

KDM2410M

KEDACOM

Installation Guide

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About the KDM2410M

1 Product Introduction

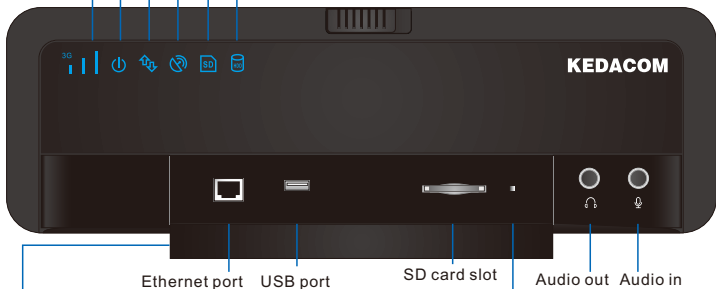
Kedacom KDM2410M (hereinafter referred to as the Mobile NVR) supports 3G/4G/WiFi/WiFi-AP wireless network transmission, satellite positioning, and H.264 and H.265 encoding formats. The Mobile NVR accommodates two SIM cards, one 2.5-inch hard disk drive (HDD) or solid-state drive (SSD), and one secure digital (SD) card. For storage devices, the Mobile NVR adopts the hard disk vibration damping technology. The Mobile NVR can connect to PTZ cameras and control them. The Mobile NVR can be controlled by Kedacom Video Management System (VMS), which is a comprehensive platform for managing cameras, NVRs, encoders, and decoders.

2 Product Appearance

2.1 Front Panel

On the front panel of the Mobile NVR, you can see the following items:

VMS connection indicator
Power indicator
3G signal bar
GPS indicator
SD card indicator
Disk indicator



Hook the groove on the cover and gently open the cover.

Reset button
Pressing and holding this button for 5s will reset the system to factory defaults.

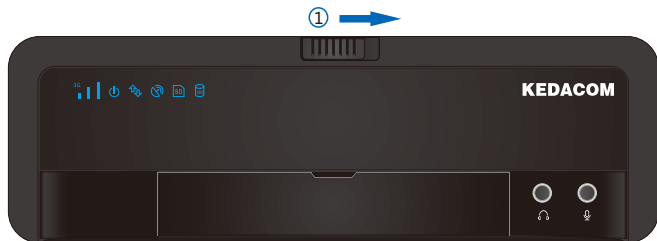
The following table helps you read the indicators on the front panel.

Indicator	State	Description
3G signal bar	On	A 3G or 4G connection is established.
	Off	No 3G or 4G connection is established.
Power	On	The Mobile NVR is powered on.
	Off	The Mobile NVR is powered off.
VMS connection	On	The Mobile NVR is connected to a VMS.
	Off	The Mobile NVR is disconnected from the VMS.
GPS	Blue	The Mobile NVR is collecting data.
	Red	Data Error
	Off	The GPS module of the Mobile NVR is faulty.
SD	Blue	An SD card is installed.
	Blinking blue	The Mobile NVR is performing the writing or reading operation on the SD card.
	Red	The SD card is faulty.
	Off	No SD card is installed.
Disk	Blinking blue	The Mobile NVR is performing the writing or reading operation on the disk.
	Red	No disk is installed, the disk is not formatted, or the disk is faulty.

2.2 Inserting a Disk

On the front panel, you can insert one disk. To insert a disk:

1. Slide the slider right to unlock the protection mask.



2. Take out the key from the key slot.

3. Insert the key into the disk lock and turn the key clockwise to unlock the disk slider.

4. Slide the disk slider left to unlock the hard disk tray.

When the hard disk tray is unlocked but you do not insert or remove a disk, the KDM2410 will sound the buzzer at an interval of 3s.

