

# AC Series

## ASSA ABLOY Aperio® Integration

This guide covers the how to integrate ASSA ABLOY's Aperio wireless locks with Aiphone's AC-APERIO-8 PoE controller.

These instructions assume that the AC Nio™ software has already been configured and is otherwise operational. For more instructions, see this quick start guide:

<https://www.aiphone.com/ACSeriesQuickStartGuide>

See this page for more information about the Aperio product line:

<https://www.assaabloy.com/az/en/solutions/topics/access-control/aperio>

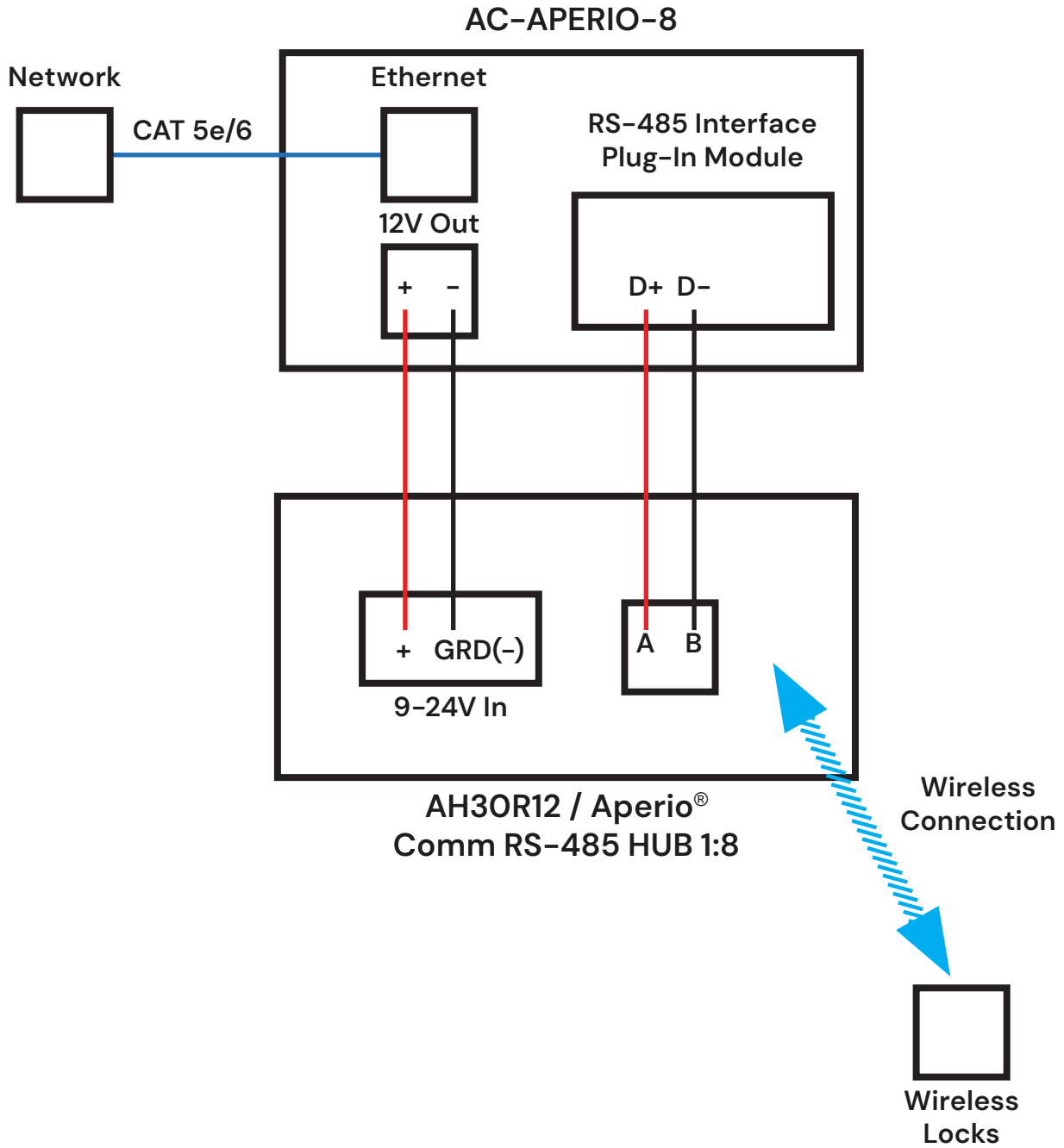
### Hardware and Software Requirements

The following equipment is required for the integration:

