Pandora would like to thank you for choosing our security-service system Pandora Professional v3

Pandora Professional v3 is a car security-service system built for cars with on-board voltage of 12V. It is a complex engineering device, which includes unique and modern technological software and hardware solutions.

While developing the Pandora Professional v3 we were using the most up-to-date electronics from world's best manufacturers. The device is built using high-precision mounting and control machinery; thus, we guarantee highest possible quality, reliability and stable technical characteristics for the whole operation period.

The system has a cryptographically strong authorization code with unique dialog algorithm and individual encryption key on every device. It guarantees protection form electronic hacking for the whole operation period.

The system is built for your convenience: it's ergonomic, reliable, has the highest security and service characteristics, 3 years unconditional warranty and free service and support. We are happy to provide any support we can - feel free to use our online support.

! WARNING! It's strongly recommended to install a security system by the skilled automotive technician! The installation must be performed according to the provided technical documentation, installation guides and schemes. The functionality and features of the system depend on its correct installation/configuration and/or the specifics of the vehicle.

This device has limited external factors resistance. It should be operated in a temperature outside from -400C to +850C range. All system components must be installed only in a car interior. The base unit and remote controls are fulfilled with the IP40 category of protection against water.

Our web-site: pandorainfo.com
Customer support: support@pandorainfo.com

CE EAC

Product is in conformity with Electromagnetic Compatibility Directive EMC 2004/108/EC and R&TTE Directive 1999/5/EC

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1 General information

System set

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! The manufacturer reserves the right to change the system set and construction of the product to improve its technological and operational parameters without a notification.

Read before using

Carefully read this manual before starting installation and using the security-service system. Pay attention to text marked with !

! The security-service system is a complex technical product. System installation and configuration must be carried out only by a skilled professional.

! Features and system modes, control of the vehicle's zones depends on the type of connection and system settings, original vehicle operation logic and trim.

! The system set includes the «Owner's personal card». This card contains information under the protective layer that is intended only for the owner of the system. Make sure that the protective layer on the owner's plastic card is intact after the installation of the system. Read the «Owner's personal card» section of this manual before erasing the protective layer.

! When system installation is finished:

• Check the system operation and functions with a specialist.
We recommend that you mark each working function with a sign ☑.
• Check that the «Installation certificate» and «Warranty card» are filled out. These documents may be required for contacting the customer support.
• Ask an installer to mark the layout of the system components on the diagram. This information may be required for diagnostic/configuring or emergency deactivation of the system.
• We recommend that you change the default value of the PIN-codes of the system. You can write down the changed PIN-codes in the «PIN-codes of the system» section.

PIN-codes of the system

! It is recommended that you will write down the changed or created values of all PIN-codes. Eliminate third-party access to this information.

The «Secret PIN-code»
(is written on the «Owner's personal card»)
The «Service PIN-code»
(default value is 1-1-1-1)
The «Guest PIN-code»
(default value is 1-2-3-4)
The «Immobiliser PIN-code»
(is used for the Code Immobiliser (pin-to-drive) function)
The "Beach mode PIN-code"
(is used for Beach mode function)

CANNOT BE CHANGED

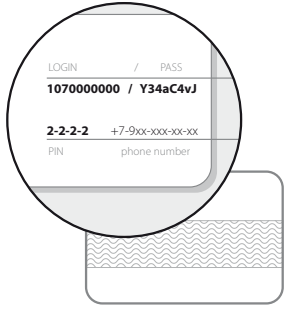
□-□-□-□
□-□-□-□
□-□-□-□
□-□-□-□

Owners's personal card

! Erase the protective layer carefully. Do not use any sharp objects to avoid damaging of a hidden information under the protective layer. The information on the owner's personal card could not be changed or restored in case of damage or lose. Eliminate third-party access to this information.

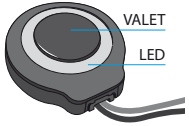
The Owner's personal card contains private information under a protective layer:

- **PIN (the «Secret PIN-code»)** is a 4-digit number. This code can be used to disarm the system to deactivate Immobiliser functions and to activate Service mode. It can be also used to enter programming mode.
- **LOGIN is a 10-digit number.** This information is used to add the system to the online service and mobile applications.
- **PASS** contains 8 characters and can consist of digits, lower- and upper-case letters). This information is used to add the system to the online service and mobile applications.
- **Phone number** is a phone number of the preinstalled SIM card.



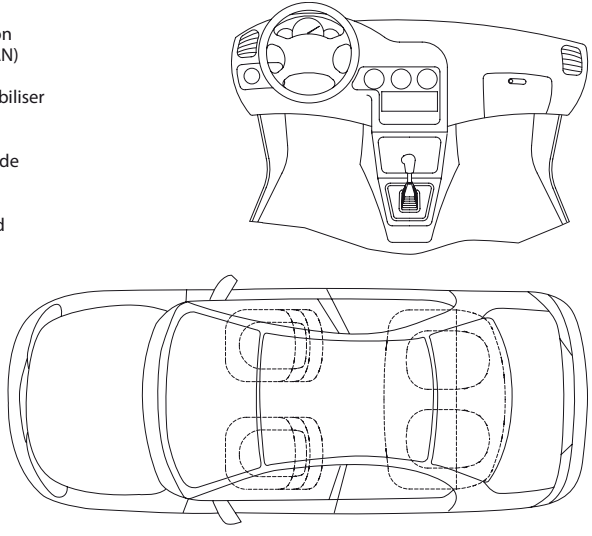
External VALET button

An external VALET button with a two-colour (red, green) status LED indicator is placed inside a vehicle (see the "System modules layout" section). The button is used for programming the system, arming/disarming, activating/deactivating Immobiliser mode.



System modules layout

1. External VALET button (VALET button by CAN)
2. Button for the Immobiliser PIN-code
3. Button for Beach mode PIN-code
4. Circuit being blocked
5. Base unit
6. Beeper
7.
8.



Base unit

Built-in LTE module (4G LTE/3G/2G | GPS/GLONASS) - provides a connection with our online service pandora-on.com and mobile application, allows to control the system by a phone using DTMF commands, voice and SMS notifications, LBS-coordinates (only by DTMF -command), automatic date and time detection, precise GPS location (with Tracking function).

Built-in nano-SIM port is used to work with the built-in GSM modem.

! The SIM-card can be changed. The SIM-card should be replaced and the following settings should be performed only by a qualified specialist.

868MHz Antenna, LoRa modulation (dynamic dialog encryption AES 128 bit) supports up to 4 remote controls D-027.

2.4 GHz radio channel, Bluetooth 5.0 protocol (BT5.0) - supports up to 14 additional Bluetooth devices (see the «Additional devices» section), including a mobile phone.

Built-in 3D accelerometer is used to detect shock/motion/tilt including 2 separate zones of shock sensor (alarm and warning), the system allows to adjust sensitivity of each zone, to use data from the accelerometer to lock the door locks and block the engine on movement.

Temperature sensors allow the system to measure temperature of different zones: interior temperature - built-in sensor of the main unit, engine temperature - external temperature sensor (see "System set" section of the manual), outside temperature - vehicle's digital protocol. System allows to change default sensor's settings, use the information from the external peripheral devices (PS-331BT, RHM-03BT, DMS-100 BT), program automatic engine start and stop, control engine preheater by temperature conditions.

Built-in digital 2xCAN/LIN* interfaces allow the system to read status end execute commands via digital buses, and work with engine preheaters Webasto Thermo Top Evo and Eberspaecher Hydronic 1/2/3.

Built-in digital IMMO-KEY port and Immobilser bypass* - hardware and software algorithms with the special Pandora CLONE server allow the system to bypass original immobilisers for automatic and remote engine starts.

Built-in micro-USB port - update and configuration of the system using the Pandora Specialist application and Pandora Alarm Studio.

! *More information is available on loader.pandorainfo.com

Information signals of the system

LIGHT SIGNALS OF THE LED INDICATOR	
SIGNALS	DESCRIPTION
THE SYSTEM IS ARMED	
Short red flashes	System is armed
Short green flashes	System is armed (authorization devices are in the coverage zone)
Fast red flashes	Alarm
THE SYSTEM IS DISARMED	
Faded	System is disarmed
Red	System is preparing for automatic or delayed arming
Green (when turning on the ignition)	System is in the Service mode
Green flashes (when turning on the ignition)	Confirms the number of paired control devices (remotes, tags, watches, bands)
Red flash (when turning on the ignition)	Confirmes a paired mobile device
WHEN ENTERING THE «SECRET PIN-CODE» OR THE «SERVICE PIN-CODE»	
Green flash	Confirmes a VALET button pressed
Short red flash	Confirms an input of a digit PIN-code is incorrect
Red and green flashes	Confirms correct PIN-code

SOUND / AND LIGHT SIGNALIZATION	
SIGNALS	DESCRIPTION
1x/1x	Arming
2x/2x	Disarming
5x/5x	Vehicle search
30 sec./30 sec.	Alarm - alarm level of a sensor is triggered, PANIC mode
3x	Remote/automatic engine start procedure indication
3x/1x	Warning level of a sensor is triggered
4x/4x	«Sensors were triggered» signal when disarming Parking lights are not turned off notification when arming «Sensors are triggered» signal when arming
25 sec./25 sec.	Engine blocking warning in the Anti-Hi-Jack modes

BEEPER SOUND SIGNALS	
SIGNALS	DESCRIPTION
1 sound signal	Activating the Service mode
2 sound signals	Deactivating the Service mode
1 sound signal	Correct input of the «Immobiliser PIN-code»
3 sound signals (3 times)	A battery in a radio tag is discharged (when switching ignition on)
4 sound signals (4 times)	Absence of an authorization device when switching ignition on
Fast sound signals	Engine blocking warning in the Anti-Hi-Jack modes

2 System functions and modes

Security mode

The system confirms arming with **1x sound** and **1x light** signals. When the system is armed, the system monitors security zones with separated warning and alarm level of triggering:

- Warning mode - this mode activates when there is a slight impact on the shock sensor or additional senor. It is accompanied with **1x light** and **3x sound** signals;
- Alarm mode - this mode activates when a sensor or one of the security zones is triggered. It is **30 sec. light** and **30 sec. sound** signals. The alarm signals can be cancelled by an arming or disarming command.

