



THE CONNECTED IRRIGATION EXPERT



**LR-IS-FL**

LoRa

Bluetooth®

QUICK  
INSTALLATION  
GUIDE

# PRESENTATION

The LR-IS-FL is a Bluetooth® / LoRa™ mains water timer, remotely controllable from 2, 4, 6, 9 or 12 stations. Its probe input allows the connection to a rain sensor or a flow meter / water meter.

The LR-IS-FL requires the association with a LR-MB (relay WiFi/LoRa) or an LR-BST. (However it can be used in bluetooth)

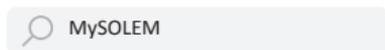
## Step 1

# DOWNLOADING

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



2. Search «**MySOLEM**» in the search bar.



3. Download **MySOLEM** application.



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

# CREATE UN ACCOUNT

To benefit from all **LR-IS-FL** features, please create a **MySOLEM** account.

1. Launch **MySOLEM** app from your smartphone and/or tablet.
2. Go to «**My account**» by typing on  icon.
3. Follow the steps described on the app.

## Step 2

# PAIRING

1. Remove the lower hatch to let appear the terminal.
2. Connect the **220/24 Vac** power supply and replace the hatch.
3. Launch the **MySOLEM** app.
4. Tap on the «**Add a module**» buton or the «**+**» buton .
5. Choose the **LR-IS-FL** from the list of nearby controllers.
6. **(Optional)** Define a name and a security key for your controller and click on the button «**Validate**».
7. To finish the pairing of your **LR-IS-FL**, follow the next steps described in the app.

**Note :** To identify your **LR-IS-FL** among the nearby controllers, please refer to the «**Default name**» present on his product label.

## Security key

The security key allows to protect your controller. You can define it during the step 6 of the «**ASSOCIATION**» or access to further information by clicking on the icon  at the top right of your screen..

## Step 3

# LR-MB PAIRING

To optimize the LoRa™ radio connection between the LR-MB and the LR-IS-FL controllers, we advise to install the LR-IS-FL in a plastic valve box under 800 meters to the LR-MB. We also advise to associate all your LR-IS-FL near the LR-MB before installing them separately in the valve boxes.

1. Select the **LR-IS-FL** programmer previously installed.
2. Click on the top right icon  to access to the product's informations.
3. Click on «**Remote Access**».
4. Select the **LR-MB** you want to use.
5. Click on the button «**Send**» or  on the bottom of your screen to validate.

Once the pairing finished, you can test the connection between your **LR-MB** and your **LR-IS-FL** :

6. Go back to «**Remote access**» screen.
7. Click on the button  to start the test.

### **Note :**

- The message «**Connection established**» means that the connection is reliable.
- The message «**No connection established**» means that it is necessary to bring the **LR-IS-FL** closer to the **LR-MB** or vice versa.

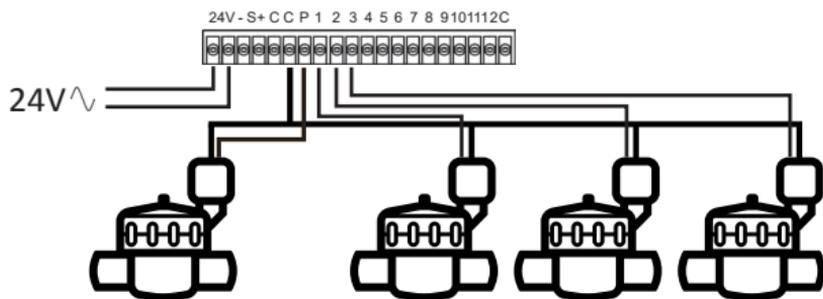
# LR-BST PAIRING

1. On the application, select your **LR-BST**, and enter pairing mode .
  2. Select the **LR-IS-FL** programmer previously installed.
  3. Tap the icon  at the top right of your screen to access product's information.
  4. Tap on «**Accès à distance**».
  5. Select in the list the **LR-BST** initially chosen.
- Once the association is complete, you can test the connection between your **LR-BST** and your **LR-IS-FL**
6. Return to the **LR-IS-FL** screen «**Remote Access**», previously seen.
  7. Click on the button  to start the test.

