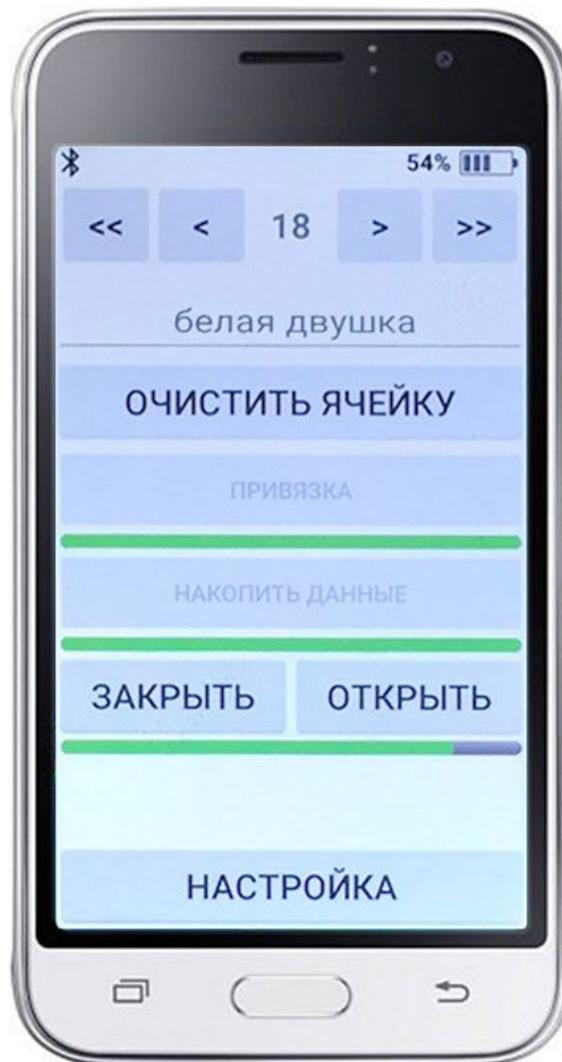


# DIGITAL SYSTEM «ECHO-2»

v.1



**Purpose of use:**

Digital system ECHO-2 is designed for testing factory remote controls installed on TOYOTA/LEXUS vehicles equipped with D4, 94, 98 type SMART ignition keys. The system consists of transmitter and smartphone, which is, controls the system.

**Technical features:**

- USA and EU frequencies supported
- Fast data-saving algorithm (car-5 sec., key-20sec.)
- 20 of independent memory slots to store key data
- 20 of any actions (open or close)
- Ability to add text reminder into any slot
- Distance to the key from 1 to 5 m
- Small dimensions 30x190x240 mm
- Flat battery protection
- User-friendly control with help of smartphone

**Supported models (from 2006 to 2015 m.y):**

- Frequency AM: LC 200, LX 570, CAMRY, RAV 4, LS and similar
- Frequency FM: PRADO, RX, GX, Venza and similar
- Supported EU (433 MHz) and USA (315 MHz) models

**Items in set:**

- Transmitter box
- Smartphone
- 220V charger

**How to use the system:**

1. Transmitter and smartphone must be fully charged before use.
2. Switch transmitter on.
3. Switch smartphone on and run the application. The connection to the transmitter will automatically be established, the buttons available for controlling will be unlocked, the Bluetooth icon and the status of smartphone's battery will appear in the top line. If threshold of 30% of the battery charge achieved, then transmitter can be switched off spontaneously - this triggers the protection of Li-Po battery from the full discharge, charge the transmitter.
4. To exclude the possibility of accidental pressing, application control is carried out by pressing and holding the corresponding button for 2 seconds.
5. Using the buttons (< > move one cell, << >> move through five cells), select one of the 20 memory locations where you want to write. If the cell already written, the available control buttons will be unlocked.
6. Press the CLEAR CELL button
7. Approach the transmitter to the car and press the READ LF button. On some cars, with a passive comfort access system, you need to take and hold the door handle. Receiving data takes a few seconds. The process of reading you can watch on your smartphone, using progress indicator. After that, the next control button will be unlocked in application.

Approach the SMART-key (the distance between the transmitter and the key should be from 1 to 5 meters). Click the COLLECT DATA button and information will be read from the SMART key. The process of reading you can watch on your smartphone, using progress indicator. In case the key is in motion or strong interference, the accumulation of data can not be performed completely and the progress indicator will not be filled to the end. In this case, you can use already accumulated parcels, but with fewer discoveries / closures, or complete the accumulation of data again. After successful reading of data from the SMART-key, the control buttons OPEN and CLOSE will be unlocked. Also you can sign the cell in the line under its number

8. Opening and closing the car is done using the appropriate application buttons. The distance between the car and the transmitter in this case recommended being not more than 5 meters to avoid possible interference. If the progress indicator of data accumulation has been completely filled, you can perform 20 times of any actions (OPEN or CLOSE). Each press of the button decreases the available actions by
9. Turn off the transmitter. All data remains stored after turning off the device and the smartphone

#### **Notes and recommendations:**

Attention! If you opened or closed the car with the ECHO-2 system - there is a loss of synchronization with the original key and the car stops to respond to the buttons on the SMART-key. The comfort access system works independently and remains operational. To synchronize the radio channel, re-teach the "forgotten" SMART-key.

After data accumulation, for the first opening or closing the car, you may need to press the same button in application again to synchronize the new radio channel counters.

For security reasons it is recommended to set the PIN on the smartphone where the application is installed.

In the data accumulation mode, do not bring the transmitter very close to the key, the signal from the transmitter is much stronger than car and the key can take wrong data. Keep it at least 1 meter away.

Timely charge the battery of the transmitter and smartphone. Li-Po batteries can cause a fire ! Always visually monitor the charging process. Do not allow a full discharge. In case of battery swelling - replace.