

Compact / Low-power Wireless Bridge

BR-110AX Setup Guide



WA108910XA

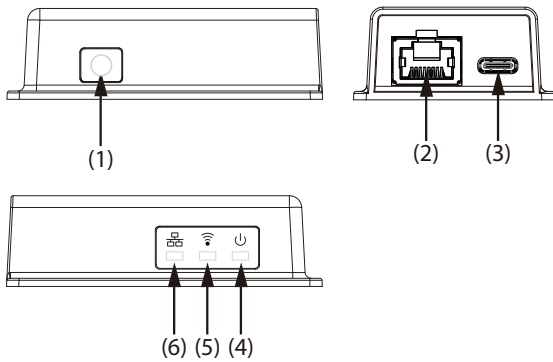
Thank you for purchasing the compact, low-power wireless bridge BR-110AX. BR-110AX is a wireless bridge that enables easy connection of wired LAN devices to wireless network and supports Wi-Fi 6 (IEEE 802.11ax) communication on both 2.4GHz and 5GHz bands. The compact enclosure provides dust and drip protection (IP21), resistance to disinfectants, and USB Type-C power input, making it easy to install in locations with limited space or power availability, such as medical facilities and retail stores. In addition, support for fast roaming enables stable communication even when BR-110AX is used with moving devices such as medical carts. This document explains how to perform the initial configuration to connect a wired LAN device to a wireless LAN.

Package Contents

Following items are bundled with BR-110AX.

- ☐ BR-110AX
- ☐ USB Cable (Type-A - Type-C)
- ☐ Hook-and-loop fastener
- ☐ Warranty Guide and GPL Inquiry Card
- ☐ Declaration of Conformity (EU/UK model only)

Name of Parts



- (1) Push switch
- (2) LAN port
- (3) Power connector(USB Type-C)
- (4) POWER LED (Green)
- (5) WLAN LED (Green/Orange/Red)
- (6) LINK LED (Green/Orange/Red)

Precautions

- Please read the following before using BR-110AX.
- The USB port on BR-110AX supports power input only. Data communication via USB is not supported.
- To maintain the dust and drip protection performance (IP21), make sure that the surface of the LAN port and power connector is facing downward, when BR-110AX is installed.
- Only one device can be connected to a wired LAN port of BR-110AX. It is impossible to connect multiple devices using an Ethernet Hub.

Necessary Items

Following items are required.

- PC to use for configuration: 1
- LAN cable: 1
- Power supply equipped with a USB Type-A port: 1

- * A USB AC adapter or a USB port on a PC can be used as the power source.
- * If wireless LAN is enabled on your PC, please disable it.

Configuration Method

There are 2 configuration methods below.

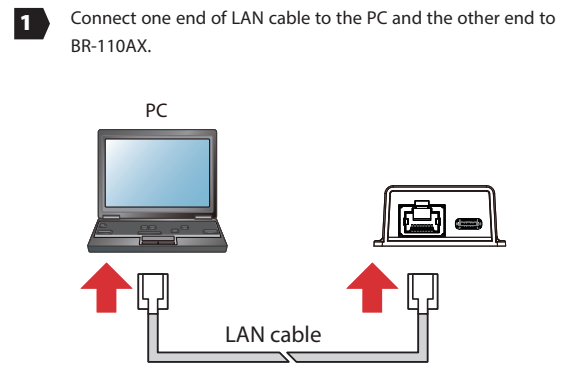
- Configuration Using Configuration Mode
(See the front page of this document)
- Configuration Using AMC Manager
(See the back page of this document)

It is recommended to use Configuration Mode if you are configuring the device for the first time or configuring only one unit.
For configuration using AMC Manager, refer to **Configuration Using AMC Manager** on the back side of this document.

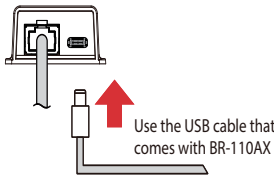
Configuration Using Configuration Mode

By connecting BR-110AX directly to a PC using a LAN cable, the Web page can be accessed even if you are not sure of the IP address.

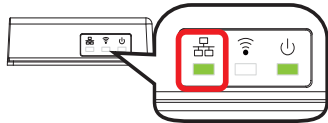
Connecting BR-110AX to PC



- 2 Connect BR-110AX to a power source using the USB cable (Type-A to Type-C) that comes with BR-110AX.

