

# K100-622 Aperio Cabinet Lock Series Installation Instructions

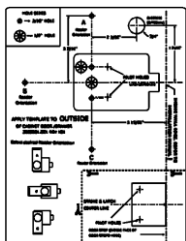
**HES, Inc.**  
**Phoenix, AZ**  
**1.800.626.7590**  
[www.hesinnovations.com](http://www.hesinnovations.com)

## Package Contents

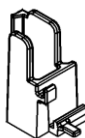
Reader



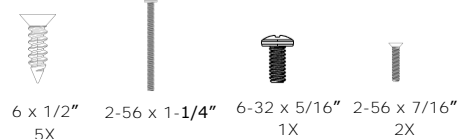
Template



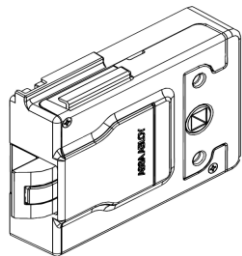
Key Override  
Paddle



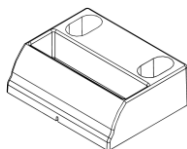
Screws



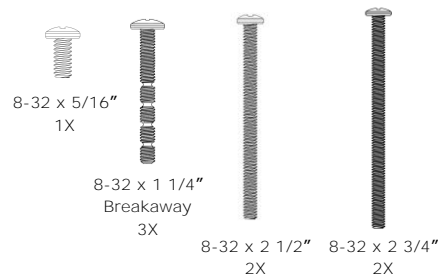
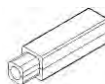
Lock Body



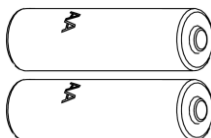
Strike Plate



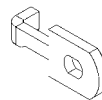
Shaft Extension



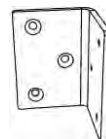
Batteries  
2X



Cam



Double door bracket



## Recommended Tools

Drill, Drill bits: 3/16", 1/2"

Approved Credential:

i.e., iCLASS or Prox ID card

Flathead drivers 3/32", 3/16"

Phillips drivers P0, P2

Pencil, Wire Stripper

Optional Additional Tools:

Gang box to mount hub

Cam lock for key override

## Product Specifications

**Wireless Frequency:** 2.4 GHz, IEEE 802.15.4, using AES 128bit encryption

**Hub Power Requirement:** 8-24VDC, 250mA

**Lock Battery Type:** Lithium AA Cell, 1.5V

**Operating Temperature:** -10C to 50C

**Holding Force:** 250 lbs

**FCC Part 15, Class B Compliant**

**BHMA: A156.3, A156.36, A156.25 Compliant**

**Credentials Supported:** 125kHz Proximity or 13.56MHz iCLASS credentials are supported depending on lock model.

QR Codes



K100-622  
Tips and Videos

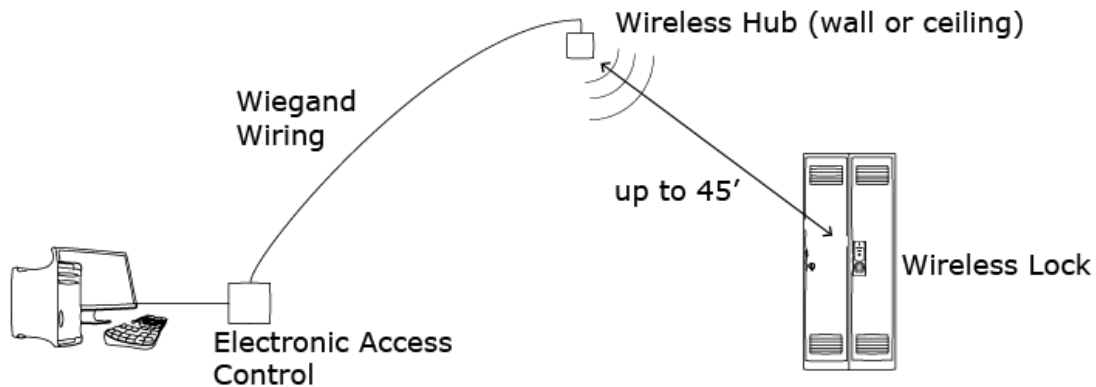
QR codes can be scanned  
with a smartphone app

**For technical support please call 1-800-626-7590**

## System Overview

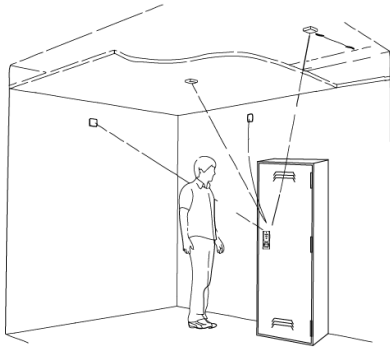
The K100-622 wireless cabinet lock extends access control to a cabinet or drawer without the complexity and expense of running wires to the cabinet or drawer. The K100-622 lock connects to an access control system through the included communication hub. The communication hub connects to the access control system with wiegand wiring typical of a wiegand reader.

When a credential card is presented to the reader on the lock the request for access is sent wirelessly to the communication hub. The communication hub then communicates through wiegand wiring to the access control system where the decision is made to grant or deny access.

