**KIC Lock**

**User Manual Draft**

Contents

[Revision History 3](#_Toc497299049)

[1. Introduction 4](#_Toc497299050)

[2. Compatible cards and phones 4](#_Toc497299051)

[2.1 Cards 4](#_Toc497299052)

[2.2 Phones 4](#_Toc497299053)

[3. App 4](#_Toc497299054)

[4. Management 4](#_Toc497299055)

[4.1 By Phone 4](#_Toc497299056)

[4.2 By Keypad 4](#_Toc497299057)

[5. Phone Operations 5](#_Toc497299058)

[5.1 Pairing to Become the Admin 5](#_Toc497299059)

[5.2 Unlocking 5](#_Toc497299060)

[5.3 Management 5](#_Toc497299061)

[5.4 Lock Parameters 5](#_Toc497299062)

[6. Keypad Operations 6](#_Toc497299063)

[6.1 Setting the Mastercode (Mastercode) 6](#_Toc497299064)

[6.2 Keypad Menu 6](#_Toc497299065)

[6.3 LED Indicators 7](#_Toc497299066)

[6.4 Mastercode Unlocking 7](#_Toc497299067)

[6.5 CODE Unlocking 7](#_Toc497299068)

[6.6 TAD Unlocking 7](#_Toc497299069)

[6.7 ATAD 8](#_Toc497299070)

[7. Card Operations 8](#_Toc497299071)

[7.1 Card Sensing 8](#_Toc497299072)

[8. Low Battery Warning 8](#_Toc497299073)

[9. Wrong-try Lock-out 9](#_Toc497299074)

[10. Return to Factory Default 9](#_Toc497299075)

[11. Technical Specifications 9](#_Toc497299076)

[12. Trouble Shooting 9](#_Toc497299077)

# Revision History

|  |  |  |
| --- | --- | --- |
| Version | Date | Description |
| 0.1 | 2017/09/01 | Initial draft |
| 0.2 | 2017/09/14 | Comments/requests |
| 0.3 | 2017/10/31 | Clean up |
| 0.4 | 2017/11/01 | Fix issues |
| 0.5 | 2017/11/01 | Clean up |

# Introduction

KIC 5510 is a smart locks with Bluetooth, MiFARE, and Keypad capabilities.

# Compatible cards and phones

## Cards

* Support MiFARE Classic, MiFARE Ultralight, MiFARE DesFire, or ISO/IEC 14443 type A with fixed UID.

## Phones

* iPhone 4S or above with iOS 9.0 or above
* Android 5.0 or above with Bluetooth Low Energy capability.

# App

Download K3 Connect on App Store or Google Play, and register an account. Always update the App to the latest version.

# Management

## By Phone

A compatible phone with App installed can be used as Admin of Locks. Management tasks can be performed in the App. An Admin can manage multiple Locks, but one Lock can only have one Admin at a time. Other phones can be Clients of the Lock.

## By Keypad

If Admin phone is not available, the Keypad can also be used for selected management tasks. See later section for the full specification.

# Phone Operations

## Pairing to Become the Admin

1. In K3 Connect, press the “+” on the top-right corner of the Locks page
2. Fill-in the DIN (it could be found on the Lock User Manual) and your selected Lock name, then confirm and put the phone close to the Lock (within 1 meter)
3. Make the Lock enter Setup Mode (See Keypad Menu section below)

## Unlocking

Admin or Client can do Unlocking: in K3 Connect, in the Locks page, click on the tab of your Lock name to trigger it

## Management

The App can do the following management tasks and more: (suggest only put minimum App UI in this manual; App is constantly improved and more features or better UI will be designed in the future)

* Set Names of Locks
* Lock parameters setting
* Add/Delete/Suspend/Restore Clients (including other phones, cards, or CODEs)
* Set Client access rights (3 sets of day/hour selection, weekly repeat)
* Set Client Nicknames
* Generate TAD codes
* View Audit Trail
* Check Lock Battery status
* Update Lock Firmware

## Lock Parameters

* Block TAD codes
* Lock-down
  + All clients including all phones and cards excluding the Admin phone and mastercode will be suspended.
* Passage Mode On/off
  + Passage Periods (3 sets of day/hour selection, weekly repeat)
* First-Man-in
  + When a lock is scheduled for a Passage period, the lock will remain locked in this Passage period until a valid code, card or phone is used to open the lock. Once open the lock will remain open for the defined Passage period.
* Dual-Credential
  + Program to be set so that two valid credential are required to open lock

# Keypad Operations

## Setting the Mastercode (Mastercode)

* There is a default Mastercode of 12345678 in the beginning or after return-to-factory-default.
* The Mastercode length is between 6 to 8 digits.

