

■ PREFACE



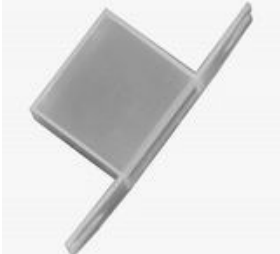





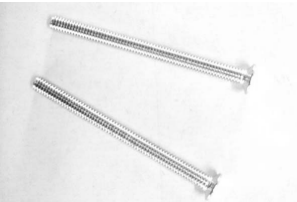
- **Thank you for purchasing the BioAxxis® BD-1 fingerprint deadbolt.**
- **Please read the documentation carefully before installation & use. The manual details all installation procedures and operation steps.**
- **Manufacturer and/or Distributors of the BioAxxis® BD1 will not be responsible for any damages caused by incorrect installation or mishandling of the lock. Any such damages will void manufacturer's warranty.**

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1. Parts

Please familiarize yourself with all the parts in the packaging box of the BioAxxis® BD1. If any part is missing or damaged, contact our service center or your local dealer.

 <p>Outdoor Unit</p>	 <p>Indoor Unit</p>	 <p>Strike Lining Box</p>
 <p>Outdoor Rubber Gasket</p>	 <p>Strike Plate</p>	 <p>Keys</p>
 <p>Deadbolt Latch 2 3/4" backset (70mm)</p>	 <p>Deadbolt Latch 2 3/8" backset (60mm)</p>	 <p>2" screws</p>

 <p>1 3/16" screws</p>	 <p>Wooden & Metal Screws</p>	 <p>Alkaline Batteries</p>
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2. Required Tools

① Electric or battery operated Drill	② One 3/8" Diameter Drill Bit
③ One 1" Diameter Drill bit	④ One 2 1/8" Diameter Drill Bit
⑤ A Carpenter Chisel	⑥ A Hammer
⑦ A pair of scissors	⑧ A pair of pliers
⑨ Philips & flat head screw drivers	

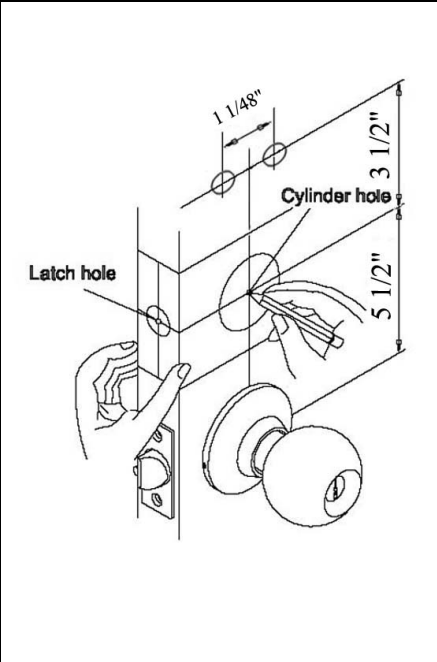
3. Pre-installation

3.1 Mark and bore holes on the door

3.11 Mark holes on door

For doors with existing deadbolt lock: Remove existing cylindrical deadbolt and bore two upper fixing posts holes as indicated on the template, then install the BioAxxis® BD1 in its place.

For doors that do not have a cylindrical deadbolt lock or a hole for the cylindrical deadbolt lock:

	<ol style="list-style-type: none"> A. Start approximately 46” from floor. Select the appropriate installation template according to the length of the backset. Fold and apply the template to the edge of the door bevel. Mark the center point of the cylinder hole on the door face, and then mark the center point of the deadbolt hole on door edge, as indicated on the template. B. For installation of combination set (door handle and deadbolt), it is recommended that the distance is 5 ½” between the two center points. C. Mark the center points of the two small holes on the door face for the two upper fixing posts mounted on the top plate of the outdoor unit, as indicated on the installation template.
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3.12 Bore holes

