

iKEY Premier

USER MANUAL

iKEY SYSTEM FUNCTIONS

1. Proximity Door Unlock / Alarm Disarm

Approach the vehicle and when the iKey enters the sensing range, the system will disarm and unlock the doors immediately. If horn enabled, the parking lights will flash 2X. If siren enabled, the parking lights and siren will flash and sound 2X. The status LED indicator light will flash BLUE to indicate the system is disarmed.

2. Proximity Door Lock / Alarm Arm

Walk away from the vehicle and after the iKey exits the sensing range, the system will arm and lock the doors immediately. If horn enabled, the parking lights will flash 1X. If siren enabled, the parking lights and siren will flash and sound 1X. Status LED indicator light will flash BLUE and RED alternatively to indicate the system is armed.

3. Remote Unlock / Disarm

While the iKey is outside the proximity sensing range: Press and hold the UNLOCK button for 1 second to manually disarm and unlock the doors. If no door is opened and LOCK button is not pressed within 30 seconds, the system will re-arm and re-lock the doors automatically 30 seconds later. If any door is opened and then closed within 30 seconds, the system will re-arm and re-lock the doors immediately 30 seconds later. If any door is opened but not closed within 30 seconds, the system will re-arm and re-lock the doors 5 seconds after all the doors are closed.

4. Remote Lock / Arm

While the iKey is outside the proximity sensing range: Press and hold the LOCK button for 1 second to manually lock the doors and arm the vehicle.

With the iKey is within the proximity sensing range: Press and hold the LOCK button for 3 seconds to override iKey function and manually lock the doors.

Caution: Doors will not be opened until iKey exits and re-enters the sensing range. **DO NOT LEAVE IKEYS INSIDE THE VEHICLE WHEN NOT PRESENT.

5. EMERGENCY CARD Unlock and Alarm Disarm

Your Emergency Card provides an alternative method to gain access and start your vehicle. It's useful in the event your iKey becomes lost, damaged, battery depleted, submerged in the liquid, etc.

Place your Emergency Card next to the bypass antenna for 5 seconds to disarm, unlock doors and enable the Push-Start Ignition system. Once the Emergency Card is removed from the bypass antenna, the system will lock and arm after 30 seconds. User must enter and start the vehicle within this 30-second window to avoid triggering alarm function. If longer disarm time is required, leave the Emergency Card over the bypass antenna to disarm continuously.

Note:

1. After driving with the Emergency Card, turn off the ignition, the Start Button will be deactivated after 10 seconds.
2. The Key-Not-Found Reminder Function will be activated while driving with the Emergency Card.

6. Remote Trunk Release

To release the trunk, press and hold the TRUNK RELEASE button for 3 seconds. Please note the system will disarm the vehicle before opening the trunk. Make sure to close the trunk and arm the system when done.

Note:

1. In PKE mode and iKey is outside the proximity sensing range, the doors and trunk will re-lock 60 seconds later if all doors and trunk are closed.
2. While PKE is disabled temporarily for car washing or permanently via Dip Switch, the doors and trunk will not lock automatically after Remote Trunk Release.
3. While the engine is running, ignition in ACC or ON state, the trunk release output will be deactivated.

7. Panic Function

While the iKey is outside the proximity sensing range: Press and hold the LOCK button for 3 seconds to activate Panic Function. The parking lights will flash and horn/siren (if enabled) will sound for 30 seconds. If the vehicle was remotely started, the engine will shutdown immediately. Press LOCK, UNLOCK or TRUNK RELEASE button to exit the Panic mode.

Note: While the PKE function is disabled permanently via Dip Switch, please press the TRUNK RELEASE button to exit Panic mode.

8. TACH Ignition Programming

Tach Learning procedures:

1. Depress Brake Pedal,
2. User pushes and holds down Momentary Switch Button. This should start the vehicle and initiates "Tach Learning" mode.
3. User Releases Switch Button as soon as engine starts. The "Release point" establishes the Starter Crank Duration Time.

User continues to hold down Brake Pedal until engine is at low idle. When user releases Brake Pedal it establishes the AC Run Voltage from the Tach Source. If Tach Learning was successful, parking lights flash 2 times and horn honks 2 times. If unsuccessful parking lights flash 4X and horn honks 4X.