## Keypad Menu

* Change Mastercode
* # Mastercode ● 00 ● Length[6~8] ● New-Mastercode ● New-Mastercode ●●
* Ex: #12345678 ● 00 ● 6 ● 123456 ● 123456 ●●
* Enter Setup Mode
* # Mastercode ● 11 ●●
* Add Code
* # Mastercode ● 21 ● Length[4~8] ● New-CODE ● New-CODE ●●
* Ex: #12345678 ● 21 ● 4 ● 4444 ● 4444 ●●
* Note that new CODE length is between 4 to 8 digits.
* Add Card
* # Mastercode ● 22 ● Card-tap ●●
* Delete Code
* # Mastercode ● 31 ● CODE ● CODE ●●
* Delete Card
* # Mastercode ● 32 ● Card-tap ●●
* Delete All Codes (except Mastercode)
* # Mastercode ● 41 ● Mastercode ● 41 ●●
* Delete All Cards
* # Mastercode ● 42 ● Mastercode ● 42 ●●
* Delete All Phones including Admin
* # Mastercode ● 43 ● Mastercode ● 43 ●●
* Delete All Codes (except Mastercode)/Cards/Phones including Admin
* # Mastercode ● 44 ● Mastercode ● 44 ●●
* Lock Down
* # Mastercode ● 51 ● 1 ●● (Lock Down on)
* # Mastercode ● 51 ● 0 ●● (Lock Down off)
* Passage mode
* # Mastercode ● 52 ● 1 ●● (Passage mode on)
* # Mastercode ● 52 ● 0 ●● (Passage mode off)
* First-Man-in
* # Mastercode ● 53 ● 1 ●● (First-Man-in on)
* # Mastercode ● 53 ● 0 ●● (First-Man-in off)
* Dual-Credential
* # Mastercode ● 54 ● 1 ● Mastercode ● 54 ● 1●● (Dual Credential on)
* # Mastercode ● 54 ● 0 ● Mastercode ● 54 ● 0●● (Dual Credential off)

## LED Indicators

* Red led indicated incorrect code sequence.
* Red + blue LED indicated suspended code. This can be used when codes are in lockdown or when codes are valid but cannot used ie in the case of entering a new code with the same digits as an existing code or part of a mastercode string

## Mastercode Unlocking

* Enter Mastercode
* Mastercode ●

## CODE Unlocking

* Enter CODE
* Code ●

## TAD Unlocking

* Enter \* followed by TAD-codes
* \* TAD-code ●
* TAD codes are time-specific temporary codes that can be generated in App. TAD codes can be generated in the App anywhere; no need to be in front of the Lock.
* TAD codes can be obtained in the App:
  + In the Clients page, press the “+” on the top-right corner, and select Type as TAD codes to see the UI. Once generated, send the TAD codes to the users.

## ATAD

* Auto Repeat Time And Duration codes that can be generated in App
* Repeat by Day (duration no longer than a day) or by Week (duration no longer than a week)
* ARTAD codes can be set to run for a number of selected weeks up to a maximum of 4 weeks
* New TAD codes will be sent to an email when they becomes effective
* Only a single email address could be sent to the responsible person to forward automatically to a group.

# Card Operations

## Card Sensing

* Put the card in front of the sensing area, and wait until LED flash and beep heard.

# Low Battery Warning

When the battery is at a low state, there are two kinds of situation:

* + During successful unlocking, the sound is 3 beeps then 5 beeps for low battery warning
  + During successful authentication but if the battery is not enough to unlocking, the sound is 3 beeps then 10 beeps for extreme low battery warning.

Both situations are only released by replacing with new brand batteries.

# Wrong-try Lock-out

After 3 continues unsuccessful unlocking attempt within 1 minute, the Lock sill stays no-response for Code or Card for 1 minute.

# Return to Factory Default

Following the steps:

1. Remove battery cover and take-out one battery
2. Keep # button pressed
3. Replacing the battery while pressing the # button
4. Wait for 4 beeps then releasing the # button.
5. Press ####
6. Replace the battery cover.

# Technical Specifications

* User Counts: maximum 1 Admin + 50 Client Phones, and 800 Codes or Cards
* Audit Trail entry number: 2000 on lock
* Powered by 4x AA Batteries
* Operation Temperature: -20°C to 70°C
* Storage Temperature: -30°C to +80°C
* Radio Frequency: MiFARE: 13.56MHz, Bluetooth: 2.4GHz

# Trouble Shooting

|  |  |
| --- | --- |
| Problem | Solution |
| |  | | --- | | Administrator phone becomes an invalid user | | The Admin may lose the administration rights when any of the following happened:   1. Another Phone was setup as a new Admin 2. Operation of “Deleted All Phones” or “Delete All Codes (exclude Management Code)/Cards/Phones including Admin” are performed on keypad 3. Return-to-factory-default |
| No relocking after unlocking | Check if parameter setting is in Passage mode |
| Lock no responding | Change battery and try again |
| Bluetooth communication with the Lock seems no working (For Bluetooth Pairing, Unlocking, or Sync) but other function of Lock is still working | 1. For the App to close, then launch the App and try again 2. If still not working, turn-off Bluetooth function on the phone and turn-on again, then try again 3. If still not working, reboot the phone and try again |