

SUPPORT

Models supported include ALMS-Horn-RGB

WARRANTY

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If you have any questions, please feel free to contact us. We will respond within 2 working days.

Email: service@icpdas.com

ALMS-Horn-RGB

User guide for Firmware Update

Version: 1.0/ Updated: MAY 2026

Ch.1. Setting up the ALMS-Horn-RGB

Ch. 2. Firmware Update Procedure

Ch. 3. Troubleshooting

Ch. 4. Additional Information



ICP DAS CO., LTD.
Website: <http://www.icpdas.com>

1. Setting up the ALMS-Horn-RGB

Before updating the firmware, please ensure that the network settings for both your host computer and any ALMS-Horn-RGB modules are correctly configured, or the update procedures via the Ethernet network may not function correctly.

Step 1: Connect the ALMS-Horn-RGB to the same hub or the same sub-network as your Host PC, and attach a power supply to the ALMS-Horn-RGB. Do not connect the ALMS-Horn-RGB to a router or directly to the Internet as this may cause the update process to fail.

Please refer to ALMS-Horn-RGB Quick Start Guide for more detailed information.

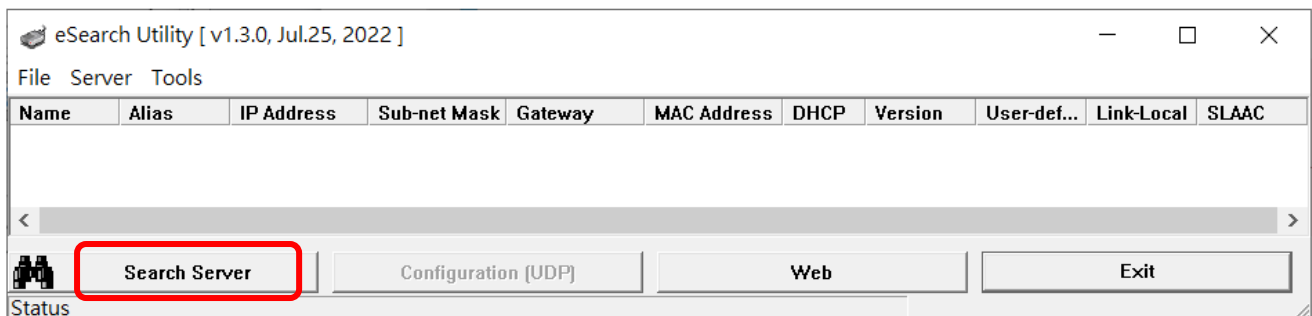


[Download the Quick Start Guide.](#)

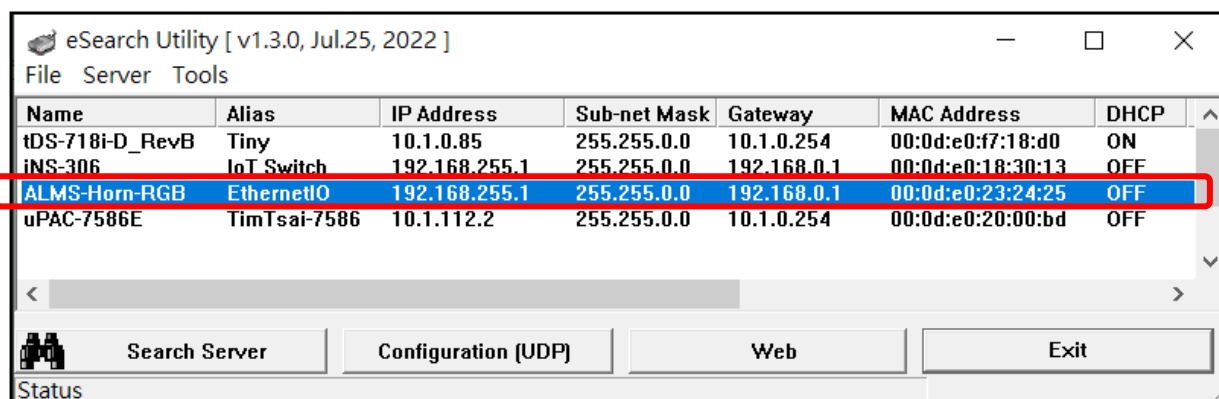
Step 2: Install the eSearch Utility on your Host PC, and then run the Utility to search for any ALMS-Horn-RGB module connected to the network.



