kino·mo

HYPERVSN™

Model M operating manual

Revolution in Every Dimension

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⚠️ **WARNING! The present operating manual must be carefully read before using the device.**

The operating manual covers device(s) (hereinafter referred to as the device, devices or Hypervsn™ Model M) overview, technical specifications, safety requirements, and other information required to operate Hypervsn™ Model M.

The present operating manual is designed for Hypervsn™ Model M.

Hypervsn™ Model M 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.

Kino-mo Ltd, the manufacturer, disclaims all liability for any harm caused to a consumer by improper device operation and use. No changes shall be made to the equipment without the manufacturer's permission as this may void the user's authority to operate the device.

The device appearance may vary slightly from the pictures presented in the current manual.

Thank you for purchasing our product.

PLEASE READ THE OPERATING INSTRUCTIONS CAREFULLY BEFORE CONNECTING THE DEVICE TO A POWER SOURCE.

1. APPLICATION

The present operating manual is designed for Hypervsn™ Model M.

Hypervsn™ Model M is designed to display videos and images formed by spinning rays.

- The content is uploaded through a Wi-Fi connection.

- The device is to be connected to single-phase alternating current mains with 110/230V voltage and 50/60Hz frequency and can be operated continuously while plugged in.

- The device has **Class A** electromagnetic compatibility.

The device is designed for static mounting on walls, custom-made structures such as free-standing structures or structures hanging from the ceiling or other stable surfaces and can be operated indoors under the following conditions:

1. Temperature range from 0 °C to +35 °C.
2. Relative humidity up to 80%.

Basic technical device specifications are listed in Table 1 (page 6).

The device consists of two major elements:

1. Rotor
2. Stator

The device assembly process is specified in paragraph 4.

2. TECHNICAL SPECIFICATIONS

Table 1. Basic technical specifications

PARAMETERS DESCRIPTION	MODEL M
Maximum image size (diameter)	567 mm
Dimensions, mm Diameter	567 mm
Depth	174 mm
Number of LED rays	4
Rotational speed	670 RPM
Number of LEDs per each LED ray	168
Average power consumption	35 W
Rated voltage	110/230V
Rated current	1,0/0,5A
Input AC frequency	50/60 Hz
Net weight	2.8 kg
Noise figure on the device axis (3 metres from the unit)	45 Db
Fuse	ceramic 4A 250VAC 5X20MM

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Power cable length	3 metres
Power cable thickness	8 mm (max)

Plug: the size of the head of the plug depends on its region.

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3. PACKAGE CONTENTS

3.1. T1-D package contents

Table 2. T1-D package contents

COMPONENT NAME	QUANTITY
Stator	1 piece
Rotor	1 piece
Wall bracket	1 piece
Operating manual	1 piece
Set screw	1 piece

3.2 Key elements

Table 3. Components of the device

ROTOR	STATOR	WALL BRACKET

# 4. HYPERVSN™ MODEL M ASSEMBLY

Picture 1. Wireless antenna

Attention.

◉ Please mind the device wireless antenna integrity. Make sure you do not cut the antenna off. Before assembling the device, make a visual check of its components integrity.

◉ Rays should not have any cracks or other visual damages.

◉ The stator should not have any dents and contain 4 tightened screws on the back side. Make sure that the shaft axis is parallel to the ground and turns on its axis (rotate the shaft with your fingers).

◉ Contact your supplier if you notice any disproportions during the visual check.

A **screwdriver with a PH2** bit is required to assemble the device. The device is to be assembled in the order shown in Table 4 below:

Table 4. Hypervsn™ Model M assembly

1. The **recess in the shaft** (marked with a **turquoise arrow** on the right image below) needs to be positioned so that it remains against the **white mark** on the rotor (marked with a **turquoise arrow** on the left image below).
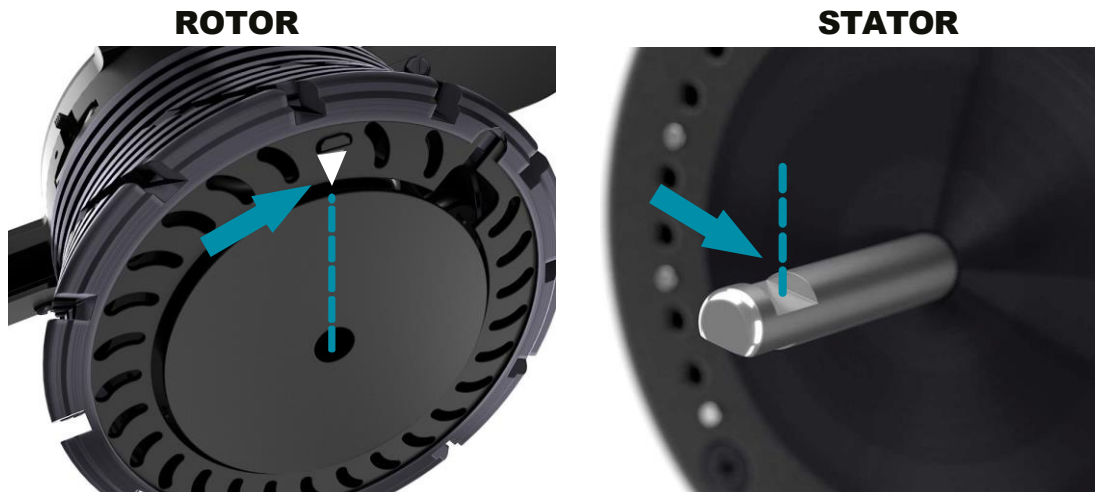
ROTOR   **STATOR**

Picture 2. Placing the recess in the shaft

2. Take the rotor carefully while trying not to damage the rays. Place it gently and fit straight onto the stator shaft as shown below. You will hear a typical click.

Picture 3. Fitting the rotor onto the stator shaft

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3. Screw in the binding screw inside the rotor firmly:

◉ Put the screwdriver to the srew hole as shown on the picture below,

◉ Push in the screw until stop,

◉ Tighten the srew until stop.

Please note that if the assembly steps were performed correctly, the stator and rotor elements should not have a luft.

Picture 4. Screwing in the binding screw

Attention. While moving the device do not hold onto rays. Otherwise they can be easily broken.

5. HYPERVSN™ MODEL M INSTALLATION AREAS

5.1. Prohibited areas

It is prohibited to install the device without the dome (regardless of the height) in the following areas:

1. Children playgrounds,

2. Animal open-air cages,

3. Areas with birds and insects that can get in contact with the device,

4. Next to any objects (curtains, drapes) that can potentially come in contact with the device under the influence of wind or in any other way.

