

6050

WiFi control board
for 1 motor 24V

INSTALLATION MANUAL

6050 WiFi control board for 1 motor 24V

The 6050 automation system is the ideal solution for a 24V motor, offering remote gate management through a mobile application. With the 6050 control board, the user can perform all automation settings and manage the gate remotely from anywhere via smartphone and WiFi network connection.

SAFETY INFORMATION AND CE COMPLIANCE

Please read these instructions carefully before installing and using the product. Incorrect installation or use may cause injury to persons or damage to property.

This product is part of an automation system and is not considered a complete machine according to the Machinery Directive 2006/42/EC. Final compliance of the installation with CE requirements is the responsibility of the installer. Installation must be carried out exclusively by qualified personnel and in accordance with applicable European standards and regulations, including EN 12453 regarding the safe use of automated doors and gates.

General Safety Instructions

1. Before performing any wiring or programming work, disconnect the power supply.
2. The power supply must be protected by a 30mA residual current device (RCD).
3. Proper grounding of all metallic parts of the installation is mandatory.
4. Do not modify or interfere with the components without the manufacturer's approval.
5. Keep remote controls away from children to prevent accidental operation.

Safe Operation Requirements

6. Installation of photocells is mandatory for obstacle detection and accident prevention.
7. The current sensitivity must be properly adjusted according to each installation.
8. Suitable safety devices must be installed (e.g. NC safety contacts or 8K2 resistive safety edges).
9. Motor force must be adjusted within the permitted limits to avoid the risk of injury.
10. The installation must include a manual release system for emergency situations.

11. The use of visual warning devices (e.g. flashing beacon) during gate operation is recommended.
12. Warning signs must be installed in visible locations.

Inspection and Maintenance

13. After installation, a complete functional test must be performed, including multiple opening and closing cycles.
14. Proper operation of all safety devices must be verified (photocells, safety contacts, limit switches).
15. The installation must be periodically inspected and maintained.

Declaration of Conformity

The product complies with the following European Directives:

- 2014/53/EU (RED – Radio Equipment Directive)
- 2014/30/EU (EMC – Electromagnetic Compatibility)

The final installation may only be put into operation once full compliance with Directive 2006/42/EC (Machinery Directive) and the relevant safety standards has been ensured.

The manufacturer reserves the right to make modifications without prior notice. Any use other than the intended purpose is not recommended and is carried out at the user's own responsibility.

TECHNICAL SPECIFICATIONS

- Operating Voltage: 24VAC /DC
- Motor Output: 24VDC
- Accessories Output: 24VAC/DC
- Operating Temperature: -20°C to +60°C
- Remote Control Receiver: Rolling Code or Fixed Code depending on the installation
- Automation Applications: Sliding Gate Motor, Single Swing Gate Motor, Barrier Gate, 24VDC
- Reception Frequency: 433.92MHz

CE DECLARATION OF CONFORMITY



According to Directive 2006/42/EC (Machinery Directive), the manufacturer: L. PSARROS & SIA OE declares that the following product: 6050 WiFi control board for 1 motor 24V is an automation component and not a complete machine, and complies with the requirements of the following European Directives:

- 2014/53/EU – Radio Equipment Directive (RED) • 2014/30/EU – Electromagnetic Compatibility Directive (EMC).

The integrated WiFi radio module complies with Directive 2014/53/EU (RED) and operates in the 2.4GHz and 5GHz frequency bands in accordance with European regulations. Final installation and commissioning are permitted only when the complete system complies with Directive 2006/42/EC.

MANUFACTURER CONTACT DETAILS: PROFELMNET L. PSARROS & SIA OE

Address:

11 Proedrou Drakaki Street
17341 Agios Dimitrios
Athens, GREECE

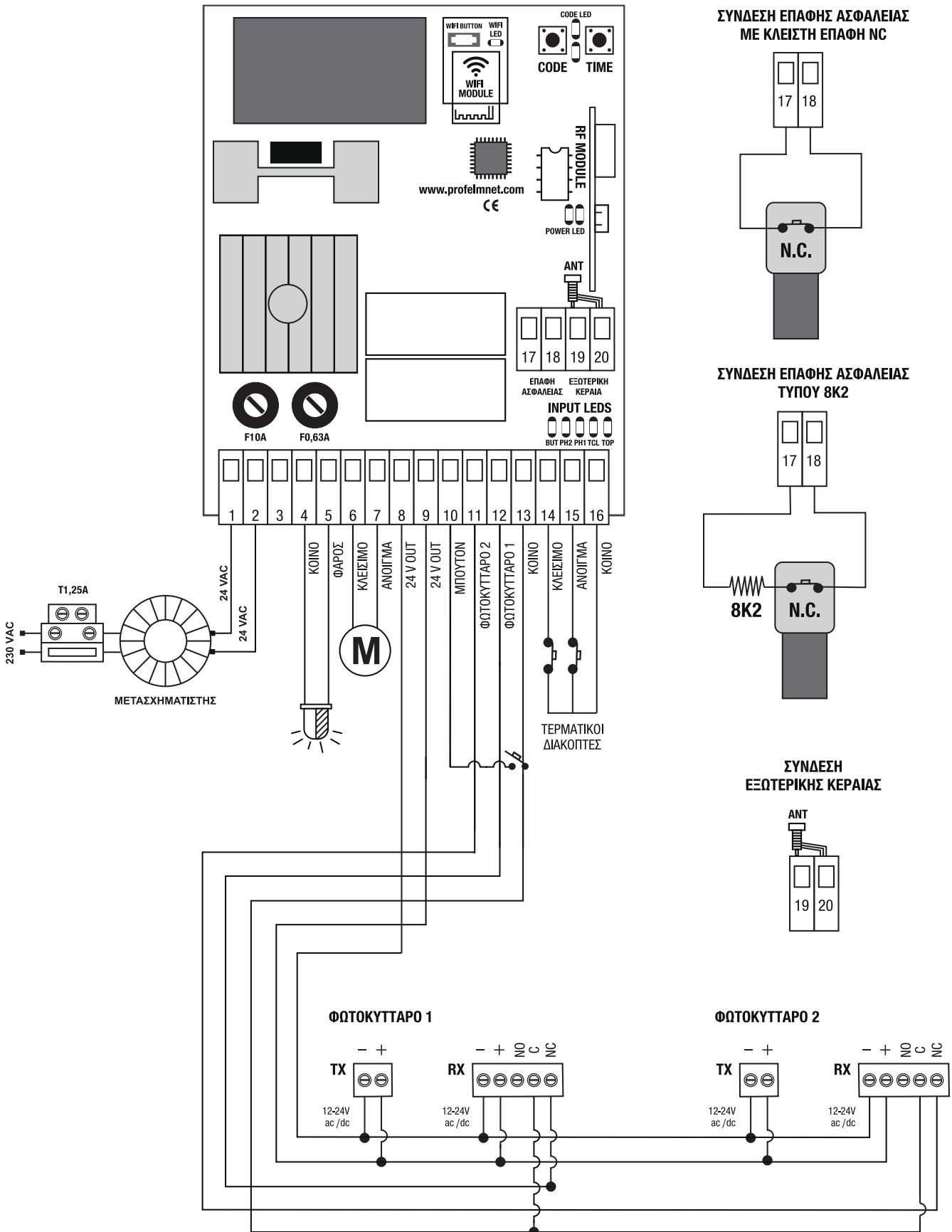
Phone:

