

TWIG®



WIRELESS AUTOMATION:

TWIG-MC

TWIG-V





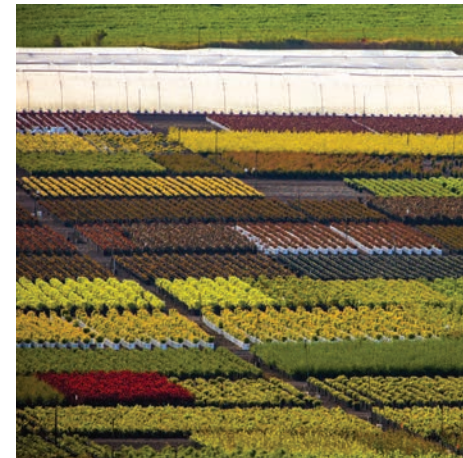
Reliable.

Simple.

Rugged.

Wireless Valve Control You Can Trust

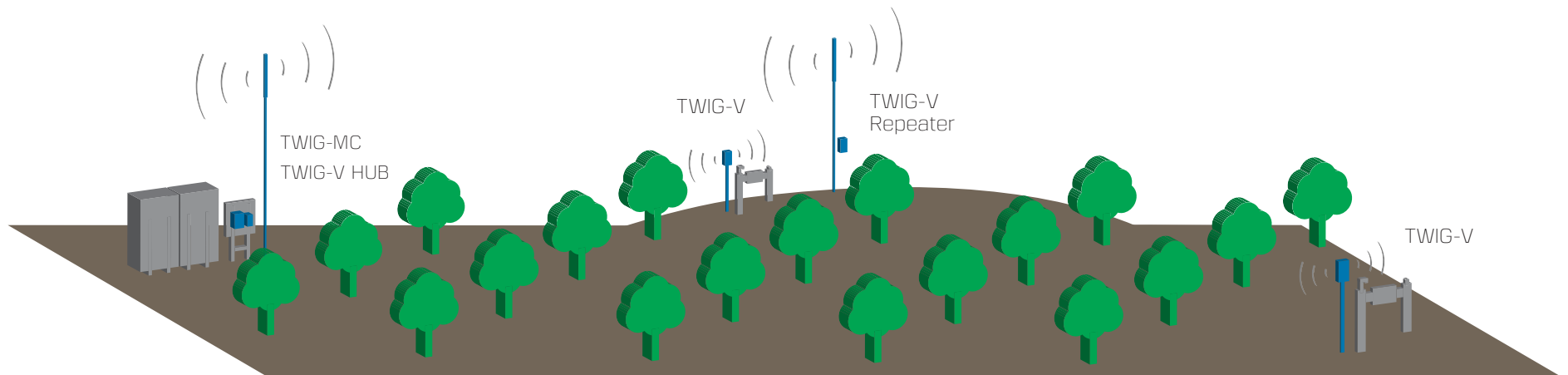
TWIG Wireless Automation was designed with a single purpose: turn valves on and off. It is built for rugged agricultural and industrial applications where reliability is critical. Whether you are drip irrigating tomatoes or settling dust at a coal terminal, you can depend on the latest LoRa radio technology and low-power design of the TWIG-V devices to keep your system operating around the clock.





TWIG-V Network

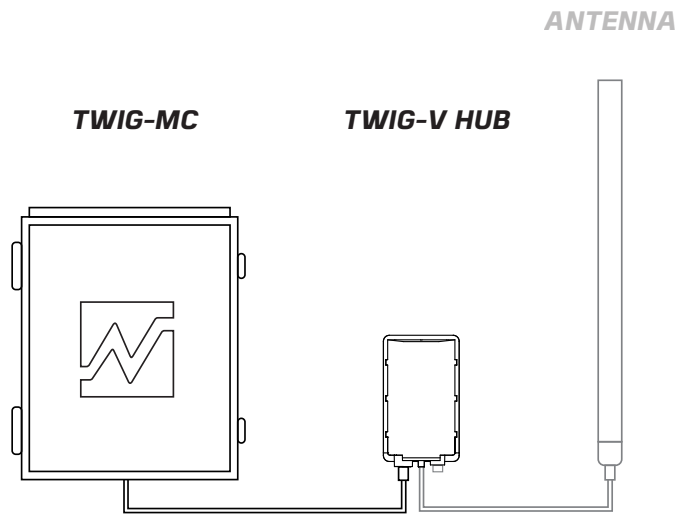
The purpose of TWIG Wireless Automation is to turn valves on and off in the most simple and reliable way possible. It eliminates unnecessary features and troublesome wires that cause other systems to be quickly abandoned.



