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1. Introduction and safety precautions

Operating instructions for RSTtech SUN MX Wi-Fi lamps

The lamp is designed for lighting aquariums, terrariums, and paludariums. Power is supplied via a power supply unit (18-30V) that is safe for humans.

Safety precautions (Important!)

- **High voltage:** The L and N terminals of the power supply unit (in a perforated case) carry a dangerous voltage of 220V.
- **Strictly prohibited:** Do not touch the terminals of the power supply unit when the device is connected to the mains.
- **Switching:** Do not disconnect or connect the power cable connectors while the luminaire is switched on.
- **Interference:** Do not repair or upgrade the luminaire yourself.

2. Operating rules

For long-term operation of the device, follow these recommendations:

- **Humidity and ventilation:**
 - Do not use the lamp in a closed, humid environment without ventilation (under aquarium covers, etc.). This prevents corrosion and overheating.
 - Do not immerse the luminaire in water.
- **Splash protection:**

- Avoid direct splashes from aeration on the housing.
- The aerator may only be used if a cover glass is in place.
- **Power supply maintenance:**
 - Place the power supply unit only in a dry place.
 - Do not allow water or foreign objects to get inside.
 - Do not cover the power supply unit with other objects.
- **Cooling:**
 - Do not place foreign objects on the lamp — this impairs heat dissipation from the LEDs.

⚠ Warning: Failure to comply with these rules will void the warranty.

3. Lamp care

Regular care ensures maximum brightness and extends the service life of the LEDs.

■ Cleaning the housing and radiator

- **Dust and dirt:** Clean the surface of dust, food residue, and dirt with a soft brush or damp cloth.
- **Cooling:** Keep the radiator fins clean — this is critical for heat dissipation.

🔍 Protective glass care The intensity of the aquarium lighting directly depends on the cleanliness of the glass.

- **Method:** Use only a soft damp cloth.

- **Prohibition:** Do not use hard sponges, abrasives, or scrapers — scratches on the glass impair light transmission.

■ Permitted and prohibited products

- **✗ PROHIBITED:** Use alcohol, solvents, or gasoline. They can irreversibly damage the protective glass and the coating of the case.
- **✓ ALLOWED:** For heavy calcium deposits, use weak solutions of vinegar or citric acid.

Tip: Clean the glass lightly during each aquarium maintenance to prevent stubborn deposits from forming.

4. Basic concepts (read before starting)

To make setup easier, please note the following terms:

- **A browser** is a program for accessing the Internet: Safari (compass on iPhone), Chrome (colored circle), Samsung Internet, or Opera.
- **Address bar** — the field at the top of the browser where you usually type website names. The address numbers (**192.168.32.1**) should be entered there, not in the Google search field in the middle of the screen.
- **No internet connection** — when you connect to the lamp's Wi-Fi, your smartphone may display "Internet not available." This is normal. The lamp creates its own network solely for managing settings.
- **💾 floppy disk** — icon in the upper right corner of the menu. This is the "Save" button. Without pressing it, no changes will be saved in the lamp's memory.

5. Control via Wi-Fi

🌐 **Control via Wi-Fi** Any device with Wi-Fi (smartphone, tablet, laptop) and a modern browser (Chrome, Safari, Opera, etc.) is suitable for configuration.

1. Connecting to the network

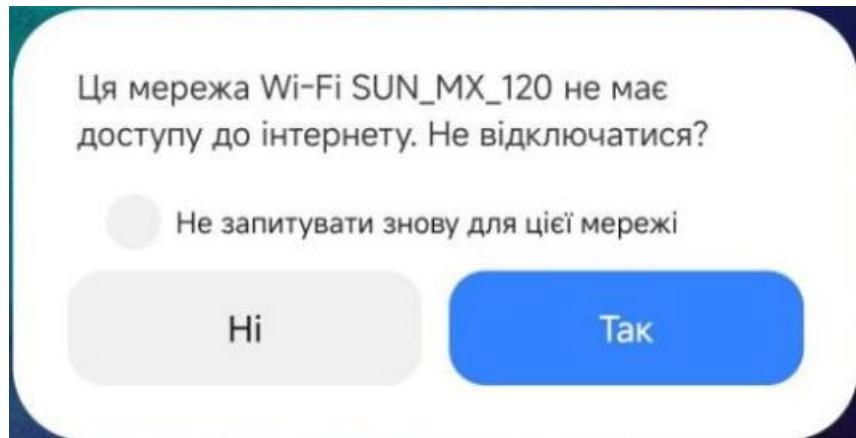
1. Open the Wi-Fi settings on your device.
2. Find the network with the name of your light fixture model (for example,



SUN_MX_120).

