

TRUE-LITE IGNITER

By SUPERIOR VALVE & CONTROL

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Features

- Weatherproof enclosure meeting Nema 4, 12, & 13.
- Weatherproof push buttons with LED Indicators for monitoring & failure mode.
- 12 Volt Battery Powered for remote location operation.
- 7MM Silicone with S.S. core ignition wire produces a reliable spark.
- Control module fires 62 times in a one 15 second sequence.
- Built in SCADA connections, with both NO & NC choices.
- All internal connections are soldered to protect against loose connections and lost continuity.
- High-grade ignition coil with a 90-degree boot to hold ignition wire tightly secured.
- Every unit is test-fired at the factory to ensure reliable results in the field.
- Magnalatch Valve for positive gas shut off.

Options

- Solar charger to maintain battery at optimum voltage for reliable operation.
- Local warning light mounted on exterior of box for Non-SCADA users.
- Solar charger mounting bracket for 2" pipe.
- Explosion proof Magnalatch Valve.
- Conduit connector for Magnalatch Valve & conduit seal off.
- 110 Volt model with battery backup.

Specifications

- Enclosure meets Nema Class 4, 12, & 13.
- Igniter input voltage range 10.5Volts to 14.5 Volts
- Igniter current draw is 5.2A in ignite mode.01A and in flame monitoring mode .
- Igniter operates a Parker Magnalatch 12V – 18W Valve.
- Solar panel input 12V-12W maximum.
- SCADA interface NO and NC contacts rated at .5A at 120VAC or 2A at 24VDC.
- Igniter operates a standard spark coil without a resistor.
- Spark repetition rate is set at 4 sparks per second and can be programmed for up to 8 sparks per second.
- Igniter lockout after one 15-second ignition trial.
- Weatherproof push button Purge Switch for opening the control valve to allow gas to purge air from system.
- Weatherproof push button Ignition Switch with a built in circled LED light to let you know if its in 'Attempt to Fire' mode– (bright red flash), or 'Monitoring' mode- (dim red flash).

Standard Accessories

- Weatherproof enclosure for the igniter unit.
- 10 ½” electrode including ceramic housing and 7” probe.
- 36” conduit for ground wire and igniter cable.
- High quality insulated igniter cable rated for high temperatures and high voltage.
- 12-volt battery.
- Built in SCADA interface or a LED SCATA lamp to indicate errors.



Installation

1. Mount igniter unit on flush vertical surface and bolt securely.
2. Cut and install conduit and connectors.
3. Cut the igniter wire and ground wire to the length needed and run it inside the conduit. Attach the ground wire to the ground terminal bolt that is located on the bottom left corner of the enclosure. Connect the igniter wire with the rubber boot to the coil inside the unit.
4. If using a solar panel, run the wire through the round precut hole at the bottom of the unit and attach to the positive and negative solar terminals of the terminal block marked 'Solar'. Shield the panel from sunlight until the battery is connected.
5. Install conduit for the Magnalatch Valve and run wires through conduit. Attach to the positive and negative terminals for the valve on the terminal block marked 'Valve'.
6. Connect electrode to the end of the igniter wire and attach the ground wire to the burner piping on the vessel. (Position electrode per sketch.) Do not ground the electrode by touching the tip of the electrode to the metal piping.
7. Check wiring to ensure proper connection and connect the battery to test the unit.

Note: it is the installers/user's responsibility to adhere to all Local, State and Federal codes for wiring and gas connections.



Operation

Caution: For safety, ensure flame arrestor is secure and in proper working order prior to lighting flame. It is recommended to follow API RP-12N for testing the flame arrestor and accessories.

Start-up

1. Make sure the battery has a full charge and all the terminal connections are tight with no loose wiring. Keep the manual valves that control the pilot and main burner gas lines closed until ready to ignite.
2. Open the valve and press the ignition button. A red LED indicator light will flash bright red while attempting to light. The igniter will fire up to 62 times during one-15 second cycle unless ignition is successful. Once the pilot is lit and in flame monitoring mode, the LED will flash dim red. If ignition fails refer to troubleshooting guide.

