



EN

Quick Installation Guide

**4K HD-TVI, AHD, HDCVI, CVBS,
to HDMI, VGA, CVBS, indoor**

MAM-5MM2203M0A

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Safety instructions

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General safety instructions

- Before switching on and operating the system, first read this safety advice and the operating instructions.
- Keep the operating instructions in a safe place for later use.
- Installation, commissioning and maintenance of the system may only be carried out by authorised individuals and in accordance with the installation instructions - ensuring that all applicable standards and guidelines are followed.
- Protect the devices from water penetration and humidity, since these can cause lasting damage.
- Should moisture nevertheless enter the system, under no circumstance switch on the devices under these conditions, instead send them for examination to an authorised specialist workshop.
- The system must never be used outside of the technical specifications, since this can destroy it.
- The device must be protected from excesses of heat, dust, humidity and vibration.
- When separating the system from the voltage supply, only ever use the plug to pull out the cable. Never pull directly on the cable itself.
- Lay the connecting cables carefully and check that they are not mechanically stressed, kinked or damaged and that no humidity can penetrate into them.
- In the event of a malfunction, please inform your supplier.
- Maintenance and repairs may only be carried out by authorised specialist personnel.
- The system must be isolated from the power supply before opening the housing.
- The device may only be opened by qualified service personnel. Unauthorised access invalidates any warranty claim.
- Connection cables should always be exchanged through Videor E. Hartig GmbH.
- Use only original spare parts and accessories from Videor E. Hartig GmbH.
- The housing should only be cleaned using a mild domestic cleaning agent. Never use solvents or petrol as these can permanently damage the surface.
- During installation, it is essential to ensure that the seals provided are correctly installed and that they are not displaced during installation. Damaged seals must not be installed and will invalidate any warranty.
- The installer is responsible for the maintenance of the enclosure as per the technical data, e.g. by sealing the cable outlets with silicone.
- Wire end ferrules should be used when shortening the flexible connection cables.
- The devices may only be operated in the temperature range indicated in the data sheet and within the defined air humidity range.

WEEE (Waste Electrical & Electronic Equipment)

Correct Disposal of This Product (Applicable in the European Union and other European countries with separate collection systems).



This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Graphical symbols

Please pay attention to the safety instructions, and carefully read through this instruction guide before initial operation.



Important points of warning are marked with a caution symbol.



Important points of advice are marked with a notice symbol.

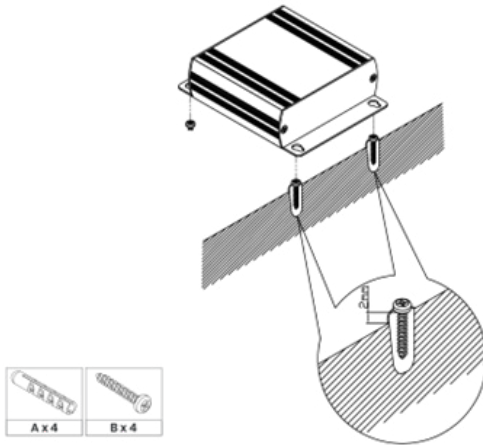
Package Includes

- MAM-5MM2203M0A x 1 pcs
- DC12V 500mA power adapter x 1 pcs
- SMT Self-tapping Screw x 4pcs
- Wall Plug x 4 pcs
- Rubber Pad x 4pcs

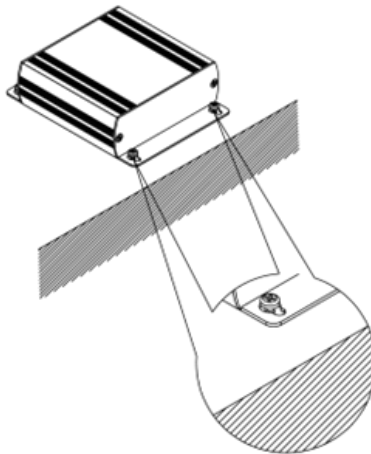
Installation Guide

Install On A Table Or A Wall

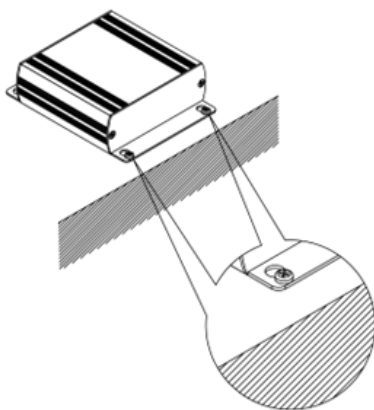
Step 1: Evenly fix SMT screws on a platform and leave a 2mm high clearance.