- AC Series AC-APERIO-8
- ASSA ABLOY AH30R12/Aperio Hub Com RS-485\*
- ASSA ABLOY USB Radio Dongle\*
- Aperio Programming Application\*
- Aperio License Key File\*
- Aperio Wireless Locks, such as the IN100, ES100, or DL100

\*Included in the base Aperio kit.

# Hardware Wiring

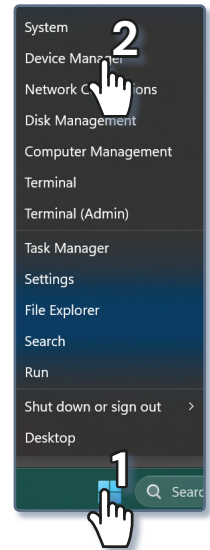


# Aperio® Programming Application

Install the Aperio Programming Application onto the programming PC. This is included with the Aperio kit.

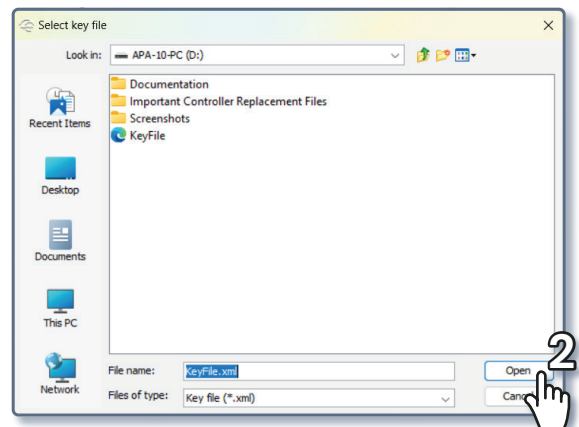
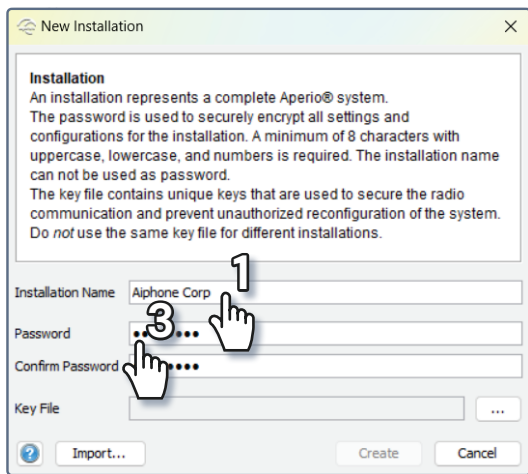
Plug the ASSA ABLOY USB Radio Dongle into the same PC. The driver should install automatically. Ensure the "Tritech TriBee USB" is recognized and functioning in Windows Device Manager. Device Manager can be located by right clicking the Windows start button.

Launch the Aperio Programming Application. If the USB Radio Dongle is installed correctly and plugged in, a green symbol will appear in the bottom left side of the application next to **USB Radio**. If the USB dongle is installed incorrectly or not connected to the PC, an error will appear.