[Download the eSearch Utility.](#)



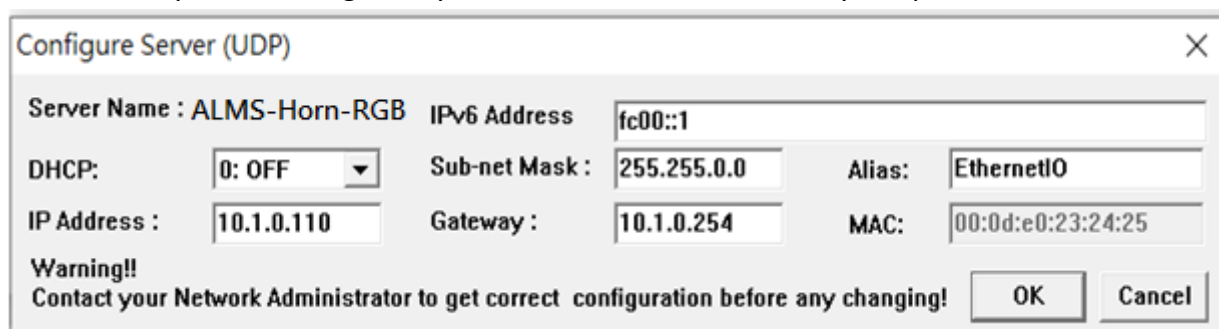
Step 3: Configure the correct network settings for the required ALMS-Horn-RGB module.



Name	Alias	IP Address	Sub-net Mask	Gateway	MAC Address	DHCP
tDS-718i-D_RevB	Tiny	10.1.0.85	255.255.0.0	10.1.0.254	00:0d:e0:f7:18:d0	ON
iNS-306	IoT Switch	192.168.255.1	255.255.0.0	192.168.0.1	00:0d:e0:18:30:13	OFF
ALMS-Horn-RGB	EthernetIO	192.168.255.1	255.255.0.0	192.168.0.1	00:0d:e0:23:24:25	OFF
uPAC-7586E	TimTsai-7586	10.1.112.2	255.255.0.0	10.1.0.254	00:0d:e0:20:00:bd	OFF

Search Server Configuration (UDP) Web Exit

Users can modify IP address, gateway, and sub-net mask if necessary to update the firmware.



Configure Server (UDP)

Server Name : ALMS-Horn-RGB IPv6 Address : fc00::1

DHCP: 0: OFF Sub-net Mask : 255.255.0.0 Alias: EthernetIO

IP Address : 10.1.0.110 Gateway : 10.1.0.254 MAC: 00:0d:e0:23:24:25

Warning!!
Contact your Network Administrator to get correct configuration before any changing!

OK Cancel

Step 4: Download the latest of ALMS-Horn-RGB's Firmware.



[Download the Firmware File.](#)

Firmware

FILE NAME	DESCRIPTION	MODEL	LAST UPDATE
ALMS-Horm-RGB Firmware	For ALMS-Horm-RGB	ALMS-Horm-RGB	2023-08-28

2. Firmware Update Procedure

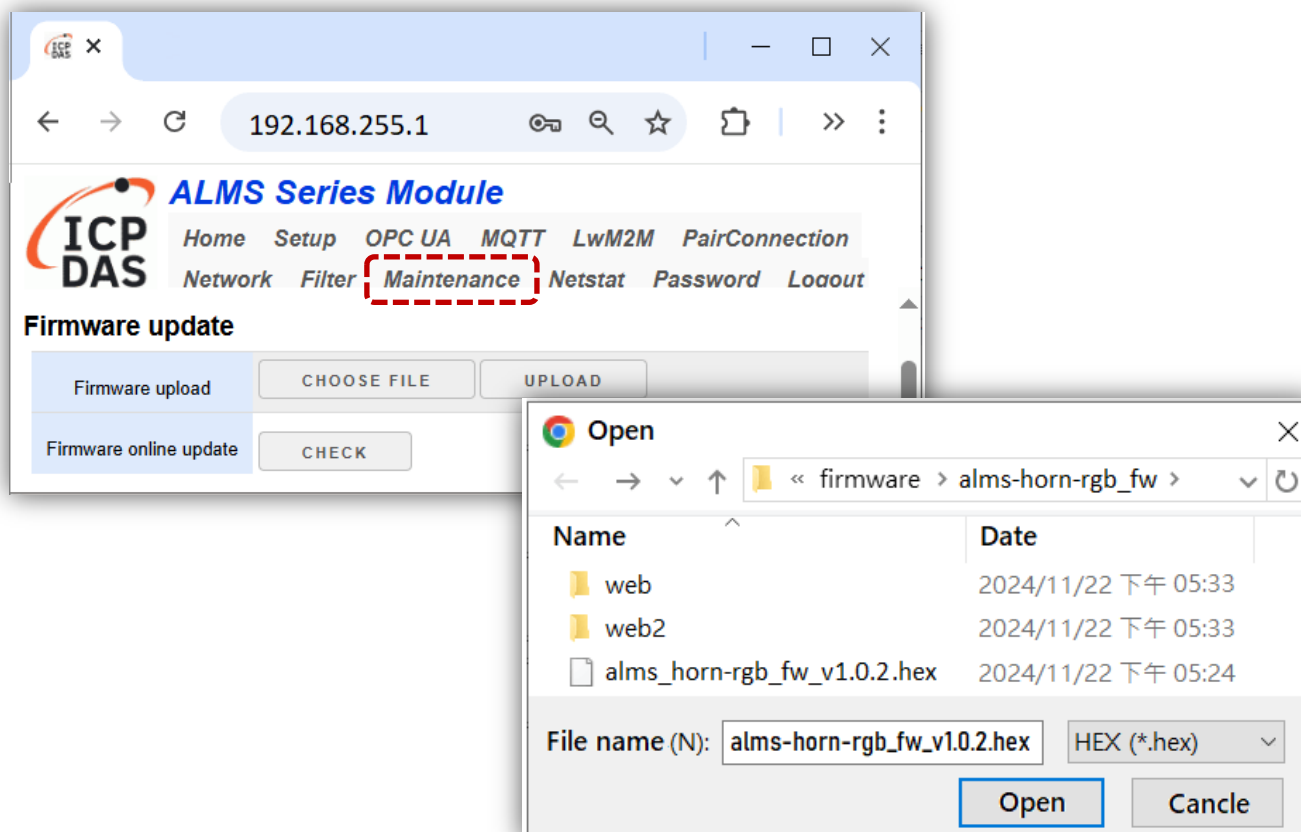
The firmware update can fail when the computer has multiple network interfaces (e.g., LAN and Wi-Fi). Therefore, enable only one network interface for updating the firmware, and temporarily turn off other network interfaces, firewalls, and anti-virus software first.