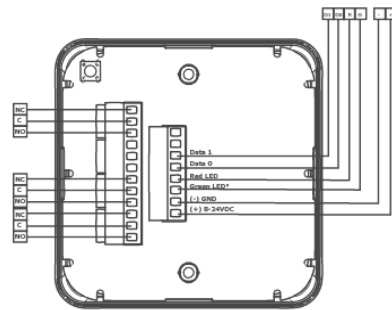


## Installation Steps

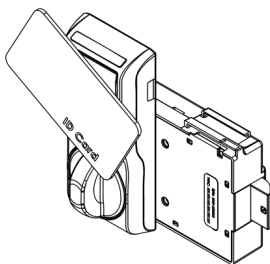
### A. Locate and Mount the Hub



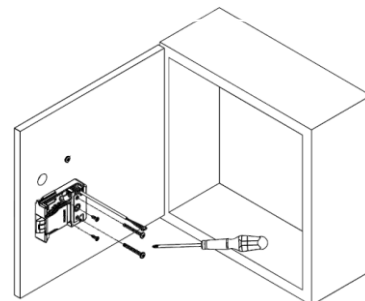
### B. Connect the Hub



### C. Test the Lock



### D. Install the Lock



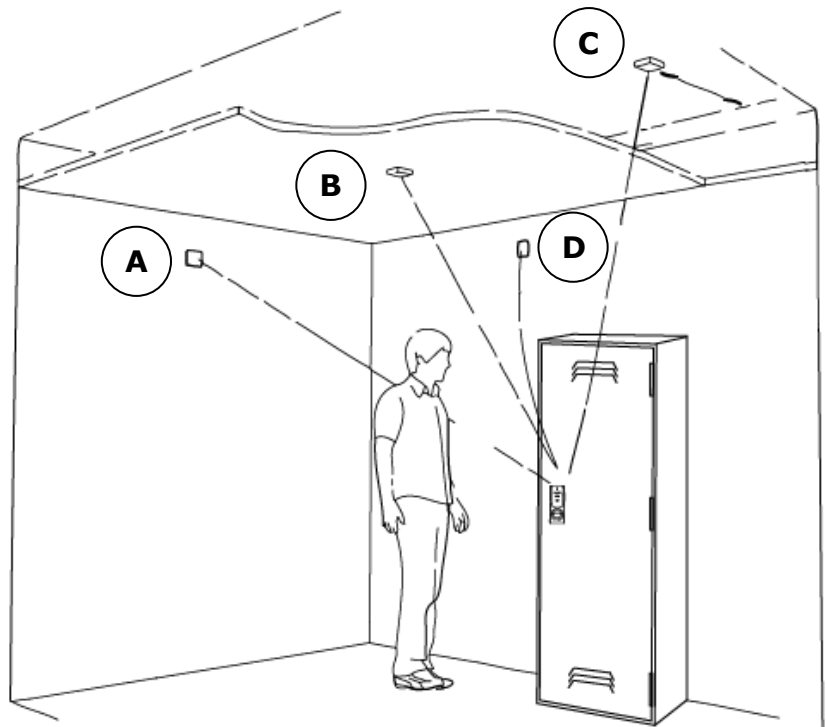
## 1. Choose the hub location

It is recommended that the hub be mounted near the top of a wall, on the ceiling or above the ceiling to reduce potential for interference.

For a stable and reliable radio link, it is recommended that the hub is located within forty-five (45) feet of the lock. A maximum of two interior walls between the hub and lock is recommended.

Recommended locations:

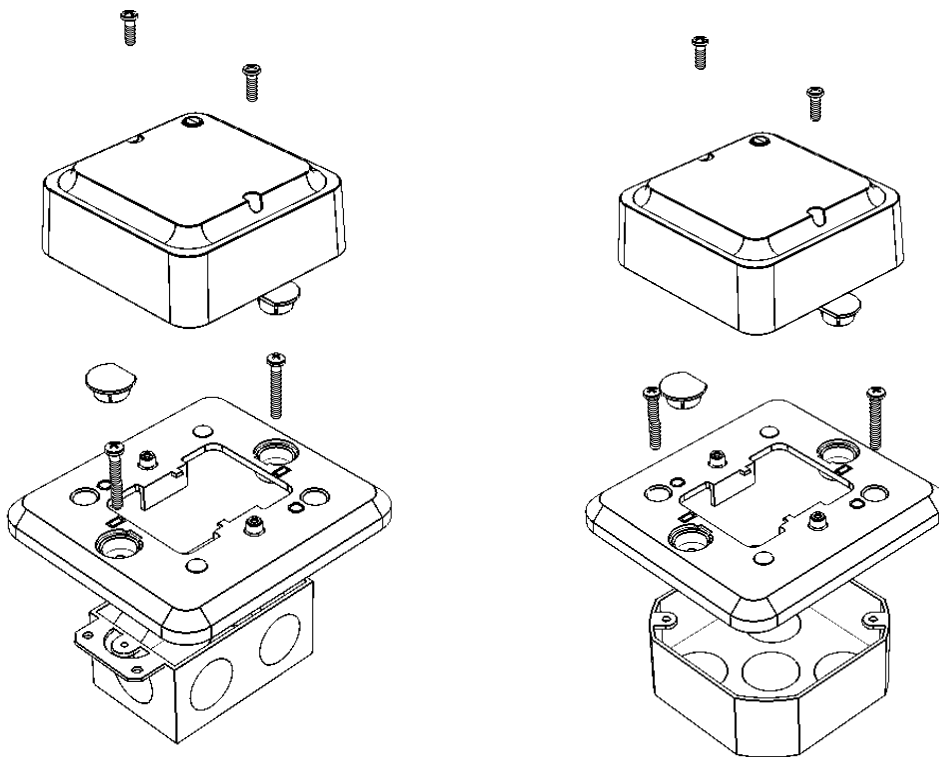
- A: Wall Mount
- B: Ceiling Mount
- C: Inside Ceiling Mount
- D: Wall Mount, Adjacent Room



\*Note the hub is not rated for use in plenum air spaces.

