Mamibot

Robot Window Cleaner

iGLASSBOT W120-DP Pro

Self-Water-Spray Version



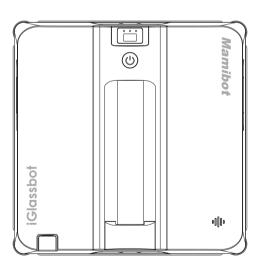
USER MANUAL

Thanks for purchasing Mamibot Robot Window cleaner W120-DP Pro featured with two self water spray hole type.

We hope W120-DP Pro will bring you a smarter and more convenient lifestyle.

If you encounter any problem not mentioned herein, please contact info@mamibot.com.

For more details, please visit our official website: http://www.mamibot.com.



Please read all instructions before using this product, and keep it properly for future reference.

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Safety Instructions and Warning

Please read all instructions carefully, and keep it at hand for setting up, using and maintaining W120-DP Pro. Any operation that against the following instruction may damage the device or cause injury.

W120-DP Pro is not to be used by children. Persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge may only use this device if they are supervised or have been given instruction about how to use it safely and understand what risks are involved.

Notes for Main Unit and Components

- ▲ Children shall not play with the appliance.
- ▲ The appliance is not to be used if it has been dropped, if there are visible signs of damage or if it is leaking.
- Keep the appliance out of reach of children when it is energized or cooling down.
- ▲ Use only the original adapter, plug and battery. Use of other types will result in malfunction and / or danger.
- ▲ Use the proper electric outlet and make sure no heavy objects are placed on the adapter or power cord.
- ▲ Allow adequate ventilation around the adapter when using it to operate the device. Do not cover the adapter with objects that will reduce cooling.
- ▲ The W120-DP Pro has to be unplugged after use and before carrying out user maintenance on the appliance.
- ▲ Do not use W120-DP Pro in a high moisture environment. Never handle the adapter with wet hands.
- ▲ Connect the adapter to a proper power source. The voltage requirements can be found on the adapter.
- ▲ Do not use broken adapter, power cord or plug. The plug must be removed from the outlet before cleaning or remaining the device. Do not unplug the plug by pulling the power cord.
- ▲ Do not attempt to service the adapter and battery. Replace the whole unit if it is damaged or exposed to high moisture. Contact Mamibot dealer for help and maintenance.
- \blacktriangle The battery used in this device may present a risk of fire or chemical burn if mistreated. Do not disassemble, short circuit, heat above 40°C (104 \mathbb{F}), or incinerate.
- ▲ Do not expose your W120-DP Pro, adapter and battery to rain or excess humidity, and keep it away from liquids (such as beverages, faucets, and so on).
- Avoid exposing your W120-DP Pro, adapter to direct sunlight or intense light source, and keep it away from heat source (such as radiators, space heater, stoves and so on).

- ▲ Do not place your W120-DP Pro in the vicinity of strong magnetic fields.
- ▲ Do not use it on cracked glass or to clean other surface with uneven area as it may fall off due to insufficient suction power.
- \blacktriangle Operating W120-DP Pro at temperature: 0°C-40°C (32°F-104°F)
- ▲ W120-DP Pro must be used in accordance with the instruction manual.
- ▲ Manufacturer can not take any responsibilities for any damages or injuries caused by improper use.

Warning

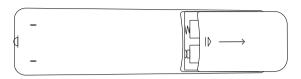
- ▲ This appliance contains batteries that are only replaceable by skilled persons.
- ▲ Check if the safety rope and extension cable are broken or not before use.
- ▲ Fasten the safety rope and tie it to indoor fixtures before using W120-DP Pro.
- ▲ Set danger warning area downstairs for no-balcony window and door.
- ▲ Battery shall be charged (Green light is on on the robot) before use.
- ▲ Do not use it on rainy or moist days.
- ▲ Switch power on before you put device onto glass.
- ▲ Make sure W120-DP Pro can stick and stand on glass surface while put onto glass.
- ▲ Make sure to put the cleaning pad on the bottom of W120-DP Procorrectly to avoid water leakage.
- ▲ Do not spray or pour water onto W120-DP Pro and adapter.
- ▲ Keep hair, loose clothing, fingers and all parts of body away from the openings and moving parts.
- ▲ Do not use in areas with existed flammable or combustible liquids, gas.
- ▲ Please fully charge (about 1-2 hrs) and turn off W120-DP Pro and place it in a cool and dry place if you do not use it for a long time. Charge it every 3 months at least to avoid battery dead.
- ▲ Please turn the switch on when you are going to use W120-DP Pro, so that you can check the status of indicator.

