

Wi-Fi HaLow™ Compliant Wi-Fi Extender

EX-150AH Setup Guide



WA108250XX

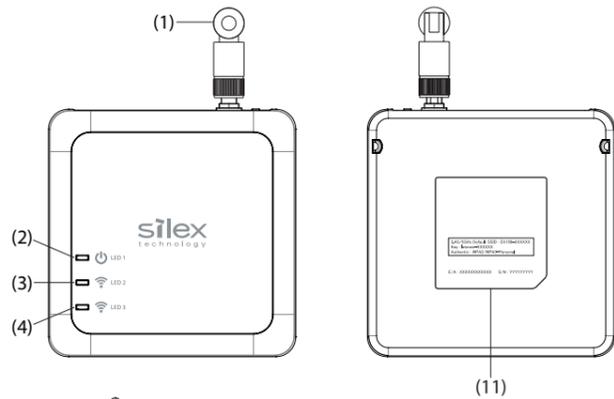
Thank you for purchasing the Wi-Fi extender "EX-150AH". EX-150AH is a repeater that supports IEEE 802.11ah(Wi-Fi HaLow™)/IEEE 802.11ax. It can operate as an Access Point that connects Wi-Fi station devices such as PCs and tablets, and as a station device that supports IEEE 802.11ah. The radio waves of PCs, tablets, etc. can be relayed to remote IEEE 802.11ah Access Points. This Setup Guide explains how to configure and use EX-150AH in a wireless network.

Package Contents

Following items are bundled with EX-150AH.

- EX-150AH
- Wireless LAN antenna
- Setup Guide (this document)
- Warranty Guide and GPL Inquiry Card

Name of Parts



- (1) Wireless LAN antenna
- (2) LED 1 (Green/Red)
- (3) LED 2 (Green/Red)
- (4) LED 3 (Green/Red)
- (5) LED 4 (Orange)
- (6) LED 5 (Green)
- (7) Push switch
- (8) LAN port
- (9) USB Type-C (5V PD sink)
- (10) DC connector (12V to 24V)
- (11) Product label

Configuration Method

EX-150AH can be configured by the following methods:

- 1) Configuration Using EX-150AH's Web Page
- 2) Configuration Using AMC Manager®

When you have only one EX-150AH unit, see **Configuration Using EX-150AH's Web Page**.
When you have multiple EX-150AH units, see **Configuration Using AMC Manager®** and configure them one by one.

Necessary Items

Following items are required.

- PC to use for configuration
- Power supply

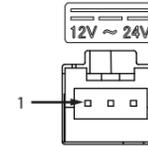
Power Supply

EX-150AH can receive electrical power in the following two ways:

- Power supply (DC 12V to 24V)
- USB Type-C connector (DC5V/1.5A)

*** Do not connect a power supply that supports DC12V to 24V while receiving a power from the USB Type-C connector. It may cause unintended operation or malfunction.**
* When there is no power supply that supports DC12V to 24V, prepare the power supply that supports a USB port, and connect it to the USB Type-C power connector of EX-150AH.
* To connect to this connector, please use JST PAP-03V-S.
* The pin arrangement for the DC connector of EX-150AH is as follows.

DC connector

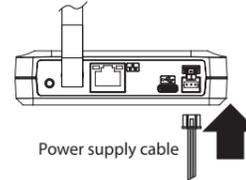


PIN Number	Signal Name	Description
1	FG	-
2	GND	GND
3	VCC	DC 12 to 24V

Powering on EX-150AH, Network Setting of PC

- 1 Connect the power supply cable or USB Type-C cable to EX-150AH.

* During the configuration of EX-150AH, do not turn on the Silex Technology's IEEE 802.11ah Access Points that have the factory default setting.



- 2 Change the network settings of the PC to allow accessing EX-150AH.

Sample network setting)
When there is no DHCP server in your environment, the default IP address of EX-150AH is "169.254.111.111".
Then, change the network settings of your PC as below:
IP address : 169.254.111.1
Subnet mask : 255.255.0.0

* Make sure that the IP address set on the computer does not overlap with the IP address of EX-150AH.

Configuration Using EX-150AH's Web Page

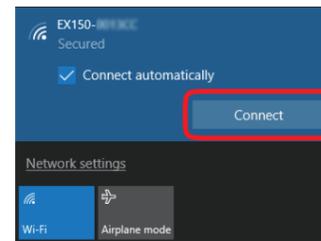
*Connect EX-150AH and PC via wireless LAN.

