MAGTEK ®
SECURITY FROM THE INSIDE

Quick Installation Guide
Setup and Installation

iDynamo 6 Overview

iDynamo 6 is a SCRA with magnetic stripe, EMV contact, and EMV / NFC contactless reading capabilities. Contactless and NFC reading requires connection to and power from a fully-powered USB 3.0 port, or the optional rechargeable battery pack. If the battery pack is not installed and the host does not provide fully powered USB C, then the contactless antenna will not turn on and iDynamo 6 will only read magnetic stripe and EMV contact cards.
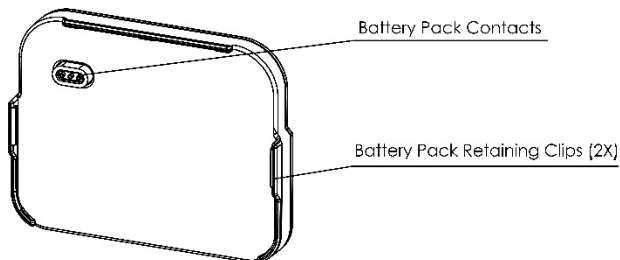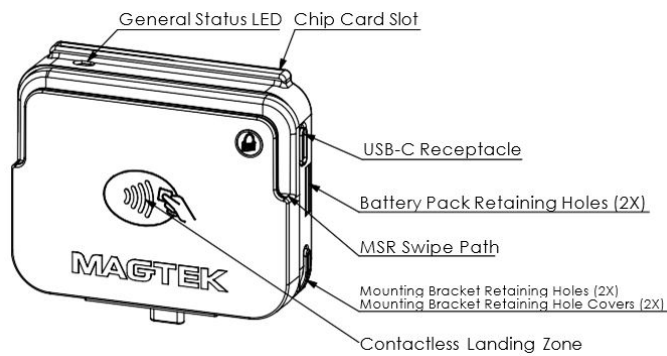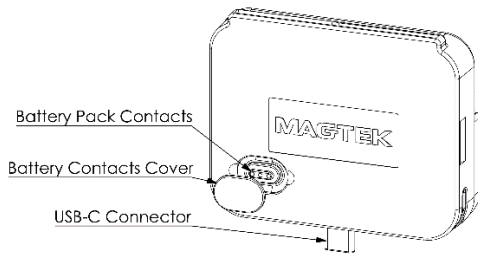

| Mounting Bracket | Battery Pack | iDynamo 6 SCRA |

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

Major Components

- Battery Pack Contacts
- Battery Contacts Cover
- USB-C Connector

- General Status LED
- Chip Card Slot
- USB-C Receptacle
- Battery Pack Retaining Holes (2X)
- MSR Swipe Path
- Mounting Bracket Retaining Holes (2X)
- Mounting Bracket Retaining Hole Covers (2X)
- Contactless Landing Zone

- Battery Pack Contacts
- Battery Pack Retaining Clips (2X)

Power and Charging

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

Although, the battery pack ships with partial charge, MagTek recommends fully charging before use (approximately 2 to 3 hours). iDynamo 6 USB C only powers on when connect to a host via the host USB C connection. Once iDynamo 6 USB C is connected to the host, powered ON mode will respond with the General Status LEDs. iDynamo 6 USB C uses the battery pack to power its on-board contactless reader. To charge the battery pack, the iDynamo 6 USB C must be connected via the USB C receptacle located on the side of the device. To avoid possible damage to the host or the device, only use the USB power adapter designed for the host you are using along with the cable included with iDynamo 6.

To maximize the battery pack's charge, follow guidelines:

Do not discharge the battery pack to 0%. Full discharge shortens the battery life. 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).
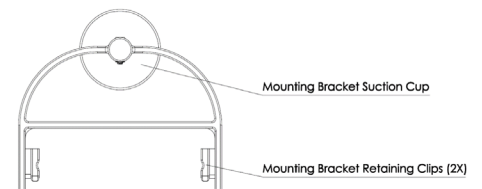
To install the battery pack:

1. Remove the battery pack contacts cover from the rear of iDynamo 6.
2. Check electrical contacts on iDynamo 6 and battery pack are clean.
3. Rotate battery pack contacts to align 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.