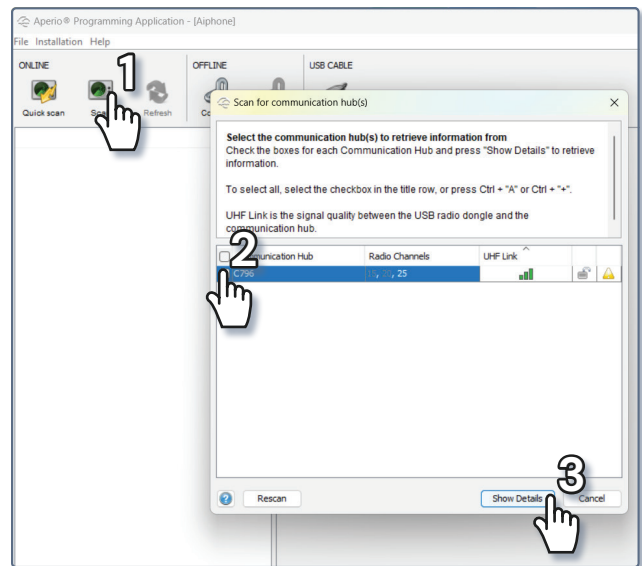


Once the Aperio Programming Application has detected the USB Radio Dongle, click **File**, New Installation at the top of the application.

A pop-up window will appear. Enter an installation name, such as a company or site name. Browse and select the **Key File** provided in the Aperio Kit or received from ASSA ABLOY. Click **Open**. Set a password of at least eight characters, then click **Create**.



Click **Scan** to search for the Aperio® Hub. A pop-up window will appear with the search results. Use the check boxes next to each hub that is found on the network to select it, then click **Show Details**



The selected hubs will appear in the section to the left. Record the **EAC Address** for a future step in the AC Nio™ software.

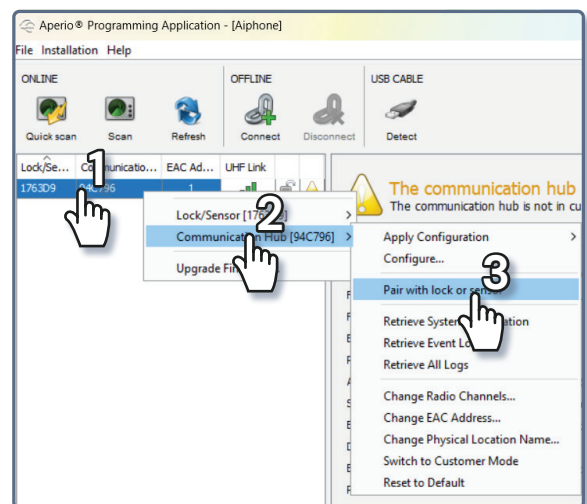
Lock/Sensor	Communication Hub	EAC Address	UHF Link
1763D9	94C796	1	

Right click the listed hub, then choose **Select Communication Hub [94C796]**. Click **Pair with lock or sensor**.

A new pop-up window will appear with a prompt to “pair with lock or sensor.” Present a credential to the wireless lock that will be paired with the hub. Wait until the lock’s status LED stops blinking before clicking **Done**.

If pairing is successful, another pop-up will appear, reading that the “Communication Hub paired successfully to the following: XXXXXX,” where XXXXXX is the number printed on the back of the lock.

Repeat the process with all hubs and locks that will be added to the system.



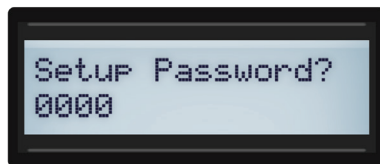
**i** Some wireless lock models require that the handle on the free egress side of the door be turned downwards before presenting the credential.

## AC-APERIO-8 Hardware Settings

To prepare the AC-APERIO-8 to work with the AC Nio™ software, remove the plastic case that covers the unit. Enter setup mode on the new panel's LCD by holding down **Enter** until a message appears asking for the pin. If a pin has not already been set, it will be 0000. To choose a different number, press the arrow keys to move the flashing cursor left and right to cycle through the digits. Press **Enter** to select that digit. Then, use the arrow keys to scroll through digits 0-9, and press **Enter** again to set the number. Repeat these steps, then press **ESC** to enter the PIN.

