

Pandora would like to thank you for  
choosing our service-security system  
Pandora Smart Moto v2

**Pandora Smart Moto v2 is a security-service system specially designed for motorcycles.**

It is a complex engineering solution, which includes security system, telemetry, remote and automatic engine start and various service options.

When building the Pandora Smart Moto v2 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 is built for your convenience: its ergonomic, reliable, has the highest security and service characteristics, 3 years warranty. We are happy to provide any support we can – feel free to use our online support.

This device has limited external factors resistance. It should not be operated in temperatures outside -40 to +85° C range.

Our web site: [www.pandorainfo.com](http://www.pandorainfo.com)  
Customer support: [support@pandorainfo.com](mailto:support@pandorainfo.com)



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

## Table of contents

<b>General information</b>	<b>4</b>
System set	4
Read before using	5
PIN-codes of the system	6
System modules layout	6
Owner's personal card	7
External VALET button	7
Base unit	8
System signals	9
<b>System functions and modes</b>	<b>11</b>
Security mode	11
Owner authorization devices and functions	13
Checking the number of paired devices	14
<b>Immobilizer radio tag</b>	<b>15</b>
Functions of the button	15
Indication of the SEND LED	16
Replacing a battery of the tag	16
Updating firmware of the tag	16
<b>Control the system by a phone</b>	<b>17</b>
Changing settings via a phone	19
<b>System installation</b>	<b>21</b>
General installation requirements	21
Wiring description	22
Wiring diagram	24

<b>Online service and mobile applications</b>	<b>26</b>
<b>Control the system</b>	<b>29</b>
Arming	29
Disarming	30
PANIC mode	31
Vehicle search function	31
Service mode	32
<b>Control of the system in case of emergency</b>	<b>33</b>
Emergency disarming	34
Temporary deactivation of anti-theft functions	34
<b>Programming the systems</b>	<b>36</b>
Entering/Exiting programming mode	37
Programming table	38
<b>Additional devices</b>	<b>42</b>
<b>Warranty obligations</b>	<b>44</b>
Installation certificate	47
Acceptance certificate	48
Warranty card	48

## GENERAL INFORMATION

### System set

1. User manual	1
2. Owner's personal card	1
3. Radio tag BT-760	2
4. Base unit	1
5. External VALET button	1
6. External temperature sensor	1
7. Reed sensor	2
8. Blocking relay	1
9. Piezo siren PS-330	1
10. Wires	1
11. Fastening kit	1
12. Packaging	1

---

**!** 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 AND TELEMETRIC 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 VEHICLES 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 A 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  IN THE "CONTROL THE SYSTEM" SECTION.
- 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

### 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 "Immobilizer PIN-code"

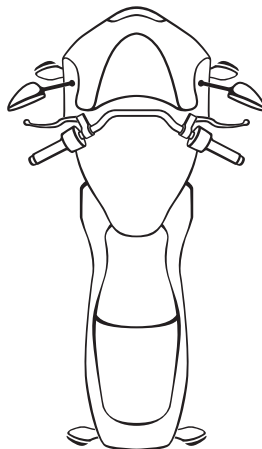
(is used for the Validator (pin-to-drive) function)

! IT IS RECOMMENDED THAT YOU WILL WRITE DOWN THE CHANGED OR CREATED VALUES OF ALL PIN-CODES. ELIMINATE THIRD-PARTY ACCESS TO THIS INFORMATION.

CANNOT BE CHANGED						
<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>
<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>
<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>

## System modules layout

- 1 External VALET button  
(VALET button via CAN)
- 2 Base unit
- 3 Temperature sensor
- 4 Siren
- 5 Circuit being blocked
- 6
- 7

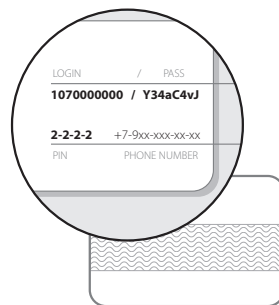


## Owner's personal card

**!** ERASE THE PROTECTIVE LAYER CAREFULLY. DO NOT USE ANY SHARP OBJECTS TO AVOID DAMAGING OF HIDDEN INFORMATION UNDER THE PROTECTIVE LAYER.

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 and to deactivate immobilizer 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 SIM-card installed in the base unit.



## External VALET button

An external VALET button with a three-color status LED indicator is placed inside a vehicle (see the system modules layout). The button is used for programming the system, arming/disarming, activating/deactivating immobilizer mode.



## Base unit

**Built-in GSM modem (2G/LBS)** – provides a connection with our online-service pandora-on.com and mobile applications (Pandora Online/Pandora Pro), 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

**Built-in nano-SIM port** is used to work with the built-in GSM modem. The phone number of the SIM-card installed in the base unit is written on the Owner's card.



THE SIM-CARD CAN BE CHANGED, THE SIM-CARD SHOULD BE REPLACED AND THE FOLLOWING SETTINGS SHOULD BE PERFORMED ONLY BY A SPECIALIST

**Built-in GPS/GLONASS-receiver** is designed to determine current location and to automatically determine UTS date and time.

**2.4GHz radio channel, Bluetooth 4.2 protocol (BT4.2)** - supports 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 block the engine and close the central lock on movement.

**Temperature sensors** allow the system to measure temperature of different zones: outside temperature – built in sensor of the main unit, engine temperature – external temperature sensor.



















**The system** setting allow you to reassign sensor to different zones and use information from external additional devices (see the "Additional devices" section).

**Built-in battery** to notify an owner in case of power disconnection in armed mode. The battery will be charged automatically when engine is running.

**Built-in micro-USB port** – update and configuration of the system using a PC and Pandora Alarm Studio.





## System signals







SOUND  AND LIGHT  SIGNALIZATION	
SIGNALS	DESCRIPTION
1x  / 1x 	Arming
2x  / 2x 	Disarming
1x 	Enabling Service mode
2x 	Disabling Service mode
3x  / 3 times	Battery in a radio tag is discharged warning (when turn on ignition)
4x  / 4 times	There is no any authorization device warning (when turn on ignition)
5x  / 5x 	Car search function
30 sec.  / 30 sec. 	Alarm, PANIC mode
3x  / 1x 	Warning level of a sensor is triggerd
4x  / 4x 	Sensors were triggered' signal when disarming / 'Sensors are triggered" signal when arming

LED INDICATOR SIGNALS	
SIGNALS	DESCRIPTION
THE SYSTEM IS ARMED	
Short red flashes	System is armed
Short green flashes	System is armed (an authorization device is 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 ignition is on)	System is in service mode
Green flashes (when switching on the ignition)	Confirms the number of paired radio tags
Red flash (when switching on the ignition)	Confirms a paired mobile device
WHEN ENTERING THE "SECRET PIN-CODE" OR THE "SERVICE PIN-CODE"	
Orange flash	Confirms a VALET button press
Short red flash	Confirms a digit input PIN-code is incorrect
Red and green flashes	Confirms correct PIN code





## 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 sensor. 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 accompanied with **30 sec.**  **light** and **30 sec.**  **sound** signals, the alarm signals can be canceled 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 immobilizer function and additional blocking are not used). If there were alarm events 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.