Note:

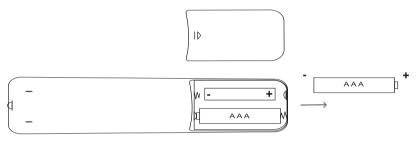
- 1.W120-DP Pro is not a cordless cleaner, it can only work properly when connects to the adapter and power source.
- 2. For the purposes of recharging the battery, only use the detachable supply unit provided with this appliance: GM70-240300-D.
- 3.Standby power consumption in off mode is less than 0.3W.
- 4. This portable appliance is a high energy consumption product, and must shut off the power switch after use.

Notes for remote batteries:

- 1. The types of batteries must be 2 x AAA batteries.
- 2. How to remove and insert the batteries:



1). Slide the battery cover in the direction of the arrow and open it.



2). **Remove** the 2pcs AAA battery from the remote.

Or align the positive and negative poles of the battery to the positive and negative poles of the battery cavity and **insert** the battery.

- 3. Non-rechargeable batteries are not to be recharged.
- 4.Different types of batteries or new and used batteries are not to be mixed
- 5.Batteries are to be inserted with the correct polarity.
- 6.Exhausted batteries are to be removed from the appliance and safely disposed of.
- 7. If the appliance is to be stored unused for a long period, the batteries should be removed.
- 8. The supply terminals are not to be short-circuited.

Specification

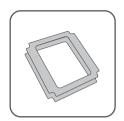
| Attantibut Wannibut | | | |
|------------------------------|-----------------------------|--|--|
| Product Model | W120-DP Pro | | |
| Size of Main Unit | 229*229*69 mm | | |
| Net Weight | About 1.40 KG | | |
| Adapter Input | 100-240VAC ~ 50/60Hz | | |
| Adapter Output | 24.0V=3.00A | | |
| Rated Wattage | 72W | | |
| Battery Type | Rechargeable Li-ion Battery | | |
| Battery Capacity | 600mAh | | |
| Robot Rated Voltage | 24V | | |
| Charging Time | About 2 hours | | |
| The Min. workable Surface | 60 x 40 cm | | |
| Water Tank Capacity | About 60 ml | | |
| Working Noise | <75dB | | |
| Spraying Drive Type | Ultrasonic Drive | | |
| Working Frequency (Robot) | 2432MHz, 2452MHz, 2471MHz | | |
| Working Frequency (Remote) | 2432MHz, 2452MHz, 2471MHz | | |
| Max. Transmit Power (Remote) | < 10 dBm | | |

[%] The datas come from the lab of Mamibot Manufacturing USA Inc. It may be slightly different from the users' data, please subject to the actual products. For continous products improvment, we reserve the right to any technical and design change without prior notice.

What's in the package



W120-DP Pro x 1pc with Safety Rope



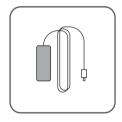
Cleaning cloth x 2 pcs



Remote x 1pc



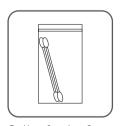
AC Plug x 1pc (with power cord)



Adapter x 1pc



Measuring Cup x 1pc



Cotton Swab x 2 pcs

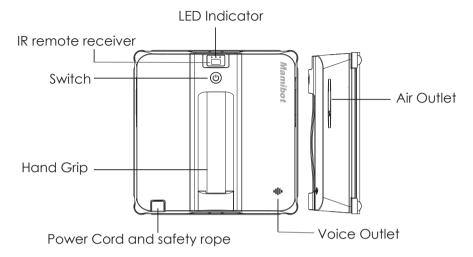


User Manual x 1pc

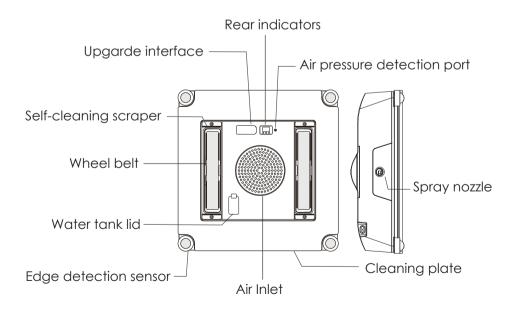
Accessories of some models may be slightly different and they are subject to the actual received products.