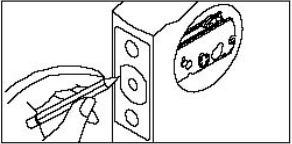
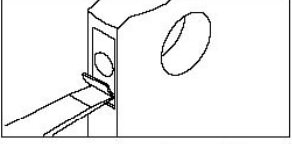
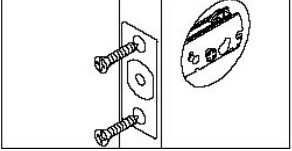
<p>The diagram shows a cross-section of a door edge. On the left edge, there is a hole labeled '1"'. On the top face, there are two small circles representing holes, each labeled '3/8"'. On the right edge, there is a larger hole labeled '2 1/8"'. The diagram is enclosed in a rectangular box.</p>	<ul style="list-style-type: none"> A. Bore a 2 1/8" diameter hole in the center of door face for chassis. (It is recommended to bore this hole from both sides of the door to avoid splintering.) B. Bore a 1" diameter hole in the center of door edge for deadbolt. C. Bore two separate 3/8" diameter holes for the upper fixing posts.
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3.2 Deadbolt Latch Selection

There are two deadbolt latches in each box, one with a 2 3/8" (60mm) backset and the other with a 2 3/4" (70mm) backset. Make sure which length you will need and select the right one before installation.

4. Installation

4.1 Installation of Deadbolt

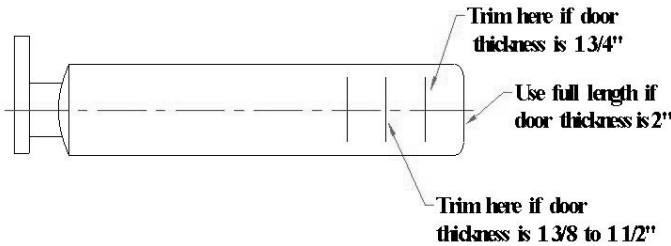
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; align-items: center; margin-bottom: 10px;"> A  </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> B  </div> <div style="display: flex; align-items: center;"> C  </div> </div>	<ol style="list-style-type: none"> A. Insert the deadbolt latch into the hole in the edge of the door (follow the UP sign), keeping it parallel to the face of the door. Mark the outline of the face plate and remove the deadbolt. B. Then chisel 1/8" deep rectangular shape, per your marking (or until the faceplate is flush with the door edge). C. Insert the deadbolt latch; make sure the deadbolt UP sign is facing upwards. Then fasten the screws.
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4.2 Installing Strike and Strike Lining Box (on the door jamb)

<p>The diagrams are arranged vertically and labeled A, B, and C. Diagram A shows a pencil marking a horizontal line across the door jamb and a vertical line down the center. A circular inset shows a close-up of the door edge with the label 'Center line'. Diagram B shows a drill bit being used to bore a hole into the door jamb. Diagram C shows a chisel being used to create a shallow groove in the door jamb, with the label 'Strike' pointing to the groove.</p>	<p>A.</p> <ol style="list-style-type: none"> (1) Close the door until the deadbolt touches the door jamb along the face plate to mark the horizontal center lines. (2) Measure one half of the door thickness from one side of the door jamb, and then mark the vertical center lines. (3) Extend the vertical center line and the horizontal line to mark the drill center point for the strike. <p>B. Bore a 1” diameter and 1” deep hole in the door jamb at the center point for strike. To ensure the proper deadbolt function, this hole must be drilled at least 1” deep.</p> <p>C. Chisel the door jamb at 1/16” deep for the strike plate which must fit flush with the door jamb.</p> <p>D. Insert the strike lining box and then fasten screws to the plate.</p>
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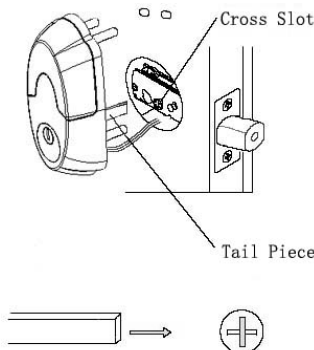
4.3 Sizing Tail Piece (to the right length)

BioAxxis® BD1 is designed to fit door thickness of 1 3/8” to 2”.
TRIM THE TAIL PIECE PER DOOR THICKNESS.

