Keyless system

SMART PKE
type PV5 & PV7

VW/AUDI/SEAT/SKODA
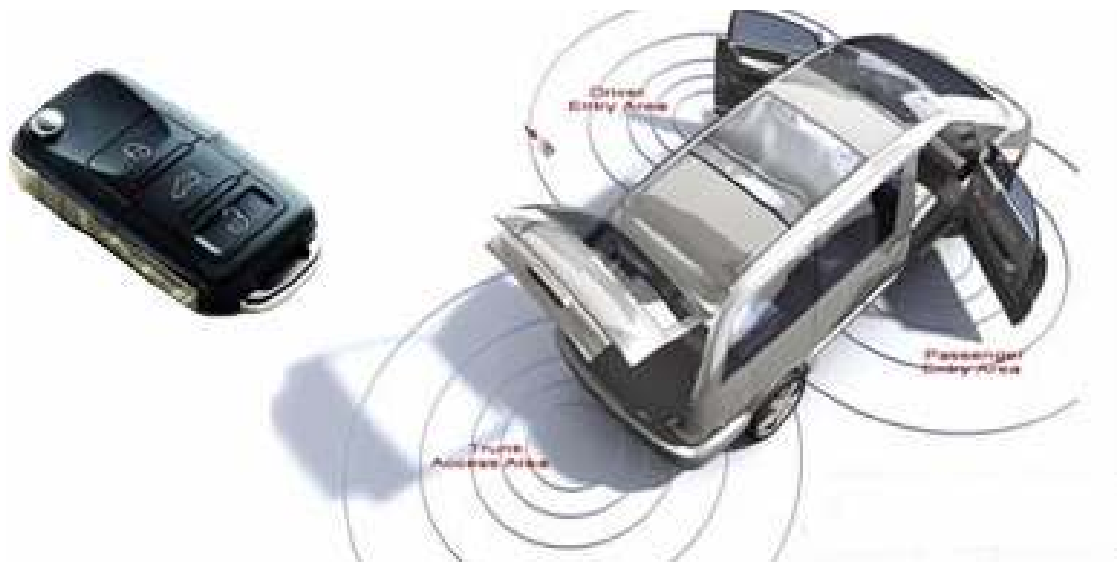
User's and installation guide

PHOBOS
SYSTEMS

1.4

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 (3) to lock the doors, or press unlock button (1) to unlock the doors, hold the trunk button (2) for 2 seconds to open the trunk. For panic mode use button (4).
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. **Windows auto close.** When you leave the vehicle with smart remote for 3 meters, the doors will lock automatically and the windows will roll up automatically (if vehicle allows it).
5. **Shock sensor alert.** If shock sensor sense vibrations, siren will beep for 10 seconds**.**
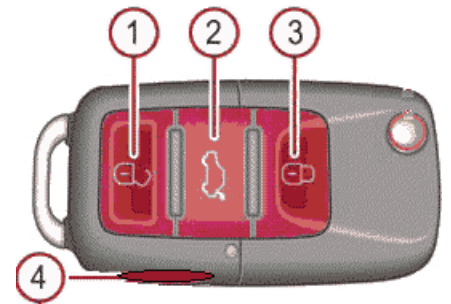
3. System activation

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 VAG-COM software. VAG-COM is computer program for car diagnosis, which is through a personal computer connected to the control units of all Volkswagen Group vehicles (Volkswagen, Audi, Seat, Skoda).

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 2 seconds. Remote LED flash 3 times. The main unit will start the process. Next step should be finished in 20 seconds.
   b. Press and hold lock button on the remote, LED start flashing.
   c. Than press and hold unlock button along with pressed lock button. LED stop flashing, but will be ON.
   d. Release the buttons, learning process start, LED flash 2 times to confirm successful coding
   e. 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 again by simultaneously pressing trunk button and unlock 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 once) or deactivate (indicator light flash 2 times). Shock sensor turn ON when alarm successfully activated. Connect black / white wire to original car's siren (horn).

3.5 Windows auto close

Green wire has 20 second roll up impulse, it has to be connected to central locking main unit. For this function, yellow wire has to be connected. See chapter 3.4.

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

Antenna 1

Antenna 2

Main unit

Check your keyless part number here
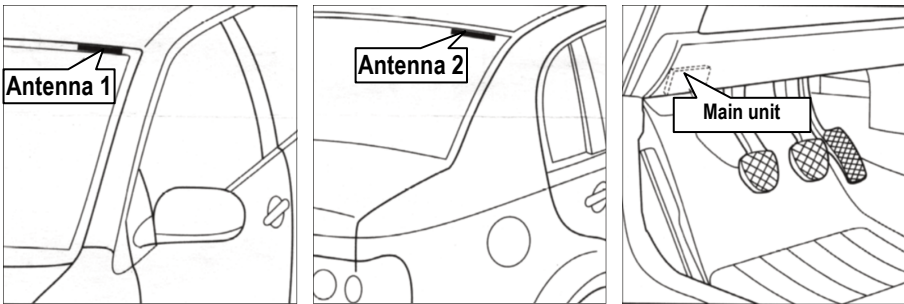
5. Specifications