## 2. Mounting the Hub.

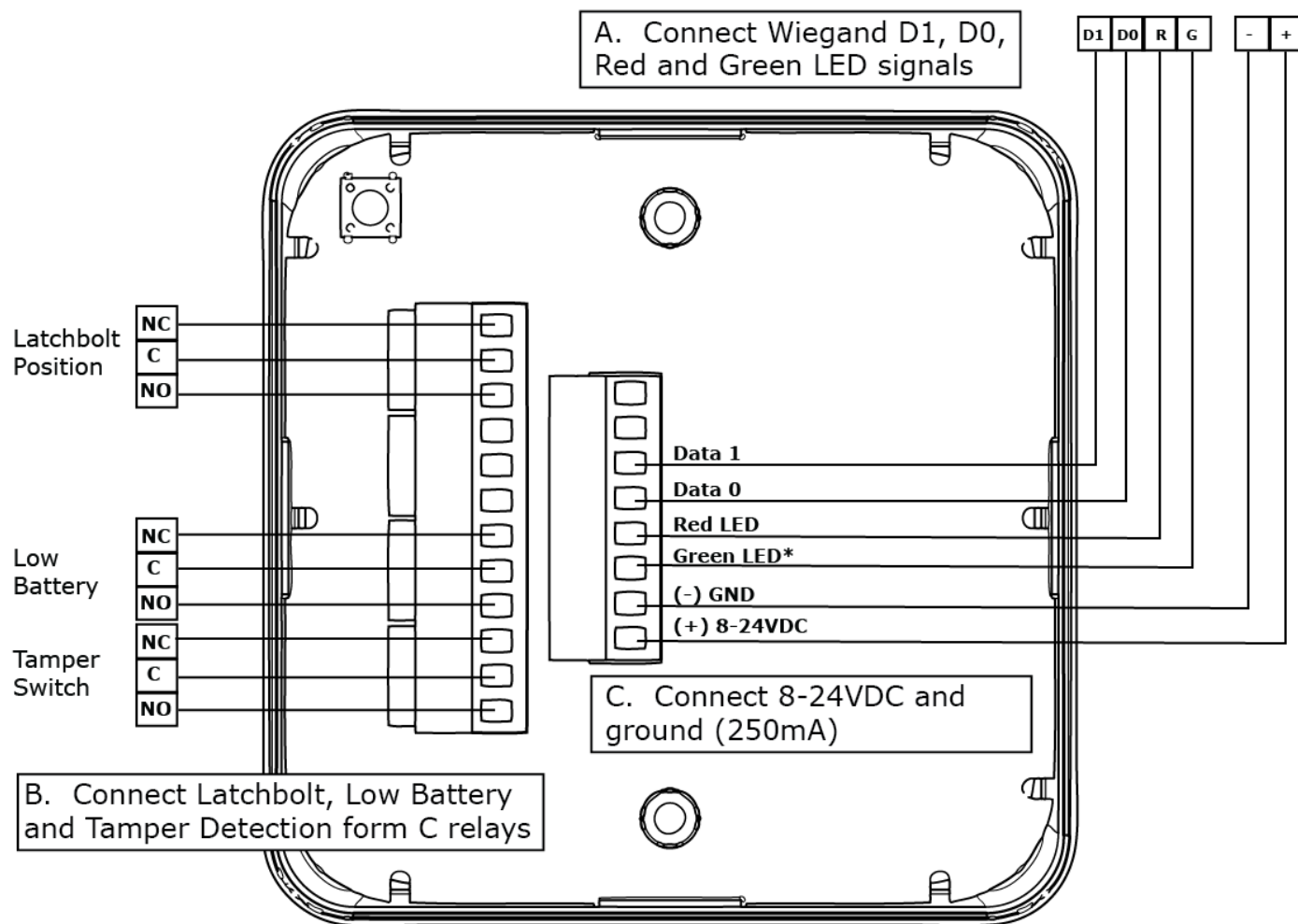
The included adapter plate can be used to mount the hub on a single or double gang box.



Mounting the Hub

### 3. Wiring the Hub.

The Aperio Hub connects to the Access Control system via Wiegand wiring. The hub requires 8-24VDC power (250mA). The hub includes three form C relays that can be used to transmit latch bolt position status, low battery signal and a tamper signal. The hub connects to the cabinet lock wirelessly.



**\*Note:** The **Green LED** input is used to grant access to the cabinet lock. If the Green LED signal is not available to indicate approved access, the hub input can be activated by another unlock signal or relay. Refer to the LED reference card for any other codes.

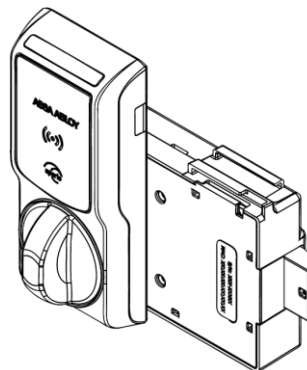
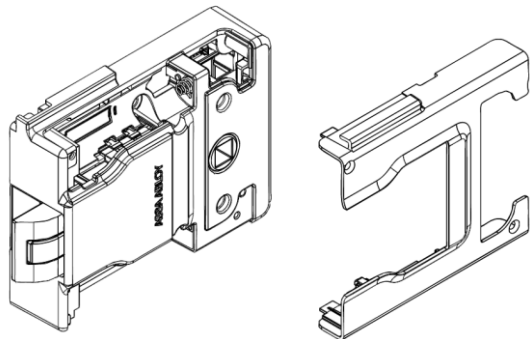