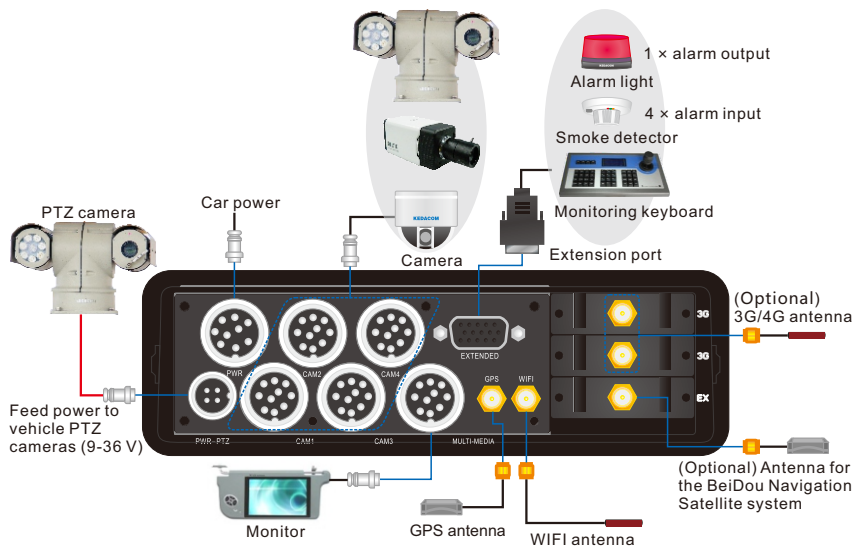
5. Press the left end of the hard disk tray until the right end stands up.



6. Pull out the hard disk tray from the disk slot and unscrew the cover of the hard disk tray.
7. Put the disk into the hard disk tray and screw it.
8. Put the hard disk tray back to the disk slot.
9. Slide the disk slider right to lock the hard disk tray.
10. Turn the key counterclockwise to lock the disk slider.
11. Put the key back to the key slot.
12. Lock the protection mask.

2.3 Rear Panel

The following figure shows the rear panel of the Mobile NVR.



2.4 Pins

[Aviation Plugs]

PWR-PTZ



- 1+2 — Red VCC_PTZ
- 3+4 — Black GND_PTZ

VCC: Requiring 18 AWG cables or cables with a greater diameter (for example 16 AWG)

GND: Same as above

The **PWR-PTZ** plug can connect only to 9-36 V PTZ cameras.

CAM



- 2+3 — Red 12V_OUT
- 1+4+8+9 — Black ETH
- 5 — Black GND
- 6 — Black GND
- 7 — Green AUDIO IN
- 10 — Yellow VIDEO IN

VCC: Requiring 18 AWG cables or cables with a greater diameter (for example 16 AWG)

GND: Same as above

The **CAM** plug supports the 12 V (12 W) DC power output.

[Extension port]



- Orange RS232_TXD
- Brown RS485-A
- White ALM_IN2
- Green RS232_RXD
- Black 4×GND
- Purple ALM_OUT_B
- Red RS485-B
- Blue ALM_OUT_A
- Yellow ALM_IN3
- Pink ALM_IN4
- White ALM_IN1

PWR



- 1+2+3+4 — Red CAR_IN+
- 6+7+8+9 — Black CAR_IN-
- 5 — Yellow ACC

CAR: Requiring 16 AWG cables or cables with a greater diameter (for example 14 AWG)

ACC: Requiring 22 AWG cables or cables with a greater diameter (for example 18 AWG)

The **PWR** plug supports the 12/24 V power inputs. Before using the Mobile NVR, connect **CAR_IN+** to the anode of the car battery, **CAR_IN-** to the cathode of the car battery, and **ACC** to the ignition system of the car. This can achieve delayed poweron and poweroff for the Mobile NVR.

MULTI-MEDIA



- 1 — Red 12V_OUT
- 2 — Yellow VIDEO OUT
- 3 — Green AUDIO IN
- 4 — Red RS485A
- 5 — Black GND
- 6 — Black GND
- 7 — Yellow AUDIO OUT
- 8 — Green RS485B
- 9 — Red DP
- 10 — Green DM

The **MULTI-MEDIA** plug supports the 12 V (24 W) DC power output. The **DP** and **DM** pins can connect to USB storage devices.

Installing the Mobile NVR

1 Preparations

1.1 System Specifications

Ensure that the specifications of the Mobile NVR are complied with. For example, the operating temperature for the NVR must be within the range of -40°C to 70°C.

For the physical specifications of the Mobile NVR, see chapter "Physical Specifications."

1.2 Equipment Cleanliness

The following table provides the mapping between the particle diameter range and number of particles per cubic meter.