If one of the security zones is triggered the system:

- records this event in its non-volatile memory;
- activates the alarm or warning mode;
- informs an owner by all available means;
- blocks the engine (in accordance with the settings and connections).

If one of the security zones is opened at the moment of arming, the system will produce **4x sound** and **4x light** warning signals.

If one of the security zones fails, the system will forcibly turn off this zone. If a switch triggers more than 9 times in a row, it will be disabled until the next arming. The shock/tilt/motion sensor is temporarily deactivated (15 sec.) if it has been triggered more than 3 times in a row.

The system confirms disarming with **2x sound** and **2x light** signals. The system deactivates engine blocking (if the Immobiliser function and additional blocking are not used). If there were alarm events (except warning level) during the armed period, the system will produce **4x sound** and **4x light** warning signals. The system continues to display all zones when it is disarmed, but the information is not saved in the memory.

! For emergency disarming see «CONTROL OVER THE SYSTEM IN CASE OF EMERGENCY».

Controlled and security zones

- Interior temperature (status)
- Engine temperature (status)
- Outside temperature (status) */**
- Voltage of the on-board circuits (status)
- Engine operation control - RPM (status)
- Heater operating control (status)
- Fuel level (status)
- Parking (automatic gearbox) /Handbrake (manual gearbox) status
- Parking light is not turned off notification (status)*
- Shock sensor (security zone - alarm and warning level)
- Motion sensor (security zone - alarm level)
- Tilt sensor (security zone - alarm level)
- OE alarm system status*
- Additional sensor (status, security zone - alarm and warning level)**
- Turning ignition on (status, security zone - alarm level)
- Opening doors (status, security zone - alarm level)
- Opening a hood (status, security zone - alarm level)
- Opening a truck body (status, security zone - alarm level)
- Pressing brake (status, security zone - alarm level)

* Available via CAN-bus (see loader.pandorainfo.com).
** Option (see "Additional devices" section of this manual).

Remote and automatic engine starts

The system allows the remote engine start using the "remote engine start" command from a remote control or preconfigured automatic engine start function. Remote start can be used to heat engine and interior, charge battery or to cool the interior with air conditioning.

Remote and automatic starts can only be used when the system is armed. While the system is in remote or automatic start mode, it keeps performing all security functions of all security zones excluding a shock sensor and additional sensor (the system can be configured not to disable sensors during a remote engine start). To compensate it, the motion sensor sensitivity will be increased and its responsiveness will be reduced. If any security zone will be triggered, the engine will be immediately stopped and alarm mode will be triggered.

When using the remote and automatic engine start functions, make sure that a car is secured with handbrake or some other means of fixating the car on a parking position.

Remote and automatic engine start on automatic transmission cars will only occur, if a transmission selector lever was left in the «P» position.

If a car has manual transmission, remote or automatic start will only occur if the program neutral procedure was followed when the car was arming.

An example of the program neutral procedure

1. When the engine is running, fixate the car with the handbrake and put gear lever to the neutral position. Program neutral procedure will be switched on automatically (by default system settings).
2. Turn the key in the ignition lock to the OFF position (the engine should still be running) and take it out of the lock (skip this step for cars with a Start/Stop button).
3. Leave the car, close the doors.
4. Arm the system - the engine will be stopped. Now the system is ready to perform remote and automatic engine start.

Automatic starts

The system allows configuring automatic engine start and stop conditions using a mobile application, some options are available in a remote control. The following conditions can be specified for automatic engine starts: schedule, time period, engine temperature, voltage. The engine will be stopped automatically after specified time or when the engine temperature reaches a specified value. The engine can be also stopped by a user command.

! Automatic engine starts and stops by temperature are available only if engine temperature data is available in digital buses of the car, or if an external engine temperature sensor is connected. Remote and automatic engine starts are not available if the hood is open.

After a series of three unsuccessful attempts of automatic start, all following automatic starts will be canceled until disarming/arming (this does not affect on remote engine start).

Slave mode

This mode allows arming and disarming vehicle control elements - factory key fob, buttons/sensors of a keyless access entry system. Slave mode can be implemented using analog connections or a digital protocol of a vehicle.

! This mode is disabled by default - configuration of the system should be made by a qualified technician. It is recommended to activate the "Prohibit disarming when a tag is absent" to increase security features of the SLAVE mode. If this mode is activated, it will be possible to disarm the system only when an authorization device is in the coverage zone or using the "Immobiliser PIN-code" (see "Code Immobiliser" (pin-to-drive) function).

Owner authorization devices and modes

Authorization devices

Authorization devices are Bluetooth devices paired with the system (radio tags, remote controls, mobile phone with the app, band). The devices are used to recognize an owner in the radio coverage zone of the base unit, to arm/disarm the system (Hands Free mode) and to implement Immobiliser or Anti-Hi-Jack functions.

! It is necessary to make additional configuration of the system to use mobile device, remote control, tag, band as an owner authorization device. Configuration of the system should be made by a qualified technician.
When using authorization devices, it is recommended to install beeper.

Hands Free arming/disarming

This mode is used for automatic arming/disarming when an owner with an authorization device is distancing or approaching a vehicle.

! This mode is disabled by default. The configuration should be made by a qualified technician.

Immobiliser mode

This mode is used to recognize an owner using authorization devices when the system is disarmed.

When turning on the ignition, the base unit performs a search for authorization devices in the radio coverage zone. If there is no authorization device in the radio coverage zone, the system will block the engine. Engine blocking will occur immediately or at the time a motion sensor detects movement, it depends on the system settings. When an authorization device appears in the coverage zone, the system will exit blocking mode and will continue to work in normal mode.

! This mode is enabled by default. Its operation depends on the method of connection and system configuration.
For emergency disarming see «CONTROL OVER THE SYSTEM IN CASE OF EMERGENCY»

Anti-Hi-Jack 1/2 modes

The Anti-Hi-Jack modes help to prevent aggressive seizure of a vehicle in case of disappearance of authorization devices from the radio coverage zone when system is disarmed.

ANTI-HI-JACK 1 mode - The base unit checks if an authorization device is in the radio coverage zone each time when ignition is on and a door is opening/closing.

ANTI-HI-JACK-2 mode - The base unit constantly checks if an authorization device is in the radio coverage zone when ignition is on.

If the system cannot detect an authorization device, the base unit will perform a delayed engine blocking. The siren will play the `Engine blocking warning' ringtone before blocking. The engine will be blocked immediately or at the time the car starts moving, it depends on the system settings. When an authorization device appears in the coverage zone, the system will exit blocking mode and will continue to work in normal mode.

! This mode is disabled by default - configuration of the system should be made by a qualified technician.
For emergency disarming see «CONTROL OVER THE SYSTEM IN CASE OF EMERGENCY»

Code Immobiliser (pin to drive) function

This function allows to use the pre-programmed «Immobiliser PIN-code» to disable the engine blocking, service mode, disarming the security system. The code must be entered using factory vehicle controls (buttons/lever/pedal) and/or additionally installed elements.

In case of emergency, it is possible to disable code immobiliser by methods, described in «Control the system in case of emergency».

AN EXAMPLE OF USING THE FUNCTION

- Turn on the ignition to disable engine blocking or service mode, turning on the ignition is not required if you want to disarm the system or control time channels.
- Enter the «Immobiliser PIN-code», code can consist max of 4 digits from 1 to 9:
  - Press the pre-programmed button/lever/pedal the number of times equals to the first digit.
  - Pauses between presses should not exceed 1 second. More than 1 second pause will be interpreted as the start of the next digit input.
- The system will confirm the correct input by a sound signal of the beeper and will activate a programmed action.

! This mode is disabled by default - configuration of the system should be made by a qualified technician.
For emergency disarming see «CONTROL OVER THE SYSTEM IN CASE OF EMERGENCY»

Beach mode

This mode allows to use the pre-programmed «Beach mode PIN-code» for system arming/disarming.

The code must be entered using factory vehicle controls (buttons/sensors) or additionally installed element.

