

kDynamo

Secure Card Reader Authenticator

Quick Installation Guide

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

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



kDynamo Overview

kDynamo makes mobile payments and card reading easier than ever and adds EMV contactless/ NFC and contact EMV chip card reading capabilities while maintaining its small footprint. There are two models for kDynamo: kDynamo Air and kDynamo mini. kDynamo Air is Made for iPad (4th, 5th, and 6th generation), iPad Pro (9.7 inch), iPad Air, and iPad Air 2. kDynamo mini is Made for iPad mini (2, 3, and 4). See the Installation and Operation Manual for complete details.

Installation

Installing kDynamo is a straightforward process since the kDynamo uses user host controls. kDynamo mini keeps you on the go with its smaller size and handheld ease-of-use. kDynamo Air features a 100mm VESA (Video Electronics Standards Association) standard mounting pattern that provides fixed mounting for greater security and convenience, allowing users to deploy kDynamo Air in a variety of off the shelf semi-mobile or permanent mounts, and eliminating the need for expensive customization.

Mounting options are further detailed in the complete Installation and Operation Manual.

- kDynamo mini: Handheld with iPad mini (2, 3, and 4). Supports third-party adhesive-mounted hand strap.
- kDynamo Air with iPad (4th, 5th, and 6th generation), iPad Pro (9.7 inch), iPad Air, and iPad Air 2
 - Handheld
 - 100mm VESA mount points for third-party stands or hand straps

Major Components Overview

kDynamo connects to an iPad host via the Lightning connector. An additional adapter shell, which is included with each device and which varies based on the iPad model being used, snaps on to kDynamo to secure and surround the host.

Figure 1 - kDynamo Air Major Components

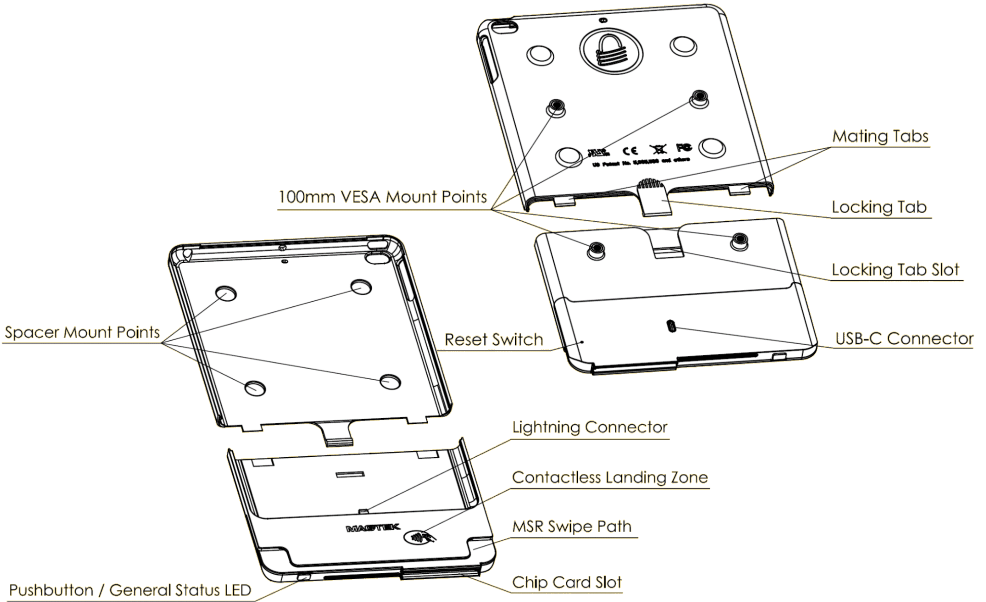
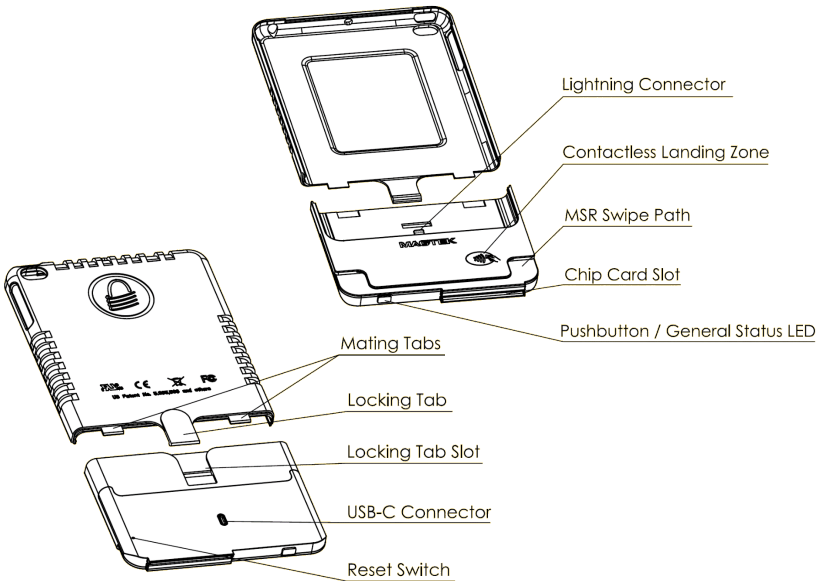


