OPERATING MANUAL

FIBARO
SINGLE SWITCH
FGBHS-213

Works with
Apple HomeKit

CONTENTS

v1.1

Important safety information

⚠ **Read this manual before attempting to install the device!**
Failure to observe recommendations included in this manual may be dangerous or cause a violation of the law. The manufacturer, Fibar Group S.A. will not be held responsible for any loss or damage resulting from not following the instructions of operating manual.

⚠ **Danger of electrocution!**
FIBARO Single Switch is designed to operate in electrical home installation. Faulty connection or use may result in fire or electric shock.

All works on the device may be performed only by a qualified and licensed electrician. Observe national regulations.

Even when the device is turned off, voltage may be present at its terminals. Any maintenance introducing changes into the configuration of connections or the load must be always performed with disabled fuse

⚠ **Required overcurrent protection**
FIBARO Single Switch must be protected with an overcurrent protection (fuse) with a value not higher than 10A.

HomeKit technology

Apple HomeKit technology provides an easy, secure way to control HomeKit-enabled accessories using Siri on your iPhone, iPad, or iPod touch.

After installing your **FIBARO Single Switch**, configure it from a compatible app with just a few simple steps.

You can even create your own custom scenes to control your home settings. For example, you can create a scene to automatically turn off the lights, lock your doors, close the garage door, and set the thermostat to the desired temperature in just one step.

ℹ To control this HomeKit-enabled accessory, iOS 9.3 or later is recommended.

Controlling this HomeKit-enabled accessory automatically and away from home requires an Apple TV with tvOS 9.2 or later or an iPad with iOS 9.3 or later set up as a home hub.

#1: Description and features

FIBARO Single Switch is designed to be installed in standard wall switch boxes or anywhere else where it is necessary to control electric devices.

FIBARO Single Switch allows to control connected devices either via HomeKit technology (using *Bluetooth*® low energy) or via a switch connected directly to it and is equipped with active power and energy consumption metering functionality.

Main features of FIBARO Single Switch:

- Compatible with Apple HomeKit technology,

- *Bluetooth*® low energy technology for wireless communication,

- Advanced microprocessor control,

- Works with various types of switches – momentary, toggle, three-way, etc,

- To be installed in wall switch boxes of dimensions allowing for installation, conforming to provisions of applicable regulations,

- FIBARO Single Switch is an extension unit.

#2: Supported loads

The Single Switch may operate under the following loads:

- Conventional incandescent light sources,
- Halogen light sources,
- Electrical appliances which power consumption does not exceed the limit for a specified device,
- Loads up to 8A rated current.

⚠ **Applied load and the Single Switch itself may be damaged if the applied load is inconsistent with the technical specifications!**

When connecting the Single Switch act in accordance with the following rules:

- Do not connect loads greater than those recommended!
- Do not connect types of loads other than resistive and incandescent!

#3: Installation

⚠ **Connecting the Single Switch in a manner inconsistent with this manual may cause risk to health, life or material damage.**

When connecting the Single Switch act in accordance with the following rules:

- Connect only in accordance with one of the diagrams,

- Electrical installation must be protected by overcurrent protection (fuse) of with a value not higher than 10A,

- The Single Switch should be installed in a wall switch box compliant with a relevant national safety standards and with depth no less than 60mm,

- Electrical switches used in installation should be compliant with the relevant safety standards,

- Length of wires used to connect the control switch should not exceed 10m.