Step 2: Place MAM-5MM2203M0A on the platform and fit its holes in the corresponding screw positions.

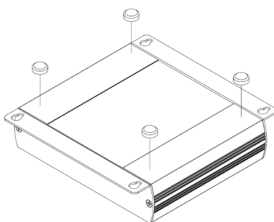


Step 3: Move MAM-5MM2203M0A until it gets fixed.

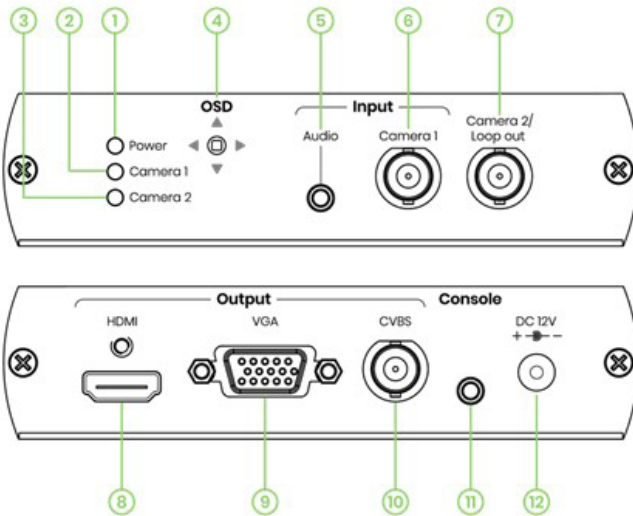


Use Rubber Pads to Prevent the Product from Slipping down The Platform

Fix each rubber pad at each corner of the product.



Panel View



No.	Interface	Description
1	Power LED	To indicate power status (Refer to Description 1).
2	Camera 1 LED	To indicate Camera 1 status (Refer to Description 1).
3	Camera 2 LED	To indicate Camera 2 status (Refer to Description 1).
4	OSD	To control OSD menu (Refer to Description 4).
5	Audio	To use a 3.5mm audio cable to connect an audio source from a HD-TVI, AHD, HDCVI camera (Refer to Description 2).
6	Camera 1	To use a coaxial cable to connect with a HD-TVI, AHD, HDCVI camera (Refer to Description 2).
7	Camera 2 / Loop Out	To use a coaxial cable to connect with a HD-TVI, AHD, HDCVI camera, a DVR or another AD001HD4-4K (Refer to Description 3, 5).
8	HDMI	To use an HDMI cable to connect with an HDMI display (Refer to Description 3).
9	VGA	To use a VGA cable to connect with a VGA display (Refer to Description 3).
10	CVBS	To use a coaxial cable to connect with a CVBS display (Refer to Description 3).
11	Console	To use a 3.5mm to RS232 cable to connect with a PC (Refer to Description 2).
12	DC 12V	To connect with a DC12V 500mA power adapter.

Description 1 – LED Indicator

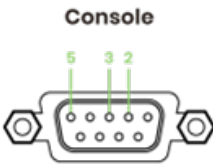
Interface	LED Color	Status
Power	Green ON/ OFF	Power ON/ OFF
Camera 1	Green ON/ OFF	Signal Detected/ No Video
Camera 2	Green ON/ OFF	Signal Detected/ No Video

Description 2 – Installation and Cabling

1. Avoid being in areas with electrical interferences, such as mobile phones, micro-waves and so on, when installing your AD001HD4-4K.
2. Remove the power before installation.
3. Audio Input
 - If connecting to a camera with a built-in microphone, AD001HD4-4K can only output the video source.
4. Console
 - Use DB9(Female) to 3.5mm stereo phone jack.
 - Configure RS232 parameter at 115200/ 8-N-1.
 - Pinout Instructions:



3.5mm Stereo Phone Jack	
PIN	Define
Pin 1	RX
Pin 2	TX
Pin 3	GND



DB9 (Female)	
PIN	Define
Pin 2	TX
Pin 3	RX
Pin 5	GND

Description 3 – Video Format & Resolutions

Video Input Format & Resolutions (Auto Define HD-TVI, AHD, HDCVI, CVBS Video Format)

Resolutions	HD-TVI	AHD	HDCVI
8MP (4K)	12.5/15 FPS	15 FPS	15 FPS
6MP	X	X	20 FPS
5MP	12.5/20 FPS	20 FPS	X
4MP	25/30 FPS	25/30 FPS	25/30 FPS
2MP (1080p)	25/30 FPS	25/30 FPS	25/30 FPS
1.3MP (720p)	30 FPS	25/30 FPS	25/30/50/60 FPS

