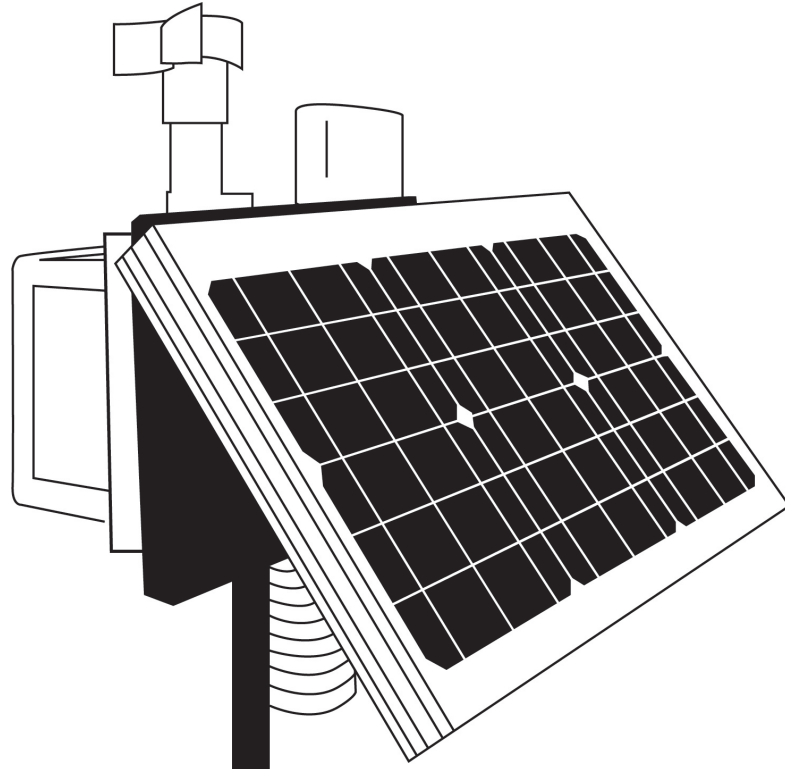




SOLEM

THE CONNECTED IRRIGATION EXPERT



CONNECTED IRRIGATION STATION

 **Bluetooth**®  **LoRa**™ 3G/4G



**INSTALLATION
GUIDE**

Summary

1 -Important Instructions and Reminders	p4
2- General presentation	p5
3- Package contents	p5
4- Characteristics of the Connected Irrigation Station	p5
5- Precautions for use	p5
6- Installation and commissioning	p6
A/ Downloading the MySOLEM app	p6
B/ Creating your account on the application	p6
C/ Installation and commissioning	p7
D/ Mounting the Station on the Mast	p10
7- Informations	p10
8- Technical characteristics	p11

1 - Important instructions and reminders

ACCES AU MANUEL UTILISATEUR

The user manual is accessible in the application by clicking on the icon  located at the top right at the start of installation or in the settings page  once the Irrigation Station is installed or on our website solem.fr.

1. Before installing and commissioning the product, please carefully read all the instructions in this manual. Failure to follow these instructions may lead to the deterioration of equipment or risks to people. The safety instructions presented in this manual cannot be exhaustive. Also, the user is called upon to exercise caution and common sense during installation.
2. In the event of a failure, the manufacturer cannot be held liable beyond the repair or replacement of the product within the framework of its legal guarantee. Maintenance operations remain the full responsibility of the user. Any deterioration of the product linked to a handling error cannot be attributed to a failure of the materials.
3. We advise you to be two for the installation of the Connected Irrigation Station. Gloves are necessary to avoid cuts as well as appropriate tools for the mechanical part of the installation.

2 - General presentation

The Connected Irrigation Station allows, using these 4 integrated sensors, to measure and record climatic data as well as to create a connected irrigation network with additional LoRa programmers with 9V battery or mains or to collect the data from probes such as humidity, tensiometer, pressure thanks to the acquisition module.