5.2. Installation requirements

1. The device is allowed to be used indoors only at the temperature ranging from 0 °C to +35 °C and relative humidity of up to 80%.

2. The device must be installed out of public reach and reach of animals (dogs, cats, etc.). Such sites include but are not limited to:

   a) Custom-made device installation structures without free inward access,

   b) Closed-type display cases provided that the personnel examines the safety provision.

3. If the device is installed in public places, the mounting height must be at least 2.9 meters. The mounting height is defined as the distance from the floor level to the lowest point of the rotating element.

4. Please do not install the device in areas affected by high temperatures, heavy steam/vapor, great amount of dust, or close to heaters, air conditioners, radiators, ovens and other similar equipment.

5. The device should not be installed under direct sunlight.

5.3. Suggested sites

Please read the requirements below carefully to achieve the best visual effect of the device:

1. Do not install the device in close proximity to bright light sources such as large LED displays, projector screens.

2. The most suitable background colour for device installation is dark grey (anthracite). To achieve a better effect do not install the device against white or very light background.

3. Please do not install a single Hypervsn™ Model M unit in spacious premises since this will significantly decrease the visual effect. It is recommended to install at least two Hypervsn™ Model M devices side by side in premises of over 100 square metres and with ceilings 5 metres high; and at least three Hypervsn™ devices side by side in premises over 200 square metres and with ceilings 5 metres high. Under such circumstances it is critical not to space the devices apart but install them side by side.

4. The recommended device installation angle is 90° to the mounting surface.

6. INSTALLATION GUIDE

⚠️ **Installation can be completed only by an authorised specialist.**

6.1. Hypervsn™ Model M installation

Select the required mount based on the bearing surface where the device will be placed. The bracket has three holes, each with a 5.2 mm diameter.

Important. Screwhole diameter:

◉ **Partition Wall - 5.2 mm**

◉ **Solid Wall - 5.0 mm**

1. Drill holes in the surface area so that the central hole of the fixture faces upwards.

Picture 5. Wall bracket

2. Screw the bracket tightly into the wall with the relevant fittings.

3. Place the device on the wall bracket and fit it firmly downwards.

4. Attach the set screw to the bracket.

Picture 6. Device installation against a wall

Attention:
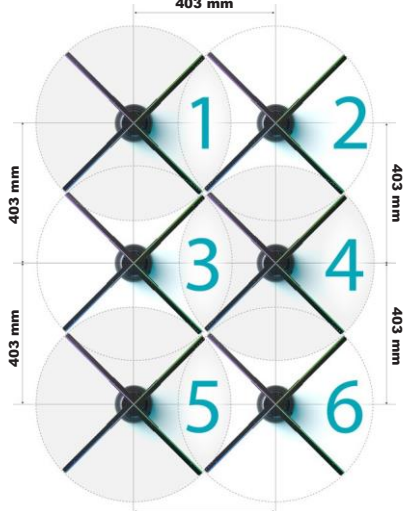
◉ In order to avoid illegal actions by unauthorised persons with regards to the device, do not forget to secure it with the set screw (4).

◉ Before pressing the "On" button make sure that the device remains at a safe distance from the viewer – at least 0.5 metres.

◉ The correct Hypervsn™ Model M installation angel is 90° to the surface (shaft axis should be parallel to the ground).

6.2. Installation protocols for connected Hypervsn™ Model M

Protocols for connected Hypervsn™ Model M and recommended spacing between the central points of the brackets are as follows: 403 mm (accuracy ±0.5 mm)

◉ Grey devices: front

◉ White devices: back

Table 5. Multi-unit installation patterns

HYPERVSN™ WALL PRE-SETS	DESCRIPTION
	Hypervsn™ Wall pre-set: **6 units**; Height: 1.38 meters; 54 inches; Width: 0.97 meters; 38 inches
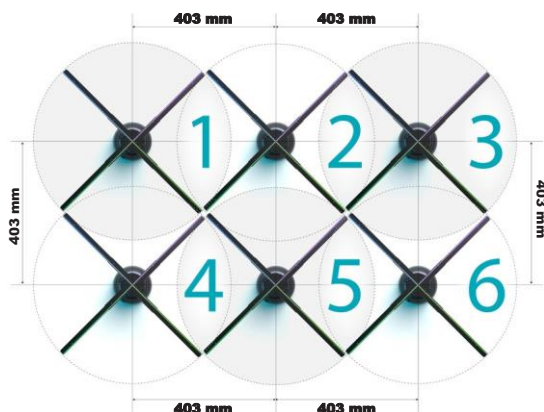
Hypervsn™ Wall pre-set: **6 units**;
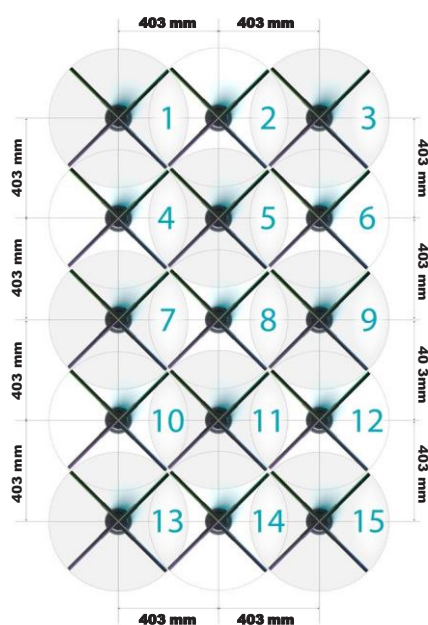
Height: 0.97 meters; 38 inches;

Width: 1.38 meters; 54 inches
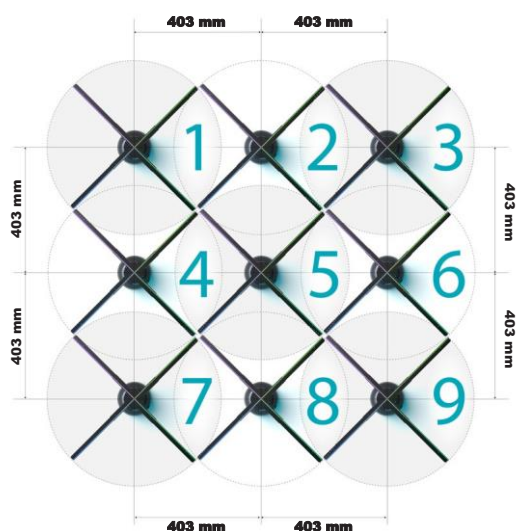
Hypervsn™ Wall pre-set: **9 units**;