Connecting to PC

- 1 Click the network icon on the notification area (system tray) to view the wireless networks.

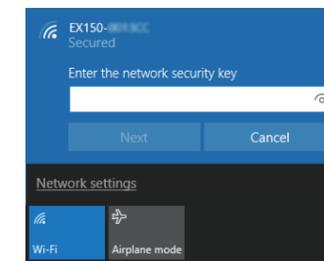


- 2 Select the SSID configured on EX-150AH from a list and click **Connect**.



* The default SSID is "2.4G/5GHz Default SSID" that is noted on the product label.
* If **Connect automatically** is checked, your PC will automatically connect to EX-150AH every time it restarts.

- 3 Enter the Pre-Shared key to **Security key** and click **Next**.

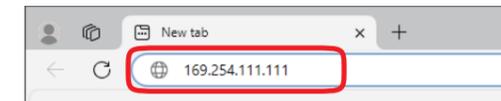


* The default Pre-shared key is "key" that is noted on the product label.

- 4 When a message **Do you want to allow your PC to be discoverable by other PCs and devices on this network?** appears, click **No**.

Access to EX-150AH's Web Page

- 5 Start a Web browser (Microsoft Edge, etc.) on the PC. Enter the IP address of EX-150AH to the address bar and press the Enter key.



- 6 The login password configuration page appears, enter the password to configure for EX-150AH and click **Submit**.

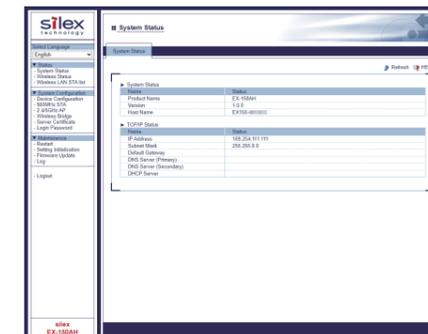


* The login password configuration page is displayed only when EX-150AH has the factory default settings. Once configured, it will not be displayed again.

- 7 The login page is displayed. Enter the login password you have configured and click **Login**.

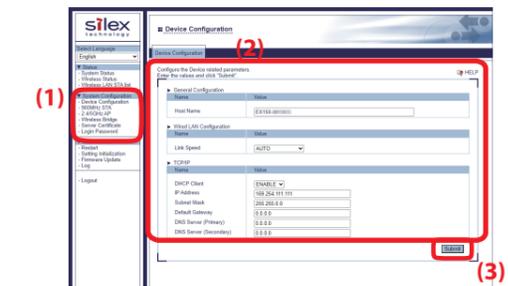


- 8 The Web page of EX-150AH is displayed.



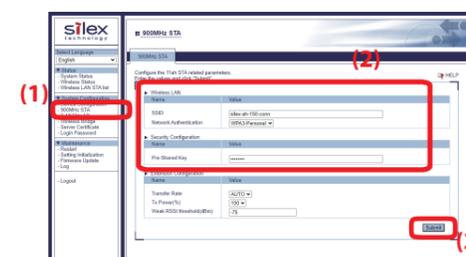
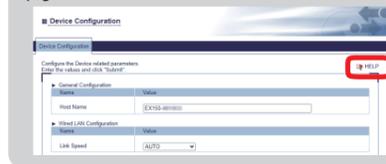
Basic Configuration

- 9 Click the setting from the page menu (1), enter the necessary settings at the displayed page (2) and click **Submit** (3).



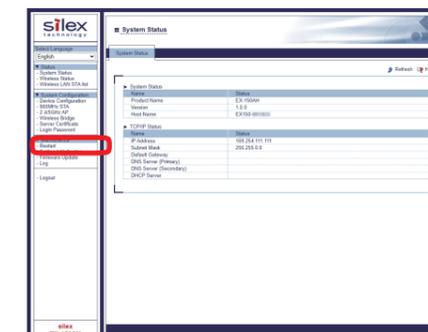
- 10 Click 900MHz STA from the page menu(1). Change the following settings according to the Access Point to connect(2). Check the settings and click Submit(3).
- SSID
- Network Authentication
- Pre-Shared Key

* For details on each setting, refer to the User's Manual or the Help page. Clicking **HELP** on top right of the page will open the Help page.



* Change the setting at **Extension Configuration** as necessary.

- 11 To take effect of the changes, restart EX-150AH. Click **Restart** from the page menu.



- 12 Click **Yes** to restart EX-150AH.