3 - Package contents

- 1 Station equipped wired with 4 sensors and a solar panel mounted on a tube
- 1 mast foot diameter 50 length 1M with mounting plate
- 1 mast tube diameter 50 length 1M
- 1 tube cap
- 1 guying kit
- 1 notice

4 - Features of the Connected Irrigation Station

The Connected Irrigation Station provides the following functionalities :

- Temperature measurement and alert sending based on high and low thresholds
- Measurement of hygrometry and sending of alerts according to high and low thresholds
- Rainfall measurement and alert sending based on high and low thresholds
- Measurement of the average wind speed and sending of alerts according to high and low thresholds
- Connects all irrigation programmers and sensor acquisition modules via radio
- LoRa within a radius of 800 m around it and within the limit of 24 modules.

The control and analysis of the data measured by the Station can be carried out from a smartphone or a tablet thanks to the MySOLEM application available free of charge on App Store and Google Play, or from a PC in connecting to the www.mysolem.com platform.

5 - Precautions for use

- Regularly clean the Solar panel.
- Regularly check if the rain gauge is clogged.
- Regularly check the tension of the guy wires.

6 - Installation and commissioning

A/ Downloading the MySOLEM application.

Check that Bluetooth is activated before starting commissioning. Bluetooth compatibility of smartphones / tablets with the irrigation station from bluetooth version V4.0.

1. On your smartphone and/or tablet, go to your store



2. Download the MySOLEM app




B/ Creation of your account on the MySOLEM application

It is necessary to create an account to be able to use the Connected Irrigation Station.

1. Launch the app on your smartphone/tablet.

IMPORTANT

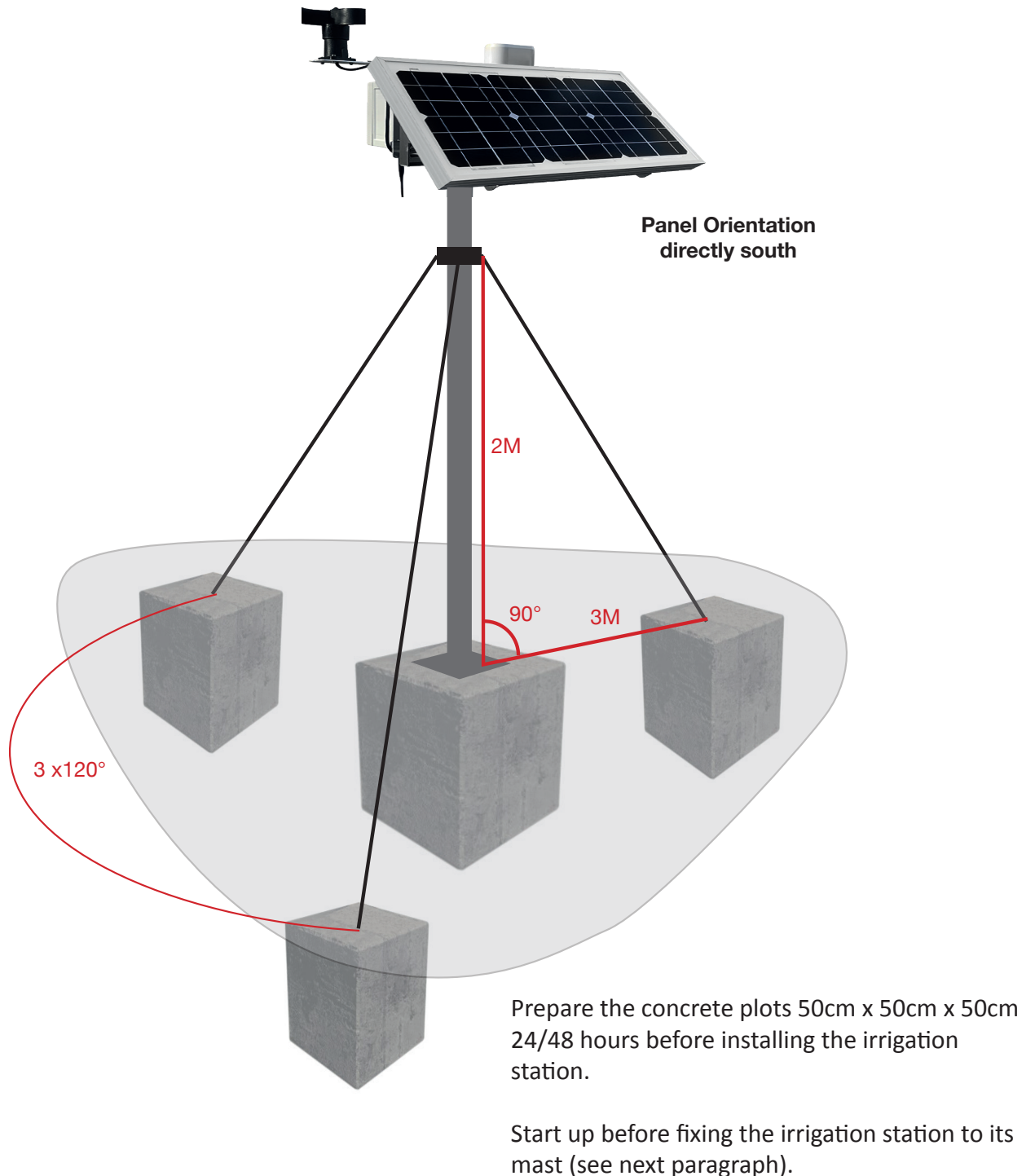
During the installation process, it is imperative that the phone/tablet is connected to the internet