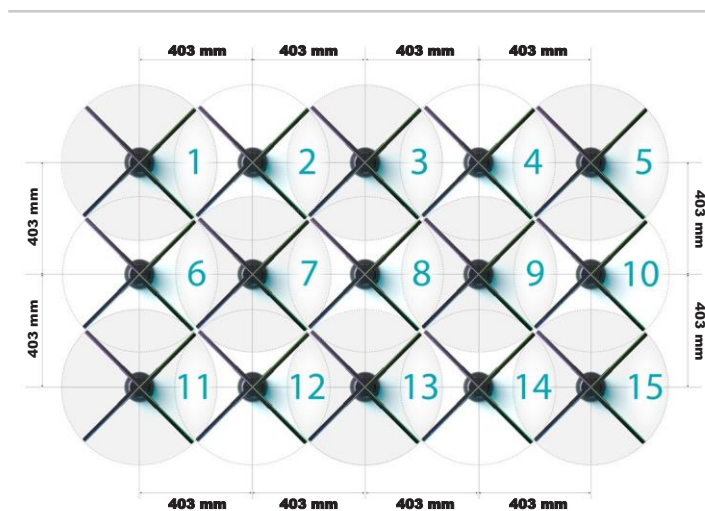Height: 1.38 meters; 54 inches;

Width: 1.38 meters; 54 inches

Hypervsn™ Wall pre-set: **15 units**;
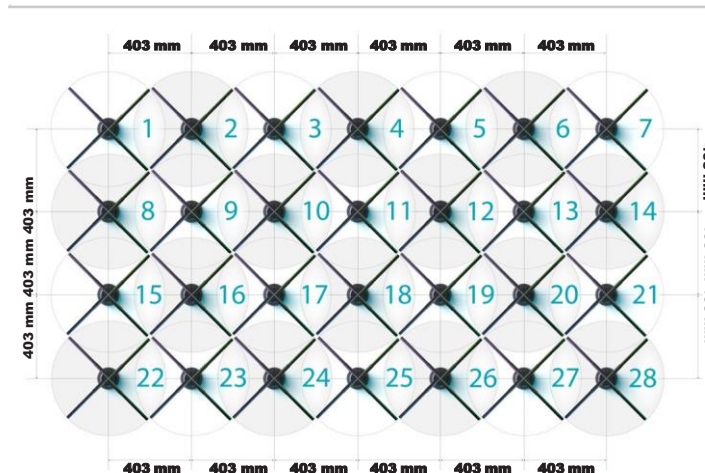
Height: 2.18 meters; 85 inches;

Width: 1.38 meters; 54 inches

Hypervsn™ Wall pre-set: **15 units**;

Height: 1.38 meters; 54 inches;

Width: 2.18 meters; 85 inches

Hypervsn™ Wall pre-set: **28 units**;

Height: 1.78 meters; 70 inches;

Width: 2.99 meters; 117 inches

Attention. The current options are valid only for rigid surfaces.

7. HYPERVSN™ MODEL M OPERATION

Attention. Sections 7.1-7.2 are designed for overview only (no action is required). Read them carefully and follow further instructions.

7.1. Operating modes overview

The device has two operating modes which are selected on the switch at the LED ray base. Setup mode is used ONLY for setting up the device, Operating mode – for daily operation. If you are using the device for the first time, please choose the Setup mode.

1. Setup mode (marked with a black dot). When turned on, the device displays Wi-Fi Hotspot message and creates a wireless network in close proximity to the device. The network is named "hypervsn-XXXXXXX", where XXXXXXX is a 7-digit number. The same serial number can be found on the base of the rotor.

2. Operating mode. This is the main operating mode. In this mode, the device can be connected to the Internet, be remotely controlled, and display user content. If there is no user content uploaded on the device, the device will display an animated Kino-mo intro.

Picture 7. Switches

7.2. Switching device ON and OFF

⚠️ **It is prohibited to turn the device on when it is partly or fully disassembled, and, particularly, to switch on the stator separately from the rotor. Before pressing the "On" button make sure that the device remains at a safe distance.**

To switch on:

◉ Put the switch at the base of the stator into the anticlockwise position.

◉ Plug the device in. The device will start working straight after that.

To switch off:

◉ To switch the device off, unplug the device.

7.2.1. LED blink patterns

The device state can be determined on the basis of the activity of the three LEDs on the stator.

Please read the LEDs activity description below carefully to understand different device states better.

Table 6. Stator LED blink pattern description

LEDs ACTIVITY	DESCRIPTION
All LEDs are off	◉ The device is not connected to the alternate current mains. ◉ The device is working in the Operating mode (showing content).
The red LED is on	◉ The device is connected to the alternate current mains (but is not turned on).
The red LED is blinking	◉ Device engine is not working. This might be due to fact that the Shunt component is removed or its contact integrity is disturbed.
The red and the green LEDs are blinking	◉ The device is connected to the alternate current mains without the rotor. **Attention.** It is forbidden to connect the device to the alternate current mains without the rotor. ◉ Technical issues. Please contact **support@kino-mo.com** if you notice that the red and the green LED blink.

7.2.2. Engine operation lockout

The main function of the shunt component is to stop engine operation if the shunt contact integrity is interrupted. Example case: Reed switch is connected to the shunt contact as well as to the external protection (dome). If the dome integrity is interrupted, the device will shut down immediately.

7.3. Initial activation

The device requires activation for the first-time use. To do so, connect the device to an Internet-enabled Wi-Fi network. If the router is provided, please configure it in accordance with the instructions provided. Upon purchase, each customer receives a personal email invitation. Follow e-mail instructions in order to create your personal account.
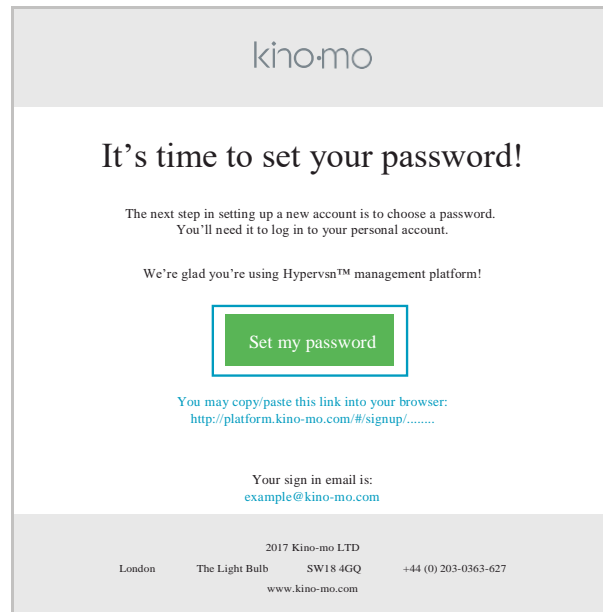