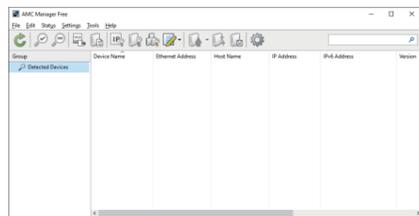


The configuration has now been completed.

Configuration Using AMC Manager®

Start AMC Manager®

- Download AMC Manager® from the Sillex Technology's website and install it to the PC.
Click **Start - sillex Tools - AMC Manager**.
The AMC Manager® will be started.

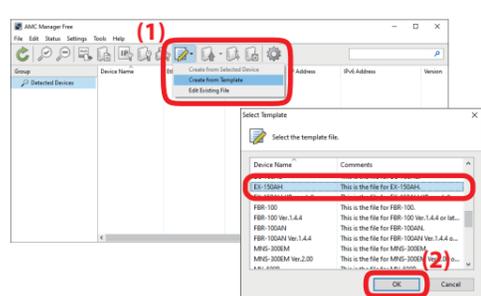


* In the following instructions, AMC Manager® Free will be used as an example.
* Although this document uses AMC Manager® Free for explanation, the configuration methods will basically be the same even if you are using AMC Manager® which requires a separate license key.

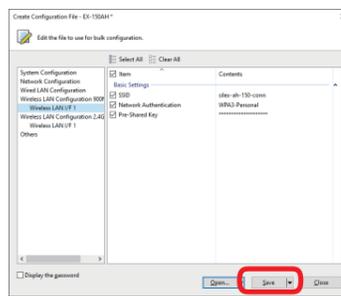
* For the configuration, connect EX-150AH to the PC using a LAN cable, and configure it one by one.

Create Configuration File

- Create a configuration file using the template.
Click the icon **Create the configuration file** and click **Create from Template** from the toolbar (1).
In the **Select Template** window, select the **EX-150AH** and click **OK** (2).



- In the **Create Configuration File** window, check the check box of the items you want to use for the configuration file, edit the settings and click **Save**.
In the dialog to save the configuration file, specify the file name and click **Save**.



* When EX-150AH is used for the first time, the login password needs to be set.

* Change the following settings **Wireless LAN Configuration 900MHz** of EX-150AH according to the Access Point to connect.
- SSID
- Network Authentication
- Pre-Shared Key

Connection to PC & Network Setting

- Connect EX-150AH to the PC and change the network setting of the PC according to the instructions given at **Powering on EX-150AH, Network Setting of PC and Connecting to PC** in the back page.

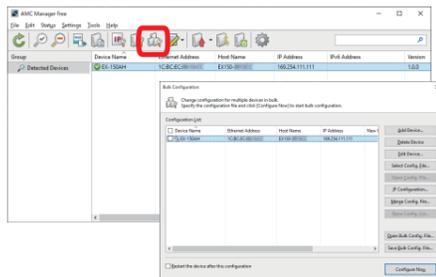
For the IP address to set to the PC, use the one communicable with EX-150AH.

Setting example)

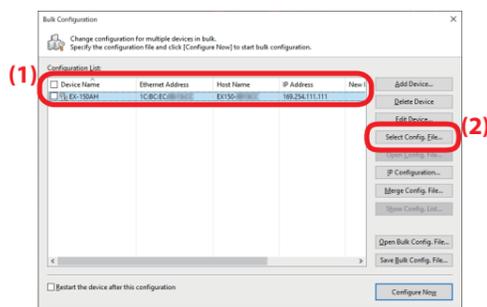
Sample address to set for EX-150AH	Sample address to set for PC
192.168.20.10	192.168.20.100
172.25.50.10	172.25.50.100

Basic Configuration

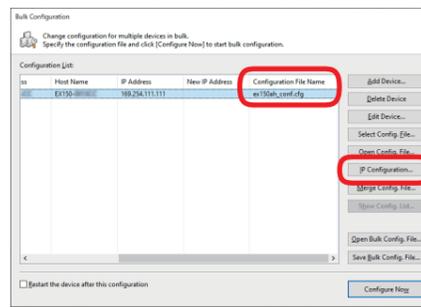
- Select the EX-150AH unit to configure from the device list of AMC Manager®, and click the icon **Configure multiple devices in bulk**.
For bulk configuration, the configuration file is used to send the settings to the devices.



