



 **SOLEM**
IRRIGATION

L'EXPERT DE L'IRRIGATION CONNECTÉE
THE CONNECTED IRRIGATION EXPERT



LR-MB

INSTALLATION GUIDE

PRESENTATION

The LR-MB is a relay Wi-Fi- Bluetooth®/LoRa™ sector, remotely controllable. It can manage up to 25 « LR-IP » battery operated irrigation modules and/ or « LR-FL » flowmeter modules from the LR range, from anywhere with a simple internet connection.

Recommandations :

An LR product installation requires a pre-audit phase in order to check the connection of the products in their intended positioning.

To optimize the connection between the « LR-MB » and the LR modules, it is strongly recommended :

- 1 - Install LR modules in buried plastic manholes and to position them as high as possible in the eye.
- 2 - Position the « LR-MB » or its remote antenna as high as possible, with a clear environment.
- 3 - To test the LoRa™ connection between « LR-MB » and the modules using the test tool present in the MySOLEM application. (see page 12)

INFORMATIONS

LoRa connection periodicity between « LR-MB » and his modules is 3 minutes.

Remotely, each modification of program or manual control will be effective after a delay of 3 minutes.

On the « LR-FL » module :

- Recording of the count, every 15 minutes.
- Feedback, every 3 minutes.

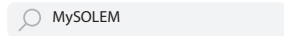
Step 1

DOWNLOADING

1. On your smartphone and/or tablet, go to the « App Store » and/or « Google Play » app.



2. Look for « MySOLEM » in the search bar.



3. Download the MySOLEM application.



4. Once installed, activate the Bluetooth® of your smartphone and/or tablet

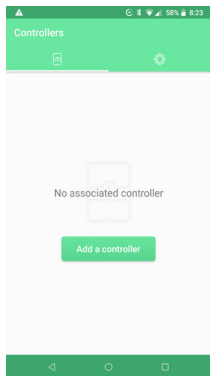
Step 2

CREATE AN ACCOUNT

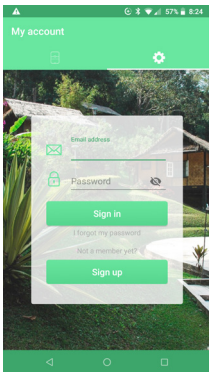
1. On your smartphone and/or tablet, launch the « MySOLEM » application



2. Enter the « My Accounts » tab



3. If you already have an account, fill in your credentials. Otherwise, follow the steps to create an account.



Step 3

INSTALLATION LR-MB

1. Make sure the place where you want to install the « LR-MB » is covered by the Wi-Fi connection of your internet box.

2. Screw on the antenna, and connect the 230VAC power supply provided with the « LR-MB ».

3. Launch the MySOLEM application from your smartphone and/or tablet.



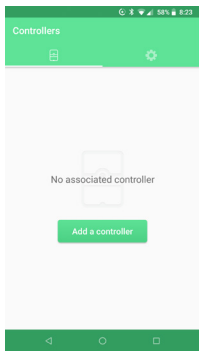
4. Press on

Add a controller

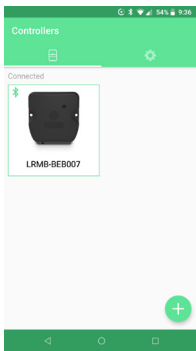
or



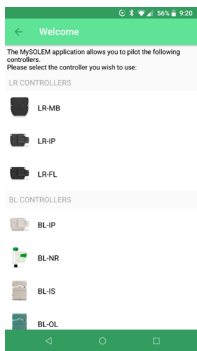
5. Select LR-MB.



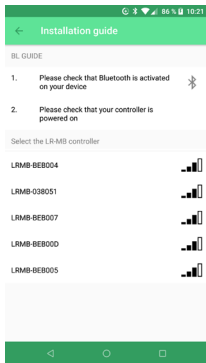
No module
installed



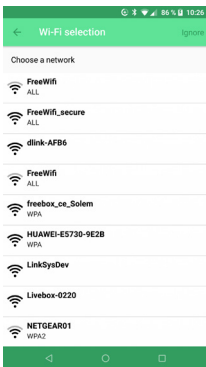
Modules are already
installed



6. Select the « LR-MB » you wish to install from the list of available modules under « Select the LR-MB programmer »



7. Select the Wi-Fi network access to which you want to connect your « LR-MB » by clicking on the corresponding line or « Ignore » if your « LR-MB » has already been assigned to a Wi-Fi network.