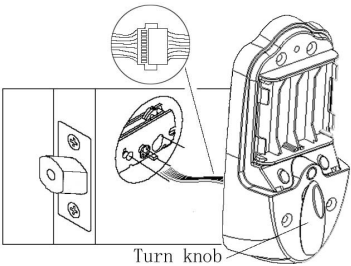
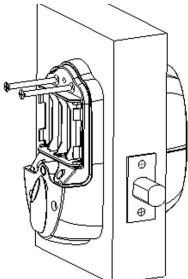


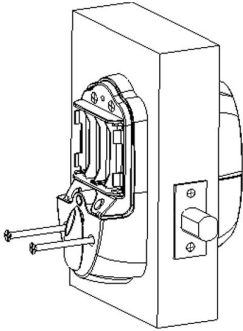
Trim the tail piece accordingly, with a pair of pliers.
 Note: If the door thickness falls between two notches, then use the longer of the two notches. (Sketch is not to scale.)

4.4 Installation of the Outdoor Unit

	<ol style="list-style-type: none"> 1. Attach the rubber gasket to the back of the outdoor unit. 2. Push the cylinder and fixing posts inside the door. 3. Make sure the two slim fixing posts go through the latch holes. 4. Make sure the tail piece is vertical. 5. Make sure the deadbolt is engaged. 6. Insert tail piece through the cross slot of the latch. 7. Insert the connector and wire through the cylinder hole below the deadbolt latch. 8. Insert the two upper fixing posts through the small upper holes on the door (the newly drilled holes).
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4.5 Installation of the Indoor Unit

	<ol style="list-style-type: none"> 1. Select the proper door opening orientation on the bottom plate of the Indoor Unit. If the door is left handed, please push the orientation selector switch to “L” position; if it’s right handed, switch the selector to “R” position. 2. Left handed doors are defined as hinge on the left when you are entering the home from outside. The opposite is true for right handed doors. 3. Connect the 2 sets of wires. It should end up as shown in the diagram to the left. NOTE: be sure to connect the wires below the latch. 4. Turn the manual turn knob to the vertical position, facing downward. 5. Insert the tail piece into the vertical retaining slot of the indoor unit. 6. Gently finish joining the outdoor and indoor units together, ensuring all fixing posts are aligned properly. Make sure the cables are not jammed by the latch. 7. Turn the turn knob to test the operation of the deadbolt.
	<ol style="list-style-type: none"> 8. Fasten the two 1 3/16” long screws through the upper fixing post holes on the upper section of the inside unit. 9. Continuously check the operation of the knob.



10. Fasten the two 2" long screws through the bottom fixing posts from the inside unit.
11. Insert 4 high-quality AA batteries - this will enable you to program and test the lock
12. Put the battery cover on and fasten the screw.

4.6 Final inspection/adjustment prior to enrollment

Note: After installation and prior to using the unit, make sure you read and follow the steps below:

- ① Insert 4 new high-quality AA batteries in the battery housing.
- ② Turn the inside knob to the horizontal position; next turn it to the vertical position (locked position). It should turn freely. If and when the inside and outside locks are attached securely and the inside knob doesn't turn freely, see the trouble shooting table below for possible solution. If the knob turns freely, continue with the next step.
- ③ Make sure you selected the appropriate door opening orientation – Left or Right handed.
- ④ Try to lock and unlock from outside by moving the sliding cover. When the sliding cover is fully lifted, the deadbolt should be disengaged; when the sliding cover is slightly lifted and immediately shut it down, the deadbolt should be engaged.
- ⑤ Try to lock and unlock from inside by pressing the Open/Close button to ensure it works well.