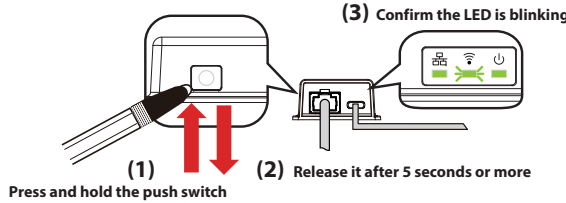


- 3 Check the connection status using the LEDs. When BR-110AX has successfully connected to the PC, the LINK LED lights green or orange.

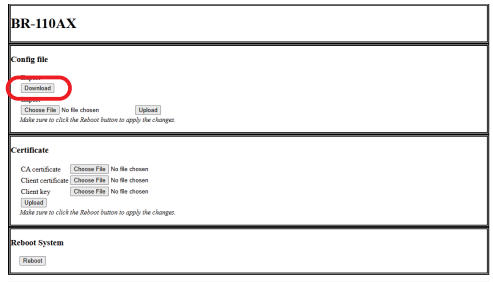


Configuring BR-110AX Using Configuration Mode

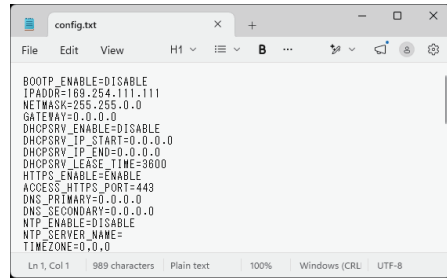
- 1 When BR-110AX is turned on, press and hold the push switch using a pointed object, then release it after at least 5 seconds. Confirm that the WLAN LED is blinking green. BR-110AX will start running in the Configuration Mode and be ready to configure from the PC that has been connected to BR-110AX via a LAN cable.



- 4 Click **Download** under **Export**. The message for the config file (config.txt) appears. Follow the instructions in the message.



- 5 Open the configuration file you have downloaded with a text editor, edit the necessary settings such as the wireless network to connect to, and then save it.

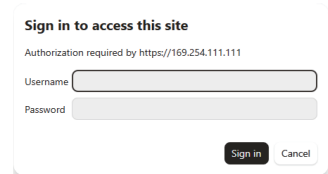


To connect using WPA3-Personal, change the following settings in the configuration file.

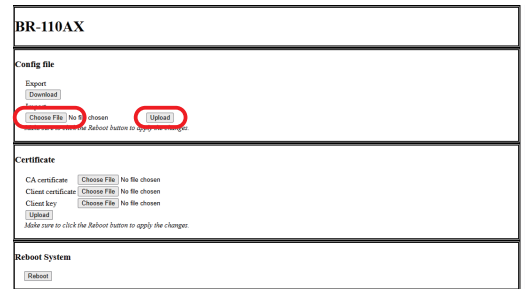
Item	Details
WL_STA_SSID	Set the SSID of the Access Point to connect.
WL_STA_NETWORK_AUTH	Set the authentication method of the Access Point to connect. For WPA3-Personal, set "3".
WL_STA_WPA_PSK	Set the pre-shared key (PSK) of the Access Point to connect.

* To connect using an authentication method other than WPA3-Personal, or to modify other settings, refer to **A. Configuration list** in the User's Manual.

- 3 After the restart is completed, access the BR-110AX's Web page according to **1** and **2** again. Enter "**admin**" for the **Username** and the configured password for **Password**, then click **Sign in**.



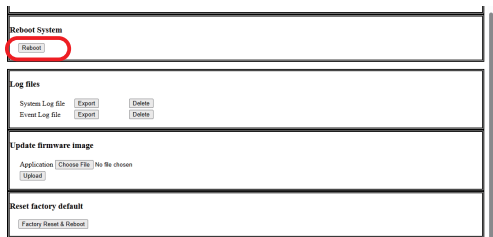
- 6 Click the button under **Import** in the BR-110AX's Web page. When the file selection dialog appears, select the config file you have edited, and click **Open**. Check that the specified config file is displayed and click **Upload**.



- 7 When the following message appears, click **Return to top pages**.

Update config success.
[Return to top pages.](#)

- 8 Click **Reboot** under **Reboot System**. When the confirmation dialog appears, click **OK**.



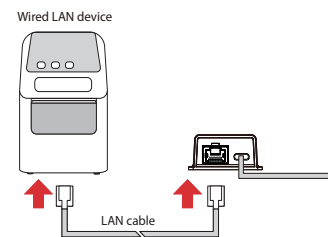
- 9 BR-110AX will restart. When the following message appears, close the Web browser.