- **LF actual distance** 1-3m
- **Average consumption** ≤ 17mA
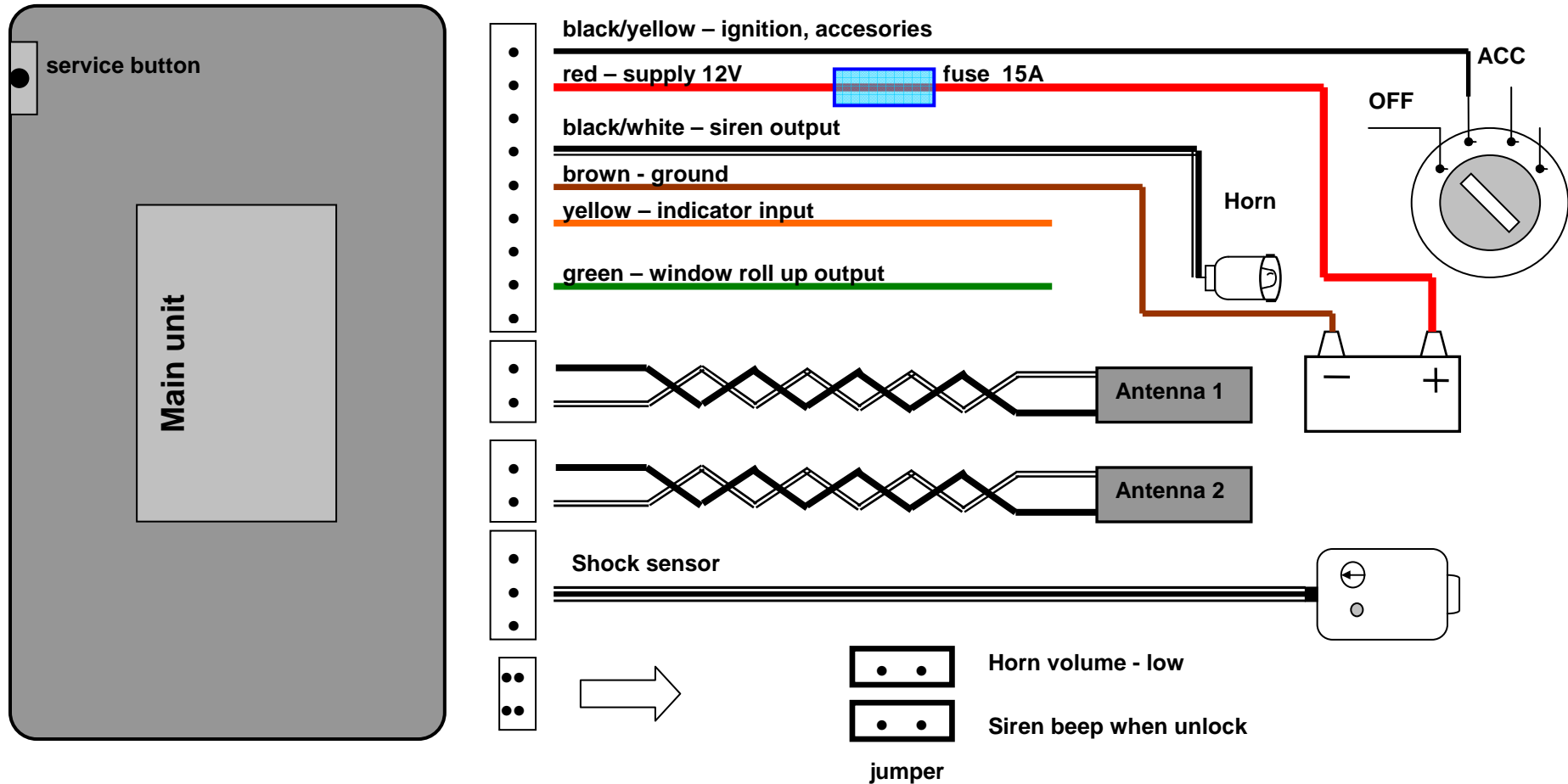- **Operating range** DC 10-15V
- **Remote battery** 1x CR 2032

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

6. Supported vehicles

Possible remote types

Type	Vehicles	Part number of the original KEY	Country	MHz
PV7	Some latest VW	1K0 959 753 N	everywhere	434
PV5	02- VW, SEAT, SKODA	1J0 959 753 CT/AG/DA/AH 1K0 959 753 G	Europe (Middle East)	434

Installation diagram SMART PKE system

service button

Main unit

black/yellow – ignition, accesories

red – supply 12V   fuse 15A

black/white – siren output

brown - ground

yellow – indicator input

green – window roll up output

Horn

ACC

OFF

Antenna 1

Antenna 2

Shock sensor

Horn volume - low

Siren beep when unlock

jumper

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