+30 210 9850244
+30 697 4894108
(Technical Support)

Email:

info@profelmnet.com

6050 WiFi control board for 1 motor 24V



TECHNICAL CHARACTERISTICS

Power Supply	24VAC/DC
Motor Power	200W in total
Box Dimensions	10cm X 14.50cm X 5cm
Board Dimensions	8.5cm X 10.5cm X 0.05cm
Transformer Primary Side	T1,25A
Power Supply Fuse 24VAC/DC	F10A
Photocell Fuse	F0,63A
Flash Power Supply	24VDC
Photocells Power Supply	24VAC/DC
Board Memory	removable up to 300 remotes
Temperature	-20oC + 60°C
WiFi Protocol	IEEE802.11 / 2.4GHz / 5GHz
Reception Frequency	433.92 MHz
Encoding	Multiple, depending on the installation
Transformer	Toroidal 24VAC 130VA
Compatible Application	Tuya Smart Life, Smart Living
Maximum Number of Users	20

ELECTRICAL WIRINGS

1	+24VAC/DC
2	-24VAC/DC
3	Not Used
4-5	Light 24VDC
6	Close Motor
7	Open Motor
8	24VOut
9	24VOut
10+13	Contact Button - N.O
11+13	Contact Photocell 2 NC
12+13	Contact Photocell 1 NC
13	Common
14+16	Close Terminal Switch - N.C
15+16	Open Terminal Switch - N.C
16	Common Terminal Switch
17+18	Safety Edge NC /8K2
19	External Antenna 433,92MHz
20	Shield Antenna 433,92MHz

Compatible with:



Compatible with:



Powered by:



6050 WiFi control board for 1 motor 24V
is certified by:



THE POWER TO MOVE

Easy, Simple and Smart From Everywhere!

Download the Tuya Smart Application

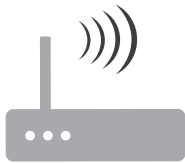


CONNECTION WITH TUYA SMART APPLICATION

Connect your smart device to your Wifi network and download the Tuya Application through Google Play or Apple store



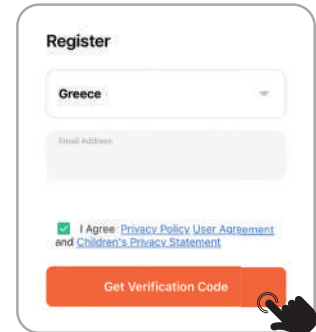
Mobile Phone



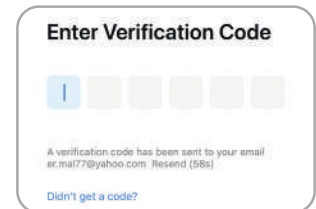
Wireless Router



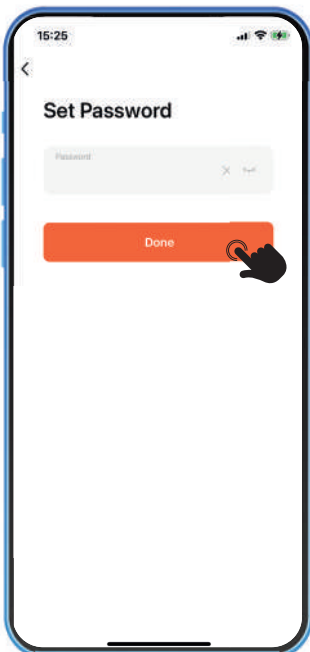
1 Press Sign Up for new account



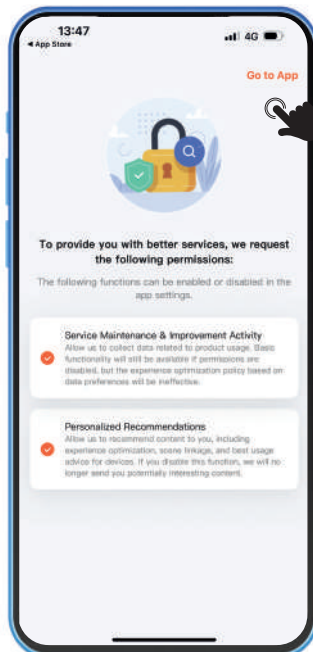
2 Fill your email and press Send verification code



