Pandora

model: MINI MOTO

WIRING DIAGRAM

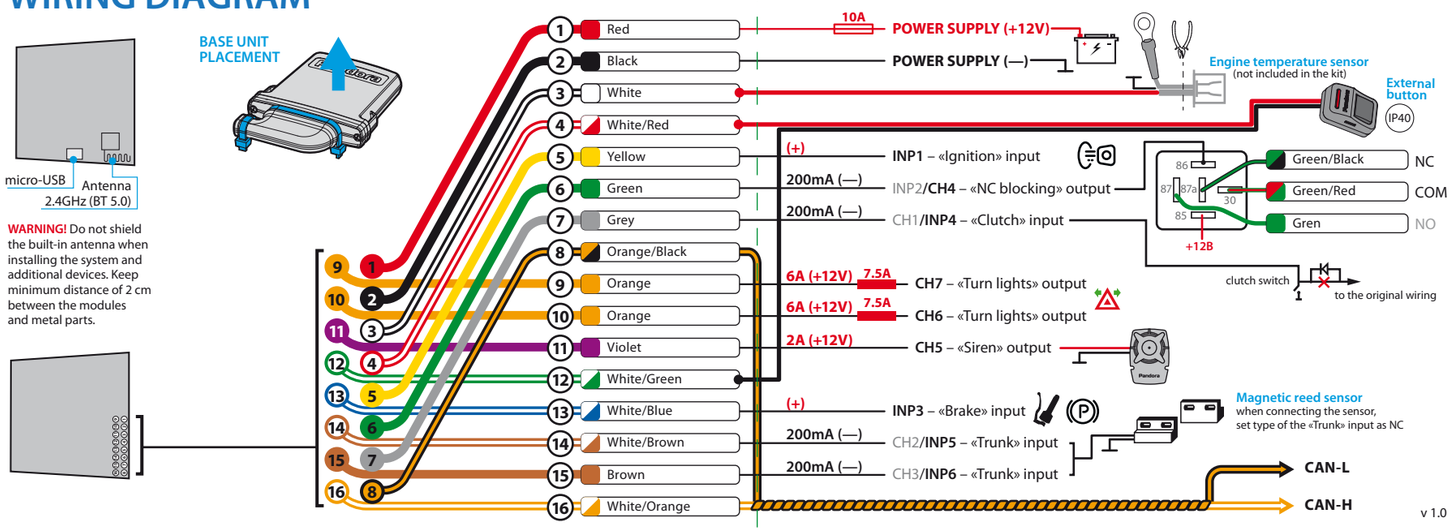
WARNING! The installation locations of the base unit and system elements must meet their temperature, dust- and moisture-protection characteristics. The base unit and blocking relay are designed to operate at temperatures from -40°C to +85°C, the degree of protection is IP54.

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! All wireless accessories from the kit are already paired with the base unit. The maximum number of paired Bluetooth accessories is 14.

WARNING! Fixate the protective cap using clamps when the installation is finished. Isolate the protective cap and wires with the insulating tape.
WARNING! All power circuits of additional devices that are not powered through the base unit of the system should have their own fuses.

WARNING! Update firmware of the base unit before installation. If the CAN-bus connected, choose the vehicle model code.
IT IS FORBIDDEN to install the system on a vehicle with normal voltage other than 12V.
IT IS FORBIDDEN to install the system with damaged output cables.

IS FORBIDDEN to change or bypass original fuses of a system in the installation process.
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).



Micro-USB connector

This connector is used to configure and update the system with Pandora Alarm Studio or Pandora Specialist App.

Main cable

The main cable contains low-current programmable channels: inputs «INP» and outputs «CH» with a preset logic. Changing the preset logic is available in the system settings «Inputs and outputs» or «Time channels» menus. Additionally, in the «Input settings» submenu the «INP» channels can be reassigned from the normally open type «NO» (the system reacts to the appearance of the potential corresponding to the scheme) to the normally closed type «NC» (the system reacts to the disappearance of the potential corresponding to the scheme).