Picture 8. Personal email invitation

The process of connecting the device to a wireless network is as follows:

1. Go to **https://platform.kino-mo.com** and enter your E-MAIL and PASSWORD from the previous step.
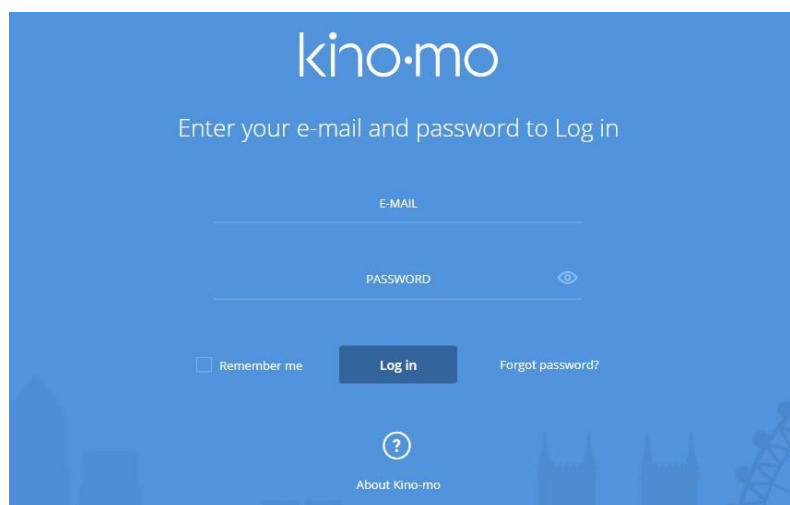
Picture 9. Platform login screen

2. Open "My Company" page **https://platform.kino-mo.com/#/company** and copy the information from the "Company Name" field, and save it for further actions.
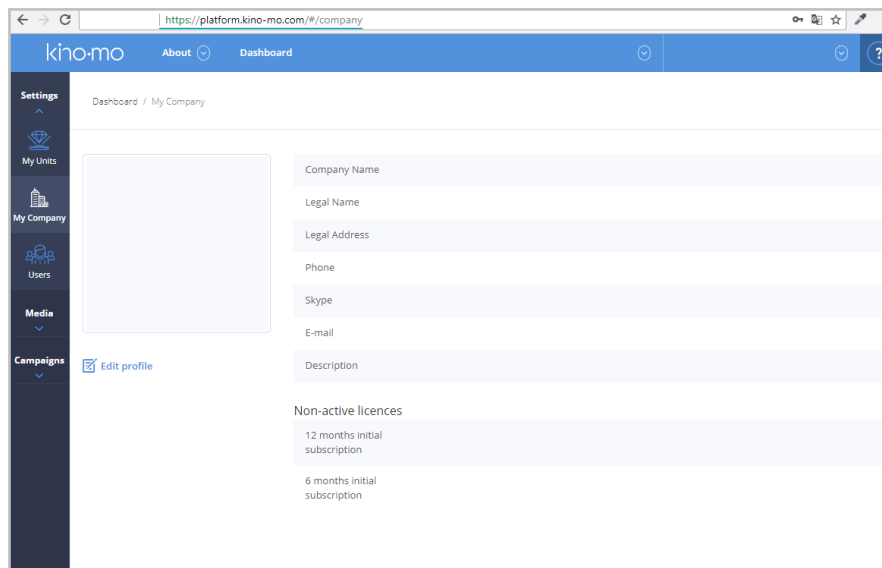
Picture 10. "My Company" page

3. After that go to "My profile" page. Copy the information from "Nickname" and "E-mail" fields and save it for further actions.
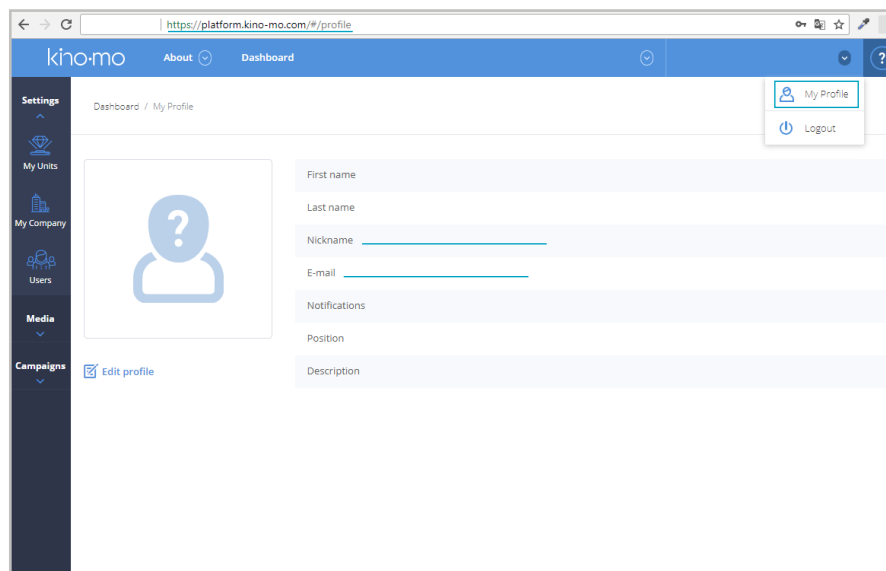
Picture 11. "My Profile" page