5. Trouble Shooting

PROBLEMS	POSSIBLE REASONS	SOLUTIONS
Indoor turn knob does not turn or turns very sluggishly & hard to turn	<ol style="list-style-type: none"> 1. Incorrect installation 2. Tail piece not trimmed properly; 	<ol style="list-style-type: none"> 1. Make sure the tail piece was inserted vertically through the cross slot of the deadbolt and slot of the indoor unit while the turn knob was vertical. 2. Measure the door thickness and trim the tail piece per section 4.3 of the installation manual
Indoor turn knob turns but nothing happens.	<ol style="list-style-type: none"> 1. The tail piece did not go through the cross slot of the deadbolt; 2. Tail piece was trimmed too short and does not penetrate the slot of the indoor unit; 	<ol style="list-style-type: none"> 1. Remove and reinstall the outdoor unit. Then insert the tail piece through the cross slot of the deadbolt and slot of the indoor unit while the turn knob is in vertical position. 2. Contact the BioAxxis® BD1 dealer that you purchased to lock from OR Contact us at: info@bioaxxis.com
When the sliding cover is fully lifted to power on without any fingerprint enrolled inside, the deadbolt does not disengage or four alert beeps are heard.	<ol style="list-style-type: none"> 1. Right & left hand door configurations is set incorrectly; 2. The tail piece was not set properly 	<ol style="list-style-type: none"> 1. Correctly configure the unit for left or right hand door swing per section 4.5. 2. Uninstall the outdoor unit and keep the UP sign side of the tail piece up and insert the tail vertically through the cross slot of the deadbolt while the turn knob is in vertical position.

<p>When the sliding cover is slightly lifted and immediately put down to engage the deadbolt, but the deadbolt does not fully engage, or four alert beeps are heard.</p>	<ol style="list-style-type: none"> 1. Improper positioning of the strike and strike lining box. It may be deflecting the deadbolt. 2. Incorrect length of the deadbolt. 	<ol style="list-style-type: none"> 1. Check the position of the strike and the strike lining box. 2. Measure the door thickness and choose the deadbolt with right length.
<p>When the sliding cover is lifted up during daily use, nothing happens (fingerprint scanner does not blink)</p>	<ol style="list-style-type: none"> 1. Batteries not inserted correctly; 2. Outdoor & Indoor unit wires not connected properly 	<ol style="list-style-type: none"> 1. Remove & reinsert the batteries following “+” and “—” signs in the battery house; 2. Check the connections and make sure both the wires are coupled properly.
<p>When the sliding cover is up (whenever the door is locked or unlocked), the scanner blinks three times and six beeps are heard.</p>	<p>Low Voltage</p>	<p>Change the batteries</p>

Operation Manual

Helpful Hints

(Please read before attempting to program the BioAxxis® BD1):

Please be sure to physically leave your door open until you have successfully enrolled the first user (ADMINISTRATOR) into the BioAxxis® BD1 and have successfully verified the new user's fingerprint to unlock the door.

With no fingerprints enrolled in the BioAxxis® BD1, the deadbolt will engage/disengage when the sliding cover is fully opened and immediately closed.

It is strongly recommended that the pointer finger be used when enrolling/verifying fingerprints. It is, by far, the easiest finger to use during the enrollment/verification process. The thumb is, by far, the worst digit to try enrolling.

Common definitions of terms used when using the BioAxxis® BD1:

- ***Fingerprint Enrollment:*** Process of adding fingerprints to the BioAxxis® BD-1.
- ***Enrolled Fingerprints:*** Fingerprints that have been successfully added into the BioAxxis® BD1.
- ***Verifying Fingerprints:*** Process of authentication by scanning enrolled fingerprints to A) Unlock the door or B) Authenticate Administrators enrolled fingerprints to program the BioAxxis® BD1.