Rebooting...

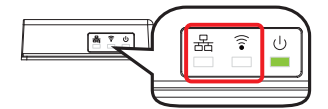
The configuration using Configuration Mode is now complete. Remove the LAN cable and the USB cable from BR-110AX.

Checking Connection

- 1 Connect the wired LAN device that you want to use wirelessly to BR-110AX using a LAN cable, and then turn on the device.



- 2 Confirm that the LEDs are in the following states.
WLAN LED: ON (Green or Orange)
LINK LED: ON (Green or Orange)



If the wired LAN device can communicate with other devices over the wireless LAN, the initial configuration is complete.
If communication is not successful, first check the following:
- Is the POWER LED on?
- Is the LAN cable properly connected to the wired LAN device?
- Do the network settings of BR-110AX match those of the network to which it is connected?

If these do not help, initialize BR-110AX according to **Factory Default Configuration** on the back page of this document.

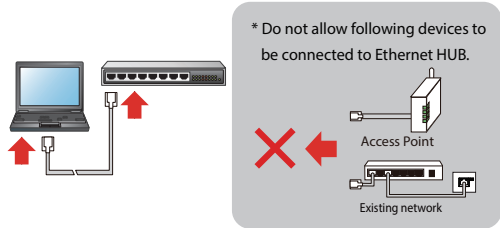
Configuration Using AMC Manager

BR-110AX can be configured using AMC Manager. This method is suitable for performing the initial configuration of multiple BR-110AX units at once.

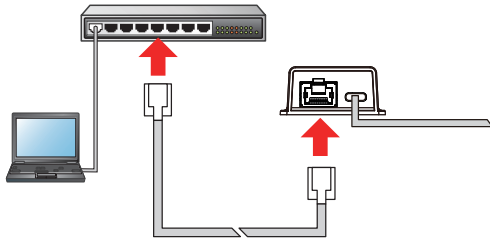
- * There are two versions of AMC Manager; the one is AMC Manager Free (free version) and the other one is AMC Manager (non-free version).
- * To use AMC Manager (non-free version), a license key needs to be purchased. Please contact Silex Technology to purchase a license key.

Connecting Multiple BR-110AX Units

- 1 Connect the PC to the Ethernet Hub using a LAN cable.

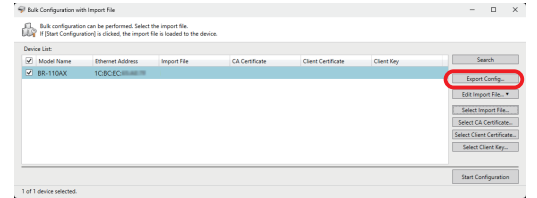
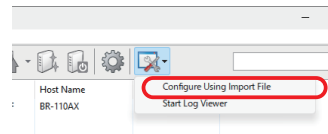


- 2 Connect BR-110AX to the Ethernet Hub using a LAN cable and turn on the power. Repeat this to connect all BR-110AX units that you want to configure.

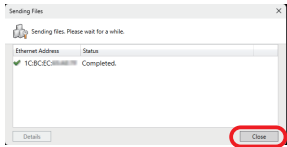


Configuring BR-110AX Using AMC Manager

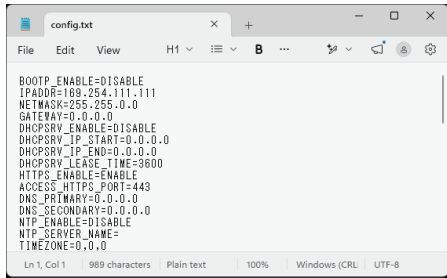
- 1 Start AMC Manager, click the **Start the plug-in tools** icon and select **Configure Using Import File** from the displayed menu.
- 2 When the screen below appears, select the target BR-110AX unit and click **Export Config.**



- 3 Select the destination folder to export the configuration file. When the export is complete, click **Close**.



- 4 Edit the exported configuration file using a text editor, and then save it.

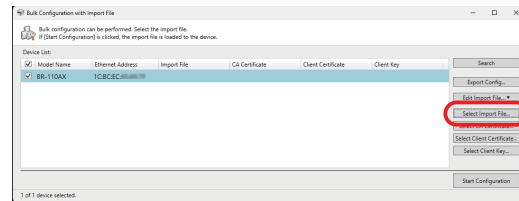


To connect using WPA3-Personal, change the following settings in the configuration file.

