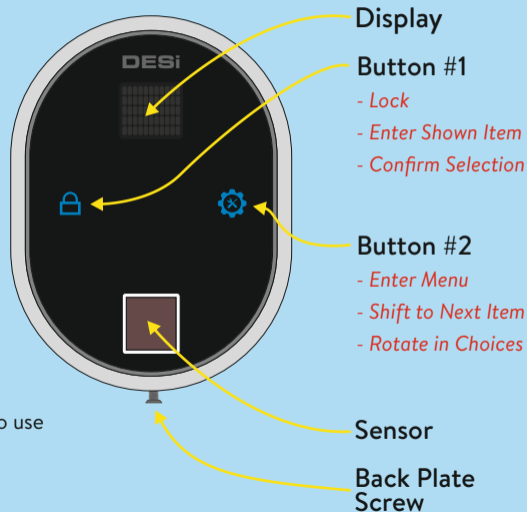# WIRELESS FINGERPRINT READER

In this section, you can find details about installation and usage of Wireless Fingerprint Reader.

Before using your motorized cylinder, first, you should adjust "**locking way**" and then "**number of rotation**" settings via master controller of your motorized cylinder. If master controller is fingerprint reader, please check page 25 and 26 for this purpose.

If you want to change the master controller of motorized cylinder, check "HOW TO RESET MOTORIZED CYLINDER" topic on the last page.

To use all available features of your device, we recommend you to use a smartphone as master controller.

Display

Button #1
- *Lock*
- *Enter Shown Item*
- *Confirm Selection*

Button #2
- *Enter Menu*
- *Shift to Next Item*
- *Rotate in Choices*

Sensor

Back Plate Screw

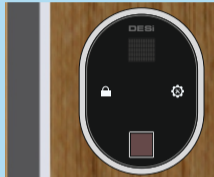DESi

6.1. INSTALLATION OF WIRELESS FINGERPRINT READER

Unscrew back plate screw at the bottom of reader and separate pack plate from device. After that, follow the steps below:

1st Step

Place back plate to the desired location and fix it with 2 screws.

2nd Step

Place the device and tighten back plate screw.

6.2. ENROLLING FIRST (MASTER) FINGERPRINT

Fingerprint reader comes without any fingerprint in its memory. The first 3 fingerprints are accepted as master fingerprints and administrative activities like enrolling or deleting fingerprint can be done by master fingerprints only.

Master fingerprints need to be chosen carefully. Don't enroll a child's finger or any finger which is deformed (or can be deformed easily) as a master finger.

To enroll first fingerprint:
- Touch to device with your palm to wake it up. Touch "Button #2". First "OK" and then "LEARN" will be displayed.
- Touch "Button #1". "L3" will be displayed.
- Put the finger onto the reader till you see "OK" and remove. "L2" will be displayed.
- Put the same finger again till you see "OK" and remove. . "L1" will be displayed.
- Put the same finger again till you see "OK".

After this step, your finger will be enrolled as first master. Schematic representation of operation is as follows:

6.3. SETTINGS / ADMINISTRATION MENU

You can change settings of your motorized cylinder and perform administrative activities via this menu. Before using your smart cylinder, "number of turns" and "locking way" settings should be adjusted properly. Otherwise, it will damage the device's mechanical structure or your lock.

The menu items and order is as follows:

Display	Function
LEARN	Enrolling new fingerprints
DELETE	Deleting enrolled fingerprints one by one
RESET	Deleting all fingerprints (Reseting fingerprint reader)
TURN	Adjusting motorized cylinder according to lock's number of rotation to lock/unlock
MOTOR	Adjusting direction of locking according to door's opening way
USER	Showing total number of enrolled fingerprints in the device's memory
SOUND	Enabling or disabling buzzer sound (Warning tones are always active)
NIGHT	Enabling or disabling delayed locking which locks 5 s. after locking button on the cylinder is pressed.
MANUAL	Enabling or disabling automatic locking mode which locks cylinder 1 minute after it is unlocked
R.LEARN	Shifting the motorized cylinder to enrolling mode to learn new controllers
R.DELETE	Deleting all controllers enrolled to cylinder except master controller.
R.COUNT	Reporting number of controllers enrolled to motorized cylinder via buzzer sound
HOLD.TM	Adjusting latch retraction period.