Product Description

Main Unit



Top + Side View



Bottom + Side View

Remote instruction



| ♠ N | Cleaning the left area in N-Type |
|------------------------|-----------------------------------|
| N) | Cleaning the right area in N-Type |
| ^ | Cleaning upwards button |
| ~ | Cleaning downwards button |
| < | Cleaning leftwards button |
| > | Cleaning rightwards button |
| ▶ II | Cleaning starts / pause button |
| N | Auto Z-Type cleaning button |
| Z | Auto N-Type cleaning button |
| -3 | Regular spray button |
| © + | Strong spray button |
| Chapte | Water spray on / off button |
| | Powerful cleaning button |
| (1) | Spot cleaning button |
| 4 9/ # 9 | Voice on / off button |
| LANGUE | Language settings button |

Remote Control

Notice:

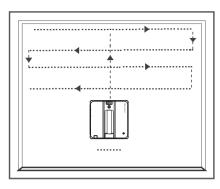
- 1.Please place 2 x AAA battery into the remote before use. Make sure that the positive and negative are not reversed to avoid short circuit or injuries.
- 2. In order to prevent misuse, please pause the device first before using other commands, otherwise, the commands will be invalid.

Function Menu

X Please make sure the edge of W120-DP Pro is 8cm or more away from window frames or corners before cleaning (as Fig.B on Page 13).

(Z) **Z-Type cleaning mode**

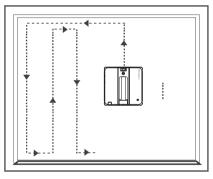
Start W120-DP Pro in the center of the glass. It will detect the frame upwards first, and the frame left second, after that, it will start cleaning with Z shaped path.



"Z" Shaped Path

N N-Type cleaning mode

Start W120-DP Pro in the center of the glass. It will detect the frame upwards first, and the frame left second, after that, it start cleaning with N shaped path.



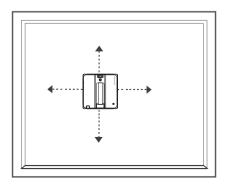
"N" Shaped Path

x 2 Deep cleaning mode

Press the button on remote, W120-DP Pro will clean the glass with "Z" & "N" shaped path.

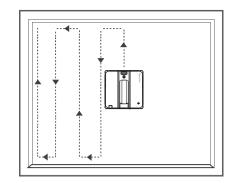
③ Spot cleaning mode

Press the button on remote, W120-DP Pro will perform up and down, left and right reciprocating cleaning four times respectively.



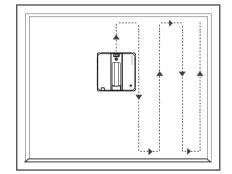
•N) Cleaning the left area in N-Type

Put W120-DP Pro on the glass, press the button on remote, it will only clean the left area of the robot in N-Type.



(N+) Cleaning the right area in N-Type

Put W120-DP Pro on the glass, press the button on remote, it will only clean the right area of the robot in N-Type.



Upwards/Downwards/Leftwards/Rightwards cleaning

Put W120-DP Pro on the glass, press the button $\land \lor \lor \lor$ on remote, the robot will do the upward cleaning, downward cleaning, leftward cleaning, downward cleaning respectively, then stop at the border.

(►II) Start / Pause

Put W120-DP Pro on the glass, press the button (*) on remote to start auto cleaning, generally, W120-DP Pro will clean with N shaped path at auto cleaning mode, press the button again to pause the robot. Users can press the button (*) on the robot to start or pause auto cleaning mode, too.

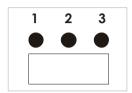
(LANGUE) Language Setting

Press the language button on remote to switch between different language voices if the robot is multilingual. Please press the button $\wedge \vee$ on remote to switch the language, then press the button n to confirm it.

Notice:

- Gererally, W120-DP Pro will return to the start position after automatical cleaning is finished, it is normal that some times the start position and return position are slightly different.
- The cleaning path is for reference, please subject to the actual products.