Step 1: In the eSearch Utility, click the **“Search Servers”** button to search for any ALMS-Horn-RGB modules connected to the network. (The network settings of the ALMS-Horn-RGB module as described in **Step 3 on Page1**)

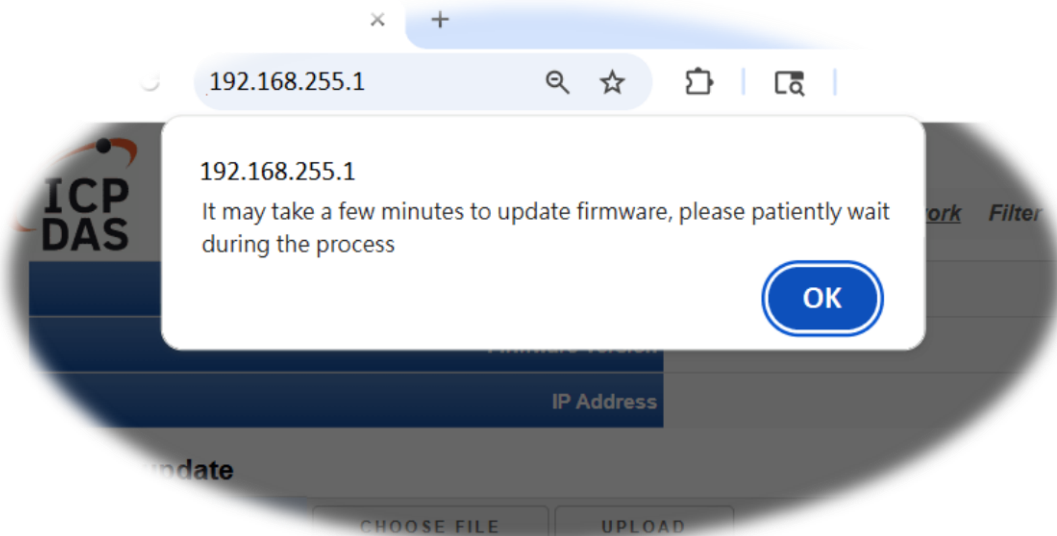
Step 2: Open the browser interface (e.g., Google Chrome or Internet Explorer, etc.), and enter the IP Address of ALMS-Horn-RGB in the address bar for access the ALMS-Horn-RGB’s management interface.

Step 3: Click **“Maintenance”** page, find the **“Firmware Update”** column and click the **“CHOOSE FILE”** button, it will display the open file dialog box.

Step 4: In the **“Open”** dialog box, select the firmware file (**ALMS-Horn-RGB_fw.hex**) that will be used to update the module and then click the **“Open”** button.

