

Change Parameter Values / Interface Parameters / System Config

System Config 7 Explained

System config 7 is used when a VFD is running in constant pressure using a 4 - 20 mA transducer. The VFD is also equipped with an HOA switch and speed potentiometer to control the speed of the drive manually. This configuring was developed to allow the user to easily change between run modes by simply changing the position of the HOA switch on the front of the panel. The most common application for this is center pivot irrigation.

HAND | OFF | AUTO

Hand (Manual): In this position, the equipment is controlled manually. For a VFD, this means that the speed or operation mode (such as start/stop) is controlled manually by the operator using the potentiometer. Any input into Aux 2 (call for water) will be ignored.

Off: In this position, all motor control is stopped.

Auto (Automatic): For a VFD, this means that the speed or operation mode is controlled automatically based on input signals from a pressure transducer.



Common Issues

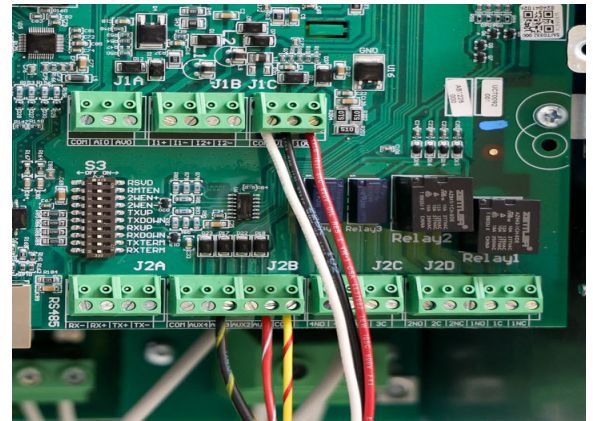
- ▶ Make sure keypad is always set to auto. (This is the most common mistake users make)
- ▶ When submersible pump is set to "Yes" and minimum is set to "30 Hz", the speed potentiometer must be at 50% or greater for the motor to start.
- ▶ When using the VFD for constant pressure, Interface Parameters > System Config must be set to #7.

HOA Wiring

COM - yellow/red
AUX1 - red/white
AUX3 - black/yellow

Speedpot Wiring

COM - white
VIN - black
10VO - red



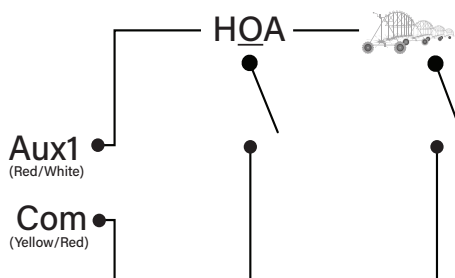
Other Scenarios

Calls for water from a PLC or pivot control relay should use Aux 2 and Com. When Aux 2 is reserved by something else, you may need to tap into the red/white wire going into Aux 1.

When tapping into the red/white wire there are two wiring options:

Wire in parallel

Either the HOA or pivot relay may be used to turn on the pump



Wire in series

Both the HOA and pivot relay must be used to turn on the pump