VEHICLE/SYSTEM ZONES	CONTROLLED ZONES	SECURITY ZONES	NOTIFICATIONS		
			Voice	SMS	Push
External temperature					
Engine temperature					
On-board voltage					
Shock sensor (alarm)					
Shock sensor (warning)					
Tilt sensor (alarm)					
Motion sensor (alarm)					
Ignition (alarm)					
Brake (alarm)					
Clutch (alarm)					
Trunk (alarm)					
Additional sensor (alarm)					
Additional sensor (warning)					

## Owner authorization devices and functions

### Authorization devices

Authorization devices are Bluetooth devices paired with the system (radio tags, remote control D030, mobile phone with the app). 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 immobilizer or Anti-Hi-Jack functions.

 WE RECOMMEND TO INSTALL THE BEEPER IF YOU USE AUTHORIZATION DEVICES


### Arming/Disarming by clutch lever

You can arm/disarm the system by a clutch lever if an authorization device is in the coverage zone.

 THIS MODE IS ENABLED BY DEFAULT. IT IS REQUIRED TO MAKE ADDITIONAL CONNECTIONS FOR THIS MODE.

### 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. IT IS REQUIRED TO MAKE ADDITIONAL SETTINGS USING THE MOBILE APPLICATION OR PANDORA ALARM STUDIO TO USE THIS MODE. QUICK ACCESS COMMANDS TO MANAGE HANDS FREE MODE: 223\* - ACTIVATE HANDS FREE ARMING, 224\* - ACTIVATE HANDS FREE DISARMING, 222\* - DEACTIVATE ALL HANDS FREE MODES.

### Immobilizer 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 any 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. IT IS REQUIRED TO MAKE ADDITIONAL CONNECTIONS FOR THIS MODE.

### Multi-button code immobilizer (pin-to-drive)

Multi-button code immobilizer (pin-to-drive) is a function that allows disarming, disabling blocking and controlling service mode and time channels using original vehicle controls (button, lever or pedal) and a pre-programmed PIN-code (the "Immobilizer PIN-code").

#### AN EXAMPLE OF USING THE FUNCTION


- Turn on the ignition to disable engine blocking or enable service mode, turning on the ignition is not required if you want to disarm the system or control time channels.
- Enter the "Immobilizer PIN-code". Press a 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 immobilizer code can consist max of 4 digits from 1 to 9.
- The system will confirm the correct input by a sound signal of the beeper and a programmed
- function will be performed.





THIS MODE IS DISABLED BY DEFAULT. THIS MODE CAN BE SET ONLY BY A PROFESSIONAL SPECIALIST

## Checking the number of paired devices

The number of paired radio tags/mobile device can be checked by the number of flashes of the LED indicator. The number of tags/mobile device can be checked when switching on the ignition (the system must be disarmed). The number of green flashes will indicate the number of paired radio tags, a following red flash will indicate a paired mobile device.

You can also check the number of paired radio tags/mobile device by taking off and putting back on battery terminal. The system will emit short sound signals from a siren :

- First series of the siren signals  – indicates the number of paired radio tags;
- The second long signal  after a pause of 2 seconds indicates a paired mobile devices.

## IMMOBILIZER RADIO TAG

A radio tag is a device used to control a vehicle/system. The tag is also used as an authorization device for “Immobilizer/Anti-Hijack/HandsFree” modes. It works in the Bluetooth coverage zone. The radio tag has:



- 2.4GHz frequency, BLUETOOTH 4.2 LOW ENERGY protocol

**SEND**

- control button

**CR 2032**

- Battery



- Motion sensor



AVOID MOISTURE ON THE RADIO TAG. DO NOT PLACE THE RADIO TAG NEAR MAGNETS OR PRODUCTS WITH SELF-MAGNETIC FIELDS

SEND



### Functions of the button

ACTION	FUNCTION
- Short press when ignition is off	Arm/disarm
- 2 seconds (system is disarmed)	Change the “Main owner’s phone number”
- Press and hold for 3 sec when ignition is on	Activate/deactivate Service mode
- 6 Press and hold for 6 sec.	Pair a tag with the base unit
- Press and hold for 10 sec.	Firmware update

## Indication of the SEND LED


SIGNALS	DESCRIPTION
1 flash	Arm/disarm Confirmation of arming Low battery level (when installing a battery)
2 flashes	Confirmation of disarming
3 flashes	High battery level (when installing a battery)
Faded Constant light	Battery is discharged (when installing a battery, when the button is pressed)

## Replacing a battery of the tag

Carefully open the cover of the tag's battery compartment. Extract discharged battery and insert a new one keeping in mind the correct polarity. Replacing a battery will not cause a loss of tag code information, as authorization data is stored in the non-volatile memory of the MCU. Carefully close the cover of the tag's battery compartment. All elements of construction should be rigidly locked in places. If it is so, the tag can be operated as usually.



## Updating firmware of the tag

- Download the Pandora BT application (for Android or iOS devices equipped with a Bluetooth 4.0 Low Energy or higher module).
- Open the mobile app Pandora BT.
- 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 option: FILE MANAGER – firmware will be uploaded from the phone storage (only for Android). INTERNET – firmware will be uploaded by an internet connection.



## CONTROL THE SYSTEM BY A 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. When it answers, enter a command code

#	Return to previous menu	4 5 6 *	Switch on additional channel
*	Repeat the last message	6 5 4 *	Switch off additional channel
1 *	Arming	2 5 8 *	System information
0 *	Disarming	2 2 2 *	Disable Hands Free mode
1 0 *	Silent arming	2 2 3 *	Enable Hands Free arming
0 0 *	Silent disarming	2 2 4 *	Enable Hands Free disarming
9 *	Help	2 9 7 *	End call
1 5 *	Tow truck mode	5 5 1 *	Enable service mode (see description below)*
1 0 0 *	Request GSM account balance	5 5 2 *	Disable service mode
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	8 8 8 *	Enable authorization devices

**!** \*IT IS REQUIRED TO ENTER THE "SECRET PIN-CODE" AFTER DIALING A COMMAND

### 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.

### Repeat the last message

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

### Request current coordinates

1. Call the system number. Wait for the answer.

2. Dial 500\*.
3. The system will confirm: 'Current coordinates are sent via text message' and will send text message with coordinates and a web link to a map to your phone.  
To end the session, hang up the phone..

