



DO NOT TURN ON BOTH BLOCKS AT THE SAME TIME AT A DISTANCE OF LESS THAN 10 METERS FROM EACH OTHER WHEN USING AN INDOOR ANTENNA AND AT A DISTANCE OF LESS THAN 20 METERS FROM EACH OTHER WITH AN EXTERNAL ANTENNA, TO AVOID DAMAGE TO THE INSTRUMENTS.

The device is designed to work with cars equipped with the KEYLESS GO keyless access system and has 2 transmission modes: SHORT_KEY - transmits a signal only from the car to the key (the distance between the units is 15-150 meters and depends on the battery condition in the key) and LONG_KEY - transmits a signal from the car to the key and from the key to the car (the distance between the units is up to 500 m - in the line of sight with the antennas deployed.). LONG_KEY is designed to work with Toyota, Lexus.

The set consists of 2 blocks - large (B) and small (M), 2 chargers, headphones and an external antenna.

THE ANTENNAS IN THE BLOCKS ARE NOT REMOVABLE AND ARE FIXED INSIDE. THEY CAN ONLY BE FOLDED AND UNFOLDED IN THE PLANE IN WHICH THEY ARE INSTALLED. DO NOT TRY TO TURN THEM TO THE SIDE OR UNSCREW THEM, THIS WILL LEAD TO BREAKAGE.



MAXIMUM RANGE BETWEEN UNITS IS ACHIEVED WHEN THE ANTENNAS ARE FULLY EXTENDED ON BOTH UNITS. FOR NORMAL OPERATION, TRY TO EXTEND THE ANTENNAS BY AT LEAST 45 DEGREES.

Installing batteries.

Use original IDENTICAL UNPROTECTED high-current 18650 batteries in your devices (for example: MURATA (SONY) US18650VTC6, SONY US18650VTC5D). Protected batteries are longer and

attempting to install it will damage the devices.

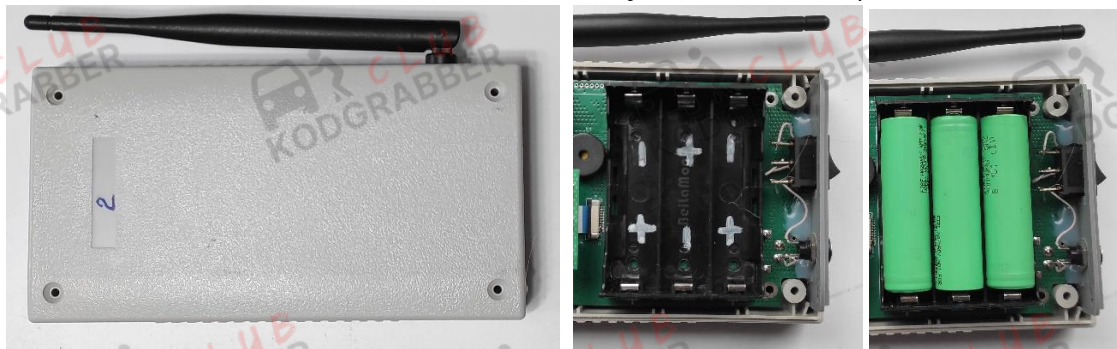
The photo shows protected and unprotected batteries for comparison.



OBSERVE POLARITY!!! INCORRECT INSTALLATION WILL RESULT IN DAMAGE TO THE DEVICE!!!

Block M.

Unscrew the 4 screws on the back cover and carefully remove the front panel.



Install the batteries according to the markings and put the front panel back in place. Tighten the screws.

Block B.



Unscrew screws 1-4, remove the battery compartment cover, install the batteries according to the marking, install the cover and tighten the screws.

CAREFULLY!!! THE UNITS HAVE CONTROL SEALS INSTALLED INSIDE THEM TO PREVENT UNAUTHORIZED DISASSEMBLY. DAMAGE TO THE SEALS WILL DEPRIVE THE DEVICES OF ANY FURTHER SUPPORT FROM THE MANUFACTURER!

Description of blocks.

