea mPOS battery to fully discharge.
- Do not attempt to remove the battery from the Infinea mPOS unit.

CAUTION:



If the Infinea mPOS battery is fully discharged and enters Tamper Detect Mode, the unit may only be reactivated at IPC or an authorized service facility.

TROUBLESHOOTING

The troubleshooting guidelines provided in the following section are included to assist in the successful installation and configuration of Infinea mPOS units.

If you are having problems operating your Infinea mPOS unit, first verify that there is power to the device and that it is powered on and sufficiently charged.

See section titled **CHARGING YOUR INFINEA MPOS/MPOS FLAT** for additional information on charging your device.

Once power and proper battery charge has been confirmed, please review the appropriate sections below for additional troubleshooting options. If the problem persists or the problem is not described below, contact technical support at **support@ipcmobile.com**. Your unit may need to be returned for servicing.

Troubleshooting > General

| Problem | Possible Cause | What To Do |
|--|---|--|
| Blank Display | <ul style="list-style-type: none"> Infinea mPOS is not powered on by the software | <ul style="list-style-type: none"> Verify power and proper charging. Run Test Display option to verify there is sufficient screen contrast. |
| Keypad does not respond | <ul style="list-style-type: none"> Infinea mPOS is not powered on by the software Faulty keypad | <ul style="list-style-type: none"> Verify power and proper charging. Run Test Keyboard option to verify keys are recognized when pressed. Attempt the transaction using another device, if available. |
| Infinea mPOS won't connect to the iOS device <small>(not applicable for mPOS Flat version)</small> | <ul style="list-style-type: none"> iOS device is not making proper contact with the Infinea mPOS | <ul style="list-style-type: none"> Verify power and proper charging. Ensure iOS device is fully inserted into the unit and seated properly on the Lightning connector. |
| Infinea mPOS connects, but won't accept payment | <ul style="list-style-type: none"> The card could not be read Device is in a tampered state | <ul style="list-style-type: none"> Attempt the transaction using another device, if available. |

Troubleshooting > Magnetic Stripe Reader

If the Infinea mPOS is not reading magnetic stripe cards properly, first verify that there is power to the device and that it is powered on and sufficiently charged. Then, refer to the table below for additional troubleshooting options:

| Problem | Possible Cause | What To Do |
|---|--|--|
| No data is returned when card is swiped | <ul style="list-style-type: none"> • Incorrect swipe method used • Faulty read head • Magnetic stripe is unreadable • Secured head reader requires decryption of encrypted data • Device is in a tampered state | <ul style="list-style-type: none"> • Swipe the card again following the instructions under section of this manual titled MAGNETIC STRIPE READER. • Run a test transaction with another magnetic stripe card under the Test MSR menu option to determine if the card may be defective. |
| Only partial data is returned when card is swiped | <ul style="list-style-type: none"> • Swipe method is incorrect • Faulty read head • Magnetic stripe is unreadable | <ul style="list-style-type: none"> • Process transaction manually using keypad. • Attempt the transaction using another device, if available, to determine if the device is defective. |

Troubleshooting > RFID Reader

If the Infinea mPOS is not reading RFID Tags/Cards properly, first verify that there is power to the device and that it is powered on and sufficiently charged. Then, refer to the table below for additional troubleshooting options:

| Problem | Possible Cause | What To Do |
|---|--|--|
| No data being returned during RFID reading | <ul style="list-style-type: none"> • Card not located close enough to receiver/transmitter • Unreadable RFID tag/card • Faulty RFID reader • Software not decoding correctly | <ul style="list-style-type: none"> • Hold the card closer to the RFID label and attempt to read the card again, following the instructions under section of this manual titled CONTACTLESS CARD READER. • Attempt the transaction using another device, if available. |
| Only partial data is returned during RFID reading | <ul style="list-style-type: none"> • Unreadable RFID tag/card • Faulty RFID reader • Software not decoding correctly | <ul style="list-style-type: none"> • Attempt the transaction using another device, if available. |
| Unable to read certain RFID Tags/Cards | <ul style="list-style-type: none"> • RFID type is not compatible. • RFID type is not supported. <p>See Technical Data for additional information.</p> | <ul style="list-style-type: none"> • Verify RFID type is compatible/supported. • Attempt the transaction using another device, if available. |

