

ML2 Programming Instructions

EN VER 1.7

Alfred International Inc. reserves all rights for the final interpretation of the following instructions.

Search "Alfred Home" in either the Apple App Store or Google Play to Download











STATEMENT

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 communication. 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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

FCC Radiation Exposure Statement

To comply with FCC/IC RF exposure requirements for mobile transmitting devices, this transmitter should only be used or installed at locations where there is at least 20 cm separation distance between the antenna and all persons.

Industry Canada Statement

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

WARNING

Failure to follow the below instructions could result in damage to the product and void the factory warranty. The accuracy of the door preparation is critical to allow proper functioning and security of this Alfred Product.

Misalignment of the door prep and lock can cause performance degradation and hinder the security functions of the lock.

Finish Care: This lockset is designed to provide the highest standard of product quality and performance. Care should be taken to ensure a long-lasting finish. When cleaning is required use a soft, damp cloth. Using lacquer thinner, caustic soaps, abrasive cleaners or polishes could damage the coating and result in tarnishing.

IMPORTANT: Do not install batteries until the lock is completely installed on door.

- 1. Master PIN Code: Can be 4-10 Digits and should not be shared with other users. Default Master Pin code is "12345678". Please update once installation is completed.
- 2. User PIN Code Numbers slots: User Pin Codes can be assigned number slots between (1-250), it will be assigned automatically then read by voice guide after enrollment.
- 3. User Pin Codes: Can be 4-10 digits and can be set up through Master Mode or Alfred Home App.
- 4. Access Card Number slots: Access card can be assigned number slots between (1-250), it will be assigned automatically then read by voice guide after enrollment.
- 5. Access Card: Only Mifare 1 type card is supported for ML2. It can be set up through Master Mode or Alfred Home App.

INTRODUCTION

The Alfred ML2 door lock combines a modern look with durability that is perfect for multi-family property, small business office space, retail space, hotel, airport, restroom, or mixed-use commercial building. It is easy to use and install, and allows you to manage access with up to 250 unique PIN codes and 250 access cards.

You can program, control, monitor your door lock activities within Alfred Home app.

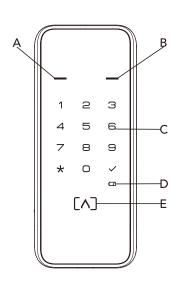
Door positions sensors are also included to be able to detect the position of your so your lock knows if it is open or closed before locking

It also can be connect with Smart Home&Security system via Z-Wave™(Module sold separately) or Zigbee(Module sold separately).

It drives the deadbolt or clutch to lock and unlock the door. Inside lever or knob is always free for immediate exit.

SPECIFICATIONS

Front assembly



A: Status indicator(Red)

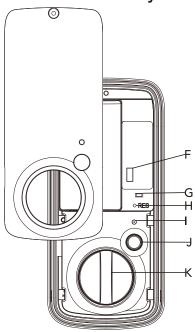
B: Status indicator(Green)

C: Touchscreen keypad

 $\textbf{D} \colon Low\ battery\ indicator$

E: Card reader area

Back assembly



F: Wireless module port

G: Handing switch

H: Reset button

I: Internal indicator

 ${f J}$: Multi-functional button

K: Thumb turn

DEFINITIONS

Master Mode:

The Master Mode can be entered by entering "**+Master PIN Code+ $\sqrt{\ }$ " to program the lock.

Master PIN code:

The Master PIN Code is used for programming and for feature settings.



The default Master PIN Code must be changed after installing.

The Master PIN Code will also operate the lock in Away Mode and Privacy Mode.

Simple PIN Code Rule

For your security, we have set up a rule to avoid simple pin codes that can easily be guessed. Both the Master PIN Code and User PIN Codes need to follow these rules.

Rules for Simple Pin Code:

- 1. No consecutive numbers Example: 123456 or 654321
- 2. No duplicated numbers Example: 1111 or 333333
- 3. No other existing Pins Example: You cannot use an existing 4 digit code within a separate 6 digit code

Manual Locking

The lock can be locked by pressing and holding any key for 1 second from outside or using thumb turn from inside or pressing multiple function button on interior assembly from inside.