2. Create an account by filling in the necessary fields with, among other things, an email address and a password
3. Go to the "My account" tab by pressing the icon. 
4. Follow the steps described on the application.

C/ Installation and commissioning

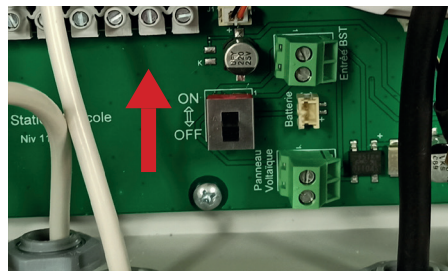
IMPORTANT

The distance from obstacles is essential in order to have representative measurements.
Avoid proximity to trees and walls.
Choose a sunny location for the solar panel.



Commissioning

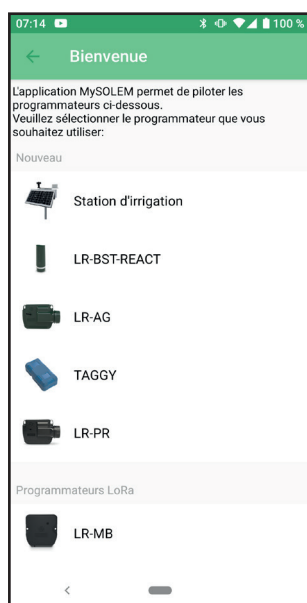
1. Open the main cabinet and turn the switch to ON.



On start-up, the Station connects via the 3G / 4G network to the MySOLEM platform (provided you have requested activation of the SIM card using the document provided in the box of the Connected Irrigation Station). During this initialization phase, the LEDs inside the product will flash to indicate that the installation is in progress.

The first data uploads will take place after a maximum of one hour.

During this time, open the MySOLEM application, select the Connected Irrigation Station, then scan the QR code located on the back of the box lid to associate the Station.




The «Manual Installation» mode allows you to install the Connected Irrigation Station in the event of a problem with scanning the QR code.