When enrolling and verifying fingerprints, make sure to use the following directions:

- Place the fingerprint straight, not angled, on the scanning window.
- Place the center portion of the fingerprint's vortex (swirl in the fingerprint) somewhat firm and completely flat on the center of the scanning window.
- If possible, do not allow the tip of your finger to press on the metal backing, behind the scanning window. If the tip of your finger is resting there during enrollment/verification, there is a good chance that the center of the fingerprint's vortex is not centered on the scanning window.
- Keep fingerprint still during enrollment/verification.
- If you are having difficulty enrolling or verifying enrolled fingerprints, it is recommended to enroll the same fingerprint multiple times at slightly different angles.

Important Programming Notes:

When **Adding** or **Deleting** Fingerprints, the closed sliding cover must be fully lifted within 8 seconds **after** pressing the **ADD** or **DEL** button, or the BD1 will power off. If this occurs, simply ***close the sliding cover***, press the **ADD** or **DEL** button again and fully lift the sliding cover immediately to restart the programming sequence.

The first two fingerprint users enrolled will automatically be programmed as **ADMINISTRATORS** (Users 1 and 2). **ADMINISTRATORS** can apply all programming functions as well as verify their fingerprints to unlock the door.

The third thru thirtieth fingerprint users enrolled (Users 3 thru 30) are automatically programmed at the **USER** level. **USER** level fingerprints can only be used to unlock the door, not to program the lock.

Definitions of Indication Beeps:

Single, Short Beep – Indicates that **any** operations sequence has begun **OR** that the door has been successfully locked or unlocked **OR** that the sliding cover has been left open for more than ten seconds.

Single, Long Beep – Indicates that programming operation was successful

Short, Double Beep – Indicates that individual fingerprint user deletion sequence has begun.

Long Double Beep – Indicates that Delete All programming was successful

Four Beeps – Indicates unsuccessful enrollment/unsuccessful verification attempt **OR** BioAxxis® BD1 was improperly installed (see Installation Guide).

Six, Short Beeps – Low battery alert, change batteries

Section I - Enrolling Administrators (First 2 Fingerprint Users):

Please Note: The → symbol is used in all instructions within this manual. The → symbol indicates that you need to go to the next step in the instructional sequence.

Sliding cover must be closed before any programming sequence can begin.

As noted in the Helpful Hints section, the first two users that enroll their fingerprints into the BioAxxis® BD1 will automatically be programmed as **ADMINISTRATORS** (Users 1 and 2).

ADMINISTRATORS can apply all programming functions as well as verify their fingerprints to unlock the door.

Please use the following steps to enroll the **first fingerprint user** (ADMINISTRATOR1 /USER 1):

Remove the battery cover from the indoor unit → Press the “ADD” button located on the indoor unit → Single beep will be heard → Fully open the closed sliding cover located on the outdoor unit immediately → A single short beep will be heard and the fingerprint scanner will turn on → Rest your pointer finger on the scanning window during the first of two scans → After the first scan of your pointer finger is completed, the sensor will briefly turn off (for one second) → Remove your pointer finger from the scanning window and immediately place it back onto the scanning window in preparation for the second scan → A single beep will be heard and the fingerprint scanner will turn back on for the second scan of your pointer finger → Keep your pointer finger on the scanning window thru the second scan. After the scanning is completed you will here a **single, long beep** indicating that the operation was successful **OR** you will hear

four beeps indicating that your fingerprint was not successfully enrolled. If you hear four beeps, please start the enrollment process from the beginning → Close the sliding cover

Congratulations! Your first fingerprint user (Administrator 1/User 1) is enrolled!

