



MAGTEK tDynamo Secure Card Reader Authenticator Installation Guide

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Secure Card Reader Authenticator

Quick Installation Guide

Setup and Installation

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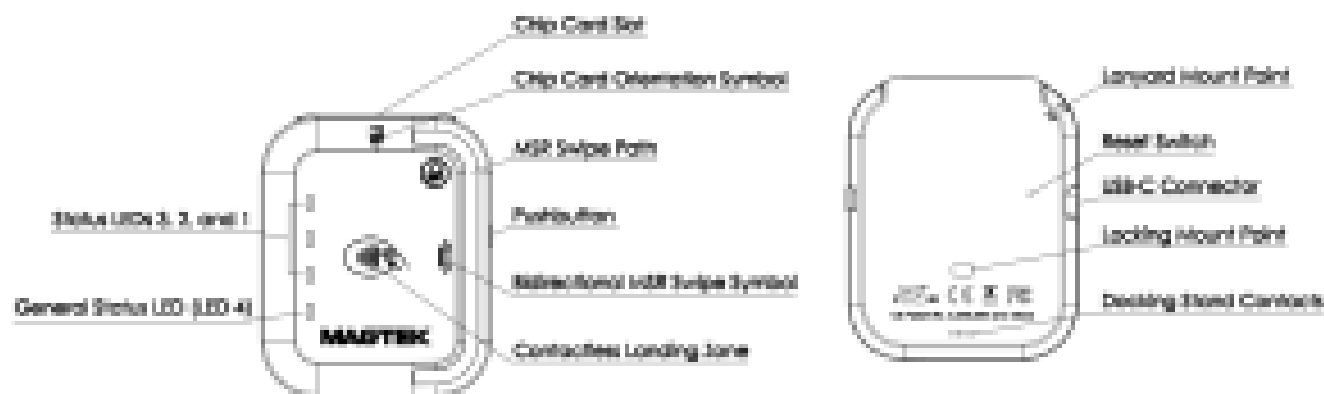
Dynamo Overview

Point-of-service and point-of-sale needs to be fast, reliable, and secure.

Dynamo delivers on all three and meets the growing demand from your customers to use the latest technology in the easiest-to-use form factor.

Dynamo is a simple way to take a wide variety of payment methods, in a small, versatile device including magnetic stripe, chip card, and contactless.

Major Components Overview



Visual and Auditory Feedback

tDynamo's General Status LED (LED 4) and Status LEDs 3, 2, and 1 provide feedback to the operator and cardholder about the internal state of the device:

- Green flashing: Powered on and ready, or indication to swipe a card.
- LEDs 4, 3, 2, 1 light in sequence: The device has read a contactless tap.
- All 4 LEDs on together: Device has just been powered on.
- LEDs 4, 3, 2, 1 light in combination: Battery check result after pressing the pushbutton.
- Steady green: The host has initiated a contactless EMV transaction.
- Three Blue flashes: After pressing the pushbutton for 2 seconds, the device will transition to Pairing Mode when the button is released.
- Short Blue Flashing: Flashing Blue (for pairing mode).
- Red LED: The operator is updating the firmware.

tDynamo's beeper provides feedback:

- One short beep on startup: Testing sound.
- One short beep after it has successfully read a contactless tap:
Cardholders can safely remove the card or device from the contactless landing zone.
- Two short beeps: Occurs when a transaction is canceled.
- Two short beeps: Occurs when the device is turned off.

CAUTION

MagTek recommends charging AT LEAST every 6 months to maximize operation.

Storage Temperature: 32°F to 113°F (0°C to 45°C)

Power and Charging

tDynamo can be powered by one of two sources: USB or the built-in rechargeable battery. It can be charged directly with the USB-C cable or via the optional stand. MagTek recommends charging every 6 months to maximize operation. Storage Temperature: 32°F to 113°F (0°C to 45°C)

Power On and OFF

ON: To power on the device when it is not docked, tap the pushbutton.

OFF: To power off the device, press and hold the pushbutton for 5 to 10 seconds.

USB-C Connector Power

Power via USB-C connector provides continuous power and charges the battery. The device powers on automatically, and stays powered on.

Charging the Device Directly

Power via the rechargeable battery: we recommend manually powering the device down when not in active

use. A full recharge cycle for a completely drained battery takes approximately 4.5 hours.

To charge the device using a USB-C cable, connect it to a USB charger or to a USB host that provides at least 500mA @ 5V.

Charging the Device via the Docking Stand “stand”

To charge the device using the stand, set the tDynamo in the stand making certain it is fully nested in, and touch the charging contacts. Connect the stand's USB cable to a host that provides at least 500mA @ 5V.

Checking Battery Charge Level

To check the battery charge level, make sure the device is powered on, then briefly tap the pushbutton.

The Status LEDs light to show the battery level as follows:

1. LED: the battery is at 50%
2. LED: the battery is between 50-70%
3. LED: the battery is between 70-90%
4. LED: the battery is above 90%

Connection via USB and Bluetooth® LE

End-users need only set up a host with appropriate software, configure the software, and connect the device to the host. tDynamo can connect to a host via a variety of connections.