Notes for the diagrams:
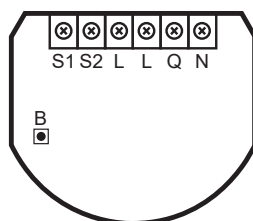
S1 - terminal for 1st switch

S2 - terminal for 2nd switch (not used at the moment)

L - terminal for live lead

Q - output terminal of the 1st channel
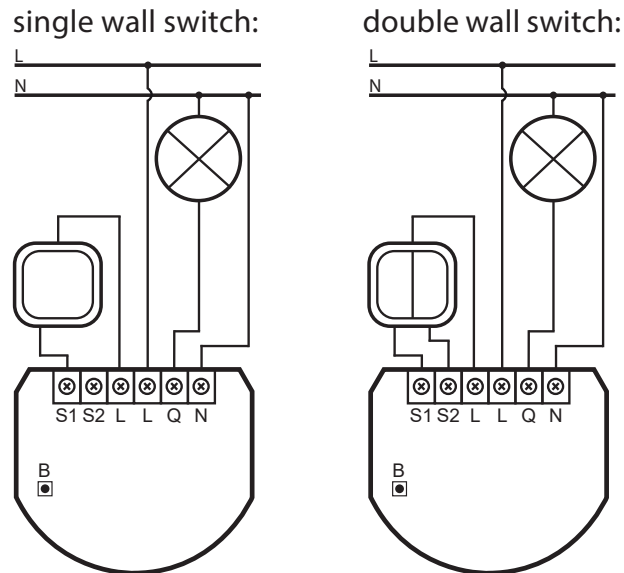
N - terminal for neutral lead

B - service button

Installation of the Single Switch:

1. Switch off the mains voltage (disable the fuse).
2. Open the wall switch box.
3. Connect with one of following the diagrams for appropriate device:

single wall switch: double wall switch:

Wiring diagrams - Single Switch

4. After verifying correctness of the connection switch on the mains voltage.
5. Pair the device (see "Pairing the accessory" on page 7).
6. Turn off the mains voltage, then arrange the device in a wall switch box.
7. Close the wall switch box and turn on the mains voltage.

#4: Pairing the accessory

1. Open the Settings app on your iOS device.

2. Go to the *Bluetooth®* section, and turn the *Bluetooth®* on.

3. Place the accessory next to your iOS device.

4. Open a HomeKit compatible app of your choosing on your iOS device.

5. Start pairing with your HomeKit app.

6. Find HomeKit Setup Code on the last page of *Quick Start Guide* included in the box that looks like this:

XXX-XX-XXX
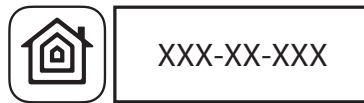
7. Point your iOS device's camera at the Setup Code to scan it or enter the Setup Code manually.

8. Choose Single Switch you wish to pair.

9. If entered Setup Code is valid, the device will complete the setup process.
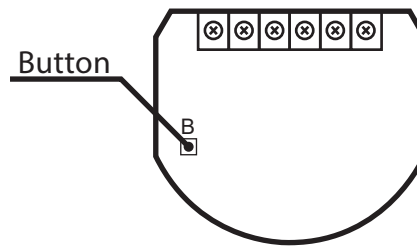
10. Follow instructions displayed in the application.

i **NOTE**

Remember to keep your HomeKit Setup Code in safe place. You may need it in case of re-pairing.

#5: Reset

Resetting the Single Switch to factory defaults:

Reset procedure allows to restore the accessory back to its factory settings including HomeKit pairing.

1. Open the wall switch box.

2. Press and hold the button.

Button

3. Wait for the LED indicator to glow **yellow.**

4. Release the button.

5. Click the button to confirm.

6. Accessory will glow red to confirm reset.

7. Delete the accessory from the app before pairing it again.

⚠ **WARNING!**

Danger of electrocution, take precautions to avoid electric shock!

#6: Functionality

Power consumption monitoring:

The Single Switch measures current active power consumption and reports it to your iOS device.

New power consumption report is sent:

- if current power changed by at least 20% compared to last reported,
- if current power changed by at least 200W compared to last reported,
- once every hour,
- after turning on/off.

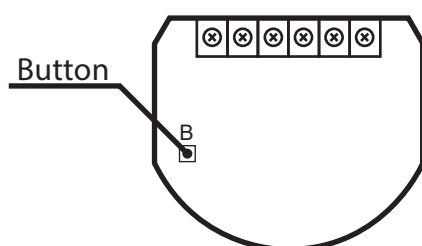**Energy consumption monitoring:**

The Single Switch measures cumulative energy consumption and reports it to your iOS device.