Wiring the hub

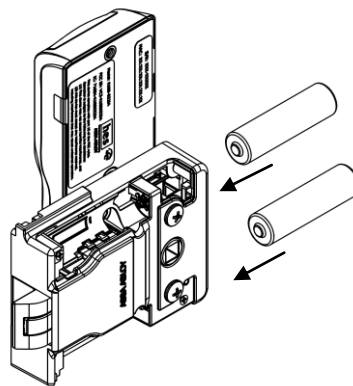
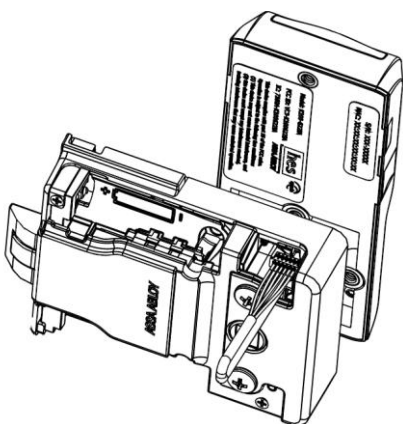
## 4. Testing the Lock with the Access Control System

With the hub connected to power and the access control system, test the lock with a known good credential to confirm it will open as desired when installed.

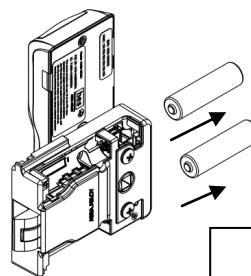
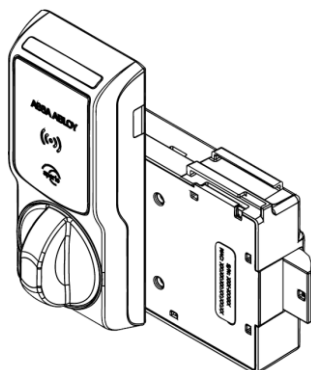
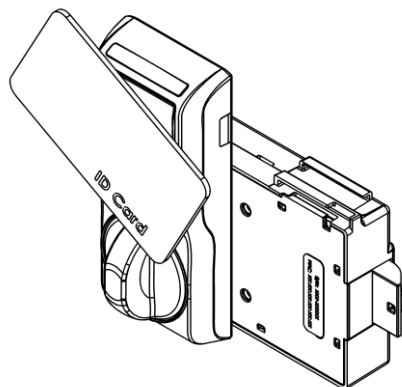
1. Remove the battery cover from the lock body
2. Pass the wire and shaft from the reader through the lock body.



3. Connect the wire from the reader to the socket in the lock battery compartment. The wire is keyed.
4. Install the batteries, ensure correct orientation. The lock will self test and beep once.



5. Present a credential known to the access control system.
6. A green LED indicates access is granted; twist the knob to retract the latch. Refer to the LED reference card for any other codes.
7. Remove the batteries, carefully unplug the cable and separate the lock and reader to prepare for installation.

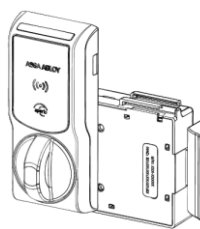


Testing the lock

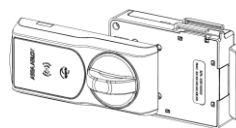
## Mounting the Lock

### Note regarding Orientation

The K100-622 reader and lock body can be oriented in several ways to accommodate various cabinets and drawers.