8. Enter the password for the Wi-Fi network access point, then confirm.

To check that your « LR-MB » is correctly connected to the Wi-Fi network, check that the LED on the front panel is solid green.

Step 4

ASSOCIATION MODULES LR

2 ASSOCIATION MODES :

1/ Factory pre-association

In this mode, the « LR-MB » is pre-associated at the factory with the other LR modules. The whole form a custom KIT LR.

Power up the modules and test the LoRa™ connection (see page 12)

2/ Manual association

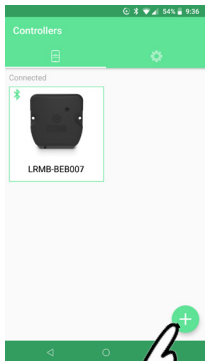
See step 5

Step 5

ASSOCIATION Manual

1/ Position the LR module within range of « LR-MB » (<10m)

2/ Go to the home screen, press on

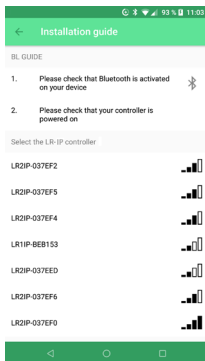


3/ Select the type of module to install.

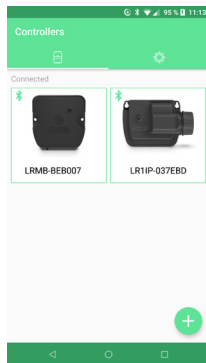


4/ Select your module from the list of programmers.


The displayed number corresponds to the « Default name » present on his product label.

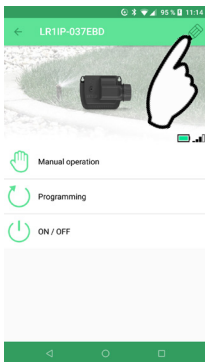


Once the selection is made, the module(s) appears

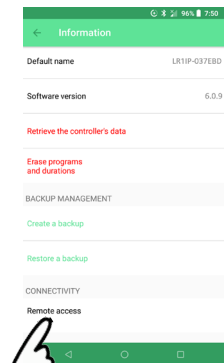


5/ Select the module you just added by tapping it.

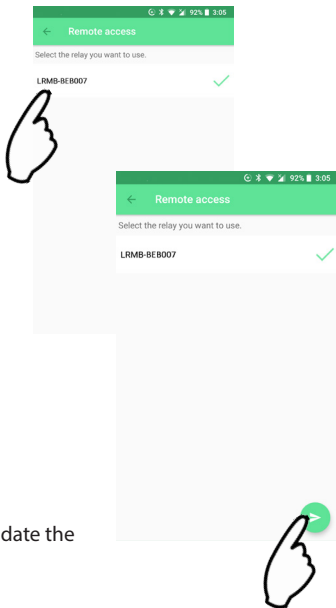
Press on  top right to access the product information page.



6/ Pairing : Tap « Remote Access »



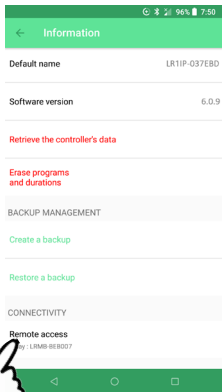
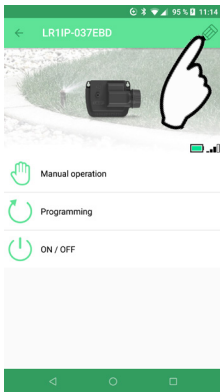
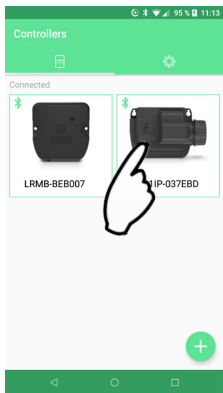
7/ Select your « LR-MB »



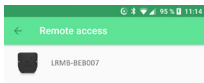
8/ Press to validate the operation.


LoRa™ CONNECTION TEST

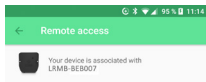
Once your network is made up: « LR-MB » installed and connected to the Wi-Fi network, modules associated with « LR-MB », you can test the LoRa™ connection between the « LR-MB » and the modules to validate the positioning of your products.



1/ Test the LoRa™ connection with a support on



2/ The message  indicates that the LoRa™ connection between the « LR-MB » and the module is reliable.