Indicator Introduction & Abnormity



| Number | | Color | Status | | |
|-----------------|------------------|------------|-----------------|----------------|---|
| | | | Solid | Blinks | Off |
| _ | Charing indiator | Orange | Charging | / | If the power is off, all the indicators |
| 1 | | Green | Fully charged | / | |
| 2 | Power indicator | White | Powering on | / | |
| | | Blue | water spray off | water spray on | will be off. |
| 3 Spray indicat | Spray | Red | / | Abnormal | |
| | indicator | Blue + Red | / | Abnormal | |

| Abnormity | Abnormal Staus |
|--------------------------------|--|
| Barameter abnormal | Red blinks 4 times + Beeps 4 times |
| Gyroscope abnormal | Red blinks 5 times + Beeps 5 times |
| Microcontroller abnormal | Red blinks 8 times + Beeps 8 times |
| Edge detection sensor abnormal | Blue is always on + Red blinks |
| Movement abnormal | Red and blue blinks alternately + long beeps |

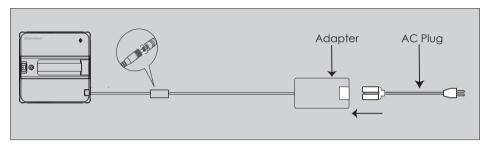
Installation

Charging

Connecting the adapter, AC cord and the robot properly as below image, then insert the plug into the power outlet:

Charging Indicator: Solid orange: Charging

Solid green: Fully charged (About 2 hours charging).

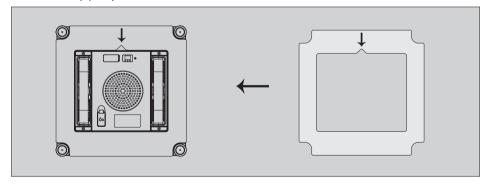


Cleaning cloth installation

• Use the original cleaning cloth, align it with the cleaning plate and attach it to the velcro then flatten the cloth properly.

Note: The triangular notch on the cloth must fit the mark on the machine see the below picture.

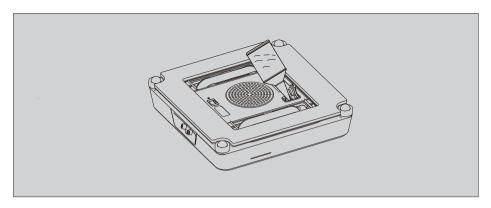
- The cloth should not cover the wheel belts or edge detection sensors.
- Please do not spray too much water on the cleaning cloth when use to avoid slippery.



Fill up the water tank

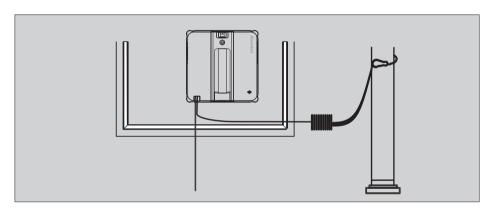
Open the water tank lid, fill up the water tank with clean tap water before starting it, then seal the lid tightly.

- Do not add dirty water or thick liquids into the water tank.
- Do not add corrosive or flammable liquids into the water tank.



Safety rope fixing

The safety rope must be tied on the indoor fixtures tightly before use. Make sure the length of the safety rope is appropriate for cleaning.



Note:

- 1). Please check the safety rope, make sure the rope is not damaged and the knot is not loose.
- 2). Set danger-warning area downstairs for no-balcony window and door before use.

To use W120-DP Pro

- 1. Please charge the W120-DP Pro fully, place the cleaning cloth on the cleaning plate, fill up the water tank and fasten the safety rope tightly before use.
- 2. Plug W120-DP Pro into power outlet, wait for a while until the voice broadcast is finished.

- 3. Put the W120-DP Pro vertically on a horizontal table (Fig.A) and hold it.
- ① Hold and press the regular spray button (-1) on remote until water spray out from 2 left nozzles.
- 2) Hold and press the strong spray button 🖭 on remote until water spray out from 2 right nozzles.
- 4. hold and press the switch button © on W120-DP Pro for about 3 seconds to turn W120-DP Pro on, then put it on the window glass firmly.

Note:

Make sure the edge of W120-DP Pro is 8cm or further away from window frames or corners before cleanina (Fia B).

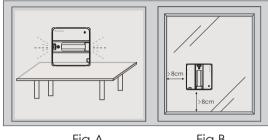


Fig A Fia B

4. Start:

- 1). Short press the switch button @ on the robot to start auto-cleaning.
- 2). Short press the button (*) on the remote to start auto-cleaning.
- 3). Users can also press other buttons on the remote to operate W120-DP Pro.