4. Turn the device off. Move the switch at the base of the rays to the Setup mode (marked position).

Picture 12. Switching device into the Hotspot mode

5. Turn the device on.

6. Messages "WiFi Hotspot" and "ACTIVATE HYPERVSN" will appear on the device.

Picture 13. WIFI HOTSPOT service message that you should see in Setup mode message
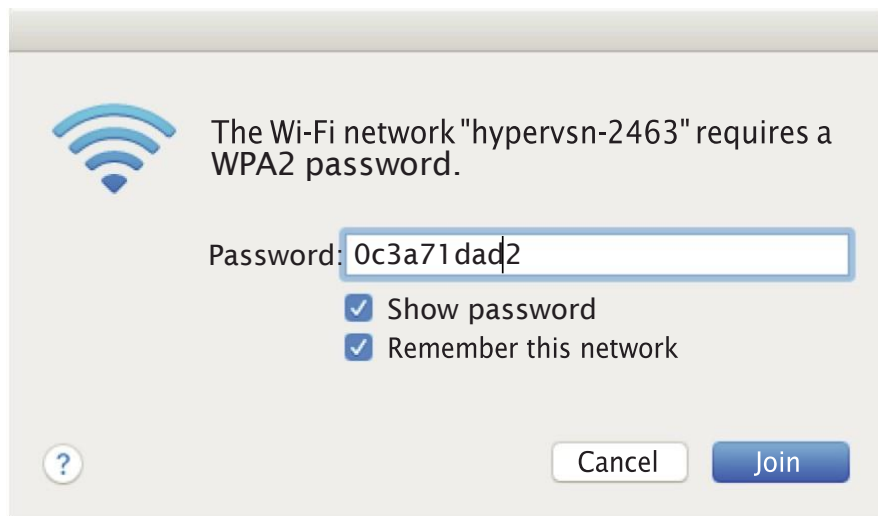
Picture 14. ACTIVATE HYPERVSN service message that you should see in Setup mode

7. Turn on Wi-Fi on your laptop or any other device and the Wi-Fi network "**hypervsn-XXXXXXX**" (where XXXXXXX is a 7-digit number) will appear in 1-2 minutes.
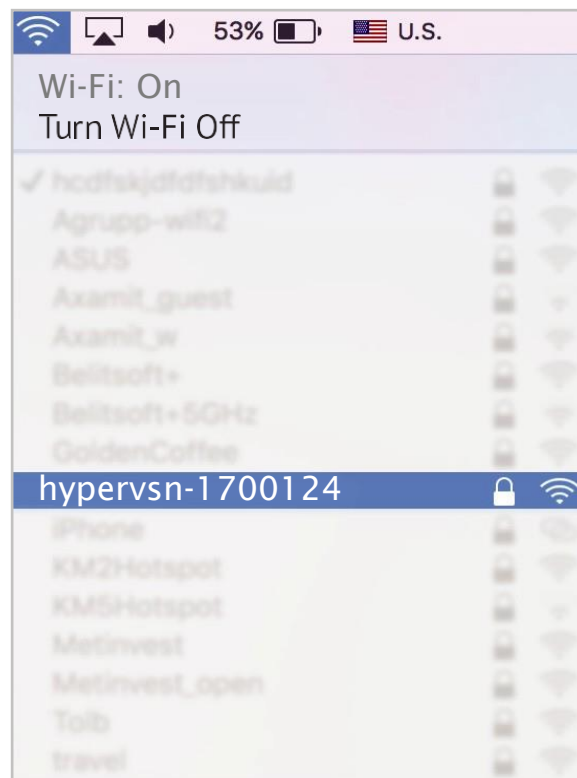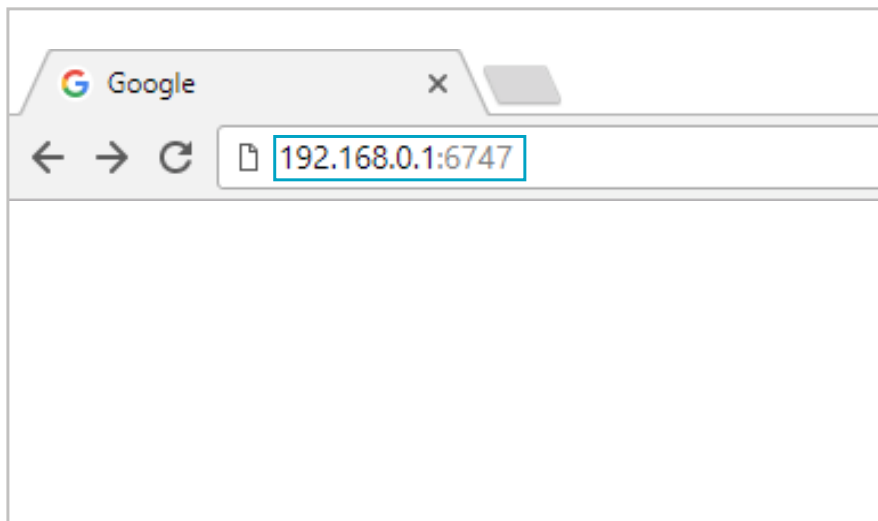

Picture 15. Connecting to the hotspot

8.   Connect to the "**hypervsn XXXXXXX**" Wi-Fi network and use the following password: **0c3a71dad2.**
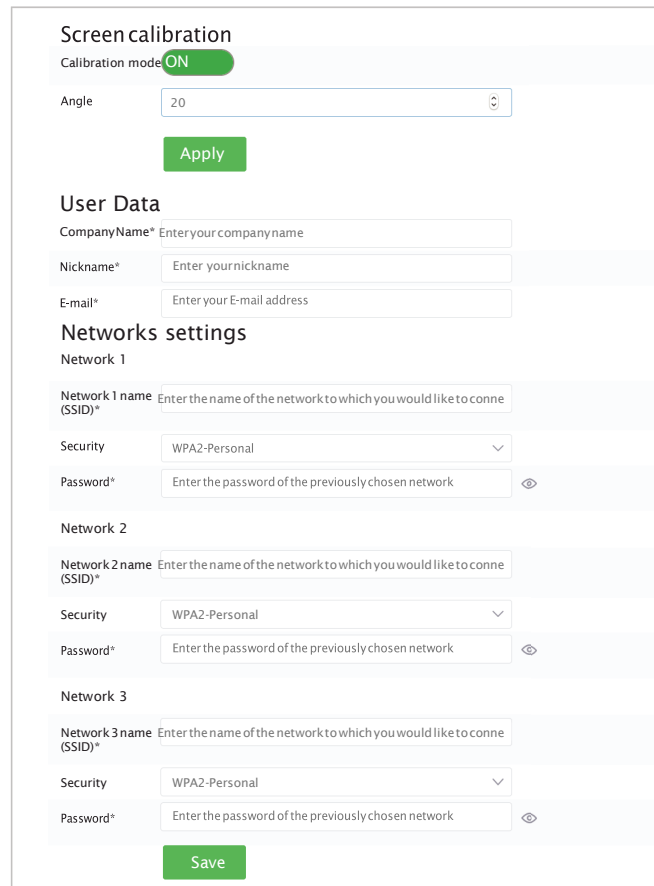