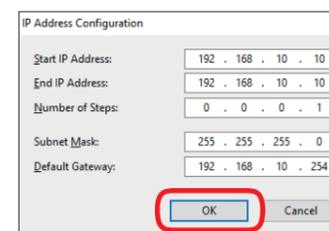
- In the **Bulk Configuration** window, select the EX-150AH unit to configure from the **Configuration List** (1) and click the **Select Config. File** button (2).
When a file selection dialog appears, select the configuration file that you have created and click **Open**.



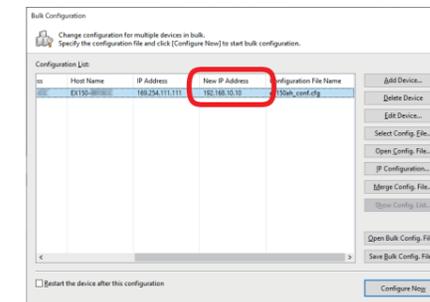
- The selected file is displayed at **Configuration File Name**.
Click **IP Configuration** for the IP address configuration.
When you are using the DHCP server to automatically configure the IP address, skip this and go on to 10.



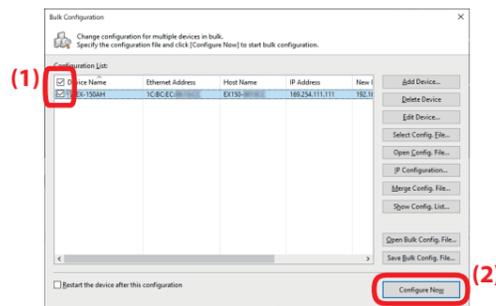
- In the **IP Address Configuration** window, specify the range of IP address to configure for EX-150AH, and click **OK**.



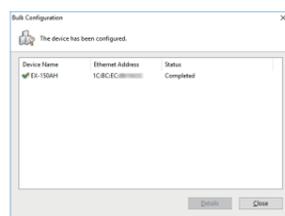
- The IP address is pre-assigned to EX-150AH and is displayed under **New IP Address**.



- Check the check box of the EX-150AH unit to configure (1) and click **Configure Now** (2).



- The configuration performs and the result is displayed.
Click **Close**.



- When there are more EX-150AH units to configure, repeat the process of 4 to 11 and configure them one by one.

The configuration has now been completed.

How to Download AMC Manager®

AMC Manager® can be downloaded from the Sillex Technology's website.
Access the URL below to download it.

<https://www.sillextechnology.com/>

- When the website is displayed, click **Support Center** in the bottom of the page.
- Click **Software Download**.
- In the **Software Download** page, click **AMC Manager®**.
- Enter the necessary information to the download form and click **Download**.
(If the download form is not displayed, just click **Download**.)
- Download AMC Manager®.

Factory Default Configuration

Follow the instructions below to reset EX-150AH to the factory default setting.

- While EX-150AH is operating, press and hold the push switch for more than 5 seconds.
When the LED1/LED2/LED3 start blinking green together, release the push switch. The settings will be reset to the factory defaults and EX-150AH will be restarted.

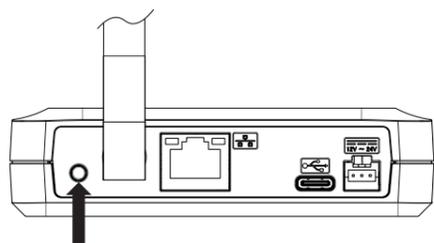
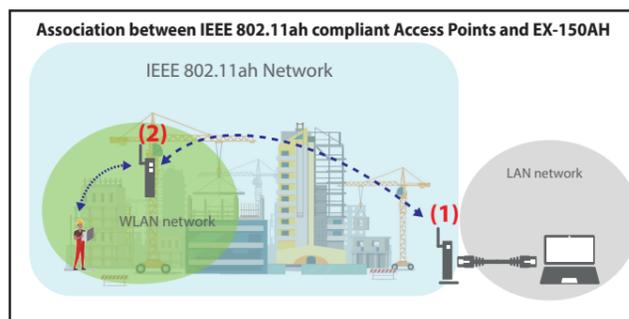


Image of Using EX-150AH



- IEEE 802.11ah-compatible Access Point
- EX-150AH(Wi-Fi HaLow™-compatible Wi-Fi Extender)

Trademarks

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Customer Support Center

If you have any questions, please contact us at the following.

Customer Support Center information

E-mail: support@sillexamerica.com
URL: <https://www.sillextechnology.com/>

Sillex Technology America, Inc.