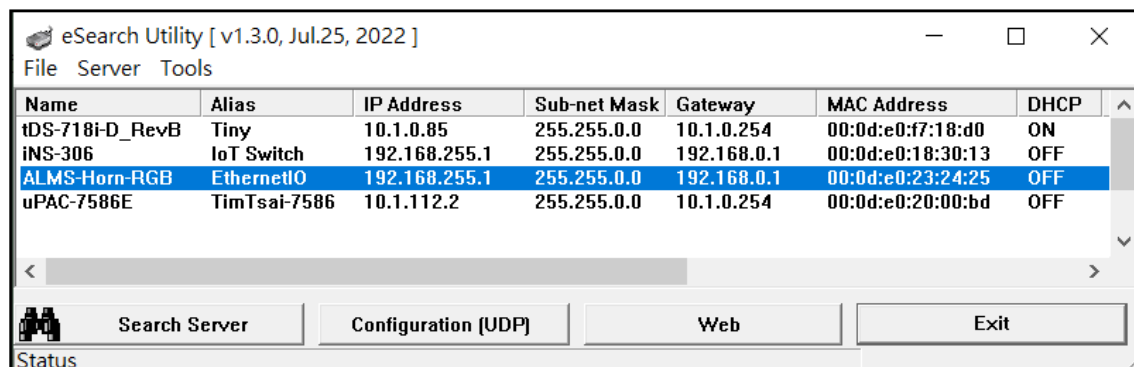


Step 5: Click the “**UPLOAD**” button, it is going to update process.



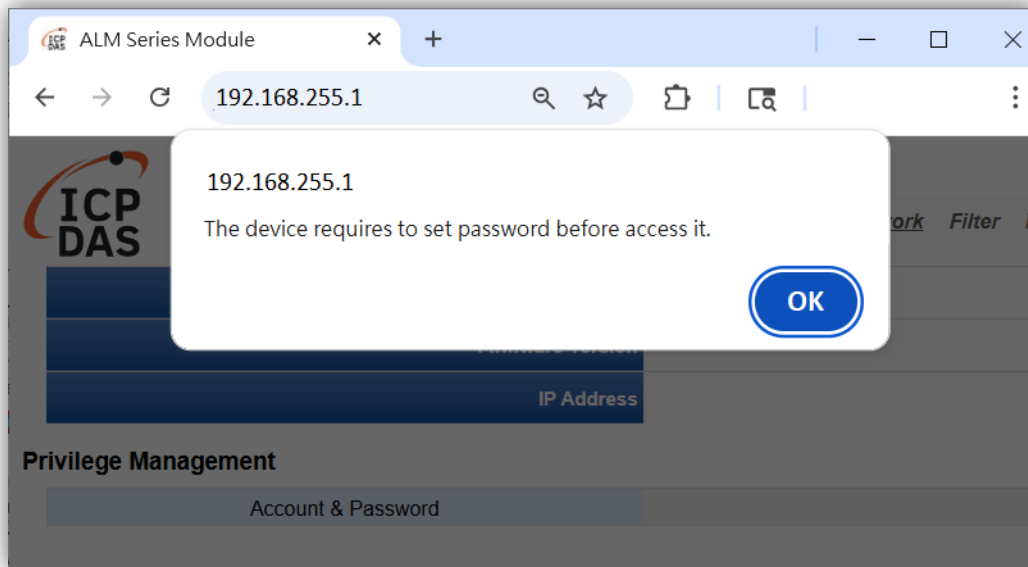
Step 6: Once the update is complete, the user can turn off the power and then turn the ALMS-Horn-RGB back on to restart it.

Step 7: In the eSearch Utility, click the “**Search Servers**” button to search again to check Whether it can work or not. **Note that the network settings for the module may need to be reconfigured after updating the firmware.**

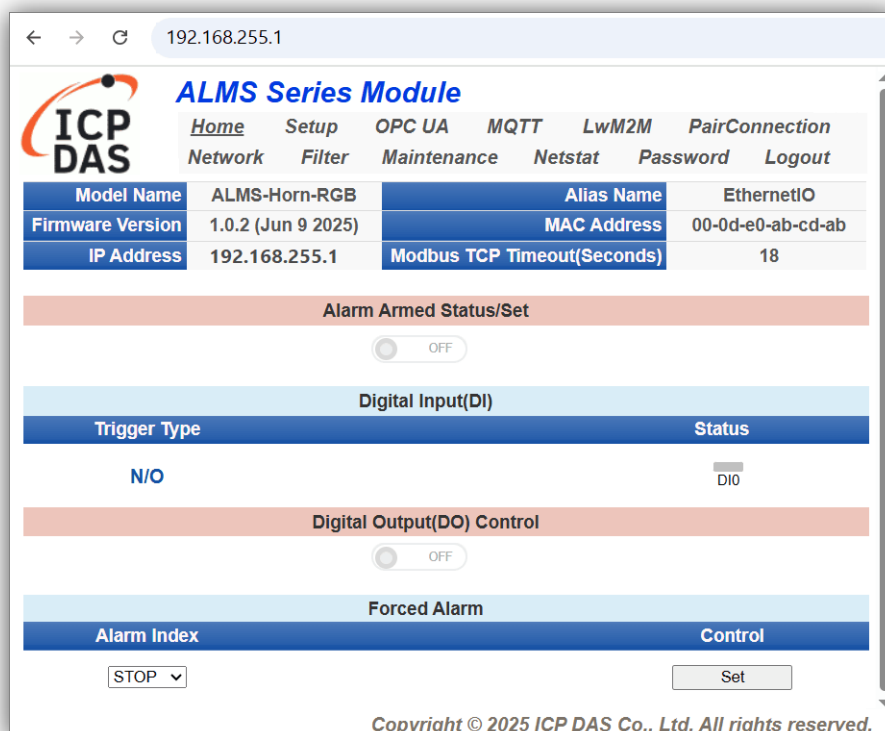


Step 8: Open the browser, and enter the IP Address of ALMS-Horn-RGB in the address bar for access the ALMS-Horn-RGB's web server.