Please use the following steps to enroll the **second fingerprint user (ADMINISTRATOR2 /USER 2)**:

With the battery cover removed, press the “ADD” button located on the indoor unit → Single Beep will be heard → Fully open the closed sliding cover located on the outdoor unit immediately → A single short beep will be heard and the fingerprint scanner will turn on → To be able to enroll the second Administrator’s fingerprint, the first Administrator enrolled must first **verify** their enrolled fingerprint by resting it on the scanning window → When the first Administrator’s fingerprint is successfully **verified**, the sensor will briefly turn off (for one second) → A single short beep will be heard and the fingerprint scanner will turn back on → The second Administrator may now be enrolled by immediately resting their pointer finger on the scanning window for the first of two scans → After the first scan of the enrollment process is completed, the sensor will briefly turn off (for one second) → Remove your pointer finger from the scanning window and immediately place it back onto the scanning window in preparation for the second scan → A single beep will be heard and the fingerprint scanner will turn back on for the second scan of your pointer finger → Keep your pointer finger on the scanning window thru the second scan. After the scanning is completed you will hear a **single, long beep** indicating that the operation was successful **OR** you will hear **four beeps** indicating that your fingerprint

was not successfully enrolled. If you hear four beeps, please start the enrollment process from the beginning → Close the sliding cover

Congratulations! The second fingerprint user (administrator 2/User 2) is enrolled! From this point on, the third thru thirtieth fingerprint users enrolled (Users 3 thru 30) are automatically programmed at the USER level. USER level fingerprints can only be used to unlock the door, not to program the lock. One of the two Administrators must always verify their enrolled fingerprint to begin any programming sequence (Enrolling Additional User fingerprints or Deleting fingerprints).

Section II - Enrolling Fingerprint Users 3 thru 30:

Please Note: The → symbol is used in all instructions within this manual. The → symbol indicates that you need to go to the next step in the instructional sequence.

Sliding cover must be closed before any programming sequence can begin.

As noted in the Helpful Hints section, the third thru thirtieth fingerprint users enrolled (Users 3 thru 30) are automatically programmed at the **USER** level. **USER** level fingerprints can only be used to unlock the door, not to program the lock.

Please use the following steps to enroll **additional fingerprint users** (Users 3 thru 30):

With the battery cover removed, press the “ADD” button located on the indoor unit → Single beep will be heard → Fully open the closed sliding cover located on the outdoor

unit immediately → A single short beep will be heard and the fingerprint scanner will turn on → To be able to enroll additional fingerprint users, one of the two Administrators must first **verify** their enrolled fingerprint by resting it on the scanning window → When the Administrator's fingerprint is successfully **verified**, the sensor will briefly turn off (for one second) → A single short beep will be heard and the fingerprint scanner will turn back on → The additional fingerprint user may now be enrolled by immediately resting their pointer finger on the scanning window for the first of two scans → After the first scan of the enrollment process is completed, the sensor will briefly turn off (for one second) → Remove your pointer finger from the scanning window and immediately place it back onto the scanning window in preparation for the second scan → A single beep will be heard and the fingerprint scanner will turn back on for the second scan of your pointer finger → Keep your pointer finger on the scanning window thru the second scan. After the scanning is completed you will here a **single, long beep** indicating that the operation was successful **OR** you will hear **four beeps** indicating that your fingerprint was not successfully enrolled. If you hear four beeps, please start the enrollment process from the beginning of this section → Close the sliding cover

Repeat steps from the beginning of Section II to enroll additional fingerprint users.

Section III – Deleting Individual Fingerprint Users:

Please Note: The → symbol is used in all instructions within this manual. The → symbol indicates that you need to go to the next step in the instructional sequence.

Sliding cover must be closed before any programming sequence can begin.

The Individual Fingerprint User Deletion programming function deletes fingerprint users from the most recent fingerprint user enrolled to the earliest fingerprint user enrolled.

Please use the following steps to delete individual fingerprint users:

With the battery cover removed, press the “DEL” button located on the indoor unit → Short, Double Beep will be heard → Fully open the closed sliding cover located on the outdoor unit immediately → A single short beep will be heard and the fingerprint scanner will turn on → To be able to delete the most recently enrolled fingerprint user, one of the two Administrators must first **verify** their enrolled fingerprint by resting it on the scanning window → When the Administrator’s fingerprint is successfully **verified**, a single, long beep will be heard indicating that the most recently enrolled fingerprint user has been deleted → Close the sliding cover

Repeat steps from the beginning of Section III to delete the **next** most recently enrolled fingerprint user.