6.3.1. ENROLLING A NEW FINGERPRINT (LEARN or ENROLL)

If you want to enroll a new fingerprint to the reader, follow the steps below:
- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" (or "ENROLL") will be shown.
- Touch "Button #1" when "LEARN" (or "ENROLL") is on display. "L3" will be shown.
- Put the finger to the reader till you see "OK" and remove. "L2" will be displayed.
- Put the same finger again till you see "OK" and remove. . "L1" will be displayed.
- Put the same finger again till you see "OK".

In this way, the new finperprint will be enrolled to the device. Schematic representation of operation is as follows:

NOTE 1: System assigns an id to fingers and this id is shown when finger is read.
NOTE 2: During enrollment, device reads the finger 3 times. If any of those reads doesn't match, "FALSE" (or "DENIED") message will be displayed and reader turns back to "L3" step. In this case, enrolling need to be repeated. Try to put your finger to the sensor in a similar way during all reads.

6.3.2.DELETING ENROLLED FINGERPRINTS ONE-BY-ONE (DELETE)

If you want to delete an enrolled fingerprint which you know the id number, follow the steps below:

- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" will be shown.
- Touch "Button #2" till "DELETE" appears and touch "Button #1" when "DELETE" is on display. "02" will be shown.
- Touch "Button #2" till you see the fingerprint id you want to delete and touch "Button #1" when related id is on display.
- "OK" will be shown.

In this way, the related finperprint will be deleted. Schematic representation of deleting a fingerprint (e.g. id is "07") is as follows:

NOTE 1: System assigns an id to fingers and this id is shown when finger is read. By mistake, if you pass the id of fingerprint you want to delete, wait a few seconds till display goes off and restart the procedure.

NOTE 2: First master fingerprint cannot be deleted in this way.

6.3.3. DELETING ALL FINGERPRINTS / RESET FINGERPRINT READER (RESET)

If you want to delete all enrolled fingerprint readers (including masters) , follow the steps below:

- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" will be shown.
- Touch "Button #2" till "RESET" appears and touch "Button #1" when "RESET" is on display. "00" will be shown.
- Touch "Button #2" till you see "17" and touch "Button #1".
- "OK" will be shown.

In this way, all the finperprints (including masters) will be deleted. Schematic representation of operation is as follows:

NOTE: If you pass "17" by mistake, don't touch any button and wait a few seconds till display goes off. After that restart the procedure.

6.3.4. ADJUSTING MOTORIZED CYLINDER ACCORDING TO LOCK'S NUMBER OF ROTATION TO LOCK/UNLOCK (TURN or TURN COUNT)

To adjust your motorized cylinder according to lock's number of rotation, follows the steps below:

- First of all, close the door.
- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" (or "ENROLL") will be shown.
- Touch "Button #2" till "TURN" (or "TURN COUNT") appears and touch "Button #1" when "TURN" (or "TURN COUNT") is on display. "OK" will be shown and cylinder will automatically lock and unlock the door.

In this way, motorized cylinder will learn how many rotations is needed to lock / unlock the door. Schematic representation of operation is as follows:

6.3.5. ADJUSTING DIRECTION OF LOCKING ACCORDING TO DOOR'S OPENING WAY (MOTOR or D.HANDING)

To adjust your motorized cylinder's locking way according to the door's handing, follows the steps below:

- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" (or "ENROLL") will be shown.
- Touch "Button #2" till "MOTOR" (or "D.HANDING") appears and touch "Button #1" when "MOTOR" (or D.HANDING) is on display. "RIGHT" or "LEFT" will be shown.
- Touch "Button #2" to toggle between;
  "RIGHT" - right door,
  "LEFT" - left door.
- When desired way is displayed, touch "Button #1". "OK" will be displayed.

In this way, motorized cylinder's direction of locking will be set. Schematic representation of changing direction of locking from right to left is as follows:

NOTE: To transfer settings to motorized cylinder, you need to lock or unlock motorized cylinder via master controller.