Step 9: In the Login dialog, enter the username and password, then click the “Sing in” button.
(Use the default username and password is “Admin” for the login)



Step 10: After logging into the ALMS-Horn-RGB web server, the main page will be displayed. Check both the Firmware version and Date are correct.



3. Troubleshooting

3.1 How to update Firmware when the Different Network Segment for IP Address of the ALMS-Horn-RGB and Host PC.

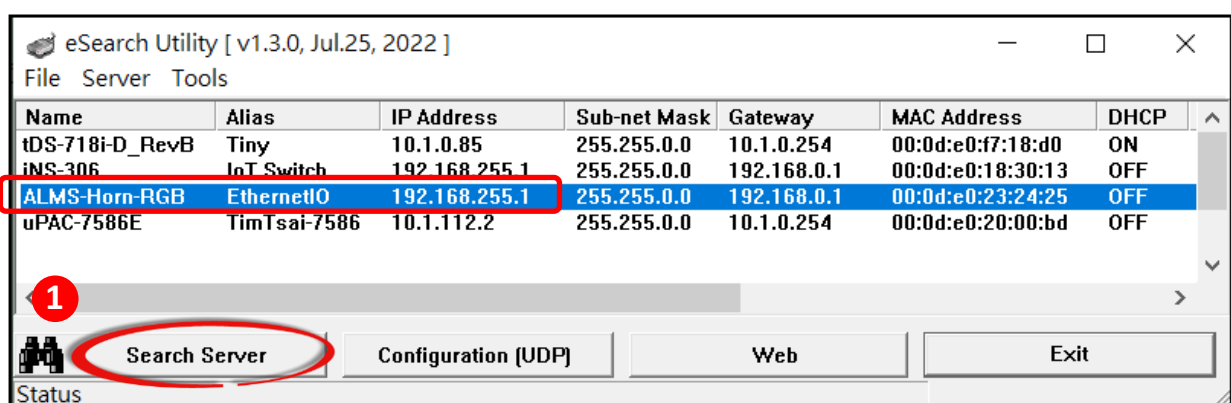
For example, the first time to get the ALMS-Horn-RGB module, the factory default IP address is 192.168.255.1, but the host PC IP address is 10.8.10.8, therefore, before update the firmware, user can refer to the following two methods to update firmware.

Method 1:

Using “**Dynamic Host Configuration Protocol (DHCP)**” to automatically assigns an IP address to ALMS-Horn-RGB module. Follow the procedure described below:

Step 1: Run the eSearch Utility to search for any ALMS-Horn-RGB modules to the network.

Step 2: Double click the name of ALMS-Horn-RGB to open the “**Configure Server (UDP)**” dialog box.



Step 3: Select the "1: ON" option from the "DHCP:" drop-down menu and click the "OK" button.

Configure Server (UDP)

Server Name : ALMS-Horn-RGB IPv6 Address : fc00:0:0:0:0:0:1

DHCP: 3 0: OFF Sub-net Mask : 255.255.0.0 Alias: EthernetIO

IP Address : 0: OFF Gateway : 192.168.255.1 MAC: 00:0d:e0:65:00:41

Warning!!
Contact your Network Administrator to get correct configuration before any changing!

OK Cancel

Step 4: Wait 2 seconds and then click the "Search Servers" button again to ensure the ALMS-Horn-RGB is working well with new configuration.

eSearch Utility [v1.3.0, Jul.25, 2022]

File Server Tools

Name	Alias	IP Address	Sub-net Mask	Gateway	MAC Address	DHCP
tGW-715(j)_RevB2	Tiny	10.1.0.56	255.255.0.0	10.1.0.254	00:0d:e0:71:50:ab	ON
PDS-755	N/A	10.1.102.86	255.255.0.0	10.1.0.254	00:0d:e0:d0:83:0b	OFF
ALMS-Horn-RGB	EthernetIO	10.1.0.110	255.255.0.0	10.1.0.254	00:0d:e0:ab:cd:ab	ON
PDS2-5105D-MTCP-1	N/A	10.1.102.51	255.255.0.0	10.1.0.254	00:0d:e0:d0:db:40	OFF