3. Connect to it. There is no default password.

4. Connection stability: Be sure to confirm that the network is saved by clicking "Yes" or "Do not disconnect" in the system message about the lack of Internet.

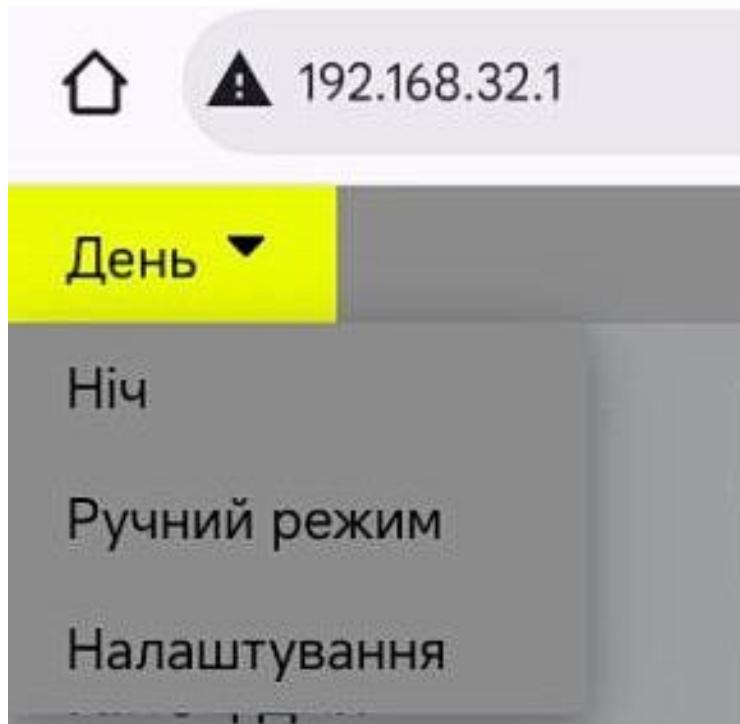


5. Recommended: For stable configuration, turn off mobile Internet (data transfer) on your smartphone while working with the lamp. This will prevent the phone from automatically switching to 4G/5G.

2. Log in to the control panel

- Open your browser.
- Enter the IP address in the address bar: **192.168.32.1** and press Enter.

- The control page will load with the menu in the upper left corner.



3. Main operating modes The menu contains settings for day, night, and manual modes, as well as network settings.

Alternative method: Quick connection via QR codes

параметри по замовчанню:

S/N, Wi-Fi: LED9451dc3c46b4
password: fishtank



For maximum convenience, there is a sticker with two QR codes on the lamp body (near the cable input) that allow you to set up the device in seconds.

Step 1. Automatic Wi-Fi connection

1. Plug the lamp into a power outlet.
2. Open your smartphone camera and point it at the left QR code marked "Step 1."
3. Tap on the pop-up message "**Connect to the SUN_MX_... network.**" Your smartphone will connect automatically (no password required).
4. **Important:** If your smartphone asks, "*This network does not have Internet access. Stay connected?*" be sure to click "**YES**" or "**Do not disconnect.**"

Step 2. Instant access to the control panel

1. Once your smartphone has connected to the lamp's network, point your camera at the QR code on the right marked "**Step 2.**"
2. Click on the link <http://192.168.32.1> that appears on the screen.
3. The lamp control interface will automatically load in your browser.

 **Tip:** If you plan to change the settings frequently, we recommend adding the open page to your browser's "Bookmarks" or placing it as an icon on your smartphone's home screen.

Control via Wi-Fi (PC/Laptop)

Any laptop or computer equipped with a Wi-Fi module and a modern browser (Chrome, Safari, Opera, Edge, etc.) is suitable for configuration.