AN EXAMPLE OF USING BEACH MODE

- Press the factory or additionally installed element until the single light flash, thereafter start to enter
- «Beach mode PIN-code».
- Enter the «Beach mode PIN-code», code can consist max of 4 digits from 1 to 9:
  - Press the control element the number of times equals to the first digit.
  - Pauses between presses should not exceed 1 second.
  - More than 1 second pause will be interpreted as the start of the next digit input.
- After the correct input the system will confirm arming/disarming by the sound and light signals.

! This mode is disabled by default - configuration of the system should be made by a qualified technician.
For emergency disarming see «CONTROL OVER THE SYSTEM IN CASE OF EMERGENCY»

Checking the number of recorded remote controls

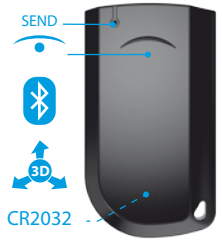
The number of recorded remote controls can be checked by the number of flashes of the LED indicator on the VALET button or on the base unit. The number of registered remote controls device can be checked every time the ignition is switched on when the system is disarmed. The number of green LED flashes will indicate the number of recorded control devices (remotes, tags, watches, bands), the red flash - paired mobile device.

You can also check the number of recorded devices by taking off and putting back on battery terminal (if possible). The system will emit short sound signals from a siren, with less than 1 sec. interval.

3 Immobiliser tag

A radio tag is a device used to control a vehicle/system on a distance of a Bluetooth connection. The tag is also used as an authorization device for «Immobiliser/Anti-Hi-Jack/Hands Free» modes. The radio tag has: a control button for arming/disarming and activating/deactivating Service mode, a built-in accelerometer, which allows the tag to go in the energy saving mode when there is no movement and LED indicator SEND.

! For correct operation, it is not recommended to place the radio tag near the metal objects, magnetic and electronic devices (credit cards, phones, keys, remotes, etc.). Do not expose the radio tag with high temperatures, moisture, or strong impacts. It is recommended to place the radio tag on the belt in an individual case or in the front pocket of clothing.



Functions of the button

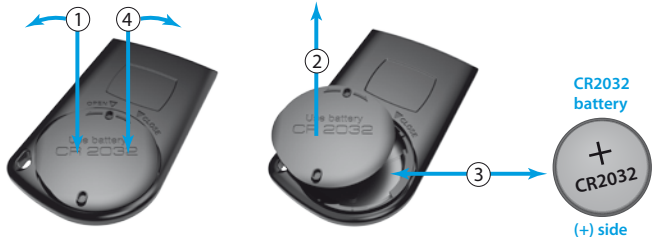
PRESS	DESCRIPTION
- short press (when ignition is off)	System arming/disarming
- press and hold for 1 sec. (when engine is running)	Activation of «Ignition hold on» mode
- press and hold for 2 sec. (when system is disarmed)	Change the «Main owner phone number»
- press and hold for 3 sec. (when ignition is on)	Activating/deactivating Service mode
- press and hold for 6 sec. (in programming mode)	Pairing a tag with the base unit
- press and hold for 10 sec.	Firmware update

Indication of the SEND LED

SIGNALS	DESCRIPTION
one flash	confirmation of arming low battery level (when installing a battery)
two flashes	confirmation of disarming
three flashes	high battery level (when installing a battery)
faded constant light	battery is discharged (when installing a battery, when the button is pressed)

Installation/replacing a battery of the tag CR2032

To install or replace the battery (CR2032), carefully follow these steps:
1. Turn the battery cover in the «OPEN» direction;
2. Remove the battery cover;
3. Remove the battery from the battery compartment and, observing the polarity, install a new one (when installing a high-quality battery, the SEND indicator light will produce three red flashes);
4. Install and rotate the battery cover in the «CLOSE» direction. After completing the procedure, you can continue to operate the radio tag in normal mode.



Prompt entry/change of the main owner phone number

For a prompt entry/change of the main owner's phone number follow next steps:

- Disarm the system, being near the vehicle call the system phone number, wait for the answer (Enter the «Guest PIN-code if you are calling not from the owner's phone number. Default value is 1-2-3-4);
- Press and hold button on the radio tag until two flashes of the **SEND** indicator, then release button;
- System will save incoming phone number as the «Main owner's phone number» and will repeat it;
- End call.

! The phone number could be also change using mobile device (See «Changing settings via phone» section).

Updating firmware of the tag

Download the Pandora BT application (Android / iOS) or Pandora Specialist (Android) on the devices equipped with a Bluetooth 4.0 Low Energy or higher module.

- Open the mobile app, find the system.
- Press and hold the button of the radio tag until the 10th flash of the **SEND** indicator, then release the button.
- Select the found device and select one of the update options: FILE MANAGER - firmware will be uploaded from the phone storage (only for Android). INTERNET - firmware will be uploaded by an internet connection.

4 Remote control

A two-way remote control is a mean to control and display system and vehicle state. The remote control operates only when it is in the coverage zone of the system radio channel. All transmitted commands are reliably protected against electronic hacking with a modern dynamic dialogue encryption algorithm.

! The remote control is switched off when shipped, switch it on according to the user manual.
The remote control is a unified control device - its operation depends of the security system and implemented functional.
For maximum effectiveness and operational range, it is recommended not to shield aerial area (see picture) with fingers when using a remote control

- control buttons – control and confguration of the system parameters;
- OLED display – visualization of the informtion icons;
- sound source – 16 sound melodies matching a particular event;

- vibration indicator – confirmation of the buttons pressing and commands executing, accompanying sound notifications of the alarm evets;
- light indicator SEND/ALARM – displaying the communication status;
- battery slot – for the standard AAA type power source;
- antenna 868 MHz (LoRa HS / AES 128 Bit) – secured control and receiving information on a long distance.

Switching on/off the remote control

To switch on the remote, press and hold the F button for 3 sound signals (3 sec.). The «REMOTE ON» ringtone will play (change the battery if the remote control does not switch on). Pressing and holding the F button again for 3 seconds will cause the remote to switch off.

Displaying the connection status

To control the connection status the remote control is using the SEND/ALARM light indicator and information icon .

When the system is armed the connection status is displayed automatically no more than once a minute.

Connection status icons

– 868 MHz connection when system is armed
– flashing while connection missing when system is armed
– control command sent, waiting for response
→ → – control command sent, response received

SEND/ALARM light indicator

Green indicator	Red indicator
• Flashes if there is a connection with the base unit • Goes dark when there is no connection with the base unit	• Flashes frequently if there is any notification • Flashes occasionally when there is no connection

Replacing the remote control battery

The standard AAA type battery with a nominal voltage of 1,5V is used in the remote control.

Battery needs to be replaced if the remote control is not turning on or the icon has only one bar left and starts flashing.

To change the battery:

- move aside the battery cover;
- remove the battery from the battery compartment and, observing the polarity, insert a new one;
- close the battery cover;
- the remote is ready for use (switch the remote on by pressing F for 3 seconds).

! It is recommended to have a spare AAA battery in the car.

Diagnostic Mode

Diagnostic mode is used for the initial test of the remote control. The test is performed when the remote control is switched off and the battery is charged:

- press and hold the button – display, sound source, **SEND/ALARM** indicator, vibration indicator will turn on;
- press and hold the button – display will show technical information;
- press and hold the F button – after 3 sec. the remote control will switch on.

Quick access functions of the remote control

	System disarmed		System armed (no alarm events)
	Ignition is switched on	Ignition is switched off	
(short press)	Lock doors without arming	Arming with a sound confirmation	Search mode – flashes of turn signals with sound signals for 5 seconds
(1 sec.)		Arming without sound confirmation	Search mode – flashes of turn signals without sound signals for 5 seconds
(2 sec.)	Switch on «Ignition Hold on» mode		
(3 sec.)	Switch on «Programmed neutral»		Remote engine start
(short press)	Unlock doors	Unlock doors	Disarming with sound confirmation
(1 sec.)			Disarming without sound confirmation
(2 sec. and more)	Switch off «Ignition Hold on» mode		Switch off the ignition during remote or automatic engine start procedure.
F (short press)	Switch on display		
F (1 sec.)	Unlock trunk		
F (2 sec.)	Switch on/off additional option		
F (3 sec.)	Switch on/off remote		
+ (short press)	PANIC mode		
+ F (short press)	Arming when the engine is running with sound confirmation	Arming in 30 seconds with sound notification	
+ F (sec.)	Arming when the engine is running without sound confirmation	Arming in 30 seconds without sound notification	

Icons of the remote control

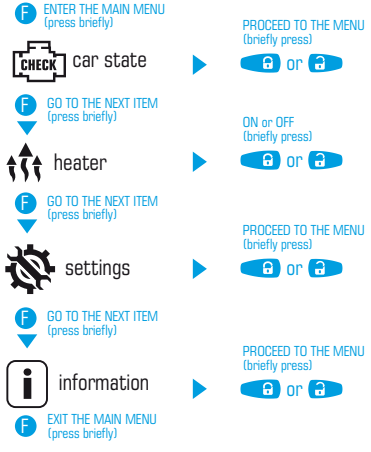
- Connection status
- Security mode status
- Remote control battery level
- 12:48 Current time
- 12.48 Battery voltage
- 22 ° Interior temperature
- 90° Engine temperature
- 55% Fuel level*
- Engine operation icon
- Ignition security zone
- Shock sensor Warning level
- Shock sensor Alarm level
- Tilt sensor security zone
- Motion sensor security zone
- Doors security zone*
- Hood security zone
- Trunk security zone
- Additional sensor Warning level
- Additional sensor Alarm level / Original alarm status*
- Low voltage security zone
- Brake pedal security zone

* Separate display indication of doors, original alarm status depends on the information in CAN-bus digital protocol of specific car. Fuel level indication depends on the information in CAN-bus digital protocol, or on the original fuel level (require additional connection). Engine temperature indication depends on the information in CAN-bus digital protocol, or on the connected additional temperature sensor (see system set).

