

Keyless system

SMART PKE

type PF2

FORD Focus / FORD Fiesta / FORD Mondeo



User's and installation guide

1. Introduction

This device is an enhanced replacement of the OEM remote part, with own keys and electronics. Remote and main unit generates PKE (passive keyless entry function) system providing vehicle contact less locking and unlocking, when leaving or approaching the vehicle. Moreover, this device also allows activating windows roll up function. Device can be used as simple alarm to secure your vehicle against theft, it includes a shock sensor.

What is the difference between our smart PKE system and common aftermarket PKE systems?

This device has very simple installation. Whole system intelligence is in remote and main unit. Only 12V, Ground and ACC need to be connected. This system is update of the original technology, other aftermarket PKE require complicated installation and can work unreliable.

What is power consumption of SMART PKE system?

The PKE system has nearly the same power consumption as OEM remote. Remote controller battery lasts about 1 year. If the vehicle is not used for more than 3 days, the main unit will turn to save mode, PKE function is OFF, but doors can be open by pressing the unlock button. PKE function will turn ON again, when ignition is turn ON/OFF (or ACC). When ignition is ON, PKE system is not active. This system use RFID communication. The remote sends signal when it capture signal transmitted from the control unit. This way battery power is saved effectively, as the remote out of RFID signal does not transmits.

2. Functions

1. **PKE function.** This function is identical to the OEM remote functions. Press lock button (2) to lock the doors, or press unlock button (1) to unlock the doors, hold the trunk button (3) for 2 seconds to open the trunk.
2. **PKE function.** Hands free lock / unlock and arm / disarm alarm function within 1 – 3 meter range. (see below).
3. **Lock / unlock notice.** When lock the doors, PKE system siren beep once, when unlock the doors, PKE system siren beep 2 times (depends on setting, see the scheme). Lock or unlock the vehicle is also confirmed by the internal system of the vehicle (indicators flash), if vehicle allows it.
4. **Shock sensor alert.** If shock sensor sense vibrations, siren will beep for 10 seconds.



3. System activation

3.1 Remote system activation

To make this system work, remote has to be programmed. This has to be done same way as adapting an OEM remote. Remote programming can be done in local dealer center, by using specifically learning process for FORD vehicles.

3.2 Learning PKE main unit into the remote

Remote control supplied with the system is already coded. If purchasing additional remotes, it is necessary to programming them this way:

- a. Press service button on the side of main unit for 3 seconds. The main unit will start the process. Next step should be finished in 20 seconds.
- b. Press and hold unlock button along with pressed lock button within 5 seconds hold lock button on the remote.
- c. Release the buttons, learning process start, after 5 seconds process ended.
- d. When coding another remote, repeat steps from b point

3.3 PKE doors and trunk lock / unlock activation

Main unit must be connected to power supply, ignition (or ACC accessories) and at least one antenna must be connected. We recommend connecting both antenna and placing them as pictures shows.

PKE function can be deactivated by simultaneously pressing trunk button and unlock button for 4 seconds.

PKE function can be activated by simultaneously pressing trunk button and lock button for 4 seconds.

When PKE function is OFF, locking / unlocking can be controlled by using remote buttons.

Notice

Vehicle can be locked also by remote button. When user will move away from vehicle, system verifies the vehicle lock. If vehicle would not be locked, system will try to lock it again.

3.4 System activation for alarm function

Connect shock sensor to main unit connector.

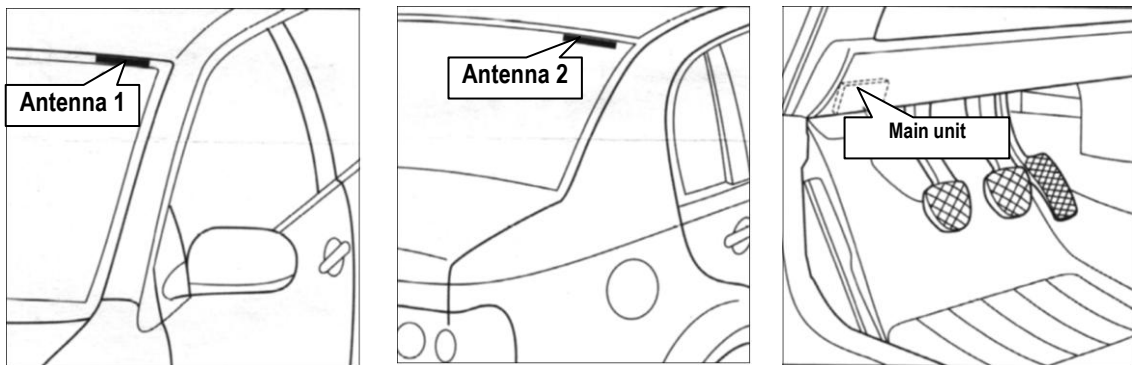
Locking / unlocking confirmation is usually indicated by sound and light signals directly in the vehicle. If we want to use the alarm function, it is necessary to bring the signals used to discern the lock / unlock sequence of the vehicle.

Connect the yellow wire to indicators as scheme shows. Based on their flashes, PKE system recognizes when to activate the alarm function. (Indicator light flash 2 times) or deactivate (indicator light flash 1 times longer). Shock sensor turn ON when alarm successfully activated. Connect black / white wire to original car's siren (horn).

ATTENTION !

It is not recommended to activate this function, if there are small children or pets in the vehicle! Unexpected window roll up, when remote will be moved away from vehicle, can result in serious injury of the people or pets!