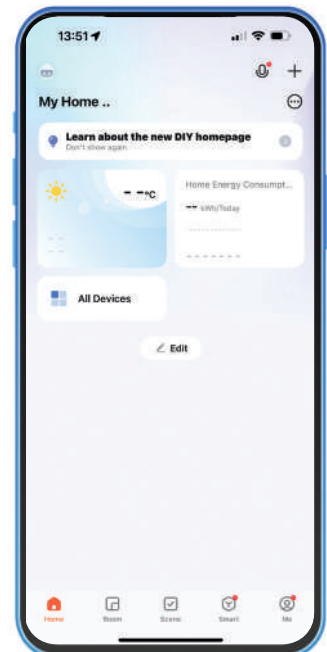
3 Send Verification Code



4 Set your Password

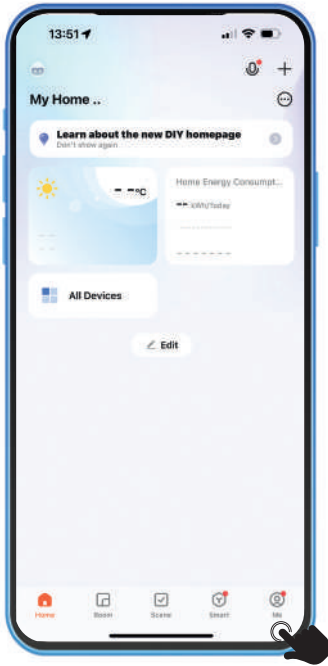


5 Go to application

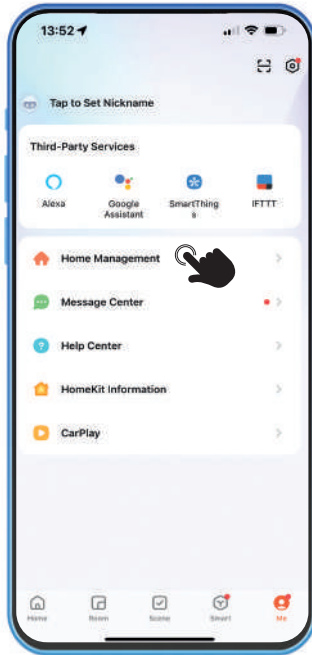


6 The account has been successfully created

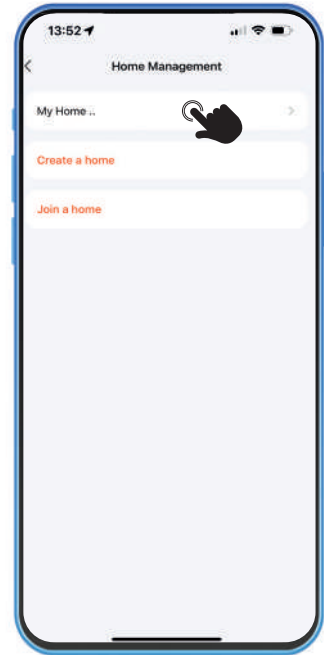
Create your HOME in application



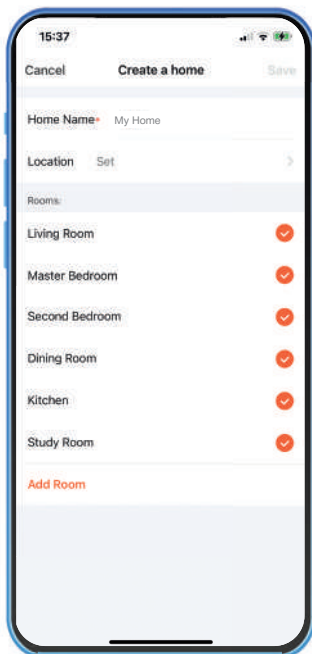
1 Select Profile



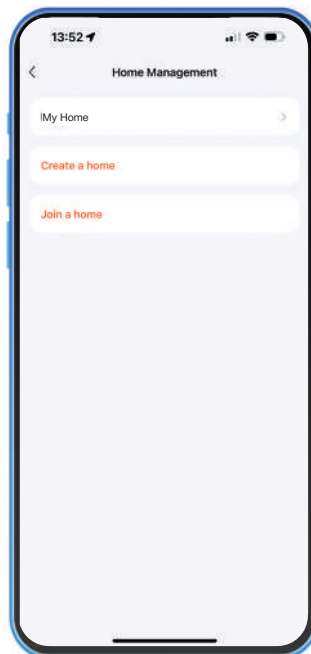
2 Select Home Management



3 Create your HOME



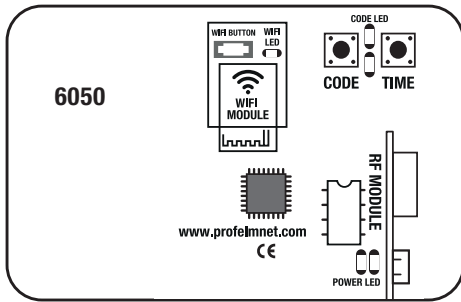
4 Give a name to your HOME



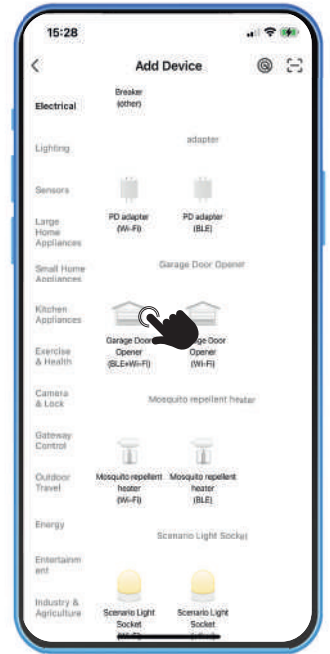
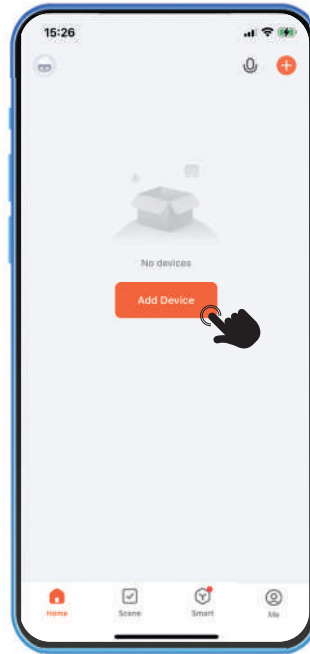
4 Your HOME is created

Pairing with the 6050 control board

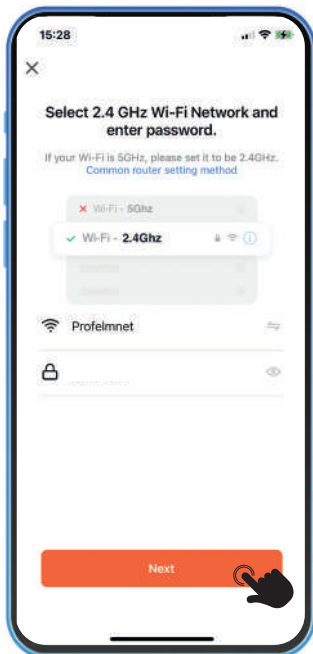
WiFi COMPATIBILITY
6050 control board is compatible with 2.4GHz and 5GHz.