Picture 16. Password input

9.   Type in **192.168.0.1:6747** in the browser to access the webpage with a form to fill in.

Picture 17. Input this IP-address into your browser address bar

10. The "Screen calibration" page should appear.
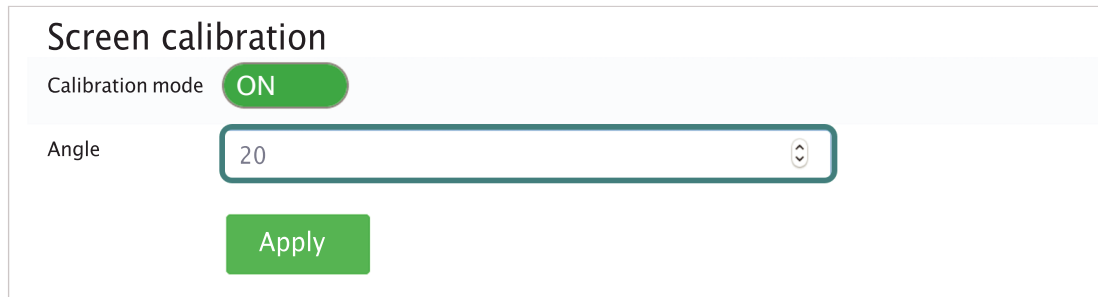

Picture 18. Screen calibration page

11. Calibrate the image horizontal orientation:

a) Switch the "Calibration mode" on. After that the device will display "Kino-mo" image and its serial number.

Picture 19. Kino-mo image and device serial number

b) Enter the correction angle and press "Apply". The correction angle must vary from -170 to +170. A positive number rotates the image clockwise, while a negative number rotates it anticlockwise.
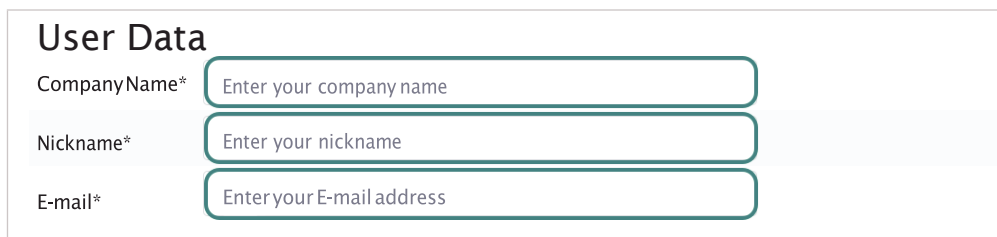

Picture 20. Screen calibration

Follow the instructions and fill in the required fields in the User Data section: "Company Name", "Nickname" and "E-mail" (use the information from steps 2 and 3 of this instruction).

Attention. All fields are case sensitive.
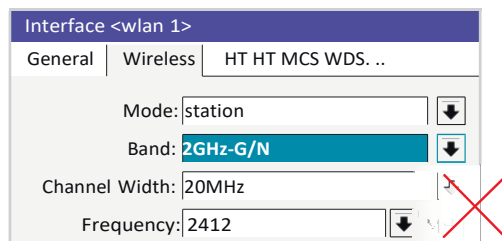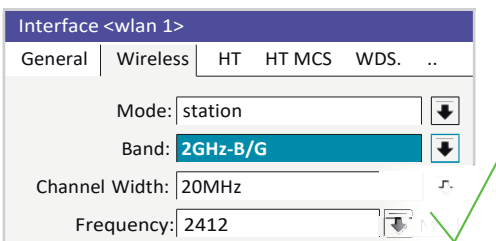

Picture 21. User Data section

Fill in the required fields in the "Networks settings section" in order to connect to the previously configured access point.

Table 7. WI-FI network requirements **(✓ - correct, ✗ - incorrect)**

1. Device operation requires direct Internet connection without any additional login screens.
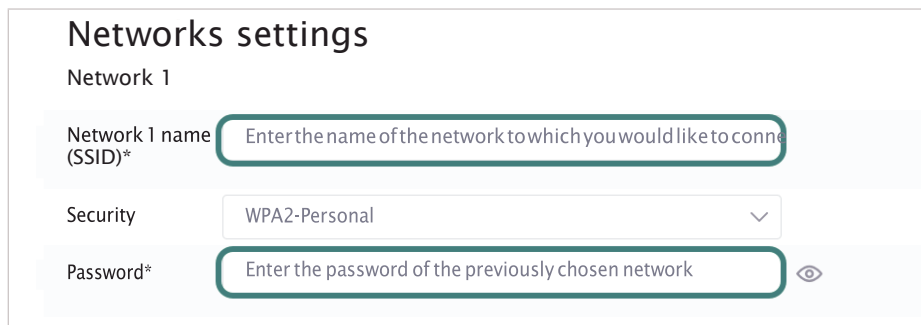
2. Distance to the router: up to 3 metres.
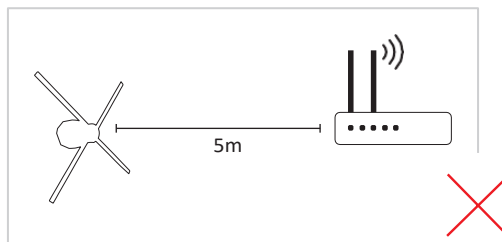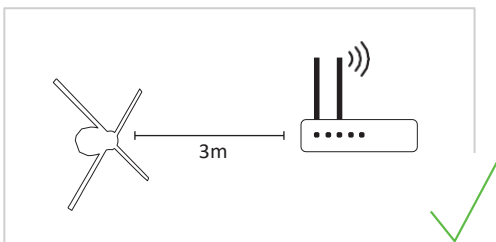
3. Wi-Fi frequency: 2.4 GHz.

2.4 GHz

4. Router network mode: B/G.

Interface <wlan 1>				
General	Wireless	HT	HT MCS	WDS. ..

Mode: station
Band: **2GHz-B/G**
Channel Width: 20MHz
Frequency: 2412

Interface <wlan 1>		
General	Wireless	HT HT MCS WDS. ..

Mode: station
Band: **2GHz-G/N**
Channel Width: 20MHz
Frequency: 2412
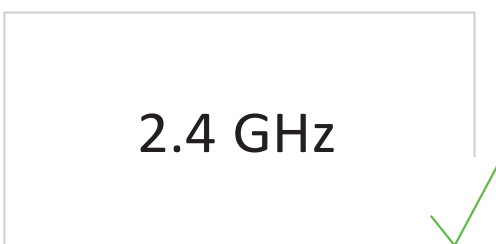
5. General recommendations: choose a less congested Wi-Fi channel, avoid physical barriers between the router and the Device.