If battery is disconnected – the System still retains Tach learning point data. *** If customer wants to relearn the Tach to change the start point- Customer repeats procedure.

9. Start Button Operations

DP1 on DIP3: This switch in UP (OFF) position - Tach Mode

DP1 on DIP3: This switch in DOWN (ON) position - Tachless Mode

Tach Mode

- Apply the brake and tap the start button once to START.
This can be done from any mode (OFF, ACC or ON).
- Alternatively in an emergency situation, without applying the brake from OFF state, press and hold the start button for 3 seconds to START.
- If the system failed to sense the Tach signal (i.e. engine stall) it will exit to the ignition (ON) mode. You

can restart engine by applying brake and pressing the start button.

Tachless Mode

Non-Diesel Vehicle:

- Apply the brake and press -and-hold the start button to START. The starter cranks so long as the button is being pushed (up to 6 seconds). This can be done from any mode (OFF, ACC or ON).
- Alternatively in an emergency situation, without applying the brake while in OFF state, press-and-hold the start button for 3 seconds to engage engine to START, release button after engine started.
- If your engine failed to start after you released the Start Button, the system will have entered RUN mode and you must press the Brake and then hold the Start Button to exit the RUN mode before attempting to restart the engine.

Diesel Vehicle:

Without applying the brake while in OFF state, press and release the Start Button twice to turn the ignition ON, wait till the Glow Plug Light goes out, then apply the brake and press -and-hold the start button to START.

To Turn Your Engine OFF

- Apply the brake then press-and-hold the start button for one second to turn OFF the ignition.
- Alternatively in an emergency situation, without applying the brake, press-and-hold the Start Button for 3 seconds to turn OFF the ignition.

10. Authorization of PSB Module

This allows us to use the PBS module as a standalone product with an existing alarm. The existing alarm provides either a Ground when Armed or Ground when Disarmed as the authorization signal. Selected via Dip Switch DP2 on DIP3. Detailed below:

DP2 on DIP3 in UP (OFF) position: Authorization when Grounded. * If the PSB sees a Ground Pulse on the purple wire the PSB should Authorize for 60 Seconds. ** If the PSB sees a Ground Latched, the PSB should Authorize for as long as the Ground signal remains on the purple wire.

DP2 on DIP3 in DOWN (ON) position: Authorization when Ground disappears from purple wire. The PSB should not operate when the purple sees a ground, but should authorize when the Ground signal disappears.

11. Remote Start

With the iKey outside the proximity sensing range, press and hold the TRUNK RELEASE and LOCK buttons for 3 seconds. The parking lights and siren (if enabled) will flash and sound 1X to indicate remote start signal received. After 5 seconds the system will attempt to start the engine. If vehicle does not start at the first attempt (i.e. cold engine start), system will attempt to start the engine up to 3 times. Once started vehicle will run for 15 minutes---parking lights will remain ON during this period.

Note:

1. Press and hold the TRUNK RELEASE and LOCK buttons for 3 seconds to shutdown the remote start.
2. For diesel vehicle there will be a delay while the vehicle's Wait-to-Start Light is ON. After 18 seconds the system will proceed to start the engine regardless.
3. The engine will shut down after remote start if the RPM is too high. (Example: If floor mat got stuck on gas pedal.)
4. If Hood is not closed the remote start will fail.
5. Remote cannot be proceeded before performing Tach Learning.

12. Remote Start Ignition Take Over Procedure

After vehicle is remote started, use the following steps to takeover ignition without restarting the engine:

1. Approach the running vehicle with a valid iKey to disarm alarm and unlock doors.
2. Enter the vehicle and without stepping on the brake, press the Start button once.
3. Step on the brake to exit Remote Start mode. (Start Button's status LED turns OFF and backlight stays ON) Vehicle is now safe to take out of the Park to drive.

13. iKEY Keyless Entry Function Enable/Disable

A. Disable Passive Keyless Entry function temporarily:

iKEY Passive Keyless Entry function can be disabled for car wash, service, valet purposes.

