

EXAMPLES OF PAIRING ADDITIONAL DEVICES

WARNING! All additional devices included in the system set are paired with the system. The maximum number of paired Bluetooth devices must not exceed 14.

WARNING! Do not shield the built-in antennas when installing the additional devices. Keep minimum distance of 20 mm between the modules and metal parts

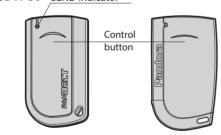
Bluetooth devices" section

№10.1.1-3 Pairing radio tags BT760/BT770/BT780 SEND indicator

- Enter the programming level №10.1.1...3.
- If the LED is green, the system is ready for pairing* • Press the control button on a tag and hold it for 6

(6 flashes of the tag status indicator), release the button after the sixth flash.

• If pairing was successful, the LED will light red and the siren/beeper will sound a beep. The system will enter the programming level Nº0.



Control

buttons

2

№10.2.1 - 3 Pairing a remote control R-468BT

- Enter the programming level №10.2.1...3. • If the LED is green, the system is ready for pairing*
- Press three control buttons on a remote control second or until 1 red flash of SEND LED
- If pairing was successful, the LED will light red and the siren/beeper will sound a beep. The system will enter the programming level $N^{o}0$.



- Enter the programming level №10.2.1...3
- If the LED is green, the system is ready for pairing*
- Enter the pairing menu on the Watch2 (MENU->
- Settings->Bluetooth->Vehicle->Connect).
- If pairing was successful, the LED will light red and the siren/beeper will sound a beep. The system will enter the programming level №0.



Pairing door sensor DMS-100 BT

- Enter the programming level №10.3.1...10.
- If the LED is green, the system is ready for pairing*.
- Open the plastic case ① of the sensor carefully and insert a battery 2 into the sensor.
- If pairing was successful, the LED will light red and the siren/beeper will sound a beep. The system will enter the programming level №0.



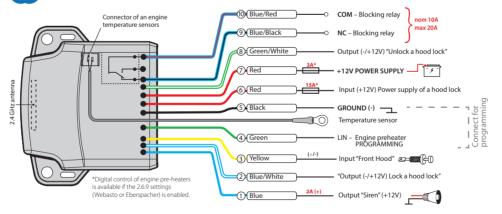
SEND

indicator

2.4 GHz

*WARNING! See the "Level Nº10 – Manage

An example of pairing a radio module RHM-03 BT



• Connect the wire 4 (Green) to wire 5 (Black). Connect

- Enter the programming level Nº10.6 "Pairing an engine compartment module". The LED will light green or red*



- Connect the wire 7 (Red) to +12V. • If pairing was successful, the LED will light red and a siren/beeper of the base unit will sound a beep. The system will automatically enter the programming level №0.
- Disconnect the wire 4 (Green) from the wire 5 and insulate all unused wires.
- · Connect the wire 4 (Green) to wire 2 (Black). Connect them to a grounded spot of a car.
- Enter the programming level Nº10.6. • If the LED is green, the system is ready for pairing*.
- Connect the wire 1 (Red) to constant +12V.
- If pairing was successful, the LED will light red and the siren/beeper will sound a beep. The system will enter
- Disconnect the wire 4 (Green) from the wire 4 and insulate all unused wires.

the programming level NºO. Pandora RHM/PS Temperature sensor gine/interior/outside temperature) +12V POWER SUPPLY 1 Red/Black 2) Black 3 Yellow IN RHM/PS - Input "Trunk" CH BLE PS - Output