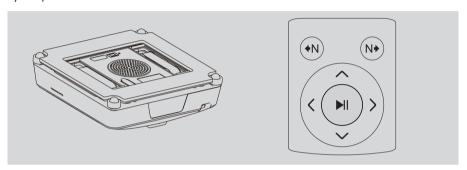
5. Pause:

Short press the switch button (10) again or short press the button (11) on the remote again to pause the device.

- 6. Generally, W120-DP Pro will return to its starting point automatically after cleaning is finished. There is a beep remind when cleaning is finished.
- * Use remote to move W120-DP Pro to a reachable location if it doesn't return to the starting point.
- 7). Hold the hand grip and the safety rope, press switch button 0 for 3 seonds, then take the device off from the window.
- 8). Clean the cloth in time and dry it for future use.
- 9). Empty the water tank if you are not going to use it for a long time.
- 10). **UPS**: The UPS is 20-30 mintues, if there is a sudden power outage, please remove the machine in time.

Maintenance

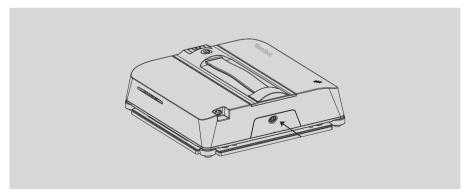
- 1. After each cleaning, wash the cleaning cloth and dry them for future use.
- 2. Wipe the main unit with sofy and dry cloth regularly.
- 3. Clean the wheel belt as below:
- 1). Plug the W120-DP Pro into the power outlet;
- 2). Turn over the unit as the picture, press the upwards button " \land " on the remote, then the wheel belt will rotate automatically.
- 3). Wipe off the dirts on the wheel belt with moist paper towel, then press the upwards button " \land " again to exist the program.
- 4). Dry the wheel belt and store it.



4. Spray nozzle cleaning:

The nozzle may be clogged after the robot has been used for a period of time.

Use a cotton swab to clean the nozzles back and forth several times as below picture:



- 5. Empty the water tank if you do not use it for a long time.
- 6. Charge W120-DP Pro at least every 3 months if you don't use it for a long time.
- 7. Cleaning cloth is consumables, replace it according to usage.
- 8. Store the device in a cool and dry place away from direct sunlight.

Product Warranty

- The W120-DP Pro has a 1 year limited warranty against original defects in workmanship or material.
- The warranty only applies to the authorized distributors of Mamibot.
- Improper usage or not in accordance with the user manual will void the warranty.
- The application of force majeure will be invalid.
- Normal reductions, such as battery aging, mopping cloth aging are not guaranteed.

Note:

Please keep and provide your proof of purchase, S/N when making a claim.

Questions & Answers

Q1: What types of windows can be cleaned with W120-DP Pro? A: From floor-to-ceiling windows, small size windows (minimum not less than 60 cm x 40 cm / 23.62 inch x15.75 inch), frameless windows, etc. It can be suitable for most windows.

Q2: Can W120-DP Pro work on seamed alass?

A: It can work if the gap between the parts is less than 5mm, but the gap needs to be sealed, no air leakage, and no height difference.

Q3: Streaks appear after cleaning.

A: If water streaks appear after cleaning, it is recommended to replace a dry and cleaning cloth, then **turn off the water spray** and wipe again.

Q4: W120-DP Pro keeps alerting "insufficient water" even the tank is full. A: Please contact the seller for further check.

Q5: W120-DP Pro may fall or slip on some window frames.

A: Please check if the window frames are irregular-shaped, or if the corners and the frames are uneven, or if the frames are cracked. Please do not use W120-DP Pro on windows with such conditions.

Q6: Can W120-DP Pro work on an inclined surface?

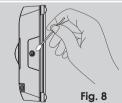
A: We do not recommend consumers to use the machine on an inclined surface.

Q7: W120-DP Pro can not be turned on when hold and press the switch. A: 1). W120-DP Pro can be turned on only after the power source is plugged in properly.