Video Output Format & Resolutions

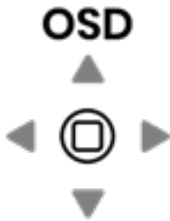
Resolution	HDMI	VGA	CVBS
4K2K	30/ 25Hz	X	X
2160p	30/ 25Hz	X	X
1080p	60/ 50Hz	60/ 50Hz	X
1080i	60/ 50Hz	60/ 50Hz	X
720p	60/ 50Hz	60/ 50Hz	X
576p	60Hz	60Hz	PAL
480p	60Hz	60Hz	NTSC

When HDMI/ VGA resolution is set to

- 480p, 720p@60, 1080i@60, 1080p@60, 2160p@30, 4K2K@30, CVBS will be NTSC.
- 576p, 720p@50, 1080i@50, 1080p@50, 2160p@25, 4K2K@25, CVBS will be PAL.

Description 4 – OSD Settings

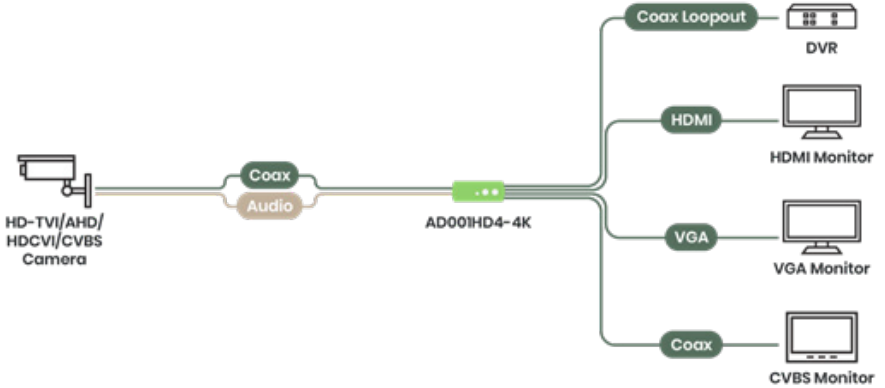
Use 5-Way Tactile Switch to Control OSD Menu



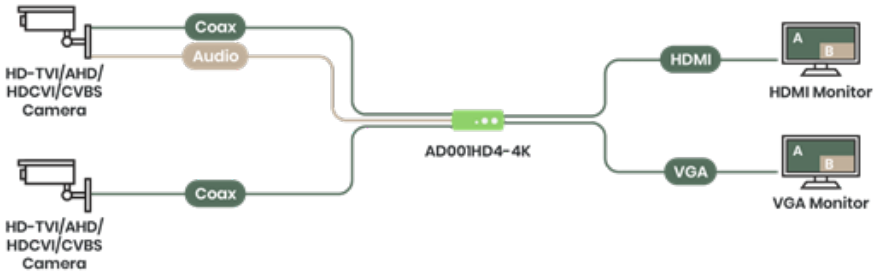
Button	Features
•	Turn ON/ OFF OSD menu
▲	Up
▼	Down
◀	Switch function
▶	Switch function

Installation Diagram

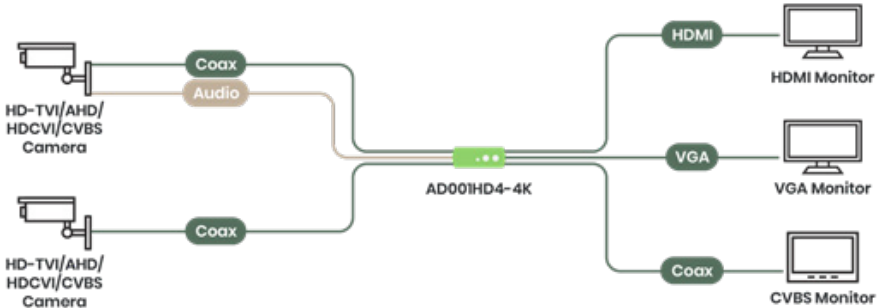
1 in 4 out Mode (HDMI, VGA, CVBS output at the same time)



2 in 2 out Mode (Dual cameras with PIP)



2 in 3 out Mode (Dual cameras with manual switching Cam 1 / 2)



Further information

The manual is also available from the eneo web site at www.eneo-security.com.

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