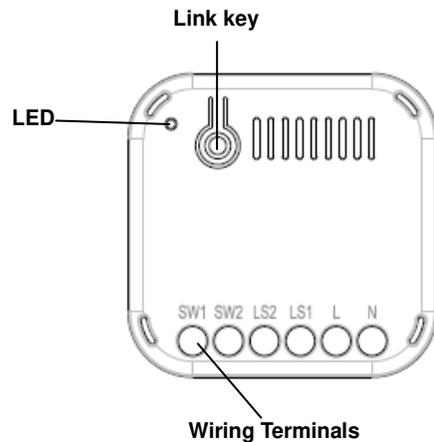# AN194 — Curtain Controller

The Curtain Controller is used for controlling motorized curtain, roller blinds, shutters and venetian blinds. Through the gateway, the user can remotely set their desired stop position of the curtain.

Main features:
- Wireless control of curtain motor.
- Support up to 400W electric motor load.
- Positioning Auto calibration function
- Detects and report curtain's current position

It supports U-Net two-way wireless technology and is fully compatible with any U-Net enabled devices. The U-Net protocol allows end devices such as AN194 to pair with a U-Net gateway as central control making it suitable for smart home cloud based platforms such as HomeSys.

Product Overview

Link key

LED

Wiring Terminals

SW1 SW2 LS2 LS1 L N

Safety Precautions before Installation

- **Be sure to isolate or switch off mains power before installing or maintenance.**
- **Avoid installing the unit in stormy or raining weather.**

IMPORTANT

Installation must be performed by skilled technicians who are informed about the standards and technical requirements of the appliance and its proper installation. Note that the In-Wall On/Off Module is designed to be installed in a wall switch box to operate.
Check your local codes as they apply to your situation. If the house wiring is of aluminum, consult with an electrician about proper wiring methods.
Before proceeding with the installation, TURN OFF THE POWER TO THE LIGHTING CIRCUIT AT THE CIRCUIT BREAKER OR FUSE BOX TO AVOID ELECTRICAL SHOCK.
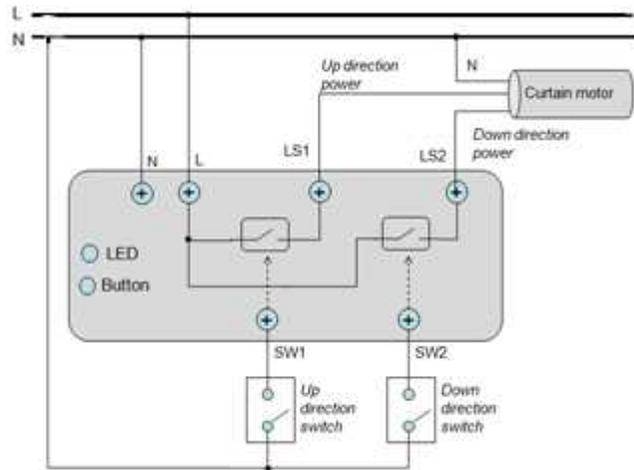

WARNING

Due to connection to AC mains, the curtain controller module should be placed inside an enclosed casing to avoid accidents from electrical contact. Ideally an electrical wall box should be used whenever possible.
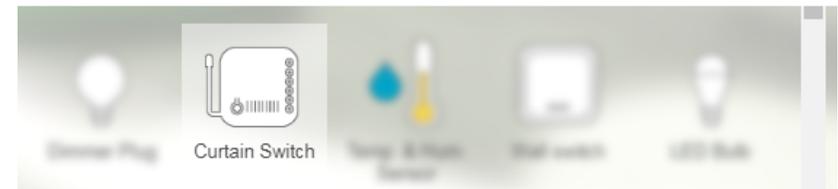(Example of electrical box on right)
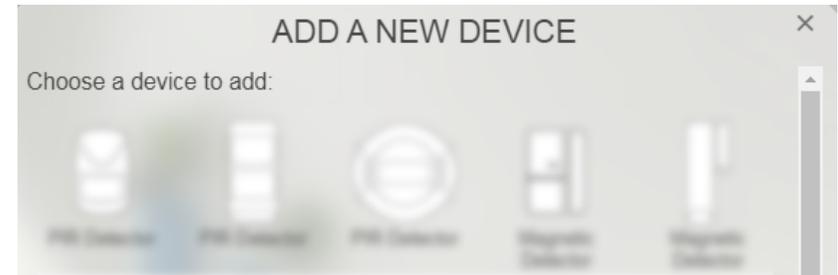
Wiring installation

1. Switch off or isolate the AC mains power before installing.
2. Wire up the Curtain Controller to the curtain motor and the terminal switch according to the wiring diagram below. Terminals SW1 and SW2 connect to the existing switch which controls the up/down direction of the curtain respectively.