To disable/enable this function: With ignition OFF, press and hold the LOCK and UNLOCK buttons together for 3 seconds until horn honks. Vehicle will honk once if function is enabled or twice if disabled.

While the iKey Passive Entry function is disabled, the security status LED will light solid Blue.

Attention if the iKey Passive Keyless Entry function is disabled:

- A valid iKey is still required and sensed within the proximity to disarm alarm and start the vehicle. Entering or starting the vehicle without the iKey will set off the alarm function.
- Doors will not be locked or unlocked automatically when departing or approaching the vehicle. Make sure to lock the doors manually when departing from the vehicle.

B. Disable Passive Keyless Entry function permanently:

If you want to disable this function permanently, power OFF the Control Module, pull down the Dip Switch DP1 on DIP5, then power ON the Control Module again. Now the Passive Keyless Entry function has been disabled permanently, the system will not detect the iKEY signals, the security status LED will flash Purple when armed.

14. Security & Alarm Functions

The Security & Alarm function monitors the shock sensor, door switch, hood switch, brake and ignition while the system is in armed state. If vehicle is violated the system will sound horn (or siren if installed) and flash parking lights for 30 seconds. However, ignition and starter function will be disabled until disarmed by a valid iKey or an Emergency Bypass card. Security LED will flash Red upon disarm to remind driver that the alarm function was triggered while away.

Alarm function can be disabled via DP2 on DIP5.

Attention if the Security/Alarm function is disabled:

- Alarm will not sound when the shock sensor, door, hood and ignition triggered.
- The Push-Start system will function normally.
- After alarm function is disabled, the security LED will flash RED-RED-BLUE-BLUE when armed.

15. Ignition Controlled Door Lock/Unlock Function

Ignition lock function will automatically lock the doors when the brake is applied 15 seconds after vehicle started. Doors will automatically unlock when the ignition is turned OFF. The default setting of this function is ON.

To disable this function, while the alarm is disarmed with ignition OFF, do not depress the foot brake, push the Start Button twice to turn the ignition ON, then depress and release the foot brake continuously 6 times

within 10 seconds, the horn will honk twice to confirm. Repeat the operation to enable this function, the horn will honk once to confirm

16. Door-Not-Closed Reminder Function

Leaving the iKey sensing range with the doors open or ajar will trigger the Door Not Closed Reminder. Vehicle will chirp the horn and flash the parking lights twice to warn the driver that one or more doors are not closed. The system will remind the driver 3 times in total. If doors remain open after the warning, system will lock the doors regardless. Parking lights will continue to flash for additional two (2) minutes however, vehicle will be armed and the engine start will be disabled.

To disable/enable this function: with door open, switch ignition to ACC, depress and hold brake pedal then press and hold the TRUNK button and UNLOCK button together for 2 seconds until horn honks. Vehicle will honk once if function is enabled or twice if disabled.

17. Dome Light Delay (The default setting is OFF)

This function is for vehicles with dome light delay. If dome light delay function is enabled, the doors will arm 30 seconds later after locking. If there is any door not closed 30 seconds after locking, the Door Not Closed Reminder Function will be triggered.

Dome light delay function can be enabled/disabled via DP5 on DIP5.

DP5 in UP position (OFF), dome light delay is disabled.

DP5 in DOWN position (ON), with 30-second dome light delay.

18. Key-Not-Fund Reminder (If iKey leaves sensing range with vehicle running)

If vehicle door is open-then-closed while vehicle is running it will trigger the system to search for the iKey for 6 seconds the next time the brake is applied. Vehicle will do nothing if iKey is found. If the iKey is not located, vehicle will chirp the horn and flash the parking lights twice. This is to remind the current driver that the iKey is no longer detected and if need needs to be present in the vehicle before it is driven to another location. Without the iKey, once the vehicle is turned off it will not be able to start again. However the bypass transponder could be used for START in this case.

To disable/enable this function: with door open, switch ignition to ACC, depress and hold brake pedal then press and hold the TRUNK button and LOCK button together for 2 seconds until horn honks. Vehicle will honk once if function is enabled or twice if disabled.

