

LiSwitch LSW-101

lamp dimmer module
and small power switch
in extension cord design
to automatically control a lamp
or other small electrical appliance
with the Room Service
home automation system.

Room Service system

An Ingénovie home automation concept in which each room or house is managed by a room-manager, an autonomous control system responsible for managing heating, lighting and other electrical appliances automatically,

- According to your presence .
- According to necessity.

LiSwitch

The LiSwitch module allows room-manager to control a lamp or other small electrical equipment.



Characteristics

- Dimmer light for incandescent lamp. .
- On/Off Switch for other types of lamp or small electrical equipment.
- Compatible with CFL (Compact-fluorescent) lamp, without dimmer function.
- Manual command button for on-off switch and dimmer function.
- Small-extension cord design, easy to install.

Easy installation

The extension cord design simplifies installation on various devices or lightings, and positioning the module for easy access for the manual command.

Facing up or facing down, the manual command is designed to provide quick access nearby, by simple pressing it with hand, or even with foot.

The blue light on the push-button lights up when the switch is turned off to help finding it in the dark.

Simple and intuitive manual command

- Turn on and off light by simple press of the button.
- Gradually light dimming by keeping the button pressed. The intensity goes up or down alternately each press.

The last dimmer adjustment is memorized and sent to the room-manager to be re-applied in the same context / circumstance according to the current application.

The manual command sent to room-manager will be treated as higher priority according to configuration.

Automatic functionality

Many automatic functionality are available under room manager control.

- Turn on the light automatically when it is necessary when you are present in the room.
- Sunrise simulator with the morning-call software to turn on the bed-side lamp gradually before the wake up time.
- Turn on or off a device during your absences.

PoliNet Home Automation Network

LiSwitch is equipped with a PoliNet network module to communicate with his room-manager.

PoliNet network, an Ingénovie's innovation, offers important features to build a simple and reliable home automation system :

- Power-Line Carrier system (PLC), using existing electrical installation. Hence, the traditional installation remains operational.
 - Secure bi-directional protocol.
- Each command is authenticated by an electronic signature, and acknowledged to ensure a good reception.

- Decentralized cooperative network

In this system there is no central unit that takes all the decisions. Several room-managers in an installation can communicate to each other to synchronize their operating modes. For example, the room-manager in the entrance will announce your arrival and the other room-to-managers may decide to raise their thermostats.

- Conforms to EN-50065. The European standard ensures, among others, that devices using the same frequency band can co-exist in the same installation.

- Flexible addressing. Each device is assigned a three-digit ID: house-id, room-id and device-id giving a broad and flexible address space for a home automation application.

Driver software

The LiSwitch driver software is integrated into the Room Services software suite.



- Automatic identification of devices available in the network.
- Manual command : turn on, turn off and level change.
- Shortcut to the main menu.
- Label modification associated with the device.
- Configuration with other Room Services application.
- Modification of the device ID.

Some examples of the available applications that can be configured with LiSwitch module :



Morning-Call.

- Turn on a coffee machine before wake up.
- Sunrise simulator: use the bedside lamp to simulate sunrise.
- Luminotherapy - to keep the room well lighted all morning



Auto-lighting

Install LiSwitch on the main room lighting to have an automatic lighting according presence.



Day and night

Use LiSwitch for night lamp associated to the twilight detector.

Other applications may be available in the Room Services software suite.

Technical specifications :

Power Supply:

- Supply Voltage : 230V 50/60Hz

Light Dimmer :

- incandescent lamp max 150W.

Switch:

- Non-inductive load up to 500W.

Power Line carrier :

- Protocol : PoliNet
- Frequency : 132 khz
- Compatibility : EN50065

Weight and dimension

- Dimension : 60 x 60 x 25 mm (l x w x h)
- Cable 280 cm.
- Weight : 225 g.

Room Services software suite

LiSwitch, like all devices managed by a room-manager may be associated with one or more application from the Room-Service software suite.

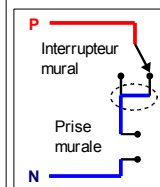
Each link has a specific configuration allowing you to create settings to be applied depending on the active/current context.

For example, you can adjust the level of dimmer light depending on the current mode.

Command by wall switch.

An optional wiring allows manual command of the module from a wall switch.

LiSwitch can detect a short power cut to alternately turn on and off the device connected.



This way, you can use the wall switch on/off/on transition to create this small interruption.

A push button may also be used to create the same effect.

Transition detection time : 90 ms.

Application diagram

