

Aperio integration with ACT Enterprise

ACT Enterprise 2.8 and later supports ASSA ABLOY Aperio locks. ACTpro 1520e controllers with firmware v1.06 or later support up to four Aperio hubs and up to sixteen Aperio locks. Every Aperio lock must be paired with an Aperio hub.



In ACT Enterprise 2.8:

- Aperio hubs/locks are only supported on the ACTpro 1520e controller.
- Aperio sensors are not supported.

This guide is written for installers who will install Aperio locks on a customer site and configure the locks to work with the customer installation of ACT Enterprise.

Prerequisites

You will need:

- An ACT Enterprise license key for Aperio lock support. The license will determine how many Aperio locks are supported in your ACT Enterprise installation. Contact Vanderbilt for pricing information.
- The Aperio Programming Application and USB radio dongle. These are used to communicate with and configure the Aperio hubs/locks. The dongle can be purchased from Vanderbilt or from ASSA ABLOY. Contact ASSA ABLOY to request the Aperio Programming Application.
- An installation-specific encryption key. This key is used to secure communications between the Aperio locks and hubs in an installation, and must be requested from ASSA ABLOY.

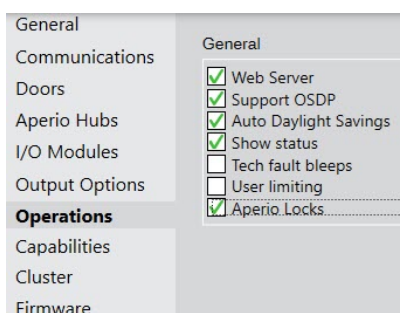
Note: The installation name you provide when creating/opening an installation account in the Aperio Programming Application **must** match the installation name provided to ASSA ABLOY when requesting the encryption key.

- Configuration files for the Aperio hub and locks (*ACT Hub Settings.xml* and *ACT Lock Settings.xml*). These files are installed in the following folder and are used to quickly configure the Aperio hub and locks for optimised integration with ACT Enterprise: *C:\Program Files\Access Control Technology\ACT Enterprise*.

In addition:

- The Aperio hub must be wired to an ACTpro 1520e controller during installation.

This controller should already be installed and configured, and the following setting must be enabled for the controller in ACT Install: **Advanced Setup > Controllers/Hub Groups > Controller Details > Operations > Aperio Locks**.



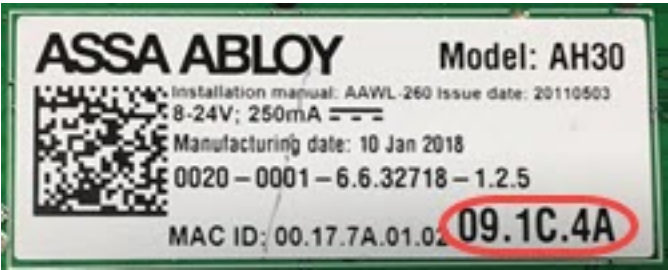
Installation and configuration

The following procedure describes installing and configuring a single Aperio hub and set of locks. Repeat as necessary for all hubs and locks.

1. **Configure and install the Aperio hub hardware.**

When choosing a hub location, ensure that it is within range of the intended Aperio lock locations.

Note: Take note of the last six digits of the MAC ID labeled on the back of the hub – this is required to identify the hub later in the Aperio Programming Application.



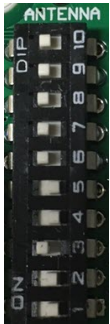
Connect the Aperio hub to door network 2 on the ACTpro 1520e controller.

Configure the hub as follows:

- Use DIP switches 1–3 to address the hub. The hub must be addressed 1, 2, 3 or 4 (in binary). For example, in the illustration, DIP switches 1 and 2 are off, and DIP switch 3 is on, giving an address of 4 (binary 001).

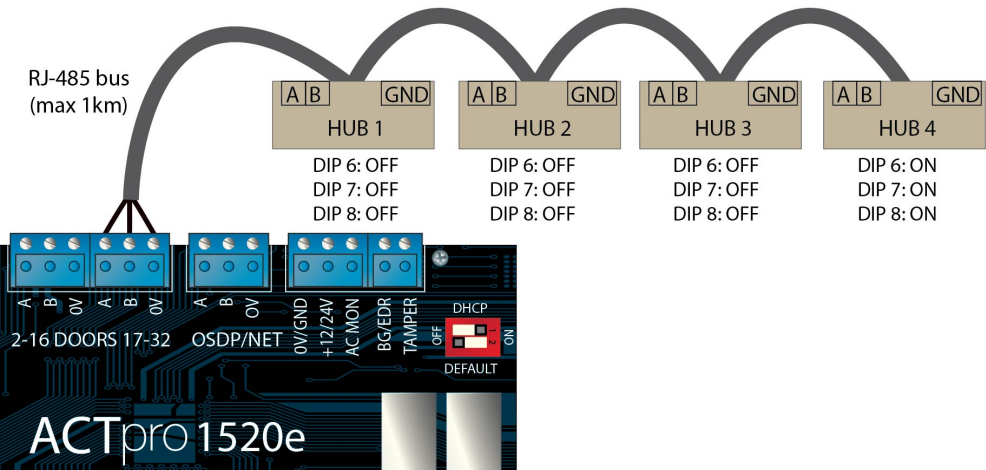
Note: If you change the hub address, you must power cycle the hub and the ACTpro 1520e controller.

- Set DIP switch 10 to **On** to enable the internal aerial.
- Wire the following connections between the Aperio hub and the ACTpro 1520e controller on network 2 (DOORS 17-32):



Aperio Hub	ACTpro 1520e Controller
A	A
B	B
GND	0V
8-24VDC	+12V

The remaining terminals in the Aperio hub should be unconnected (D0, D1, RED, GREEN).



