



Infinite  
Peripherals™



**INFINEA BLUEPAD** USER MANUAL

**INFINEA BLUEPAD™**

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**Infinite  
Peripherals™**

## **LEGAL NOTICE**



“Made for iPod,” and “Made for iPhone,” mean that an electronic accessory has been designed to connect specifically to 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.

## **COMPATABILITY**

Compatible with

iPhone 5	iPod touch (5 <sup>th</sup> generation)
iPhone 4S	iPod touch (4 <sup>th</sup> generation)
iPhone 4	iPod touch (3 <sup>rd</sup> generation)
iPhone 3GS	iPod touch (2 <sup>nd</sup> generation)
iPhone	iPod touch (1 <sup>st</sup> generation)
iPad (4th generation)	iPod classic
iPad mini	
iPad (3rd generation)	
iPad 2	
iPad	

Compatible with

Android OS 2.1 or higher

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.

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# OVERVIEW

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The Infinea BluePad is a handheld PIN pad with integrated smart and magnetic stripe card reader which communicates over Bluetooth®. The Infinea BluePad is compatible with Android and iOS mobile devices.

## FEATURES

Battery	Rechargeable Li-Poly 3.7V - 270 mAh Charging via USB cable or Power Station
Magnetic Card Reader	3-Track Hi coercivity Bi-directional reading capabilities
Smart Card Reader	ISO 7816 cards Supports synchronous and asynchronous smart cards Supports international characters sets and Unicode standard EMV Level 1 EMV Level 2 PCI PTS 3.x SRED Certification
PIN Pad	Colored control keys
Display	Readable display handles multiple languages
Encryption and Key Management	AES, DES, 3DES, RSA Key management schemes-single and 3DES Master Session, Single and 3DES Derived Tamper detection circuitry to resist unauthorized intrusion
I/O Connectors	mini USB

## TECHNICAL DATA

<b>Electrical</b>	
External and Charge Power Supply	5 VDC via USB
Compatibility	Apple - iPod, iPhone, iPad and iPad mini Android - OS 2.1 or higher
Battery Power Supply	Li-Poly 3.7V, 270mAh
Bluetooth Communication	Supports iAP and Serial Port Profile (SPP)
Operations Modes	Active (Power On) Power Off (after 2 second idle)
MCU	128KB of SRAM 256KB of Lockable Flash Memory 256 Bytes of User OTP 128KB of ROM (HAL, EMV Level 1, Secure Bootloader)
Application Memory	32 Mb application accessible flash 16 Mb application accessible SRAM
Encryption Methods	PIN Pad and Bluetooth: DES and 3DES DUKPT/AES-256 encryption algorithms Magnetic Strip Reader and Smart Card: AES-256/3DES DUKPT
Communications	Mini-USB connector supports RS-232, USB Client
KeyPad	10 numeric and 6 functional keys
Smart Card Reader	ISO 7816, cards; EMV Level 1 Type Approved
Magnetic Stripe Reader	3-track hi-coercivity bi-directional reading capabilities
<b>Mechanical</b>	
Dimensions	68.5 x 110 x 13 mm (WxDxH)
Display Dimensions	128 x 32 pixels monochrome LCD display
Weight	4.2 ounces
<b>Environment</b>	
Operating temp/Humidity Storage Temp/Humidity	0° to 40°C/35 to 85% RH -10° to 50°C/ 5 to 90% RH
Reliability	200,000 minimum card insertions 200,000 minimum magnetic card swipes Up to 1,000,000 key strokes (per key)
<b>Software</b>	
Software Support	SDK for iOS and Android OS platforms
<b>Certifications</b>	
PCI EMV	PCI PTS 3.xSRED EMV Level 1 EMV Level 2; Type 21

\*Specifications subject to change without notice.

## **BOX CONTENTS**

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Your Infinea BluePad will ship with the items listed below.

Infinea BluePad



mini-USB charge / sync cable\*



\*Bulk shipments may ship without cables in each box

## **SOFTWARE: DRIVERS & SDK**

Because of the continually evolving SDK, the latest SDK are not distributed on CD.

For the latest Infinea BluePad SDK's, please visit our developer portal:

[www.ipcprint.com/developer](http://www.ipcprint.com/developer)

# GETTING STARTED

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The Infinea BluePad allows customers to capture magnetic strip and smart card information onto a mobile device. Before using your Infinea BluePad the battery should be properly charged. The following table will help to get your Infinea BluePad ready for use.

