

IRROmesh 975 Installation Quick Start Guide

For additional information refer to the Instruction Manual page number, marked within the [], at the end of each bullet point.

Step 1

Preparation and Planning

- Map out the fields and identify areas that need monitoring. [1]
- Decide on optimal locations for Gateway, Base, Relay and End Nodes, paying particular attention to maximum allowable distances between nodes. [2]
- Before proceeding to the next step, gather the parts and materials you will need to install the system such pipes or poles and waterproof wire connectors. [3-4]

Step 2

Charging and Association

- To charge and associate all components at the same time – uncover all components (up to 10 Nodes at a time) and uncover and turn on the Base. Place everything upright in full sun within 2' (60cm) of each other for at least 8 hours. [2-3]
- If there are more than 8-10 Nodes, once associated, cover the solar panels of the associated Nodes and move them away from the Base at least 3000' (95 m) so the Base can't "hear" them anymore, then charge and associate the remainder of the Nodes. For purpose of association, data collection devices are counted as Nodes. [3]
- The Base is fully charged and ready for association when its GREEN light flashes. Nodes and Data Collection Devices are charged when their RED and YELLOW lights flash and associated when only their GREEN lights flash. Nodes will go to sleep after associations so you may see no lights at all, which is ok. [3]
- After association, reset the BASE for a few minutes by turning OFF the power switch and covering the solar panels with the black plastic bag. When ready, take the BASE back to its final install location and power it ON.

Step 3

Data Collection Device Set-up

- **LOGGER:** Download 975L software from the IRROMETER website at www.IRROMETER.com/download/975-DL.exe to a Windows® OS laptop computer and install it with administrative privileges. After associating the Logger, connect it to the computer containing the 975 software. This allows the system to sync a timestamp from the computer. [4]
- **PC LINK:** Download the SensMitPath software package from www.IRROMETER.com/download/sensmit_installer.exe. Install it on your Windows® OS computer *with administrative privileges*. You may need to whitelist SensMitPath in your anti-virus software. After associating the PC Link, plug it in to its dedicated computer and follow all instructions on the SensMitWeb website to register your account information. You

will need the Base ID to complete the registration. [4-5]

Do not power down the computer after the final setup. Leave SensMitPath software running. It's OK to minimize the software screen but do not exit/close it. [5]

- **CELL GATEWAY:** Go to SensMitWeb.com and register with your account information. You will need the base ID and SIM card or MEID number to complete the registration. [5]

FYI – LED Patterns [8]

- All LEDs scrolling rapidly like a Christmas tree: Unassociated Node.
- If associated, but not communicating with the Base yet, lights will cycle in a RED and YELLOW flash pattern. Node will sleep for a minute or so, then try again.
- GREEN is obviously good in general. Flashing means Node is awake. Intermittent flashing means power save mode. GREEN LED OFF means system asleep or no power.
- YELLOW LED ON, means Node is non-operational. Blinking indicates system activity. YELLOW LED OFF means no current network activity.
- RED LED ON by itself is always bad. Blinking means error in sending message through network. RED LED ON 1-second or more, means low power. RED LED OFF, good news.

Fully Charged Base



Fully Charged Nodes or Data Collection Device Seeking Association



Fully Associated Nodes or Data Collection Devices



Basics for Layout



*Distance between Base and Relay:
800' maximum (if more than 4 Nodes total)*

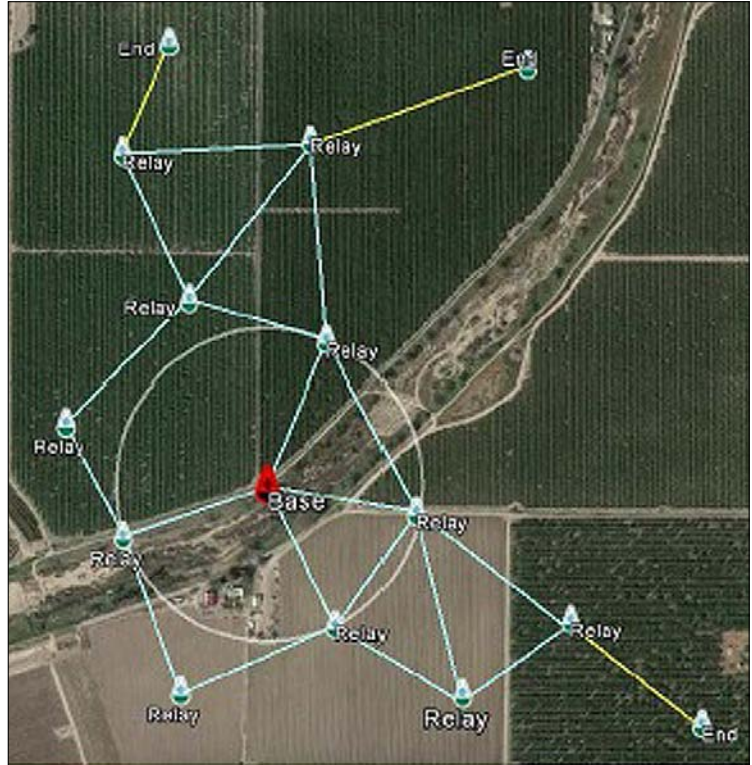


*Distance between Relay and Relay:
1000' maximum*



*Distance between Relay and End:
1200' maximum*

- 12 Relay Nodes per network maximum
- 3 End Nodes per Relay Node maximum
- 1 Relay Node minimum per system (standard Base)
- 5 feet minimum above canopy for Relay and End Nodes, Base to be higher
- 20 Nodes maximum per Base
- **Data Collection Device:** Logger, PC Link or Cellular Gateway to be within 400' of Base



Each Node has capacity for:

- 3 WATERMARK Sensors
- 1 Temperature Sensor
- 1 Switch Closure
- 1 Rain Gauge

IRROMETER®

THE IRROMETER COMPANY, INC.

1425 Palmyrita Ave., Riverside, CA 92507

(951) 682-9505 PHONE

(951) 682-9501 FAX

www.IRROMETER.com

sales@IRROMETER.com

 **Irrigation**
ASSOCIATION™
Bronze Member