Smart Building System Integration

The ML2 can be integrated into Smart Building Systems via add on wireless modules (sold separately).

The ML2 supports both Z-Wave and Zigbee integrations.

Auto Re-lock

After lock has been successfully unlocked, it will automatically re-lock after a preset time. This feature can be turned on through the Alfred Home App or through option #4 in Master Mode menu at the Lock.

This feature comes disabled in default settings. Auto re-lock time can be set to 30secs, 60secs, 2mins, and 3mins.

DEFINITIONS

Away(Vacation) Mode

This Feature can be enabled in the Master Mode menu, or through your third party Zigbee Hub (sold separately). This feature restricts access of all User PIN Codes except Bluetooth Keys and the Master Code. If someone unlocks the door by using the inside thumb turn or key override, the lock will sound an audible alarm for 1 min. Additionally when the alarm is activated it will send a notification via the Alfred Home App, and or the Zigbee Smart Building System (if integrated) to the user to make them aware of the status change of the lock.

Silent Mode When enabled, S

When enabled, Silent Mode shuts off key tone playback for use in quiet areas. Silent Mode can be turned On or Off in Master Mode Menu Option #5 at the lock or through Language settings on the Alfred Home App.

Keypad Lockout

The lock will go into KeyPad Lockout for a default of 5 mins after the wrong code entry limit has been met (10 attempts). Once the unit has been placed in shutdown mode due to the limit being reached the screen will flash and will prevent any keypad digits from being entered until the 5 min time limit has expired. The Wrong code entry limit resets after a successful Pin code entry has been entered or the door is unlocked from inside thumb turn or by Alfred Home App.

Status LED

Exterior indicators located on Front Assembly. Green LED will illuminate when the door is unlocked or for a successful settings change. Red LED will illuminate when the door is locked or when there is an error in settings input.

Interior indicator located on Back Assembly, Red LED will illuminate after locking event. Green LED will illuminate after unlocking event.

Green LED blinks when the lock is pairing with Z-Wave or Zigbee hub(sold separately), it stops blinking if pairing succeeded. If Red LED illuminates, pairing failed.

The Red and Green LED will blink alternately when the lock is drop off from Z-Wave or ZigBee network.

User PIN code

The User PIN Code operates the Lock. They can be created between 4 and 10 digits in length but must not break simple pin code rule. You can assign a User Pin code to specific members within the Alfred Home App. Please make sure to record set user Pin codes as they are **NOT** visible within Alfred Home App for security once set. Maximum Number of user PIN codes is 250.

DEFINITIONS

Access Card(Mifare1)

Access Cards can be used to unlock the lock when placed over top of the Card reader on the front face of the ML2. These cards can be added and deleted at the lock using the Master Mode Menu. You can also delete Access cards at any time within the Alfred Home App when connected via WIFI or BT or assign an Access card to a specific member on your account. Maximum number of Access Cards per lock is 250.

Privacy Mode(Inside Deadlock)

Enable by holding the Multi-function button on the Back assembly of lock for 3 Seconds. Enabling this feature restricts ALL accesses, including Master PIN Code, User PIN Code, Alfred Home App Access and Wireless accesses(Zigbee or Z-Wave). This feature is designed to be used when the User is home and within the house but wants to restrict any other users from being able to unlock the door, for example when sleeping at night once everyone that is supposed to be home is within the house.

The feature will disable automatically by unlocking door using thumb turn or override key.

Bluetooth Energy Saving Mode:

Bluetooth Energy Saving Feature can be programmed in Settings options on the Alfred Home App or in Master Mode Menu at the Lock.

Enabling Energy Saving Mode - means Bluetooth will broadcast for 2min after keypad lights turn off on Touchscreen Panel, after the 2min expires the Bluetooth feature will go into energy savings Sleep mode to reduce some battery draw. The front panel will need to be touch to wake up the lock so the Bluetooth connection can be re-established. Disabling Energy Saving Mode - means Bluetooth will stay active continuously to create quicker connection If user has enabled One Touch Unlock Feature in Alfred Home App, Bluetooth must been Enabled as the One Touch feature requires constant Bluetooth connect availability to function.