How to Connect tDynamo via USB-C Connector

1. Power on the host.
2. Install the host software. It should be configured to connect with the tDynamo .
3. Check that tDynamo 's primary connection is USB-C.
4. Connect the small end of the USB cable to tDynamo 's USB-C connector.
5. Connect the large end of the USB cable to the USB port on the host.

How to Connect tDynamo via Bluetooth LE

1. Check that tDynamo 's primary connection is Bluetooth LE.
2. Close any other host connections to the tDynamo .
3. Install the host software.
4. Power on the tDynamo and check for adequate battery charge.
5. Press the pushbutton for 2 seconds until the Blue LED flashes 3 times, then release the pushbutton to enter Pairing Mode. The LED flashes blue up to 2 minutes or until a host pairs or connects.

Continue to the next steps based on your host device...

on iOS host

6. On the [iOS] host launch the [Settings] app, select [Bluetooth], and check the host's radio button is [On].
7. Use the app to pair with and connect to the tDynamo . [MagTek Test] in the app store behaves as follows:
 - a.) Launch host app.
 - b.) Select [BLE EMV] as the device type.
 - c.) Press the [Connect] button.
 - d.) Locate tDynamo 7-digit serial number on the device label.
 - e.) In the list of pairable devices, select [tDynamo-serial number].
8. When the host shows [Bluetooth Pairing Request] and requests passcode, enter the configured passkey (or default [000000], be sure to change later). The LED goes from blinking blue to green when paired.
9. The app should then report the device is now [Connected].

on Android host

6. On the [Android] host launch the [Settings] app, open [Bluetooth] settings or [Connected Devices]> [Bluetooth] “settings page”, and check host has Bluetooth turned [On].
7. Press the [Search for Devices] / [Scan] / [Pair New Device] button to show the [Available Devices] list. Locate tDynamo 7-digit serial number on the device label. In the list of pairable devices, select [tDynamo-serial number].
8. When the host requests a passcode or PIN, enter the configured passkey (or default [000000], be sure to change it later).
9. Then press the [OK] button. tDynamo appears in the [Paired Devices] list.
The LED goes from blinking blue to green when paired.
The app should then report the device is now [Connected].

on Windows 10 Host

6. Enter desktop mode and double-click the [Bluetooth Devices] icon in the taskbar to launch the [Manage Bluetooth Devices] window.
Locate tDynamo 7-digit serial number on the device label.
7. In the list of pairable devices, select [tDynamo-serial number]. [Ready to Pair] should show under the name. Select the device and press/click the [Pair] button.
8. When the host requests a passcode or PIN, enter the configured passkey (or default [000000], be sure to change it later). Then press [Next].
9. Windows should return you to the [Manage Bluetooth Devices] page and after a short period of time shows [Connected] below the device, you are pairing with. [Connected] means the same as paired, but there is no active data connection until the host software initiates one. The LED goes from blinking blue to green when paired.

How to unpair the tDynamo from a Bluetooth LE Host

iOS Host

1. On the [iOS] host launch the [Settings] app, select [Bluetooth].
2. Press the “i” information icon next to the devices’ names in the [My Devices] list.
3. Select [Forget this Device] and make sure the tDynamo disappears from [My Devices]

Android Host

1. Locate the device on the [Bluetooth] configuration page.
2. Press the settings (gear) icon.
3. Press the [Unpair] or [Forget] button and check that the device disappears from the [Paired Devices] list.

Windows 10

1. Select the device in the [Bluetooth and Other Device Settings] window.
2. Press the [Remove device] button.

Accepting Payments



How to Swipe Magnetic Stripe Cards

Cardholders should swipe magnetic stripe cards in the MSR swipe path, indicated by the bidirectional MSR swipe symbol shown on the device's face. The magnetic stripe must face toward and into the device. Cardholders may swipe in either direction.



How to Insert Contact Chip Cards

Cardholders should insert chip cards into the chip card slot, indicated by the chip card orientation symbol shown on the device's face.



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, tDynamo lights all four status LEDs green and 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 varies 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, 201112 (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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Please note that the use of this accessory with an Apple product may affect wireless performance.

Apple®, Apple Pay®, OS X®, iPhone®, iPad®, iPad Air®, iPad Pro®, Lightning®, and Mac® are trademarks of Apple Inc., registered in the U.S. and other countries.

EMV® is a registered trademark in the U.S. and other countries and an unregistered trademark elsewhere.

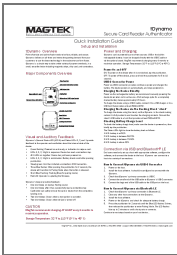
The EMV trademark is owned by EMVCo, LLC.

The Contactless Indicator mark, consisting of four graduating arcs, is a trademark owned by and used with permission of EMVCo, LLC.

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Documents / Resources



[MAGTEK tDynamo Secure Card Reader Authenticator](#) [pdf] Installation Guide
tDynamo, Secure Card Reader Authenticator