Refer to the ASSA ABLOY documentation for the Aperio AH30 hub for more information.

2. Create or open the installation in the Aperio Programming Application.

To do this:

- a. Insert the USB radio dongle into a USB port on your laptop.
- b. Install and run the Aperio Programming Application on your laptop.
- c. Create, import, or open the installation for the current site.

Refer to the ASSA ABLOY documentation for the Aperio Programming Application for more information.

Note: The installation name you provide when creating/opening an installation account in the Aperio Programming Application **must** match the installation name provided to ASSA ABLOY when requesting the installation encryption key.

3. Pair each lock to the hub using the Aperio Programming Application.

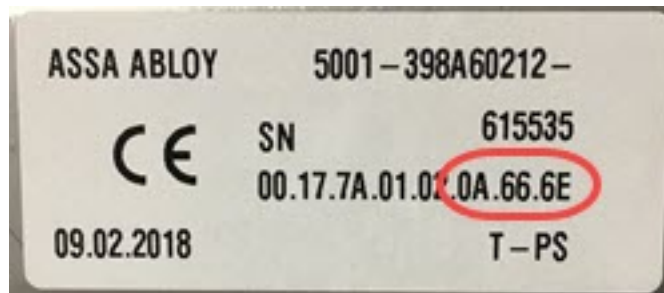
Notes:

- For your convenience, Vanderbilt recommend that you power up and pair each lock in sequence at a central location before physically installing the locks on the intended doors.

Once powered up, each lock will poll continuously for a connection. If you have multiple unpaired locks powered up, it may be difficult to identify the specific lock you are pairing.

Also, you must present a card to each lock during pairing, which may be difficult if they are widely distributed on the site.

- The last six digits of the MAC address labeled inside each handle is required to complete door configuration in ACT Install.



To pair Aperio locks to an Aperio hub:

- a. In the Aperio Programming Application, click **Quick Scan** to search for hubs.
A list of discovered hubs displays in a popup dialog. Each hub found is identified by the last six digits of its MAC address (labeled on the back of the hub).
- b. Select the checkbox for the hub to which you want to pair locks, then click **Show Details**.
Details for the selected hub display in the main window.
- c. Right-click the entry for the hub, select **Communication Hub > Pair with lock or sensor** from the context menu, and when the **Pair with lock or sensor dialog** displays, present a card to the lock to initiate pairing.

If pairing is successful, a confirmation message displays. Close the message to continue.

Repeat this step for each lock.

Refer to the ASSA ABLOY documentation for the Aperio Programming Application for more information.

4. Configure the locks to read ACT cards.

Apply the hub and lock configuration files provided by Vanderbilt (*ACT Hub Settings.xml* and *ACT Lock Settings.xml*).

To do this:

- a. In the Aperio Programming Application, click **Installation > Manage Configurations > Import**, then browse to, select and upload each file. Enter the following password when prompted:
Vanderbilt123
- b. Right-click the entry for the hub, select **Communication Hub > Apply Configuration > Select Hub Config File** from the context menu, then browse to and select **ACT Hub Settings**.
- c. Right-click the entry for the lock and select **Lock/Sensor > Apply Configuration > Select Lock Config File** from the context menu, then browse to and select **ACT Lock Settings**.
- d. Power cycle both the Aperio hub and the ACT1520e controller.

5. Install the lock hardware.

Refer to the ASSA ABLOY documentation for your Aperio locks for more information.

6. Configure the Aperio hub in ACT Enterprise.

To add the Aperio hub to ACT Enterprise:

- a. In ACT Install, click **Advanced Setup > Controllers/Hub Groups**.
- b. Click the **Controller Name** for the ACTpro 1520e controller to which the Aperio hub is wired.
- c. On the **Controller Details** screen, click the **Aperio Hubs** tab.
- d. For the hub entry with a **Local Address** corresponding to the DIP switch address set on the Aperio hub, select the **In DB** and **Enable** check boxes, then enter the last six digits of the MAC address labelled on the hub in the **MAC address** field.
- e. Click **Save**.

7. Configure the Aperio locks as doors in ACT Enterprise.

To add Aperio locks to ACT Enterprise

- a. In ACT Install, click **Advanced Setup > Controllers/Hub Groups**.
- b. Click the **Controller Name** for the ACTpro 1520e controller to which the Aperio hub is wired.
- c. On the **Controller Details** screen, click the **Doors** tab.
Aperio locks are listed in the door range 17–32.
- d. For each Aperio lock connected to the hub, select the **In DB** and **Enable** check boxes, then enter the last six digits of the MAC address labeled on the lock in the **MAC address** field.
- e. Click **Save**.

8. Configure the required access permissions in ACT Manage.

Ensure that the new doors (locks) are added to the appropriate door groups, and that the door groups are assigned to the appropriate users. See the ACT Manage documentation for more information.

Operation notes

- The onboard memory in every Aperio lock stores information retrieved from ACT Enterprise for a configurable number of recently presented cards. If the lock goes offline, it will grant/deny access based on the stored information.
- If you change the RF channels used by an Aperio lock you must update the channels on the hub with which that lock is paired and on all other locks paired with that hub to avoid a loss of communications. Refer to the ASSA ABLOY documentation for more information.
- If you reassign a lock to another hub, or change the DIP switches on the hub, you must power cycle

the ACTpro 1520e to pick up the changes.

- It may take up to one hour to register the online/offline/battery status of connected Aperio locks.



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Supply subject to availability.

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