### **Request GSM balance**

1. Call the system number. Wait for the answer.
2. Dial 100\*.
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 car 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 PANIC mode, receive an emergency call. Wait for the answer.
2. Dial **15\***, to enable the "Tow truck" mode, the system will disable motion, shock and tilt sensors.  
To end the session, hung up the phone.
3. To disable this mode, disarm the system.

### **Activating/Deactivating engine blocking**

You can block a car engine using any phone. The engine will remain blocked until phone command 'Unlock engine' will be sent and the "Secret PIN-code" will be entered. This blocking cannot be disabled using a remote control or VALET button.

1. Call the system number and wait for the answer.
2. Dial **666\*** to block an engine or **999\*** to unlock it (after dialing **999\*** you should enter the "Secret PIN code" that is located on the owner's card).

 ALL OTHER COMMANDS CAN BE ENTERED IN THE SAME MANNER.

## Changing settings via a phone

1 \*

### Phone number settings

- 1 \* Owner's number -> #
- 2 \* Additional owner's number -> #
- 3 \* Second additional owner's number -> #
- 4 \* Account balance inquiry number -> #
- 5 \* System's number -> «#»

2 \*

### Settings of the voice calls

- 1 \* Voice calls on alarm
- 2 \* Voice calls on triggering warning level of the sensors
- 3 \* Voice calls on engine start
- 4 \* Voice calls on engine stop
- 5 \* Voice calls on restoring GSM connection
- 6 \* Voice calls on disarming
- 7 \* Voice calls on entering programming mode
- 8 \* Voice calls when radio relay connection is lost
- 9 \* Voice calls when on-board voltage is low
- 0 \* Voice calls on accident

3 \*

### Settings of the text messages

- 1 \* Text messages on alarm
- 2 \* Text messages on triggering warning level of the sensors
- 3 \* Text messages on engine start
- 4 \* Text messages on engine stop
- 5 \* Text messages on restoring GSM connection
- 6 \* Text messages on disarming
- 7 \* Text messages on entering programming mode
- 8 \* Text messages when radio relay connection is lost
- 9 \* Text messages when on-board voltage is low
- 0 \* Text messages on accident

5 \*

### Additional settings

- 1 \* Changing guest PIN-code
- 2 \* Entering as guest
- 5 \* Set threshold voltage for sending text message

7 \*

### Sensor sensitivity settings

- 1 \* Settings of the warning level of the shock sensor sensitivity
- 2 \* Settings of the alarm level of the shock sensor sensitivity
- 3 \* Settings of the motion sensor sensitivity
- 4 \* Settings of the tilt sensor sensitivity
- 5 \* Settings of the warning level of the supplementary sensor sensitivity
- 6 \* Settings of the alarm level of the supplementary sensor sensitivity

8 \*

### Settings of saving mode

- 1 \* GSM connection
- 2 \* Money saving mode of the GSM connection
- 3 \* Voice calls in roaming service

9 \*

### Current time and date settings

- 1 \* Set up date
- 2 \* Set up time

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 system number:

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

**!** THERE ARE 3 WAYS TO CHANGE MAIN OWNER'S PHONE NUMBER:

1. VIA A PHONE, USING DTMF COMMANDS SETTINGS MODE.
2. USING RADIO TAGS: TURN ON THE IGNITION WHEN THE SYSTEM IS DISARMED AND 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, THEN PRESS AND HOLD THE BUTTON ON THE RADIO TAG FOR 2 SECONDS (UNTIL THE SECOND FLASH OF THE SEND INDICATOR). RELEASE THE BUTTON, THE SYSTEM WILL RECOGNIZE THE INCOMING PHONE NUMBER AS THE "MAIN OWNER'S PHONE NUMBER."
3. USING THE PANDORA ALARM STUDIO OR PANDORA BT APPLICATIONS.

## SYSTEM INSTALLATION

### General installation requirements

- Install base unit in hidden places where access is difficult.
  - Install securely each system's component, as conditions of the vehicle standard operation can harm functionality of the alarm system and cause damage to the vehicle original systems, including the elements of safety in motion.
  - The system installation should be performed when the system sockets and the negative battery terminal are disconnected.
  - The system installation can be performed via twisting together or via lead-tin soldering followed by isolation of a switching place.
  - When wiring, pay attention to sections and materials of switched conductors, if they are different, bring electrochemical potentials to the minimal difference. The isolation should not allow for moisture to reach wiring, as the presence of moisture will increase electrochemical destruction of wires (this is especially important for the large current circuits).
  - Switched connections should be placed as high as it is possible in the cavities so water condensate will not form drops on the switching location.
  - To avoid the destruction of compounds by vehicle vibration, ensure that there is a bit of free length to the wiring, providing enough sagging.
  - Do not allow wiring in places where the wires isolation can be destroyed by abrasion.
  - Electronic system units should be placed sockets down and as high as possible to avoid condensate reaching electronic components through the socket.
  - When installing base unit, secure it to the vehicle body for correct operation of in-built shock sensor.
- All unused system wires during the installation must be insulated and secured to prevent accidental touching of a vehicle body or other wire.

## Wiring description

### Connector X1 (micro-USB)

This connector is used to configure and update the system via a USB cable connected to a computer with Pandora Alarm Studio.

### Connector X2 (Main connector)

The main connector has multi-function inputs (INP) and outputs (CH) with the factory-preset logic. The logic of the channels can be changed in the Inputs/Outputs and Time Channels settings. It is also possible to re-program type of an input (INP) from normally open (NO) to normally closed (NC) in the input settings.

- **Wire №1 | Red | POWER (+12V)** — System power supply. It should be connected to reliable conductor with constant voltage of 12V

- **Wire №2 | Black | GROUND (-)** — Ground. It should be connected to a vehicle grounding spot (-). This wire should be connected **FIRST** during installation.

- **Wire №3 | White | t° sensor** — Connect a temperature sensor to this wire. Factory logic is "Engine temperature". Connect this wire to the red wire of the sensor. The black wire of the sensor is connected to a vehicle grounding spot.

- **Wire №4 | White-Red | LED/VALET** — Connect this wire to the red wire of the LED/VALET button.

- **Wire №5 | Yellow | (+) | INP1** — Factory default logic is "Ignition". Connect this wire to the ignition switch or to the appropriate wire where 12V voltage appears when ignition is switched on and does not disappear until the moment ignition is disabled.



CONNECTION OF THIS WIRE IS MANDATORY.

