

Tucor RKW+ Controller with Nexus Wireless Valve System Warren Shores HOA , Fort Collins, CO



“The Tucor RKW+ with Wireless Valves was the perfect solution for this site which had no in ground wires to work with for retrofit”

**Tracy Shields
DBC Irrigation Supply**

Web Connected
Tucor RKW+ Controller



CHALLENGE

The irrigation control system at Warren Shores HOA property in Fort Collins, CO was originally installed back in the 1970's with a hydraulic control system. Retrofitting such a system to modern standards was a challenge given the fact that there was no in ground control wiring available. There are 48 valve locations spread out across the site, located in and around buildings, hardscape and mature trees/shrubs. The site is an active community so disruption such as trenching asphalt/concrete cutting and boring for a new wire path wasn't a feasible option.

SOLUTION

The Tucor RKW+ Controller with Nexus Wireless Valve system is engineered to easily retrofit an entire site such as this without wires. All existing valve locations can be connected back to the RKW+ controller wirelessly using a robust 900 MHz radio network. The Lithium-Ion battery powered Field Receivers come pre-mounted/configured in a 12" DryBox that's sealed top and bottom. The Field Receiver box is set next to the existing valve box location, and is wired in via a DC latching solenoid and then powered on. At the RKW+ Controller the 900MHz Radio Gateway will automatically bind with the Field Receiver once both are powered up. While valves are active the Field Receivers "check in" with the Gateway to make sure that power hasn't been lost at the controller. If a return signal isn't received the field receiver will latch the solenoid off as a safety feature to prevent the solenoid staying on permanently.

RESULTS

The Tucor RKW+ Controller with Nexus Wireless Valve system enabled the easy retrofit of the entire site. All 48 Valve locations were very quickly retrofitted wirelessly with minimal disruption in a fraction of the time of a traditional install. The RKW+ Controller is web connected and setup to schedule irrigation based on weather and soil moisture data. The system also sends alerts when Field Receiver batteries need replacing. Flow Sensing was added to the system using a Tucor Hybrid 3D using an old in ground pump control wire.



Field Receiver in DryBox

Find out more at www.tucor.com or call 1(800) 272-7472