- **Wire №1 | Red | POWER SUPPLY (+12V) 10A** — System power supply. It should be securely connected to the reliable conductor with a constant voltage of +12V. The wire is equipped with a 10A fuse.
- **Wire №2 | Black | GROUND (-)** — ground. It should be connected to a vehicle grounding spot (-). This wire should be connected FIRST during the installation.
- **Wire №3 | White** — channel for connecting of the external temperature sensor, default logic is «Engine temperature sensor». It is connected to the red wire of the sensor, the black wire of the sensor is connected to the ground (-).
- **Wire №4 | White/red | LED/VALET** — channel for connecting the external VALET button. It is connected to the red wire of the external button.
- **Wire №5 | Yellow | (+) | INP1** — default setting is positive status «Ignition» input. It is connected to the ignition switch or other wire, where +12V appears when the ignition is turned on and does not disappear until the ignition is turned off. This input is mandatory for connection.
- **Wire №6 | Green | 200mA (-) | INP2/CH4** — default setting negative status «NC blocking» output. Channel for controlling the blocking relay with a normally closed contact group (the channel is enabled when: the system is armed and ignition being switched on, the system is disarmed but the Immobiliser or Anti-hi-Jack mode is enabled and the ignition being switched on).
- **Wire №7 | Grey | 200mA (-) | CH1/INP4** — default setting negative status «Clutch» input. Is used for system arming/disarming in the presence of authorization devices (see 1.2.4 setting «Arming/disarming by clutch lever»). It is connected to the wire what becomes grounded when the clutch lever is pressed.
- **Wire №8 | Orange/black | CAN-L** — digital bus «CAN-Low». It is connected to the corresponding CAN-Low wire of the vehicle. Before connecting the digital bus, you must select the vehicle model (model code). Information available on www.loader.pandorainfo.com and in the Pandora Specialist App and Pandora Alarm Studio.
- **Wire №9 | Orange | 6A (+12V) | CH7** — default logic is «Turn indicators». Connect this wire to (+) control wire of the left or right turn indicators. The wire is equipped with a 7.5A fuse.
- **Wire №10 | Orange | 6A (+12V) | CH6** — default logic is «Turn indicators». Connect this wire to (+) control wire of the left or right turn indicators. The wire is equipped with a 7.5A fuse.
- **Wire №11 | Purple | 2A (+12V) | CH5** — default logic is «Siren». Connect this wire to +12V wire of the siren. When using owner's authorization devices and Immobiliser or Anti-hi-Jack modes, it is recommended to set both «Siren» and «Beeper» logic in the settings.
- **Wire №12 | White/Green | LED/VALET** — channel for connecting the external VALET button. It is connected to the black wire of the external button.
- **Wire №13 | White/blue | (+) | INP3** — default logic is «Brake». Connect this wire to a wire where +12V appears when the brake pedal or lever is pressed.
- **Wire №14 | White/brown | 200mA (-) | CH2/INP5** — default logic is «Trunk». Connect this wire to a wire that becomes grounded when the pannier opens. It is necessary to change the input type from NO to NC in the «Inputs settings» if a magnetic reed sensor is used.
- **Wire №15 | Brown | 200mA (-) | CH3/INP6** — default logic is «Trunk». Connect this wire to a wire that becomes grounded when the pannier opens. It is necessary to change the input type from NO to NC in the «Inputs settings» if a magnetic reed sensor is used.
- **Wire №16 | Orange/black | CAN-H** — digital bus «CAN-High». It is connected to the corresponding CAN-High wire of the vehicle. Before connecting the digital bus, you must select the vehicle model (model code). Information available on www.loader.pandorainfo.com and in the Pandora Specialist App and Pandora Alarm Studio.

PROGRAMMING THE SYSTEM

System settings and parameters can be configured using the Pandora Alarm Studio and Pandora Specialist application. 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.

! 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. 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.

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

Pandora Specialist application

The Pandora Specialist mobile application (Android only) is available for system configuration:

- Download and install the Pandora Specialist mobile app (scan the QR-code or go to the Google Play app store);
- Connect the system and mobile device using USB cable or Bluetooth connection.

Programming table

FUNCTION	VALET BUTTON		
№0 – Entering a level	Level	Delete	Update
№2 – Changing the Service PIN-code	P2		
№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 D030 / D035 / Band / Watch2	H1→P2→P1	H3	
№10.2.2 – Pairing a D030 / D035 / Band / Watch2	H1→P2→P2	H3	
№10.2.3 – Pairing a D030 / D035 / Band / Watch2	H1→P2→P3	H3	
№10.3.1 – Pairing a door sensor DMS-100BT	H1→P3→P1	H3	H5
№10.3.2 – Pairing a door sensor DMS-100BT	H1→P3→P2	H3	H5
№10.3.3 – Pairing a door sensor DMS-100BT	H1→P3→P3	H3	H5
№10.3.4 – Pairing a door sensor DMS-100BT	H1→P3→P4	H3	H5
№10.4.1 – Pairing a radio relay BTR-101	H1→P4→P1	H3	H5
№10.4.2 – Pairing a radio relay BTR-101	H1→P4→P2	H3	H5
№10.6 – Pairing an additional device RHM-03BT / PS-331BT / PS-332BT	H1→P6	H3	H5
№10.7 – Pairing an additional device	H1→P7	H3	H5
№10.8 – Pairing a telemetry module Pandora Eye Pro / NAV-X	H1→P8	H3	
№10.9 – Pairing a GPS-receiver NAV-035 BT	H1→P9	H3	H5
№10.11 – Pairing an RF module RFM-470	H1→P11	H3	H5
№11 – Programming and configuring an «Immobilizer PIN-code»	H1•P1		
№13 – Emergency deactivating/activating code immobilizer function (pin-to-drive)	H1•P3		
№15 – Emergency deactivating/activating authorization devices (immobilizer, Anti-hi-Jack)	H1•P5		
№50 – Pairing a mobile phone	H5		
№100 – Exit the programming menu	H10		

P – press **X** times | H – hold for **X** sec | → – 1 sec pause | • – without a pause

Bluetooth connection

- Enter the programming level №50;
- Open the mobile app, go to «Advanced mounting», when choose «Bluetooth»
- Choose the system in a search field;
- When changing the settings enter the «Service PIN-code» (default value is 1-1-1-1).

