

Knightronix™ Knightlighter Gaslight Igniter

6V Battery Mantle Burner Edition
KNA1-6V-DF-S-M2

QuickStart Installation and Operating Instructions



ONE YEAR LIMITED WARRANTY ON GASLIGHT IGNITER

Knightronix, Inc. will repair or replace, at its discretion, any Knightlighter automatic igniter which, in normal use, has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to Knightronix with proof of purchase, within one year of shipment. Knightronix shall not be responsible for any asserted defect, which has resulted from improper installation, hook-up, misuse, abuse, or alteration. Knightronix shall not be responsible for cost of removal/installation or for damage resulting there from. Under no circumstances shall Knightronix be liable for incidental or consequential damage or cost resulting from any defective products. This warranty is the sole warranty and sets forth the customer's exclusive remedy, with respect to defective products. All other warranties, expressed or implied, whether of merchantability, fitness for purpose or otherwise, are disclaimed by Knightronix. Knightronix is not responsible for any injury or mishap related to misuse, abuse or lack of judgment in installing or operating of the igniter/burner within a gaslight or the integrated gaslight installation.

A Return Authorization Number is required. Upon issue of the number, the defective product may be returned prepaid by the customer for repair or replacement at Knightronix discretion. Knightronix is not responsible for removal or reinstallation of the warranted products.

Knightronix will provide phone or e-mail support for customer or on-site technical personnel. For questions regarding the igniter/burner operation, maintenance, or returns call 651 636-1008 or e-mail ignitersupport@knightronix.com. More support documents are available on our web store site: http://www.vulcanlighting.com/catalog/igniter_install_help_files.php

Knightronix, Inc.
2212 Silver Lake Rd. New Brighton, MN 55112 USA.
Phone (651) 636-1008 Fax (651) 636-0211

Web: <http://www.knightronix.com> Email: info@knightronix.com
Web Store: <http://www.vulcanlighting.com>



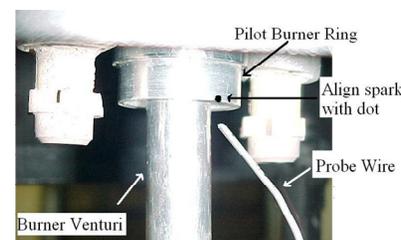
Final Set-up

1. Align the igniter and position daylight sensor (photo sensor on yellow and black twisted wires) so the daylight sensor is not pointed toward any bright lights (street lights, Holiday lights, etc.)
2. The daylight sensor must have a clear view of daylight for the lamp to shut off during the day.
3. Be sure that the daylight sensor does not view the lamp flame or reflections off the glass (if possible, place outside the lantern.)
4. The back of the daylight sensor is also sensitive to light; cover it with a sheath or with black electrical tape so the lamp does not shine on the back side of the plastic sensor.
5. Check the alignment of the flame sensor; verify that it is pointed up toward the position of the flame. If necessary, apply sheath to flame sensor.
6. Check the alignment of the ignition probe (see Probe Alignment Instructions).
7. Check the gas line for leaks using bubble water solution or a gas detector around the fittings. If any leaks are present, correct them before powering the igniter. Turn on the gas.
8. Replace the glass in the gaslight.
9. Proceed to Operational Checkout instructions.

KNIGHTRONIX™ DIRECT WIRE™ HIGH VOLTAGE PROBE ALIGNMENT FOR MANTLE BURNING GASLIGHT

The DIRECT WIRE™ high voltage probe has been pre-positioned. Before operating, be sure to check probe alignment and adjust as described below.

Probe Gap



Final Probe Alignment:

Verify that the high voltage igniter probe wire is connected to the high voltage coil of the igniter board. The probe shall be aligned and positioned so that the spark shall project up from the open wire probe to the bottom edge of the pilot burner ring at the point that is marked with a black dot; the spark should not spark to the burner venturi. The gap shall be about 3/16 inch. (See photos above.)