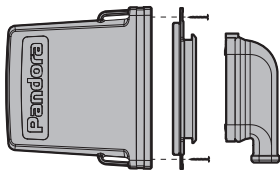
- **Wire №6 | Green | 200mA (-) | INP2/CH4** — Factory default logic is "NC Blocking". The channel is used to control a blocking relay with normally closed logic. The channel is enabled (blocking is activated) when the ignition is switched on in the armed mode or there is no radio tag in the coverage zone when ignition is switched on (in the Immobilizer mode).

- **Wire №7 | Gray | 200mA (-) | CH1/INP4** — Factory default logic is "Clutch". Input for arming/disarming when an authorization device is in the zone (1.2.4 setting "Arming/Disarming by a clutch handle). Connect this wire to a wire that becomes grounded when the clutch handle is pressed.

- **Wire №8 | Orange | 6A (+) | CH7** — Factory default logic is "Turn indicators". Connect this wire to (+) control wire of the left or right turn indicators.

- **Wire №9 | Orange | 6A (+) | CH6** — Factory default logic is "Turn indicators". Connect this wire to (+) control wire of the left or right turn indicators.

- **Wire №10 | Purple | 2A | CH5** — Factory default logic is “Siren” and “Beeper”. Connect this wire to to (+) control wire of the siren.
- **Wire №11 | White-green | LED/VALET** — Connect this wire to the black wire of the LED/VALET button.
- **Wire №12 | White-blue | (+) | INP3** — Factory default logic is “Brake”. Connect this wire to a wire where 12V voltage appears when brake is pressed.
- **Wire №13 | White-brown | 200mA | CH2/INP5** — Factory default logic is “Trunk”. Connect this wire to a wire that becomes grounded when the pannier opens. It is required to change input type to NC in the Inputs settings if a reed sensor is used.
- **Wire №14 | Brown | 200mA | CH3/INP6** — Factory default logic is “Trunk”. Connect this wire to a wire that becomes grounded when the pannier opens. It is required to change input type to NC in the Inputs settings if a reed sensor is used.



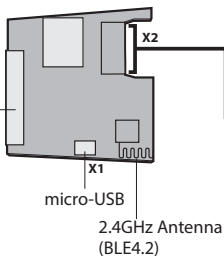
**WARNING!** Update firmware of the base unit before installation.

**WARNING!** All power circuits of additional devices that are not powered through the base unit of the system should have their own fuses.

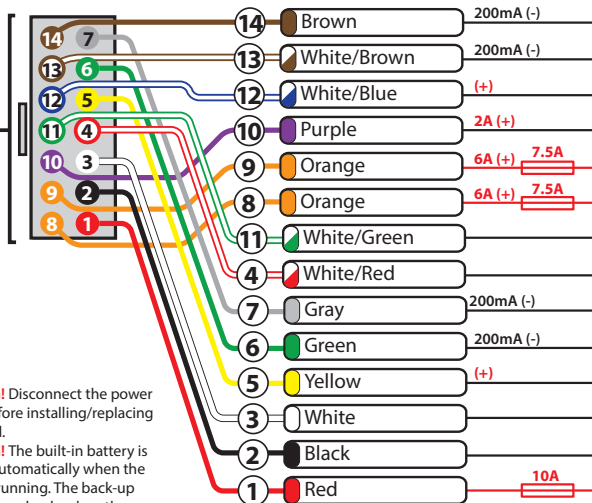
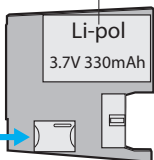
**WARNING!** The base unit must be placed vertically or horizontally, do not cover the front side of the unit (the side with the "Pandora" sign).

**WARNING!** Fixate the protective cap using clamps when the installation is finished.

GSM | GPS/GLONASS  
Antenna



Battery



**WARNING!** Disconnect the power supply before installing/replacing a SIM-card.

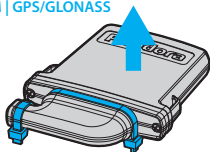
**WARNING!** The built-in battery is charged automatically when the engine is running. The back-up battery is used only when the system is armed.



placed  
ver  
with

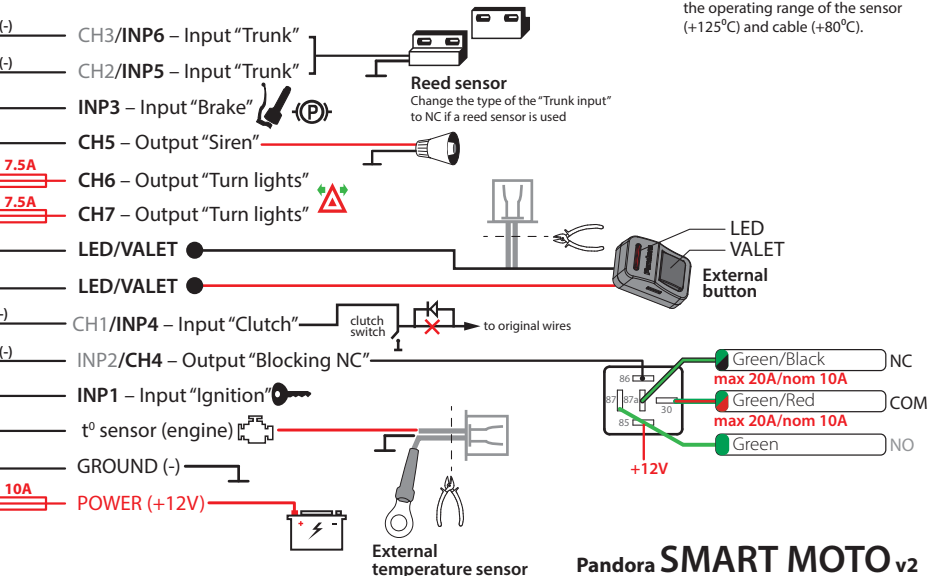
## BASE UNIT PLACEMENT

GSM | GPS/GLONASS



**WARNING!** Do not shield the built-in antennas when installing the system and additional devices. Keep minimum distance of 2 sm between the modules and metal parts.

**IT IS FORBIDDEN** to install the system on a car with normal voltage other than 12V.  
**IT IS FORBIDDEN** to bypass original fuses of a security system in the installation process.  
**IT IS FORBIDDEN** to install the security system with damaged output cables.  
**IT IS FORBIDDEN** to install the temperature sensor at the place where temperature is higher than the operating range of the sensor (+125°C) and cable (+80°C).



Pandora **SMART MOTO v2**  
Wiring diagram

## ONLINE SERVICE AND MOBILE APPLICATIONS

Telemetric function of the system allows you to control your vehicle using the online service pandora-on.com or mobile apps – Pandora Pro (for iOS), Pandora Online (for Android).