3. When wiring is completed, do not assemble the module into the wall box just yet.
4. Switch the AC mains power back on to power up the unit.

Binding with HomeSys

1. If the Gateway was powered off, wait until the Gateway is fully powered on and ready for binding.
2. Log into the HomeSys account from a web browser.
3. Select "System".
4. Select "Add a New Device", then "Curtain Controller".

5. Click 'Next' again until the screen below appears. This means the gateway is entering binding mode.

6. Press and hold the Link key for 3 seconds until its LED flashes, then release.
7. The screen below will appear in 10 seconds if the process is successful.

Note: If the LED blinks steadily for 30 seconds followed by 3 rapid flashes, this means the binding was unsuccessful. Abort and repeat steps 4 to 6 above.

8. Once binding is complete, switch off the AC mains power again.
9. With the AC mains turned off, assemble and secure the curtain controller inside the electrical box to avoid any physical contact with user.
10. Switch the AC mains on again when complete. The controller is ready to use.
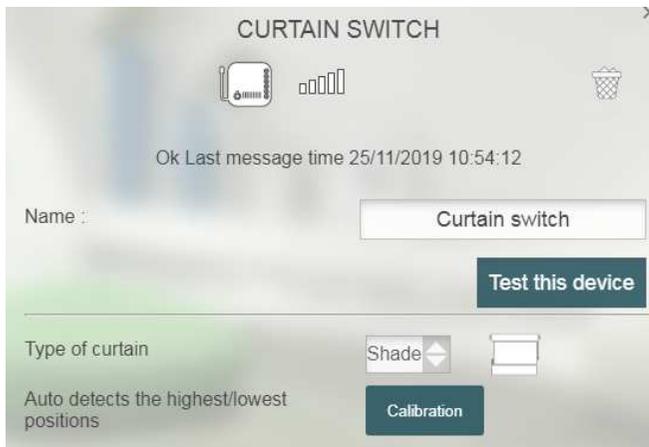
Auto Calibration

This lets the controller automatically measure the entire length of the curtain. Once calibrated, the curtain can moved accurately to any position when set remotely by the user.

1. Go to Select "System" and select the Curtain Controller
2. Choose the type of curtain: Shade or Blinds.
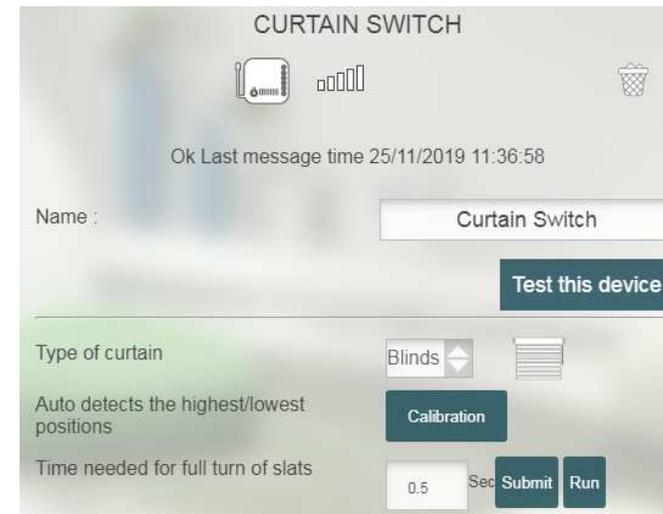
Shade calibration

3. Click the "Calibration" button to start. The motor will proceed to move, completing two full cycles of up, down and up again.
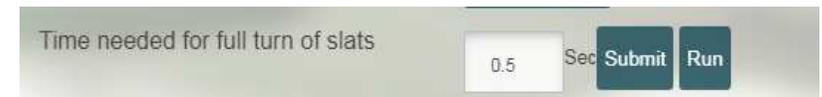

4. When calibration is complete, a "Done" will appear.

Blinds calibration

3. First, calibrate the up/down movement by clicking the "Calibration" button. The motor will proceed to move, completing two full cycles of up, down and up again.