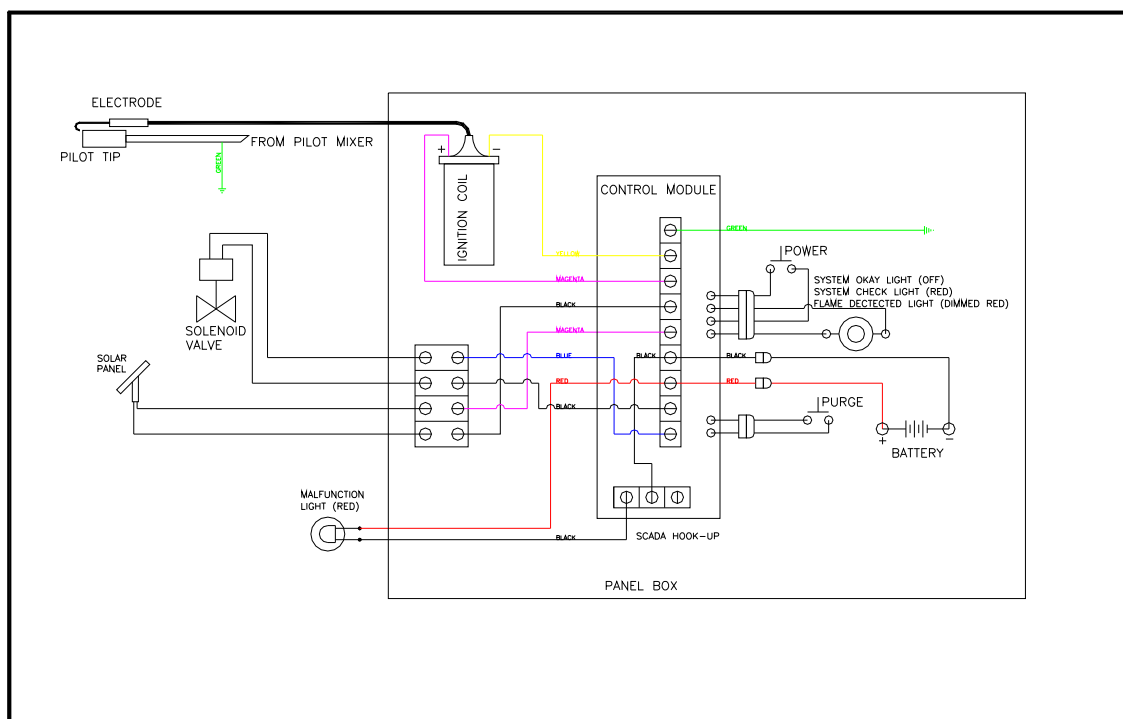
Shut Down

1. Close the manual gas valves for the pilot and main burner. The unit will attempt to relight and will time out in 15 seconds, shutting down the system.

Maintenance

The ignition system should provide years of trouble free operation. However, the following should be periodically checked for optimum performance.

- Check the brackets on the electrode to make sure they are tight.
- Check the wire terminals and electrode for wear.
- Check the battery condition. The battery must have 10.5 Volts to 14.5 Volts.
- Check the electrode for carbon build up.
- Test the output from the Solar Charger.
- Test the unit by manually closing the gas valves and reopening them after the flame goes out.



Troubleshooting

Problem	Cause	Remedy
1.) Nothing happens when pushing the ignition button.	a.) Loose connections at battery. b.) Bad battery, low voltage.	a.) Tighten all connections. b.) Install new battery or charge existing battery and check solar charger.
2.) Igniter sparks but fails to light pilot.	a.) Pilot gas valve shut shut off. b.) Air in gas line. c.) Plugged line, no gas.	a.) Turn gas valve on. b.) Purge air with gas. c.) Clean out strainers, filters, orifices, etc. as needed and purge line.
3.) Igniter fails to spark.	a.) Improper placement of electrode. b.) Improper ground. c.) Loose or damaged wiring. d.) Loose or damaged igniter cable. e.) Wired incorrectly.	a.) Reposition electrode according to sketch in installation instructions. b.) Check continuity in ground wire. c.) Tighten or replace damaged wires. d.) Check continuity of ignition cable, tighten connections. e.) Refer to schematic, correct as needed.
4.) Igniter lights pilot but continues to spark.	a.) Improper placement of electrode.	a.) Reposition electrode according to sketch in installation instructions.