Troubleshooting > Smart Card Reader

If the Infinea mPOS is not reading smart cards properly, first verify that there is power to the device and that it is powered on and sufficiently charged. Then, refer to the table below for additional troubleshooting options:

| Problem | Possible Cause | What To Do |
|---|--|--|
| No data returned when card is swiped | <ul style="list-style-type: none"> Card was not inserted correctly Smart card is unreadable Device is in a tampered state | <ul style="list-style-type: none"> Insert the smart card again following the instructions under section titled SMART CARD READER. Run a test transaction using a different smart card under the Test SCR menu option to determine if the card may be defective. Attempt the transaction using another device, if available, to determine if the device is defective. |
| Only partial data returned when card is swiped | <ul style="list-style-type: none"> Card was not inserted correctly Smart card is unreadable | |

Troubleshooting > Barcode Scanner

If the Infinea mPOS is not reading barcodes properly, first verify that there is power to the device and that it is powered on and sufficiently charged. Then, refer to the table below for additional troubleshooting options:

| Problem | Possible Cause | What To Do |
|--|---|---|
| Scanner does not operate | <ul style="list-style-type: none"> Faulty scan engine | <ul style="list-style-type: none"> Attempt the transaction using another device, if available. If the other device processes the transaction successfully, return the faulty device for servicing. |
| No data/partial data returned when barcode is scanned | <ul style="list-style-type: none"> Barcode is unreadable Software decoded incorrectly Faulty scan engine | |
| Unable to perform multi-scanning | <ul style="list-style-type: none"> Multi-scan mode not enabled Software does not support multi-scans | <ul style="list-style-type: none"> Verify multi-scan mode is enabled. Verify that device software version supports multi-scan. |
| No audible beep when barcode is scanned | <ul style="list-style-type: none"> Sound mode not enabled | <ul style="list-style-type: none"> Verify Beep Upon Scan mode is enabled. |
| Unable to scan certain barcode symbols | <ul style="list-style-type: none"> Barcode type is not enabled Barcode type is not supported | <ul style="list-style-type: none"> Ensure barcode type has been enabled. Verify barcode type is supported by your device. |

TECHNICAL DATA

| | mPOS | mPOS Flat |
|--|---|--|
| MECHANICAL | | |
| Processor | Maxim USIP Professional, version IC400C | |
| Memory | 128KB of SRAM 256KB of Lockable Flash Memory 128 KB of ROM | 128KB of SRAM 256KB of Lockable Flash Memory 128 KB of ROM 32KB FRAM (Optional) |
| Application Memory | 8MB applicable accessible flash | |
| Display | LCD, Monochrome, 128 x 32 pixel | |
| Compatibility | iPhone 5C/5S, iPod touch (5th and 6th generations) | Any Bluetooth device with iOS, Android™, Windows®, Windows Phone® 8, Windows Mobile |
| Connectivity | Apple Lightning™ connector | RS-232 Bluetooth (*Optional - SPP/iAP) |
| Weight <i>(without iOS Device)</i> | 188g (6.63 oz) | 182g (6.42 oz.) |
| Dimensions | 145mm (l) x 68mm (w) x 27mm (h) (5.7" x 2.7" x 1.1") | 145mm (l) x 68mm (w) x 23mm (h) (5.7" x 2.7" x .91") |
| Buttons | Scan button | |
| | Keypad: On/Off, OK, Up, Down, Clear and 10 numeric keys | |
| Port | Mini USB for charge and sync | Mini USB for charge |
| ELECTRICAL | | |
| Barcode Scanner | Newland 2D High Speed Imager Supported Symbolologies -1D Barcode Scanner: <i>Code128, UCC/EAN-128, AIM 128, EAN-8, EAN-13, ISBN/ISSN, UPC-E, UPC-A, Interleaved 2 of 5, ITF-6, ITF-14, Matrix 2 of 5, Industrial 25, Standard 25, Code39, Codabar, Code 93, Code 11, Plessey, MSI-Plessey, GS1-DataBar™(RSS) (RSS-14, RSS-Limited, RSS-Expand)</i> | |
| | Supported Symbolologies - 2D Imager: <i>PDF417, QR Code(QR1, QR2, Micro QR), Data Matrix (ECC200, ECC000, 050, 080, 100, 140)</i> | |
| Battery Capacity | Rechargeable Li-ion 3.7V, 1330mAh | |
| Battery Life | Approximately 500 transactions per fully charged battery. | |