For questions and technical support please call 651-636-1008.



Probe Alignment



Operational Checkout

Operational Checkout of the Automatic Gaslight

1. Cover Daylight Sensor and the Flame Sensor (if installed) with black tape or otherwise to simulate darkness (other colors or types of tape do not block all light.)
2. Snap together the connector on the 6VDC battery pack to the input power wire connector on the KnightLighter™ Igniter. LED on top of unit will flash twice to signal power on.
3. After 6 seconds, there will be 1 spark and 2 flashes; valve will open and sparks shall appear across the spark probe to the pilot burner ring (mantle configurations) or burner tip (open flame configurations) and the gaslight shall light.
4. Remove the tape from the Flame Sensor (if installed and covered) and the gaslight shall remain lit.
5. Remove the tape from the daylight sensor and the lamp shall go out in about 1 minute. Replace the glass panels.
6. This completes the gaslight checkout. It is ready to operate.

ATTENTION: Ion Sensor Mode is designed to operate using open flame burners that have all brass tips. For all other types of burners, the Flame and Daylight Sensor must be uncovered.

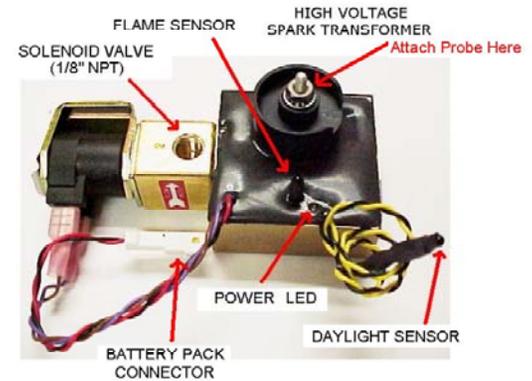


Igniter Troubleshooting

OPERATIONAL MODE

Gaslight does not light in the evening.

1. Check for bright lights in the area. Cover sensors; if unit lights, make sure Daylight Sensor is not pointed toward any bright lights (street lights, Holiday lights, etc.).
2. Check the alignment of the Flame Sensor; verify that it is pointed up toward the position of the flame. If necessary, apply sheath to Flame Sensor.
3. Battery voltage is too low. Check batteries. Battery Pack voltage shall be greater than 4.0 VDC. Replace batteries.
4. Check for conditions noted under Test Mode section.



NOTE:

For QuickConnect Assemblies; the easiest way to replace the batteries is to unplug the igniter and remove the igniter from the lamp. The igniter can be taken to the shop where the old battery pack can be replaced with a new battery pack. (Battery packs can be ordered from Knightronix, Inc.)

Be careful not to get dirt in the gas receptacle when removing and replacing the igniter and make sure the igniter is fully seated after reinstalling. Check for gas leaks.



Igniter Troubleshooting

BATTERY IGNITER TROUBLESHOOTING

TEST MODE

1. Sparks but does not light or lights inconsistently.
Probe adjustment; spark gap shall be 3/16 - 1/4" inch. Sparks shall appear to the side of the burner tip at the slit.
2. Sparks and lights but does not stay lit.
Flame Sensor is not seeing the flame; unit will continue sparking sequence and shut off. (Remember to remove cover from Flame Sensor after testing.)
Daylight Sensor is seeing light/flame; unit will cycle on and off.
Adjust sensor so it does not see the flame or other lights.
3. No Spark; valve does not open.
Check for 6V at igniter input. Replace battery pack if necessary.
Daylight or Flame Sensor is seeing light. Check for bright lights in the area. Cover sensors and try again. Remember when testing, to remove cover from sensors when unit lights.
4. No Spark or faint spark. Solenoid clicks ON and valve stays open during ignition cycle and then clicks off.
Spark gap is too wide. Adjust Probe, see Item #1.
5. Igniter resets i.e. clicks on/off continuously.
Spark gap is too close. Adjust to 3/16 - 1/4" inch.