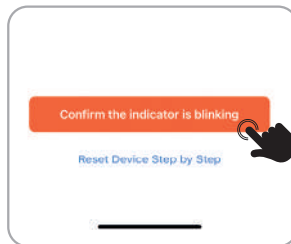
Power the 6050 control board
The blue LED indicator of the board will start flashing rapidly.
Otherwise, hold and press firmly on the WiFi button of the board until the blue LED indicator starts blinking



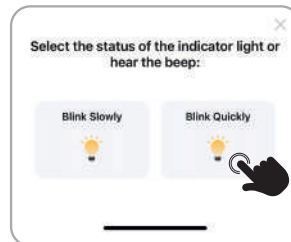
- 1 Go to Tuya application and press Add Device
- 2 Choose the GARAGE DOOR OPENER (WiFi - BLE)



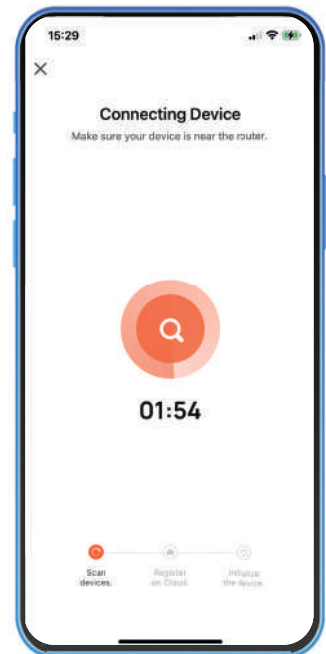
- 3 Complete the Username and Password of the WiFi network



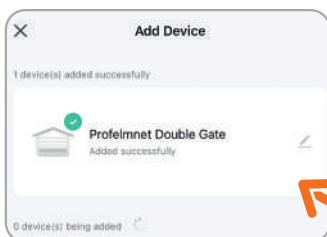
- 4 Press the confirmation messages successively



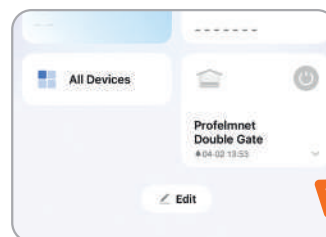
- 5 Choose Blink Quickly



- 6 Connecting Device

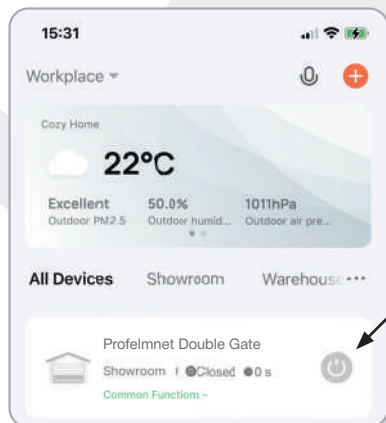
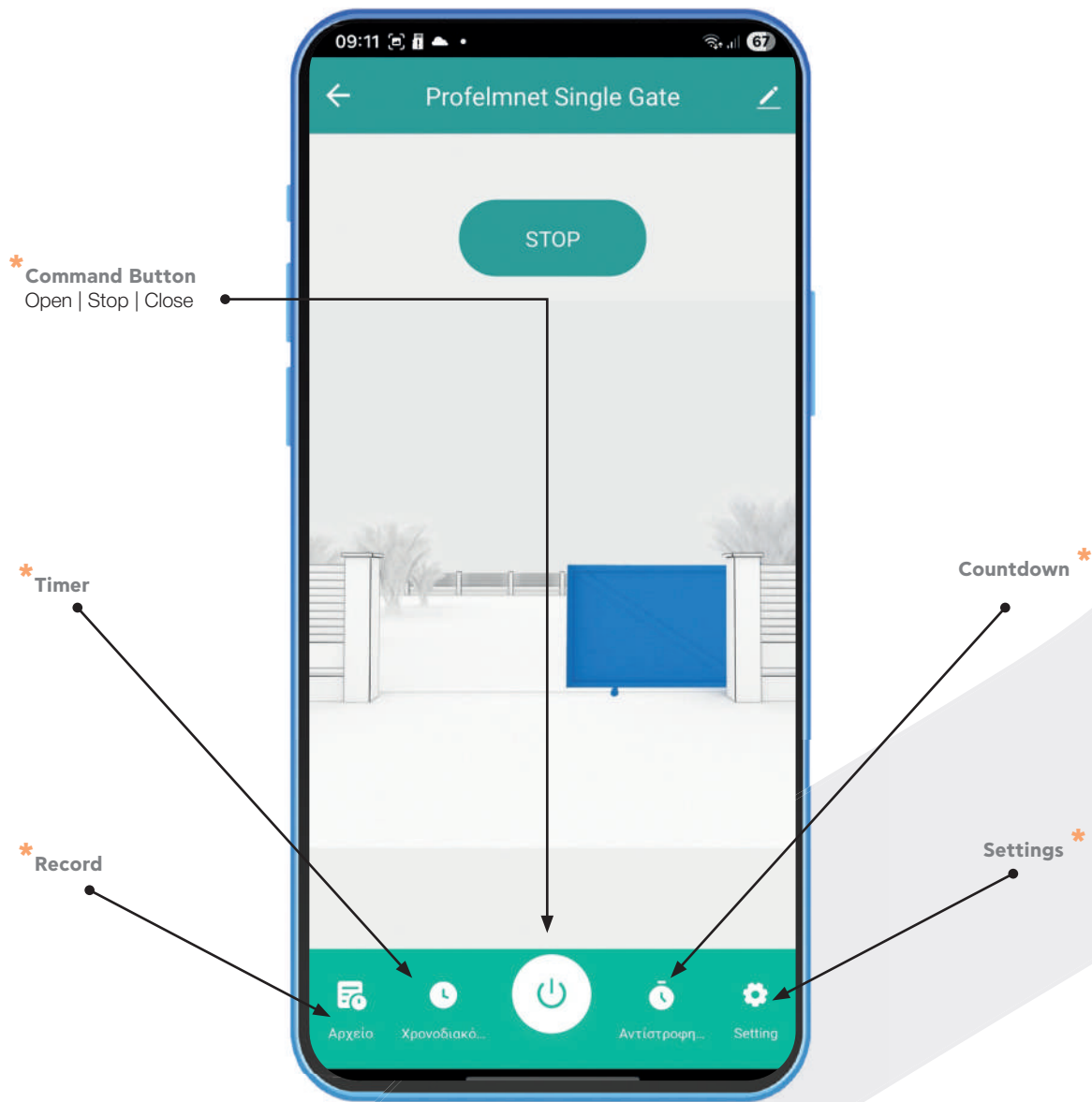