Once the pin is entered, press **ESC** to view the settings menu. To adjust a setting, cycle through the list of options by using the arrow keys, then press **Enter**. Use the same method as above to adjust each character; depending on the setting, the settings may be letters, numbers, or a mix of the two. Like before, use the arrows to select a character, press **Enter** to modify it using the arrows, then **Enter** again to set it. Once a setting is ready, hit **ESC** to return to the previous screen.

Set a **Server IP Address**, which is the IP address of the AC Nio host. The default server port will not need to be changed unless AC Nio is configured to use a different port than the default.




The panel can either use a static IP address or use DHCP reservation. Select which method will be used by navigating to **Panel Comm Mode** and choose the communication method. If the communication mode is set to static, the Panel IP Address, Panel Subnet Mask, Panel Gateway, and Panel DNS must be set manually.

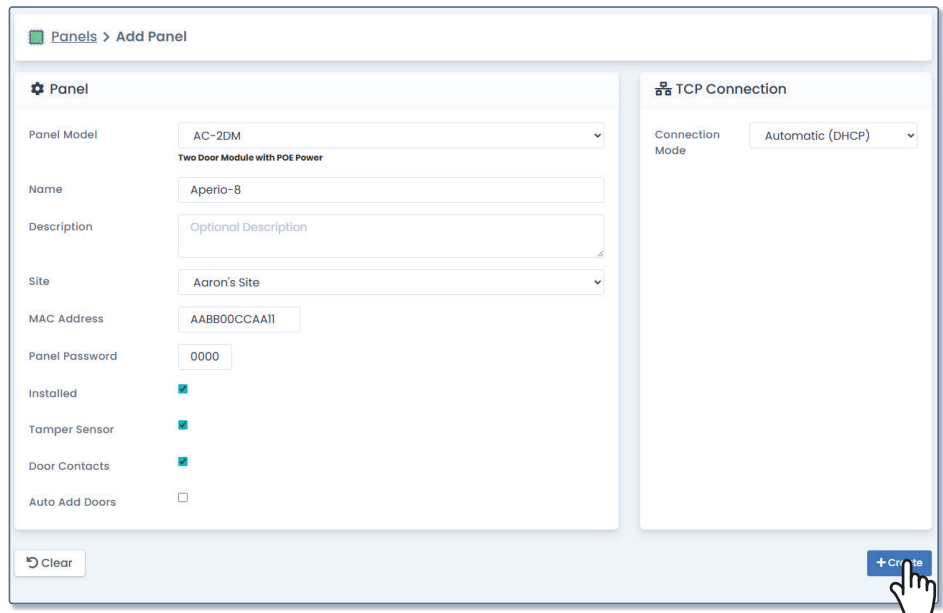
Once all settings have been configured, press **ESC** to exit programming mode.

# AC Nio™ Settings

Open the AC Nio software. Navigate to **Hardware**, **Panels** on the left side menu. Click **+ Add** to connect the AC-APERIO-8 panel to the system.

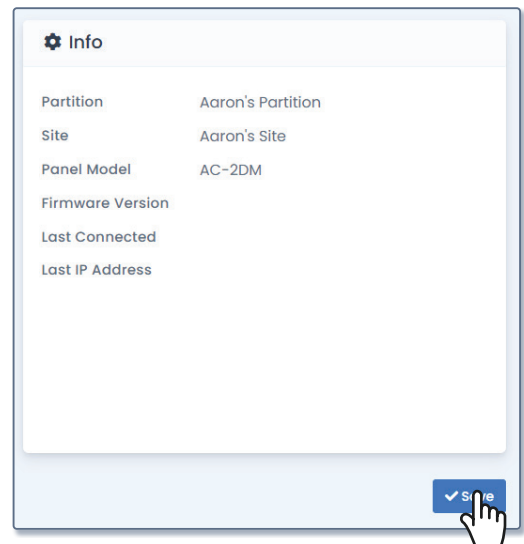
Select a **Panel Model** using the drop-down menu and give it a **Name** and **Description**. Assign the panel to an existing site using the Drop-Down under **Site**. Enter the panel's MAC address, which is printed on an attached sticker. The **Panel Password** will show up as 0000. If the panel is still set to that default PIN, it is recommended to change it to something different. Whatever the password is set to here will override the default. In the top right, set whether the **Connection Mode** is static or DHCP. Click **+Create** to finalize the settings.

