Operating instructions

LogicMachine Ambient

Connections and operating elements

|	
A	Ethernet RJ45 with Power over Ethernet
C	RGB LED light
D	Reset button
E	LED indicator 1 (green)
F	LED indicator 2 (red)
G	USB2.0
H	Buzzer
I	Gesture control sensors
J	LED locator
L	VOC / AIR quality sensor
M	EnOcean module
N	Bluetooth module
P	Humidity + temperature sensor
R	Air pressure + temperature sensor

GND
1-Wire
+24V
B
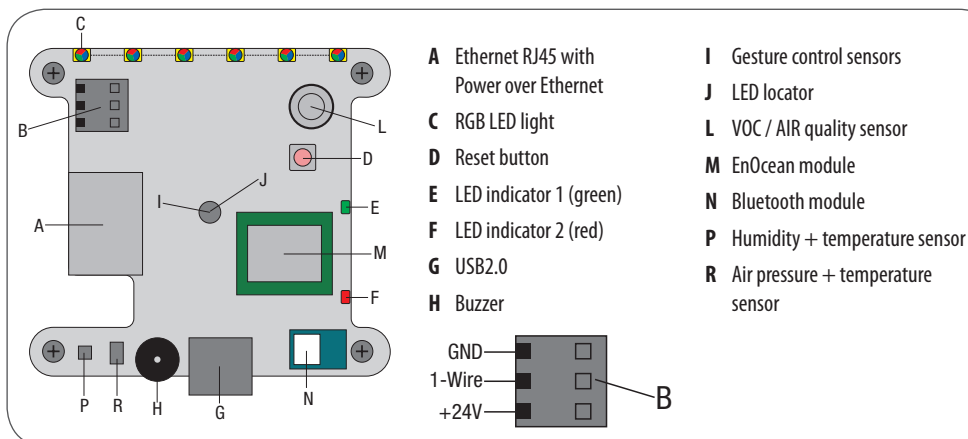
About

LM Ambient is an ecodesigned wall-mounted controller with gesture control that transforms the device into smart push-button. Temperature, humidity, barometer, air quality and light sensors measure and control environment around you. Ambient lighting can work as LED lamp or notificator. LM Ambient consists of sensor platform, visualization server, cross-standard gateway, scenarios and logic engine. It supports KNXnet/IP, Modbus TCP and BACnet. It also has built-in bi-directional EnOcean, Bluetooth 4.0 Low Energy interfaces. LM Ambient provides ecosystem for IoT including pairing with wearable electronics, platform for custom applications and external development possibilities.

Applications:

- Gateway
- Presence monitoring
- Smart thermostat
- Gesture push-button
- Sound / light / wearable notification center
- HVAC
- Universal controller (lighting, shutters etc.)
- Health / activity monitoring
- Security
- Application server
- Internet-of-Things / Cloud integration

Mounting on the wall
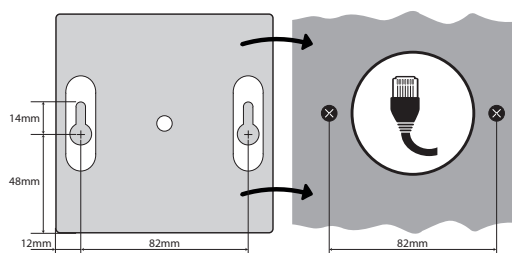
1. Drill two holes in the wall Ø 5.5 mm. The distance between holes is 82 mm.
2. Insert nylon plugs in the wall, then insert screws.
3. Prepare Ethernet cable to be connected. We recommend to use a regular wall-mounting box.
4. Attach Ethernet/PoE cable to the device (either from EMBS Ethernet Switch outputs or from passive PoE adapter). If you use a regular 24V DC power supply, connect it accordingly to power input clamps.
5. Place the device on the wall.

Included in the kit

1 x LM Ambient with an ecodesign wooden enclosure

1 x 1.5 m Ethernet cable

2 x wall screws Ø 3.5 mm, length 30 mm

2 x nylon plugs Ø 3.5 – 6 mm, length 30 mm

1 x 24V DC power supply with PoE (optional)

Caution

Security advice

The installation and assembly of electrical equipment may only be performed by skilled electrician. The devices must not be used in application that can result danger of people, animals or real value.

Electrical connection

The devices are constructed for the operation of protective low voltage (SELV), Grounding of the devices is not needed. When switching the power supply on or off, power surges must be avoided.

Technical data

Power voltage	12-24V DC via Power Over Ethernet or from power supply
Power consumption (idle)	2 W
LED indicator 1	green
LED indicator 2	red
Length of wall screws and nylon plugs	30 mm
Supported diameter of wall screws	3.5 – 6 mm

Operation	-5℃ to 45℃
Max. humidity	93%, no condensation
Type of protection	IP 20
Dimension (WxHxD)	107 x 107 x 22 mm

Interface		
	1x 10BaseT/100BaseTX	All
	1x USB2.0	All
	1x EnOcean 868MHz	LMWE00, LMWE02
	1x Bluetooth 3.0 and 4.0	All
	1x 1-Wire	All
	1x Reset push button	All
	1x Buzzer	All
	1x IR Blaster (optional)	All
	1x RGB light	All
	1x Gesture control sensor	All
	1x Humidity sensor	All
	1x Temperature sensor	All
	1x Air quality / VOC sensor	LMWN02, LMWE02
	1x General air quality sensor	LMWN00, LMWE00
	1x Barometer	All
	1x Ambient light sensor	All