## Quick Start Guide

Step	What to do	Purpose	Where to find more information
1	Fully charge your Infinea BluePad as recommended	The battery pack should be fully charged before use to ensure long battery life.	Charging Battery, Page 8.
2	Install Software	Smart Card and Magnetic Stripe reading requires software to be installed onto your device.	Software is not provided with the Infinea BluePad. Please contact your reseller or Infinite Peripherals for Third-Party software solution options.  Developers should refer to the section in this manual on "Developing Applications" Page 12.
3	Turn On Infinea BluePad	Capture MSR and Smart Card data.	Power button location, Page 7.

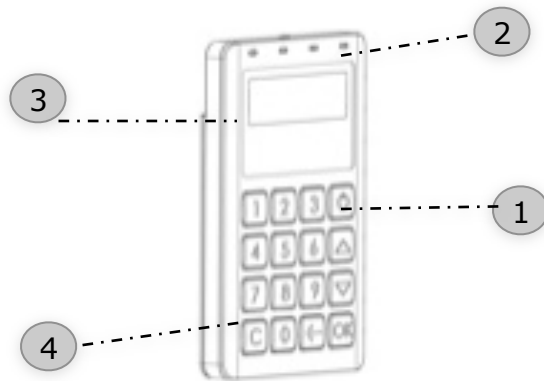


# ABOUT YOUR INFINEA BLUEPAD

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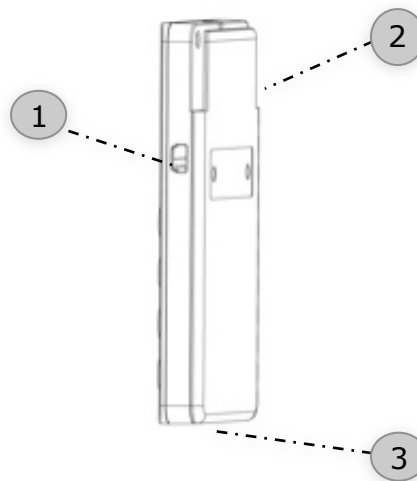
## Front

1. Power Button
2. Indication LEDs
3. Graphic display
4. Keyboard



## Back

1. Mini-USB power and Communication connector for RS-232 cable
2. Magnetic Strip Card reader slot
3. Smart Chip card reader slot



## User Notes

Software must be used to process the information captured by the PIN Pad and magnetic stripe and smart card reading features. Please consult your reseller for this software or contact Infinite Peripherals for recommendations on compatible third party software solutions.

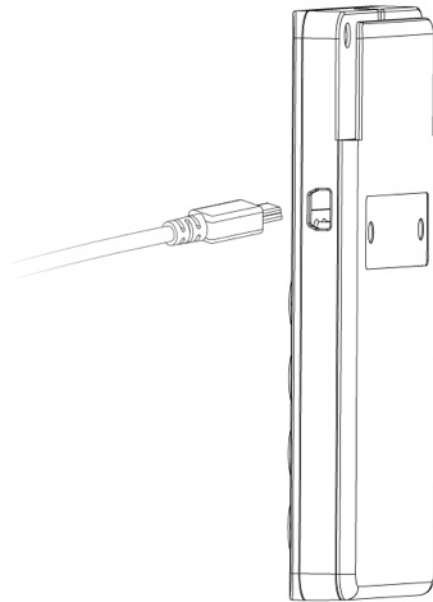
## **BATTERY CHARGING**

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The Infinea BluePad uses a Lithium Ion rechargeable battery. Before first use, the battery pack should be charged for at least (4) hours.

To prevent electrical damage to the Infinea BluePad and/or battery, please use approved mini USB cables only.

1. Connect mini USB charger cable as shown below.
2. When charging, plug icon appears next to battery on PIN Pads display. (PIN Pad must be turned on to show display)



## **BATTERY STATUS**

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The Infinea BluePad uses the battery indicator to display the following hardware properties. The table below explains these the hardware status.

This can be viewed in the Infinea BluePad “Info Hardware” menu.

