

step 1 Locate and Mount

Locate the Novo within 18" of the host controller on a vertical surface. Use the 4 (qty) mounting holes in the back of the Novo case.

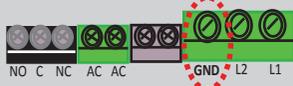
step 2 Connect Station Wires

Connect the multi-colored wire attached to the Novo to the host controller's station outputs. Tie all the white common wires together.

VALVE COM	WHT
8, 16, 24, 32	PUR
7, 15, 23, 31	BLU
6, 14, 22, 30	GRN
5, 13, 21, 29	YEL
4, 12, 20, 28	ORG
3, 11, 19, 27	RED
2, 10, 18, 26	BRN
1, 9, 17, 25	BLK

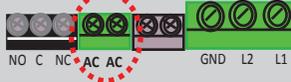
step 3 Connect to a Ground Rod

Locate the "Gnd" terminal block and connect a #10 bare copper wire to a ground rod or ground plate depending on soil conditions. The ground rod should be located a minimum of 10' from the Novo.



step 4 Connect AC Power

Locate the "AC" power terminals on the Novo. Connect the two wires from the supplied transformer. Connect the plug end into an approved electrical receptacle. For outdoor installations, verify the plug is protected with a weathertproof cover.



step 7 Check the System

Using a multi-meter set to AC, verify;
* 24 VAC at the AC terminal blocks on the Novo

* 24 VAC on the 2Wire path when operating any station in MANUAL mode from the Novo.

Confirm any station can be operated Manually from the Novo in MANUAL mode. Then confirm stations can be operated manually from the host controller.

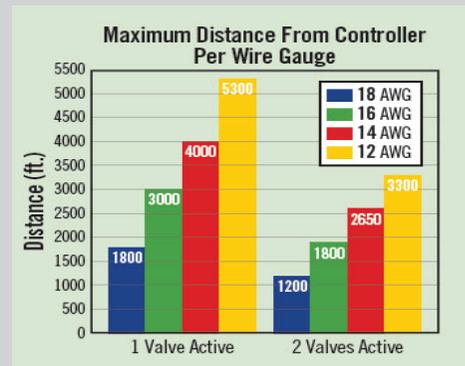
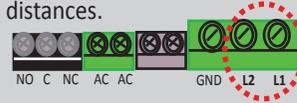
step 9 Troubleshooting

1) Cannot operate a station manually from the Novo. Go to the FAULTS menu.

- * Confirm there isn't a break in the 2Wire path,
- * Confirm decoders are programmed properly with the right station number,
- * Confirm the valve solenoid is not defective

step 5 Connect 2Wire Path

Locate the "L2 / L1" terminal on the Novo. Connect the 2Wire communication cable to these terminals. The 2Wire path can be 12, 14, 16, or 18 gauge wire for direct burial applications. See the wire sizing chart for the maximum allowable distances.



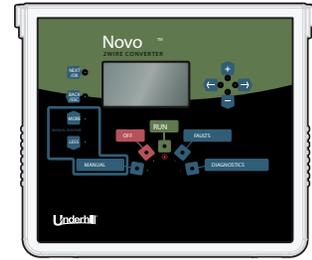
step 6 Program Decoders

Use the Underhill Portable Programmer p/n DEC-PROG-12 to program each decoder to match the corresponding station number.



step 8 Program Senders

For applications where **more** than 32 stations are required, program and install Universal Senders p/n TW-SEN-8 by connecting them to the host controller's station outputs starting at station 33. Program Senders using the same programmer as in Step 6 and numbering sequence should start at #5.



Menu Button	RUN	FAULTS	DIAGNOSTICS	MANUAL	OFF
Display					
What Does it Do?	Automatic mode between Novo & a host controller. Displays total current draw for # of stations, decoders, solenoids and 2Wire load in miliamps (mA).	Identifies a station not working. Issue could be: * broken 2Wire * a decoder * a solenoid Press “-” button to view next 7 stations.	* Confirms if commands between the Novo & a host controller are being received. * Provides a method to change factory default decoder threshold settings under certain field conditions.	Allows any station to be operated at a time from the Novo separate from a host controller. Default runtime is 2 minutes. Can run up to 9 hours per station.	Immediately stops any scheduled or manual irrigation. De-energizes 2Wire com path
Other Displays within this Menu	<p>A “Fault” has occurred</p> <p>A “Fault” has occurred. Stations 2 & 12 are operating from a host controller</p>		<p>Verifies if Novo is receiving commands from Host controller.</p> <p>Allows decoder thresholds to be user-defined for some field conditions</p>	<p>Once a station starts, the display changes from “Ready” to “Running” and remaining run time is displayed.</p>	