

M424

Installation Guide

Verifone Part Number: DOC380-003-EN-A, Revision A01



www.verifone.com

M424 Installation Guide
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Preface

This guide is the primary source of information for setting up the M424 device.

Audience

This guide is intended for the users involved in M424 device installation.

Organization

This guide is organized as follows:

- Chapter 1: [Device Overview](#) - Provides an overview of the M424 device.
- Chapter 2: [Device Setup](#) - Provides instructions on configuring the M424 device.
- Chapter 3: [Specifications](#) - Provides the power requirements and dimensions of the M424 device.
- Chapter 4: [Maintenance and Cleaning](#) - Explains how to maintain the device.
- Chapter 5: [Service and Support](#) - Furnishes information on contacting local Verifone representatives or service providers, as well as details on ordering accessories or documentation from Verifone.
- Chapter 6: [Accessories](#) - Provides the range of accessories with corresponding part numbers
- Chapter 7: [Troubleshooting Guidelines](#) - Provides guidance for addressing issues that may arise during device installation.

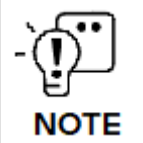


Related Documentation

To learn more about the M424, refer to the following documents associated with the Verifone Part Number (VPNs).

M424 Certifications and Regulations	VPN DOC380-001-EN
M424 Series Quick Installation Guide	VPN DOC380-002-EN
M4xx Accessory Certifications and Regulations	VPN DOC445-005-EN
M4 POE Dongle Certifications and Regulations	VPN DOC000-001-EN
M4xx ESU Dongle Certifications and Regulations	VPN DOC445-011-EN

Conventions

The following table describes the conventions and provides examples of their use.

Convention	Meaning	Example
<p style="text-align: center;">Blue</p>	<p>Text in blue indicates terms that are cross-referenced.</p>	<p>See Conventions.</p>
	<p>The bulb icon is used to highlight important information.</p>	<p>If exchanging cables use a Verifone-approved cable.</p>
	<p>The caution symbol indicates possible hardware or software failure or loss of data.</p>	<p>Avoid placing metallic objects at the front of the card reader.</p>
	<p>The lightning symbol is used as a warning when bodily injury might occur.</p>	<p>For safety, do not string cables or cords across a walkway.</p>

1. Device Overview

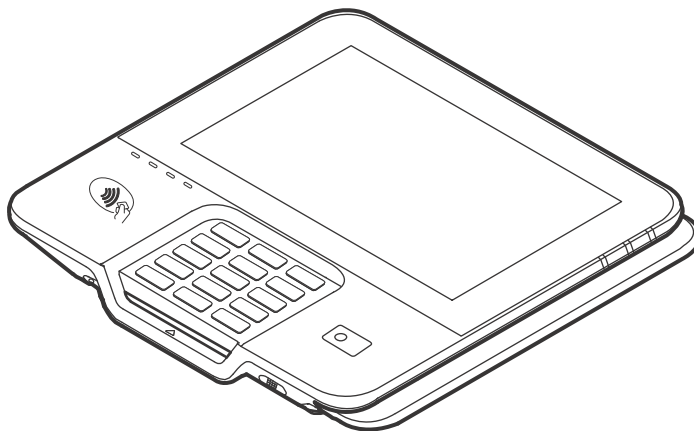
This chapter provides a brief description of the Verifone M424 device.

The Verifone M424 device is a best-in-class, single-screen media-capable, and consumer-facing device, which allows electronic payment transactions to be processed in multi-lane scenarios. This payment processing solution with a fully integrated POS can scan barcodes, QR codes, and products with the help of an integrated camera.

In combination with Verifone Connect digital services, it offers self-check-out/self-check-in, payment, and the ability to run Android applications, like loyalty and inventory. It also enables clients to remotely monitor and update their devices using Verifone’s estate management solution. The Verifone M424 device supports Bluetooth and Wi-Fi. It meets PCI-PTS 5.x SRED requirements for maximum security.

The Verifone M424 device supports all payment methods - magnetic stripe, EMV, and NFC/Contactless Reader, including Apple Pay, Google Pay, and Samsung Pay mobile wallets. The easy-to-read color touch screen supports all payment-related user interactions and keypad for secure PIN entry.

Figure: 1 M424 Device



Key Features and Benefits

	M424 Features
Processor	<ul style="list-style-type: none"> <li data-bbox="698 1711 1190 1753">• 1.1 GHz, Arm Cortex-A7 quad-core <li data-bbox="698 1764 1190 1806">• Dedicated secure processor

Memory	<ul style="list-style-type: none"> • 2 GB RAM • 16 GB Flash • Secure processor: 512 MB DRAM, 512 MB Flash
Display	<ul style="list-style-type: none"> • 5.5-inch (120.77 X 67.93) HD IPS LCD, Capacitive Touch screen
Keypad (touch)	<ul style="list-style-type: none"> • Dedicated mechanical keypad and on-screen (touch) keypad
Payment	<ul style="list-style-type: none"> • Magnetic Swipe Reader (MSR) • Smart Card Reader (SCR) • Contactless Reader (CTLS) • Near Field Communication (NFC) • Quick Response (QR) code
Communication	<ul style="list-style-type: none"> • Bluetooth 4.2 BLE • 2.4 GHz + 5 GHz Wi-Fi, 802.11 a, b, g, n
Peripheral Ports	<ul style="list-style-type: none"> • Bluetooth 4.2 BLE • 2.4 GHz + 5 GHz Wi-Fi, 802.11 a, b, g, n
Camera	<ul style="list-style-type: none"> • 5 MP (front QR/Barcode Scanner) • Auto-focus • Fast scanner
Security	<ul style="list-style-type: none"> • PCI PTS 5.x-approved • SRED • Supports AES DUKPT
SIM/SAM	<ul style="list-style-type: none"> • 2 Standard SAM
Environmental	<ul style="list-style-type: none"> • Operating temperature: 0°C to 40°C (32°F to 104°F) • Storage temperature: -20°C to 60°C (-4°F to 140°F) • Relative humidity: 5% to 95% Non-condensing

Features and Benefits Following are the features and benefits.