A



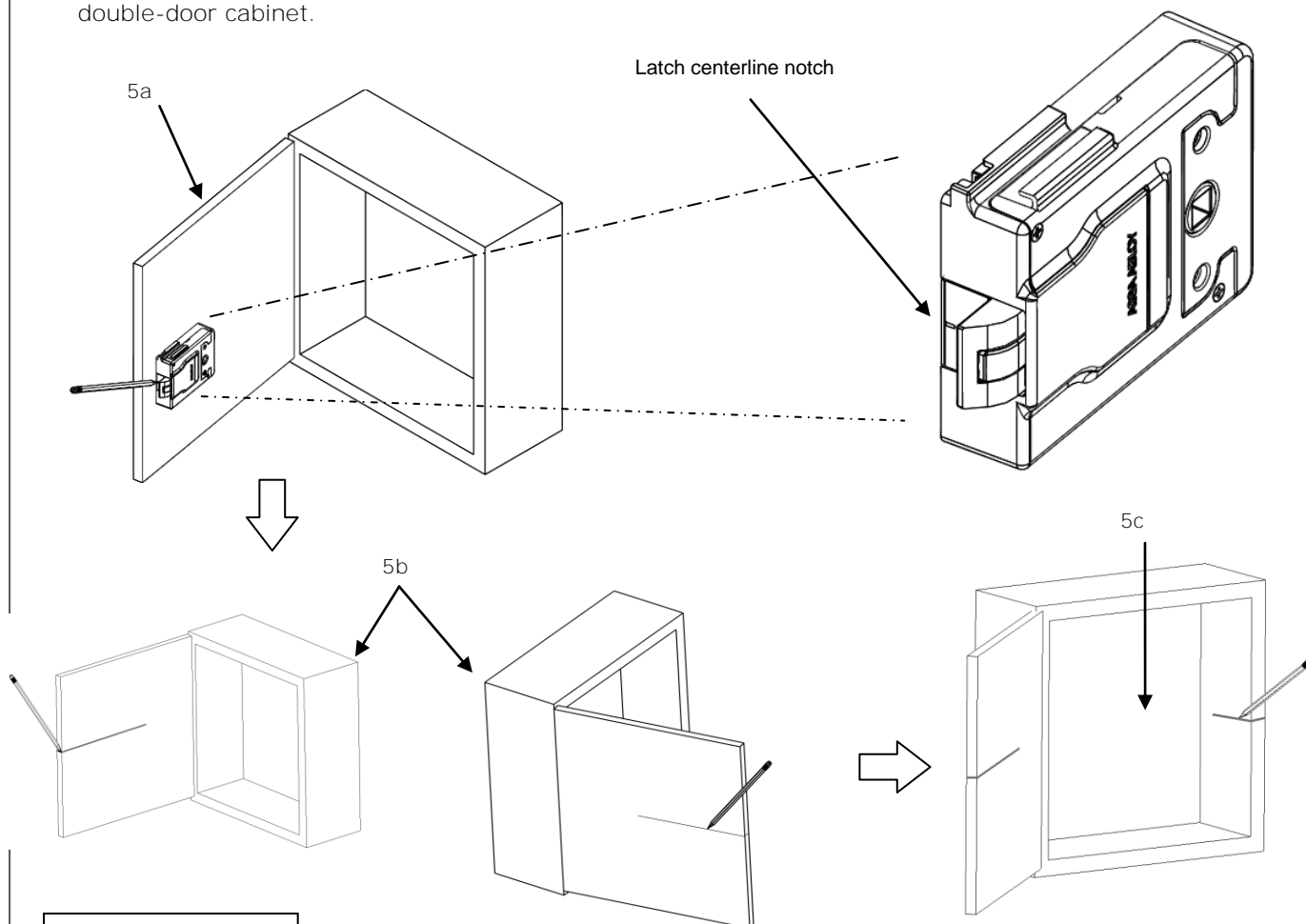
B



C

### 5. Establish the horizontal centerline of the latch.

- 5a. Hold the lock body to the inside of the door and position it generally where you would like it to mount. Locate lock centerline notch on the latch and use a pencil to mark this point on the inside of the cabinet door.
- 5b. Draw the horizontal latch centerline from this mark on the inside of the cabinet door and transfer it to the outside of the cabinet door.
- 5c. Next, transfer this centerline to the inside of the cabinet or the second door on a double-door cabinet.

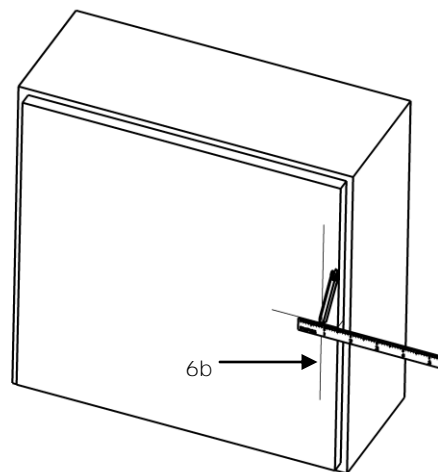
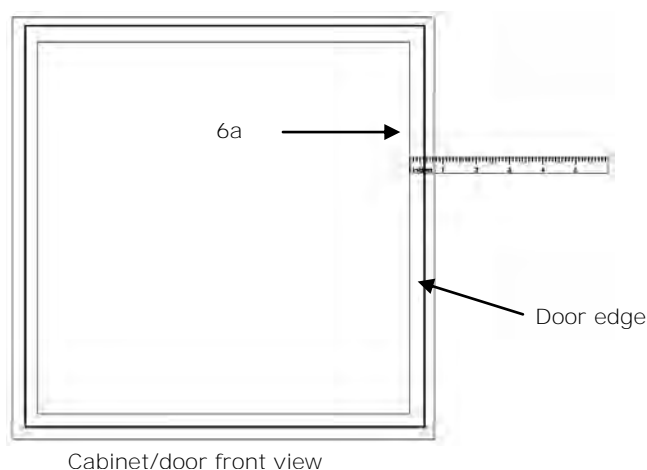


Mounting the Lock

## • Transfer the location of the inside wall of the cabinet to the door.

6a. Measure the horizontal distance between the inside edge of the cabinet and the door edge.

6b. Using the same distance away from the door edge, draw a line on the **outside** surface of the door. This line depicts the location of the strike mounting surface.



## 7. Place and use the Lock/Reader Template.

\*note orientation may be reversed for right hand door

7a. Cut through line to separate the Strike Plate Template.

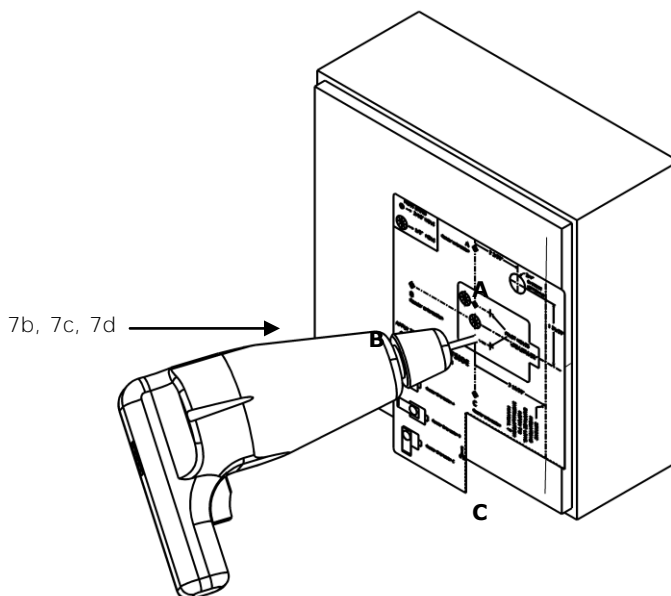
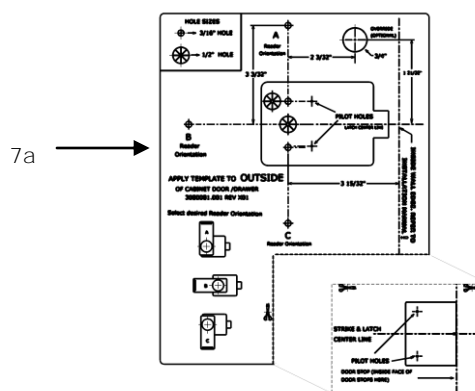
7b. Peel off the protective layer of the Lock Template and align to both the latch centerline and the line depicting the inside wall of cabinet. Press to secure.