Remote control menu

You can control and manage all main settings and parameters of the system using the menu of the remote control.

Briefly press the F button to enter the menu. The following presses of the F button will switch between menu items. Press the 🔒 or 🔓 button to enter a selected item.



You can manually exit the menu by pressing the F button for 1 second. If there are no any actions within 5 seconds, the remote control will exit the main menu automatically.

CAR STATE

To get information about engine temperature, interior temperature, battery voltage and fuel level, select the CAR STATE menu by short presses of the F button and briefly press the ▲ or ▼ button.

HEATER

To enable/disable the engine preheater, select the HEATER menu by short presses of the F button and briefly press the ▲ or ▼ button.

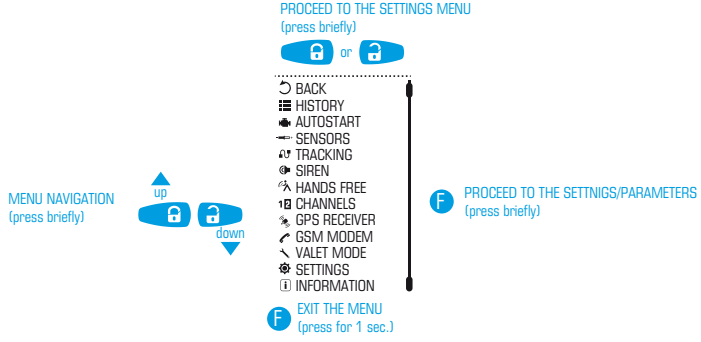
ENABLING THE HEATER
(press briefly)
▲ or ▼
heater on

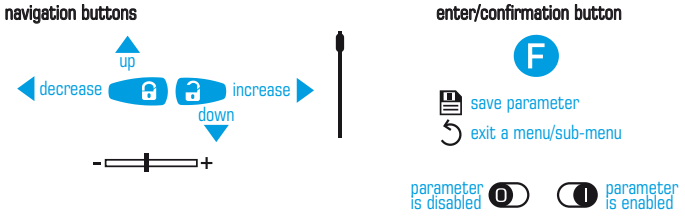
DISABLING THE HEATER
(press briefly)
▲ or ▼
heater off

SETTINGS

To change settings and parameters of the system, select the SETTINGS menu by short presses of the F button and briefly press the ▲ or ▼ button.

Briefly press ▲ or ▼ button to select a sub-menu, to enter the sub-level briefly press the F button.





HISTORY VIEW EVENT HISTORY

This menu allows viewing the event history stored in the remote control's memory. The remote control displays an event name and its time.

! The number of events is limited by the memory of the remote control.

AUTOSTART AUTOMATIC ENGINE START SETTINGS

This menu allows configuring the automatic engine start and stop settings. A synchronized real time clock in the remote control and the base unit and other autonomous system settings allow to implement set of conditions of engine start and operation regardless of whether the remote control is in the radio coverage zone or not.

- **ENABLE** - this submenu switches on/off all automatic engine starts.
- **TIMER** - this submenu allows starting an engine every day at the scheduled time.
- **START TEMP** - this submenu allows starting an engine automatically when the engine temperature is low.
- **WORK TIME** - this submenu determines the maximum engine operation time for automatic and remote starts.
- **PERIODICALLY** - this submenu allows starting engine periodically with a configured time interval.
- **STOP TEMP** - this submenu determines the engine stop temperature.

SENSORS SETTING AND ADJUSTMENT OF THE SENSORS

This menu allows controlling and adjusting sensors (shock/motion/tilt) sensitivity. SHOCK and additional EXTERNAL sensors have separate ALARM and WARNING sensitivity zones. Alarm zone triggers when there is considerable impact on a sensor. If the alarm zone is triggered, the system will indicate it with light and sound alarm for 30 sec. Warning zone triggers when there is a minor impact on a sensor (the sensitivity of the warning zone should be higher than the alarm level sensitivity for correct operation). Warning level is indicated by one light and three sound signals.

- **SHOCK** - This submenu allows adjusting sensitivity of the alarm and warning zones of the shock sensor.
  - - warning and alarm zones are enabled.
  - - warning and alarm zones are disabled.
  - - warning zone is disabled.
- **MOTION** - This submenu allows adjusting sensitivity of the motion sensor.
  - - motion sensor is enabled.
  - - motion sensor is disabled.
- **TILT** - This submenu allows adjusting sensitivity of the tilt sensor.
  - - tilt sensor is enabled.
  - - tilt sensor is disabled.
- **EXTERNAL** - This submenu allows adjusting sensitivity of the alarm and warning zones of the additional sensor.
  - - warning and alarm zones are enabled.
  - - warning and alarm zones are disabled.
  - - warning zone is disabled.

TRACKING TRACKING SETTINGS

This menu allows you to switch on and off the tracking function for online services.

SIREN OPTIONS OF THE SIREN SOUND SIGNALS

This menu allows configuring siren sound notifications.

- - all sound signals are enabled.
- - warning signals are disabled.
- - warning and alarm signals are disabled.

HANDS FREE SETTINGS OF THE HANDS FREE MODE

This menu allows configuring the Hands Free mode for arming/disarming.

- - enable arming in the Hands Free mode.
- - enable disarming in the Hands Free mode.
- - enable arming and disarming in the Hands Free mode.
- - disable arming and disarming in the Hands Free mode.

CHANNELS TIME CHANNEL CONTROL

This menu allows switching on/off time channels. These channels are used to implement additional functions and to control external devices.

GPS RECEIVER COORDINATES DETECTION

This menu allows you to switch on and off detection of GPS/GLONASS coordinates and Tracking.

GSM MODEM MANAGE THE BUILT-IN MODEM

This menu allows you to switch on and off the built-in LTE modem (GSM functions: online service and mobile application, control and notifications by phone).

VALET MODE SERVICE MODE

This menu allows activating/deactivating the Service mode.

SETTINGS SETTING OF THE REMOTE CONTROL

This menu allows configuring the remote controls operation.

- **SOUND** - this submenu allows switching on/off sound signals.
- **VIBRO** - this submenu allows switching on/off vibrations.
- **BACKLIGHT** - this submenu allows adjusting LCD backlight brightness.
- **RFM LOST** - this submenu allows configuring sound notifications in case of losing connection between

a remote control and a base unit.
- disable notification signals.
- enable notification by “Melody” ringtone. The notification will play once when system is armed.
- enable notification by “ALARM” ringtone. The “ALARM” ringtone will be played if the system is armed. The system will notify you with a short signal one time per minute after the ringtone. The notifications will come until the connection is established or the notification can be cancelled by a short press of the F button.

• **DATE/TIME** - this menu allows you to set time for the systems without GPS/GLONASS receiver. It is required to arm and disarm the system after to send the changed value to the base unit.
• **TIME ZONE** - this menu allows you to set UTC time zone for automatic date and time detection by GPS/GLONASS-coordinates.

SENSORS

To get technical information about the remote control, select the INFORMATION menu by short presses of the F button and briefly press the button or button.

5 Control over the system by phone

! For the correct operation of the GSM functions, an owner should monitor the status/balance of the SIM card installed in the system. If the SIM card is blocked or defective, GSM functions of the system will be unavailable.

Call the system's phone number from the "Owner's main number". When it answers, enter a command code.

Default settings allow the system to receive calls only from the phone number programmed as an "Owner's main number". If you call from any other numbers, including Additional owner's numbers, it will be necessary to enter the "Guest PIN-code" (default value is 1-2-3-4).

#	Return to previous menu/state	2 5 8 *	System information
*	Repeat the last message	2 2 2 *	Disable Hands Free mode
1 *	Arming	2 2 3 *	Enable Hands Free arming
0 *	Disarming	2 2 4 *	Enable Hands Free disarming
1 0 *	Silent arming	2 2 5 *	Enable Hands Free disarming only with autom.start
0 0 *	Silent disarming	7 8 9 *	Enable automatic engine start
1 5 9 *	Unlocking trunk	9 8 7 *	Disable automatic engine start
9 *	Help	2 9 7 *	End call
1 5 *	Tow truck mode	5 5 1 *	Enable Service mode*
1 0 0 *	Request GSM account balance	5 5 2 *	Disable Service mode
1 2 3 *	Start the engine/prolong heating	1 5 6 *	Switch on engine preheater
3 2 1 *	Stop the engine	6 5 1 *	Switch off engine preheater
3 3 3 *	Switch on add. function using F via CAN	6 6 6 *	Enable engine blocking
5 0 0 *	Request current coordinates	9 9 9 *	Disable engine blocking*
7 5 3 *	Force connection to the server	9 9 8 *	Disable authorization devices
4 5 6 *	Switch on additional channel	8 8 8 *	Enable authorization devices
6 5 4 *	Switch off additional channel	4 2 4 *	Fuel level calibration

***Enter the "Secret PIN-code" after dialling a command.**

! It is not necessary to enter the "Guest PIN-code" when you are calling from any number, if the "Owner's main number" is not set up. Additional system settings allow: make a call from the "Additional owner's number" without entering the "Guest PIN-code", request the "Guest PIN-code" from any numbers, prohibit calls from any numbers except the "Owner's main number". Configuration of the system should be made by a qualified technician.