Search Server Configuration (UDP) Web Exit

Status

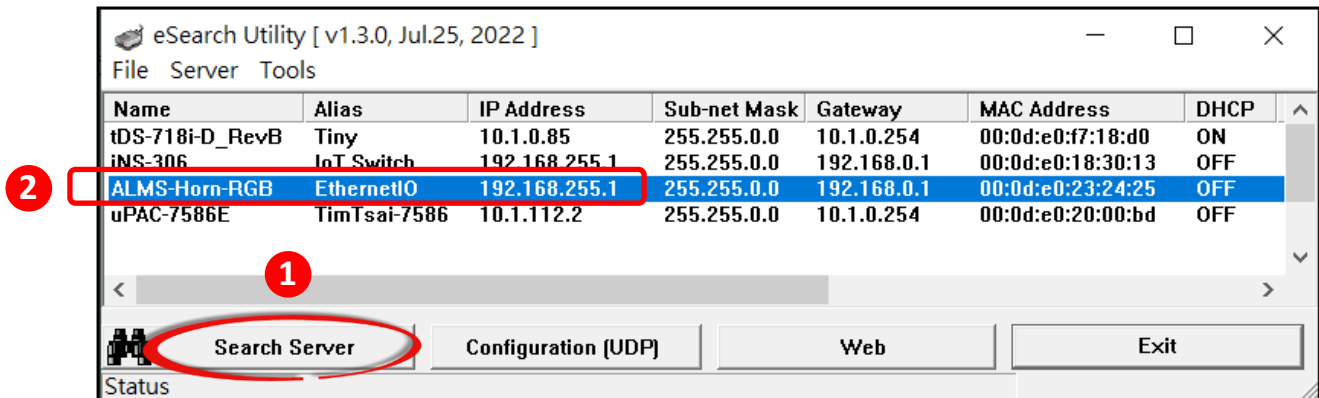
Step 5: Refer to "[Chapter 2-Firmware Update Procedure](#)" for details of how to complete the update process.

Method 2

Using “Manual configuration” to assigns an IP address to ALMS-Horn-RGB module. Follow the procedure described below:

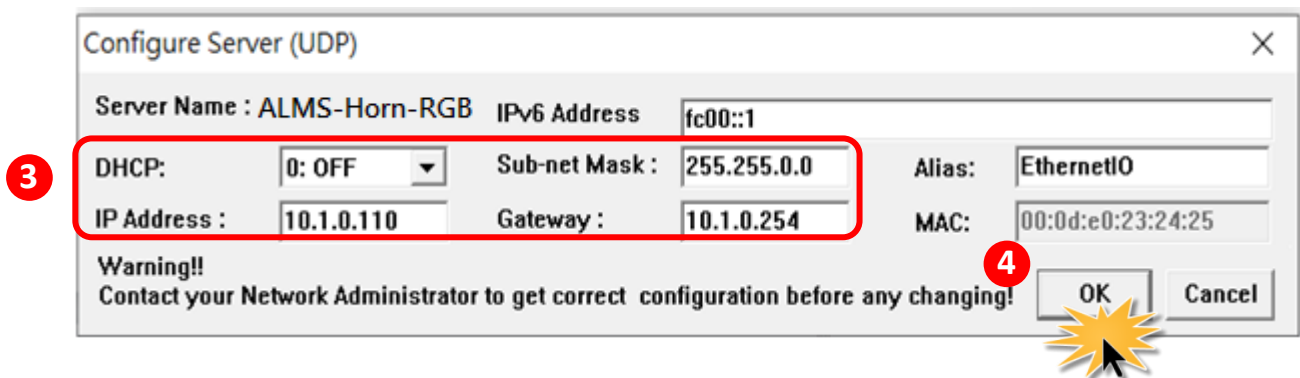
Step 1: Run the eSearch Utility to search for any ALMS-Horn-RGB modules to the network

Step 2: Double click the name of ALMS-Horn-RGB to open the “Configure Server (UDP)” dialog box.