Ease of Use

- Large 5.5” LCD for unlimited application possibilities and easy readability under various lighting conditions.
- Touchscreen for icon-based applications or electronic signature capture support.
- Intuitive telco-style keypad with colored control keys.
- Bi-directional magnetic stripe card reader with an extended blade for optimal card reading.
- Audio jack to facilitate accessibility for the visually impaired.

Performance and Durability

- Fast transactions due to powerful 1 GHz ARM Cortex and quad-core ARM Cortex-A7 1.1GHz processor.
- Rounded corners and drop resistant to less than 75 cm on the concrete floor to minimize breakage.
- 16GB of Flash memory and 2GB SDRAM.

Security

- Incorporates tamper-sensing circuitry to detect unauthorized intrusion and supports a broad spectrum of software-based security features.
- PCI-PTS 5.x approved for debit and other PIN-based transactions.
- EMV Level 1 Type Approval.
- Supports reliable security features including TLS, VeriShield file authentication, and VeriShield Protect to help prevent fraud and other intrusions.

Contactless Capability

- Advanced contactless architecture that future-proofs investment with a single contactless interface (SingleCI), SoftSAMs, and side-by-side application architecture.
- Dedicated tap zone for optimized user experience.
- Accepts EMV, NFC, QR Code and mag-stripe contactless payments as well as PIN-based transactions.

Communication Technology

- Bluetooth: Simple, plug-and-play installation for locations that need short range wireless capability. Eddystone and iBeacon profiles are also supported.
- Wi-Fi: Ideal for retailers that need multiple wireless devices and have an existing IP infrastructure.

2. Device Setup

This section outlines the setup procedures for the M424 covering the following segments:

- [Device Location](#)
- [Inside the Shipping Carton](#)
- [Device Features](#)
- [Connection Ports](#)
- [M424 Connection Options](#)
- [MSAM Card](#)
- [Device Power Source](#)
- [Smart Card Reader](#)
- [Magnetic Card Reader](#)
- [Contactless Smart Card Transaction](#)
- [M424 Wi-Fi/BT Support](#)
- [Optional Accessories](#)

Device Location

The following are guidelines used to select an ideal location for the device.

- The device must be used in an attended environment.

Ease of Use

- Select a location convenient for both the merchant and cardholder.
- Select a flat support surface less than two meters high, such as a countertop or table, or secure the device on a stand mount supplied by Verifone.
- Select a location near a power outlet, POS, ECR, or computer connected to the device. For safety, do not string cables or cords across a walkway.



NOTE

-
- The M424 device must be mounted only on Verifone-approved stands.
 - The device is suitable for mounting only at heights less than or equal to 2 meters.
-

Environmental Factors

- Do not use the device where there is excess heat, dust, humidity, moisture, caustic chemicals or oils.

- Keep the device away from direct sunlight and anything that radiates heat, such as a stove or a motor.
- Do not use the device outdoors.

Electrical Considerations

- Avoid using this product during electrical storms.
- Avoid locations near electrical appliances or other devices that cause excessive voltage fluctuations or emit electrical noise (for example, air conditioners, electric motors, neon signs, high-frequency or magnetic security devices, or computer equipment).
- Avoid using the device near water or in moist conditions.
- Disconnect the device from its POS device before cleaning.



Do not use the device near water, including a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool to avoid shock or damage.

CAUTION

N'utilisez pas l'appareil à proximité de l'eau, y compris d'une baignoire, d'un lavabo, d'un évier de cuisine ou d'une buanderie, dans un sous-sol humide ou à proximité d'une piscine pour éviter les chocs ou les dommages.

PIN Protection Measures

Use the following techniques to provide effective screening of the PIN entry keypad during the PIN entry process. You can use these methods in combination, although in some cases a single method might suffice.

- Position the device on the check-in stand in such a way as to block visual observation of the PIN-entry process. Examples include:
 - Visual shields are designed into the check-in stand. The shields may be solely for shielding purposes or may be part of the general check-in stand design.
 - Position the device so that it is angled in such a way that PIN spying is difficult.
- Install the PED on an adjustable stand that allows consumers to swivel the device sideways and/or tilt it forwards/backward to a position that makes visual observation of the PIN-entry process difficult.
- Position in-store security cameras so that the PIN-entry keypad is not visible.
- This risk of shoulder-spying during PIN entry can be significantly reduced by installing the optional approved privacy shield.