The Pandora Pro and Pandora Online applications can work via a Bluetooth channel when there is no connection to the server. To get these functions, 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 required 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”).

### Registration

Visit the website or open the mobile app to create an account - Web-service:

- <https://pandora-on.com>

Mobile apps:

- **Pandora Pro** for iOS is available in the AppStore;
- **Pandora Online** for Android is available on the Play Market (Google Play).



**!** MINIMUM REQUIREMENTS: ANDROID V4.4; iOS V10.

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 apps Pandora Pro or Pandora Online. Use your previously created login/password to login

## 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 car and click "Add".

 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 setting and get information about the vehicle state through the online-service.

 NUMBER OF EVENTS IN THE HISTORY IS LIMITED. EVENTS ARE STORED FOR AT LEAST ONE MONTH.

## Control via Bluetooth

The Pandora Pro and Pandora Online applications can work via a Bluetooth channel when there is no connection to the server. This type of connection allows you to control the system, receive status information and use your mobile phone as an authorization device.

To get access to these functions, pair a mobile device in the system:

### 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 instruction of code entering in the "Control 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 PHONE

Turn on Bluetooth on your mobile phone and open the mobile application. Go to : Settings -> Bluetooth control -> Bluetooth device/ Not specified (Android)» -> + (iOS)/ Add (Android)». Select the found system in the search window, the system and the mobile device will be automatically paired. The system will confirm pairing with the series of green and red flashes of the LED and a sound signal of the siren.

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 (Factory pre-set is 0-0-1-1-1-1 where 4 last digits are the "SERVICE PIN-code").

### IV. EXIT PROGRAMMING MODE

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






















 THE SYSTEM SUPPORTS ONLY ONE MOBILE DEVICE.

## CONTROL 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  and 1 flash of light signalization .





-  **Clutch lever** – Press the clutch lever when a radio tag is in the coverage zone  → .
-  **Radio tag** – A radio tag must be in the Bluetooth coverage area. Shortly press the control button  on the tag.
-  **Mobile applications Pandora Online and Pandora Pro** – 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. The icon of the current system mode will be changed  → .
-  **Online-service** – Login to the PANDORA-ON.COM, when the system is online (there is an Internet connection) press the button on the control panel. The icon of the current system mode will be changed  → .
-  **Phone** – Call the system number. Wait for the answer. Dial the    command. To arm the system without siren signals dial the   .
-  **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




## 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 .**










**Clutch lever** – Press the clutch lever when a radio tag is in the coverage zone  → .


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

**Mobile applications Pandora Online and Pandora Pro** – 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. The icon of the current system mode will be changed  → .


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



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

**HandsFree mode** – Move toward the vehicle with an authorization device .

 **VALET button** – Enter the “Secret PIN-code” (see the “Emergency disarming using the VALET button” section).


## PANIC mode






**If your car or you are in danger and you want to draw attention to your car, you can use PANIC mode. In this mode the siren will sound  and turn signals  will flash repeatedly for 30 seconds. To activate this mode, use one of the methods described below.**

- 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.

 TO CHANGE BUTTONS LAYOUT IN THE APP, GO TO THE “SETTINGS -> ACTION BUTTONS”.

## 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 .**


To activate this mode, call the system number. Wait for the answer. Dial the  command. To activate this mode without siren signals dial the  command.


## Service mode



It is recommended to put the system into the service mode before handing it to a car service 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 switch on this mode, disarm the system , turn on the ignition , an authorization device (a radio tag, a remote control, a mobile phone) must be in the coverage zone, enter the "Immobilizer PIN-code" (if the "Code immobilizer" function is used) and use one of the method described below.

The command will be confirmed:



- Service mode is enabled – one long sound signal 1x  an constant green LED when ignition is on ;
- Service mode is disabled – two long sound signals 2x  and faded LED when the ignition is on.

**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 LED), release the button «SEND».

**Mobile applications Pandora Online and Pandora Pro** – 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. The icon  will be appear in the mobile application, and it will disappear when the service mode is disabled.

**!** TO CHANGE BUTTONS LAYOUT IN THE APP, GO TO THE "SETTINGS -> ACTION BUTTONS".

**Online-service** – when the system is online (there is an Internet connection) select a command:

- To enable service mode – Select "Activate Service mode" command and press "SEND". The icon  will confirm the command
- To disable service mode – Select "Deactivate Service mode" command and press "SEND". The icon  will disappear.
- **Phone** – Call the system number wait for the answer. To activate service mode, dial the (5)(5)(1)(\*) DTMF command and then dial the "Secret PIN-code" from the Owner's personal card.
- To deactivate service mode dial the (5)(5)(2)(\*) DTMF command.



## CONTROL OF THE SYSTEM IN CASE OF EMERGENCY

The system has emergency ways to deactivate security and anti-hijack 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).

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 USING DTMF COMMANDS

0\* – DISARMING.

998\*XXXX – DEACTIVATE AUTHORIZATION DEVICES (IMMOBILIZER AND ANTI-HIJACK FUNCTIONS), WHERE XXXX IS THE "SECRET PIN-CODE" WRITTEN ON THE OWNER'S PERSONAL CARD UNDER THE PROTECTIVE LAYER.

1\* – ARMING.

888\* – ACTIVATE AUTHORIZATION DEVICES (IMMOBILIZER AND ANTI-HIJACK FUNCTIONS).

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

### ENTERING THE PIN-CODE

The code must be entered only when the base unit is powered and the ignition is off. The PIN-code can be entered using the external or located on the base unit VALET button. The digits input and correct input is indicated by the external or located on the base unit LED indicator.

- **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. Pause for more than 1 second, a red LED indicator flash and a short sound single of the Beeper 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. Pause for more than 1 second, a red LED indicator flash and a short sound single of the Beeper 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. Pause for more than 1 second, a red LED indicator flash and a short sound single of the Beeper 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

In case you cannot disarm the system as usual, use the VALET button and the 'Secret PIN-code' written on the Owner's personal card (see the "General information" section):

- If your car is locked, unlock it by an 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). 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.
- The system will stay in previous state in case of incorrect input of the PIN-code. It will be indicated with a long red flash of the LED indicator. New input can be attempted after 5 seconds.
- Emergency disarming is equivalent to a normal method of disarming. No additional actions are required for further operation of the system.

Emergency control of the anti-theft functions

This section describes how to deactivate and activate anti-theft functions (Immobilizer and Anti-Hi-jack), which use a radio tag, a remote control or a mobile phone as an owner authorization device, and "Code immobilizer" function, which uses standard car controls (buttons, levers, pedals) to enter the Immobilizer PIN-code.