## Step 4

# WIRING

Connect the **LR-IS-FL** to the solenoids as described below.  
Use **24V valves** only.



## Step 5

# SET SENSOR



**Warning, by default there are no sensor configured.**

The **LR-IS-FL** has a - **S** + sensor input on which you can connect a rain sensor or a pulse sensor / water meter after cutting the blue wire. Once the sensor is connected, it is necessary to configure it in the application.

1. Using the MySOLEM mobile app, connect to your LR-IS-FL.
2. Click on **Add Sensor**.
3. Select your sensor type and follow the instructions given by the application

## Step 6

# SET FLOWMETER

1. Check the «**Instant Value**».

**Instant Value:** Ensures that the volume consumed indicated on the water meter is the same as the volume displayed on the application. If a gap is noted, check the wiring (polarity) or adjust the «**COEFFICIENT**» value.

2. Fill in the remaining fields.

**High threshold (daily volume): maximum consumption** (in liter) that you do not want to exceed in a period of **24h**. If the goal is exceeded you will be alerted immediately (by e-mail and notification smartphone and / or tablet).

**Low threshold (daily volume): minimum consumption** (in liters) that you want to achieve over a period of **24h**. If the goal is not reached you will be alerted the next day at 7am (by e-mail and notification smartphone and / or tablet).

**Leak alert volume:** water volume threshold (in liter) from which you want to be alerted.

**Station flow:** for each station, read the flowmeter at **time T (Cpt1)**, then at **time T + 5mn (Cpt2)**.

Make the calculation  **$(\text{Cpt2} - \text{Cpt1}) / 5 \Rightarrow \text{Flow (L / min)}$**

In the application fill in the results.

**High Threshold (Station Flow Alerts): Maximum consumption warning threshold** in % of the calibrated flow of the channel. The «**High threshold**» alert is immediate as soon as it is reached.

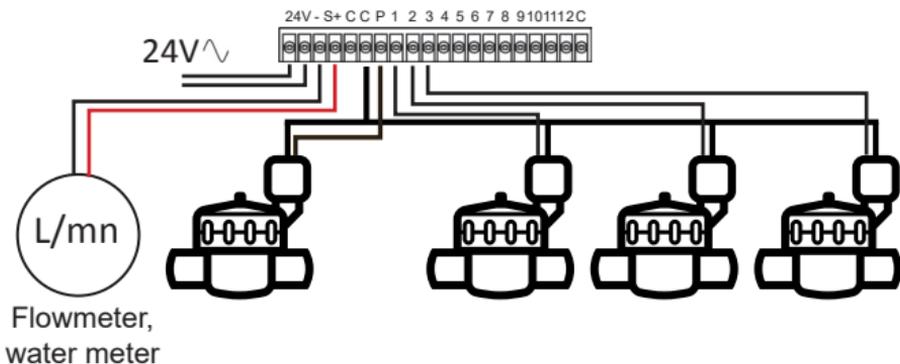
**Low threshold (Station Flow Alerts):** Minimum consumption warning threshold in % of the calibrated flow of the channel. The «**High threshold**» alert is immediate as soon as it is reached. For each station flow alert you have the possibility to define the desired type of action:

- **No action:** watering continues.
- **Permanent OFF:** resuming watering requires a manual ON command (in the application on the programmer concerned).
- **Inhibit the output:** stops the station concerned, requires the acknowledgment of the alert (in the application on the programmer concerned) to reactivate the station.

### **Stabilization time:**

Time required before the water flow is stable when starting and stopping the station. It eliminates the peak flow (start) or leak (stop). The time is the same for all stations.

During this period, the consumption is not taken into account for triggering alerts or actions.



Connect your + S - input to a water meter equipped with a flow sensor as shown above. Use dry contact flow sensors or equivalent.

For polarized flow sensors, when wiring, observe the polarization :

**Red wire -> +    Black wire -> -**

## INFORMATION ON THE STATUS OF THE LED

**Green LED** : normal operation

**Blinking green LED** : One channel is in progress (the flashing number corresponds to the station number activated).

**Green LED and Red Flashing** : One channel is in progress and the rain sensor is activated or a station is in progress and the product is in permanent OFF or several days.