- 2). If the battery capacity is low, W120-DP Pro may not be turned on at first, please charge it. We strongly recommend you charge the cleaner fully at initial use.
- Q8: How to clean the window glass if the glass is heavy dirty?
 A: 1). If there is sand or hard debris on the glass, please clean it manually first to avoid scratching the glass when use. Then put W120-DP Pro on the glass and start to clean, please switch off the water spray at the first cleaning.
- 2). After the first cleaning finished, please replace a piece of cleaning mop, and start cleaning at second time (make sure the water spray is turned on).
- 3). After the second time cleaning finished, please replace a piece of dry cleaning mop, and start cleaning again, please turn off the water spray at the third cleaning time.
- Q9: How to clean the window glass if the glass is not too dirty? A: Please follow the two steps:
- 1). Put the dry cleaning mop on W120-DP Pro, start it, make sure the water spray is turned on.
- 2). After the first cleaning finished, please replace a piece of cleaning mop and start, please turn off the water spray at the second cleaning time.
- Q10: W120-DP Pro does not stop after the cleaning work is finished. A: Please press the button (*) on the remote to stop W120-DP Pro manually if W120-DP Pro finished the cleaning work.
- Q11: W120-DP Pro did not finish the cleaning work due to some reasons. A: Put the device on the point that it stopped, press the button \langle or \rangle on remote to continue cleaning work.
- Q12: Can users spray some water manually on the glass before use? A: It is not recommended to spray water on the glass before use to prevent the device from slipping.
- Q13: Can users add cleaning agent into the water tank for use? A: The spray nozzles may be blocked by the cleaning agent. It is not recommended to add cleaning agent into the tank.
- Q14: How to remove W20-DP Pro if there is a sudden power outage? A: 1). Hold the safety rope tightly and keep your hand as close to the device as possible.
- 2) Make sure that the safety rope parallel to the working surface, then slowly pull the device in front of you and remove it.

Troubleshooting

| Malfunction | Possible Causes | Solutions | |
|--|--|--|--|
| W120-DP Pro gets slippery or works in irregular pattern. | Glass is too dirty or too wet. Cleaning cloth is too dirty or too wet. Glass is too dry. | Use a clean cloth. Cleaning the driving wheels. Do not use it in moist or rainy days. Spray some water on the cloth first if the glass is too dry. | |
| Remote does not work. | No battery inside or battery has low power in remote. Remote is broken. | Replace the battery. Replace the remote with new one. | |
| W120-DP Pro got stuck on glass frames. | Edge detection misjudgement. | Stop it first, pull the robot lightly to reachable location, then try again. | |
| Squeaky sound when use. | Glass is too dry or edge detection sensors are too dirty. | Spray a little water on the cleaning cloth before use. Clean the edge detection sensors and use again. | |
| The device does not return to the starting point after cleaning. | The friction index of glass is different. | Use remote control to operate the device so as to return to reachable location. | |
| W120-DP Pro does not spray when use at first time or after refill the water tank. | 1.The water pipe is short of water at initial use. 2. The water pipeline is blocked. 3. Dirty water or thick cleaning agent was added into the tank. | 1. Plug W120-DP, press the buttons or on on remote to fill the water pipe until the nozzle sprays water. 2. Please add clean water into the tank, do not add cleaning agent. 3. Use the cotton swab to clean the spray nozzle (Fig.8). 4. Contact the seller for help. | |
| Movement abnormal 1. Cleaning cloth is not installed properly. 2. The wheels are stuck by something. | | Reinstall the cloth properly. Check and clean the wheels. | |



* Re-connect the power outlet and restart the device if the problems can not be solved by the mentioned methods.

Or please contact the local seller for help.

Correct Disposal & Conformity



The symbol on the product or on its package indicates that this product may not be treated as household waste. Instead, it should be taken to the appropriate collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local council, your household waste disposal service or the shop where you purchased the product.

The product was tested and found to be in compliance with: Directive 2014/53/EU. RoHS 2.0 Directive (EU) 2015/863.

Radio Frequency Interface Requirements – Related to European installation

Note: This equipment has been tested and found to comply with the limits for a EN 300 440 v2.1.1 receiver Category 1. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment is sensitive to other equipment that intentionally generates, radio frequency energy in the 2432MHz, 2452MHz, 2471 MHz that may conduce to the instability to use the Remote Control on it. However there is no quarantee that interference will not occur in a particular installation. If this equipment suffer from the harmful interference from another radio device to radio this can be determined by turning the respective equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Turn off the disturbance equipment and do not use the WiFi camera in proximity of equipment that operate at such frequency with high transmitting power
- Increase the separation between the disturbance equipment
- Consult the dealer or an experienced radio / TV technician for help.

We reserve the right to changes in text, design, and technical specifications which are subject to change without prior notice.

Manufacturer:

Mamibot Manufacturing (Shanghai) Co.,Ltd. 37B, Tower B, Global Harbor, North Kaixuan Rd, Putuo District, Shanghai, P.R.C.

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