Default network configuration

Login name	admin
Password	admin
IP address	192.168.0.10
Network mask	255.255.255.0

These settings can be changed in
System config → Network → Interfaces, by clicking on LAN

Ordering code sample

LMW X 0 X - X X
1   2   3

1	N	Without EnOcean
	E	With EnOcean

2	02	Air quality / VOC
	00	General air quality

3	ZR	Zebrano Radial
	BL	Black Lacquer
	WL	White Lacquer
	OT	Oak Tangential

embedded systems

Status LEDs, RESET button

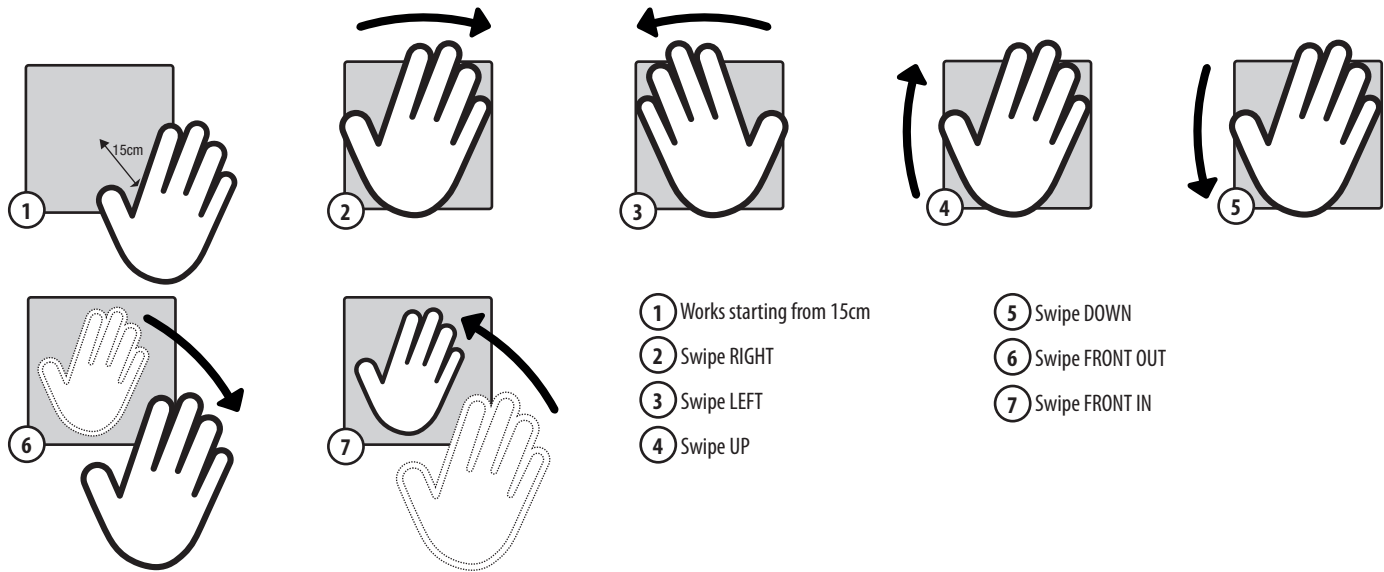| Procedure		LED 1 status (green)	LED 2 status (red)
Device starting		Green steady ON	Off
Operating device		Off	Off
Rebooting device	Press RESET < 10 sec.	Off	Steady red
Temporary settings of default IP	Press RESET >10 sec. then	Off	Blinking Red
	Press RESET < 10 sec. or select System config → System → Reboot		
Factory settings of default IP, passwords, project deleted	Press RESET >10 sec. + Release + Press RESET > 10 sec.	Off	Flashing Red

Recycling

This products falls within the scope of Waste Electrical & Electronic Equipment Directive 2002/96 EC (WEEE). This product should not be disposed of with household waste. Please recycle where facilities exist.
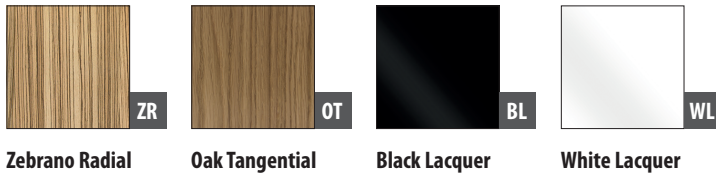
Support

If you have any technical questions, please contact us by writing to *support@openrb.com* or look in Examples/FAQ sections at *www.logicmachine.net*

Gesture control

1. Works starting from 15cm
2. Swipe RIGHT
3. Swipe LEFT
4. Swipe UP
5. Swipe DOWN
6. Swipe FRONT OUT
7. Swipe FRONT IN

Basic variations of wooden enclosures

ZR	OT	BL	WL
Zebrano Radial	Oak Tangential	Black Lacquer	White Lacquer

Custom variations of wooden enclosures

BE	ME	NA	OR	PA	SC	RL	NE
Beech	Macassar Ebony	Nut America	Oak Radial	Palisander	Schizandra	Red Lacquer	Nut Europe

More types of wood and colors available by request. 3D files of the enclosure are available at *www.logicmachine.net*

Companion products

Power and infrastructure:

5-port PoE Ethernet switch with QoS

24V power supply with PoE

I/O extension:

1-wire 2 Universal I/O PUZZLE

LogicMachine Re:actor Lite

For other companion products please see our website at *www.logicmachine.net*

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