## Temporary deactivation of anti-theft functions

This section describes how to deactivate and activate anti-theft functions (Immobilizer and Anti-Hi-jack), which use a radio tag, a remote control or a mobile phone as an owner authorization device, and "Code immobilizer" function, which uses standard car controls (buttons, levers, pedals) to enter the Immobilizer PIN-code.

### Temporary deactivation of anti-theft functions

To temporarily deactivate the Immobilizer or Code immobilizer function (pin-to-drive), turn on the ignition when the system is disarmed. Enter the "Secret code" from the owner's personal card using the VALET button. The immobilizer functions will be being deactivated by the time the ignition is turned off.

### **Emergency deactivation of anti-theft functions**

Emergency control of the anti-theft functions is possible only when the system is disarmed, the ignition is off, service mode is deactivated, a vehicle battery is charged.

Enter the "Secret PIN-code" or the "Service PIN-code" (default value is 1-1-1-1) to put the system in programming mode

To manage Immobilizer and Anti-Hi-Jack functions - After entering programming mode, press the VALET button 13 times.

To manage Immobilizer and Anti-Hi-Jack functions - After entering programming mode, press the VALET button 15 times.

Pauses between presses should not exceed 1 second. Each pressing will be confirmed with an orange LED indicator flash. The system will confirm entering the 13th level with the red flashes of the LED and short signals of the Siren/Beeper.

• **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 siren will sound one signal, the LED will produce the series of red and green flashes and the system will return to the programming menu. Enter the 'Secret PIN-code' that is written on the owner's plastic card. The system will confirm deactivating with two sound signals of the siren, 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.

• **TO ACTIVATE THE FUNCTION** - The LED indicator will light red and the Beeper will sound a long beep after entering the programming level. The system will wait for action. Press the VALET button once activate the immobilizer function. The system will confirm enabling with one short sound signal of the Siren/Beeper and a green LED light. Turn on the ignition and then turn off to exit programming mode. The function will be activated.

## PROGRAMMING THE SYSTEM

The system can be configured by the Pandora Alarm Studio app. Some settings can be changed in programming table only.

To change the system settings or program the system using a computer or VALET button, the system should be in programming mode. Enter the “Service PIN-CODE” to enter the programming mode.

### Pandora Alarm Studio

The Pandora Alarm Studio application allows you to change the main settings and parameters of the system, update firmware, download installation manuals.

#### Installing the app:

- Download the Pandora Alarm Studio to a PC with Windows XP/Vista/7/8/10;
- Run the Pandora AlarmStudio;
- Connect the system to the PC via a USB cable;
- Put the system to the programming mode;
- The Pandora Alarm Studio will automatically connect to the system and you will be able to configure settings and update firmware.

**!** IT IS RECOMMENDED TO UPDATE FIRMWARE OF THE BASE UNIT BEFORE INSTALLING AND PROGRAMMING THE SYSTEM.

#### Updating firmware:

- Open the “Update Software” window and select one of the update options (“Load from file” – upload firmware file from a PC folder, “Firmware archive” – upload firmware from a server to “firmwares” folder);
- Select firmware and press the “Update” button to upload firmware to the base unit.

**It is required to exit programming mode after settings were changed or firmware was updated.**

**!** IF BOOT MODE HAS BEEN INTERRUPTED FOR SOME REASON AND THE STATUS INDICATOR LIGHTS RED, YOU NEED TO LOAD FIRMWARE USING QUICK BOOT MODE (WITHOUT ENTERING THE PIN-CODE). OPEN ALARMSTUDIO, DE-ENERGIZE AND DISCONNECT THE SYSTEM, PRESS AND HOLD VALET BUTTON LOCATED ON THE BASE UNIT, RELEASE THE BUTTON IMMEDIATELY AFTER CONNECTING THE SYSTEM AND A COMPUTER VIA USB CABLE, THE SYSTEM WILL ENTER BOOT MODE.

## Entering/Exiting programming mode

You can enter the programming mode only if the base unit is powered from a USB cable or the main power supply is connected, the ignition is off, the system is disarmed and service mode is off. To enter programming mode, enter the "Service PIN-code" (default value is 1-1-1-1) using an external VALET button or the VALET button located on the base unit.

! SEE THE DETAILED DESCRIPTION OF PIN-CODE ENTERING PROCEDURE IN THE "CONTROL OVER THE SYSTEM IN CASE OF EMERGENCY" SECTION OF THE USER MANUAL.

IF YOU DON'T HAVE THE 'SERVICE PIN-CODE', YOU CAN ENTER PROGRAMMING MODE USING THE 'SECRET PIN-CODE' WRITTEN ON THE OWNER'S CARD.

The system stops to execute commands when it is in programming mode. Therefore, exit programming mode after changing settings and parameters of the system.


















To exit programming mode, use one of the following methods:


- Press and hold the VALET button for more than 10 seconds;
- Turn on and then turn off the ignition when a USB cable is disconnected and the main power supply of the system is connected;
- Disconnect the power supply (main and USB power supply).

The system will reboot programmatically (all changes will be saved) after exiting programming mode. All ways to exit programming mode are accompanied by sound signals of the siren and light signals of the LED indicator. The light signals indicate the number of paired control devices.

! SEE THE "CHECKING THE NUMBER OF PAIRED DEVICES" SECTION FOR DETAILED DESCRIPTION.

## Programming table

FUNCTIONS/COMPATIBILITY	VALET button
Nº0 - Entering a level	
Nº1 – Pairing control devices Radio tag BT-760 (3 items)   Remote control D030/Smart watch Pandora Watch2 (1 item)	1
Nº2 – Changing the Service PIN-code	2
Nº4 – Reset to the factory settings	4
Nº5 – Pairing an additional module RHM-03BT/PS-331BT/PS-332BT (1 item)	5
Nº6/Nº7 Pairing a radio relay BTR-101 (2 items)	6/7
Nº8 – Pairing a GPS-receiver NAV-035 BT	8
Nº10 – Pairing a telemetry module Pandora Eye Pro	1 
Nº11 – Programming and configuring an “Immobilizer PIN-code”	1  • 1
Nº13/15 – Emergency deactivating/activating authorization devices and functions	1  • 3 / 1  • 5
Nº16 – Updating Bluetooth modem firmware	1  • 6
Nº19/20 – Updating firmware of a radio relay BTR-101	1  • 9 / 2 
Nº21 – Updating firmware of an additional module RHM-03BT/PS-331BT/PS-332BT	2  • 1
Nº22 – Updating firmware a GPS-receiver NAV-035 BT	2  • 2
Nº23/Nº24 – Pairing a door sensor DMS-100 BT (2 items)	2  • 3 / 2  • 4
Nº25/Nº26 – Updating firmware of a door sensor DMS-100 BT	2  • 5 / 2  • 6
Nº27 – Pairing an additional device DI-04/BT-01	2  • 7
Nº28– Updating firmware of an additional device DI-04/BT-01	2  • 8
Nº50 – Pairing a mobile phone	5 
Nº100 – Exit the programming menu	10 

(1...9) – press the Valet button *X* times without a pause  
 (1,2,5,10)  – Hold the Valet button for *X* seconds  
 • – pause (no more than 1 sec.)

