

# iDynamo 6 with Lightning

## Secure Card Reader Authenticator

### Quick Installation Guide



Mounting Bracket



Battery Pack  
(optional)



iDynamo 6  
SCRA

### iDynamo 6 Overview

iDynamo 6 is an SCRA with magnetic stripe, EMV contact, and EMV / NFC contactless reading capabilities. To use the contactless capabilities, the device must be powered from a fully-powered USB-C port, or must be fitted with the optional battery pack for handheld solutions. The removable battery pack gives the flexibility to accept two or three methods of payment in one compact reader, and to function as a battery-free device if handheld contactless payments are not required. The versatile mounting bracket included with the device can be used to enhance mechanical stability with many types of host, including those with iOS, Windows, and Android operating systems.

Made for iPhone X, iPhone XR, iPhone XS, iPhone XS Max, iPhone 8, iPhone 8 Plus, iPhone 7, iPhone 7 Plus, iPhone 6, iPhone 6 Plus, iPhone 6s, iPhone 6s Plus, iPad Pro 10.5-inch, iPad Pro 12.9-inch (2nd generation), iPad Pro 9.7-inch, iPad Pro 12.9-inch (1st generation), iPad mini (5th generation), iPad mini 4, iPad Air (3rd generation), iPad Air 2, iPad mini 3, iPad Air, iPad (6th generation), iPad (5th generation)

### Auditory Feedback

iDynamo 6's beeper provides feedback to operators and cardholders about the internal state of the device: The device sounds one short beep after it has successfully read a contactless tap, and the cardholder can safely remove the card or device from the contactless landing zone. The device sounds two beeps when an operator cancels a pending EMV transaction.

### Commands

iDynamo 6 is designed to be connected to a host which sends commands and data to, and receives data from, the device. iDynamo 6 with Lightning can receive a limited set of commands via the USB-C receptacle in addition to the Lightning connector, even when the device is set to use the Lightning connector as its primary host interface.

**MAGTEK RECOMMENDS CHARGING AT LEAST EVERY 6 MONTHS TO MAXIMIZE OPERATION.**

**STORAGE TEMPERATURE: 32°F TO 113°F (0°C TO 45°C)**

Made for

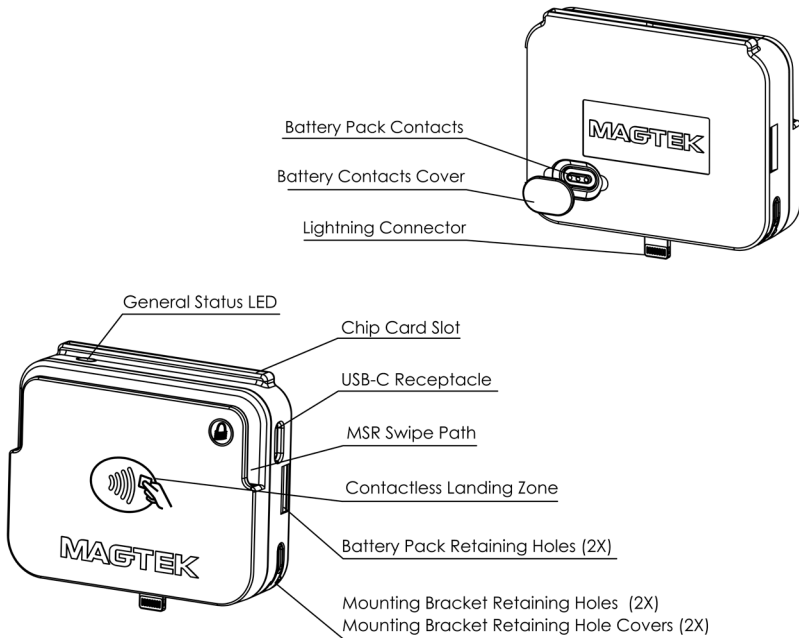


iPhone



iPad

## Major Components



## Power and Charging

iDynamo 6 only powers on when it is connected to a host via the host connector, or to a USB-C power source via the USB-C receptacle. Although the battery pack ships with a partial charge, MagTek recommends fully charging it before use (approximately 2 to 3 hours). To avoid possible damage to the host or the device, only use a USB power adapter designed for the host you are using, and the cable included with iDynamo 6. For example, for iOS devices, use only chargers sold by or approved by Apple. If the solution design includes accepting contactless payments while iDynamo 6 is powered by a handheld host (that is, not powered through the USB-C receptacle from a high-powered USB-C power source), the device must have the battery pack installed. iDynamo 6 only uses the battery pack to power its on-board contactless reader, and receives all other operating power from the connected host.

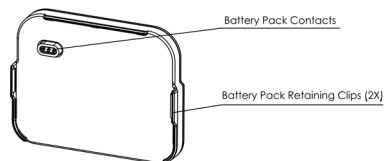
To power the device ON or OFF use the host to send commands. Powered ON mode will respond with the General Status LEDs.

To maintain the battery pack's charge capacity as much as possible, follow these guidelines: Do not discharge the battery pack to 0%. Full discharge shortens the battery life. When possible, plan to recharge the battery pack well before it is fully depleted. Store the battery pack at the lowest reasonable temperatures within the device's specified storage temperature range. Temperature is the most critical factor in extending battery life. Store the battery pack charged to less than 100% (40% is optimal).

### To install the battery pack:

1. Remove the battery pack contacts cover from the rear of iDynamo 6.
2. Make sure the electrical contacts on iDynamo 6 and the battery pack are clean.
3. Rotate the battery pack so the contacts line up with the contacts on iDynamo 6.
4. Press the battery pack onto iDynamo 6 until you feel it click into place.