Block B:



1. Antenna
2. Screen
3. Green LED. (led_green)
4. Red LED (led_red)
5. Blue LED (led_blue)
6. Headphone jack
7. Power switch
8. Charger connector
9. External antenna connector

Block M:





1. Button KN1
2. Button KN2
3. Button KN3
4. Green LED (led_green)
5. Red LED (led_red)
6. Blue LED (led_blue)
7. Button lock indicator (LOCK - buttons are locked)
8. PIN code indicator (PIN - when turning on, you need to enter the PIN code)
9. Sound confirmation indicator
10. Battery voltage
11. Main operating mode (SHORT_KEY or LONG_KEY)
12. Indicator of lack of connection between blocks.
13. Key type in LONG_KEY mode
14. Key frequency in LONG_KEY mode
15. Charger connector
16. Power switch
17. Car type in SHORT_KEY mode

Each button has a corresponding LED that lights up when the corresponding button is pressed.

Further in the instructions:

Short press - press and release (the corresponding LED will flash). Long press - press and hold the button until the corresponding LED starts to flash quickly.

IT IS PROHIBITED TO TURN ON BOTH UNITS AT THE SAME TIME AT A DISTANCE OF LESS THAN 10 METERS FROM EACH OTHER WHEN USING AN INTERNAL ANTENNA AND AT A DISTANCE OF LESS THAN 20 METERS FROM EACH OTHER WITH AN EXTERNAL ANTENNA, TO AVOID DAMAGE TO THE INSTRUMENTS.

DO NOT KEEP BOTH UNITS ON AT THE SAME TIME FOR A LONG TIME. THIS WILL LEAD TO A RAPID DISCHARGE OF THE BATTERY AND MAY CAUSE THE UNIT TO OVERHEAT.

To prevent this from happening, it is enough to turn off the M unit between work. Try to turn on the M unit only near the machine and turn it off immediately after work.

WORK ORDER

1. Charge the batteries in the blocks

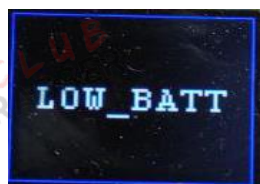
The blocks are charged ONLY WITH THE CHARGERS COMING IN THE SET. Charging is indicated by a red indicator on the charger, upon completion of charging the indicator color changes to green. To balance the battery, it is advisable to continue charging for several hours after the color changes to green.

DURING CHARGING, THE UNITS MUST BE TURNED OFF.

The maximum distance from block B to the key is achieved when the battery in block B is fully charged.

If the LOW BAT message appears during operation, immediately turn off the unit and charge it.

DO NOT ALLOW THE BATTERIES TO BE FULLY DISCHARGED.



All control is performed from the M block. After switching off, the selected mode is saved.

If the PIN code request is enabled, the PIN code entry screen will appear:



Short presses of KN1 move the cursor, short presses of KN2 and KN3 type the digit at the cursor location. After entering all the digits, long press of KN1 confirms the entry of the entered PIN code. The digit at the top of the screen shows the remaining number of entry attempts. If the PIN code is entered incorrectly 10 times, 3 more attempts are given to enter the 6-digit PACK code. If it is entered incorrectly, the device will be blocked forever.

2. Control of block M:

1. Short press of KN1 – selection of the main mode SHORT_KEY or LONG_KEY

2. Long press KN1 - turn on/off sound (S on the screen).

3. Short press KN2:

SHORT_KEY mode - select car type.

LONG_KEY mode - select key type.

4. Long press KN2 - enable/disable PIN code request (PIN on screen)

5. Short press KN3:

SHORT_KEY mode - select auto type.

LONG_KEY mode - select key frequency.

6. Long press of KN3 - lock/unlock from accidental short button presses (LOCK on the screen)

7. Short single flashes of the green LED – searching for connection with block B.

8. Short double flashes of the green LED – connection with block B is established.

9. Constant green light - code is being transmitted.

Basic method of operation: place the units at a distance of several meters so that they do not interfere with each other, turn on both units, the green should blink with double flashes and the NO_LINK inscription should not appear on the screen, select the mode in which you are going to work on the M unit, the units will synchronize, and both will have the same mode. Now they can be turned off and the next time they are turned on, they will both be in the desired mode. Try to keep the M unit turned off and turn it on near the car, this will prevent the battery from discharging and overheating.