### Level №0 – Entering a level

After entering programming mode, the system waits for level input – “Level 0 Entering a level”.

**Enter a desired level using the VALET button (see the programming table) to change settings or parameters:**

- To enter a level, press the VALET button the number of times equals to the desired level number, pauses between presses should not exceed 1 second. The system will confirm correct input with red LED flashes and short sound signals of the siren/beeper and proceed to the desired level.
- For quick access to the higher level, press and hold the VALET button. The siren will sound tone beeps (up to 10). These sounds mean the sequence number of a two-digit level number (the first signal – level №10, the fifth signal – level №50, the tenth signal – level №100). Release the VALET button immediately after the desired number of signal. To enter an intermediate level (Level №11...№19 or №21...№28), press the VALET button the number of times equals to the second digit (1...9) of the desired level number immediately after releasing the button. The system will confirm correct input with red LED flashes and short sound signals of the siren/beeper and proceed to the desired level.

### Level №1 – Pairing control devices

Prepare to pair all Bluetooth devices - install batteries, turn on the devices in accordance with their manuals. All previously paired devices will be removed when you pair new devices (tags and remote control are in separate memory cell, so if you pair a new radio tag, the previously paired remote control will be not removed and vice versa). Devices are paired one by one, in any order and without time limit.

**Enter the programming level №1, the LED will be green:**

- To pair a remote control, press and hold 3 buttons of a remote control (arm/disarm/F) simultaneously for 1 second (until a short beep), then release the buttons;
- To pair a radio tag, press the control button on a tag and hold it for 6 seconds (6 flashes of the tag status indicator), release the button after the sixth flash;
  - If pairing of any device was successful, the siren/beeper will sound a beep
  - Press the VALET button once to pair the next device or to finish pairing (the LED indicator will confirm it with the series of green and red flashes and the beeper will confirm it with the series of sound signals), the system will go to the programming level №0.

### Level №2 – Changing the Service PIN-code

Prepare a new value of the “Service PIN-code, it should consist of 4 digits (from 1 to 9). Write down or remember the new PIN-code.

**Enter the programming level №2:**

- Enter the first digit of the code using the VALET button. Press the button the number of times equals to the first digit. Pauses between presses should not exceed 1 second, every pressing will confirm with an orange LED indicator flash. Pause for more than 1 second and a red LED indicator flash with a sound from the Beeper confirms the input of the first digit. Then you can enter the next digit;
- Enter the other numbers in the same manner. The input of the fourth number will be confirmed by the series of red and green LED indicator flashes and the series of sound signals of the Beeper. The system will wait for PIN-code re-entering;
- Enter all four digits again.
  - If you correctly enter the "Service PIN-code" twice, the indicator will produce the series of red and green flashes and the Beeper will produce the series of sounds, the new PIN-code will be recorded, the system will return to the programming level №0.
  - In case of the incorrect code, input the indicator will be lit red and the Beeper will sound a long beep, the system will not change the code and will return to the programming level №0.

**Level №4 – Reset to the factory settings**

The procedure recovers the factory settings of the system without deleting previously registered devices (tags, mobile device, relays, etc.) that is stored in the non-volatile memory.

**Enter the programming level №4:**

- Press and hold the VALET button for more than 4 seconds. Release the button after a sound of the Siren/Beeper. The system will confirm the resetting to the factory settings with a long red flash of the LED indicator. After that, the system will reset the settings to default and return to the programming level №0.

**Level №11 – Programming and configuring an "Immobilizer PIN-code"**

The level is divided into 3 sublevels (Sublevel 11.0 – Selecting buttons; sublevel 11.1 entering the PIN-code; sublevel 11.2 – confirmation of the PIN-code input). Use the VALET button to navigate between sublevels and save the code.

**Enter the programming level №11:**

- №11.0 - Selecting buttons

The system will automatically enter the sublevel 11.0 (Selecting buttons) after entering the level 11. The system will wait for buttons pressing. Each pressing will be confirmed with an orange flash of the LED. You can turn on the ignition (the system will stay in programming mode). The system can determine buttons via analog "Code immobilizer 1" and "Code immobilizer 2" inputs .

After selecting active buttons, press the VALET button to enter the sublevel 11.1 (Entering the PIN-code).



- №11.1 - Entering the PIN-code

Program the immobilizer deactivation PIN-code using the selected button or buttons on this sublevel. The code can consist of one or more memory cells, each memory cell can store a sequence of pressing each of the five selected immobilizer buttons.

The code is entered by pressing the selected buttons for at least 1 second. Each pressing is confirmed with an orange flash of the LED. A pause for more than 1 second and the red LED confirms the input for the current memory cell, you can start entering the next memory cell.

After entering the code, press the VALET button to enter the next sublevel.

- №11.2 - Confirmation of the PIN-code input.

Confirm the entered PIN-code on this sublevel. Repeat the procedure described above and press the VALET button. The system will compare two inputs after that.

- If you correctly enter the code twice, the indicator will produce the series of red and green flashes and the Beeper will produce the series of sounds, the new code will be recorded, the system will return to the programming level №0.

- In case of the incorrect code input the indicator will be lit red and the Beeper will sound a long beep, the system will not change the code and will return to the programming level №0.

### Level №13/№15 – Emergency deactivating/activating authorization devices and functions

See the detailed description in the “Control of the system in case of emergency” section.

### Level №6/7/8/10/23/24/27 – Pairing additional devices

See the detailed description in the manual of each device.

### Level №16/19/20/21/22/25/26/28 – Updating firmware of an additional device

Enter the desired level of the programming table. The LED will light green. Start the mobile app and find your device in the app, select the device and choose on of the following update options:

- INTERNET - It allows you to upload firmware from a server;
- FILE MANAGER (only for Android) - It allows you to upload firmware from phone storage.

### Level №50 – Pairing a mobile phone

See the detailed description in the “Mobile applications” section.

### Level №100 – Exit the programming menu

To exit the programming menu, press and hold the VALET button for more than 10 seconds until the tenth sound signal of the Siren/Beeper or until a red flash of the LED. The system will exit programming mode and will reboot programmatically.