DTMF commands

For example: To have simple access to the engine start function, create a new contact in the contact list of your phone, name it `Engine start', for instance, and add the number in the following format: +XXXXXXXXXX,123*,297* where "+XXXXXXXXXX" - the system phone number, "," - pause is a feature of the phone (can be displayed as the `P', see the instructions of the phone), "123*" - remote engine start DTMF command, "297*" - end call DTMF command. Contact can be added as a speed dial to any of the free button.

To have simple access to engine start function a phone other than the main owner's phone, create contact in the following format: +XXXXXXXXXX,1234,123*,297* where `1234' is the "Guest PIN-code".

Repeat the last message

To repeat any message, press ***** during a voice call to the system.

Voice help

The system has a voice help menu. During a voice call to the system, dial **9*** and listen to the information about system control commands.

To end the session, hang up the phone.

Arming/disarming

1. Call the system number. Wait for the answer.
2. Dial the **1*** DTMF command to arm the system, or the **0*** for disarming. For the silent arming dial the **10*** DTMF command, for the silent disarming - the **00*** DTMF command.
3. The system will confirm command with a voice message "System is armed/disarmed".

To end session, hang up the phone.

Activate/deactivate Service mode

1. Call the system number. Wait for the answer.
2. Turn on the ignition, an authorization device (tag, Bluetooth remote control, watches, paired mobile device) must be in the coverage zone if the Immobiliser or Anti-Hi-Jack modes are enabled. To activate Service mode, dial the **551*** DTMF command -- "Activate Service mode", then enter the "Secret PIN-code" from the Owner's personal card.
3. To deactivate Service mode, dial the **552*** DTMF command -- "Deactivate Service mode".
4. The system will confirm execution of the command.

To end the session, hang up the phone.

Enabling/disabling automatic engine starts

The system has a function of prompt disabling automatic engine start:

1. Call the system number. Wait for the answer.
2. Dial the **987*** DTMF command to disable all automatic engine starts or the **789*** to enable.
3. The system will confirm execution of the command.

To end the session, hang up the phone.

Request current coordinates

1. Call the system number. Wait for the answer.
2. Dial the **500*** DTMF command.
3. The system will confirm: «Current coordinates are sent via text message» and will send text message with LBS and GPS/GLONASS coordinates to your phone.

Request GSM balance

1. Call the system number. Wait for the answer.
2. Dial the **100*** DTMF command.
3. The system will confirm: «Balance information is sent via text message» and will send text message with account balance information to your phone.

To end the session, hang up the phone.

Tow truck mode

This mode is intended for vehicle transportation with preservation of arming function. Tow truck mode can be activated only when the system is armed, it will be deactivated automatically when disarming.

1. Call the system number. If the system is in ALARM mode, receive an emergency call. Wait for the answer.
2. Dial the **15*** DTMF command to enable the «Tow truck» mode, the system will disable motion, shock and tilt sensors.

To end the session, hung up the phone.

Activating/deactivating engine blocking

You can block the vehicle engine using any phone. The engine will remain blocked until the phone command «Unlock engine» will be sent and the «Secret PIN-code» will be entered. This blocking cannot be disabled by any other means.

1. Call the system number and wait for the answer.
2. Dial the **666*** DTMF command to block the engine or the **999*** to unlock it (after dialling **999*** you should enter the «Secret PIN-code» that is located on the Owner's personal card).

! All other commands can be entered in the same manner.

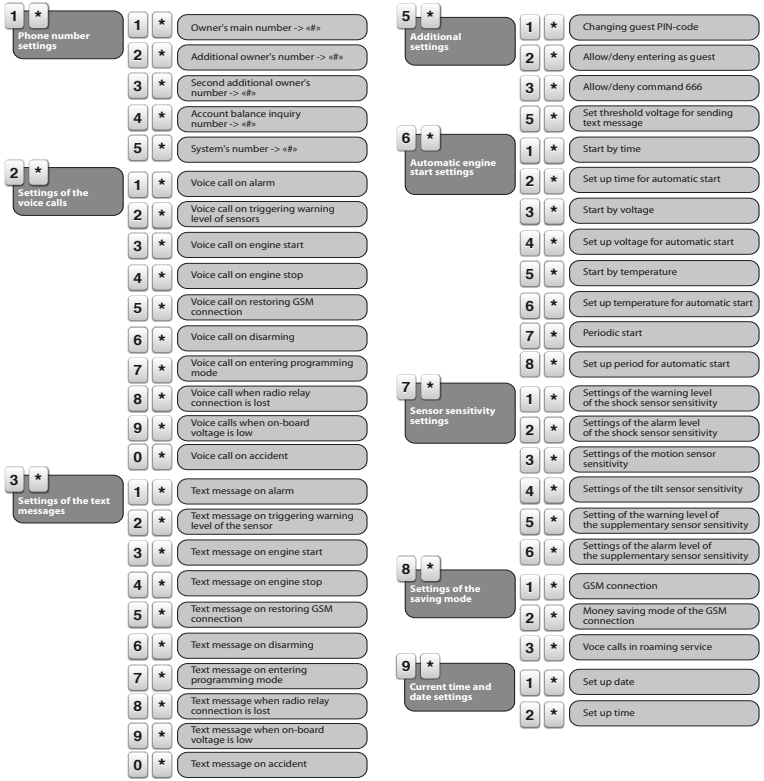
Changing settings via a phone

Disarm the system, call the system number, wait for the answer, switch on the ignition for 1-3 seconds (but no more than 5 seconds), then switch it off. The system will enter the settings mode.

An example of changing the owner's main phone number:

1. Enter the setting menu via a phone according to the instruction above;
2. Dial the 1* DTMF command (phone number settings) and the 1* (owner's main phone number);
3. Enter new owner's main phone number in the format *XXXXXXXXXX # (the system recognizes "*" as "+");
4. To confirm, dial the 1*.

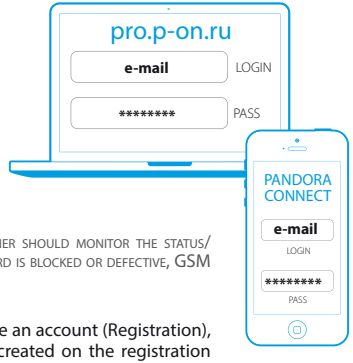
! There are 2 ways to change main owner's phone number:
1. Via a phone, using DTMF commands settings mode.
2. Using radio tag s and the VALET button:
- disarm the system, get in the vehicle, call the system phone number, wait for the answer (dial the "Guest PIN-code" (default value is 1-2-3-4) if you are calling not from the main owner's number).
- press and hold the control button on the radio tag until two flashes of the LED indicator (2 seconds) or shortly press the VALET button.
- the system will recognize the incoming phone number as the "Main owner's phone number".



6 Online service and mobile application

Telemetric functions of the system allow you to control your vehicle using the online service pandora-on.com or mobile app - Pandora Connect. A SIM card with Internet access is installed in the system to provide this functionality.

When approaching the vehicle or when Internet connection is missing a mobile phone with the app installed can work with the system via a Bluetooth connection. The mobile phone must be paired with the system.



! For the correct operation of the GSM functions, an owner should monitor the status/balance of the SIM card installed in the system. If the SIM card is blocked or defective, GSM functions of the system will be unavailable.

Before using the online-service, it is necessary to create an account (Registration), login to your account (using your email and password created on the registration step) and add the system to your account (enter information from the Owner's personal card).

Web-service: **https://pandora-on.com**.
The **Pandora Connect** mobile app is available for downloading from the corresponding app store:
App Store for iOS devices;
Google Play for Android devices.

Download on the App Store

GET IT ON Google Play

! The manufacturer reserves the right to make changes of the interface and functionality of the Internet service and mobile application without notifying the consumer.

Registration

Visit the website or open the mobile app to create an account. You will create the data to sign in: LOGIN - your email, PASSWORD - a password entered during the registration. You will receive an email with a confirmation link. Click the link to complete the registration procedure.

Login

After completing of the registration process, you can login to the online service via a computer's web browser or via the mobile application Pandora Connect. Use your previously created data:
Login - your e-mail;
Password - previously created password.

Adding a system to your account

The created account can support up to 3 telemetry systems. Use the information from the Owner's personal card to add the system to your account.

Go to the «Add a device/Add a system» window and enter the LOGIN and PASS from the Owner's personal card, create a name for your vehicle and click «Add». If you need to use several systems/devices on the same account: enter the application settings, click «Change», click «+», in the «Device Registration» window, enter the data of a new system/device located on the Owner's personal card.

! Erase the protective layer carefully. Do not use any sharp objects to avoid damaging of hidden information under the protective layer.

After this, you will be able to control, change settings and get information about the vehicle state through the online-service.