- 7 The 6050 control board is being synchronized



- 8 The 6050 control board is ready

Home Page 6050



All devices main page

Quick Command

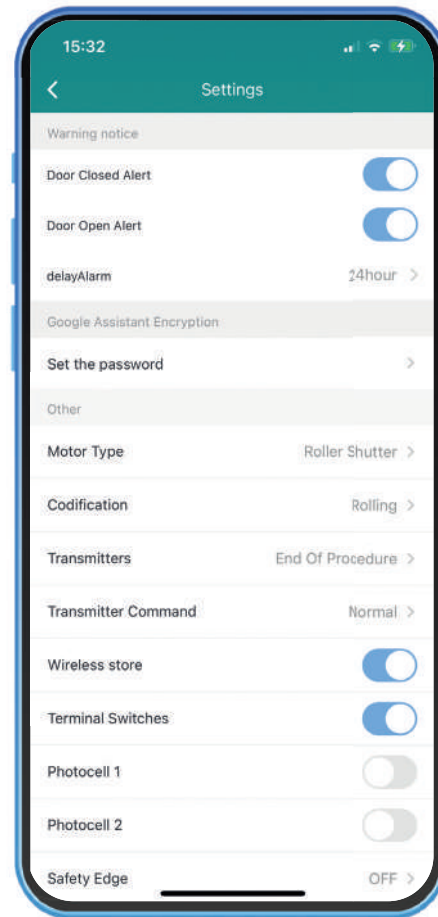
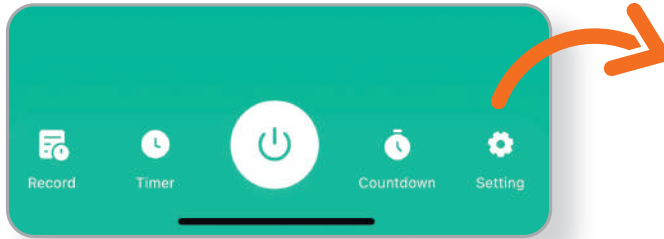
- **Green:** Is open
- **Grey:** Is closed



6050 configuration menu

In home page, select 'Settings' for 6150 board configuration

 Settings



Function	Selections / Values	Description
Notification of the closed position	• ON / OFF	Notification of the closed position
Notification of the open position	• ON / OFF	Notification of the open position
Delay alarm	Not used	
Google Assistant Security Code Enter your personal security Code	4 digit code	In order to execute a voice command with GOOGLE ASSISTANT, you have use this 4-digit code for security
Motor Type	<ul style="list-style-type: none"> • Sliding • Swing • Barrier • Roller Shutter • Deadman Roller Shutter • 2-channels Roller shutter 	Select based on the installation
Codification	<ul style="list-style-type: none"> • Rolling • Open Rolling • Fixed • Profelmnet 	Select based on the remotes
Remotes	<ul style="list-style-type: none"> • Save transmitter • Save pedestrian transmitter • Deletion • End of process 	See below the procedure number 1
Delete User	0-299	Choose the number of user you want to delete
Remote Command	<ul style="list-style-type: none"> • Normal • Only open 	Normal: Cycle remote command (Open-Stop-Close) Only Open: Remote command ONLY OPEN
Wireless Store	• ON / OFF	Wireless new Remote Addition
Terminal Switches	• ON / OFF	
Photocell 1	• ON / OFF	Protective Photocell 1. When it is activated, the gate is not closed.
Photocell 2	• ON / OFF	Freeze Photocell 2. When it is activated, the gate is freeze.

Function	Selections / Values	Description
Safety Edge	<ul style="list-style-type: none"> Deactivate 8K2 NC 	Once the safety edge is activated, the gate stops and moves back 10 cm. 8K2: Use resistance 8,2K Ω for safety edge control NC: Use NC contact for safety edge control
Polarity	<ul style="list-style-type: none"> Clockwise Counter Clockwise 	Select based on the installation
Button	<ul style="list-style-type: none"> OFF Normal 	Normal: Cycle button command (Open-Stop- Close)
Reverse Movement	<ul style="list-style-type: none"> ON / OFF 	Select based on the installation
Brake	<ul style="list-style-type: none"> ON / OFF 	Select based on the installation
Lamp	<ul style="list-style-type: none"> Courtesy Light Flashing Beacon Light Warning Light 	Flashing Beacon Light: The light is flashing during the cycle of the motor Courtesy Light : The light is steady for 3 minutes after the last command. Warning Light: The light indicates the status of the gate.
Auto-closing Transit	0s-180s	Auto-Close transit for Photocell 1
Auto-closing Stand-by	0s-180s	Auto-Close stand by for Photocell 1
Deceleration	<ul style="list-style-type: none"> ON motor < 500W A ON motor < 500W B ON motor < 500W C ON motor > 500W A ON motor > 500W B ON motor > 500W C Deactivate 	Default values <ul style="list-style-type: none"> Motor < 500W choice A Motor > 500W choice A
Normal Force	1-10	A higher value corresponds to a higher power of the motor (normal movement)
Deceleration Force	1-10	A higher value corresponds to a higher power of the motor (slow movement)
Initial Force	<ul style="list-style-type: none"> Normal Maximum Soft 	Normal: Starting Force is same with motor power Maximum: Starting force is the maximum Soft: Starting Force is soft
Normal Movement Amperostop Motor	1-10	A higher value corresponds to a higher power of the motor (normal movement)
Slow Movement Amperostop Motor 1	1-10	A higher value corresponds to a higher power of the motor (slow movement)
Activate Operating Time	<ul style="list-style-type: none"> ON / OFF 	When it is activated, the command is active for 10 sec
Set Operating time	Start Procedure End of Procedure	
Additional Time	1-40s	This time is added to the travel time set by the user.
Pedestrian Travel Time	1-120s	The Automatic Closing function is disabled.
Status Message	Trouble Shooting	
Add transmitters serial number	Type the 8 digits	For security reasons, this is only for certified Profelmmnet installers
Test Command	<ul style="list-style-type: none"> Open Stop Close 	Test the configuration