Section IV – Deleting ALL Fingerprint Users:

Please Note: The ➔ symbol is used in all instructions within this manual. The ➔ symbol indicates that you need to go to the next step in the instructional sequence.

Sliding cover must be closed before any programming sequence can begin.

Deleting ALL enrolled fingerprint users will reset the lock and all users (including Administrators fingerprints) will be deleted. With no fingerprints enrolled in the BioAxxis® BD1, the deadbolt will engage/disengage when the sliding cover is fully opened and immediately closed.

Please use the following steps to delete all fingerprint users:

With the battery cover removed, **press and hold** the “DEL” button and “OPEN/CLOSE” button (located on the indoor unit between the ADD and DEL buttons) ➔ While still pressing and holding the “DEL” and “OPEN/CLOSE” buttons, fully open the closed sliding cover located on the outdoor unit ➔ A single, long beep will be heard and the fingerprint scanner will turn on ➔ To be able to delete all enrolled fingerprint users, one of the two Administrators must first **verify** their enrolled fingerprint by resting it on the scanning window ➔ When the Administrator’s fingerprint is successfully **verified**, two long beeps will be heard after approximately 15 seconds, indicating that ALL enrolled fingerprint users have been deleted ➔ Close the sliding cover

Section V – Unlocking the BioAxxis® BD1 from Outside:

Please Note: The ➔ symbol is used in all instructions within this manual. The ➔ symbol indicates that you need to go to the next step in the instructional sequence.

In case of emergency, override keys can be used to disengage the deadbolt.

Please use the following steps to unlock the BioAxxis® BD1 from outside, with your enrolled fingerprint:

Fully lift the sliding cover ➔ A single, short beep will be heard and the fingerprint scanner will turn on ➔ Rest any enrolled fingerprint on the scanning window while the sensor verifies the enrolled fingerprint ➔ If fingerprint verification is successful, the deadbolt will disengage and a single, short beep will be heard ➔ Close the sliding cover

If verification of enrolled fingerprint was not successful, then 4 short beeps will be heard. If this happens, please start the unlocking process over again, from the beginning of this section

Section VI – Locking the BioAxxis® BD1 from Outside:

Please Note: The ➔ symbol is used in all instructions within this manual. The ➔ symbol indicates that you need to go to the next step in the instructional sequence.

In case of emergency, override keys can be used to engage the deadbolt.

Please use the following steps to lock the BioAxxis® BD1 from outside:

Make sure your door is closed ➔ Partially open and immediately close the sliding cover ➔ Deadbolt will engage and a single, short beep will be heard

Section VII – Unlocking the BioAxxis® BD1 from Inside:

Please Note: The ➔ symbol is used in all instructions within this manual. The ➔ symbol indicates that you need to go to the next step in the instructional sequence.

In case of emergency, manual turn knob can be used to disengage the deadbolt.

Please use the following steps to unlock the BioAxxis® BD1 from inside:

Press the "OPEN/CLOSE" button (located between the ADD and DEL buttons) ➔ Deadbolt will disengage and single, short beep will be heard.

Section VIII – Locking the BioAxxis® BD1 from Inside:

Please Note: The ➔ symbol is used in all instructions within this manual. The ➔ symbol indicates that you need to go to the next step in the instructional sequence.

In case of emergency, manual turn knob can be used to engage the deadbolt.

Please use the following steps to lock the BioAxxis® BD1 from inside:

Press the "OPEN/CLOSE" button (located between the ADD and DEL buttons) ➔ Deadbolt will engage and single, short beep will be heard.

Support:

Contact the FS Locks dealer that you purchased to lock from

OR

Contact us at: info@fslocks.com for additional support.