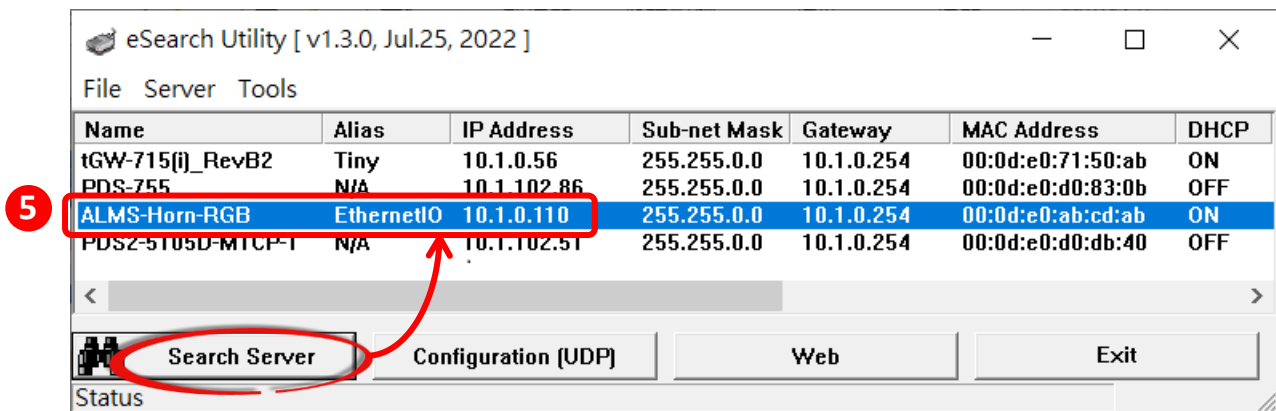


Step 3: Select the “0: OFF” option from the “DHCP:” drop-down menu.

Step 4: Contact your Network Administrator to obtain a correct network configuration (such as IP Address/Sub-net Mask/Gateway). Enter the network settings and click the “OK” button.



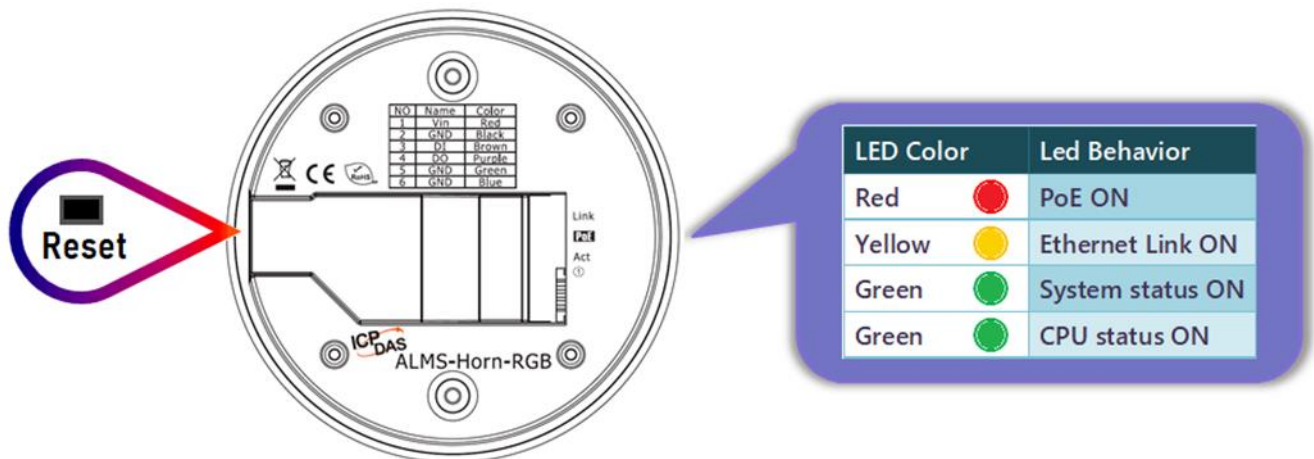
Step 5: Wait 2 seconds and then click the “**Search Servers**” button again to ensure the ALMS-Horn-RGB is working well with new configuration.



Step 6: Refer to “**Chapter 2-Firmware Update Procedure**” for details of how to complete the update process.

3.2 How to update Firmware when the ALMS-Horn-RGB fails to recovery/update firmware in a normal way.

Use the following procedure to reset Firmware.



1 Turn off the Power for ALMS-Horn-RGB.

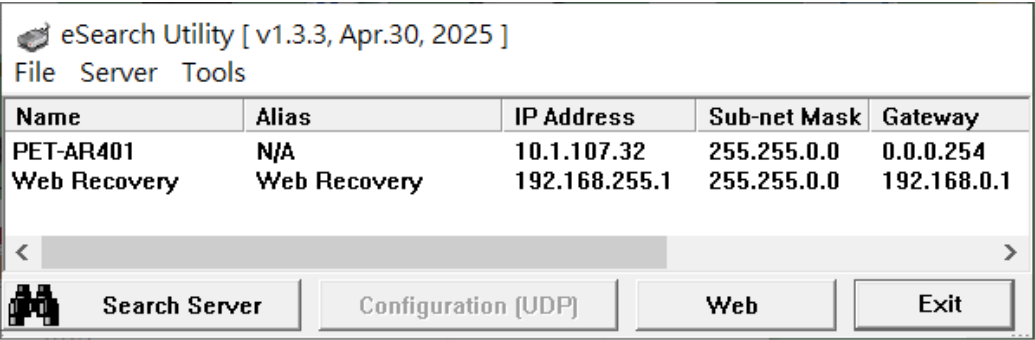
2 Keep pressing the reset button then turn on power.