Writing a mobile device to the system memory

When approaching the vehicle or when Internet connection is missing a mobile phone with the mobile application Pandora Connect installed can work with the system via a Bluetooth connection. This type of connection allows you to control the system, receive status information and use your mobile phone as an authorization device. After installing the mobile application pair your mobile device with the system.

! The system supports Bluetooth connection only with one mobile device.

I. ENTER THE PROGRAMMING MODE

Use the VALET button to enter the «Service PIN-code» (default value is 1-1-1-1). See the detailed description of the procedure in the «Control over the system in case of emergency» section.

II. ENTER THE «PAIRING A MOBILE PHONE» PROGRAMMING LEVEL

After entering programming mode, press and hold the VALET button for 5 seconds (until the fifth signal of the siren/beeper). The system will enter the «Pairing a mobile phone» programming level. The LED indicator will light green, the system is ready for pairing.

! The previously paired device will be erased from the system memory after entering the level.

III. PAIR A MOBILE DEVICE

Enable the Bluetooth connection in the mobile device, enter the app settings, click «Bluetooth control», click «Not defined». In the search box, establish a connection with the detected system. The red and green flashes of the «LED» indicator light and a single siren sound will confirm the pairing.

! If there is no automatic pairing, enable the «PIN request for phone pairing» item in the «Radio tag and mobile device functions» settings and make the pairing procedure again. A mobile device will request a PIN-code (Default value is 0-0-1-1-1-1 where 4 last digits are the «Service PIN-code». This setting should be made by a qualified technician.

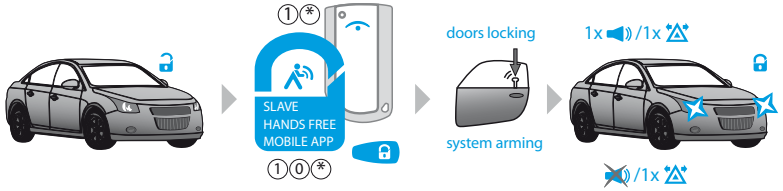
IV. EXIT PROGRAMMING MODE

Turn on the ignition and then turn off to exit programming mode.

7 Control over the system

Arming

To arm the system when the ignition is off, use one of the methods described below. The system will confirm the command with 1x short sound signal and 1x flash of light signalization.



Remote control
Shortly press the button on the remote control when you are in the radio coverage zone. The remote control will play «ARMING» ringtone and security mode status icon will be changed to .
To arm the system without a sound notification press and hold the button for more than 1 second.

Radio tag
A radio tag must be in the Bluetooth coverage area. Shortly press the control button on the tag.

Slave mode
Shortly press the "Lock" button on an original remote control of a vehicle or use the sensor/button on the door handle (for cars with an intelligent access system).

Phone
Call the system number. Wait for the answer. Dial the ①✱ command. To arm the system without siren signals dial the ①⓪✱.

Online service PANDORA-ON.COM
Login to the PANDORA-ON.COM, when the system is online (there is an Internet connection) press the button on the control panel.

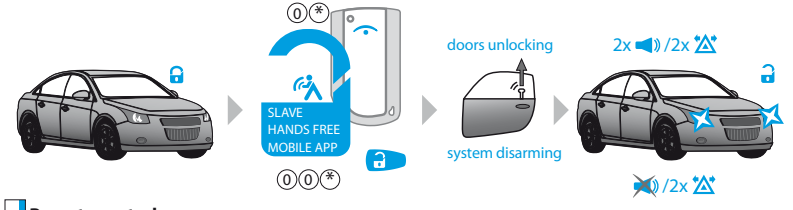
Mobile application Pandora Connect
Open the mobile application. When the system is online (there is an Internet or Bluetooth connection), press and hold the button on the control panel until the scale is fully loaded.

HandsFree mode
Move with an authorization device away from your vehicle.

VALET button
Press and hold the VALET button for 3 seconds. The system will be armed in 30 seconds. The LED indicator is lighting red during the countdown.
! There is an option in the system settings that allows to arm the system with disabled sensors (shock/tilt/motion and additional sensors). The configuration should be made by a qualified technician.

Disarming

To disarm the system, use one of the methods described below. The system will confirm the command with 2 short sound signals 2x and 2 flashes of turn indicators 2x.



Remote control
Shortly press the button on the remote control when you are in the radio coverage zone. The remote control will play «DISARMING» ringtone and security mode status icon will be changed to .
To disarm the system without a sound notification press and hold the button for more than 1 second.

Radio tag
A radio tag must be in the Bluetooth coverage area. Shortly press the control button on the tag.

Slave mode
Shortly press the "Unlock" button on an original remote control of a vehicle or use the sensor/button on the door handle (for cars with an intelligent access system).

Phone
Call the system number. Wait for the answer. Dial the 0* command. To disarm the system without siren signals dial the 00*.

Online service PANDORA-ON.COM
Login to the PANDORA-ON.COM, when the system is online (there is an Internet connection) press the button on the control panel.

Mobile application Pandora Connect
Open the mobile application. When the system is online (there is an Internet or Bluetooth connection), press and hold the button on the control panel until the scale is fully loaded.

HandsFree mode
Move towards the vehicle with an authorization device.

VALET button
Enter the "Secret PIN-code" (see the "Emergency disarming using the VALET button" section).

Unlocking the trunk

The system allows to unlock the trunk no matter if the system is armed or not. If the system is armed when this action is performed, the trunk will be disarmed, shock and supplementary sensors will be disabled. All the other security zones will remain armed. If the trunk was not opened in 15 seconds after using «unlock trunk» command, the system will lock it again, enable sensors and arm trunk security zone. This will be indicated with 1 flash of turn signals 1x.

To unlock the trunk, choose one of the following methods:

Remote control
When you are in the radio coverage zone, press and hold the F button for 1 second on the remote control until the remote control will play single sound and vibro- notification.

Mobile application Pandora Connect
Open the mobile application. When the system is online (there is an Internet or Bluetooth connection), press and hold the button on the control panel until the scale is fully loaded.

Slave mode
Shortly press the open trunk button on a factory remote control or use a sensor/button on a trunk door (for cars with an intelligent access system).

Locking/unlocking doors when ignition is on

The system allows you to lock and unlock doors when ignition is on. To do this, use one of the methods described below.

Remote control
Press the button to lock doors or the button to unlock doors when you are in the radio coverage zone.

Radio tag
A radio tag must be in the Bluetooth coverage area. Shortly press the control button on the tag.

Mobile application Pandora Connect
Open the mobile application. When the system is online (there is an Internet connection), press and hold the button to lock doors or the button to unlock doors on the control panel until the scale is fully loaded.

Automatic modes
There are automatic lock modes that will lock the doors:
- on switching on the ignition - the doors will be locked automatically 5 seconds after the ignition was switched on;
- at the car movement - the system will detect car moving or change of parking brake position and perform doors locking (if speed status missing in a digital CAN-bus locking will be performed by motion sensor)
- on switching off the ignition - doors will be automatically unlocked when the ignition is switched off.

! This mode is disabled by default. The configuration should be made by a qualified technician.

Delayed arming

If you cannot arm vehicle using a remote control (you have your hands full) when leaving, you can use delayed arming.

To activate this mode, shortly press and buttons simultaneously. The LED indicator will turn red, the system will lock doors and will arm in 30 seconds, the siren will sound 1x and turn signals will flash once 1x, indicating that the mode is triggered.

To activate this mode without sound confirmation, press and hold both and buttons for 1 second until the sound and vibration signal.

To cancel delayed arming when it is triggered, simply press button.

Vehicle search function

To easily find your vehicle on a massive parking, shortly press the button when the car is armed. The system will sound the siren 5x and flash turn signals 5x.

PANIC mode

If your vehicle or you are in danger and you want to draw attention to your vehicle, you can use PANIC mode. In this mode the siren will sound and turn signals will flash repeatedly for 30 seconds.

Remote control

To activate the PANIC mode, press the and .

To switch it off, press either or button.

! In case of early disabling of the PANIC mode system executes control commands.

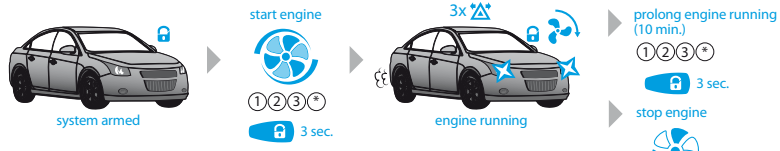
Mobile application Pandora Connect

Open the mobile application. When the system is online (there is an Internet or Bluetooth connection), press and hold the button on the control panel until the scale is fully loaded.

To switch this function off press and hold the button on the control panel until the scale is fully loaded.

Remote engine start

If the system is ready for remote engine start, use one of the methods described below to start the engine, the system will confirm the command with 3x light signalization.