Procedure number 1: **REMOTES**

SAVE TRANSMITTERS

Through 6050 board: Press the CODE button until the red indicative LED turns ON. Release immediately the CODE button and press the transmitter's button. The red indicative LED blinks once as an indication of successful saving.

Through application: Settings => Transmitters => Save Transmitter =>OK=> Press the Transmitter you want to save in sequence => Transmitters => End Process

SAVE PEDESTRIAN TRANSMITTERS

Through 6050 board: Press the CODE button continuously until the red LED starts blinking. Then release the code button and immediately press the remote button. Then release the code button and press immediately the remote button. The red indicative LED blinks once as an indication of successful saving of pedestrian remotes

Through application: Settings => Transmitters =>Save pedestrian Transmitters =>OK=> Press the pedestrian Transmitters you want to save in sequence =>Transmitters => End of process

DELETION

Through 6050 board: Press CODE button continuously. The red indicative LED turns ON. Keep pressing CODE button until the red indicative LED goes COMPLETELY OFF. Release CODE button. The memory is erased.

Through application: Settings => Transmitters => Deletion => OK





Procedure number 2:
OPERATING TIME: FROM THE CONTROL BOARD



SAME OPERATING TIME FOR OPENING AND CLOSING

1ST METHOD: THROUGH CONTROL BOARD

Using the BUTTON TIME

Place the gate in the fully closed position.

Press and hold the TIME button firmly.

After 5 seconds, the gate will start opening.

Keep holding the TIME button until the gate reaches the end stop (for sliding gates with limit switches) or the physical stop (for swing gates).

The operating time is now set.

2ND METHOD: THROUGH REMOTE

Using a saved remote or external button

Place the gate in the fully closed position.

Turn off power of the control board. Press the TIME button and then switch the power back on. When the yellow LED indicator lights up, release the TIME button. The red LED on the board will start blinking.

Press the remote control.

The motor starts to open.

Press the remote again when the gate is fully open (in case there are no limit switches). If limit switches are installed, the gate will stop automatically at them.

The operating time is now set.



DIFFERENT OPERATING TIME FOR OPENING AND CLOSING

1ST METHOD: THROUGH CONTROL BOARD

Using the button TIME

Place the gate in the fully closed position.

Turn off power of the control board. Press the CODE button and then switch the power back on. When the yellow LED indicator lights up, release the CODE button. The red LED will start blinking rapidly.

- Briefly press the TIME button.
- The motor starts to open.
- When the gate is fully open, briefly press the TIME button again (if no limit switches are present). If limit switches are installed, the gate will stop at them.
- After 1 second, the motor will start closing automatically.
- When the gate is fully closed, briefly press the TIME button again (if no limit switches are present). If limit switches are installed, the gate will stop at them.

The operating times are now set.

2ND METHOD: THROUGH REMOTE

Using a saved remote or external button

Place the gate in the fully closed position.

Turn off power of the control board. Press the CODE button and then switch the power back on. When the yellow LED indicator lights up, release the CODE button. The red LED will start blinking rapidly.

- Briefly press the remote.
- The motor starts to open.
- When the gate is fully open, briefly press the remote control again (if no limit switches are present). If limit switches are installed, the gate will stop at them.
- After 1 second, the motor will start closing automatically.
- When the gate is fully closed, briefly press the remote control again (if no limit switches are present). If limit switches are installed, the gate will stop at them.

The operating times are now set.



Procedure number 3:
OPERATING TIME THROUGH APPLICATION


Settings → Operating Time → Set operating time → OK →

The gate starts moving → Set operating time → End of process → OK

Different type of users

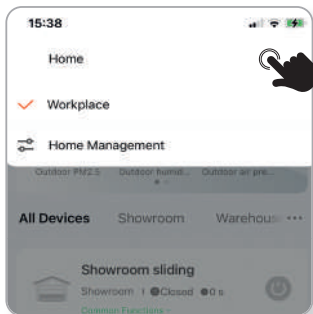


- 1. Home owner:**
The user who has paired the device with the home router and has the entire management of the device.
- 2. Administrator:**
The user who is able to make adjustments on the board
- 3. Common User:**
The user who is able to manage the device but not able to make adjustments

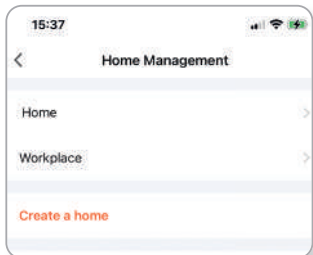
 The home owner can divide the 6150 control board into administrators or users depending on the degree of access they want to have to the control board

TIP: The user you will share access with must have a TUYA SMART app account.