Mounting Bracket

The optional mounting bracket included with the device is used to enhance mechanical stability with iOS, Windows, and Android operating systems host devices. To install mounting bracket:

- Use a paper clip to slide the small covers out of the mounting bracket
- Retain hole covers on each side of iDynamo 6 housing. Set them aside for possible future use.
- Make sure the mounting bracket suction cup and the rear surface of the host is clean.
- Slide the mounting bracket's retaining clips into iDynamo 6's retaining holes until you feel them seat firmly in place.
- 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.

- Mounting Bracket Suction Cup
- Mounting Bracket Retaining Clips (2X)

Use and Compliance

How to Use USB C for Pass-through Charging

1. Disconnect iDynamo 6 from the host.
2. Verify the charging power source works properly without iDynamo 6 by connecting the host directly to the power source using the host's original cable: The power source must be a USB charger sold or approved by the host's manufacturer.
3. Make sure the host charges correctly.
4. Disconnect the charging cable from the host and charger.
5. Connect iDynamo 6 to the host.
6. Connect the charging cable included with iDynamo 6 to the charger.
7. Connect the other end of the cable to iDynamo 6's USB C receptacle.

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 USB C receives a limited set of commands via the USB C receptacle in addition to the USB C connector, even when the device is set to use the USB C connector as its primary host interface.

How to connect to USB host

How to connect to Android Type-C host

iDynamo 6 USB C connects to an Android-based host via the USB C plug.

1. Power on the Android host.
2. Plug iDynamo 6 USB C into the host's USB C connector.
3. Install and configure the host app you intend to use.
4. Make sure the host app is configured to look for the device on the proper connection type.
5. Use the host app or the MagTek Test app to test.

How to Disconnect IDynamo 6 USB C from Android host

1. Close or disconnect all installed apps that use iDynamo 6 USB C.
2. Turn off the host's display to avoid launching or interacting with apps.
3. Carefully disconnect iDynamo 6 USB C by pulling it straight out from the host's USB C connector. Do not twist connection.

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 battery pack level is good/no charge.
- **Amber-Solid:** Battery pack not charging, level fair. Charge soon.
- **Red-Solid:** Battery pack not charging, level low. Charge immediately.
- **Red-Slow blink:** Battery pack charging, level low. Continue charging.
- **Amber-Slow blink:** Battery pack charging, level fair. Continue charging.
- **Green-Slow blink:** Battery pack charging, charge level 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.

Auditory Feedback

iDynamo 6 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.

Communication Modes

iDynamo 6 supports two different modes of communication, iAP and HID. Only one communication mode is supported at a time: HID mode for Widows and Android devices, or iAP for iOS devices. It is critical for the device to be set to the correct mode, or the host (phone, tablet, or PC) will not be able to communicate with the reader. To change the communication mode, the user must manually toggle the device following this process:

1. With the reader disconnected from any USB power source (including an active host connection), the user will leave inserted any card into the EMV dip card slot to block the iDynamo 6 card sensor and allow the software to toggle between communication modes.
2. The user will then connect iDynamo 6 to any USB C power source (Windows host, Android host, Apple host, or power wall adapter).
3. When power is established, iDynamo 6 immediately powers on with a blocked sensor in the dip card slot at the 0 second **Flash Cycle** mark.
4. The LED **Flash Cycle** begins and lasts for 6 seconds, starting with the beginning flash of the LED.
   a. **BLUE light**: iDynamo 6 is set to iAP
   b. **GREEN light**: iDynamo 6 is set to HID
5. To change mode, during this 6 second **Flash Cycle**, rapidly withdraw and insert the card into the dip card slot 3 or more times. This will cause the iDynamo 6 to toggle the current communication mode.

At the end of the **Flash Cycle**, the LED will turn solid GREEN. iDynamo 6 should now ready be ready to connect to the host application. If the connection still cannot be established, repeat from Step 1.

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

Swipe magnetic stripe cards in the swipe path with the magnetic stripe facing away from the cardholder and into the device in either direction along the path.

How to Insert Contact Chip Cards

Insert chip cards into the chip card slot with the chip facing the cardholder and toward the slot.

How to Tap Contactless Cards / Devices

Devices: Electronic payment device (i.e. smartphone), check payment NFC turned ON and payment app configured. *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.*

Devices and Cards: Wait until the host software indicates ready. Tap the card or electronic payment device on the contactless landing zone. Wait for iDynamo 6 to beep. The host software may also display progress showing whether the tap succeeded or failed. Remove the card or electronic payment device from the contactless landing zone.

Compliance