Reboot button

In the case where your lock becomes unresponsive, the lock can be restarted by pressing the Reboot Button on the Front Assembly (see diagram on Page 14 for location) This will keep all lock settings in place but will restart the lock.

Reset button

After Lock as been Reset, all User Credentials and settings will be deleted and returned to factory settings. Locate the Reset button on the Interior Assembly underneath Battery Cover and follow Reset instructions on Page 15 (see diagram on Page 3 for location). Connection with Alfred Home App will remained, but the connection with the Smart Building System Integration will be lost.

FACTORY DEFAULT SETTINGS

Settings	Factory Defaults
Master PIN Code	12345678
Auto Re-lock	Disabled
Speaker	Enabled
Wrong Code Entry Limit	10 times
Shutdown Time	5 mins
Bluetooth	Disabled(Energy saving)
Language	English

LOCK OPERATIONS

-Enter Master Mode

- 1. Touch Keypad screen with your hand to activate lock. (Keypad will illuminate)
- 2.Press "*" twice
- 3.Enter Master PIN Code and followed by " $\sqrt{}$ "

-Change Default Master PIN code

Changing Master PIN Code can be programmed in Settings options on the Alfred Home App or in Master Mode Menu at the Lock.

- 1. Enter Master Mode
- 2. Enter "1" to select Modify Master Pin Code.
- 3. Enter NEW 4-10 Digit Master PIN Code followed by " $\sqrt{}$ "
- 4. Repeat Step 3 to confirm NEW Master PIN Code

A CAUTION

User must change Factory Set Master Pin Code before changing any other menu Settings when first installed. Settings will be locked until this has been completed. Record Master Pin Code in a safe and secure location as the Alfred Home APP will not show User Pin Codes for security purposes after it has been set.

-Add User PIN Codes

User PIN Codes can be programmed in Settings options on the Alfred Home App or in Master Mode Menu at the Lock.

Master Mode Menu Instructions:

- Enter Master Mode.
 Enter "2" to enter Add User menu.
- 3. Enter "1" to add User PIN code
- 4. Enter New User PIN Code followed by " $\sqrt{}$ "
- 5. Repeat step 4 to confirm PIN Code.
- 6. To continue adding new users, repeat steps 4-5.



When Registering User Pin Codes, the codes must be entered within 10 Seconds or the Lock will time out. If you make a mistake during the process, you can press the "*" once to go back to previous menu. Before entering New User PIN code, lock will announce how many User PIN codes already exist, and User PIN code number you are registering.

-Add Access Card

Access Card can be added in Master Mode Menu at the Lock only.

Master Mode Menu Instructions:

- 1. Enter Master Mode.
- 2. Enter "2" to enter Add User menu
- 3. Enter "3" to add Access Card
- 4. Hold access card over card reader area on front of Lock.
- 5. To continue adding new Access Card, repeat steps 4



Before adding new Access Card, lock will announce how many Access Card already exist, and Access Card number you are registering.

-Delete User PIN code

User PIN Codes can be programmed in Settings options on the Alfred Home App or in Master Mode Menu at the Lock.

Master Mode Menu Instructions:

- 1. Enter Master Mode.
- 2. Enter "3" to enter delete User menu
- 3. Enter "1" to delete User PIN Code
- 4. Enter User PIN code number or User PIN code followed by " $\sqrt{}$ "
- 5. To continue deleting User PIN code, repeat steps 4

-Delete Access Card

Access Card can be deleted in Settings options on the Alfred Home App or in Master Mode Menu at the Lock.

Master Mode Menu Instructions:

- 1. Enter Master Mode.
- 2. Enter "3" to enter delete User menu
- 3. Enter "3" to delete Access Card.
- 4. Enter Access Card number followed by " $\sqrt{}$ ", or Hold access card over card reader area on front of Lock.
- 5. To continue deleting Access Card, repeat steps 4

-Auto re-lock settings

Auto Re-Lock Feature can be programmed in Settings options on the Alfred Home App or in Master Mode Menu at the Lock.