The following table describes the two preferred mounting methods and the recommended measures to protect against PIN capture in four observation corridors:

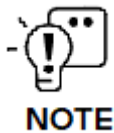
Mounting Methods and Protection Measures	Method	Cashier	Customer in Queue	Customers Elsewhere	On-site Cameras
	Countertop without stand	Use signage behind the PED	Install so that customer is between PED and next in the queue	No action needed	Do not install within view of cameras
	Countertop with stand	No action needed	Install so that customer is between PED and next in the queue	No action needed	Do not install within view of cameras

Verifone also recommends instructing the cardholder regarding safe PIN-entry. This can be done with a combination of:

- Signage on the PED
- Prompts on the display, possibly with a click-through screen
- Literature at the point of sale
- A logo for a safe PIN-entry process.
- You can secure PIN entry by installing a [Privacy Shield](#) (optional).

Mounting Considerations

Verifone recommends the use of an approved stand for all mounting situations. Position the device conveniently in relation to power, POS, ECR, and LAN connections. Ensure the M424 device is placed in a manner that allows customers to swipe their magnetic cards or insert their Smart Cards in a smooth and comfortable motion without encountering obstructions. If the unit needs to be swiveled during normal operation, Verifone recommends the use of an approved swivel stand.



Special care is required while mounting the M424 device in sites that utilize anti-theft devices positioned at doorways or surface-mounted deactivator pads. Devices of this type, such as Sensormatic brand devices generate strong electromagnetic fields, which may interfere with the M424 device. Always select mounting locations at least 0.5 meters from doorway units and at least 2.0 meters from surface mounted deactivator pads.

Inside the Shipping Carton

Open the shipping carton and carefully inspect its contents for possible tampering or shipping damage. The device is a secure product. Tampering causes it to cease to function or to operate in an unsecured manner.

Unpacking the Shipping Carton

To unpack the shipping carton:

- 1 Carefully inspect the shipping carton and its contents for possible tampering or damage.
- 2 Validate the authenticity of the sender by verifying the shipping tracking number and other information located on the product order paperwork.
- 3 Remove and inspect the contents of the shipping carton. The device ships in multiple configurations, the carton may include all or any of the following:
 - Device
 - Connectivity cable
 - Additional accessories



NOTE

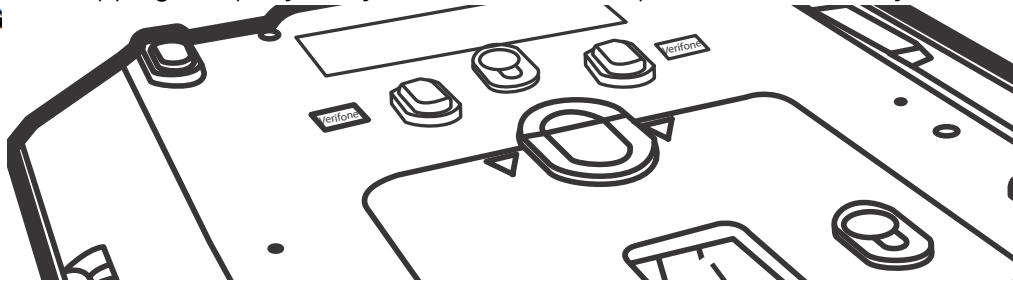
Power supply and connectivity cables are shipped separately or depending on the customer's requirements.

-
- 4 Remove all plastic wrapping from the device and components.
 - 5 Remove the clear protective film from the display.
 - 6 Inspect the terminal for possible tampering; see how to identify signs of tampering in section Periodic Inspection.

- 7 Save the shipping carton and packing material for future repacking or moving of the device.



Do not use a tampered or damaged unit. The device comes equipped with tamper-evident labels. If a label or component appears damaged, please notify the shipping company and your Verifone service provider immediately.



Periodic Inspection

Periodically inspect the terminal for possible tampering. Signs of tampering include:

- Overlays in the PIN pad area
- Wires protruding out of the device
- Foreign objects inserted into the smart card slot or magnetic stripe slot
- Any bumps in the casing below the mag stripe slot and any noticeable additional mag stripe head from the side
- Signs of damage to the tamper-evident labels
- A Tamper Warning message on the device display

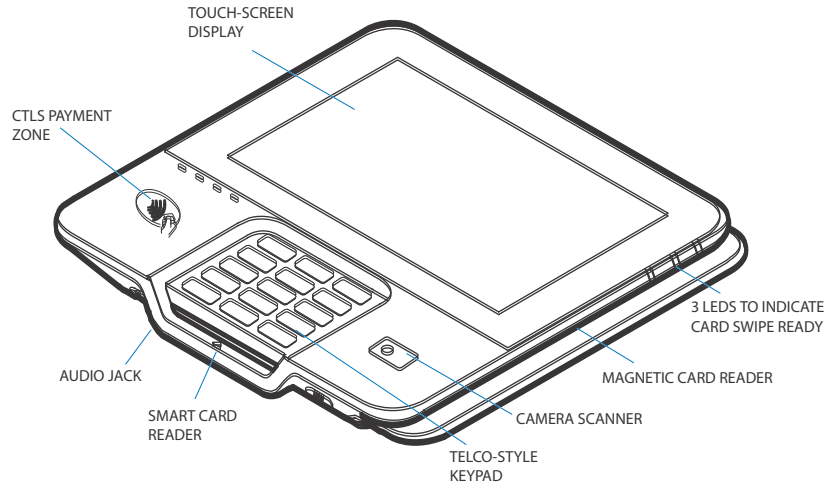
If any device is found to have been tampered with, please remove it from service immediately, keep it available for potential forensics investigation, and notify your company security officer and your local Verifone representative or service provider. To contact Verifone, please see [Service and Support](#).

For terminals equipped with a privacy shield, perform daily inspections to ensure that the privacy shield is installed and has not been removed.