1. Connect to the network

1. **Search for a network:** Open the list of available Wi-Fi networks on your computer (usually the icon in the lower right corner for Windows or in the upper right corner for macOS).
2. **Selecting a device:** Find the network with the name of your lamp model in the list (for example, **SUN_MX_120**).
3. **Connection:** Click "Connect." There **is no default password**.
4. **Connection stability (important):**
 - The operating system may warn that "This network does not have Internet access."

- This is normal because you are connecting directly to the lamp. Be sure to confirm that you want to keep the connection (click "**Yes**," "**Do not disconnect**," or "**Stay connected**").
- *Tip:* If your laptop automatically switches back to your home network with Internet access, temporarily uncheck the "Automatic connection" box next to your home router.

2. Log in to the control panel

1. Open your Internet browser.
2. In the address bar, enter the IP address: **192.168.32.1** and press **Enter**.
3. The control interface will load with a menu in the upper left corner.

3. Main operating modes

All the necessary tabs will be available in the menu:

- Day cycle settings (sunrise/sunset).
- Night mode.
- Manual spectrum control.
- Home network connection settings.

 **Tip:** If you plan to control the lamp frequently from your laptop, add the page 192.168.32.1 to your browser's **bookmarks** for quick access.

6. Day mode

 **Day mode (Basic)** Allows you to fully automate the lighting of your aquarium:

- **Sunrise and Sunset:** Set the start/end time of the day and the duration of



Початок дня 09:00
Тривалість сходу 30 хв
Кінець дня 20:00
Тривалість заходу 30 хв

smooth transitions.

- **Light Pause:** If the aquarium needs a "break" during the day, check the "Pause" box and specify the desired time interval (from... to...).



Пауза
з 12:00 по 13:00

7. Spectrum settings

 **Spectrum and brightness settings** You can flexibly adjust the color temperature and lighting intensity to suit the needs of your aquarium.

- **Channel adjustment:** Use the sliders of the corresponding colors to create the desired spectrum.
- **Preview (Real-time):** To see the changes on the lamp instantly as you move the sliders, check the "Show changes in real time" box.

- **Overall brightness:** Once you have set the ideal color balance, you can proportionally change the power of all channels at once using the "Overall brightness" slider.



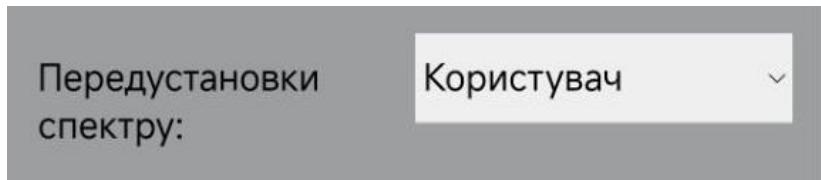
brightness" slider.

Saving settings: After you finish editing, be sure to click on the disk icon  in the upper right corner of the screen. If you don't do this, the changes will not be applied after you exit.

8. Presets (Ready-made solutions)

 **Spectrum presets** For your convenience, the lamp comes with ready-made lighting profiles designed for different types of aquariums. You can choose one

of them as a basis and, if necessary, adjust it to your liking.