New energy consumption report is sent:

- if aggregate energy consumption changed by at least 0.1kWh compared to last reported,
- once every hour.

To reset energy consumption memory:

1. Open the wall switch box.
2. Press and hold the button.

Button

B

3. Wait for the LED indicator to glow **green**
4. Release the button.
5. Click the button to confirm.

⚠️ **WARNING!**

Danger of electrocution, take precautions to avoid electric shock!

Malfunction detection:

The Single Switch detects some malfunctions and reports them to your iOS device.

Every malfunction is sent using Status Fault with code assigned to every event:

1 – overheat - device detected excessive heat and will turn off

2 – overload - device detected excessive electrical current and will turn off

4 – relay contacts sticked - control over device relays is lost

8 – no communication with power metering module, device will turn off

Maintenance load controlling:

The Single Switch can turn on and off connected loads even if is not paired or connected to an external switch (e.g. to test its operation). To change state of the device to opposite one:

1. Open the wall switch box.
2. Press and hold the button.
3. Wait for the LED indicator to glow **white**.
4. Release the button.
5. Click the button to confirm.

Button

B
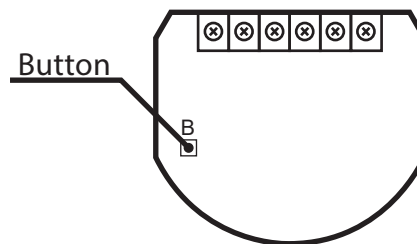
6. As long as LED is lit, clicking button will turn on/off the connected device.
7. Maintenance control will be disabled after 5 seconds of inactivity.

Device identification:

The Single Switch can identify itself if you are not sure which device you are currently controlling. When you ask the device to identify itself via HomeKit-compatible app it will:

• triple blink blue 3 times with the built-in LED,

• change state of the device to opposite one for approx. 5 seconds (only if paired with HomeKit network).

#7: Configurable parameters

1. Type of connected switch

This parameter allows to select type of wall switch connected to the device.

Available settings:	**0** – momentary switch
	1 – toggle switch (contact closed - ON, contact opened - OFF)
	2 – toggle switch (device changes status when switch changes status)
Default setting:	**1** (toggle switch - synced)

2. Restore state after power failure

This parameter determines if the device will return to state prior to the power failure after power is restored.

Available settings:	**0** – the device does not save the state prior to the power failure and sets „off" position
	1 – the device does not save the state prior to the power failure and sets „on" position
	2 – the device restores its state prior to the power failure
Default setting:	**2** (state is restored)

> **i** **NOTE**
>
> If parameter 1 is set to 1, parameter 2 is irrelevant and device state is always the same as switch state.

#8: Specifications

Power supply:	100-240V~ 50/60 Hz
Supported load types:	Resistive and incandescent
Rated load current:	8A
Operating temperature:	0-35°C
For installation in boxes:	Ø ≥ 50mm, depth ≥ 60mm
Overcurrent protection:	required external 10A circuit breaker
Radio protocol:	*Bluetooth*® low energy
Radio signal power:	EIRP up to 10dBm
Radio frequency:	2.4 GHz
EU directives compliance:	RED 2014/53/EU RoHS 2011/65/EU
Dimensions (L x W x H):	42.5 x 38 x 20.4 mm

#9: Regulations

Legal Notices

All information, including, but not limited to, information regarding the features, functionality, and/or other product specification are subject to change without notice. Fibaro reserves all rights to revise or update its products, software, or documentation without any obligation to notify any individual or entity.

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Use of the Works with Apple HomeKit logo means that an electronic accessory has been designed to connect specifically to iPod touch, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

WEEE Directive Compliance

Device labelled with this symbol should not be disposed with other household wastes. It shall be handed over to the applicable collection point for the recycling of waste electrical and electronic equipment.

Declaration of conformity

Hereby, Fibar Group S.A. declares that FIBARO Single Switch is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.