Particle Diameter Range	Number of Particles per Cubic Meter
[0, 0.5]	1.4×10^7
[0.6, 1]	7×10^5
[1.1, 3.0]	2.4×10^5
[3.1, 5.0]	1.3×10^5

You must install the Mobile NVR in an environment as free from dust and foreign conductive material (such as metal flakes from construction activities) as is possible.

1.3 ESD

To reduce the effects of electrostatic discharge (ESD), you should observe the following guidelines.

- Wear a grounding wrist strap. If a grounding wrist strap is unavailable, touch an unpainted metal surface on the appliance chassis periodically to neutralize any static charge.
- Keep components in their antistatic packaging until they are installed.
- Avoid wearing clothing made of wool or synthetic materials.
- Ensure that the Mobile NVR is well grounded.
- Keep the area around the Mobile NVR clean, free of clutter, and well ventilated.
- Ensure that the operating temperature and the relative humidity within the range complying with the Mobile NVR.

1.4 EMI

To shield electromagnetic interference (EMI), you should observe the following guidelines:

- Keep the ground system of the Mobile NVR away from that of the power supply system or lightning protection system.
- Place the Mobile NVR away from high-frequency devices, such as radio or radar stations.
- When necessary, deploy EMI shielding devices.

2 Unpacking

Perform the following steps to unpack the system:

- 1) Inspect the package to make sure that it has not been damaged.
If you find damage, contact the local authorized Kedacom agent.
- 2) Open the package and check whether any item on the packing list is missing.
- 3) Take all items out of the package and check whether any item is in poor condition.
If you find damage, contact the local authorized Kedacom agent.

3 Installing the Mobile NVR

To install the Mobile NVR, contact the local authorized Kedacom agent.

After the installation is completed, please note the following:

- To power on the Mobile NVR, turn on your car engine.
- To power off the Mobile NVR, shut your car engine off.
- For details on how to use the Mobile NVR, see the user guide included in the KEDACOM Document and Utility CD.

4 Power-on Self-Test

After the Mobile NVR is powered on, check whether the six indicators on the front panel are normal. If not, contact the local authorized Kedacom agent.

5 Product Care

5.1 Lightning Protection

To prevent the risk of lightning, you are advised to ensure the following:

- The Mobile NVR is well grounded.
- Based on onsite conditions, install lightning arrestors.

6.2 Battery Replacement

Type	ML414H-IV01E (a coin-cell battery)
Battery Life	Refer to the manufacturer's instructions or contact the manufacturer for details.
No Charge	When the battery loses its charge, the CMOS data (such as the system time and BIOS settings) may be incorrect or even lost.
Replacement	<ol style="list-style-type: none">1. Prepare a new ML414H-IV01E battery.2. Switch off the Mobile NVR and disconnect it from a power outlet.3. Wear a grounding wrist strap to replace the old battery with the new one. During replacement, do not mix up the anode and cathode. Contact the local authorized Kedacom agent if you encounter any problem when replacing the battery.
Disposal	Dispose of used batteries according to local laws or regulations.

6.3 Miscellaneous

- Do not place heavy objects on the Mobile NVR. Do not block the air vent.
- Switch off the Mobile NVR if you are not using it for a long period of time.
- Regularly check the Internet connection status of the Mobile NVR.

Physical Specifications

The following table provides the physical specifications of the Mobile NVR.

Power	9-36 V
Power consumption	15 W (HDD not included)
Operating temperature	-40°C to 70°C
Operating humidity	10% to 85% (non-condensing)
Elevation	-60 m-5000 m
Size(height x width x depth)	60 mm x 188.4 mm x 252 mm
Weight	2.45 kg (HDD not included)

Initial Configuration

To initially configure the Mobile NVR:

1. Configure network settings.
2. Enter the VMS configurations.
3. Set the time.

For details, see chapter Getting Started of the user guide for the Mobile NVR.

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Kedacom Two (2) Year Limited Hardware Warranty

WHAT IS COVERED BY THIS WARRANTY?