Device Features

Familiarize yourself with the device features before continuing with the installation process:

Figure: 2 M424 Features

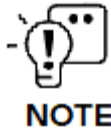


Front Panel

The front panel offers the following features:

- The VeriFone M424 device has a colored touch screen Display.
- A smart card reader is built into the front of the device to process smart card based debit or credit transactions. For directions on how to use a smart card, see [Smart Card Reader](#).
- A magnetic card reader built into the device for performing debit or credit card transactions. The card can be swiped from either direction. To ensure a proper read of the magnetic swipe card, insert the magnetic card from the side of the device as shown in [Figure 11](#).
- Contactless Reader and EMV have dedicated LEDs lower to the left of the display for contactless payments. For directions on how to conduct contactless transactions, see [Contactless Smart Card Transaction](#).
 - 4 white LEDs support CTLS transaction function.
 - 3 white LEDs support MSR transaction function.
 - 1 white LED to support EMV (CHIP) transaction function.

- A 3.5 mm audio jack to facilitate accessibility for the visually impaired.



On screen PIN entry is NOT supported.

Connection Ports

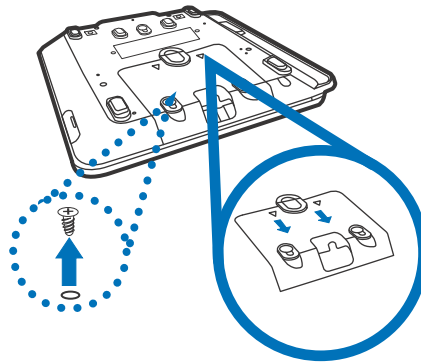
The device has one custom multiport interface for power and communications connection.

Connecting Cables and other Devices

To connect required cable connections and other devices:

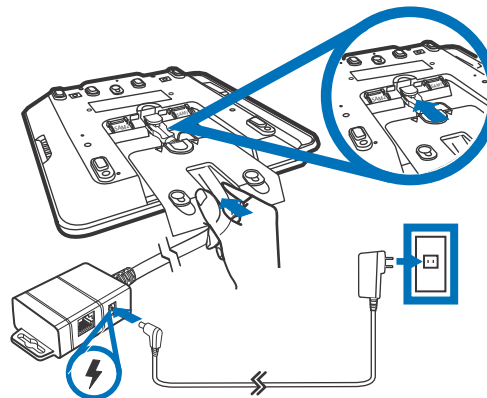
- 1 Unscrew and remove the cable cover as shown below.

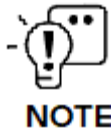
Figure: 3 Removing Cable Cover



- 2 Connect required cable connections or optional devices. Attaching the multiport cable provides multiple connection options.

Figure: 4 Multiport Cable Connected on the Rear of the Unit

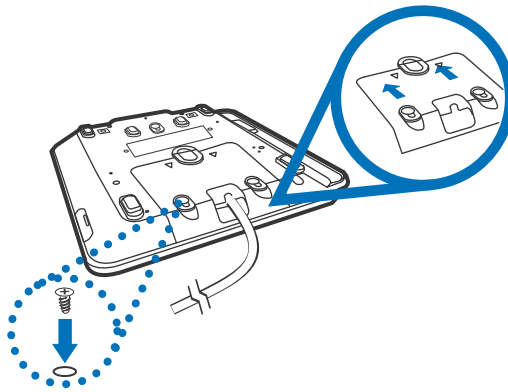




Route the multiport cable through the cable cover first, as shown in the picture.

3 Close cable compartment as shown below.

Figure: 5 Closing Cable Compartment with Cable Cover



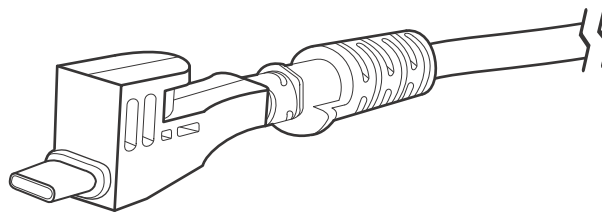
M424 Connection Options

The M424 device can be connected to other systems using several methods. They all connect to the M424 using the Multiport cable connected on the rear of the unit.

Powered Multiport Cable

Powered Multiport Cable provides USB signal connectivity and power. It provides a convenient way of connecting other systems of the same type.

Figure: 6 Powered Multiport Cable



MSAM Card

You may need to install one or two Multiple Security Access Module (MSAM) cards or replace an old one.



Observe standard precautions in handling electrostatically sensitive devices. Electrostatic discharge can damage the equipment. Verifone recommends using a grounded anti-static wrist strap.

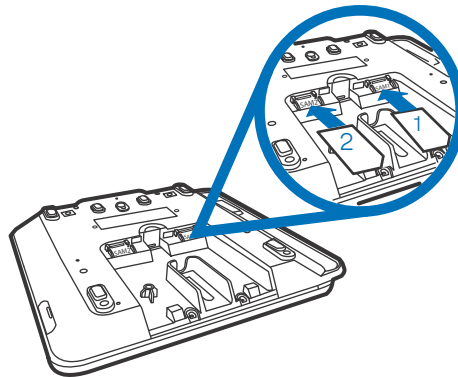
CAUTION *Observez les précautions standard lors de la manipulation d'appareils sensibles aux décharges électrostatiques. Les décharges électrostatiques peuvent endommager l'équipement. Verifone recommande d'utiliser un bracelet antistatique mis à la terre.*

Installing or Replacing MSAM Card

To install or replace MSAM cards:

- 1 Power off the device.
- 2 Place the device face down on a soft and clean surface.
- 3 Remove the cable cover of the unit.
- 4 Insert the MSAM cards. Carefully slide the cards one at a time into the slots until fully inserted. The correct orientation of the MSAM card is as indicated in the figure 7.
- 5 Close the cable cover.