PROGRAMMING TABLE

Function	V.	VALET button			
№0 – Entering a level	Level	Delete	Update		
№2 – Changing the "Service PIN-code"	P2				
№3 – Recording the idle speed (rpm)	P3				
№4 – Reset to the factory settings	P4	H4			
№10.1.1 – Pairing a radio tag BT760/BT770/BT780	H1→P1→P1	H3			
№10.1.2 – Pairing a radio tag BT760/BT770/BT780	H1→P1→P2	H3			
№10.1.3 – Pairing a radio tag BT760/BT770/BT780	H1→P1→P3	H3			
№10.2.1 – Pairing a remote control R-468BT	H1→P2→P1	H3			
№10.2.2 – Pairing a remote control R-468BT	H1→P2→P2	H3			
№10.2.3 – Pairing a remote control R-468BT	H1→P2→P3	H3			
№10.3.1 – Pairing a door sensor DMS-100 BT	H1→P3→P1	H3	H5		
№10.3.2 – Pairing a door sensor DMS-100 BT	H1→P3→P2	H3	H5		
№10.3.10 – Pairing a door sensor DMS-100 BT	H1→P3→P10	H3	H5		
№10.4.1 – Pairing a radio relay BTR-101	H1→P4→P1	H3	H5		
№10.4.1 – Pairing a radio relay BTR-101	H1→P4→P2	Н3	H5		
№10.6 – Pairing an engine compartment module RHM-03BT/PS-331BT/PS-332BT	H1→P6	НЗ	Н5		
№10.7 – Pairing an additional device DI-04BT / BT-01 / BT-02	H1→P7	H3	H5		
№10.8 – Pairing a telemetry module Pandora Eye Pro	H1→P8	H3			
№10.9 – Pairing a GPS-receiver NAV-035 BT	H1→P9	H3	H5		
№10.10 – Updating Bluetooth modem firmware	H1→P10				
№10.11 – Pairing an RF module RFM-470	H1→P11	H3	H5		
№11 – Programming and configuring an "Immobiliser PIN-code"	H1•P1				
№13 – Emergency deactivating/activating Code immobiliser function (pin-to-drive)	H1•P3				
№15 – Emergency deactivating/activating authorization devices (Immobiliser, Anti-Hi-Jack)	H1•P5				
№17 – Programming bypass of an original immobiliser	H1•P7				
№18 – Programming a "Beach mode PIN-code"	H1•P8				
№50 – Pairing a mobile device	H5				
№100 – Exit the programming menu	H10				

Control by the VALET button (see the "Level №0 Entering a level" section)

P – press X times	H – hold for X sec.	→ – 1 sec. pause	• – without a pause
. p. coo re cco		,	· ····································

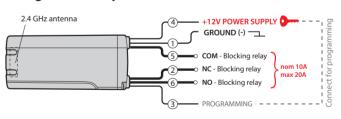
DMS1 Window

WARNING! DMS-100BT sensors from the kit are already paired with the base unit. According to the installation place you can change the default logic of the alarm zones in Pandora Specialist: "Advanced Settings"-"Inputs and Outputs"-"Inputs settings". Fill the Table with the actual logic:

DMS2 Window DMS7 DMS3 DMS8 DMS4 DMS5 DMS10

DMS6

Pairing a radio relay



- Connect the wire 1 (GROUND) to a grounded spot of
- Enter the programming level №10.4.1 or №10.4.2.
- If the LED is green, the system is ready for pairing*. · Connect the wire 3 (PROGRAMMING) to wire 4
- If pairing was successful, the LED will light red and the siren/beeper will sound a beep. The system will enter the programming level №0.
- Disconnect the wire 3 (PROGRAMMING) from the wire 4 and insulate all unused wires. Connect the (+12V POWER SUPPLY). Connect them to +12V. wire 4 to the ignition (+12V) when ignition is on).

Mobile application Pandora Specialist (Android/iOS)

Pandora Specialist – a mobile application for configuring the system using a smartphone or tablet on the Android or iOS operating platform.





- Download/install the Pandora Specialist mobile application on your smartphone or tablet by scanning the QR code or going to the App Store for iOS devices, Google Play for Android devices.
- Start the application.
- · Log in with a personal account.

• Connect your mobile device to the system via Bluetooth wireless connection or USB-OTG adapter (connection via adapter is only available for Android devices).

Bluetooth connection

• Enter the programming level №50 (press and hold the «VALET» button until 5 beeps of a Siren/Beeper).

- If the system is ready for recording the LED will light green.
- Open the Pandora Specialist app, go to the «Quick Installation» or «Advanced Mounting» menu.
- In the Bluetooth device search window, pair a
- mobile device with the found system. • If the pairing was successful the LED will light red, the Siren/Beeper will beep once, the system

the mobile device from the system memory by

will enter to programming level №0. WARNING! After the settings were made delete

entering programming level Nº50. **USB-OTG adapter (Android only)**

Open the Pandora Specialist app for Android devices-> Connect the USB-OTG adapter to your smartphone or tablet, connect the USB cable to the system, connect the USB-OTG adapter to the USB cable -> Enter the «Service PIN» using the «VALET» button.

PROGRAMMING THE SYSTEM

System settings and parameters can be configured using the Pandora Specialist software. Some functions can be configured only by the programming menu of the system. It is required to put the system to programming mode to get access to the settings

Entering/Exiting programming mode

You can enter the programming mode only if the base unit is powered form 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.

WARNING! When authorization devices (remotes, tags, etc.) are not paired with the system, you can enter programming menu by a single press of a VALET button without entering the "Service PIN-code".