## ADDITIONAL DEVICES

Remote control D-030 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 COMMANDS

Arming/Disarming | Trunk | Remote engine start | Engine pre-heater

### STATUSES

Состояние системы и транспорта

### OWNER AUTHORIZATION

Immobilizer | Anti-Hi-Jack| Hands Free

OLED-display | 2.4GHz radio interface (BLE 4.2) | Three control buttons | Sound indicator | Vibro indicator | LED indicator | Battery | micro-USB



Radio tag BT-760 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 COMMANDS

Arming/Disarming | Service mode

### OWNER AUTHORIZATION

Immobilizer | Anti-Hi-Jack| Hands Free

2.4GHz radio interface (BLE 4.2) | Control button | LED indicator | Motion sensor | CR 2032 battery



Door sensor DMS-100 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 state; temperature monitoring. The sensor can be installed on a door, hatch, trunk, trail, garage door

2.4GHz radio interface (BLE 4.2) | Hall sensor | Temperature sensor | Shock/tilt sensor | CR123a battery



Piezo siren PS-331 BT / PS-332 BT are wireless device for sound indication.

PS-331 BT:

Sound pressure 118 dB | 2.4GHz (BLE 4.2) Radio interface | flexible input "Trunk" | Flexible output | Temperature sensor | Control of connection with a main unit

PS-332 BT:

Sound pressure 118 dB | 2.4GHz (BLE 4.2) Radio interface | Back-up battery | Control of connection with a main unit



## 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](http://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.

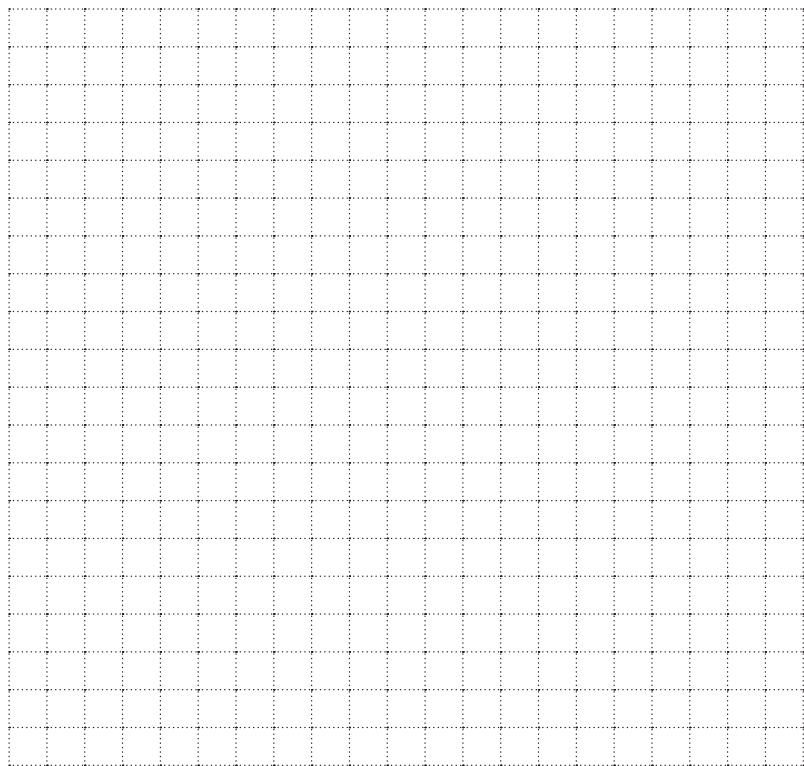
This includes: fire damage, consequential damage in case of car accident, aggressive liquids and water seeping damage, damage caused by improper use;

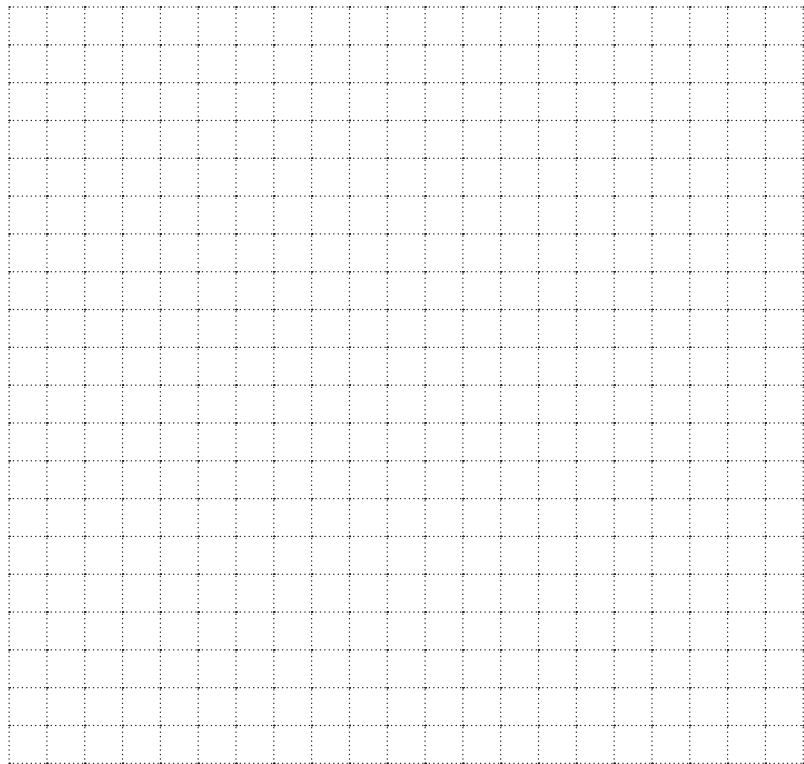
- if the damage was caused with incorrect settings and parameter adjustment;
- if system devices are replaced with any devices that are not recommended by the manufacturer;
- if manufacturer sealing is broken;
- if there is no properly filled warranty card and installation certificate.

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 THAT YOU 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 Smart Moto v2

Serial number \_\_\_\_\_

Service center name, full address and installer's stamp

Signature \_\_\_\_\_ / \_\_\_\_\_ /

Signator

Work accepted \_\_\_\_\_ / \_\_\_\_\_ /

Signator

Date « \_\_\_\_ » \_\_\_\_\_ 20 \_\_\_\_ year.

## ACCEPTANCE CERTIFICATE

**Model Pandora Smart Moto v2** 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 Smart Moto v2**

Serial number \_\_\_\_\_

Date of purchase « \_\_\_\_ » \_\_\_\_\_ 20\_\_ year

\_\_\_\_\_  
Seller's (installer's) stamp

\_\_\_\_\_  
Seller's signature