Figure: 7 MSAM Insertion



NOTE

Position the card's gold contacts facing downward toward the user. The card slot in the device has a set of contacts. The MSAM card has a notch on one corner to ensure that it fits into the connector base in only one way.

To replace SAM card, gently slide out the old SAM card before inserting a new one.

Device Power Source

The device is powered by an external AC/DC power pack. When you have finished installing the necessary cards and/or optional devices, you are ready to connect the device to the power source.

The device requires connection to a power outlet with a dedicated circuit or an uninterruptible power supply (UPS). If other devices are plugged into the same circuit, the device can potentially experience power fluctuations that might cause malfunction. The device shuts down automatically once power source is removed.



Do not connect the device to the power supply until all peripherals are attached.

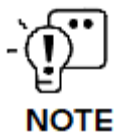
Using an incorrectly rated power supply can damage the unit or cause it not to work properly. See Specifications for detailed power supply specifications.

Do not plug the power pack into an outdoor outlet or operate the device outdoors. Disconnecting power during a transaction can also cause unsaved data files to be lost.

Ne connectez pas l'appareil à l'alimentation électrique tant que tous les périphériques ne sont pas connectés.

L'utilisation d'une alimentation mal calibrée peut endommager l'appareil ou l'empêcher de fonctionner correctement. Voir Spécifications pour les spécifications détaillées de l'alimentation.

Ne branchez pas le bloc d'alimentation sur une prise extérieure et ne faites pas fonctionner l'appareil à l'extérieur. La déconnexion de l'alimentation pendant une transaction peut également entraîner la perte de fichiers de données non enregistrés.



VeriFone recommends installing a power surge protector to protect against possible damage caused by lightning strikes and electrical surges.

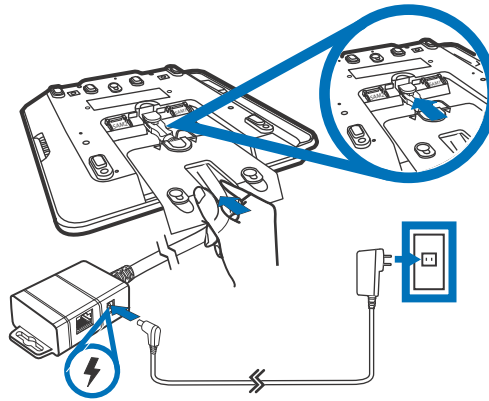
Connecting M424 Device to a Power Source

To connect M424 device to a power source:

- 1 Connect the Multiport cable (Example MSC445-010-00-A) to the Multiport at the back of the device.

- 2 Close cable cover.

Figure: 8 Connecting Base Cable to Device



- 3 Plug in power supply to the power connection port on the base module.
- 4 Plug the AC power cord into a wall outlet or power surge protector.

Smart Card Reader

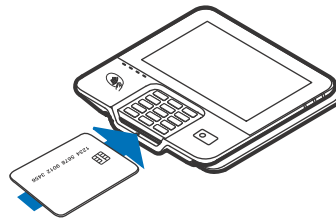
The smart card transaction procedure can vary depending on the application. Verify the proper procedure with your application provider before performing a smart card transaction.

Using the Smart Card Reader

To use the smart card reader:

- 1 Position the smart card with the gold contacts facing upward.
- 2 Insert the card into the smart card reader slot in a smooth, continuous motion until it sets firmly.

Figure: 9 Smart Card Reader



- 3 Remove the card only when the display indicates the transaction is complete.



Leave the smart card in the card reader until the transaction is completed. Premature card removal can invalidate a transaction.

Laissez la carte à puce dans le lecteur de carte jusqu'à ce que la transaction soit terminée. Le retrait prématuré de la carte peut invalider une transaction.

Magnetic Card Reader

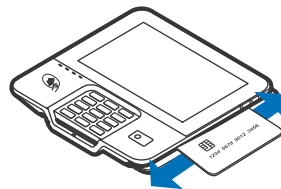
The device has a magnetic card reader that uses a triple track stripe reader. This gives the unit greater reliability over a wide range of swipe speeds and operating environments.

Using the MSR (Credit/Debit Card Transaction)

To use the MSR (credit/debit card transaction):

- 1 MSR indicator lights will flash when ready to accept MSR transaction.
- 2 Position a magnetic card with the stripe to face downward, as shown in Figure 10.
- 3 Swipe the card through the magnetic card reader.

Figure: 10 Using the Magnetic Card Reader



Contactless Smart Card Transaction

The device supports contactless transactions through an integrated contactless module. The device only becomes active for contactless smart card transactions when initialized by an application.

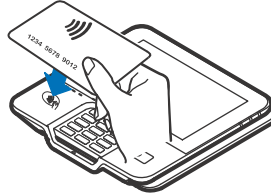
Performing a Contactless Smart Card Transaction

To perform a contactless smart card transaction:

- 1 Gently tap the card onto payment device or hold the card within 4 cm against the surface of the device on the left side of keypad above the Contactless Reader icon.