Kedacom warrants the Kedacom-branded hardware product and accessories contained in the original packaging (hereinafter referred to as "Kedacom Product") against defects in materials and workmanship when used normally in accordance with Kedacom's published guidelines for a period of TWO (2) YEARS from the date of original retail purchase in areas other than mainland China by the end-user purchaser (hereinafter referred to as "Warranty Period"). For the Kedacom Product purchased in mainland China, see the simplified Chinese version of this warranty for details. Kedacom's published guidelines include but are not limited to information contained in technical specifications, user guides, and service communications. The preceding applies unless otherwise agreed in the contract.

WHAT IS NOT COVERED BY THIS WARRANTY?

This warranty does not apply to any non-Kedacom branded hardware products or any software, even if packaged or sold with Kedacom hardware. Manufacturers, suppliers, or publishers, other than Kedacom, may provide their own warranties to you but Kedacom, in so far as permitted by law, provides their products "AS IS". Software distributed by Kedacom with or without the Kedacom brand (including, but not limited to system software) is not covered by this warranty. Please refer to the licensing agreement accompanying the software for details of your rights with respect to its use. Kedacom does not warrant that the operation of the Kedacom Product will be uninterrupted or error-free. Kedacom is not responsible for damage arising from failures to follow instructions relating to the Kedacom Product's use.

This warranty does not apply: (a) to consumable parts, such as batteries, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents, and broken plastic on ports; (c) to damage caused by use with another product; (d) to damage caused by acts outside the control of Kedacom, including without limitation acts of God, accidents, abuse, misuse, fire, storms, earthquakes, flood, or other external cause; (e) to damage caused by exposure of the product to heat, bright light, sun, liquids, sand, or other contaminants; (f) to damage caused by operating the Kedacom Product outside Kedacom's published guidelines; (g) to damage caused by service (including upgrades and expansions) performed by anyone other than a representative of Kedacom, Kedacom employee, or authorized Kedacom agent; (h) to an Kedacom Product that has been modified to alter functionality or capability without the written permission of Kedacom; (i) to defects caused by normal wear and tear or otherwise due to the normal aging of the Kedacom Product, or (j) if any serial number has been removed or defaced from the Kedacom Product.

YOUR RESPONSIBILITIES

If your Kedacom product is capable of storing data and other information, you should make periodic backup copies of the information contained on the storage media to protect the contents and as a precaution against possible operational failures.

Before receiving warranty service, Kedacom or its authorized agents may require that you furnish proof of purchase details, respond to questions designed to assist with diagnosing potential issues, and follow Kedacom's procedures for obtaining warranty service. Before submitting your Kedacom Product for warranty service, you should maintain a separate backup copy of the contents of its storage media, remove all personal information that you want to protect, and disable all security passwords.

During warranty service, it is possible that the contents of the Kedacom product's storage media will be lost, replaced or reformatted. In such an event, Kedacom and its authorized agents are not responsible for any loss of data or other information contained on the storage media or any other part of the Kedacom product serviced.

Following warranty service, your Kedacom Product or a replacement product will be returned to you as your Kedacom Product was configured when originally purchased, subject to applicable updates. You will be responsible for reinstalling all other data and information. Recovery and installation of other data and information are not covered under this warranty.

WHAT WILL KEDACOM DO IF THE WARRANTY IS BREACHED?

If during the Warranty Period, you submit a valid claim to Kedacom or an authorized Kedacom agent, Kedacom will, at its option, (i) repair the Kedacom Product using new or previously used parts that are equivalent to new in performance and reliability, or (ii) exchange the Kedacom Product for a refund of your purchase price.

A Kedacom replacement part or product, including a user-installable Kedacom part that has been installed in accordance with instructions provided by Kedacom, assumes the remaining warranty of the Kedacom Product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When a product or part is replaced or a refund provided, any replacement item becomes your property and the replaced or refunded item becomes Kedacom's property.

Kedacom reserves the right to refund the purchase price as its exclusive warranty remedy.

HOW TO OBTAIN WARRANTY SERVICE?

To seek warranty service, please contact a local authorized Kedacom agent. When contacting the agent via telephone, other charges may apply depending on your location.

User Information

Complete the form below and keep for ready reference.

User Name:	
Address:	Postal Code:
Tel:	Mobile:
Fax:	E-Mail:
Product Name:	Product Model:
Date of Purchase:	

客户咨询热线：**800-828-2866** **400-828-2866**

KEDACOM

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