3 Hold the reset button for about 6 seconds, the CPU LED will light up and blink.

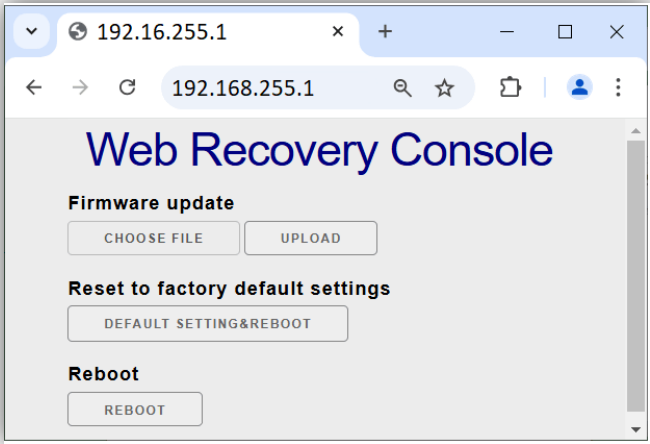
4 Open the eSearch Utility and scan devices, you will see that the name is "Web Recovery" which is ALMS-Horn-RGB module.

5 Open the Web browser, enter the IP address of the ALMS-Horn-RGB module in the address bar and then click "Enter", you will see the Recovery menu.

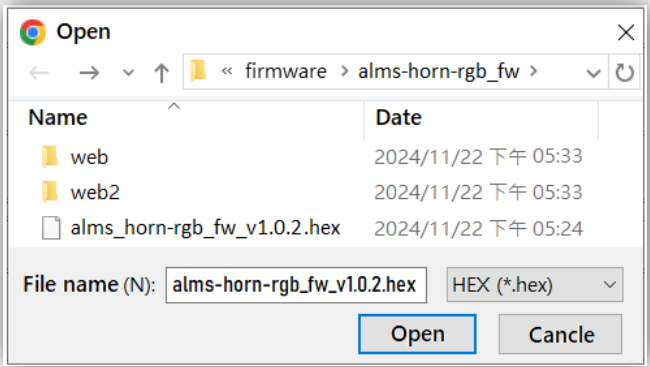
Clicking “Search Server” on eSearch Utility, you will see the module name as a “Web Recovery”.



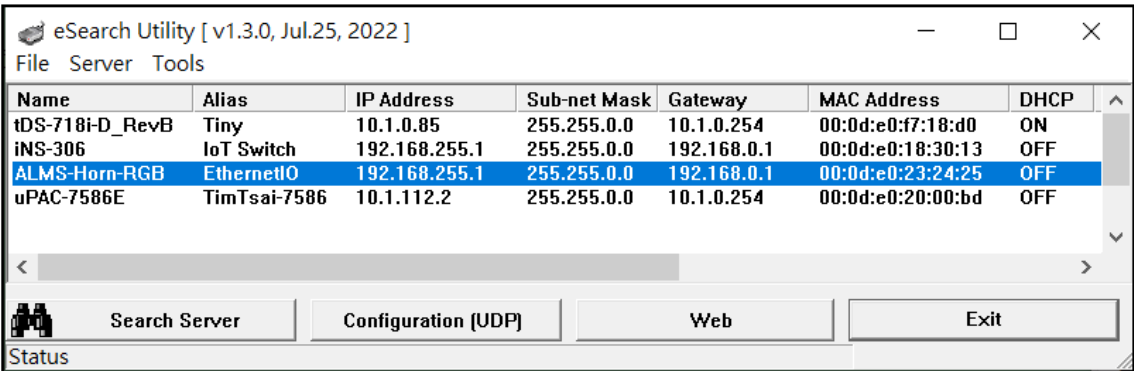
On the “Web Recovery Console” page, user can click “Firmware update >>> CHOOSE FILE >>> UPLOAD” button to begin the restore process.



Select a **ALMS-Horn-RGB** firmware image file (alm-horn-rgb_fw_v1.0.2.hex), and click “Open” button to follow the step-by-step instructions.



After the update is complete, the ALMS-Horn-RGB will reboot. Clicking “Search Server” on eSearch Utility again, you will see the module name as a “ALMS-Horn-RGB”.



4. Additional Information

The ALMS-Horn-RGB obtains the IP address assigned by the user and retrieves the firmware image through the utility program. Since the flash memory then becomes writable, the firmware can be updated via the Ethernet network.

Notes:

 **Note 1:** If the IP address settings do not work correctly (e.g. there is no response to a ping command), please contact your network administrator to obtain a valid IP address for the ALMS-Horn-RGB module.

 **Note 2:** If the settings displayed in the IP address field of the firmware update window is incorrect or invalid (e.g. IP address: 0.0.0.0), then a valid IP address must be manually specified for the ALMS-Horn-RGB in order to process the update operation.