7c. Drill four holes and two pilot holes through the cabinet, as shown. Two holes are 3/16" diameter and two are 1/2" diameter.

7d. Drill **only one** 3/16" hole depending on the desired antenna/reader orientation.

**Refer to step 10 if you are installing the optional Key Override.**

7e. Remove the lock template from the door.







## 11. Install the antenna/reader.

11a. Place and hold the antenna/reader to the outside of cabinet, routing the wire through the 1/2" offset hole.

11b. Install the top screw, which attach the antenna/reader to the outside case.

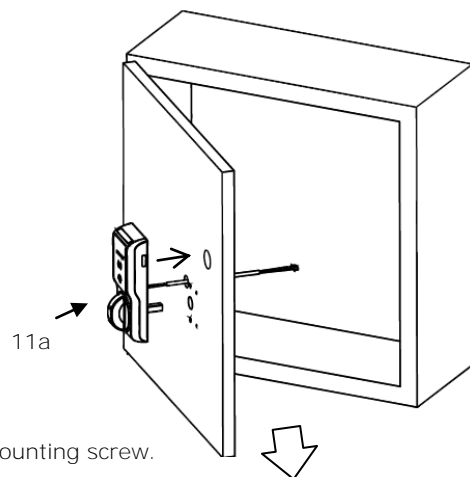
Refer to the table below to determine the length of the top mount screw needed, based on the thickness of the cabinet door.

### WARNING!

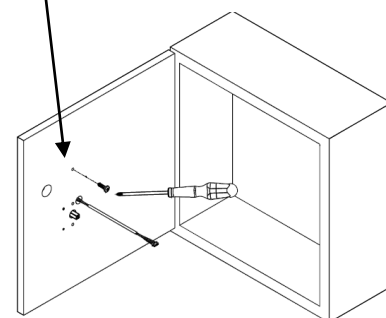
Make sure you avoid crimping the wires. Crimped wires may prevent the Reader and Lock from functioning.

**Table 2**

Door Thickness	Reader Mounting	Cut to aprox. screw length	Lock Mounting	Cut to aprox. screw length
1/16"	8-32 X 5/16"	No cut	8-32 X 1-3/4" Break Away	1-1/16"
1/4"	8-32 X 5/16"	No cut	8-32 X 1-3/4" Break Away	1-3/4"
1/2"	8-32 X 1-3/4" Break Away	5/8"	8-32 X 1-3/4" Break Away	1-7/16"
3/4"	8-32 X 1-3/4" Break Away	7/8"	8-32 X 1-3/4" Break Away	No cut
1"	8-32 X 1-3/4" Break Away	1-1/8"	8-32 X 2-1/2"	2"
1-1/4"	8-32 X 1-3/4" Break Away	1-3/8"	8-32 X 2-1/2"	No cut
1-1/2"	8-32 X 1-3/4" Break Away	No cut	8-32 X 2-3/4"	No cut



Reader mounting screw.



11b

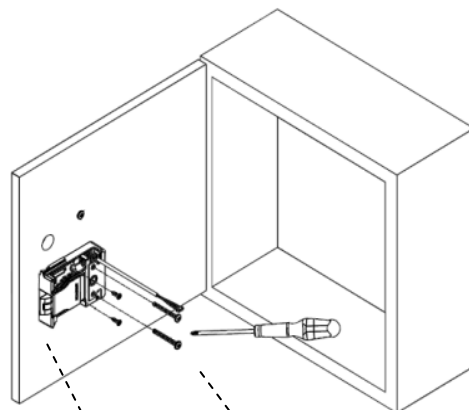
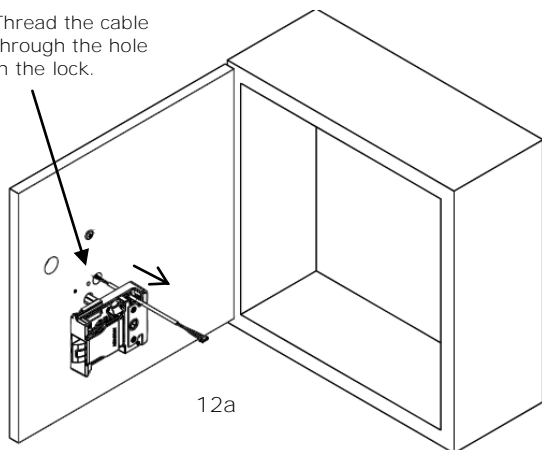
## 12. Install the lock.

12a. Remove the battery cover from lock. Place the lock on the inside of the door, threading the cable through the lock.