TWIG-V Network Components

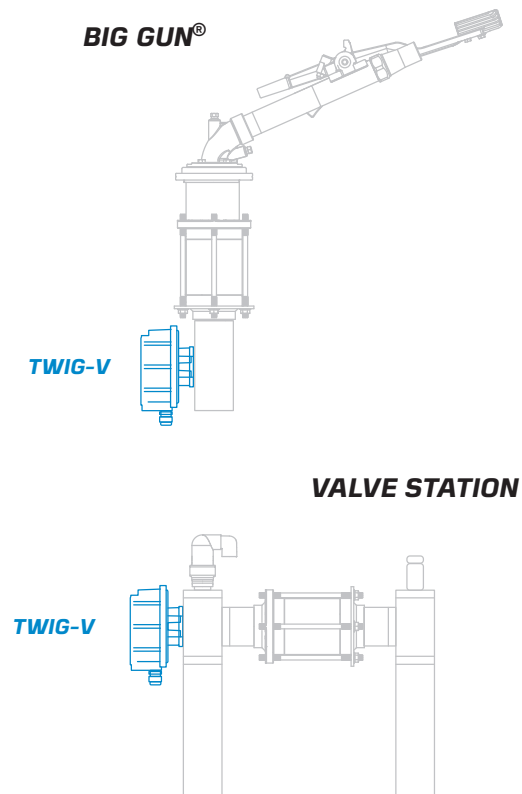
MASTER CONTROLLER

Connect to the TWIG-MC master controller via Bluetooth® or over the internet to operate your irrigation system with your iOS or Android enabled tablet or phone. The TWIG-V Hub communicates via line-of-sight 900 MHz radio signal with the TWIG-V radios in the field.