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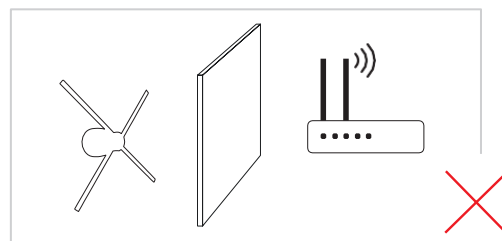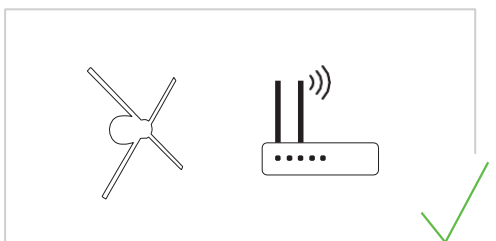
Hypervsn™ operation assumes using a personal router. We recommend to use 3G/4G routers.

If you are experiencing problems with your home or office Wi-Fi network, try to share the Internet connection from your mobile phone by creating a Hotspot. Please note that your service provider may charge a fee for using the Hotspot.

Important: the device supports up to 3 networks, so you may want to save a couple of them if you plan to move the device.

Picture 22. Networks settings

After you complete the device configuration, click "Save". The device will start booting animation.

Picture 23. Booting animation

If everything is connected properly, a success message will be displayed. If the device is not activated, a message "ACTIVATE HYPERVSN" will appear (see Step 6 of the current section).

Picture 24. Success activation message

If the activation process goes wrong (Wi-Fi network is not available, etc.) you will see the following message on the device:

Picture 25. Incorrect data message

Attention. After using the device, the stator and rotor can become hot to touch. Please wait until the temperature falls before proceeding with the next step.

12. Turn the device off. Move the switch on the rotor to the Operating Mode (unmarked position).


Picture 26. Switching the device to the Operating Mode

13. Turn the device on.

Kino-mo labels should appear on the display one by one. The messages disappear gradually and the screen turns black for 10 seconds. Kino-mo animated intro will appear 30 seconds after turning the device on.

Picture 27. Kino-mo animated intro

14 . If the device is successfully connected to an Internet-enabled Wi-Fi network (that you set up in Step 11 of this section), it is ready to be used and becomes available in your personal account at **https://platform.kino-mo.com/#/devices**. Detailed instructions on how to manage the device via your personal account are available on Hypervsn™ management platform.
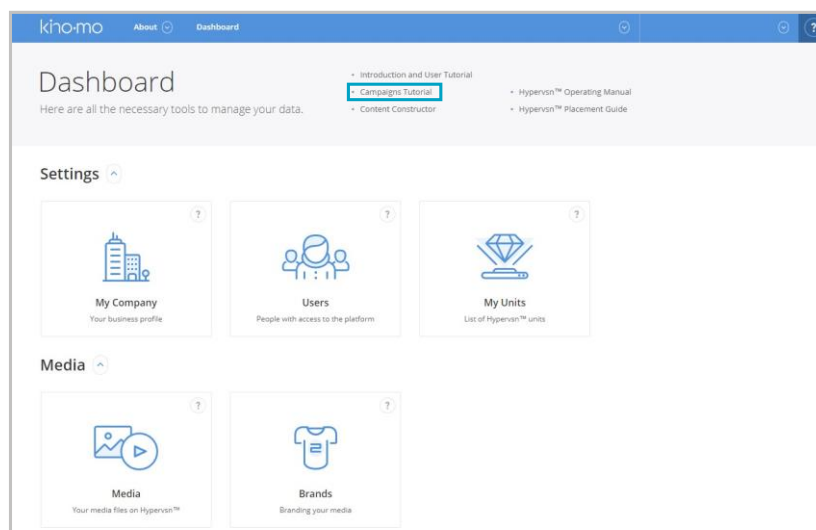
Picture 28. Hypervsn™ management platform tutorials

15. Find the "My Units" tab on the main page and click on it.
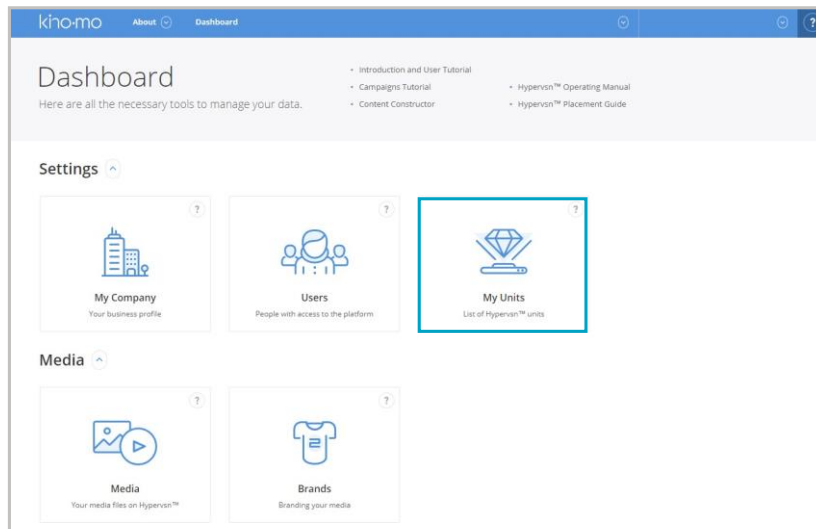
Picture 29. Platform main page

16. After that you will see the list of your devices including the one you just activated. You can also enter the device serial number in the search bar to see the required device below.
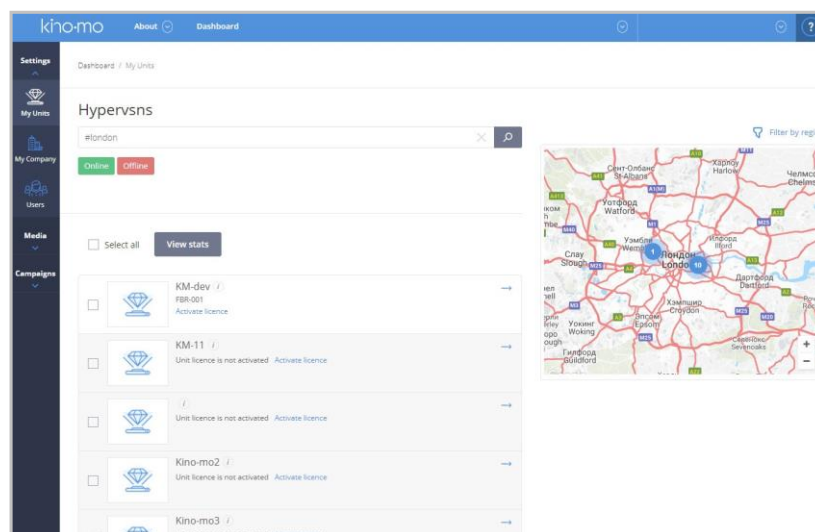
Picture 30. "List view" tab