Figure 2 - kDynamo mini Major Components



Connecting to a Host

To connect kDynamo to an iPad host, follow these steps:

1. Make sure you have the correct adapter shell for the model of iPad you are connecting to.
2. If you are connecting kDynamo Air to iPad Pro 9.7 inch or iPad Air 2, install the four included spacers in the spacer mount points inside the adapter shell.
3. Plug the main body of kDynamo into the host's Lightning connector.
4. Slide the iPad into the bottom of the adapter shell, then slide it all the way in until the adapter shell mates with the kDynamo main body. The locking tab should engage on its own.
5. Pull gently on the two halves to make sure they are secured.
6. On the host, install and configure the host software you intend to use with kDynamo. If you do not yet have host software, you can download a test tool from the App Store called MagTek Test, published by MagTek, Inc., to perform simple tests.

To disconnect kDynamo from the host, follow these steps:

1. Make sure all installed apps that use kDynamo are either closed or disconnected.
2. Power off kDynamo (see section 3.4.4 How to Power On / Wake Up from Sleep Mode / Power Off).
3. Turn off the iPad host's display to avoid accidentally launching or interacting with apps.
4. Use your fingernail or gently use a slotted screwdriver to lift the locking tab.
5. Pull kDynamo's adapter shell and main body in opposite directions.
6. Disconnect kDynamo from the Lightning connector and slide the iPad host out of the adapter shell.

Power and Charging

This device incorporates a built-in Lithium-ion rechargeable battery, which requires very little maintenance. It is not subject to "charge memory" and therefore does not require deep discharge cycles to restore its charge capacity like many other battery technologies. When properly powered through its USB port, the device powers on automatically, recharges the battery, powers the connected iPad host through the Lightning port, and remains powered on. The device stops charging the battery when it determines it is optimally full, to prevent overcharging. If the device is not connected to USB power, or if the USB connection does not provide enough power, the device primarily powers itself using the rechargeable battery.

Periodically recharge kDynamo's battery and the connected iOS host by using the included USB-C cable to connect it to the Apple USB power adapter included with the iPad host. The device requires a USB connection that can provide at least 2.4A @ 5V (12W). A full recharge cycle for a completely drained battery, regardless of whether kDynamo is pass-through charging a connected iPad host, takes approximately 4 to 5 hours.

How to Power On / Wake Up from Sleep Mode / Power Off

In Powered Off mode (General Status LED is off) or in Sleep Mode (General Status LED is lit solid), power on or wake the device by tapping the pushbutton. In response, the device lights the General Status LED, then beeps once, and transitions to either Idle Mode or Connected Mode.

To power off the device, press and hold the pushbutton for 2 to 3 seconds until the General Status LED turns off and the device beeps twice.

LED Status

Color	Flashing Pattern	Meaning
Off	Off	The device is powered off, or the battery is completely drained and needs to be recharged.
Blue	Off / Flash 1 Time	The device is not charging, and its battery is fully charged. Recharge if desired.
Blue	Off / Flash 2 Times	The device is not charging, and its battery is at medium charge. Recharge soon.
Blue	Off / Flash 3 Times	The device is not charging, and its battery is critically low, and it can not process transactions. Recharge immediately.
Blue	On / Flash Off 4 Times	The device is charging, and its battery is charged to below 50% capacity.
Blue	On / Flash Off 3 Times	The device is charging, and its battery is charged to between 50% and 70% capacity.
Blue	On / Flash Off 2 Times	The device is charging, and its battery is charged to between 70% and 90% capacity.
Blue	On / Flash Off Once	The device is charging, and its battery is charged to above 90% capacity.
Blue	Solid On	There are three conditions where the General Status LED turns solid on: Sleep Mode, firmware update, pushbutton is being held.

Accepting Payments



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, as shown. 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

Cardholders should tap contactless cards or devices on the landing zone, indicated by the EMVCo Contactless Indicator symbol on the device's face. After successfully communicating with the card or device, kDynamo beeps once. The cardholder may then remove the card or device from the contactless landing zone. If the cardholder is using an electronic payment device, ensure the payment device has NFC turned [On]. Please note, NFC antenna vary by make & model.

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 (♻️).

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SECURITY FROM THE INSIDE

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