

# 2. Mounting Procedure

### 1. Before you begin

- Manufacturer and Sellers do not provide vehicle wiring information. Find vehicle wiring information on the internet. Try the links below for more info.
- The principle of iKeyFree sends the pulse signal to lock or unlock the door. Do not connect the Brown or Orange wires to the lock or unlock power line of Vehicle. (Data Modules or Relay may be required on some vehicles)
- It is recommended to have the unit installed at a Car Stereo & Alarm install facility.
- Find vehicle wiring colors on the internet. http://www.bulldogsecurity.com/bdnew/vehiclewiringdiagrams.aspx http://www.the12volt.com/installbay/vehicles.html



# **INSTALLATION MANUAL**

### 2. Product Wires Mapping

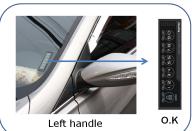
Pin	Color	Description
1	Black	(-) System Ground Input
2	Red	(+12V) System Power Input (at Key box)
3	Brown	(-) Unlock Signal Output
4	Orange	(-) Lock Signal Output
5	*Blue	NOT USED (DO NOT CONNECT)
6	*White	NOT USED (DO NOT CONNECT)

3. Locate the wires and ground in the vehicle, connect the wires from the harness.

- Wires: +12V constant Power, Power lock signal, Power unlock signal

- Ground: Connect the Black wire from the harness to the clean chassis ground.

- 4. Plug the connector from harness to the main unit and check the operation status. After plug it flash 3 times.
  - In case of no touch response, unplug the connector, re-connect it or check the connection. (initial one time to adjust the sensitivity)
  - If proper operation, Unplug the connector
- 5. Keypad placement
  - Clean and wipe the location for the keypad on the windshield
  - If the glass is tinted, it is recommended that you cut off the keypad size and attach the main unit on it.
  - Peel off the red protective vinyl on the keypad.
  - Attach the keypad at the centre of the A-pillar of the front windshield near driver's seat.
    - $\rightarrow$  The direction of #1/2 is downside, and #9/0 are upside (Left side handle)
    - $\rightarrow$  The direction of #9/0 is downside, and #1/2 are upside (Right side handle)
  - Please make sure to affix the keypad completely to avoid air bubble forming



\*Tip!!! for easy and neat affixing the sheet onto the windshield,

- 1) Dip it fully into water in a cup.
- 2) Place it onto windshield.

3) Then, you can move it flexibly and position it properly

4) Sweep it gently with plastic card from up to down to let water drip

5) Leave it over 30 minutes to let dry and securely attach to the glass. Make sure it is attached securely to avoid air bubbles from forming.

- 6. Main unit Attachment
  - Peel off the red protection vinyl on the main unit.
  - Align the main unit with the white line on the keypad precisely.
  - To match LEDs and numbers, make sure to align the LEDs to the LED holes on the keypad.

7. Plug the connector from harness to the main unit and check the operation status.

- Align the white wire of the connector to the arrow mark on main unit.
- Test Lock/unlock the door (see the User's Manual 2,3)
- If no touch response, unplug the connector, re-connect it or check the Wire harness connections.
- 8. Secure the wires and panels of your vehicle.
  - Secure all loose wires around the vehicle ignition and kick panel area.

### 3. Programming \*\* Most of the vehicles are at default state.

- 1. Change the number of Pulses (default :1)
- 2. Change the duration of pulse (default : 0.8 sec)
  - Press and release the reset button on the back of the main unit.
  - Hold down buttons #7/8 until LEDs #1/2, 3/4, 5/6 blink 3 times.
    - 1) For 0.8 seconds, press and release button #1/2.
    - 2) For 3.5 seconds, press and release button #3/4.
    - 3) For 0.3 seconds, press and release button #5/6.
  - Touch the ENTER and then all LEDs blink 3 times.
- 3. Programming of Factory Reset
  - 1) Press and release the reset button on the main unit.
  - 2) Hold down button #9/0 until all LEDs blink 3 times. \* PIN code do not change.

No	Lock Pulses	Unlock Pulses	
1	Press and release the reset button on the back of the main unit		
2	Touch the #3/4 until all LEDs blink 3 times	Touch the #5/6 until all LEDs blink 3 times	
3	Select #1/2, 3/4, 5/6, 7/8, 9/0 for the desired number of lock pulses 1, 2, 3, 4, 5		
4	Touch ENTER button until all LEDs blink 3 times.		

### 4. How to register a smartphone

(at Google play or Apple store)

- 1. Download and install the iKeyFree App.
- 2. Select and touch the iKeyFree icon.
- 3. Select the setting tool.
- 4. Touch the "R" button to register the smartphone. (Max 5)
- 5. Put the smartphone around the iKeyFree closely (10cm).

### At iKeyFree device

1. Press reset button on the back for about 3 seconds and release after the beep sound.

2. All LEDs blink 3 time.

1) Enter the PIN code and touch the ENTER button (initial PIN code "1/2, 3/4, 5/6, 7/8") 2) All LEDs blink once.





3) Touch the desired Register number

\* Registered numbers are LEDs off

\* Unregistered numbers are LEDs on

4) Then the number blink for 2 minutes and processing

5) Register is complete when the blinking LEDs and hour glass has stopped.