6.3.6. REPORTING TOTAL NUMBER OF ENROLLED FINGERS (USER or TOTAL FNGR)

To learn total number of fingerprints enrolled to the reader, follows the steps below:

- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" (or "ENROLL") will be shown.
- Touch "Button #2" till "USER" (or "TOTAL FNGR") appears and touch "Button #1" when "USER" (or "TOTAL FNGR") is on display.

In this way, number of enrolled fingerprints will be displayed. Schematic representation of this operation (which shows 8 fingerprints enrolled to reader) is as follows:

6.3.7. ENABLING OR DISABLING BUZZER SOUND (SOUND or BUZZER)

You can disable (or enable) activation sound of motorized cylinder by following steps below:

- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" (or "ENROLL") will be shown.
- Touch "Button #2" till "SOUND" (or "BUZZER") appears and touch "Button #1" when "SOUND" (or "BUZZER") is displayed. First "OK" then "ON" or "OFF" will be shown.
- Touch "Button #2" to toggle between;

>   "OFF" - buzzer is disabled
>   "ON" - buzzer is enabled.

- When desired choice is displayed, touch "Button #1". "OK" will be displayed.

In this way, desired buzzer choice will be set. Schematic representation of disabling buzzer sound is as follows:

NOTE: To transfer settings to motorized cylinder, you need to lock or unlock motorized cylinder via master controller.

6.3.8. DELAYED LOCKING FEATURE (NIGHT or DLYD.LOCK)

Your motorized cyclinder has a delayed locking feature which locks itself 5 second after you press the locking button on the motorized cylinder. If this feature is enabled, when you are going out, if you touch locking button on motorized cylinder and close the door in 5 seconds, it will lock the door automatically. You can enable or disable this feature by following steps below:

- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" (or "ENROLL") will be shown.
- Touch "Button #2" till "NIGHT" (or "DLYD.LOCK") appears and touch "Button #1" when "NIGHT" (or "DLYD.LOCK") is displayed. First "OK" then "ON" or "OFF" will be shown.
- Touch "Button #2" to toggle between;

    "OFF" - delayed locking is disabled

    "ON" - delayed locking is enabled.
- When desired choice is displayed, touch "Button #1". "OK" will be displayed.

In this way, desired delayed locking choice will be set. Schematic representation of enabling delayed locking is as follows:

NOTE: To transfer settings to motorized cylinder, you need to lock or unlock motorized cylinder via master controller.

6.3.9. AUTO-LOCKING FAETURE (MANUAL or AUTO.LOCK)

Your device has an automatic locking feature which locks itself 1 minute after it is unlocked. If you enable this feature, you will be sure that your door is always locked.

You can enable or disable this feature by following steps below:

- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" (or "ENROLL") will be shown.
- Touch "Button #2" till "MANUAL" (or "AUTO.LOCK") appears and touch "Button #1" when "MANUAL" (or "AUTO.LOCK") is displayed. First "OK" then "ON or OFF" will be shown.
- Touch "Button #2" to toggle between;
   "OFF" - auto-locking is enabled.
   "ON" - auto-locking is disabled.
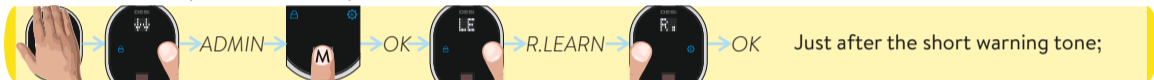- When desired choice is displayed, touch "Button #1". "OK" will be displayed.

In this way, desired auto-locking choice will be set. Schematic representation of disabling auto-locking is as follows:
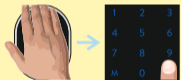

NOTE: To transfer settings to motorized cylinder, you need to lock or unlock motorized cylinder via master controller.