Click on the activated device and select "Edit information". Fill in the following fields in order to recognise your device in the future sessions:

1. "Hypervsn   name"

2. "Address"

3. "Tags"

4. "Description"
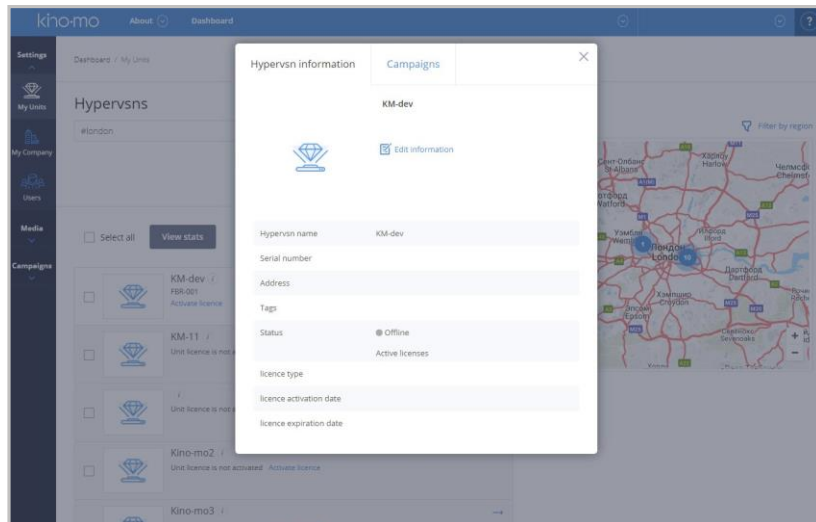
Picture 31. Editing device info

Attention. You need to enter the correct display address so that the device is located correctly.

Click on the ⓘ icon on the activated device and select "Edit information".

After all these steps you need to create a media campaign and download the content. To do this, use the "Campaigns tutorial" that can be found on the main page of Hypervsn™ management platform.

8. TECHNICAL MAINTENANCE

⚠️ **For technical maintenance, please unplug the power cord from the alternating current mains and make sure the rotating element has fully stopped.**

The device needs to undergo technical maintenance at least once a month with the following actions required:

a) Visual check of the power cord. The power cord should not have any cracks or cuts compromising its base isolation. If there are any faults of this kind, please stop using the device immediately until the faults are fixed or the device is replaced.

b) Clean the LED rays from dust.

Attention. Do not use a moist rag.

9. SAFETY PROVISIONS

⚠️ **The device must be installed so that the lower edge of the LED rays is at least 2.9 metres off the floor. Exceptions are allowed in case there is a natural barrier or similar preventing the public from approaching the device closer than by two metres.**

Additional safety requirements that have not been mentioned above yet are outlined below:

◉ The device belongs to I class with regards to protection against electric injuries. It is forbidden to operate the device using alternating current mains without any grounding system.

◉ To avoid electric injuries, please do not turn the device on while the stator safety cover is removed.

◉ The power voltage must match the information on the device type label.

◉ Under no circumstances touch the device while it is rotating. The LED rays on the rotor become effectively invisible, which might pose danger.

◉ Since Kino-mo Display relates to TYPE A pluggable equipment it is necessary to have an easy-to-reach socket nearby.

◉ After using the device, the stator and rotor elements can become hot to touch. Please wait until the temperature falls before proceeding further.

◉ Do not throw any objects into the device.

◉ Do not use the device if the power cord is damaged. Make sure the cord is not in contact with any sharp edges or hot surfaces.

◉ Do not pull the power cord, do not rewind it and do not wind it around any part of the device.

◉ If the device produces any abnormal sounds during operation, please stop using the device immediately and contact the vendor.

◉ Do not let children play with the device and do not leave them unattended in close proximity to an operating device.

◉ When the device is already attached to the wall, please keep the device power cord as far from the rotating element (rotor) as possible. You can also use wiring duct the colour of which matches the colour of the mounting surface.

◉ Hypervsn™ model M device requires an attention-label near by. Please download the label from the following page: **https://kino-mo.com/wp-content/uploads/ WARNING_Sticker_device.pdf**

Attach the label in a close proximity to the device.

We recommend to place it above the device. We disclaim all responsibility for any injuries or device malfunction if the current requirement is not met.

10. DISPOSAL

10.1. Packaging

Hypervsn™ Model M packaging is environmentally friendly and reusable. All plastic parts contain special labels, e.g. >PE< for polyethylene, >PS< for polystyrene.

10.2. Device disposal

The ⊠ sign on the device or its package means that the device cannot be disposed of as domestic waste. Instead, please pass it to an electric equipment recycling center for proper disposal.

By adhering to disposal regulations, one can prevent causing potential damage to the environment resulting from mishandling this type of waste disposal.

11. WARRANTY AND MAINTENANCE

11.1. Warranty

The device warranty life is 12 months. The average operation time is 5 years.

If the guarantee label is broken on the rotor or stator, the device warranty will be considered voided.

11.2. Service maintenance and spare parts

If the device needs to be repaired or if spare parts need to be purchased, please contact your vendor.

11.3. Special requirements

Hypervsn™ Model M complies with ISED's license-exempt RSSs. The device operation is subject to the following conditions:

1. It may not cause harmful interference, and

2. it may accept any interference, including interference that may cause undesired operation of the device.

This device complies with the FCC radiation exposure limits for an uncontrolled environment. This equipment shall be installed and operated with a minimum distance of 2 cm between user and/or bystanders and this device.

Hypervsn™ Model M 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 A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

No changes shall be made to Hypervsn™ Model M without the manufacturer's permission as it may void the user's authority to operate the device.

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Revolution in Every Dimension
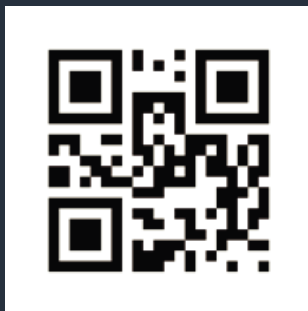
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