Master Mode Menu Instructions:

- 1. Enter Master Mode
- 2. Enter "4" to enter Auto Re-lock menu
- 3. Enter "1" to Disable Auto Re-lock(**Default**) or Enter "2" to Enable Auto Re-lock and set the re-lock time to 30 secs.
- or Enter "3" to set the re-lock time to 60secs
- or Enter "4" to set the re-lock time to 2mins or Enter "5" to set the re-lock time to 3mins

-Silent Mode/Language Settings

Silent Mode or Language Change Feature can be programmed in Settings options on the Alfred Home App or in Master Mode Menu at the Lock.

Master Mode Menu Instructions:

- 1. Enter Master Mode
- 2. Enter "5" to enter Languages Menu
- 3. Enter 1-5 to Enable a select voice guide language (see language choices in table to the right)

or Enter "6" to enable Silent Mode

Languages

- 1.English
- 2. Spanish
- 3.Portuguese
- 4.French
- 5.Chinese

-Enable Away Mode

Away Mode Feature can be enabled in Master Mode Menu at the lock.

Master Mode Menu Instructions:

- 1. Enter Master Mode.
- 2. Enter "6" to enable Away Mode.



In Away Mode, all User PIN codes will be disabled temporarily. Device can only be unlocked by Master PIN Code or Zigbee. Away Mode will be disabled automatically once Master Pin Code has been entered or Away mode has been deactivated within the Zigbee Smart Building System. If someone unlocks the door by using the inside thumb turn or key override, the lock will sound an audible alarm for 1 min. Additionally when the alarm is activated, it will send a notification message to the account holders to notify them of the Alarm via the Zigbee Smart Building System.

-Bluetooth Settings(Power Save)

Bluetooth Setting (Power Save) Feature can be programmed in Settings options on the Alfred Home App or in Master Mode Menu at the Lock.

Master Mode Menu Instructions:

- 1. Enter Master Mode
- 2. Enter "7" to enter Bluetooth Settings Menu
- 3. Enter "1" to Enable Bluetooth means Bluetooth will stay active continuously to create quicker connection or Enter "2" to Disable Bluetooth means Bluetooth will broadcast for 2min after keypad lights turn off on Touchscreen Panel, after the 2min expires the Bluetooth feature will go into energy savings Sleep mode to reduce some battery draw. The front panel will need to be touched to wake up the lock so the Bluetooth connection can be re-established.



If user has enabled One Touch Unlock Feature in Alfred Home App, Bluetooth must been Enabled as the One Touch feature requires constant Bluetooth connect availability to function.

-Network Module(Z-Wave or Zigbee) Pairing Instructions (Add on Modules Required sold separately)

Z-Wave pairing or other Network Settings can ONLY be programmed through the Master Mode Menu at the Lock.

Master Mode Menu Instructions:

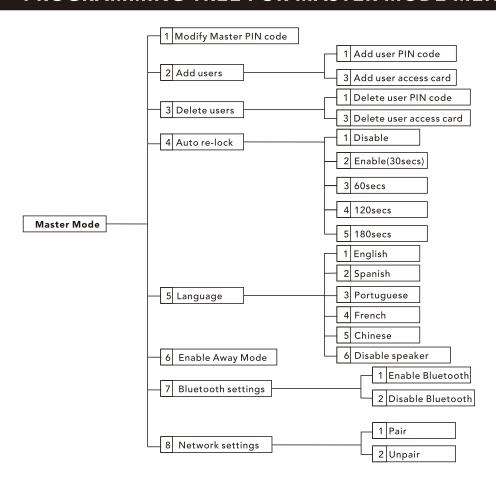
- 1. Follow user guide of your Smart Hub or Network Gateway to enter Learning or Pairing Mode
- 2. Enter Master Mode
- 3. Enter "8" to enter Network Settings
- 4. Enter "1" to enter Pairing
 - or "2" to Unpair
- 5. Follow steps on your 3rd party interface or Network controller to sync Network Module from lock.



Successful pairing to a Network completes within 10 seconds. After successful pairing, lock will announce "Setup Succeeded". Unsuccessful pairing to a Network will timeout at 25 seconds. After unsuccessful pairing, lock will announce "Setup Failed".

Optional Alfred Z-Wave or other Network Module is required to enable this feature (sold separately). If the Lock is connected to a network controller, it is recommended that all programming of PIN Codes and settings is completed through 3rd party user interface to ensure stable communication between lock and controller is maintained.

