SYSTEM DESCRIPTION:

TS IMO v2 is 12/24V immobilizer with an option of contactless controlling of the system with a possibility of extension by siren. The purpose of a product is to increase the security of a vehicle against an unauthorized person. The authorization itself is proceeded by remote controller RC SMART 2, RFID plastic card or by putting in a validation sequence (PIN sequence code created by a combination of original components for example hand brake and foot brake or similar). You can configure combinations of authorization which means you can choose if you want to be authorized only by remote controller or by card and pin code or combine them all for another increase of security.

PROCESS OF AUTHORIZATION:

Authorization beginning by turning on the ignition or by opening the driver's door (depend on a type of installation). When you turn on an ignition you will hear double beeping at the 1-second interval during 5 seconds, if authorization is not successful during this period, the immobilization circle is activated.

AUTHORIZATION BY REMOTE CONTROL RC SMART 2

Remote control RC SMART 2 can operate in two modes.
1. Manual mode: you have to press the button on the remote controller for authorization before driving itself (when the ignition is on)
2. Automatic (contactless) mode: authorization is automatically done just by the presence of RC SMART 2 in a vehicle, no need to pressing any button.
PLEASE ATTENTION! Automatic mode is deactivated by a drop of voltage on an RC SMART 2 and that is because of keeping the functionality of a system in Manual mode until you replace the battery in an RC SMART 2, we recommend replacing the battery as soon as possible (battery CR2450)

ACTIVATION / DEACTIVATION OF AUTOMATIC (CONTACTLESS) MODE OF A REMOTE CONTROL

Activation/deactivation of this mode is possible any time, there is no need to go see the instalation center. To be able to do this you need to press the button 3 times quickly on RC SMART 2 and then hold the button for 2 seconds. LED will flash either once or twice depending if the function is activated or deactivated (one flash – activated, two flashes – deactivated)

SETTINGS RANGE OF AUTOMATIC (CONTACTLESS) MODE

There are pre-set 4 levels of range for RC SMART 2 which you can choose.
I. Level – 5m, **II.** Level – 10m, **III.** Level – 15m, **IV.** Level – 20m. To switch between levels you need to press the button 2 times quickly on RC SMART v2 and then hold the button for 2second. LED will flash either once, twice, three or four times depending on which level is set.

DESCRIPTION OF REMOTE CONTROLLER RC SMART 2

Button
LED diode

Button	Functions	Conditions	Signalization
Pressing button 1x	Deactivation of system	System must be activated	LED is flashing quickly
3x quick pressing and hold for 2 sec	Activation/deactivation of automatic mode	none	LED flash once (turn on) twice (turn off)
2x quick pressing and hold for 2 sec	Setting of range for RC SMART v2	none	LED flash once, twice, three or four time

AUTHORIZATION BY RFID PLASTIC CARD:

Authorization is proceeded by getting a card near an RFID antenna. Because of the security reasons the RFID antenna is hidden in the vehicle. For the exact place please contact your service where you have been provided with the installation.

AUTHORIZATION BY VALIDATION SEQUENCE:

You can put in validation sequence even before you turn on your ignition. Afterward, PIN code is valid for 120 seconds, what means that during this period you should turn on an ignition otherwise you have to repeat the whole process again. In case you putting a validation sequence during turned on ignition you extend the time for putting a code by 5 seconds with every press of original components but only up to 25 seconds.

AUTHORIZATION VALID AFTER TURNING OFF IGNITION:

This is a period of time when you do not need to authorize yourself again. The period after turning off the ignition is 120 seconds.

PROGRAMING OF NEW REMOTE CONTROLS

You can code into system up to 10 remote controls but because of security reasons contact your installing centre for adding them into your system.

PROGRAMING OF RFID PLASTIC CARDS

You can code into system up to 10 remote controls but because of security reasons contact your installing centre for adding them into your system.

PROGRAMMING OF VALIDATION SEQUENCE

For setting validation sequence you can use max 4 original components (for example foot brake, hand brake, ESP button or rear heated window button). You can set sequence from max up to 10 press of these combination components. Unfortunately because of security reasons change of this validation sequence can be provided only by the installer centre.

EXAMPLE: Validation sequence setting is the following: 4x pressing ESP button and 2x pressing rear heated window button. So it means that installing centre had to connect two validating cables (one on ESP button and one for rear heated window button). Sum of pressing is six, in this case, don`t forget you have up to 10 pressing combinations.

SIGNALIZATION OF LOW BATTERY IN REMOTE CONTROL

If the battery voltage drops too low and in the same time automatic (contactless) mode is activated, LED on a remote controller will start flash quickly two times every second. Low battery level is signalized by buzzer too. When user push the button on remote buzzer beeps 8 times.
NOTE: When you exchange the battery in the remote controller you need to press the button for stopping an indication of low battery.

SERVICE MODE

If you leaving a vehicle in a garage for service or parking it in a park house during a holiday we recommend to turn on a service mode. All immobilizer blocking functions are turned off in this mode so there is no need to leave tag with a staff of service or parking house. Service mode is signalized by 5 beeps of buzzer per 10 seconds during the first minute but only if the ignition is on.

ACTIVATION OF SERVICE MODE BY RFID PLASTIC CARD

You need to get an RFID plastic card near the RFID antenna 5 times during the first minute after you turn on the ignition. The pause between getting a card near the antenna and taking it off from the antenna to react can be a maximum of up to 5 seconds.

ACTIVATION OF SERVICE MODE BY REMOTE CONTROLLER

Service mode is activated after 5 long pressings of a button on a remote controller

ACTIVATION OF SERVICE MODE BY VALIDATION SEQUENCE

You need to put in validation sequence code 3 times in a row to be able to enter service mode.

DEACTIVATION OF SERVICE MODE

ATTENTION: Service mode is possible to deactivate only with RFID plastic card. For deactivation, you need to get an RFID plastic card near the RFID antenna 5 times during the first minute, after you turn on the ignition. The pause between getting a card near the antenna and taking it off from the antenna to react can be a maximum of up to 5 seconds. Because of the security reasons the RFID antenna is hidden in the vehicle. For the exact place please contact your service where you have been provided with the installation.

MEMORY OF IMMOBILIZER:

Even if you unplug the battery of a vehicle TS IMO v2 will remember the current setting (if it was activated or deactivated). So exchange vehicle battery does not take any effect on TS IMO v2.

TECHNICAL INFORMATION

Voltage	12/24V
Operating temperature of device	-40°C up to 80°C
Average consumption	25mA
Sleeping consuption	3mA
Communication frequency	2,4 GHz
Max current for immobilizer circle	12V-20A/24V-10A
Battery for RC SMART v2	CR2450