

Irrigation Software vs. Pump Station Controls

Toro Lynx, Rain Bird CirrusPRO, Hunter Pilot, and similar central control systems decide where water goes on the course. Pump station controls manage the pumps, pressure, flow, and equipment that supply it.



The quick answer

Irrigation software manages zones, schedules, and field irrigation. Pump station controls operate the pumps and VFDs that make water available while monitoring pressure, flow, equipment status, and alarms.

Use this guide when

- The nightly schedule is ready, but the station cannot maintain pressure.
- A drive, pump, or alarm fault leaves the course unsure which vendor to call.
- The team needs a common language for irrigation and controls responsibilities.

Controler focuses on the pump station controls layer that supports the irrigation software your course already uses.

Why the distinction matters

A course can have the irrigation schedule ready and still be at risk if the pump station is unclear, faulted, or hard to trust. When pressure drops or a drive faults, knowing which layer owns the problem shortens the path to useful support.

The two systems work together, but they solve different problems. Replacing or troubleshooting one layer should not begin with assumptions about the other.

START WITH THE SYMPTOM, THEN CHOOSE THE RIGHT SUPPORT PATH

- Zone, schedule, or field-device issue: start with the irrigation software or irrigation service provider.
- Pressure, flow, pump, drive, source level, operating mode, or station alarm: start with pump station controls.
- Unclear symptom: capture the time, active alarms, pressure, flow, pump status, and screenshots before calling.

A practical division of responsibility

Question	Irrigation software	Pump station controls
Primary job	Decides where and when water goes on the course.	Makes pressure and flow available to supply the irrigation system.
Controls	Programs, zones, field stations, satellites, decoders, and run times.	Pumps, VFDs, valves, permissives, operating modes, and emergency logic.
Watches	Scheduled irrigation activity and field-device operation.	Pressure, flow, source level, pump availability, drive status, and alarms.
Typical question	Which areas should water tonight, and for how long?	Can the station safely deliver the pressure and flow the course is asking for?
Failure signal	A zone, field device, or scheduled program does not run as expected.	Pressure falls, flow is wrong, a drive faults, a pump is unavailable, or an alarm blocks operation.

PUMP STATION CONTROLS

Where Controler fits

Controler improves the systems that shape the operator experience and protect the nightly watering window:

- Pump start and stop logic, sequencing, and availability.
- VFD speed control and drive-fault handling.
- Pressure, flow, and source-level monitoring.
- PLC logic, HMI screens, and SCADA visibility.
- Plain-language alarms and operator guidance.
- Emergency operating modes with protections preserved.
- Remote visibility, documentation, and troubleshooting support.

Questions to answer before tonight's watering window

- Which pumps are available, and is that obvious to the operator?
- Can the station maintain the expected pressure under demand?
- Are flow readings believable and alarms understandable?
- If a VFD fails, is there a controlled recovery path?
- Can the course share enough information for effective remote support?

Need a second set of eyes?

Controler can review the pump station controls layer and identify what is unclear, risky, or difficult to support before the nightly watering window is on the line.

Request a free pump station review info@olerindustries.ca

This guide is general operational information and does not replace qualified electrical, mechanical, or controls service.