NOTE! See the detailed description of PIN-code entering procedure in the "CONTROL OVER THE SYSTEM IN CASE OF EMERGENCY" section of the user

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.

WARNING! It is forbidden to damage the protective layer of the «Owner's personal card» - the information under the protective layer of the card is intended only for the owner of the system. When the owner complains about the erased protective layer, the system is reinstalled at the expense of the installer.

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.

NOTE! See the «Checking the number of paired devices» section of the user manual for detailed description

PANDORA SPECIALIST (WINDOWS/MAC)

To configure the system using a Windows (x64) or MacOS based computer a special software Pandora Specialist is provided. • Download the Pandora Specialist software (the current version of the program is available at specialist.alarmtrade.ru, download section - «Desktop Version»). • Install and run the program.

Log in with a personal account.

- Connect the system and personal computer with a USB cable.
- Enter the «Service PIN code» (factory code value is 1-1-1-1).

NOTE! It is recommended to update firmware of the base unit before installing and programming the system

NOTE! 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 the Pandora Specialist (Android, Windows, Mac), 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.

PROGRAMMING TABLE

NOTE! The programming table is printed on the side of this manual where the wiring diagram is shown

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 ("Level №1...№18"), press (P) the VALET button the number of times equals to the desired level number (1...18), 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.

To enter a sublevel or a cell of sublevel make a pause for more than 1 second

- →, then press (P) the VALET button the number of times equals to the desired sublevel or cell number: "Level №10 → (1sec.) "Sublevel 1...10" → (1sec.) "Cell of sublevel 1...4".
- For quick access to the higher level, press and hold (H) 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 signals. To enter an intermediate level (Level № 11...№18), press the VALET button the number of times equals to the second digit (1...8) 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 №2 – Changing the "Service PIN-code"

NOTE! 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. 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;

4

• 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 №3 – Recording the idle speed (rpm)

NOTE! To timely turn off the starter during

automatic or remote engine start and the correct operation of the «Smart Turbo Timer», it is necessary to record the engine idle speed via digital or analog tachometer input.

Enter the programming level №3. • Turn on the ignition and start the engine. Wait until the stable idle speed will be reached (the engine should be warmed-up, idle speed should match the stable idle speed of the warmed-up engine). The system will confirm the presence of the idle speed status with green flashes of LED indicator.

• Press the VALET button once to save idle speed. Successful recording of the idle speed will be confirmed with the series of red and green flashes of the LED indicator and the series of sound signals of the Beeper. The system will exit programming menu and reboot after saving the idle speed.

Level №4 – Reset to the factory

NOTE! The procedure recovers the factory settings of the system without deleting previously paired devices (tags, mobile device, relays, etc.) that are 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 Nº10 - Manage Bluetooth **Level 10.10 Updating Bluetooth** modem firmware

ATTENTION! All functions of this level are available in the Pandora Specialist app when using a Bluetooth

For the management of the additional devices go to (Android): «Advanced mounting» -> Bluetooth -> «Pairing/unpairing devices». For the firmware update of the additional devices go to (Android): «Advanced mounting» -> Bluetooth -> «System devices».

For the firmware update of the main unit go to (Android and iOS): «Advanced mounting» -> Bluetooth -> «Check firmware».

This level is used to pair/remove/ update additional devices and to update Bluetooth modem of the

Each device is paired at a sublevel. To pair devices of the same type, a sublevel is divided into cells. To enter a sublevel or a cell of sublevel make a pause for more than 1 second (\rightarrow) , then press (P) the VALET button the number of times equals to the desired sublevel or cell number: "Level №10 → (1sec) "Sublevel 1...10" → (1sec) "Cell of sublevel **1...4**".

• Pairing/Deleting an additional device

Each sublevel or cell displays its current state by a color of the LED: green light means the system is ready for pairing, red light means a device has been already paired and it is required to

delete it for pairing a new device. To delete a device, press and hold the VALET button for 3 seconds (3 sound signals of Beeper/Siren). The system will be in pairing mode for 1 minute. After a minute or immediately after pairing a device, the system will automatically enter the programming level №0.

NOTE! Examples of pairing Bluetooth devices are printed on the side of this manual where the wiring diagram is

• Updating firmware of the built-in **Bluetooth modem/Updating** firmware of an additional device

Enter an appropriate sublevel or a cell of the PROGRAMMING TABLE and use the Pandora BT application to update firmware.

