WARNING: Carefully read following instructions and technical specifications in this manual before installation. The system must be installed and used only according to this manual. The system is designed for vehicles with 12V power supply. It has to be connected to 12V output and to the ground. Neither producer or seller of the system is responsible for damages caused by incorrect installation, using or operating of this product. Unprofessional operation or modification of the system can damage the system alone, or the electric system of the vehicle and leads to warranty loss. For proper working of the system we recommend the installation to be made by authorized service.

#### SYSTEM DESCRIPTION

IMOTEC is immobilization unit with contactless control and its suitable for vehicles with 12V power supply. Serves for better protection of your car and against turning ignition ON by an unauthorized person. IMOTEC can work in two modes. In first mode it is necessary to press the button on RC to deactivate system, in second mode RC must be within range of control unit and system will be deactivated automatically.

#### SYSTEM FUNCTION

Imobilizer with contacless control IMOTEC can work in three modes.

**MODE A -** In this mode it is necessary to push the button on RC to deactivate system. After turn ignition ON imobilizer is deactivated for 10 seconds and it is neccessary to press the button on RC. If you don't press the button, imobilizer will be activated and vehicle cannot be started. After receiving the signal from the remote control, system will be deactivated. If you turn ignition OFF after 3 minutes after receiving signal from RC, system will activate after 10 seconds from turn ignition ON, until you press the button on RC again.

MODE B - In this mode system will deactivate automatically after ignition is turned ON, if RC is within range of control unit (max. 5m). If you turn ignition OFF after 3 minutes after detecting RC, system will activate after 10 seconds from turn ignition ON, if RC is not within range of control unit.

**ANTI-HIJACKING MODE -** In this mode, if ignition is turned ON, system check if is RC within range every 60 seconds. If RC is without range of control unit, system start beeping for 1 minute (beeps 5 times and interrupt immobilization circuit for 1 second). If RC is still out of range, system interrupts immobilization circuit permanently and still beeping. The system is automatically deactivated when the remote control comes within range of the control unit, or you can disable it using PIN code (procedure of entering the PIN code is the same as for emergency deactivation).

## **ACTIVATION**

After ignition is turned ON, immobilization circuit is connected for 10 seconds. For this time, if you don't press the button on RC (mode A) or RC is out of range (mode B), immobilization circuit will be interupted.

**Note:** It is inappropriate to disconnect starter circuit because the system is activate after the ignition is switched on for 10 seconds. If system won't deactivate within 10 seconds, after turning ignition ON is activated immediately. System is automatically activateds after 3 minutes from deactivation and turning ignition OFF. After turn ignition ON, system is activated.

# **DEACTIVATION**

After ignition is turned ON, press the button on RC (mode A) or put the RC within range of control unit (mode B) within 10 seconds. System is deactivated. If you turn ignition OFF after 3 minutes from deactivation, in mode A it is necessary to press the button on RC within 10 seconds to prevent system activation.

## **SERVICE MODE**

At service mode, is system permanently deactivated and immobilization circuit is permanently closed.

## **TEST MODE**

At test mode, control unit constantly comunnicates with RC. If RC is within range, buzzer beeps 1x every 10 seconds. If RC is out of range, buzzer not beep. This mode is suitable for testing range of RC.

## **LOW BATTERY INDICATION (RC)**

If battery is low in your RC, system automatically switch to low battery mode.

## **SET MODE USING RC**

Each mode can be set by holding button on the remote control when the ignition is turned ON. Mode is shifted from the current to the next. Each selected mode is indicated by flashing LED on the remote control. Modes can be switched following this table:

**Note:** You can find in which mode the system is by short press of the button on the remote control

Mode	LED signalization on RC	
Mode A	1x green flash	
Mode B	2x green flash	
Anti hijacking mode	1x red flash	
Low battery mode (RC)	2x red flash	
Service mode	1x orange flash	
Test mode	2x orange flash	

#### **EMERGENCY DEACTIVATION**

System can be emergency deactivated using PIN code. PIN code is factory set to **222**.

- turn ignition ON and wait 1 minute, until buzzer beeps once
- after beep you are entering numbers of PIN code
- first number: Turn OFF/ON ignition so many times , which is the value of first number of PIN code and leave ignition turned ON. Buzzer beeps 1x.
- second number: Turn OFF/ON ignition so many times , which is the value of second number of PIN code and leave ignition turned ON. Buzzer beeps 2x.
- third number: Turn OFF/ON ignition so many times , which is the value of third number of PIN code and leave ignition turned ON. Buzzer beeps 3x.
- after system beeps turn ignition OFF/ON. If you enter correct PIN code, buzzer sounds a long beep and the system is emergency deactivated. If you entered wrong PIN code, buzzer beeps 4x and system is still activated.

**WARNING!** After emergency deactivation leave the ignition switched on at least 15 seconds, so you have not entered into entering a new PIN code!

#### **PIN CODE CHANGE**

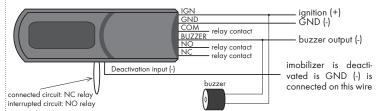
- system must be activated
- emergency deactivate the system using PIN code. After long beep, start with programing new PIN code within 10 seconds. PIN code change mode is automatically ended after 10 seconds.
- value of numberes is entering by turning ignition OFF/ON. Numbers of PIN code must be from **1** to **9**.
- first number: Turn OFF/ON ignition so many times , which is the value of first number of PIN code and leave ignition turned ON. Buzzer beeps 1x.
- second number: Turn OFF/ON ignition so many times, which is the value of second number of PIN code and leave ignition turned ON. Buzzer beeps 2x.
- third number: Turn OFF/ON ignition so many times , which is the value of third number of PIN code and leave ignition turned ON. Buzzer beeps 3x.
- turn ignition OFF/On after beep. Buzzer sounds with long beep and new PIN code is set.

**WARNING!** Keep your new PIN code in safe, because system cannot be set back to factory settings!

# PROGRAMING REMOTE CONTROLS

- system must be activated
- remove batteries from remote controls which will be programmed
- deactivate system with emergency deactivation using PIN code and turn ignition OFF/ON. Start programming RCs after long beep within 15 seconds. Programming mode is automatically ended after 15 seconds.
- RC will be programed by inserting the battery and short pressing of the button. After programming buzzer beeps once. Other RCs will be programed by the same way. At second RC buzzer beeps twice etc. After programming fourth RC, programming mode will be automatically ended. When programming new RCs, old RCs will be erased, so they need to be reprogrammed. You can program max. 4pcs of RC.

## **SCHEMATIC**



TECHNICAL PARAMETERS	
Power supply	9 - 16 V
Current - deactivated	14mA
Current - activated	70mA
Working frequency	2400 - 2483 MHz
Range	5m
Operational temperature	-40°C - 85°C
Contact current	30A
Battery life in RC (mode A)	4 years
Battery life in RC (mode B)	18 months