GreenIQ
Smart Garden Hub

Installation Guide
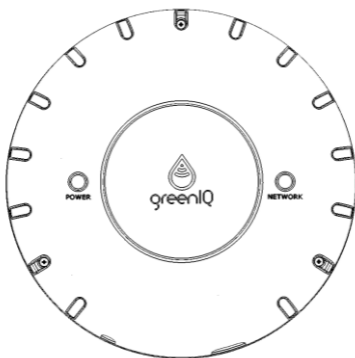
Rev. 5.1, January 2017

1. Your GreenIQ Smart Garden Hub

Thank you for purchasing the GreenIQ Smart Garden Hub. GreenIQ allows you to easily control your garden's irrigation and lighting, and save money on your water and electricity bills. Your GreenIQ:

- Automatically adjusts irrigation scheduling based on current and forecasted weather.
- Controls your landscape lighting based on sunrise and sunset schedule.
- Connects to the Internet wirelessly or via an Ethernet cable.
- Connects to weather, soil moisture, fertilizer-content and flow sensors.

2. GreenIQ's Mobile Apps

Please use one of the following mobile apps to setup and control your Hub:

iOS: http://apple.co/1s9clEw

Android: http://bit.ly/1VhOvSs

Web: https://greeniq.net

You can download GreenIQ's mobile app by scanning one of the following QR codes:

iOS

Android

Web app

3. Setting up your GreenIQ Smart Garden Hub

Please read the latest setup instructions in the following link:
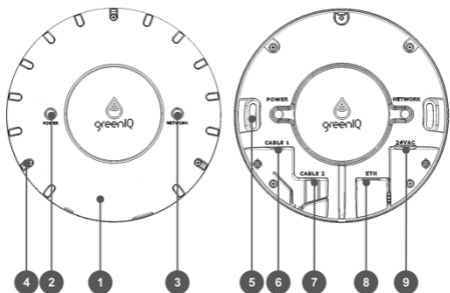
http://support.greeniq.co

GreenIQ Support

In this link you'll find useful resources for setting up your GreenIQ, connecting to sensors, connecting to your landscape lighting and integrating with popular home automation platforms such as IFTTT, Amazon Echo and many more.

4. Your GreenIQ Smart Garden Hub

1. Cover
2. Power Indicator
3. Network Indicator
4. Cover Screws (x3)
5. Mounting Holes (x2)
6. Cable 1 Port
7. Cable 2 Port
8. Ethernet Port (RJ-45)
9. Power Adapter Port

5. Installation Instructions

Warnings

- Incorrect installation might damage the device, and even cause serious injuries or death from electrical shock.
- Do not plug or apply power to the unit until you have compiled and checked all wiring connections.
- Before connecting or disconnecting wires to the unit, disconnect the unit from main supply by carefully pulling the power adapter from the mains inlet.
- When completing installation, make sure that there are no exposed wire ends.
- Never use Ethernet cable for outdoor installations.
- Make sure not to swap Cable-1 and Cable-2. Swapping cables might cause permanent damage to your Smart Garden Hub.
- Always use the provided GreenIQ power adapter.
- Never open the device's enclosure.
- Do not attempt to link two or more units using a single power adapter.

- To prevent damage to the unit, connect only one valve to each open zone wire.
- Always use water-tight connectors for all wires splice connections.

Selecting a Location

The unit's location should meet the following criteria:
1. The unit's operating temperature range is 0°C to 40°C (32°F to 104°F). Please avoid exposing the unit to direct sunlight or other heat sources.
2. If you plan to use the unit in Wi-Fi or 3G Mode, you have to make sure that there is a good wireless signal reception at the unit's location.
3. Make sure that all the connections are available at the unit's location: electrical outlet, irrigation valve wires, and Ethernet cable with Internet connection (for Wired-Mode only).
4. The electrical outlet shall be located near the GreenIQ Hub and shall be easily accessible.