4. Installation

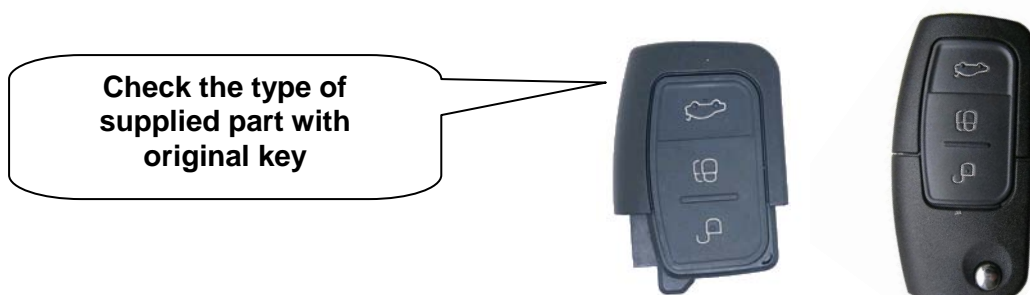


5. Specifications

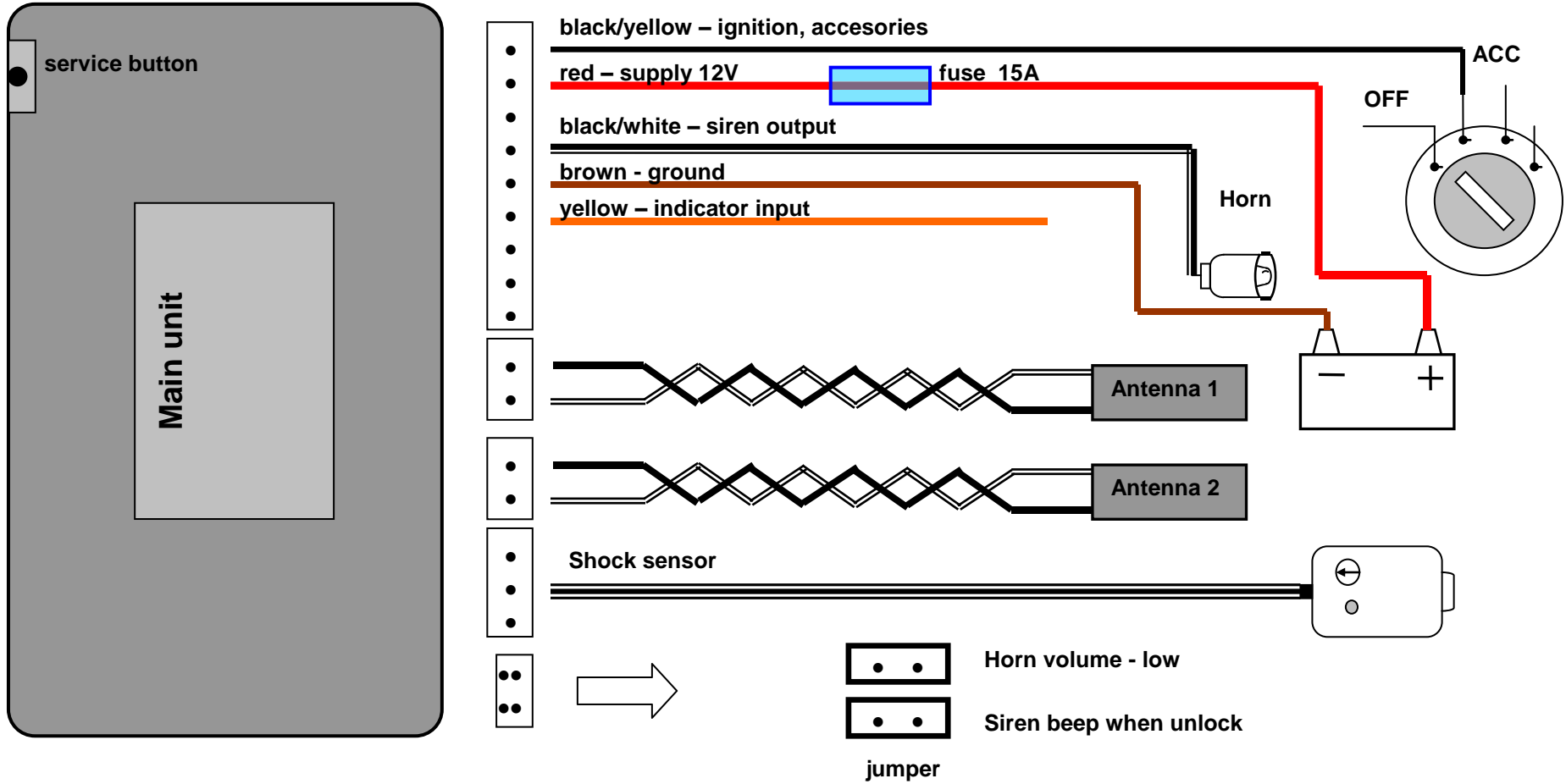
- **LF actual distance** 1-3m
- **Average consumption** $\leq 17\text{mA}$
- **Operating range** DC 10-15V
- **Remote battery** 1x CR 2032

Intelligent sleep key 5uA, 3V
Operating coil frequency : 125kHz
Operating RF frequency: 434 MHz; 433 MHz
Operating temperature -40 °C – +85 °C
Duration of transmit : 500ms sequential

6. Supported vehicles



Installation diagram SMART PKE system



It is possible to enable siren beeping when unlock or set lower intensity by connecting connector's pins by supplied jumpers