Tap to start the connection test







The communication with your relay is working properly.

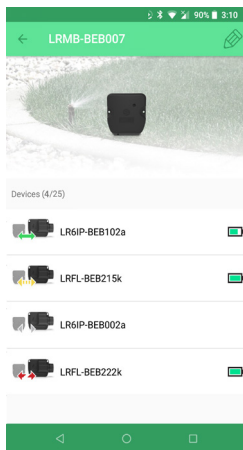


In case the connection is not reliable, move the module closer to the « LR-MB », or vice versa, and repeat the procedure.

LoRa™ CONNECTION STATUS

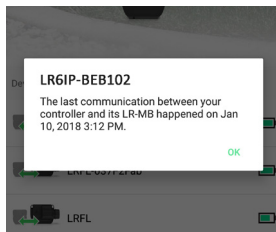
These icons give the status of the last LoRa™ connection between the « LR-MB » and the LR modules.

-  Connection < 5mn
-  5mn < Connexion < 10mn
-  Connection > 10mn
Non-transmitted changes
-  Connection never established



By pressing on one of the icons, you obtain a message giving the state of the LoRa™ connection.

Example :  LR6IP-BEB102a



LED INFORMATIONS

INFORMATIONS ON THE STATUS OF THE LR-MB LED

- Green LED : normal running
- Green LED flashing : Firmware update in progress
- Red LED flashing 3 times :

Possible causes :

1/ Loss of Wi-Fi access point (box) or connection not established.
Restart your box and the product.

2/ During initialization, the password entered is not correct.

Trick : Enter the password of the box in a « Notes » application on your mobile.
Copy the password with a long press and paste it into the corresponding field.
Repeat the initialization procedure.

3/ During initialization, the product may be too far from the box : bring the product closer.

- Red LED flashing 2 times : alarm time : the LR-MB is no longer on time.
If your product is connected to the MySOLEM platform, the time setting will be automatic. Otherwise, connect to the LR-MB from the application and check that the message « Synchronization OK » is displayed.
- LED off : the product is not powered.

MOUNTING

OUTDOOR ANTENNA

In the case of mounting the antenna outdoors with the optional extension of 5 or 10 meters, we recommend protecting the antenna with a plastic tube with an internal diameter of 15mm minimum. This tube will be clogged on his upper part to protect the antenna from the rain. The cord will have to be protected by a sheath.

INSTALLATION

LR-IP/FL

Refer to the respective notices.

CHARACTERISTICS

Techniques

Use :

Permissible humidity : 90% (relative humidity)

Ambient temperature of product use : 0°C to 50°C

Guarantee : 2 years

Dimensions :

Width 8 cm x Height 8.2 cm x Depth 1.3 cm

Alimentation :

Power supply unit : INPUT : 100-240V ~ 0.2A Max

50/60Hz OUTPUT : 12V  0.5A

Frequency band used and power emitted max :

Bluetooth® : [2400-2483.5]Mhz, 1mW

Wi-Fi : 2.4Ghz , 25mW

LoRa™ : [868-868.6]Mhz, 25mW

READ THE FOLLOWING SAFETY INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR USING THE LR-MB. BE SURE TO RESPECT RIGOROUSLY EMPLOYMENT PRECAUTIONS.

The LR-MB must be installed indoors or under cover.

Install your product so that the socket outlet is near the equipment.

The socket is a disconnecting device, in case of problem, it must be easily accessible at all times. Make sur the outlet on which your power transformer is plugged has overcurrent protection and circuit breaker type short circuit protection 16A.

Use only the power supply unit provided with the product (model MU06-T120050-C5),

INPUT : 100-240V ~ 0.2A Max 50/60Hz OUTPUT : 12V  0.5A



The symbol « CE » indicates that this device complies with the European standards on safety, health, the environment and the protection of the user. Devices with the symbol « CE » are intended for sale in Europe.



This symbol indicates that these types of electrical and electronic devices must be discarded separately in European countries. Do not dispose of this device with your household waste. Please use the collection and recycling points available in your country when you no longer need this device.



This symbol indicates that the supply voltage is a DC voltage.



This symbol indicates that the supply voltage is an AC voltage.



This symbol indicates the polarity of the DC supply voltage.



This symbol indicates that the power supply is intended for indoor use only.



This symbol indicates that the power supply has double insulation class 2.



This symbol indicates that the output of the external power supply is level 6.



This symbol indicates that the product uses a LoRa technology radio.