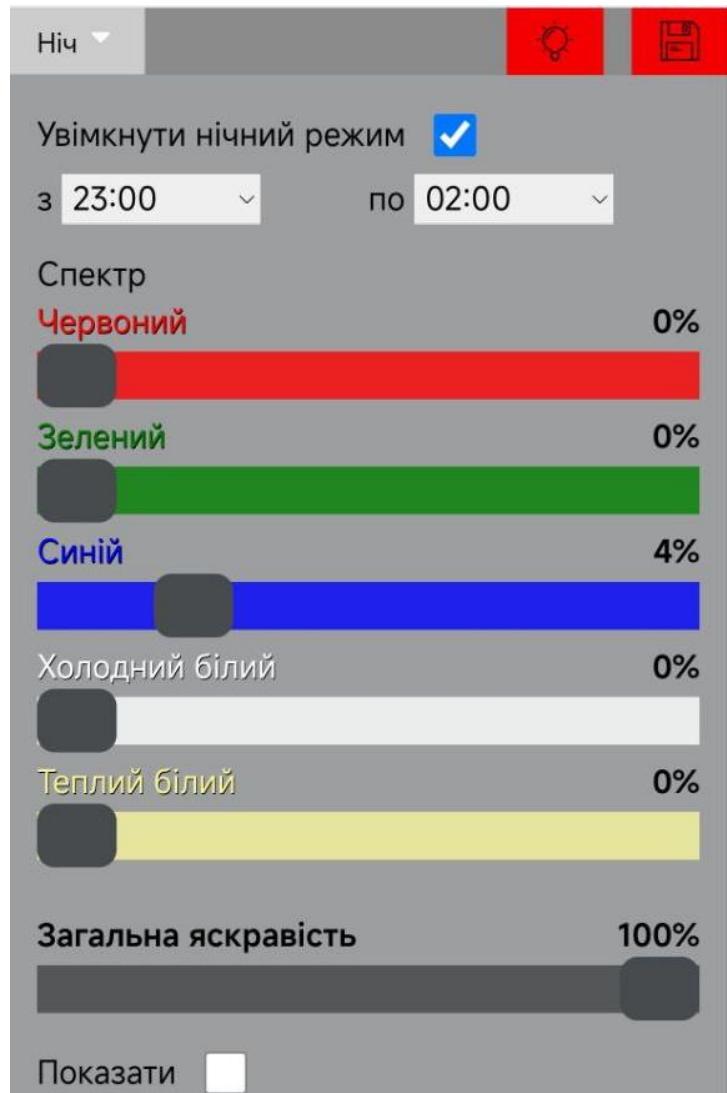


Available modes:

- **Biotope:** A spectrum that best imitates the natural conditions of specific water bodies (balanced warm or neutral light).
- **Cichlid (Pseudomare):** Emphasis on cool blue and bright white tones that highlight the colors of the fish and create the effect of ocean depths.
- **Forced herbivore:** Maximum intensity and full spectrum (with enhanced red and blue) for aquariums with active CO2 and fertilizer supply.
- **Moderate herbivore:** Optimal balance for stable growth of most plant species without the risk of algae growth.
- **Slow herbivore:** Soft light for aquariums with undemanding plants (anubias, ferns, mosses).
- **Aquarium start-up:** Special mode with reduced intensity to prevent algae blooms in the first weeks after filling with water.
- **Factory settings:** Standard universal spectrum set by the manufacturer by default.

Tip: After selecting any preset, don't forget to click on the diskette icon  so that the lamp saves these settings.

9. Night mode 🌙 **Night mode (Moonlight)** This mode is designed to create



soft night lighting for the aquarium.

- Activation:** To activate the mode, check the "Enable night mode" box.
- Operating time:** Set the exact period of illumination in the "from ... to ..." fields.
- Spectrum settings:**
 - Select the desired shade (usually blue or dim white) using the sliders.
 - To instantly see the result on the lamp, check the "Show changes in real time" box.
- Saving:** Be sure to click on the floppy disk icon in the upper right corner to save the night mode settings.

10. Manual mode



💡 Manual mode This mode is designed to turn on the light outside of the schedule (for example, for aquarium maintenance). In this mode, the lamp works continuously, ignoring the daily schedule.

How to turn on:

- **Via the interface:** Click on the "Light bulb" icon in your browser.
- **Physical button:** Briefly press the button/panel located on the body near the cable entry. Pressing it again will return the lamp to automatic mode.



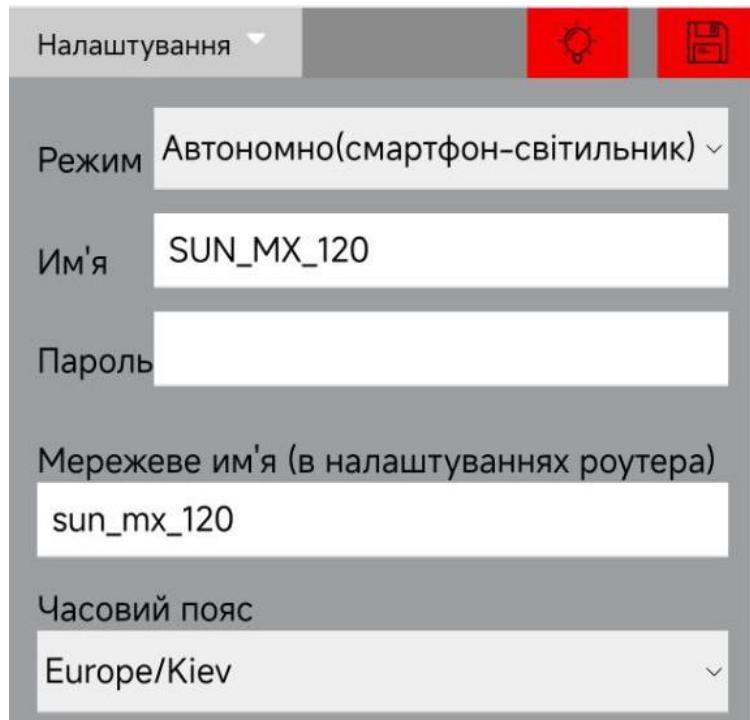
⚠ Features:

- **Mode reset:** If you unplug the lamp (or if the power is turned off), manual mode is automatically turned off. When power is restored, the lamp always returns to automatic mode according to the set schedule.

Spectrum settings:

- On the "Manual" tab, you can set a separate spectrum and brightness for this mode.
- **Saving:** Click on the floppy disk icon  in the upper right corner to save your settings.
- To see the result instantly on the lamp, check the "Show changes in real time" box.

11. Network and region settings



On this tab, you can specify how the device will interact with your Wi-Fi network and set the time parameters.

Selecting the operating mode

You can choose one of two connection options:

- **"Standalone" mode (recommended):**
 - The light creates its own Wi-Fi network. You connect to it directly from your smartphone.
 - This is the most reliable method, as it does not depend on your router.
- **"Router network" mode:**
 - The lamp connects to your home Wi-Fi network.
 - You can control it without switching networks on your smartphone while within range of your router.

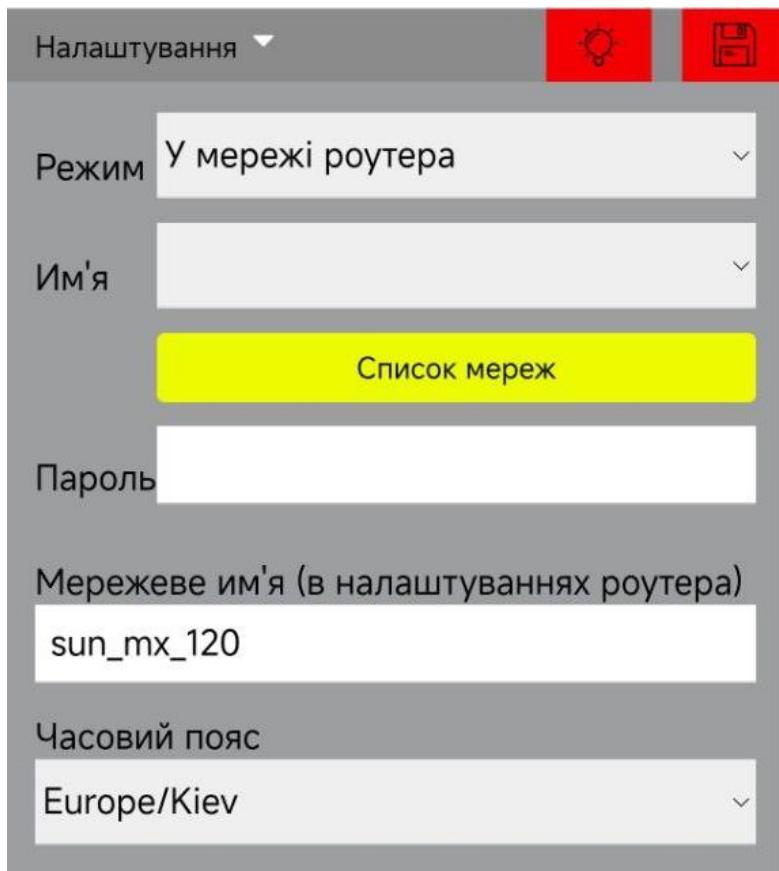
Access and time settings

- **Network name (SSID):** This is **the name of your light** that you see in the Wi-Fi list. You can change the default name (e.g., SUN_MX...) to any other name.
- **Password:** You can set a password to protect access or leave the field blank to make the network open.
- **Time zone (Greenwich):** Select the time offset of your region relative to **GMT** (e.g., +2 or +3). This is necessary for the Day/Night schedule to work accurately.