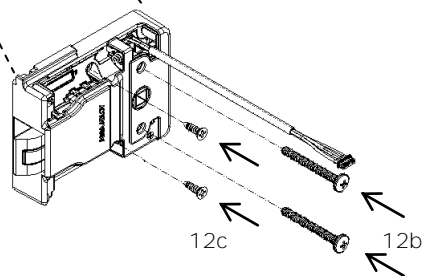
12b. Using two 8-32 lock mount screws (see table 2 for length), attach the lock to the antenna/reader. Tighten the screws.

12 c. Install the two #6 self threading screws and tighten.

Thread the cable through the hole in the lock.

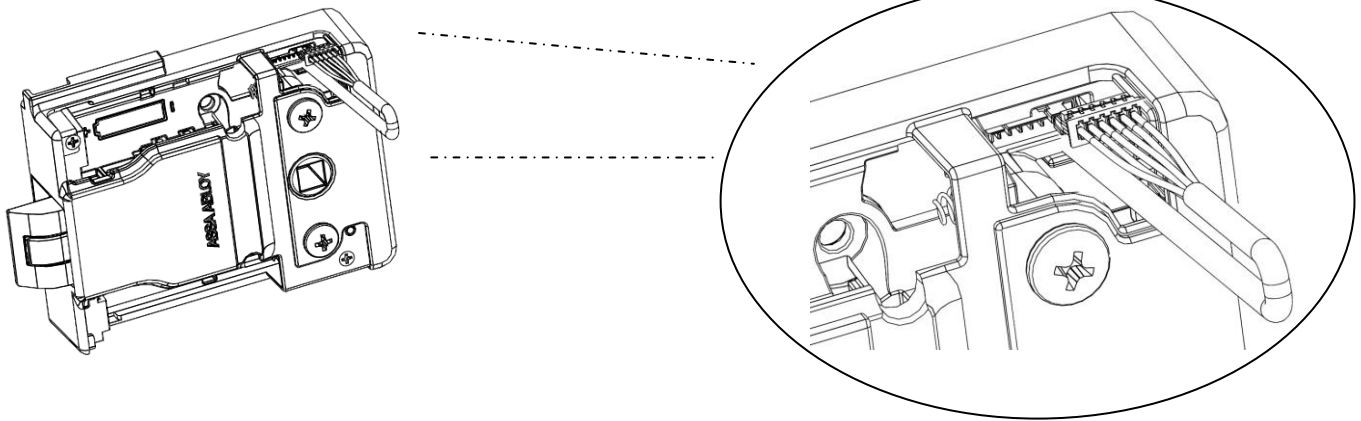


12c



### 13. Electrically connect the antenna/reader wire to the lock body.

Make sure to correctly orient connector while inserting it. The connector is keyed to only fit one way.



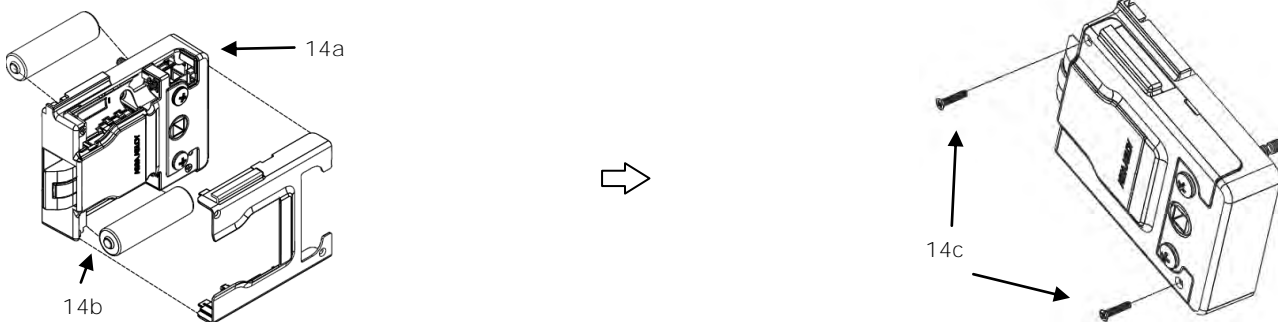
### 14. Install the Batteries.

14a. Gently tuck the wires into the battery cavity.

14b. Install the battery and battery cover.

**Note:** Please verify the battery is inserted in the correct polarity position.

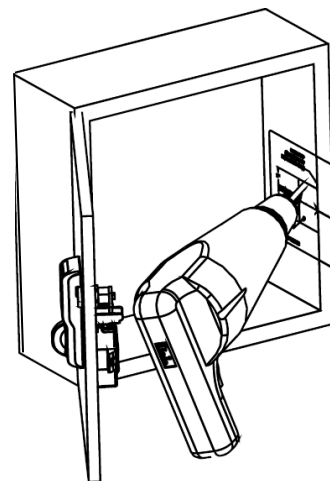
14c. Install and tighten the screws.



**Note:** Always use new batteries installed with correct polarity.

### 15. Place the single-door Strike Plate Template.

- 15a. Peel off the protective layer of the Strike Plate Template and align it to both the latch centerline and the edge of cabinet.
- 15b. Drill two pilot holes as shown on template.
- 15c. Remove the template.

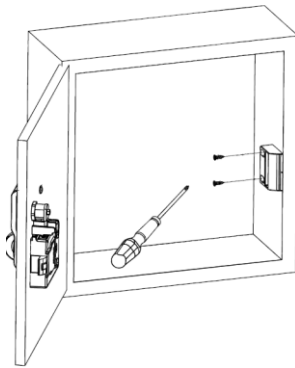


## 16. Install the single-door strike plate.

16a. Place the strike plate over the pilot holes. Insert and tighten two screws in the slotted holes.