4. When calibration is complete, a "Done" will appear.

5. To calibrate the tilting angle of the blinds slat, first enter an estimated time period needed for a full turn of the slats. The aim is to set a time period just long enough for a full turn of the slats but short enough to prevent any movement of the blinds. Setting this too long will not only turn the slats but will also move the blinds upwards. The default period is 0.5 seconds.
6. After entering the time, click "Submit" and wait for "Done" message to register the new time.
7. Click "Run" and observe the results.

8. If the slats fail to reach a full turn, or the blinds starts to move up, repeat steps 4 to 6 with a new time until satisfied.
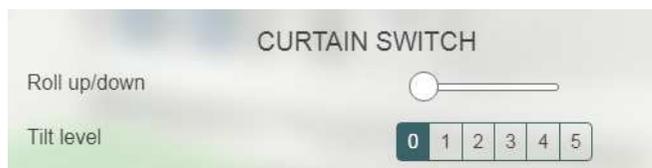
Operation

On demand control
The controller can be operated on demand either;
- manually using the external switches on terminals SW1/SW2, or
- remotely through the gateway.

To control from Homesys,
1. Go to "Automation" page, under "Devices" tab.
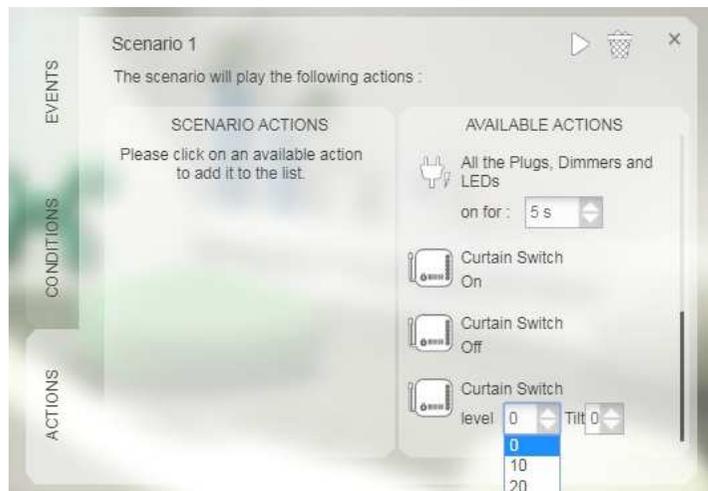2. Move the slider to set the curtain position.

3. For blinds, the full turn of the slats are divided into 6 levels. Click on the "Tilt level" to choose the desired angle of tilt.

Scenes
The controller can added as part of a Scene.
1. Go to "Automation" page, select "Scenes" tab.
2. Select a Scene, and click on its "Action" tab to set the curtain position, and if necessary, the slats tilt angle for blinds.

Troubleshooting

Symptom	Cause of Failure	Recommendation
Device not responding and LED not displaying	The device is not wired to the mains power correctly	Check if wiring is correct, or voltage is too high or too low
LED displaying, but cannot control curtain.	Binding was not successful	Repeat the steps in Binding with HomeSys

Reset to Factory Settings
To reset the unit back to factory default state:
1. Make sure the LED on the unit is turned off. If it is on, press the Link key once to turn it off.
2. Press and hold the Link key on the module for 3 seconds until the LED turns on and then release. The LED will start to flash.
3. Press and hold the Link key again for more than 6 seconds until the LED turns off, then release. The LED will flash every 2 seconds indicating the unit is now reset back to factory default settings.

Auto Binding
Once reset back to factory settings and first powered up again, the unit will attempt to automatically bind with any U-Net compatible gateway for 30 seconds. This is called Auto-binding.

If binding is unsuccessful after 30 seconds, Auto-binding process will stop and the LED indicator will flash slowly every 2 seconds, implying this unit has never paired with any device.
Note: Auto-binding can be restarted again by disconnecting and reconnecting power to the unit.

Specifications

Frequency Range	868.3 MHz
Power Input	230V/50Hz
Maximum Electric Motor Load	Max. 400W
Working Temperature	-10°C - 40°C

Specifications are subject to change without notice

WARNING:

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.
Contact your local government for information regarding the collection systems available.
If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the
groundwater and get into the food chain, damaging your health and well-being.
When replacing old appliances with new ones, the retailer is legally obligated to take back your old
appliance for disposal at least for free of charge.

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CE

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