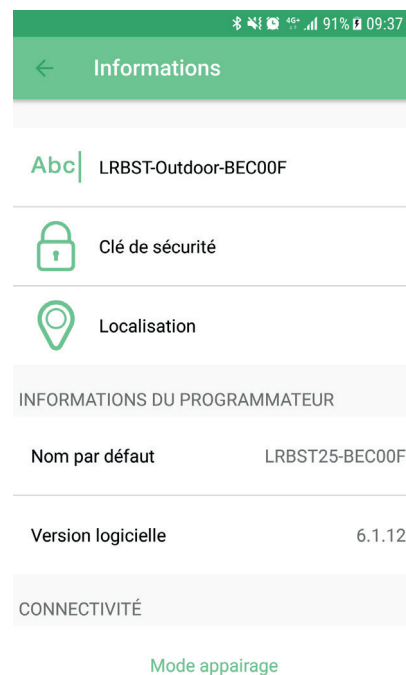
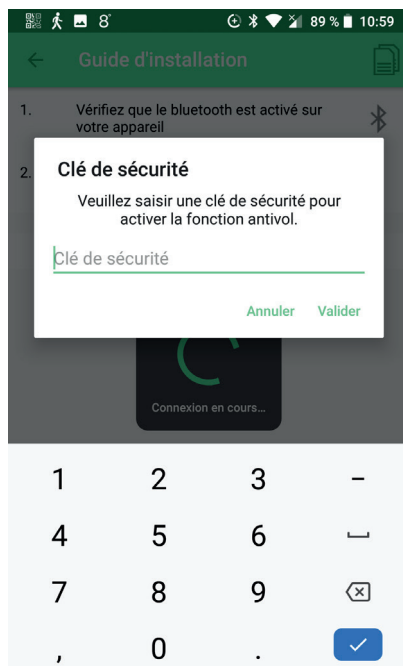
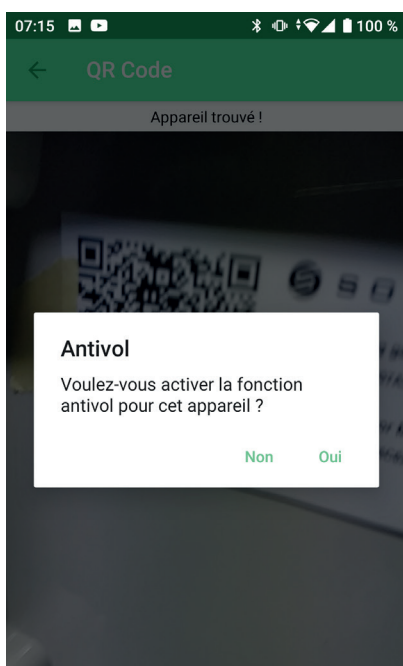
2. Close the main cabinet.

Bluetooth security key

The security key helps protect your programmer by restricting access to your programmer.

You can set it in 2 different ways:

- During “ASSOCIATION on the MySolem App” Page 7.
- By accessing product information, via the icon  at the top right of your screen when you entered Bluetooth in your programmer



D/ Mounting the Station on the Mast

- 1 Plug the remaining tube into the Station tube and put the assembly on the fixed mast foot.

CAUTION, DO NOT LOCK THE TUBES YET.

- 2 Orient the panel to the south.
- 3 Once done, lock the tubes by gently tapping the top of the tube with a wooden wedge.
- 4 Complete the guying, see page 6.

The Connected Irrigation Station is now operational.

7 - Informations

3G/4G data communication frequency :

The Connected Irrigation Station communicates periodically with the MySOLEM platform every hour, and wakes up in the event of sensor alerts or manual commands sent from the mobile application or the mysolem.com platform.

Communication periodicity in LoRa mode:

The communication frequency in LoRa between the LR modules and the Connected Irrigation Station is 3 minutes.

8 - Technical characteristics.

Use :

Permissible humidity: 90% (relative humidity)
Ambient temperature for product use: -20°C to 60°C
2 years warranty

Dimensions :

Mast diameter 50mm Length 2M50
Station weight 13kg

Power supply :

Solar panel: 12V 20W
Battery: 3.65V 4Ah


Frequency band used :

Bluetooth®: [2400-2483.5]MHz
LoRa™: [868-868.6]MHz
3G/4G: [900-2100]MHz
LoRa™ range: 800m (variable range depending on the environment)

Sensors :

- PT100 temperature sensor: Operating temperature from -40°C to 105°C
- Hygrometry probe: Operating temperature from -40°C to 60°C, accuracy +/- 3%
- Rain gauge: provides an impulse at each tilt of approximately 0.4 mm.
- Anemometer: Accuracy from 3 to 15km/h: 1km/h, from 15 to 180km/h 3%, max 200km/h.

3G/4G This symbol indicates that the product uses a 3G/4G technology radio

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



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



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



This symbol indicates that these types of electrical and electronic devices 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.

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