Remote control

- To start the engine, press and hold the button for 3 seconds (the remote control must be in the radio coverage zone). Sound signal will confirm the command, LCD will show flashing the «engine is running» icon signifying preparation to the engine start. In a few seconds the engine will be started, the remote will play the «ENGINE START» ringtone and show «Ignition on» icon and spinning engine operation icon.
  The remote will give notification 1 minute before designated engine stop the icon will flash and the «ENGINE STOP IN 1 MINUTE» ringtone will play every 10 seconds.
  Sending the «REMOTE ENGINE START» command (press and hold the button for 3 seconds) while the «ENGINE STOP IN 1 MINUTE» ringtone is playing will extend its operation period by 10 minutes.
  This procedure can be repeated multiple times.
- To stop the engine, press and hold the button for 2 seconds or more (the remote control must be in the radio coverage zone. The engine will be immediately stopped and it will be confirmed by remote playing the «ENGINE STOP» ringtone and the «Ignition on» icon and the «Engine is running» icon will turn off.

Factory key

The system reads digital information from a car, this allows you to start and stop the engine by a factory key:

- To start the engine, press the «LOCK» button 3 times within 5 seconds (the key must be in the radio coverage zone).

- To stop the engine, press the «LOCK» button 3 times within 5 seconds (the key must be in the radio coverage zone).

  ! Remote engine start by an original key does not require any additional settings. Check if the function available for your car in loader.pandorainfo.com

  The function becomes available only 30 seconds after arming.

Phone

- To start the engine, call the system number, wait for the answer. Dial the command ①②③*. If you repeat the command ①②③*,when the engine is running, it will prolong the operation period by 10 minutes (this procedure can be repeated multiple times).
- To stop the engine, call the system number, wait for the answer. Dial the command ③②①*.

Online service PANDORA-ON.COM

- To start the engine, login to the PANDORA-ON.COM, when the system is online (there is an Internet connection) press the START ENGINE button on the control panel. In a few seconds the engine will be started, it will be confirmed with the spinning icon.
- To stop the engine, press the STOP ENGINE button on the control panel. In a few seconds the engine will be stopped and the spinning icon will be faded.

Mobile application Pandora Connect

- To start the engine, open the mobile application. When the system is online (there is an Internet or Bluetooth connection) press and hold the START ENGINE button on the control panel until the scale is fully loaded. In a few seconds the engine will be started, it will be confirmed with the spinning icon.

  Sending the command again (press the icon and confirm command) will extend operation period of the remote or automatic engine start by 10 minutes. This procedure can be repeated multiple times.
- To stop the engine, press and hold the STOP ENGINE button on the control panel until the scale is fully loaded. In a few seconds the engine will be stopped and the spinning icon will be faded.

Engine preheater

Use one of the methods described below for remote start of the engine preheater:

Remote control

For remote start of the engine preheater, by short presses of the F button select the **ENGINE PREHEATER** menu and shortly press the or buttons.

If the control of the preheater operation function is implemented, the display will show an **ON** icon for the entire duration of the preheater operation.

Phone

For remote control of the engine preheater, call the system number, wait for the answer and dial the command:

- ①⑤⑥* - to start the engine preheater. The system will confirm command by a voice message "Switch on engine preheater";
- ⑥⑤①* - to stop the engine preheater. The system will confirm command by a voice message "Switch off engine preheater".

If the control of the preheater operation function is implemented, a voice message "Engine preheater switched on" will play in the main voice menu for the entire duration of the preheater operation.

Online service PANDORA-ON.COM

For remote control of the engine preheater, login to the PANDORA-ON.COM, when the system is online (there is an Internet connection) press the button on the control panel.

If the control of the preheater operation function is implemented, the icon will be displayed for the entire duration of the preheater operation.

Mobile application Pandora Connect

Open the mobile application. When the system is online (there is an Internet or Bluetooth connection), press and hold the button on the control panel until the scale is fully loaded.

If the control of the preheater operation function is implemented, the icon will be displayed for the entire duration of the preheater operation.

! To change buttons layout or add new buttons on the control panel, go to "Settings" -> "Control buttons" menu of the application.

Automatic operation of the preheater

The mobile app settings allow to turn on and off the preheater before remote and automatic engine start (except remote start by voltage). Automatic operation of the preheater is possible according to the following parameters: switching on and off according to the engine temperature, operating time.

! The preheater switching on and off by temperature is only possible when the engine temperature sensor is connected. Special settings of the system can use engine preheater as additional heater for the engine and interior when outside temperature is low (less +5C). The configuration should be made by a qualified technician, the engine temperature sensor must be connected.

Ultra-low power consumption (Season storage) mode

A special mode designed for long-term parking or seasonal storage of the vehicles. This mode significantly reduces the power consumption of the system by disabling the notification and control interfaces.

- Season storage mode is activated via the mobile application or automatically, regardless of the security mode. When the system is armed and Season storage enabled, the security zones are monitored. In case of violation of the security zone (s), Season storage mode will be temporarily disabled (for 24 hours) for the owner notification.
- Season storage mode is disabled depending on the security mode:
  - if the system is armed, it is necessary to violate some security zone and disarm the system by any available way within 15 minutes;
  - if the system is disarmed, the ignition must be switched on.

Mobile application Pandora Connect

When the system is online (only Bluetooth connection), press and hold the "Stealth mode" button on the control panel until the scale is fully loaded.

! To change the location of the button's on the control panel go to the app settings and enter the «Control Button's» menu.

Automatic mode

The system allows automatically activate the Ultra-low power consumption mode after a specified number of days after the last event (arming/disarming, changing the status of the security zone).

! The mode setting is available in the Online service and mobile application (Device settings -> CONNECTION/Data transfer -> Time to power-saving mode activation).

Service mode

It is recommended to put the system into the Service mode before handing it to a service station or valet parking. When this mode is switched on, security system stops interfering with built-in electronics and disables all functions to ease maintenance.

- **To activate Service mode, disarm the system, turn on the ignition, an authorization device (radio tag, remotes, watches, band) must be in the Bluetooth coverage zone, enter the «Immobiliser PIN-code» (if the «Code immobiliser» function is used) and use one of the methods described below.**

- **To deactivate Service mode, use one of the methods below without any additional conditions (ignition, authorization devices, system modes).**

Remote control

To activate/deactivate Service mode enter the main menu of the remote control, choose "Settings" -> "Valet mode". (see "Remote control menu" section of the manual).

Radio tag

To activate/deactivate service mode, press and hold the button on a radio tag for 3 seconds (until the third flash of the SEND LED), release the button.

Phone

Call the system number, wait for the answer:

- to activate Service mode, dial the ⑤⑤①* command and the "Secret PIN-code" from the Owner's personal card;
- to deactivate Service mode, dial the ⑤⑤②*.

Mobile application Pandora Connect

To activate/deactivate Service mode, open the mobile application. When the system is online (there is an Internet or Bluetooth connection), press and hold the button on the control panel until the scale is fully loaded.

! To change buttons layout or add new buttons on the control panel, go to "Settings" -> "Control buttons" menu of the application.

Code immobiliser

To activate Service mode, enter the "Immobiliser PIN-code" and press the Code immobiliser button 10 times within 20 seconds.

To deactivate Service mode, turn on the ignition and enter the "Immobiliser PIN-code".

Automatic mode

The system can automatically deactivate Service mode when vehicle starts driving (speed increases) and the owner authorization device (radio tag, Bluetooth remote control, watches or mobile device) is in the radio coverage zone.

! This function does not require additional configurations. See detailed information about "Speed" function on loader.pandorainfo.com.

Service mode indication

- Activated Service mode is indicated by: an  icon in the mobile application, constant green LED when the ignition is on, long sound signal of a Beeper at the moment you activate the mode.
- Deactivated Service mode is indicated by: no  icon in the mobile application, no constant green LED when the ignition is on, two long sound signals of a Beeper at the moment you deactivate the mode.

8 Control over the system in case of emergency

Before using emergency system control, check the system and vehicle control devices: check a battery, turn on a device in accordance with its manual (if required).
If all devices are working, try to make a primary vehicle diagnosis: check the vehicle original control device, vehicle battery charge level, gearbox selector position, check information on the dashboard.

THE SYSTEM CAN BE CONTROLLED FROM A PHONE

Call the system phone number and enter the command after the answer:

0* – Disarming

998*xxxx – Deactivate authorization devices, where XXXX is the «Secret PIN- code» written on the Owner's personal card.

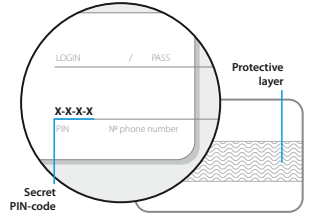
The phone number of the system is located under the protective layer on the Owner's personal card. If the call is made from the «Additional number», or a number not saved in the memory of the base unit, then after the sound signal, you will need to enter the «Guest PIN code» (factory value is 1-2-3-4). For a complete list of commands, see the section «CONTROL THE SYSTEM BY A PHONE».

The system has emergency ways to deactivate security and Anti-Hi-Jack functions (using the VALET button and the «Secret PIN-code») in case of loss or failure of control devices or in case of discharge of a battery (when you cannot replace it or charge).

- «Secret PIN-code» is located under protective layer on the Owner's personal card;
- VALET button is located on the base unit and on the external VALET button.

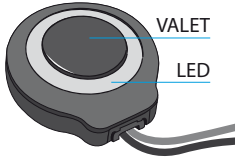
Owner's personal card

Remove the protective layer carefully. Do not use any sharp objects to avoid damaging of hidden information under the protective layer.



External VALET button

The external VALET button is placed in the interior (check «System modules layout»).