16b. Close the door to verify installation. Adjust the strike plate if necessary.

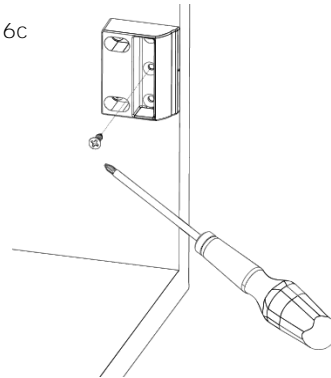
16c. After adjusting, insert and tighten the lock down screw on the strike plate.



16a-b



16c



**Note:** Do not install lock-down screw until the strike plate is correctly adjusted.

## OPTIONAL DOUBLE-DOOR INSTALLATION

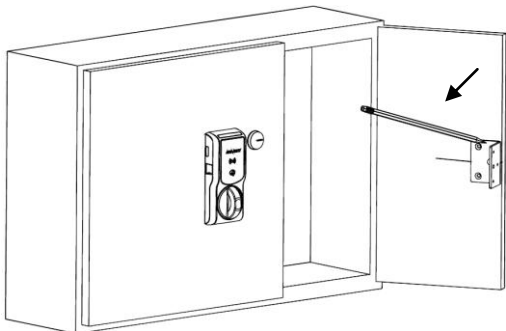
### 17. Install the Double-Door Strike Plate Mounting Bracket

**Note:** The Double-door bracket requires that one door can be secured.

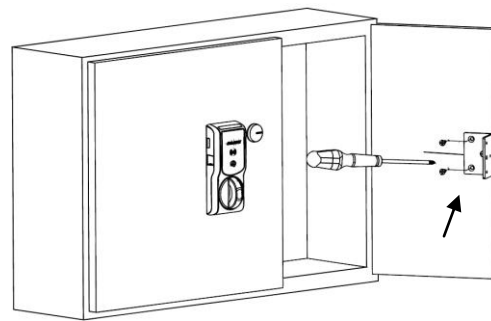
17a. Place the bracket on door, making sure it aligns with the mark made in Step 2c and the edge of the door. Mark the door.

17b. Remove the bracket and drill pilot holes at the two marks.

17c. Install the bracket using the mounting screws provided.



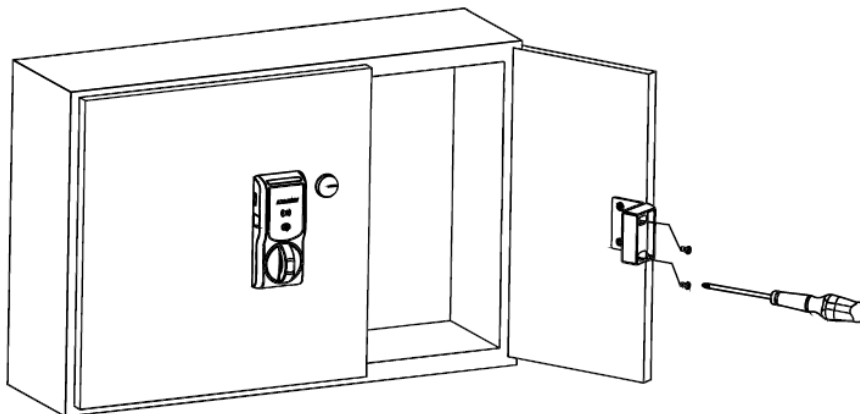
17a



17b & 17c

### 18. Install the double-door strike plate.

Place the strike plate over the holes on the bracket. Insert and tighten the two 6-32 X 5/16" screws provided.



## **WARNING**

### **FCC Statement**

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Operation with non-approved equipment is likely to result in interference to radio and TV reception. The user is cautioned that **changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.**

### **IC Statement**

This device complies with Industry Canada license-exempt RSS standards(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation.

### **Conformité aux normes FCC**

Cet équipement a été testé et trouvé conforme aux limites pour un dispositif numérique de classe B, conformément à la Partie 15 des règlements de la FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles dans une installation résidentielle. Cet équipement génère, utilise et peut émettre des fréquences radio et, s'il n'est pas installé et utilisé conformément aux instructions du fabricant, peut causer des interférences nuisibles aux communications radio. Rien ne garantit cependant que l'interférence ne se produira pas dans une installation particulière. Si cet équipement provoque des interférences nuisibles à la réception radio ou de télévision, qui peut être déterminé en comparant et en l'éteignant, l'utilisateur est encouragé à essayer de corriger les interférences par une ou plusieurs des mesures suivantes:

- Réorienter ou déplacer l'antenne de réception.
- Augmenter la distance entre l'équipement et le récepteur.
- Branchez l'appareil dans une prise sur un circuit différent de celui auquel le récepteur est connecté.
- Consultez votre revendeur ou un technicien radio / TV pour assistance. Avertissement

Les changements ou modifications à cet appareil sans expressément approuvée par la partie responsable de conformité pourraient annuler l'autorité de l'utilisateur de faire fonctionner cet équipement.

### **Conformité aux normes IC**

Cet appareil est conforme avec Industrie Canada exempt de licence RSS standard(s).

Son fonctionnement est soumis aux deux conditions suivantes:

- (1) cet appareil ne peut causer d'interférences, et
- (2) cet appareil doit accepter toute interférence, y compris des interférences qui peuvent provoquer un fonctionnement indésirable du périphérique.

**For Technical Support please call 1-800-626-7590**