SHORT_KEY MODE



This is a one-way transmission mode from the car to the key. Advantages - it works regardless of the model. Disadvantage - the small distance between the units, which strongly depends on the state of the battery in the key (15-70 meters).

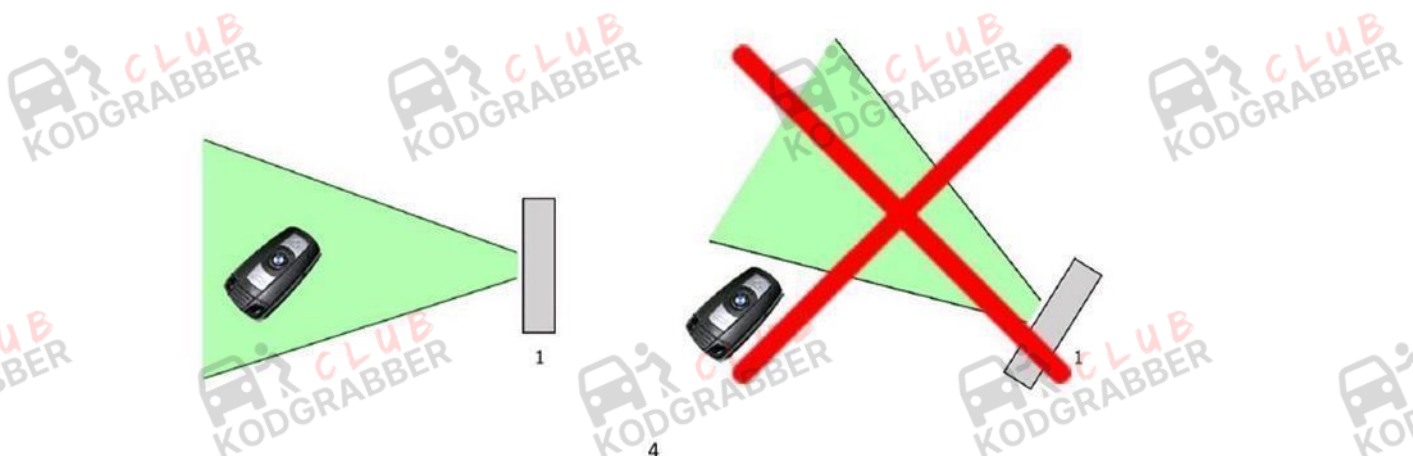
1. Using short presses of KN1, select the main mode: SHORT_KEY

2. Using short presses on KN2 or KN3, select the desired sub-mode:

- 1) TOYOTA - for cars with a key frequency of 134.2 kHz (TOYOTA, LEXUS, SUBARU...)
- 2) M-BRAND - for most cars with a key frequency of 125 kHz
- 3) FBS4 - for cars equipped with a system similar to FBS4 (MERCEDES, AUDI) with a key frequency of 22 kHz.
- 4) CHINA - for some Chinese cars with a key frequency of 125 kHz.

TOYOTA_2, M-BRAND_2, CHINA_2 modes are alternative modes to the modes above, and work more stably with some cars.

Place block B next to the key. The distance between block B and the key should be no more than 4-6 meters (10-12 for an external antenna). Make sure that the plane of the block is perpendicular to the key; in this position, the range is maximum.

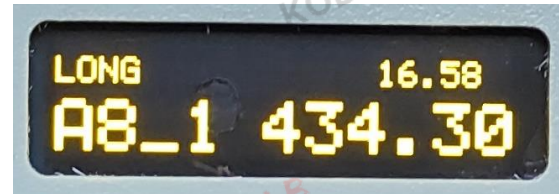
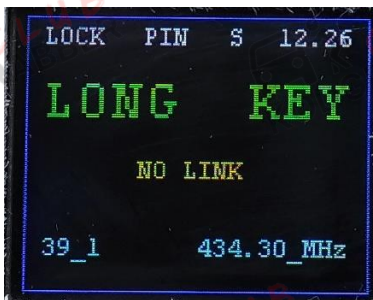


1. Double flashes of the green indicator and the absence of the NO_LINK inscription indicate the presence of a connection between the units.