Item	Details
ROOT_PASSWORD	Set the password for BR-110AX.
WL_STA_SSID	Set the SSID of the Access Point to connect.
WL_STA_NETWORK_AUTH	Set the authentication method of the Access Point to connect. For WPA3-Personal, set "3".
WL_STA_WPA_PSK	Set the pre-shared key (PSK) of the Access Point to connect.

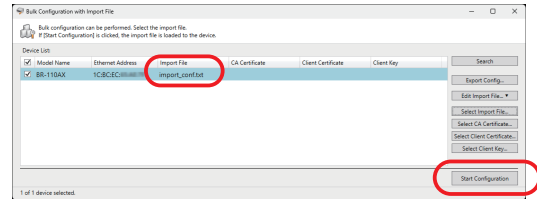
* To connect using an authentication method other than WPA3-Personal, or to modify other settings, refer to **A. Configuration list** in the User's Manual.

- 5 Select the BR-110AX unit to import the configuration to. Click **Select Import File** and select the configuration file you have edited at 4.

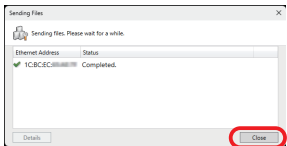


* When using an EAP authentication method, certificate files can also be uploaded at the same time. Click **Select CA Certificate**, **Select Client Certificate**, and **Select Client Key**, and then select the files to upload.

- 6 Confirm that the name of the selected configuration file is displayed under **Import File**, and then click **Start Configuration**.



- 7 The execution results are displayed. BR-110AX automatically restarts and operates with the new settings. Click **Close**.



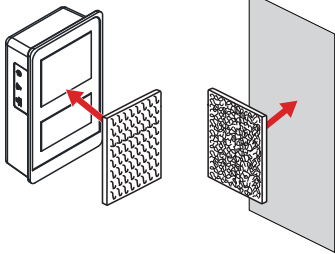
The configuration using AMC Manager is now complete. Remove the LAN cable and the USB cable from BR-110AX.

See **Checking Connection** on the front page of this document to confirm that BR-110AX can communicate properly.

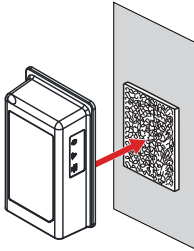
Product Installation

When the configuration is completed, install BR-110AX.

- 1 Attach the hook side of the hook-and-loop fastener to the bottom of BR-110AX, and attach the loop side to the device or medical cart that you want to use wirelessly.



- 2 Attach BR-110AX to the surface of the device where the loop side of the hook-and-loop fastener has been attached.



- * To maintain the dust and drip protection performance (IP21), install BR-110AX with the connector side facing downward (toward the floor).
- * Install BR-110AX where the LEDs are visible for status monitoring.
- * To prevent BR-110AX from falling due to its own weight or the weight of cables, make sure that it is securely fastened after installation.

How to Download AMC Manager

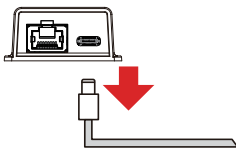
- 1 AMC Manager can be downloaded from the Silex Technology's website. Access the URL below to download it.

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

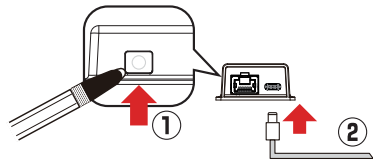
- 2 When the website is displayed, click **Resources > Support Center** from the top menu.
- 3 Click **Software Download**.
- 4 In the **Software Download** page, click **AMC Manager**.
- 5 Download AMC Manager.

Factory Default Configuration

- 1 Unplug a USB cable from BR-110AX.



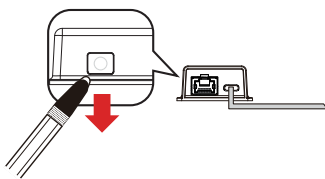
- 2 While reconnecting the USB cable to BR-110AX, press and hold the push switch of BR-110AX. Keep holding it.



* As long as the push switch is held down, the WLAN LED will keep blinking red.



- 3 Confirm that at least 5 seconds have elapsed, and then release the push switch. The settings are reset to the factory defaults, and BR-110AX restarts.



Trademarks

- AMC Manager is a registered trademark of Silex Technology, Inc.
- Wi-Fi and WPA3 are trademarks or registered trademarks of Wi-Fi Alliance.
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Customer Support Center (USA/EU)

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

Customer Support Center Information

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EU support@silexeurope.com

URL: <https://www.silextechnology.com/>

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