### At smartphone

1. Touch "Pairing" the hour glass displays during processing.

2. It takes within 2 minutes. If it does not register, touch the "R" button and "pairing" again.

3. The registered number are illuminated blue.

\* To re-register a smartphone, Forget this iKeyFree

device at Setting and register a smartphone again. (For iPhone only)

## 5. How to Unregister a smartphone (Only at iKeyFree device)

1. Press and release the reset button on the back 3 seconds till the beep sound.

2. All LEDs will blink.

3. Enter the PIN code and touch the ENTER button

4. All LEDs blink once.

5. Touch the Registered Number for  $\ 2$  seconds, all LEDs blink 3 times and completed.

\* Registered numbers are LEDs off

\* Unregistered numbers are LEDs on

# 6. How to adjust the "One touch unlock range" Initial level set at step 5 (5-10m/15-30ft).

1. If you want to change the "One touch unlock range" select the bar you want.

2. We recommend select level 4 or level 5 for the best "One touch unlock range".

### 7. Information

Select the language to get the information (How to use iKeyFree, How to register a smartphone) Korean / English / Japanese .

### 8. Select AUTO / MANUAL

1. If you want to enjoy the outdoor sports such as swimming, jogging, camping

ightarrow Leave the keys & smartphone inside and slide to MANUAL. You can unlock the door

with PIN code on Keypad (not shortcut key)  $\rightarrow$  User options does not work.

### 9. User options

1. Smart Welcome: Approaching the vehicle with registered smartphone, the door unlock automatically.

2. Smart Lock: Exceed the Bluetooth range (20-30m/65-100ft), the door lock automatically.

- 3. Smart Card: Bring the smartphone close to the iKeyFree to lock or unlock the door.
- 4. Connected device LED blink.

5. Device LED off: When the registered smartphone is inside vehicle.







# **USER'S MANUAL**



\* The system can be locked or unlocked by "Touch" with the PIN of 4-10 digits.

\* Backlight functions: If you touch random numbers, the LED light will illuminate for 5 seconds.

### 1. Lock the door

1) Touch the Enter button and then all LEDs blink and the door will be locked.

### 2. Unlock the door

1) **LED light up at ENTER button** (iKeyFree paired to registered smartphone)

- Touch the Enter button (2 sec.) then all LEDs blink 3 times and the door will be unlocked.

### 2) LED off at ENTER button

- Enter 4-10 digits PIN code. (initial PIN CODE "1/2, 3/4, 5/6, 7/8")
- Touch the Enter button and then all LEDs blink 3 times and the door will be unlocked.
- \* Random Security Code is assigned to be entered before entering the PIN code.
- 3. Special lock or unlock (for outdoor activities such as jogging, surfing etc.)

1) Lock the door

- Touch the #9/0 until ENTER button light up.
- Touch the ENTER button and then all LEDs blink and door will be locked.
- 2) Unlock the door
  - Enter 4-10 digits PIN code. (initial PIN CODE "1/2, 3/4, 5/6, 7/8")
  - Touch the Enter button, all LEDs blink 3 times and the door will be unlocked.

### 4. PIN Code Change (initial PIN CODE "1, 3, 5, 7")

At smartphone (Enabled when LED light up at ENTER button)

- 1) Select the Setting mode
- 2) Enter the current password
- 3) Enter the new password
- 4) Touch the Register button

### At iKeyFree device

- 1) Press and release the reset button on the back of the main unit.
- 2) Touch the button #1/2 until all LEDs blink 3 times.
- 3) Enter the New 4-10 digits PIN code and touch the Enter button.
- 4) It will indicate the assigned PIN numbers in order, and all LEDs blink 3 times.

### 5. LED Scan On/Off

1) Hold down the button #5/6 until Enter button LEDs lights up

2) Touch the Enter button and then all LEDs blink 3 times.

#### Cautions

- This system is designed for vehicles with power locks only.
- The contents of this manual and the specifications of this product are subject to change without notice.
- If you input the wrong code 5 times, the system will be locked up for 10 minutes. Then you can use the system again after 10 minutes.

### Specifications

- 1) Supply voltage DC 12V (Negative signal output only)
- 2) Main unit dimensions: 112(W) x 29(H) x 5(D) mm
- 3) Keypad panel dimensions: 125(W) x 32(H) mm
- 4) Operating environment:  $-30^{\circ}$ C  $\sim 80^{\circ}$ C ( $-22^{\circ}$ F  $\sim 176^{\circ}$ F)

### • Security priority levels

Original key (Remocon or smart key) > Pin code key > shortcut key (with registered smartphone key)

- 1) Locked by original key, the door unlock by original car key only.
- (Original key act as a master key, the other keys act as slave keys)
- 2) Locked by pin code key, the door unlock by original key or pin code key.
- 3) Locked by shortcut key, the door unlock by original car key, pin code key, shortcut key.



• The door lock automatically exceed the Bluetooth range (20-30m/65-100ft) as options.

### FCC INFORMATION TO THE USER

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### WARNING

Any change or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.