19. Alarm Shock Sensor

Any impact to your car while armed will trigger the shock sensor to respond. Depending on the severity of the shock, the system can react to a full shock by triggering the alarm function (horn sounds and parking lights flash for 30 seconds) or it responds to a lighter shock (30% of the strength of a full shock) and giving a warn-away alarm by honk and flash parking lights 5 times. To acknowledge and stop a shock triggered alarm, approach the vehicle with the iKey or press LOCK or UNLOCK button.

20. Auxiliary Output Function

With ignition OFF:

Press TRUNK button first then press UNLOCK button to activate the AUX 1 for 2 seconds.

Press TRUNK button first then press LOCK button to activate the AUX 2 for 2 seconds.

21. Vehicle Battery Power Saver Function

System will reduce the iKey search frequency after 7 days of inactivity to conserve vehicle battery. In this case, the Smart Key sensitivity will be reduced and it takes longer (8-10 seconds) to identify the iKey or the Bypass Transponder Card. Press the UNLOCK button once will also exit the Power Saver mode.

22. Auto Windows Closing (Additional Window Roll Up Module needed)

If window closer module is installed, windows and sunroof left open will be closed in sequenced when vehicle is armed / locked.

23. iKey(s) and Emergency Bypass Card(s) Programming

If required, use the following procedures to program a new set of iKeys and/or Emergency Bypass Card(s). Both iKeys and the Emergency Bypass Card(s) must be present and accessible during programming.

There are 2 ways to enter the programming mode to program new iKey(s) and/or Emergency Bypass Card(s).

Method 1:

Disarm the system with a valid iKey or Emergency Bypass Card.

Switch ignition to ACC, depress and release the brake pedal continuously 3 times within 5 seconds, then press and release the UNLOCK button on a new or old iKey 3 times, the horn/siren will chirp 3 times, the system's Red/Blue status LED will turn solid Red indicating the system enters iKey programming mode.

Method 2:

Open the case of the Control Module, push the Program Button on the Control Module Board two times, the horn/siren will chirp 3 times, the system's Red/Blue status LED will turn solid Red indicating the system enters iKey programming mode.

iKey(s) and Emergency Bypass Card(s) Programming

While the system is in iKey programming mode, press and hold the LOCK button on the 1st iKey transmitter for 3 seconds until the horn honks once. Then repeat the same procedure for the 2nd, 3rd or 4th iKey transmitter, the horn will honk 2, 3, or 4 times. Then the status LED turns Blue, indicating the system enters Emergency Bypass Card programming mode. Hold the 1st Bypass Card to the Bypass antenna until the horn honks once. Hold the 2nd Bypass Card to the Bypass antenna, the horn honks twice. Wait for 3 seconds, the horn honks 5 times then the system exits programming mode.

Notes:

1. While the system is in iKey programming mode, if there is no transmitter programmed within 15 seconds, the horn will honk 4 times indicating the system enters Emergency Bypass Card programming mode.
2. While the system is in Bypass Card programming mode, if there is no Bypass Card holding to the Bypass antenna within 15 seconds, the system will exit the programming mode and the horn will honk 5 times to confirm.

3. After programming any quantity of transmitter or bypass card, all data of the transmitter(s) and/or bypass card(s) programmed last time will be deleted.
4. In the same programming mode, if program a transmitter for the second time, the horn will honk 3 times indicating this transmitter has already been programmed.
5. The system can program up to 4 iKey transmitters and 2 Bypass cards.

Dip Switch Settings

A. 5 DIP SWITCHES (EXTERNAL)

Dip Switch	OFF	ON
DP1	PKE ON	PKE OFF
DP2	Alarm Function ON	Alarm Function OFF
DP3	Single Pulse Unlock	Double Pulse Unlock
DP4	Horn	Siren
DP5	Dome Light Delay OFF	30-Second Dome Light Delay



B. 3 DIP SWITCHES (INTERNAL)

Dip Switch	OFF	ON
DP1	Tach Mode	Tachless Mode
DP2	Authorization when Grounded	Authorization when Ground disappears
DP3	Remote Start Function ON	Remote Start Function OFF



FCC Requirement

changes or modifications not expressly approved by the party responsible for compliance could void the user' s authority to operate the 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.

Note: 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 communications. 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 or more 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.