Quick Installation Guide
Setup and Installation

Overview

MagTek's uDynamo provides universal connection options for its users. The uDynamo secure card reader authenticator connects to a wide variety of devices* through its retractable headphone jack. It also provides a USB interface for connection with various devices including Windows or Mac PCs, and is perfect for use with a virtual terminal.

* (More than 221 mobile phones and tablets as of Feb 2014.)

Major Components

SCRA magstripe swipe path

LED Indicator

Removable stabilizer grip large or small (optional)

Folding audio jack

Connection:	USB and Audio Jack
Power:	Battery powered; battery is charged from a 5V source, e.g., USB bus
Card Speed:	4 to 60 ips
Electrical Current:	100mA maximum during charge
Operating Temp:	32°F - 113°F (0 - 45°C)
Operating Humidity:	10% to 90% noncondensing

Power

uDynamo is powered by rechargeable internal Lithium-ion batteries. uDynamo can process up to 300 swipes on a single battery charge. If the reader is left ON, awaiting a card swipe, the battery will deplete in 3.5 hours. Recharging can take up to 6 hours.

Compatibility and Operating System

uDynamo works with all iOS and many Android devices.

- Download and install the desired application for your device from the App Store or Google Play.
- Disconnect any headsets or devices that may be connected to the audio jack of your mobile phone/tablet.
- Connect uDynamo to the audio jack.
- Run your application. Refer to your application for specific details.
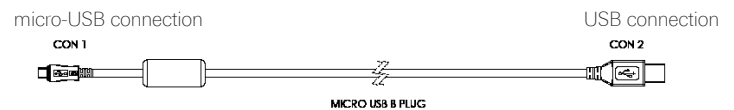- You are now ready to swipe magnetic stripe cards using your uDynamo.

Note: Some communication problems with the iPhone 4 have been discovered when using a WiFi connection. It may require a few retries to complete a transaction.

How to connect

A USB interface is provided to allow uDynamo to charge and as an optional communications interface for applications running on Windows or OS X. To charge the battery, connect the device to a USB host interface. Ensure the LED indicator shows that the battery is charging. Card transactions may be performed using either the Audio or USB interface while uDynamo is charging.

When using the audio interface, it is recommended for the host application to turn the reader ON only when ready to accept a card swipe and turn it OFF once the card information has been obtained. This will decrease the frequency of recharging. Refer to your application for specific details.

Note: Please be certain to remove all audio headsets and ensure mute is set to OFF and your volume is set to max. If you have a physical mute button on your device, it may not be automatically detected and you will need to turn mute OFF. Protect the uDynamo's audio jack by folding it in when not in use.

micro-USB connection   USB connection

CON 1

CON 2

MICRO USB B PLUG

Commands

uDynamo has no user controls. It requires an application on the host computer or mobile phone/tablet to control the operation of the card reader. uDynamo connects to the mobile phone/tablet by plugging into the device's audio jack.

LEDs

Color	Flashing Pattern	Icon	Meaning
Off	Off		If a card has not just been swiped, the device is powered off or the battery is fully discharged.
Red	Short Flash		Startup Mode: The device has just been powered on and is performing a self-test.
Green	Steady On		Idle Mode: If configured to require authentication, the device is waiting for authentication. Otherwise, the device is in the Fully Charged state and is ready to read a card.
Green	Rapid Flash		Idle Mode: Authentication has been established and the device is ready to read a card. In this mode, the LED does not indicate the battery state.
Amber/ Green	Flash/Blink		Idle Mode: The device is charging and is in the Healthy Battery state (between the Fully Charged state and the Low Battery state).
Red/ Green	Flash/Blink		Idle Mode: The device is charging OR not charging, and is in the Low Battery state. Card swipes and commands are available. Charge the device to the Healthy Battery state.
Amber	Steady On		Idle Mode: The device is charging and is in the Critically Low Battery state. Card swipes and most commands are unavailable. Charge the device to at least the Low Battery state before using.
Red	Rapid Flash		Idle Mode: The device is not charging and is in the Critically Low Battery state. Card swipes are not available. Stop using the device, disconnect it from the mobile device, and charge it until it reaches the Healthy Battery state.
Red	Steady On		Startup Mode: At power on - failed the self-test. Card swipes and commands are unavailable. Idle Mode: At Authentication - failed (LED does not indicate the battery). Attempt to re-authenticate, or power off the device, check authentication configuration, and power the device back on.
Green	Two Seconds On		Active Mode: Device has successfully read a swiped card. After this, the LED shows the device status.
Red	Two Seconds On		Active Mode: If the device was previously in authenticated mode, that mode has timed out. Re-establish authentication. Active Mode: If a card has just been swiped, the device has failed to decode card data. After this, the LED shows the device status. Swipe again. Startup Mode: If the device has just been powered on, the device is not charging, and self-test has detected the Low Battery state. After this, the LED shows the device status.

Compliance

FCC WARNING STATEMENT: This equipment has been tested and was found to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation.

FCC COMPLIANCE STATEMENT: This device complies with Part 15 of the FCC Rules. Operation of this device is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CANADIAN DOC STATEMENT: This digital apparatus does not exceed the Class B limits for radio noise from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Réglement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numériqué de la classe B est conformé à la norme NMB-003 du Canada.

CE STANDARDS: Testing for compliance with CE requirements was performed by an independent laboratory.
The unit under test was found compliant with standards established for Class B devices.

UL/CSA: This product is recognized per Underwriter Laboratories and Canadian Underwriter Laboratories 1950.

RoHS STATEMENT: When ordered as RoHS compliant, this product meets the Electrical and Electronic Equipment (EEE) Reduction of Hazardous Substances (RoHS) European Directive 2002/95/EC. The marking is clearly recognizable, either as written words like "Pb-free", "lead-free", or as another clear symbol (⊘).

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