To update firmware of the built-in Bluetooth modem, enter the "Level № 10"" → "Sublevel 10". To update firmware of an additional device, enter the "Level №10" → "Sublevel" or "Cell" corresponding to an additional device. The LED will light red after entering. Press and hold (H) the VALET button for 5 seconds. Open the Pandora Specialist, go to "Advanced mounting" or "Quick installation" -> Bluetooth screen and

"From archive" (iOS)/"Download upload firmware from a server.

the update options:

firmware" (Android) - It allows you to "File manager" (Android) – This function is available only for Android devices. It allows you to upload firmware from phone storage.

select the device and then select one of

Level №11/18 - Programming and configuring an "Immobiliser PIN-code" / "Beach mode PIN-code"

Prepare a new value of the "Immobiliser PIN-code"/"Beach mode PIN-code". Programming is divided into 3 sublevels

Selecting buttons

Enter the level 11 to program "Immobiliser PIN-code" or the level 18 to program "Beach mode PIN-code". The system will wait for buttons pressing. Each pressing will be confirmed with a flash of the LED. The system can determine buttons via analogue inputs «Code Immobiliser 1» and «Code Immobiliser 2» or digital buses of the on specialist.alarmtrade.ru). You can turn on the ignition (the system

vehicle (more info in Pandora Specialist and will stay in programming mode). Some buttons are active only when ignition is on. After selecting active buttons, press the VALET button to enter next sublevel.

Entering the PIN-code

Program the 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 selected Immobiliser buttons. The code is entered by pressing the

selected buttons for at least 1 second. Each pressing is confirmed with a 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.

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 Siren 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 Siren will sound a long beep, the system will not change the code and will return to the programming level №0.

Level Nº13/Nº15 – Emergency deactivating/activating authorization devices/functions

NOTE! See the detailed description in the "CONTROL OVER THE SYSTEM IN CASE OF EMERGENCY" section of the user manual.

To deactivate/activate "Code immobiliser function" (pin-to-drive),

enter the programming level №13. To deactivate/activate authorization devices (mobile phone, radio tags, Bluetooth remote control), enter the programming level Nº15.

Deactivating the function

The LED indicator will light 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 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 the function with a long red LED flash, two sound signals of the siren and sound signals of the beeper.

Activating the function

The LED indicator will light red and the

beeper will emit a long sound signal after entering the programming level. The system will wait for an action. Press the VALET button once to activate the function. The system will confirm activating with a green LED flash and one short sound signal of the siren and

Level №17 – Programming bypass of an original immobiliser Bypass learning procedure is performed on this level.

NOTE! See the detailed instruction in the installation manuals for cars. Level №50 – Pairing a mobile phone

NOTE! See the detailed description in the "Mobile application" section of the user manual.

Level №100 – Exit the programming

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.

FUEL LEVEL CALIBRATION

WARNING! This procedure is available only for analogue connection of the fuel

Make a connection of the «Fuel level input» to an original fuel sensor. Enable the "Use INP (+) to control fuel level" setting in the "Advanced settings" ->

"Inputs and outputs" -> " Fuel level control". Set at least two values of the fuel level using mobile application or by phone. For precise determination of the fuel level set all values (max 10).

Pandora Specialist (Android):

·Start the engine; •Go to "Advanced mounting" -> "Bluetooth" -> Choose system -> "Fuel calibrating" ->

"Calibrate fuel": •Set the actual value of the fuel level sensor. Mobile phone

·Start the engine; •Call the system phone number, wait for the

answer, enter the DTMF command 424* "Calibrate fuel level", the system will confirm command (424* - command executed);

•Depending of the actual fuel level enter the DTMF command (see the values in the table),

the system will confirm command (XXX* command executed); End call.

FLIEL LEVEL CALIBRATION TABLE (424*)

FUEL LEVEL CALIBRATION TABLE (424")			
DTMF command	Fuel level		
0*	0%		
10*	10%		
20*	20%		
25*	25%		
30*	30%		
40*	40%		
50*	50%		
60*	60%		
70*	70%		
80*	80%		
90*	90%		
100*	100%		
888*	* Reset all		
	calibration values		
	DTMF command 0* 10* 20* 25* 30* 40* 50* 60* 70* 80* 90* 100*		

VOLTAGE CALIBRATION

To calibrate actual voltage value, use the Pandora Specialist (Android) mobile application:

•Go to the "Advanced mounting" -> "Bluetooth" -> Choose system -> "Advanced settings" -> "Main settings" -> "General settings" -> "Voltage calibration"; •Set the actual voltage value.