| | | |
|--|--|--|
| Smart Card Reader | ISO ISO7816, EMV L1 Certified | |
| Magnetic Card Reader | 3-track bi-directional reading ISO 7810, 7811 and 7813 | |
| Contactless Card Reader (<i>NFC payment applications</i>) | <ul style="list-style-type: none"> • AMEX ExpressPay MagStripe and EMV • Discover ZIP and D-PAS • MasterCard PayPass MagStripe and M/Chip • VISA PayWave MSD and qVSDC | |
| Encryption & Key Management | 3DES, RSA 2048-bit, AES 128/256 | |
| | DUKPT, Master/Session, MAC | |
| Bluetooth | Bluetooth 2.0 (SPP) and 3.0 (SPP/IAP) Class 2 compatible | |
| Indicators | Visual: 4 LEDS for transaction and device status | |
| | Audio: Electromagnetic Buzzer | |
| CERTIFICATIONS | | |
| FCC/CE, Apple MFi, PCI PTS 3x SRED, EMV L1, EMV L2, EMV L1 Contactless | | |
| ENVIRONMENT | | |
| Temperature | Operation: -10°C to +40°C (14°F to +104°F) | |
| | Storage: -20°C to +50°C (-4F to +122°F) | Storage: -15°C to +50°C (5F to +122°F) |
| Humidity | Operation: 5 to 90% RH | |
| | Storage: 5 to 90% RH | |

CLEANING YOUR INFINEA MPOS

To clean the unit, use a clean cloth slightly dampened with water and a drop or two of mild soap. For stubborn stains, use alcohol or an alcohol-based cleaner.

CAUTION:



Never use thinner, trichloroethylene, or ketone-based solvents as they can deteriorate plastic or rubber parts.



DO NOT spray cleaners or other solutions directly onto the keypad or display.



DO NOT attempt to clean the card readers. Doing so may void the warranty. Please contact your Infinite Peripherals representative or certified service center to service the Infinea mPOS device.

WARRANTY

Infinite Peripherals (IPC) does not warrant, and is not responsible for, any smart phone or other device made by anyone other than IPC or approved manufacturer. If a material or workmanship defect arises with regard to any IPC product, and a valid claim is received within the Warranty Period, IPC (at IPC's sole discretion) will:

- (1) Repair the Infinea mPOS product using new or refurbished parts, or
- (2) Replace the Infinea mPOS product with a new or refurbished Infinea mPOS 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., and 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

Visit our online support center at <http://ipcmobile.com/support/rma-support.html>. Use the link provided 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 an RMA

1. Create a user account in the RMA Support Portal at <http://ipcmobile.com/support/rma-support.html>.
2. Log in to your user account and click on the the “Open a New RMA” option.
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 at the address provided.

SYMBOLS FOR USE

| Symbol | Definition |
|---|---|
|  | Consult Instructions for Use |
|  | Manufacturer |
|  | Manufacture Date |
|  | Caution |
|  | Serial Number |
|  | Part Number |
|  | Waste Electrical and Electric Equipment |
|  | Mark of conformity to European Union Directives |
|  | Complies with part 15 of the FCC rules. |

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.