- 2 Activated LED icons accompanied by a short beeping sound indicates a successful transaction.

Figure: 11 Contactless Smart Card Transaction



CAUTION

Do not allow metallic surfaces to come in contact with the contactless module to ensure that it works properly.

Ne laissez pas les surfaces métalliques entrer en contact avec le module sans contact pour garantir son bon fonctionnement.

M424 Wi-Fi/BT Support

The M424 device includes an integrated WLAN RF transceiver for Wireless LAN systems with advanced power management, and an integrated radio transceiver for Bluetooth wireless systems.

Bluetooth Support

Supports BR/EDR and LE, including Eddystone and iBeacon.

Wireless Transaction

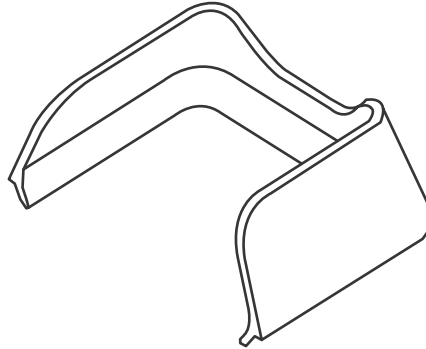
M424 supports wireless transactions. Wireless transactions occur when initialized by an application.

Optional Accessories

These accessories can be used to further enhance the device's functionality. See chapter [Accessories](#) for list of part numbers for additional information.

Privacy Shield The privacy shield is used to deter the visual observation of PIN values as they are being entered by the cardholder during a transaction.

Figure: 12 M424 Privacy Shield



Installing the Privacy Shield To install a privacy shield:

- 1 Ensure the device's surface is clean and free of dirt or debris.
- 2 Remove release liner and adhere the privacy shield by aligning the shield into the keypad recess in a downward motion.



Remove the power cord from the multiport cable before connecting any peripheral device. Reconnect the power cord only after you have finished connecting the peripheral device(s).

CAUTION *Retirez le cordon d'alimentation du câble multiport avant de connecter un périphérique. Rebranchez le cordon d'alimentation uniquement après avoir terminé de connecter le(s) périphérique(s).*

- 3 Press down firmly and hold for thirty seconds to ensure adhesive bonding.

Figure: 13 Installing the Privacy Shield

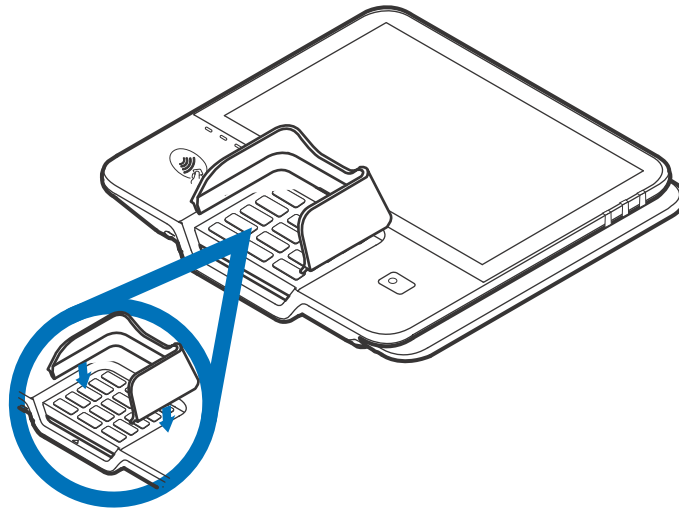
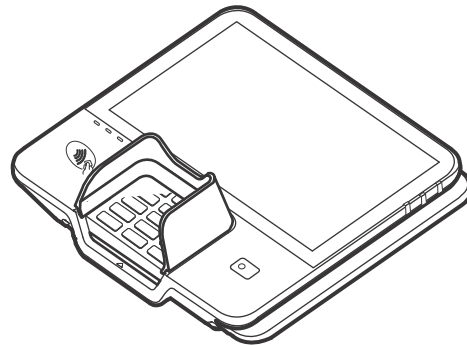


Figure: 14 Privacy Shield attached to Device



External and Optional Devices

Multiple cable configurations are provided for the M424 device that supports peripheral devices designed for use with electronic point-of-sale system such as ECR, cash drawer, barcode scanner, external keyboard, weighing scale, external printer, external speakers, and a USB connection.

3. Specifications

This chapter provides details on the power requirements, dimensions, and additional specifications of the M424 device.

Power Rating • 12V DC, 1A

Power Pack

- UL/cUL, ITE listed, LPS power supply
- Input rated: 100-240V AC, 50/60 Hz
- Output rated: 12V DC, 1A, 12W

Temperature • Operating temperature: 0°C to 40°C (32°F to 104°F)

Memory

- 2 GB RAM
- 16 GB Flash
- Secure processor: 512 MB DRAM, 512 MB Flash

Display • 5.5 inch (120.77 X 67.93) HD IPS LCD, Capacitive Touch screen

Magnetic Card Reader • Triple track (tracks 1, 2, 3), high coercivity, bi-directional

Primary Smart Card

- ISO 7816, 1.8V, 3V, 5V
- Synchronous and asynchronous cards

MSAM Card Reader • Two Security Access Modules (SAMs) card slots.

Integrated Contactless Reader • ISO 14443, ISO 18092, EMV

Keypad

- 12-key Telco-style keypad
- Three color-coded function keys below the keypad

Audio Jack

- 3.5 mm headphone jack

Peripheral Ports

- Custom Multiport Cable

Security

- Complies to PCI-PTS 5.x requirements, as well as many regional security requirements.