2. To open the door, bring the M block to the handle and touch it or press the button on the handle (depending on the model) - the green light should light up constantly, and the blue light should flash periodically.

3. To start, place the M unit in the passenger compartment, approximately in the console area between the seats (for Toyota, for other models it is determined experimentally) and press the START button. The green light should be constantly on, and the blue light should flash periodically. There is no need to bring the unit M is close to the START button, this place is used to start the key with a discharged battery (for Toyota) and interference from the button will interfere with the normal operation of the unit.
4. DO NOT LEAVE THE DEVICES ON AT THE SAME TIME FOR A LONG TIME. THIS WILL LEAD TO A RAPID DISCHARGE OF THE BATTERY AND MAY CAUSE THE UNIT TO OVERHEAT. To prevent this from happening, it is sufficient to turn off the M unit between operations.

LONG_KEY MODE



The distance between the key and the car must be more than 30 meters, otherwise the signal from the key will overlap the transmitted signal and interfere with normal operation. For short distances, use the SHORT_KEY mode. The modes can be quickly changed on the M block, if there is a connection on the B block, the desired one will be set automatically.

1. Using short presses of KN1, select the main mode: LONG_KEY
2. Using short presses on KN2, select the required key type: **OOK**- keys with OOK modulation (old RAV4 before 2012, etc.) **FSK**- keys with FSK modulation (old Prado from 2009, etc.) **88_1**- keys withPage1:88 type 1 **88_2**- keys withPage1:88 type 2 **A8_1**- keys withPage1: A8 type 1 **A8_2**- keys withPage1: A8 type 2 **A9/AA_1**- keys withPage1: A9/AA type 1 **A9/AA_2**- keys withPage1: A9/AA type 2 **39_1**- keys withPage1:39 type 1 **39_2**- keys withPage1:39 type 2 **BA_1**- keys withPage1:BA type 1 **BA_2**- keys withPage1:BA type 2

Features of the keys:

For keys with**Page 1: A8**(and some cars have keysPage 1: A9/AA) tests conducted with a fully charged battery of the B unit showed that the distance from the B unit to the key must be NOT LESS than 2.5 meters with an internal antenna (NO LESS than 4.5 meters with an external antenna) for the key to work correctly. At a shorter distance, the key is overloaded with a strong signal from the unit and does not work correctly.

In the car with keys**Page1:39**key detection range and correct operation range differ. The tests conducted with a fully charged battery of block B showed that the detection distance from block B to the key was 7 meters with an internal antenna and 13 meters with an external antenna. Whereas the working distance from block B to the key was NO MORE THAN 4.5 meters with an internal antenna and NO MORE THAN 8 meters with an external one.

Keys with **Page 1: BA** (and possibly others, of recent years of production) after being in a stationary state for approximately more than 3 minutes they "fall asleep" and stop responding to signals from the machine, and it becomes impossible to work with them until they exit the stationary state.

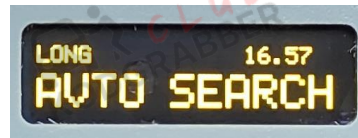
The features described above are valid for operation in both modes: **SHORT_KEY** and **LONG_KEY**.

AUTO- automatic mode, automatically determines the type and frequency of the key located in the range of block B (does not detect OOK and FSK keys, for them the type and frequency must be selected manually).

In automatic mode, the large block searches for a suitable key. Immediately after the key is found, block B. switches to the mode corresponding to the key. If there is a connection, block M. switches to the same mode as B. (if the mode on M. is: **AUTO**). In this mode, block M. **DOES NOT RESPOND** to the car, but waits for block B. to find the key. To work, wait until block B. finds the key and the blocks are synchronized, or switch block M to the desired mode.

In the **AUTO** mode, the B. block searches for the key regardless of whether the M. block is on or not.

In the **AVTO** mode, the B. unit identifies keys with Page1:88 as A8, and then the M. unit will switch to the required mode upon a signal from the car.



3. Using short presses on KN3, select the desired key frequency:

1) 433.92 or 315 for OOK and FSK modes.