PROGRAMMING TREE FOR MASTER MODE MENU



HOW TO USE

Unlock the door

- Use Access Card

- Place Access Card on Card reader area

1. Unlock the door from outside

- Use PIN code key



- Place palm over lock to wake up the keypad.
- Input User PIN Code or Master PIN Code and press " $\sqrt{}$ " to confirm.

2. Unlock the door from inside

- Manual thumb turn



Turn the thumb turn on Back Assembly (Thumb turn will be in the vertical position when unlocked)

Lock the door

1. Lock the door from outside

Auto Re-lock Mode

If Auto Re-Lock Mode is enabled, the Latch bolt will be extended and locked automatically after the set amount of time selected in the auto relock settings has past. This delay timer will start once the lock has been unlocked or the door has been closed.

Manual Mode



Press and hold any key on keypad for 1 second.

2. Lock the door from inside

Auto Re-lock Mode

If Auto Re-Lock Mode is enabled, the Latch bolt will be extended and locked automatically after the set amount of time selected in the auto relock settings has past. This delay timer will start once the lock has been unlocked or the door has been closed.

Manual Mode



In Manual Mode, the device can be locked by pushing the Multi-Function button on the Back Assembly or by turning the thumb turn. (Thumb turn will be in the horizontal position when locked)

HOW TO USE

Enable Privacy Mode



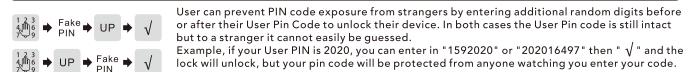
To Enable Privacy Mode (Inside Deadlock), Push and HOLD the Multi-function button on Back Assembly for 3 Seconds.

When Privacy mode is enabled, it restricts the following credentials: All User PIN Codes (except for Master Pin), All registered Access Cards and All Digital Bluetooth Keys sent through Alfred Home App.

This feature will be disabled automatically after unlocking the device with the lever handle (Mortise Lock

Installation) from the inside, or the physical key override or by entering the Master PIN code from the outside.

Use Visual PIN Protection



Use Emergency USB-C Power Port and Reboot Button



In the scenario where the Locks batteries are completely warn out and the lock will no longer turn on, you can connect any standard USB-C power banks to the Emergency Power port located on both side of the Touch screen Keypad. Connect with a USB-C cable to power lock to unlock latch bolt to get inside so you can charge your rechargeable battery.

In the scenario where the lock freezes or becomes unresponsive, the lock can be restarted by pressing the reboot button located on both side of the touch screen lock next to the Emergency USB-C Power port. This will keep all lock settings in place but will restart the lock.

HOW TO USE

Reset to factory default settings

Factory Reset

Fully resets all settings, network pairings (Zigbee or Z-Wave), memory (activity logs) and Master and User Pin Codes to original factory settings. Can only be performed locally and manually at the lock.

- 1. Open the door and keep the lock in "unlock" status 2. Open battery box and find the reset button.
- 3. Use a thin object to press and hold the reset button.
- 4. Keep holding the reset button and remove a battery from battery box then replace it.
- 5. Keep holding the reset button down until you hear the lock beep (Can take up to 10 seconds).

CAUTION: Reset operation will delete all user setting and credentials, Master PIN code will be restored to default 12345678.

Please use this procedure only when the network primary controller is missing or otherwise inoperable.

Network Reset

Resets all settings, memory and User Pin codes. Does not reset Master Pin Code nor network pairing (Zigbee or Z-Wave). Can only be performed via network connection (Zigbee or Z-Wave) if this feature is supported by the hub or controller.

Battery Charging

To charge your battery pack: 1. Remove the battery cover.

- 2. Remove the battery pack from the lock using the pull tab.
- 3. Plug in and charge the battery pack using a standard USB-C charging cable and adapter. (See max. recommended inputs below)

Input Voltage: 4.7~5.5V

Input Current: Rated 1.85A, Max. 2.0A

Battery Charging Time (avg.): ~4 hours (5V, 2.0A) **LED on battery:** Red - Charging

Green - Fully charged.

For support, please reach out to: support@alfredinc.com You can also reach us at 1-833-4-ALFRED (253733) www.alfredinc.com