4. Maintenance and Cleaning

General Care Your device exemplifies superior design and craftsmanship. The following recommendations are provided to help safeguard your warranty coverage:

- Avoid storing the device in hot areas, as elevated temperatures can diminish the lifespan of electronic components, harm batteries, and cause deformation or melting of certain plastics.
- Refrain from storing the device in cold areas, as the return to normal temperatures may lead to moisture formation inside the device, potentially damaging electronic circuit boards.
- Exercise caution to prevent dropping, knocking, or shaking the device, as rough handling can result in the breakage of internal circuit boards and delicate mechanics.

These recommendations are equally applicable to both your device and any accompanying attachments or accessories. If your device is experiencing operational issues, kindly visit the nearest Verifone authorized service provider for maintenance or replacement.

Cleaning & Sanitizing Guidelines Verifone devices should only be gently cleaned to remove dirt, residue, or debris using a lightly water-damped, clean microfiber cloth. One or two drops of pH-neutral, non-scrubbing soap may be used. Do not use solvents, harsh detergents, or abrasive cleaners.

Using improper cleaning methods or products may result in functional and/or cosmetic issues that are not covered under warranty.

Important Guidelines:

- 1 Avoid Direct Application:** Never spray, coat, or pour any liquid, sanitizer, or disinfectant directly onto the device.
- 2 Caution Against Harsh Chemicals:** Avoid using bleach, hydrogen peroxide, thinner, trichloroethylene, or ketone-based solvents, as they can degrade plastic and rubber components.
- 3 Electrostatic Discharge (ESD) Prevention:** Exercise caution to prevent ESD by refraining from vigorously rubbing with a dry towel or similar actions, as they can cause ESD and trigger a tamper alert.



Cleaning Instructions

- 1 Turn off your device.
- 2 Disconnect it from the power source.
- 3 Clean it following the instructions and guidelines as mentioned above. Once completely dry, reconnect to power up.

Magnetic Stripe Cleaning

The Magnetic Stripe Reader (MSR) must be cleaned on a regular basis (daily to once a week, depending on usage), as dirt accumulation can lead to MSR reading problems. MSR can be cleaned using commercially available card reader cleaning cards or using recommended Verifone cleaning card (PN 02746-02).



NOTE

If using a commercially available cleaning card use ONLY an approved MSR cleaning card made specifically for POS MSR Card reader devices or Petroleum MSR card readers.

Using the Battery

The Verifone M424 device uses an integrated circuit with a lithium battery having reverse-charge protection. The internal logic of the battery prevents both overcharging and undercharging (a fault condition in which the battery level goes well below the minimum acceptable charge and the battery becomes unusable).



CAUTION

There is a risk of explosion if the battery is replaced by an incorrect type.
Il existe un risque d'explosion si la batterie est remplacée par un type incorrect.

5. Service and Support

The M424 device does not contain user-serviceable parts. Unless expressly directed, refrain from attempting any service, adjustments, or repairs on the unit under any circumstance.

For product service and repair information:

- USA – Verifone Service and Support Group, 1-800-837-4366
Monday - Friday, 8 A.M. - 8 P.M., Eastern time
- International – Contact your Verifone representative

Returning a Device for Service

You must obtain a Merchandise Return Authorization (MRA) number before returning the terminal to Verifone. The following procedure describes how to return one or more terminals for repair or replacement (U.S. customers only).



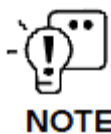
CAUTION

Customers outside the United States are advised to contact their local Verifone representative for assistance regarding service, return, or replacement of devices and accessories.

Il est conseillé aux clients en dehors des États-Unis de contacter leur Verifone local représentant pour obtenir de l'aide concernant l'entretien, le retour ou le remplacement des appareils Et accessoires.

- 1 Get the following information from the printed labels on the back of each M424 device to be returned:
 - Product ID, including the model and part number. For example, “M424” and “M308-xxx-xx”.
 - Serial number (S/N nnn-xxx-xxx)
- 2 Obtain the MRA number(s) by completing one of the following:
 - Call Verifone toll-free within the United States at 1-800-Verifone and follow the automated menu options.
 - Select the MRA option from the automated message. The MRA department is open Monday to Friday, 8 A.M. to 8 P.M., Eastern Time.
 - Give the MRA representative the information you gathered in [Step 1](#).
 - Complete the Inquiry Contact Form at <https://www.verifone.com/en/us/contact-us>.
 - Address the Subject box to “Verifone MRA Dept.”

- Reference the model and part number in the Note box.



Each M424 returned to Verifone requires a distinct MRA number to be issued. Even if you are returning multiple terminals of the same model, ensure that a separate MRA number is issued for each unit.

- 3 Describe the problem(s).
- 4 Provide the shipping address where the repaired or replacement unit must be returned.
- 5 Keep a record of the following items:
 - Detail the issue(s) with the M424.
 - Furnish the shipping address for the return of the repaired or replacement unit.
 - Maintain a record of the following elements:
 - Assigned MRA number(s).
 - Verifone serial number linked to the M424 being sent for service or repair (located on the back of the unit).
 - Shipping documentation, including air bill numbers utilized for shipment tracking.
 - Model(s) returned (model numbers can be found on the Verifone label on the back of the M424 device).