6.3.10. SHIFTING MOTORIZED CYLINDER TO ENROLLING NEW CONTROLLER MODE (R.LEARN or U-ENROLL)

- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" (or "ENROLL") will be shown.
- Touch the "Button #2" till "R.LEARN" (or U-LEARN) appears and touch "Button #1" when "R.LEARN" is on display.
- "OK" will be displayed. The motorized cylinder will shift to enrolling new controller mode with a long and a short warning tone. Schematic representation of operation is as follows:

→ADMIN→ →OK→ →R.LEARN→ →OK   Just after the short warning tone;

For keypad;

wake it up and touch the locking button.

For remote controller;

press and hold any button.

For enrolling **a new mobile phone**, please check next page.

For auto-locking module;

take the magnet closer to triangle sign and wait indicator is lit.

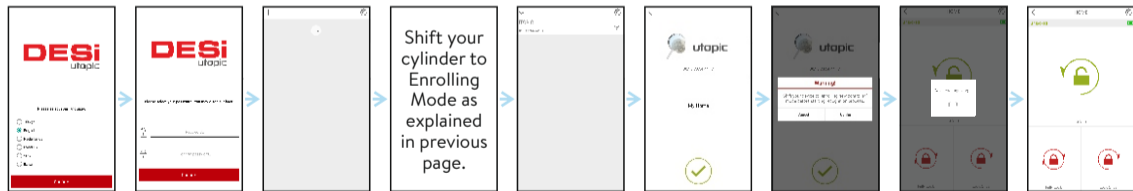For home automation interface;

3-12 V DC

power up the device and short-circuit and then open-circuit yellow and black cables.

For **other controllers**, send locking or unlocking signal via related controller.

ENROLLING A NEW (USER) MOBILE PHONE

- With the phone that you want to enroll to your motorized cylinder, search "Desi Utopic" on stores. Download, install and run the application.

- Choose desired language and define a password.

- Shift the motorized cylinder to enrolling mode as explained previous page and touch "+" in the top left corner to see the list of Utopic motorized cylinders around.

- Touch the UTOPIC line and enter a name for your device and touch the "green tick". Confirm the pop-up window. Device recognition process will start. If the matching is successful, you will hear 2 short tones from motorized cylinder and your device will be enrolled to the motorized cylinder as a user controller.

NOTE: For Android phones, application will ask to reach location services. This is needed for using Bluetooth properly.

6.3.11. DELETING ALL ENROLLED CONTROLLERS OF MOTORIZED CYLINDER EXCEPT MASTER CONTROLLER (R.DELETE or U-CLEAR)

To delete all enrolled controllers of your motorized cylinder, follows the steps below:

- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" (or "ENROLL") will be shown.
- Touch the "Button #2" till "R.DELETE" (or "U-CLEAR") appears and touch "Button #1" when "R.DELETE" (or "U-CLEAR") is on display. "OK" will be shown.
- Touch "Button #1".
- "OK" will be shown.

In this way, motorized cylinder will delete all enrolled controllers of motorized cylinder with a long warning tone. Schematic representation of operation is as follows:

NOTE: This operation doesn't delete master controller from motorized cylinder's memory. If you want to delete master controller as well, please check "HOW TO RESET MOTORIZED CYLINDER" topic on the last page.
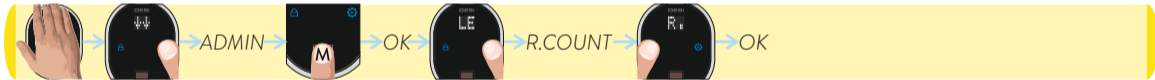
6.3.12. REPORTING NUMBER OF ENROLLED CONTROLLERS VIA BUZZER SOUND (R.COUNT or U-USERS)

Your motorized cylinder can report number of enrolled controllers via buzzer sound. To do this, follows the steps below:

- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" (or "ENROLL") will be shown.
- Touch "Button #2" till "R.COUNT" (or "U-USERS") appears and touch "Button #1" when "R.COUNT" (or "U-USERS") is on display.
- "OK" will be displayed.