 The Panel Model should be set to AC-APERIO-8; this screenshot was taken on a previous version of AC Nio.



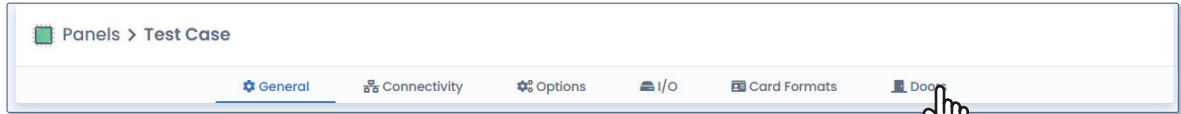
Panel Model: AC-2DM  
Two Door Module with POE Power  
Name: Aperio-8  
Description: Optional Description  
Site: Aaron's Site  
MAC Address: AABB00CCAAT1  
Panel Password: 0000  
Installed:   
Tamper Sensor:   
Door Contacts:   
Auto Add Doors:   
TCP Connection  
Connection Mode: Automatic (DHCP)  
+ Create

After clicking **+Create**, a pop-up will appear asking if door contacts are being used. If a door is not connected and **Use Door Contacts** is checked, AC Nio will behave as if the door is forced open and the door strike will not unlock. Click **Save**.



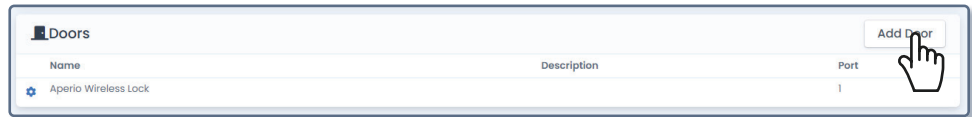
Info  
Partition: Aaron's Partition  
Site: Aaron's Site  
Panel Model: AC-2DM  
Firmware Version  
Last Connected  
Last IP Address  
Save

To add doors to the panel, or rename automatically added doors, click **Doors** along the top menu.



**i** To return to this menu, navigate to **Hardware**, **Panels**, then select the panel from the list. Doors can also be added under **Hardware**, **Doors** using similar steps.

To add a new door, click **Add Door** in the top right. If renaming an automatically added door, click the cogwheel icon next to that door.



Give the door a **Name** and detailed **Description**. Use the drop-down menu to select which **Panel** the door will connect to. Enter the **Aperio Address** recorded in the Aperio® Programming Application software. Scroll down the page, give the detected readers a different name and description is desired, and click **+ Create**.

A screenshot of the 'Door' configuration form. It includes a table for 'Door Type' with options: Managed (selected), Monitored, and Unmanaged. Below the table are input fields for Name (Main Entrance), Description (Double door near reception in Building A.), Panel (Aperio Wireless Lock Panel (Default Site)), Port on Panel (Port 2), Schedule (Always Card or PIN Access), Holiday Group (Ben), Aperio Address (1), and Tags.A screenshot of the 'Reader 1' configuration form. It has input fields for Name (Main Entrance) and Description (Optional Description). At the bottom left is a 'Clear' button, and at the bottom right is a '+ Create' button with a hand cursor pointing at it.

At this point, the door can be assigned users, schedules, and other settings like any other door in the system. See the AC Series Quick Start Guide for more on these steps:

<https://www.aiphone.com/ACSeriesQuickStartGuide>

Repeat these steps for each AC-APERIO-8 and door to be added to the system. Once all panels and doors have been configured, click **Update Panels** at the top of the page to upload the settings.