2) For other keys that have two operating frequencies: For the

433 MHz range, the upper frequency is displayed as

434.30_MHz

434.42_MHz

For the range 312-315 MHz the lower frequency is displayed

312.10_MHz

312.50_MHz

314.00_MHz

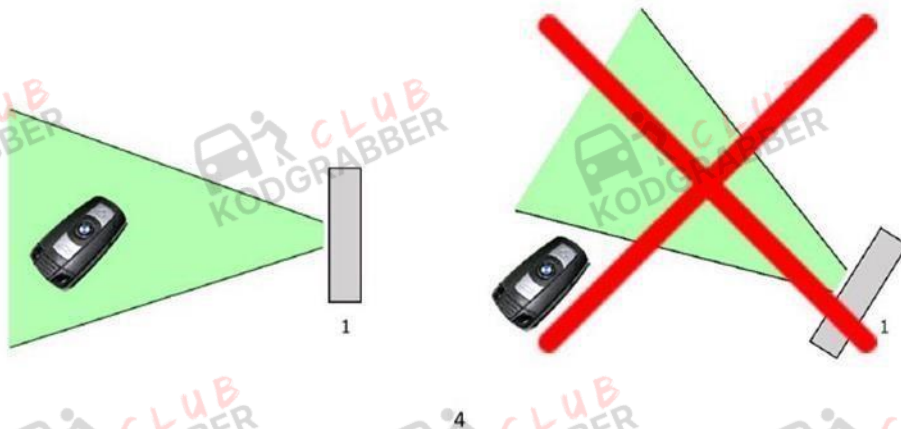
314.35_MHz

In **AUTO** mode, **SEARCH** is displayed instead of frequency.

4. If block B is turned on, the blocks are synchronized and block B will search for the key.

Flashes of the red LED on block B indicate the search for the key.

5. Place Block B next to the key. The distance between Block B and the key should be no more than 4-6 meters (10-12 for an external antenna). Make sure that the plane of the block is perpendicular to the key; in this position, the range is maximum.



6. When a suitable key is in the visibility zone, the blue and red LEDs on block B will periodically flash simultaneously. If there is no connection between the blocks, the frequency of flashes is 2 times per second, if there is a connection, 1 time per second. In parallel, the presence of a key in the visibility zone can be controlled using headphones - a beep will be heard with each response from the key. Any headphones with a 3.5 mm plug can be used.



STEREO only. Insert into the connector on block B.

That is, if the blocks are synchronized, then block B will search for the key, even if block M is turned off. You can use block B to find the key, and then turn on block M directly at the car.

7. Double flashes of the green indicator and the absence of the NO_LINK inscription indicate the presence of a connection between the units. If the red LED flashes simultaneously with the double flashes of the green LED, then the key is in the visibility zone of unit B.
8. To open the door, bring the M block to the handle and touch it or press the button on the handle (depending on the model) - the green light should light up constantly, and the blue and red should flash periodically. If only the blue flashes (and not the red), then the key frequency is incorrectly selected.
9. To start, place the M unit in the passenger compartment, approximately in the area of the console between the seats (for Toyota, for other models it is determined experimentally) and press the START button. The green light should be constantly on, and the blue and red should flash periodically. Do not bring the M unit close to the START button, this place is used for starting with a key with a discharged battery (for Toyota) and interference from the button will interfere with the normal operation of the unit.

DO NOT LEAVE THE DEVICES ON AT THE SAME TIME FOR A LONG TIME. THIS WILL LEAD TO A RAPID DISCHARGE OF THE BATTERY AND MAY CAUSE THE UNIT TO OVERHEAT. To prevent this from happening, it is sufficient to switch off the units (at least the M unit) between operations.

External antenna.

The external antenna is connected to the B-unit to increase the working distance between the B-unit and the key. Use only the ANTENNA INCLUDED IN THE KIT. Antennas from previous versions are not suitable and will damage the device.

CONNECTS ONLY WHEN UNIT B IS OFF.

ANTENNA BRANCHING



P
With

twisted around the bolts. All corners should look



To work, unfold the antenna and place it with its plane perpendicular to the key. Make sure that the antenna has a square shape - in this case, the range is maximum.



FOLDING THE ANTENNA

1. Bring shoulder 1 to shoulder 4.





2. Bring shoulder 1 to shoulder 2.