To remove the battery pack, use your thumb to apply pressure to the iDynamo 6 housing above one of the battery pack retaining clips, and use your finger to pull out on the retaining clip to release it.

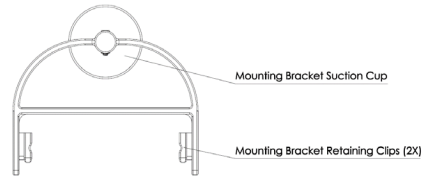


## Mounting Bracket

iDynamo 6 provides a universal mounting bracket that can be used to mechanically stabilize its connection with the host and provide a more secure, integrated feel for cardholders to interact with.

To install the optional mounting bracket:

1. Use a paper clip to slide the small covers out of the mounting bracket retaining holes on each side of iDynamo 6's housing. Set them aside for possible future use.
2. Slide the mounting bracket's retaining clips into iDynamo 6's retaining holes until you feel them seat firmly in place.
3. Make sure the mounting bracket suction cup is clean.
4. Make sure the rear surface of the host is clean.
5. After connecting iDynamo 6 to the host, press the mounting bracket's suction cup onto the rear surface of the host.



To uninstall the mounting bracket, reverse the steps above, including re-inserting the retaining hole covers. The mounting bracket resists slightly when being pulled out of the retaining holes, but is designed to be removable without damage.

## How to connect to iOS Host

iDynamo 6 connects to an iOS-based host via the Lightning plug or USB-C plug, depending on which connector the chosen host provides.

### How to Connect to an iOS Host Using the Lightning Plug

1. Power on the iOS host.
2. Plug iDynamo 6 into the host's Lightning connector.
3. After a few seconds, the iOS host will pop up an App Not Installed window. Press the App Store button to open the App Store and browse through the list of all compatible apps.
4. Install and configure the host software you intend to use with iDynamo 6.
5. Make sure the host software is configured to look for the device on the proper connection type.
6. Make sure the host software is configured to look for the correct device.
7. Make sure the host software is configured to properly interpret incoming data from the device.
8. Use the host software or the MagTek Test app to test swiping, inserting, and tapping a card.

### To disconnect iDynamo 6 from an iOS host

1. Make sure all installed apps that use iDynamo 6 are either closed or disconnected.
2. Turn off the host's display to avoid accidentally launching or interacting with apps.
3. Disconnect the cable from the USB-C receptacle, if one is connected.
4. Carefully disconnect iDynamo 6 by pulling it straight out from the host's Lightning connector.

### How to Connect to an iOS Host Using the USB-C Plug

- Details about connecting iDynamo 6 to an iOS-based host using the USB-C plug are slated for release in a future revision of this manual.

## LEDs

- **Off-Off:** The device is not connected to a host and is not receiving power.
- **Green-Solid:** Device is receiving power from the host, and is ready for the host software to connect; and the battery pack is not charging and its charge level is good.
- **Amber-Solid:** Battery pack is not charging and its charge level is fair. Charge when possible.
- **Red-Solid:** Battery pack is not charging and its charge level is low. Charge immediately.
- **Red-Slow blink:** Battery pack is charging and its charge level is low. Continue charging.
- **Amber-Slow blink:** Battery pack is charging and its charge level is fair. Continue charging if possible.
- **Green-Slow blink:** Battery pack is charging and its charge level is high. Continue charging if desired.
- **Green-Fast flash:** A cardholder's card is currently swiping in the card path, or has just exited the card path but has not yet been completely decoded by the device.
- **Green-Solid on 2 seconds:** Device has successfully read a swiped card.
- **Red-Solid on 2 seconds:** Device could not read a swiped card.
- **Blue-Solid:** Host is loading firmware onto the device.



## Accepting Payments

If the solution design includes accepting contactless payments while iDynamo 6 is powered by a hand-held host, the device must have the battery pack installed. iDynamo 6 only uses the battery pack to power its on-board contactless reader, and receives all other operating power from the connected host.

### How to Swipe Magnetic Stripe Cards

Cardholders should swipe magnetic stripe cards in the MSR swipe path with the magnetic stripe facing away from the cardholder and into the device. Cardholders may swipe in either direction along the path.

### How to Insert Contact Chip Cards

Cardholders should insert chip cards into the chip card slot with the chip facing the cardholder and toward the slot.

### How to Tap Contactless Cards / Devices

If the cardholder is using an electronic payment device, such as a smartphone, make sure the payment device has NFC turned ON and has a payment app configured to process transactions. Wait until the host software indicates it is ready for a tap. Tap the card or electronic payment device on the contactless landing zone, indicated by the EMVCo Contactless Indicator on the device's face. The card or device must be centered over the contactless landing zone. Wait for the device to beep. The host software may also display progress showing whether the tap succeeded or failed. Because each smartphone model may have its NFC antenna placed differently, the ideal tap position may vary by make and model. For example, Samsung users may need to center the phone on the contactless landing zone, while iPhone users may need to tap the top of the phone on the contactless landing zone. Remove the card or electronic payment device from the contactless landing zone.

## Compliance

### FCC INFORMATION

This device complies with Part 15 of the FCC Rules. Operation 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.

Note: 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.

Caution: Changes or modifications not expressly approved by MagTek could void the user's authority to operate this equipment.

### 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 UL 60950 1, 2nd Edition, 2011 12 19 (Information Technology Equipment - Safety - Part 1: General Requirements), CSA C22.2 No. 60950 1 07, 2nd Edition, 2011 12 (Information Technology Equipment - Safety - Part 1: General Requirements).

### 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 (♻️).

### Legal

"Made for iPhone" and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPhone or iPad 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.

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