Power independence and saving

- **Saving:** To activate any changes, be sure to click on the **floppy disk** icon  in the upper right corner.
- **Memory:** The luminaire has independent memory. In the event of a power failure (220V), all settings and schedules are saved.
- **Auto start:** After power is restored, the lamp will automatically resume operation at the set time. You do not need to reconnect to it to "start" the schedule.

12. Connecting to your home router



Connecting the lamp directly to the router allows you to control it remotely over a local network and automatically synchronize the time with servers.

⚠ Important to know before setting up:

- This mode is recommended for **experienced users**.
- After setup, the light **will disappear** from your smartphone's Wi-Fi network list.
- The old address **192.168.32.1** will no longer work.

🔧 Step-by-step connection instructions:

1. Go to the "**Settings**" section of your lamp (at 192.168.32.1).
2. Select the "**On router network**" mode.
3. Press the "**Network List**" button, then click on the empty "**Name**" field.
After a few seconds, a list of networks will appear next to it. Select the name of your home Wi-Fi network from the list.
4. Enter the password for your home network.
5. To save your changes, be sure to click on the **disk** icon  in the upper right corner.

How to find a light fixture on a router network?

After connecting, the router will assign a new IP address to the light. To find out what it is:

- Log in to your router settings.
- In the **DHCP** section, find the **DHCP Clients List** subsection.
- Find the lamp in the list. The Device Name field may contain:
 - The name of your light (for example, **SUN_MX...**)
 - **OR** the technical name of the controller: **espressif**
- Copy the IP address assigned to it (e.g., 192.168.0.236).

- Now enter this new address in your browser to control it.

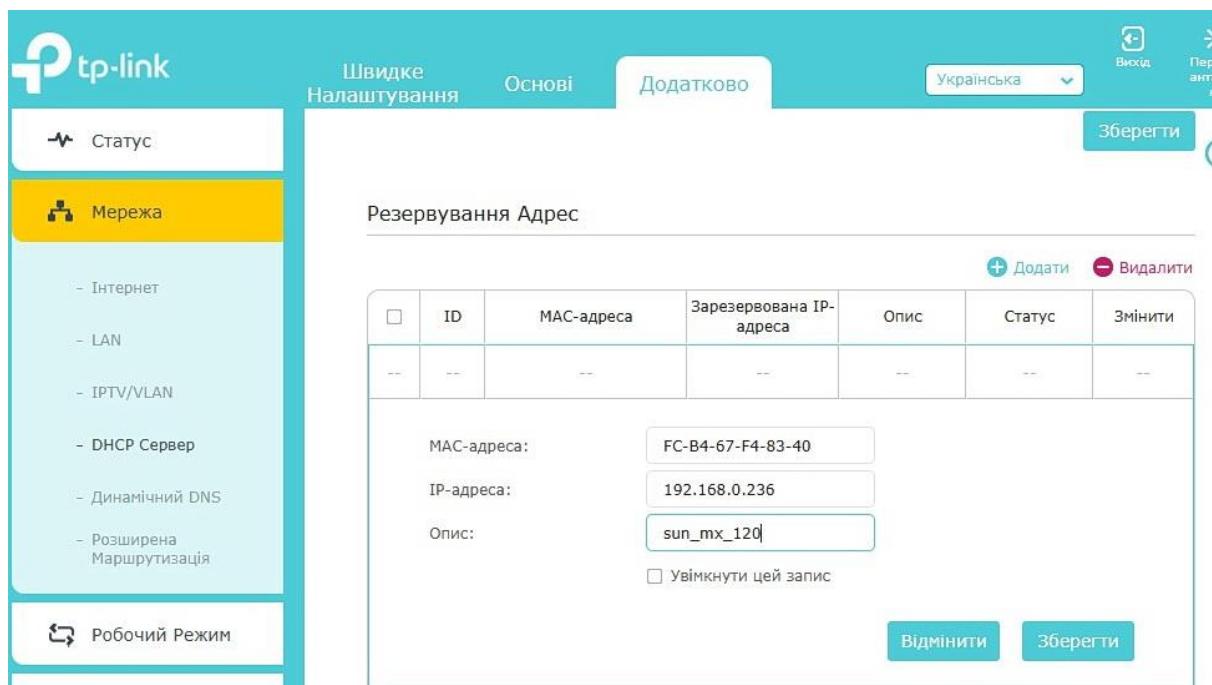
ID	Ім'я клієнта	MAC-адреса	Присвоєна IP-адреса	Час оренди
1	sun_mx_120	FC-B4-67-F4-83-40	192.168.0.236	1:56:36