! After the settings were made delete the mobile device from the system memory by entering programming level №50

USB connection

- 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;
- Open the mobile app, go to «Advanced mounting», when choose «USB-OTG»;
- Enter the «Service PIN» (default value is 1-1-1-1).

! USB-OTG adapter is not included in the set. Can be ordered separately .

Pandora Alarm Studio

The Pandora Alarm Studio allows you to change the main settings and parameters of the system, update firmware, download installation manuals. A current version of the Pandora Alarm Studio can be downloaded from pandorainfo.com. The Pandora Alarm Studio is provided only to authorized installers of Pandora systems.

- Download the Pandora Alarm Studio to a PC with Windows XP/Vista/7/8/10.
- Run the Pandora Alarm Studio;
- 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.

Updating firmware

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

Pandora Specialist

- Open the «Check firmware» menu and select one of the update options («Download firmware» - upload firmware file from a server, «File manager» - upload previously downloaded to the device memory file);
- Select firmware and press the «Update» button to upload firmware to the base unit.

Pandora Alarm Studio

- 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 the 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 Alarm Studio or Pandora Specialist application; de-energize and disconnect the system; press and hold the VALET button located on the base unit; release the button immediately after connecting the USB cable; the system will enter boot mode.

Level №0 – Entering a level

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. 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...№17»), press (P) the VALET button the number of times equals to the desired level number (1...17), 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 and proceed to the desired level.
- For quick access to the higher level, press and hold (H) the VALET button. The siren will sounds tone beeps (up to 10). These sounds means 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…№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 and proceed to the desired level.

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 Siren confirm 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 Siren. 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 Siren 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 Siren 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. 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 №10 – Manage Bluetooth devices / Firmware Update

! All additional devices included in the system set are paired with the system. The maximum number of paired Bluetooth devices must not exceed 14.
All functions of this level are available in the Pandora Specialist app when using a Bluetooth connection.
For the management of the additional devices go to «Advanced mounting» -> «Pairing/unpairing devices».
For the firmware update of the additional devices go to «Advanced mounting» -> «System devices».
For a detailed description of pairing procedure for specific device check it's manual on www.pandorainfo.com.

This level is used to pair/remove/update additional devices of the system. 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, 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 it's 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 (4 orange flashes of the LED, or 3 sound signals of the 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.

PAIRING RADIO TAGS BT760/BT770/BT780

- Enter the programing level №10.1.1…3.
- If the LED is green, the system is ready for pairing.
- Press and hold button on a tag until the 6 flashes of the tag status indicator, release the button ;
- The system will confirm pairing with a sound signal from the Siren and the LED will light red.
- The system will enter the programming level №0.

PAIRING PANDORA BAND

- Enter the programing level №10.2.1…3.
- If the LED is green, the system is ready for pairing.
- Press and hold button on the Band for 6 seconds;
- The system will confirm pairing with a sound signal from the Siren and the LED will light red.
- The system will enter the programming level №0.

PAIRING DOOR SENSOR DMS-100 BT

- Enter the programing level №10.3.1…4.
- If the LED is green, the system is ready for pairing.
- Open the plastic case of the sensor carefully and insert a battery inside.
- The system will confirm pairing with a sound signal from the Siren and the LED will light red.
- The system will enter the programming level №0.

PAIRING A SIREN PS-332 BT

- Enter the programming level «Pairing an additional device RHM-03BT/PS-331BT/PS-332BT» (level №10.6);
- System is ready for pairing, the LED lights green;
- Put a magnet on the selected zone and connect the power supply, the siren will be paired with the system;
- The system will confirm pairing with a sound signal from the Siren and the LED will light red.
- The system will enter the programming level №0.

UPDATING FIRMWARE OF AN ADDITIONAL DEVICE

- 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 the VALET button for 5 seconds until 6 orange flashes of LED indicator or 5 sound signals of the Siren. Open the Pandora Specialist or Pandora BT app, go to «Search device» screen and select the device and then select one of the update option:
- INTERNET – It allows you to upload firmware from a server.
- FILE MANAGER – This function is available only for Android devices. It allows you to upload firmware from the phone storage.

Level №11 – Programming and configuring an «Immobiliser PIN-code»

The level is divided into 3 sublevels

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 Immobiliser 1» and «Code Immobiliser 2» inputs .

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

Entering the PIN-code

Program the Immobiliser 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 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).

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 №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 №50 – Pairing a mobile phone

See the detailed description in the «Mobile application» 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 or until a red flash of the LED. The system will exit programming mode and will reboot programmatically.