In this way, motorized cylinder will start to report number of enrolled controllers via short warning tones.
Schematic representation of operation is as follows:

6.3.13. ADJUSTING LATCH RETRACTION PERIOD (FOR SOME MODELS ONLY) (HOLD.TM or LATCH RTR)

According to type of your lock and usage, you would need to adjust the time period which the motorized cylinder will keep latch of the lock inside when it unlocks the lock. To adjust latch retraction period, follows the steps below:

- Touch to device with your palm to wake it up. Two arrows will appear on display. Touch "Button #2". ADMIN will be shown.
- Put one of the master fingers onto the reader. First "OK" and then "LEARN" (or "ENROLL") will be shown.
- Touch "Button #2" till "HOLD.TM" (or "LATCH.RTR") appears and touch "Button #1" when "HOLD.TM" (or "LATCH.RTR) is on display. "0SN","3SN", "6SN" or "9SN" will be shown.
- Touch "Button #2" to choose toggle between;

        "0SN" - Short Period (latch will be kept inside the lock around 1 second and then released)
        "3SN" - Middle Period (latch will be kept inside the lock around 3 second and then released)
        "6SN" - Long Period (latch will be kept inside the lock around 6 second and then released)
        "9SN" - Longest Period (latch will be kept inside the lock around 9 second and then released)

- When desired choice is displayed, touch "Button #1". "OK" will be displayed.

In this way, latch retraction period of motorized cylinder will be adjusted. Schematic representation of adjusting latch retraction period to 3 seconds is as follows:

NOTE: To transfer settings to motorized cylinder, you need to lock or unlock motorized cylinder via master controller.

6.4. USAGE
Before using your motorized cylinder, you should adjust "locking way" and "number of rotation" according to lock which will be used with motorized cylinder.

6.4.1. UNLOCKING AND OPENING THE DOOR
Touch to device with your palm to wake it up and put an enrolled finger onto sensor. Fingerprint id will be displayed and motorized cylinder will unlock and open the door. If the finger is not known or recognized, "FALSE" will be displayed.

You can also unlock and open the door via button on motorized cylinder. For emergency conditions, the handle and key also can unlock and open the door.

6.4.2. LOCKING THE DOOR
Touch to device with your palm to wake it up and then touch locking button. System will lock the door.

You can also lock the door via button on motorized cylinder. For emergency conditions, the handle and key also can lock the door.

6.4.3. CHILD LOCK
If you enable child lock feature, motorized cylinder will behave like a standard mechanical lock. You can use it either with a mechanical key or the handle only. None of enrolled controllers (like fingerprint reader) will work till child lock is disabled. To enable child lock, press and hold two buttons on the motorized cylinder till you hear a long (3 sec.) warning tone. To disable child lock, press and hold two buttons on the motorized cylinder till you hear 3 short warning tones.

6.5. MAINTENANCE

You can clean external surfaces by soft, slightly damp cloth. Never use abrasive chemicals or water for this purpose. Don't try to disassemble your motorized cylinder.

6.5.1. CHARGING YOUR MOTORIZED CYLINDER

If you hear three short tones after operation of the motorized cylinder or if the rotation speed is too slow compared to normal working speed, you need to charge your motorized cylinders. For this purpose, we recommend to use provided charger and cable.

! ATTENTION !
- Charging period of your device is around 3 hours. We recommend you to charge it under supervision.
- With your own risk, you can use any 5 V DC microUSB chargers or a powerbank. Use high quality chargers, cables and powerbanks only.
- You may use your motorized cylinder as it is always connected to charger. The device will automatically adjust itself to work as always connected. (valid for firmware version 72 and higher.)
- If you are leaving your home for an extended period of time, first fully charge your motorized cylinder and take your mechanical key with you. If you would leave more than 2 months, after charging your motorized cylinder, either shift the motorized cylinder to childlock mode or leave your device as it is connected to charger. Otherwise, the batteries of your product would die due to deep discharge.

6.5.2. REPLACING FINGERPRINT READER'S BATTERY

If you start to see "BL" message on fingerprint reader's display, you need to replace
the batteries. Get 2x AAA Alkaline (or 1,5V Lithium Batteries) and follow steps below:
- Unscrew back plate screw. Hold fingerprint reader from bottom part, pull and lift up to detach
it from back plate.
- Replace the battery with new one. Watch the polarities!
- Attach fingerprint reader to back plate and tighten the screw.

Back Plate
Screw