Mounting

1. Make sure that the unit's cover is not in place.
2. Place the unit against the wall, and mark the location of the mounting holes on the wall. You may use the supplied GreenIQ ruler to mark the holes' location on the wall.
3. Use the two screws and the two plastic anchors from the mounting kit to mount the unit to the wall.
4. Connect the power jack to the unit's Power Adapter Port.
5. If you are using Ethernet Cable to connect to the Internet, you need to break the Ethernet Port sealing tab on the unit's cover, and plug the Ethernet Cable to the unit's Ethernet Port. After breaking the Ethernet Port sealing tab, the unit will stop being water resistant.
6. Place the cover on the unit. Use the GreenIQ Screwdriver and the three cover screws from the mounting kit to tighten the cover to the unit. The cover is an essential part of the unit's water resistance.

<u>Connecting the unit to the irrigation valves</u>

There are several types of irrigation valves in the market. The GreenIQ Smart Garden Hub supports only 24VAC valves.

<u>Warning</u>: Never shortcut a GreenIQ wire with other GreenIQ wire.

<u>Tip</u>: Before replacing your old irrigation controller, you can use the supplied sticker kit to mark the existing wires.
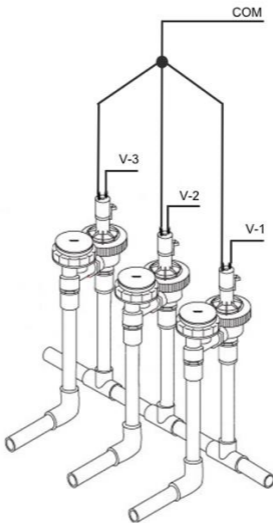
Wiring example

CABLE 1		
Color	Code	Details
White	V-1	Valve 1
Brown	V-2	Valve 2
Red	V-3	Valve 3
Yellow	V-4	Valve 4
Green	V-5	Valve 5
Blue	V-6	Valve 6
Orange	MAS	Master Valve
Black	COM	Common

CABLE 2		
Color	Code	Details
White	L	Lighting Control
Brown	F	Flow Meter
Red	VCC	3.3 VDC
Yellow	S-1	Analog Sensor 1
Green	S-2	Analog Sensor 2
Blue	S-3	Analog Sensor 3
Orange	R	Rain Sensor
Black	GND	Ground

6. Technical Specifications

Part Number:
GIQ-USWIF-001/EN : Wi-Fi Smart Garden Hub with 120VAC Adapter
GIQ-EUWIF-001/EN : Wi-Fi Smart Garden Hub with 230VAC Adapter
GIQ-USCEL-001/EN : Cellular Smart Garden Hub with 120VAC Adapter
GIQ-EUCEL-001/EN : Cellular Smart Garden Hub with 230VAC Adapter

Size and Weight:
• GreenIQ Smart Garden Hub:
  ◦ Diameter: 15.0 cm (5.91 inches)
  ◦ Depth: 5.3 cm (2.09 inches)
  ◦ Weight: 392 grams (13.83 oz.)
• Package
  ◦ Height: 17.0 cm (6.69 inches)
  ◦ Width: 17.0 cm (6.69 inches)
  ◦ Depth: 17.0 cm (6.69 inches)
  ◦ Total Weight: 1500 gram (3.31 lb.)

Output Ports:
• 6 irrigation zones
• 1 master switch for water pump, fertilizer tank or other uses
• Supports 24VAC valves. Valve maximum current rating: 150mA.
• 1 lighting channel (An external relay is required. Sold separately)

Input Ports
• Flow meter
• Rain sensor

Power Adapter:
• Output: 24VAC, 1A (included)

Communication:
• Ethernet: 10/100BASE-T Ethernet (RJ-45 connector)
• Wi-Fi Model: Complies with 802.11b/g/n
• Cellular Model: HSDPA

Operating Requirements:
• Operating Temperature: -20° to 55° C (-4° to 131° F)
• Relative humidity: up to 95% non-condensing
• Water Resistant (IP-55)