**LED Red Fixed** : the product is in initialization mode

**LED Red Flashing 2 times** : The programmer has lost time, reconnect to re-synchronize.

**LED Red Flashing 4 times** : One of the stations has a short circuit or is overconsumption. The other reason is that you probably have powered down 2 times in a short time while a station is still in progress.

**LED Red Flashing 5 times** : You have exceeded the time required to initialize the timer. Repeat the initialization procedure.

**LED Off** : The product is not powered.

## FAQ

### **What are the features required for the Bluetooth® product to work?**

Android 4.3 (or more) Smartphones or tablets equipped with Bluetooth Smart 4.0 (or more). iOS 9.0 Apple iPhone or iPad running (or more) with Bluetooth Smart 4.0 (or more)

### **Why does my station not start?**

It has to be assigned a time and a **Program A, B or C** to each station. If several stations are assigned to the same program, they will start one after the other.

**Why does Program B not start?** If **Program A** departure time is the same than **Program B's** one, then the programs will be executed one after the other.

### **What is output P for?**

You can connect a master valve or a pump through a relay, on **P** output. It will start automatically 2 sec before each station and during each station watering.

**What are the controller's output S (blue wire) for?** You can plug a rain sensor into **S** outputs, to do that you need to cut the blue wire.

**How does the rain sensor work?** When connected to the yellow wire the rain sensor acts on the 3 programs. If it is raining, **programs A, B and C** won't start; you must wait the probe to dry before the programs star again. The manual control "**All stations**" is not affected by the rain sensor conditions.

**What is the Water Budget?** The Water Budget allows to add a time percentage, according to the time recorded by each station. It is generally used during seasonal changes (for example: summer to autumn, or spring to summer).

**E.g.:** If you entered **Station 1** = 1h on Program A and **Station 2** = 0h30 on **Program A**. Then, if you enter a Water Budget for **Program A** at 120%, when starting **Program A**, stations **1** and **2** will be increased by 20%, which means 1h12 for **Station 1** and 0h36 for **Station 2**.

### **How can I restart the pairing or the pairing procedure?**

To start the pairing procedure again, just bypass the 2 pins of the battery pressure (battery prior removed) for 30s minimum.

**If my device has no more battery, do I lose my programs?**

No, they are not lost, they are automatically saved.

**I would like to reset the settings of my device. How do I do it?**

Open the app, go to the product, then open the  **Settings** and select «Erase programs and durations».

## GENERAL INFORMATIONS

***READ THE FOLLOWING SAFETY INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR USING THE LR-IS-FL. BE SURE TO CAREFULLY OBSERVE EMPLOYMENT PRECAUTIONS.***

The **LR-IS-FL** must be installed indoor or under cover.

Install your product so that the socket outlet is near the equipment. The socket is a disconnecting device, in case of problems, it must be easily accessible at all times. Make sure the power outlet to which your power transformer is connected has overcurrent and circuit breaker type 16A protection. Use only the power supply unit supplied with the product:  
INPUT : 230V ~ 50Hz OUTPUT : 24V ~ 0.75A



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



This symbol indicates that the product uses a Bluetooth® technology radio.



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



This symbol indicates that these types of electrical and electronic equipment must be disposed of 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.



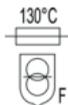
This symbol indicates that the supply voltage is an AC voltage.



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



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



This symbol indicates that the power supply unit has a thermal protection of 130 ° C.

# TECHNICAL FEATURES

## DIMENSIONS

Version 2,4,6 Stations: Width 11 cm x Height 14,3 cm x Depth 4,2 cm

Version 9, 12 Stations: Width 16 cm x Height 14,3 cm x Depth 4,2 cm

## INSTALLATION

Rain sensor or Water meter connection

Master valve connection

24V valves solenoid compatible

Maximum wiring length with solenoids: 30 m

Ambient temperature of product use : -20°C à 60°C

## ALIMENTATION

Power INPUT : 230V ~ 50Hz / OUTPUT : 24V ~ 0.75A 50Hz

## FEATURES

Bluetooth® Smart 4.0 Low Energy [2400-2483.5]Mhz

LoRa™ radio communication

Permanent programming save

Internal clock saved in case of power failure < 30 s