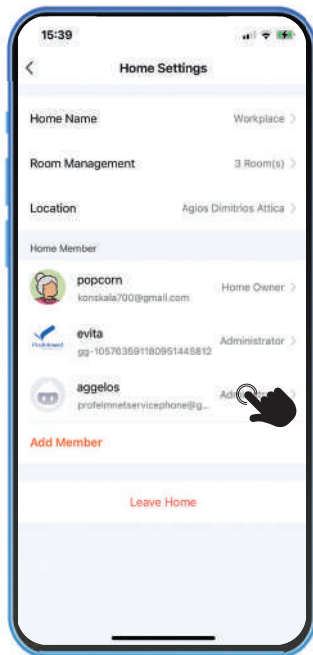
Sharing a HOME



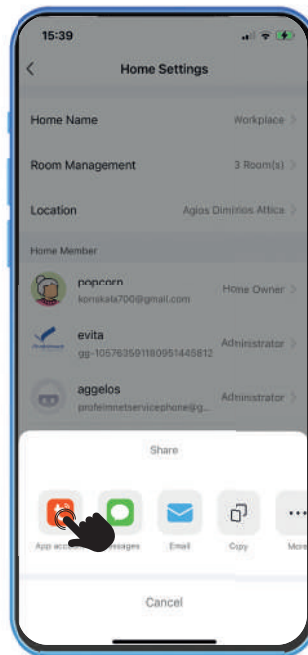
1 On main page, select the home management



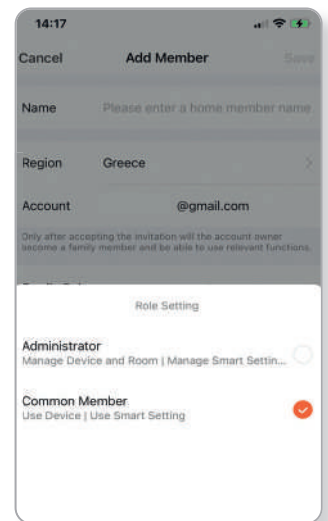
2 Choose the home you want to share



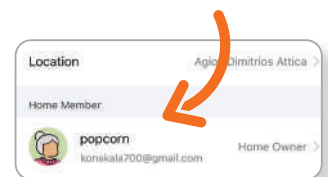
3 Choose Members Addition



4 Choose the Tuya account



5 Complete the Tuya account you want to share and select the type of user you want



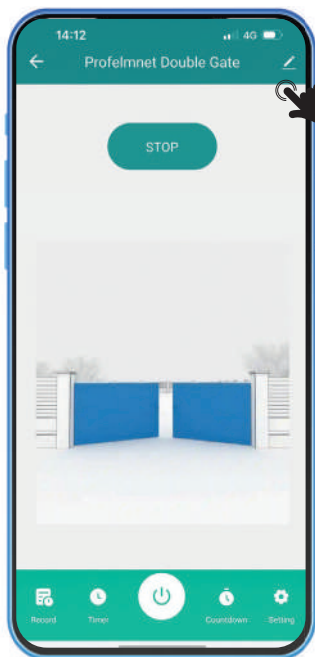
6 The new account is added

Device Sharing

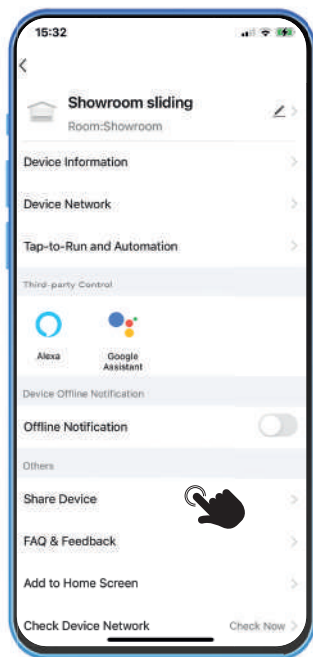


SHARE ACCESS

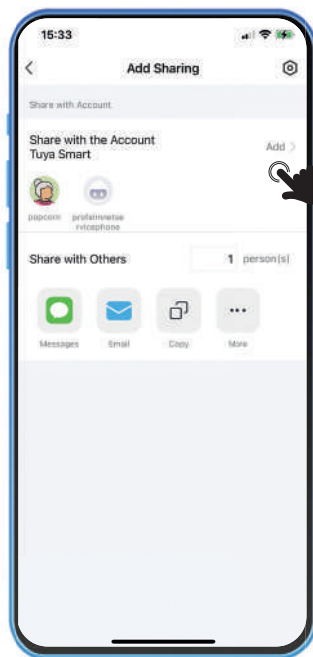
You can share access with family members or friends, allowing them to control the devices you want



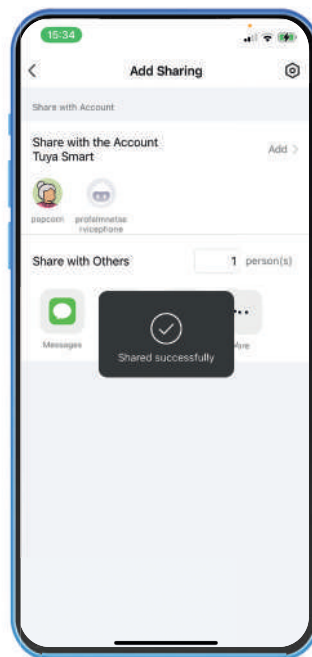
1 Go to home page and select the command as the image above shows