READ THE PROCEDURE FOR ENTERING THE PIN-CODE BEFORE USING EMERGENCY FUNCTIONS.

- **Enter the first digit** • Press the button the number of times equal to the first digit. Pauses between presses should not exceed 1 second. Each pressing will be confirmed with an orange LED indicator flash. Wait for more than 1 second, one red flash of the LED indicator and one short sound signal of the Beeper will confirm the input of the first digit. Then you can enter the next digit.

- **Enter the second digit** • Press the button the number of times equal to the second digit. Pauses between presses should not exceed 1 second. Each pressing will be confirmed with an orange LED indicator flash. Wait for more than 1 second, one red flash of the LED indicator and one short sound signal of the Beeper will confirm the input of the second digit. Then you can enter the next digit.

- **Enter the third digit** • Press the button the number of times equal to the third digit. Pauses between presses should not exceed 1 second. Each pressing will be confirmed with an orange LED indicator flash. Wait for more than 1 second, one red flash of the LED indicator and one short sound signal of the Beeper will confirm the input of the third digit. Then you can enter the next digit.

- **Enter the fourth digit** • Press the button the number of times equal to the fourth digit. Pauses between presses should not exceed 1 second. Each pressing will be confirmed with an orange LED indicator flash. The correct input will be confirmed with the series of green and red flashes of the LED indicator.

Emergency disarming/ Beach mode deactivation

If the doors are locked, open the door with the original key. Not paying attention to the siren signals, make sure that the ignition is off and enter the «Secret PIN-code» (see the procedure description above) with the VALET button. If there are no siren sounds or LED flashes, check the battery. It is not possible to enter the «Secret PIN-code», if there is no power supply.

- The system will be disarmed in case of correct PIN-code input. It will be confirmed with the series of green and red flashes of the LED indicator, the series of sound signals of the beeper, 4 beeps of the siren and 4 signals of the light signalization (notification of the security zones triggered). Emergency disarming is equivalent to a normal method of disarming. No additional actions are required for further operation of the system.
- The system will stay in the previous state in case of incorrect input of the PIN-code. It will be indicated with a long red flash of the LED indicator and a short single sound of the beeper. New input can be attempted after 5 seconds.

Emergency control of the anti-theft functions

This section describes two options to deactivate Immobiliser modes:

- Immobiliser and Anti-Hi-Jack - use owner authorization devices (tags, remotes, watches, bands) for engine blocking;
- Code Immobiliser - uses standard vehicle controls (buttons, levers, pedals) to enter the "Immobiliser PIN-code".

OPTION №1 – EMERGENCY DEACTIVATION OF ANTI-THEFT MODES

This option is used for a temporary deactivation of the anti-theft modes. Deactivation is made by entering the "Secret PIN-code" with the VALET button when the system is disarmed and the Service mode disabled.

- To temporarily deactivate the Immobiliser or/and Code Immobiliser (pin-to-drive) functions, turn on the ignition when the system is disarmed and enter the «Secret PIN-code» from the Owner's personal card using the VALET button. The Immobiliser and Code Immobiliser functions will be deactivated by the time the ignition is turned off.

OPTION №2 – EMERGENCY DEACTIVATION OF ANTI-THEFT FUNCTIONS

This method is used for a permanent deactivation of the anti-theft functions. Deactivation and activation are made by entering the «Secret PIN-code» from the Owner's personal card using the VALET button while system is disarmed, ignition is off and the Service mode is disabled.

1. Enter the programming mode by entering the «Secret PIN-code» (from the Owner's personal card) or the «Service PIN-code» (default value is 1-1-1-1).

2. Code Immobiliser - enter the programming level №13 - press the VALET button 13 times (without pauses).

2. Immobiliser / Anti-Hi-Jack - enter the programming level №15 - press the VALET button 15 times (without pauses).

3. To deactivate the function - The LED indicator will be green after entering the programming level. The system will wait 10 seconds for entering the «Secret PIN-code». If the PIN-code is not entered within 10 seconds or the input is incorrect, the system will return to the programming menu. Enter the «Secret PIN-code» that is written on the Owner's personal card. The system will confirm deactivating with a long red LED flash and two sound signals of the Siren. Turn on the ignition and then turn off to exit programming mode. The function will be deactivated.

4. To activate the function - The LED indicator will light red after entering the programming level. The system will wait for action. Press the VALET button once to activate the function. The system will confirm enabling with one short sound signal of the Siren and a green LED light. Turn on the ignition and then turn off to exit programming mode. The function will be activated.

9 Additional devices

Remote control D-035 is a two-way short-distance communication device designed to control a security system and receive information about its state. The remote control can be used as an owner authorization device.

CONTROL: Arming/Disarming | Trunk | Service mode | Remote engine start | Ignition Hold on
STATUSES: System and vehicle status
OWNER AUTHORIZATION: Immobilizer | Anti-Hi-Jack | Hands Free
OLED-display | 2.4 GHz radio interface (BLE 5.0) | Three control buttons | Sound indicator | Vibration indicator | LED indicator | Battery | micro-USB | IP40

Radio tag BT-760 | BT-770 | BT-780 is a one-way short-distance communication device designed to control a security system. The tag can be used as an owner authorization device.

CONTROL: Arming/Disarming | Service mode | Ignition Hold on
OWNER AUTHORIZATION: Immobilizer | Anti-Hi-Jack| Hands Free
2.4 GHz radio interface (BLE 4.2) | Control button | LED indicator | Motion sensor | CR 2032 battery | IP40

Door sensor DMS-1OO BT is a wireless device designed to monitor internal or external perimeter state: any security zone can be assigned to the Hall/shock/tilt sensor; temperature monitoring. The sensor can be installed on a door, hatch, trunk, trail, garage door.

2.4 GHz radio interface (BLE 4.2) | Hall sensor | Temperature sensor | Shock/motion sensor | CR123A battery | IP40

Blocking radio relay BTR-101 is a wireless device designed to perform blocking engine blocking based or not based on car movement.

2.4GHz (BLE 4.2) Radio interface | Built -in blocking relay (NC) | Motion sensor | IP54

Radio module RHM-03 BT is a wireless device designed to control equipment of the engine compartment:

• Control of Hood lock, siren, engine blocking based or not based on car movement, digital control of engine pre-heaters Eberspacher Hydronic 1/2/3 and Webasto ThermoTop Evo;

• Statuses of temperature, engine pre-heater, «Hood» security zone.

2.4GHz radio interface (BLE 4.2) | Built-in relay (NC) | Motion sensors | Hood switch input | External temperature sensor | Outputs: siren, hood lock | Engine pre-heaters control (LIN) | IP65

Piezo siren PS-331 BT is a wireless device for sound indication and control of engine compartment:

• Control connection with the base unit;

• Temperature sensor, "Hood" security zone.

Sound pressure 105-118 dB | 2.4GHz (BLE 4.2) Radio interface | Programmable input "Hood"| Programmable output | Temperature sensor | IP65

10 Warranty obligations

Manufacturer guarantees correct operation of the service-security system if exploitation, installation, storage and transportation conditions described in this manual were met.

The system should only be used according to installation scheme and user manuals.

The system is meant to be installed by the professional car electronics installers. The installer should fill in installation certificate that is included in this manual.

Parts malfunctioning during warranty period on the fault of the manufacturer should be repaired or replaced by the installation center of the manufacturer or by certified service center. List of certified service centers can be found on pandorainfo.com

The user loses the right for warranty services in the following cases:

- when warranty period expires;
- if exploitation, installation, storage or transportation conditions were not met;
- if there is mechanical damage of the external parts of the system after it is sold.

This includes: fire damage, consequential damage in case of car accident, aggressive liquids and water seeping damage, damage caused by improper use;

- if the damage was caused with incorrect settings and parameter adjustment;
- if system devices are replaced with any devices that are not recommended by the manufacturer;
- if manufacturer sealing is broken;
- if there is no properly filled warranty card and installation certificate.

Warranty period is 3 years since the moment of purchase, but no more than 3.5 (three and a half) years since the moment of production.

This warranty does not include batteries of the remotes, as they have their own service lifetime.

Maintenances and repairs of the system with expired warranty period are carried out at the expense of the user on a separate contract between the user and the installer/service center.

! We recommend you to ask an installer to fill out the installation certificate and the warranty card. These documents may be required for contacting the customer support.

Installation certificate

I, the undersigned _____
Position, name

_____

professional installer, certify that installation of the service-security system, specified below, was carried out by me in accordance with manuals and schemes provided by the manufacturer.
Car specifications:

Car model _____

Type _____

Id number (VIN) _____

Registration number _____

Security system specification:

Model Pandora Professional v3

Serial number _____

Service center name, full address and installer's stamp _____

_____

_____

Signature _____/_____/
Signatory

Work accepted _____/_____/
Signatory

Date «____»_____20____y.

Acceptance certificate

Model **Pandora Professional v3** is in conformity with Electromagnetic Compatibility Directive EMC 2004/108/EC and R&TTE Directive 1999/5/EC.

Serial number _____ Date of production_____

Responsible person's signature (stamp)

Packager_____

Signature (personal stamp)

Warranty card

Model Pandora Professional v3

Serial number _____

Date of purchase «____» _____ 20____year

_____

Seller's (installer's) stamp

Seller's signature _____