❖ Address reservation (Static IP)

To ensure that the IP address of the light does not change after restarting the router, we recommend setting up a "hard link":

1. Copy **the MAC address** and **IP address of** the light fixture in the router menu.
 1. Go to the **Address Reservation** section.

2. Add this information to the appropriate fields and save the settings.



tp-link

Швидке Налаштування Основні Додатково Українська Виходи Переглянути

Статус

Мережа

- Інтернет
- LAN
- IPTV/VLAN
- DHCP Сервер
- Динамічний DNS
- Розширення Маршрутизація

Резервування Адрес

<input type="checkbox"/>	ID	MAC-адреса	Зарезервована IP-адреса	Опис	Статус	Змінити
--	--	--	--	--	--	--

MAC-адреса: FC-B4-67-F4-83-40

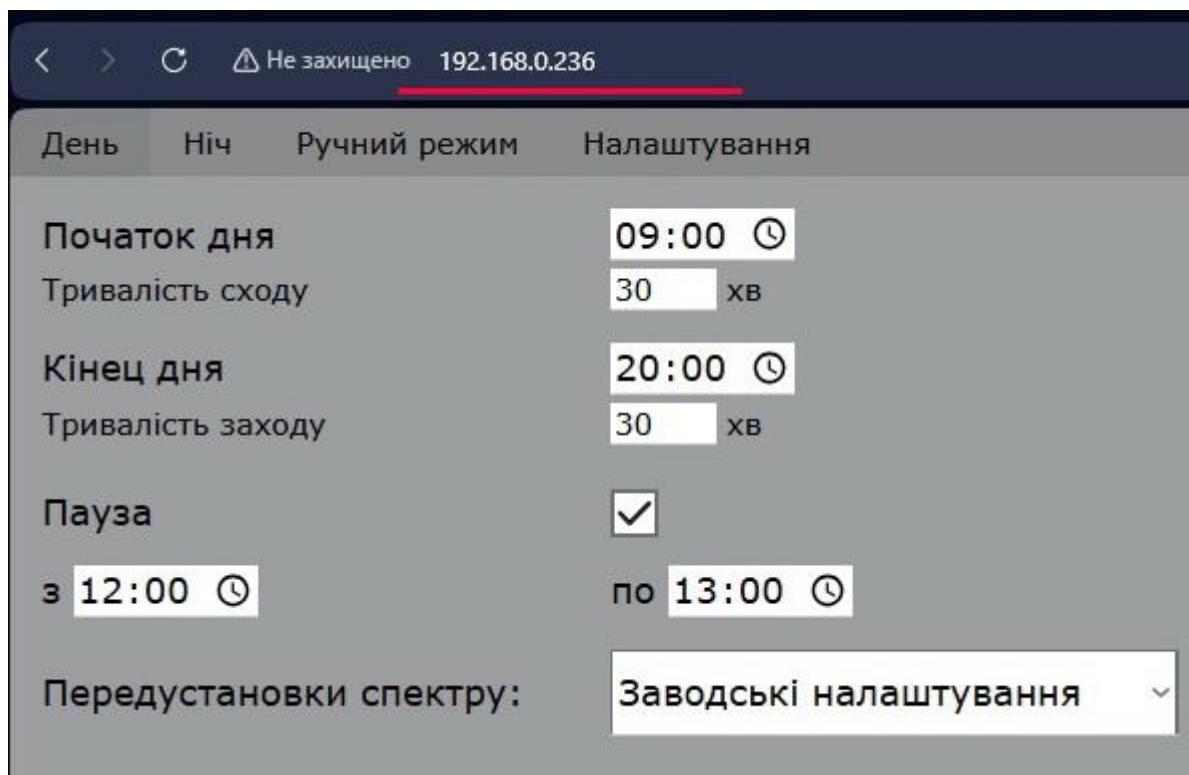
IP-адреса: 192.168.0.236

Опис: sun_mx_120

Увімкнути цей запис

Відмінити Зберегти

3. Restart the router.



Не захищено 192.168.0.236

День Ніч Ручний режим Налаштування

Початок дня 09:00

Тривалість сходу 30 хв

Кінець дня 20:00

Тривалість заходу 30 хв

Пауза

з 12:00 по 13:00

Передустановки спектру: Заводські налаштування

Note: After these steps, your smartphone must be connected to the same home Wi-Fi network as the light.

☒ How to return to standalone mode?

If you want to connect to the light directly again:

1. Go to the settings using the new IP address (provided by the router).
2. Change the operating mode to "**Standalone**."
3. Save the changes (floppy **disk** icon ).

13. Resetting settings (Reset)

☒ **Resetting settings and restoring access (Reset)** This is necessary if you have forgotten your password, incorrectly configured the connection to the router, or the light has "disappeared" from the network.

🛠 **Step 1. Hardware reset (Reset)** This "wakes up" the system and resets it to factory settings.



1. Unplug the lamp from the power outlet.
2. Press and hold the button panel.
3. Plug it back in, hold the button for another 2-3 seconds, and release it.

- **What happened:** The settings have been reset, but the light is operating in "hidden network" mode — your phone will not see it yet.

🛠 **Step 2. Enable visibility (Wi-Fi ON)** This makes the light's network visible to your smartphone.

1. Without unplugging the light, press and hold the button again for 2 or more seconds.
2. Release the button.

- **What happened:** A network with a name like **Led7c9...** (password **fishtank**) will now appear in the Wi-Fi list on your phone.

Step 3. Save the settings in the menu

1. Connect to the **Led...** network and go to **192.168.32.1** in your browser.
2. Go to the "Settings" section. You will see your old data (password, network name).