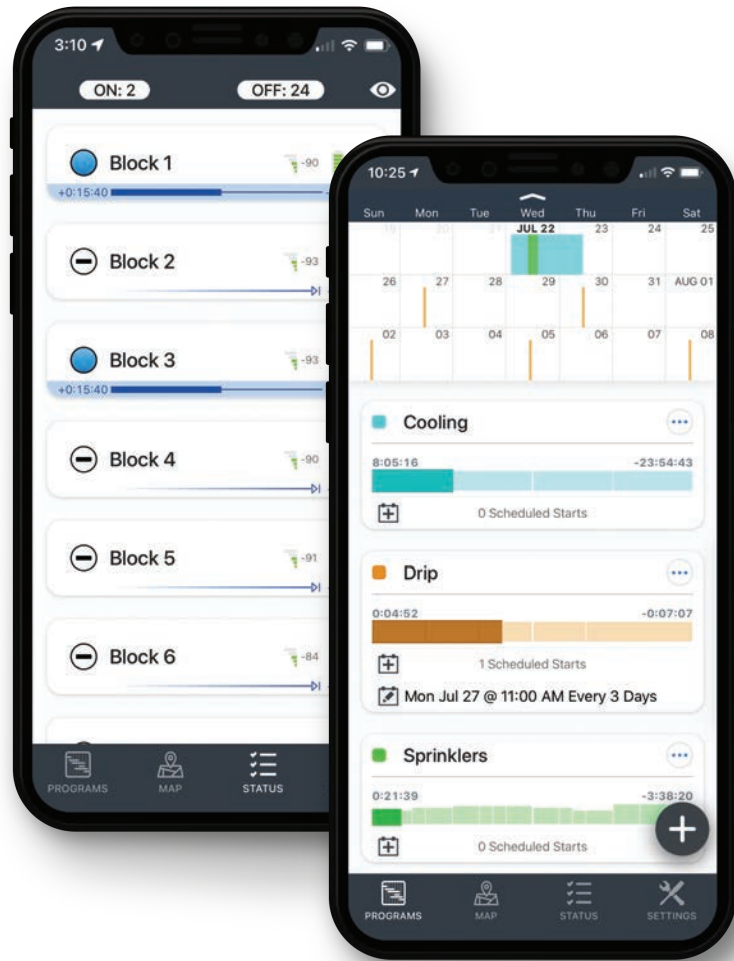
AUTOMATED IRRIGATION

The TWIG-V radios are connected to DC latching solenoid-operated valves and communicate with the TWIG-V Hub to turn valves on/off at the command of the TWIG-MC. Even portable systems can be automated thanks to the low-power design of the TWIG-V.



Mobile Control

Operate your irrigation system from the palm of your hand using the TWIG-MC mobile app (iOS or Android). Forget about the complicated automation equipment you may have seen in the past.



EASY TO PROGRAM

Quick and easy to create irrigation programs and schedule start times.

MAP IRRIGATION BLOCKS

Get a birds-eye view of the system to quickly see what blocks are irrigating.

SYSTEM HEALTH

Quickly check valve status, battery level, and signal strength.

RELIABLE AND SECURE

Programs are saved on the controller, not in the "cloud" or on your device, which means irrigation will continue despite cell or other internet outages.

TWIG^{MC}

The TWIG-MC is the master controller of the TWIG wireless system. It turns valves on/off by sending commands to the TWIG radios in the field via a Hub that manages the radio network.



TWIG-MC FEATURES

- + Full mobile control using iOS or Android TWIG-MC App, via Bluetooth®
- + Internet ready (user provided connection or cell modem)
- + No subscription fees

TWIG-MC SPECIFICATIONS

- + Control up to 200 valves
- + 1 x flow meter input (pulse)
- + 2 x pump start contacts (DC latching, 5 amp max at 120VAC)
- + 2 x pressure transducer inputs (4-20 mA)
- + 100-240 Volt AC or optional 12 Volt DC battery with solar charging kit
- + Backwards compatible with first generation TWIGs using TWIG Hub.

TWIG-V HUB FEATURES

- + Can control up to 100 TWIG-V devices and 8 TWIG-V Repeaters.
- + Communicates with TWIG-V using line-of-sight 900 MHz radio signal



NELSON IRRIGATION - TWIG

R10T Rotator® sprinklers in a hazelnut orchard
controlled by TWIG® Wireless Automation.
Oregon, USA



The TWIG-V turns valves on and off at the command of the TWIG-MC. It is installed next to the irrigation valves in the field and is wired to the 12 VDC latching solenoid on the valve. Setup and diagnostics are done using the TWIG-V app via Bluetooth®.



FEATURES

- + Low Power: replaceable D-cell batteries last 1 year
- + Fast response: radio commands occur within 3 seconds
- + Rugged: fully sealed enclosure with no buttons or door

SPECIFICATIONS

- + Operate one or two valves, independently
- + Internal antenna (standard), or external antenna
- + Up to 100 TWIG-V devices in a network
- + Bluetooth® setup via the TWIG-V mobile app (iOS or Android)



The TWIG-V Repeater extends the radio network in applications where line-of-sight radio reception is not possible due to excessive vegetation, topography, or distance.



FEATURES

- + Facilitates communication between the TWIG-V Hub and the TWIG-V radios in the field.
- + Creates a sub-network of TWIG-V radios with better signal strength
- + Repeaters do not communicate with each other.

SPECIFICATIONS

- + Up to 8 Repeaters in a TWIG-V Network
- + 110 Volt AC or optional 12 Volt DC battery with solar charging kit
- + Requires external antenna kit (6 dbi Omni)
- + Weather resistant enclosure (NEMA 4X)



TWIG® wireless automated solid set
R2000WF Rotator® sprinklers on
high value vegetables.
California, USA.



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See www.nicpat.com for a list of patent numbers.

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