iKey Two Door Kit Programming Guide

Enter programming mode:
To enter programming mode, enter the 4 digit master code number and press the 'E' key. (Put link LK1 on to set the master code).
Note: the factory default master code is 1234E.

    (MASTER CODE) E

If the code is valid you should hear a rising beep to indicate that programming mode has been entered, and the red LED on the controller should flash quickly.
If the code is not valid the keypad will beep twice quickly.
Once in programming mode there are several commands available as listed below. After the completion of a successful command the keypad will 'warble' to indicate the command has been accepted. If the command fails the keypad will do a long beep.

Set Door Release Time:
The door release time can be set from 1 to 30 seconds for door 1 and 2. The command is

    2 * (DOOR) * (TRIGGER TIME) E

For example, to set the time on Door 1 to 3 seconds and the time on Door 2 to 5 seconds you would enter the commands

    2 * 1 * 3 E
    2 * 2 * 5 E

Fail Safe Locking:
The doors relay can be changed from normally open to normally closed if required for use with fail safe locking mechanisms.
The command is:

    6 * (DOOR) * (RELAY STATE) E   Relay state= **0** for normally open (default), **1** for normally closed.

For example, set door 1 for fail safe (normally closed).

    6 * 1 * 1 E

Access Levels:
Keys can be programmed to trigger one or both doors or to toggle (unlock/relock) one or both doors. Each key has an associated 'access level' which defines the capabilities of that key. The access levels are predefined as listed below:

Access level	Door 1 trigger	Door 2 trigger	Door 1 toggle	Door 2 toggle
0				
1	YES			
2		YES		
3	YES	YES		
4			YES	
6		YES	YES	
8				YES
9	YES			YES
12			YES	YES

(Note: To Delete a user you give that key number 'Access Level 0'.)
It is also recommended that you first set all 1000 possible keys to access level 0. This will ensure that all the keys have no access.
This can be done by entering the following commands while in programming mode 3*0E, 4*1*999E

Programming Keys:
1: Add/Edit Single Key:
    1 * (KEY NUMBER) * (ACCESS LEVEL) E

This command adds a single key with the programmed access level. For example, to add key 100 with access to trigger both doors you would enter

    1 * 100 * 3 E

2: Bulk Add/Edit Multiple Keys:
It is possible to program many users in bulk. When doing this we set the required access level and bulk add the required key numbers. This command allows you to program many keys very quickly and very simply.

First, set the bulk key access level:

    3 * (ACCESS LEVEL) E

For example, to set the bulk key access level to access level 3 (trigger door 1 and 2), the command would be

    3 * 3 E

Bulk Add/Edit key numbers:

    4 * (START KEY NUMBER) * (NUMBER OF KEYS) E

For example, to program 500 keys starting at user 50 with the currently set bulk add access level the command is

    4 * 50 * 500 E

Programming bulk keys takes the controller a few seconds; once the keys are programmed it will beep 10 times.

Exit programming mode:
To exit programming mode the command is

    9 E

When entered you will hear a falling beep. Programming mode will also timeout after about 4 minutes of inactivity;

4836: iKey 2 Door Kit Wiring Diagram

13.8VDC 1 Amp Regulated Power Supply

Programming Keypad

DTA (white)

GND (black)

Data Logger

LED1

LK1

IN1
IN2
IN3
IN4

93C66

LK6

AT89C4051

LED3

LED4

LED2

1

2

C1 NO1

C2 NO2

Door 1 strike

Diodes shown above are 1N4001 or similar. It is good practice to fit a diode across the coil of any electric lock. (A diode is included with each silicon key reader).

Door 2 strike

LK1 - ON to set master code and site code
OFF for normal operation

IN1-4 always off, LK6 down.

READER 1   **READER 2**

0V IN1 LED1 +V   0V IN2 LED2 +V   0V IN3 IN4 +5V

The system type must be set to **iKey** before the keys will work.
enter **6 * 3 * 0 E**

The reader's relay can be changed from normally open (NO) to normally closed (NC) for use with fail safe locking mechanisms.

Enter the following commands while in programming mode:

6 * (READER) * (RELAY STATE) E

For example, set readers 1 and 2's relays to: normally closed and normal open respectively.

6 * 1 * 1 E
6 * 2 * 0 E

Door 1 reader

Black (GND)   GND
White (DATA)   IN1
Blue (Green LED) LED1
Red (+5V)   +V

Door 2 reader

Black (GND)   GND
White (DATA)   IN2
Blue (Green LED) LED2
Red (+5V)   +V

Door 1 exit button
(normally open)

Door 2 exit button
(normally open)

If you reverse the relay contact (make the relay normally open), connect the **YELLOW** cable (Red LED) to the controller LED pin instead of the blue cable.

Note: The green LED will normally be off and will turn green when then the door is released.