3. **Important:** If you want to control the light directly (without a router), make sure that "**Standalone**" mode is selected.
 - If you have simply forgotten your password, write it down or enter a new one.
4. Even if you haven't changed anything, **be sure to click on the floppy disk icon**  . This "confirms" the operating mode, and the lamp will become available again under its usual name.

14. Controlling the visibility of the Wi-Fi module

You can turn off the lamp's Wi-Fi module yourself or turn it back on.

How to control visibility:

- **Action:** Press and hold the button (panel on the glass on the cable entry side) for **2 seconds**.
- **Result:** Switching on and off occurs cyclically. When turned off, the light's Wi-Fi network will disappear from the list of available networks on all devices, and it will be impossible to connect to it.

Important notes:

- 1. Autonomous operation:** Turning off Wi-Fi **has no effect** on the lighting schedule. Even with the communication module turned off, the lamp continues to operate in **automatic mode** according to the set time.
- 2. Reset when power is lost:** After the 220V voltage disappears and reappears, the Wi-Fi off mode is reset. The behavior of the network will depend on your previous settings:
 - If there was **an autonomous connection**, the lamp's network will reappear in the list of available Wi-Fi networks on your phone.
 - If **a connection via a router** was configured, the lamp will automatically reconnect to your router according to the schedule.

15. Warranty obligations

The warranty period for the lamp is 12 months from the date of sale.

Important: Please check the product for defects immediately upon receipt.

Conditions for free repair: If the lamp or its parts fail through no fault of the user during the warranty period, repairs will be carried out free of charge, provided that:

- There is no visible mechanical damage.
- There are no traces of moisture inside the lamp body.

Transportation:

- According to the law, within **14 days** of purchase, all costs of transporting the product for warranty service are borne by the company.

You may be denied service if:

- Mechanical or other damage is found that resulted from intentional or careless actions by the buyer or third parties.
- The housing has been opened without authorization or repaired independently.
- Internal communications, components, design, or layout of the product have been changed.

Where to go for help?

If you have any questions about the operation of the luminaire or warranty service, you can contact:

-  **Tel:** +38 (067) 323-86-03
-  **Facebook:** facebook.com/groups/rsttech/
-  **Website:** rst-tech.com.ua/contacts