6. Accessories

Verifone provides a range of accessories and documentation for the M424. When placing orders, it is essential to reference the specific part numbers. Here are the available channels for ordering: Verifone online store:

- Verifone - [Contact us](#)
- USA - Verifone Customer Development Center, 1-800-837-4366
Monday - Friday, 7 A.M. - 8 P.M., Eastern time
- International - Contact your Verifone representative

Accessories

Part Number	Part Description
STY379-001-01-A	Passive Stylus
PPL379-013-01-A	Stylus holster
PPL379-014-01-A	Privacy Shield
PWR445-001-01-A	M4XX DC power pack
MSC445-006-00-A	CABLE ASSY, USB, ICE CUBE
MSC445-010-00-A	CABLE ASSY, EHERNET, ICE CUBE
MSC445-011-00-A	CABLE ASSY, USB & EHERNET, ICE CUBE
MSC445-012-01-A	CABLE ASSY, ETHERNET, SERIAL, USB & USB
MSC445-019-00-A	CABLE ASSY, M4XX POE, USB CABLE
MSC445-023-00-A	CABLE ASSY, BASE MODULE WITH END CAP, ICE CUBE
MSC445-028-00-A	CABLE ASSY, SERIAL, ICE CUBE

Part Number	Part Description
MSC445-029-00-A	CABLE ASSY, EHERNET & SERIAL, ICE CUBE
MSC445-032-01-A	CABLE ASSY, BERG ADAPTER, MULTIPORT

7. Troubleshooting Guidelines

This chapter compiles common instances of malfunctions that may arise during the operation of your device, along with the corresponding steps to address them. The troubleshooting guidelines outlined in the subsequent sections are incorporated to facilitate the effective installation and configuration of the device. Should you encounter challenges in operating your unit, please refer to these troubleshooting examples. If the issue persists despite following the provided guidelines or if the problem is not covered, kindly reach out to your local Verifone representative for further assistance.



NOTE

The device is equipped with tamper-evident labels and does not contain any user-serviceable parts. It is crucial not to attempt to disassemble the unit under any circumstances. Only perform adjustments or repairs explicitly outlined in this guide. For any other services, please contact your local Verifone service provider. Utilizing services from unauthorized parties may potentially void any existing warranty.



CAUTION

All units require the use of a power supply. Only use a Verifone-supplied power pack. Using an incorrectly rated power supply may damage the unit or cause it to malfunction. Ensure that the power supply used to power the unit matches the specified requirements on the back of the unit (refer to [Specifications](#) for detailed power supply specifications) before troubleshooting. If not, obtain the appropriately rated power supply before continuing with troubleshooting.

Toutes les unités nécessitent l'utilisation d'une alimentation. Utilisez uniquement un bloc d'alimentation fourni par Verifone. L'utilisation d'une alimentation mal calibrée peut endommager l'appareil ou l'empêcher de fonctionner correctement. Assurez-vous que l'alimentation électrique utilisée pour alimenter l'unité correspond aux exigences spécifiées à l'arrière de l'unité (voir [Spécifications](#) pour les spécifications détaillées de l'alimentation électrique) avant le dépannage. Dans le cas contraire, procurez-vous une alimentation électrique appropriée avant de poursuivre le dépannage.

Device Does not Start/Does not Display Correct Readable Information

If the device does not start:

- Ensure that the device is plugged in to a dedicated power source.
- Verify all the cable connections including the proper insertion of the power cable connector.
- If the problem persists, reach out to your local Verifone representative for assistance.

Blank Display

When the device display is blank:

- If the device display appears dark, tap the screen using the stylus. If the unit is in screen-saver mode, touch the screen to activate.
- If the display does shows incorrect or unreadable information, inspect all cable connections. In case the problem persists, reach out to your local Verifone representative for assistance.

Keypad Does Not Respond

If the keypad does not respond properly:

- Examine the device display. If it displays the wrong character or nothing at all when you press a key, follow the steps outlined in [Device Does not Start/Does not Display Correct Readable Information](#).
- Refer to the user documentation for that application if using a function key does not produce the anticipated outcome, to ensure accurate data entry.
- If the issue persists reach out to your local Verifone representative.

Transactions Fail to Process

Multiple factors could be causing the unit to fail in processing transactions. Utilize the following steps to troubleshoot and identify the root of the failures.

Checking Magnetic Card Reader

To check the magnetic card reader:

- 1 Perform a transaction using one or more distinct magnetic stripe cards to rule out the possibility of a faulty card.
- 2 Ensure that you are swiping cards correctly (see [Magnetic Stripe Card Reader Use](#)).
- 3 Process a transaction manually using the keypad instead of the card reader. If the manual transaction is successful and the issue persists with the card reader, it may indicate a problem with the card reader itself.

- 4 If the problem persists, reach out to your local Verifone representative.

Checking Smart Card Reader

To check the smart card reader:

- 1 Execute a transaction using various smart cards to eliminate the possibility of a faulty card.
- 2 Verify that the card is inserted correctly (see [Smart Card Reader](#)).
- 3 Ensure the SAM cards are appropriately inserted into the designated slots and are securely in place (refer to [SAM Card](#)).
- 4 If the issue persists, get in touch with your local Verifone representative.

Checking CTLS Reader

To check the CTLS reader:

Make sure there are no obstructions between the contactless logo and the card, ensuring a clear path between the contactless reader and the actual card for a seamless transaction.

Verifone
2744N University Drive
Coral Springs,
FL 33065, USA



www.verifone.com



Thank you!

We are the payments architects who truly understand commerce.

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