2 Select Share Device



3 Choose ADD and type the TUYA account you want to share

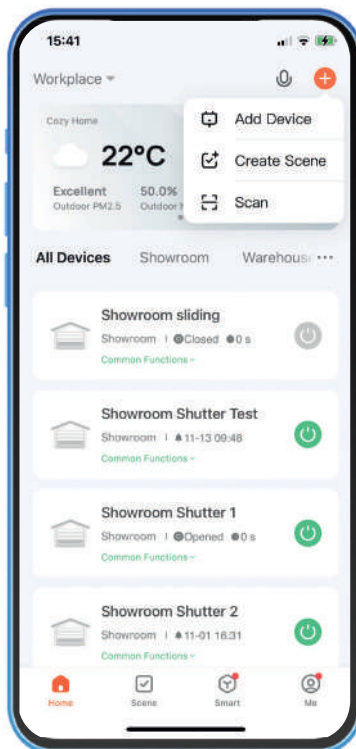


4 The device sharing is complete. The new user is able to see your device

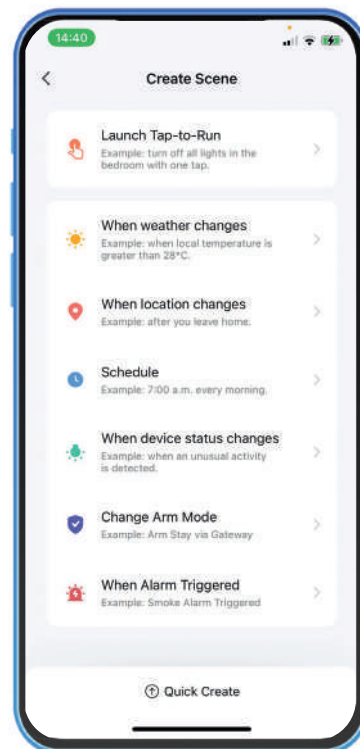
Create scenarios



You can set rules and schedules for your devices, making your home more efficient and convenient...



1 Select the + on main page and choose CREATE SCENE



2 Set the rules or scenarios you want based on your needs

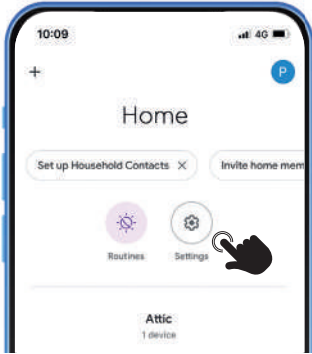
Google Home connection



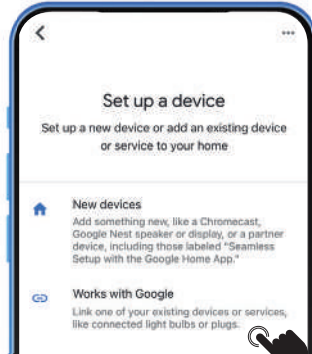
+



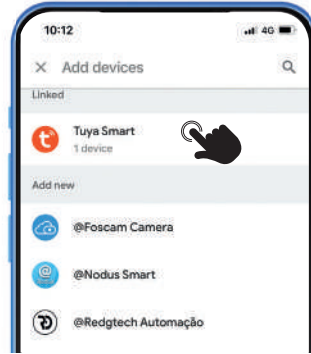
- 1 Download the Google Home application from Apple Store or Google Play. Create an account.
- 2 Synchronize the Tuya Smart application with Google Home



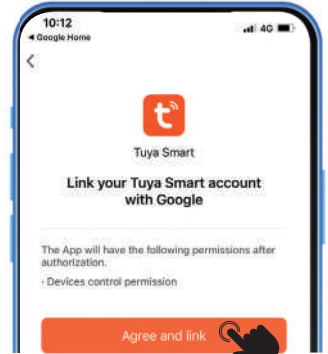
- 3 Open Google Home and press Settings



- 4 Select Works with Google



- 5 Open Google Home and find the Tuya Smart application



- 6 Press Agree and link

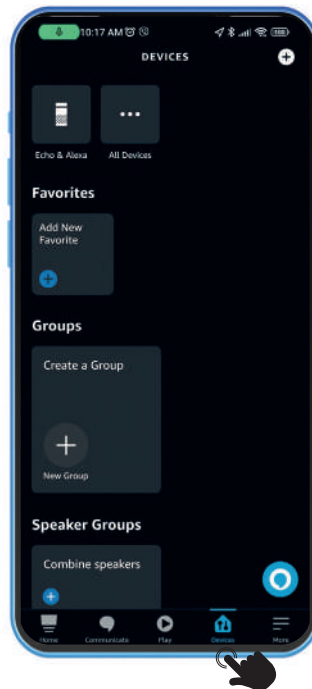
Alexa connection



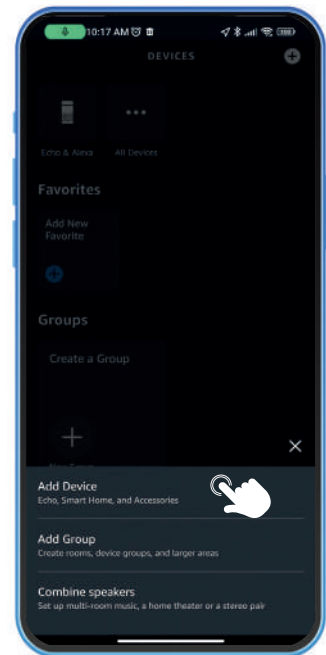
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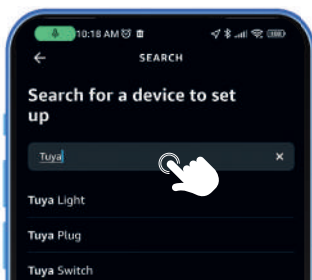
- 1 Download the AMAZON ALEXA from Apple Store or Ggoogle Play. Create an account



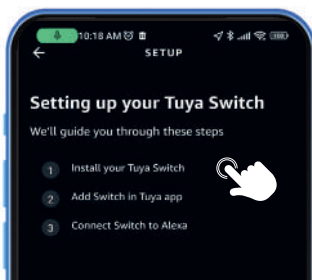
- 2 Select Devices



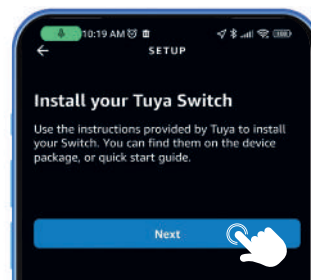
- 3 Choose Add new Device



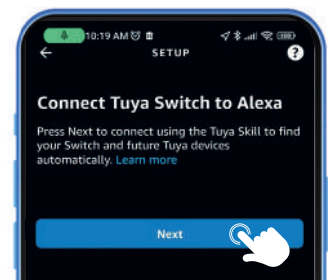
- 4 Find the Tuya Smart device (Tuya Switch)



- 5 Choose and press NEXT



- 6 Install and press NEXT



- 7 The device is added in AMAZON ALEXA



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