### **Operating Status**

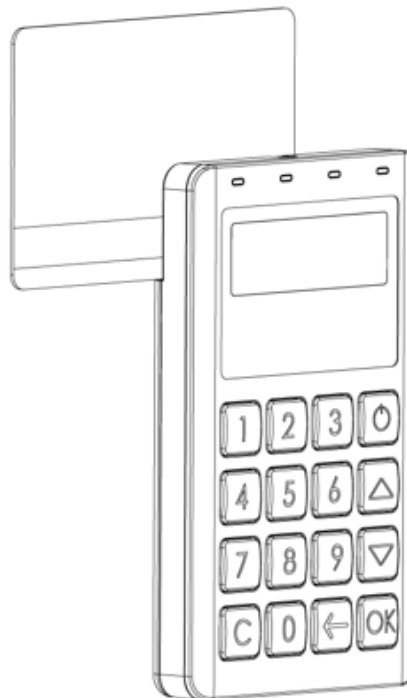
BATT	Indicates the voltage of the 279 mAh battery
VBUS	Indicates if external power supply is plugged in
CHARGE	Indicates if the battery is charging
BATLOW	Identifies low battery
BTCON	Shows active Bluetooth connection

## **FEATURES - MAGNETIC CARD READER**

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The Infinea BluePad has a integrated magnetic card reader. The card reader supports triple track which requires one swipe to read all three tracks.

1. To capture MSR information, position the magnetic card with the strip facing down.
2. Insert the card into the MSR reader slot.
3. Keep the edge of the card flat on the inner edge of the reader.
4. Quickly swipe to the left or right.
5. Hand the Infinea BluePad to the customer for signature or PIN entry.



## **FEATURES - SMART CARD READER**

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The Infinea BluePad has a built-in smart card reader to capture smart card data.

1. Position the smart card with gold contacts facing upward.
2. Insert into the smart card reader slot in a smooth continuous motion until it seats firmly.
3. Hand the Infinea BluePad to the customer for PIN entry.
4. Remove the card when the display indicates the transaction is complete.



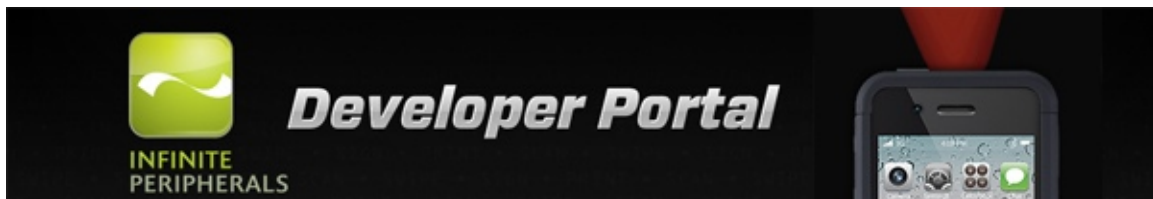
## ***DEVELOPING APPLICATION***

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Integrating the Infinea BluePad into your app requires the use of the Infinea BluePad SDK. The SDK incorporates an API specifically for developing applications to use the barcode scanning and card reading capability of the Infinea BluePad.

For details on using the Infinea BluePad SDK, please refer to the SDK's documentation.

For the latest Infinea BluePad SDK's, please visit our developer portal.



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

# ***TROUBLESHOOTING -MAGNETIC CARD READER***

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<b>Item</b>	<b>Problem</b>	<b>Possible Cause</b>
1	Blank Display. Unit display does not show correct or clear readable information	Check battery power.
2	PIN Pad does not respond	Check the display. If its not blank follow steps outline in "Transactions Fail to Process.
3	Transactions fail to process	<ol style="list-style-type: none"><li>1. Perform a test transaction using one or more different magnetic strip cards to ensure the problem is not a defective card.</li><li>2. Ensure that you are swiping cards properly see page 10.</li></ol>

## **TROUBLESHOOTING - SMART CARD READER**

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<b>Item</b>	<b>Problem</b>	<b>Possible Cause</b>
1	Blank Display. Unit display does not show correct or clear readable information	1. Check battery power.
2	PIN Pad does not respond	2. Check the display-if its not blank follow steps outline in "Transactions Fail to Process.
3	Transaction fails to process	3. Perform a test transaction using several different smart cards to ensure the problem is not a defective card. Ensure that the card is inserted correctly. See page 11.



# **FEDERAL COMMUNICATIONS COMMISSION**

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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.

15.10(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 measure.

-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 operation instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.