



Daisy
RSM-101

Daisy is a room manager.
She manages heating, lighting,
and other electrical appliances,
in a room or a house,
to serve you better during your stay,
and to save energy during your absence.

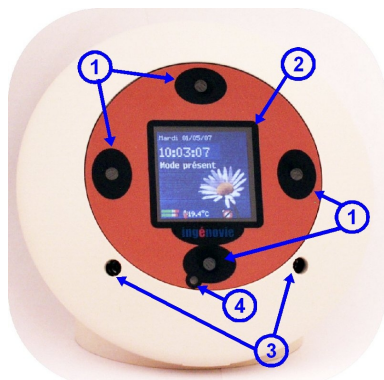
Room Service system

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.

Room-manager Daisy

It is for this purpose that the room-manager Daisy is equipped with sensors, interfaces and intelligence necessary to accomplish her mission.



Integrated sensors and interfaces

- Infrared touch keys (1)
- LCD screen color (2).
- Ultrasonic presence detector (3).
- Ambient light sensor (4).
- Ambient temperature sensor (integrated).

Easy Installation

The room-manager Daisy is a small device not larger than a CD, that simply plugs into an outlet and sits on a stable surface, facing the empty space of the room.



Ultrasonic presence detector

Thanks to this ultrasonic presence sensor, the room-manager can take into account your presence in the management of the house.



A new technology developed by Ingénovie, this presence detection is done by filling the room with ultrasonic sound wave, and observing the returning reflections, with a digital signal processing treatment to discern the presence of a person in the room

The benefits of this new technology can be felt immediately:

- Free positioning! No installation constraint, no need to install it on the ceiling, in the corridor or in a corner. The motion detector is integrated in the room-manager, and as long as it is cleared off obstructions, it will be able to detect the occupant's presence in the room.
- Higher sensitivity. The sensor can detect the slightest movement in the room, even the

breathing motion of a person slept nearby.

- Higher detection reliability. Only persistent presence would be detected, a transient movement such as an object falling off a shelf will not trigger presence detection.

The ultrasonic wave, used for years in domestic and security applications, as in nature (transmitted by the bats) is an inaudible sound to the human ear and harmless for health.

Communication Network PoliNet

To control devices under its management, room-manager communicates with control modules through a power-line carrier network called PoliNet, an innovation of Ingénovie.

- Power-Line Carrier system (PLC), using existing electrical installation. 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. This 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.

Room-Services software suite

Several software applications can run simultaneously in a room-manager, thus forming a suite of services available to users.

Morning-Call.

More than just a simple alarm, this application helps you start the day:

- Preheating function: to turn on a towel heater before you wake up.
- Sunrise simulator: use the bedside lamp to simulate sunrise.
- Morning time: to keep the light on all morning.

Auto-heating

A smart thermostat, heating regulation based on the occupant's presence. For example, 19 ° C for In room mode, 17 ° C for absent mode, and 10 ° C for vacation mode

Auto-lighting

Automatic lighting control based on presence.

- Dimmer level setting to turn on the ambient light when the room gets too dark.
- Turn off light automatically when the room is unoccupied and
- Turn off light if the natural lighting would be sufficient, for example, when you open the curtain.

Choice of face-colors



Copper



Iron



Gold



Steel

Day and night

Networked twilight detector together with other room-manager for controlling the night lighting.

Other applications are available by default or as option to download. Check-out the specification of Room Services software suite.

Flexible Configurations

All devices managed by the room-manager may be associated with one or more applications from Room-Services software suite.

Each link has a specific configuration allowing you to create settings to be applied depending on the context in progress.

For example, you can create the dimmer level adjustment for the auto-lighting application during night mode.

Software update by infrared biberon

The room manager embedded software can be updated using an infrared biberon.

This small usb card stick to the front of room-manager using two suction cups to create an infrared link for software downloading and other computer related functionalities.

Technical specifications :

LCD screen:

- Dimension : 40mm.
- Resolution : 130x130
- Number of colors: 4096 (12 bits)

Touch Key:

- 4 infrared touch keys

Power Supply:

- Voltage/frequency : 230V~ 50/60Hz
- Consumption : 2,3W

Temperature Sensor: 0 – 90°C.

Ambient light sensor

Ultrasonic presence detector: 40khz.

Ring tone: monophonic, RTX format

Power Line carrier :

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

Weight and dimension

- Dimension : 11 x 7.5 x 9.5 cm (l x w x h)
- Weight : 320 g

Application diagram

