



## Knightronix™ Knightlighter Gaslight Igniter

24VAC Igniter with Ion Sensor  
Open Flame  
KNA1-24AI-DF-S

### 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 have reasonable opportunity to verify the alleged defect by inspection. 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](mailto:ignitersupport@knightronix.com). More support documents are available on our web store site: [http://www.vulcanlighting.com/catalog/igniter\\_install\\_help\\_files.php](http://www.vulcanlighting.com/catalog/igniter_install_help_files.php)

Knightronix, Inc.  
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CAUTION!

## CAUTION IMPORTANT NOTICE

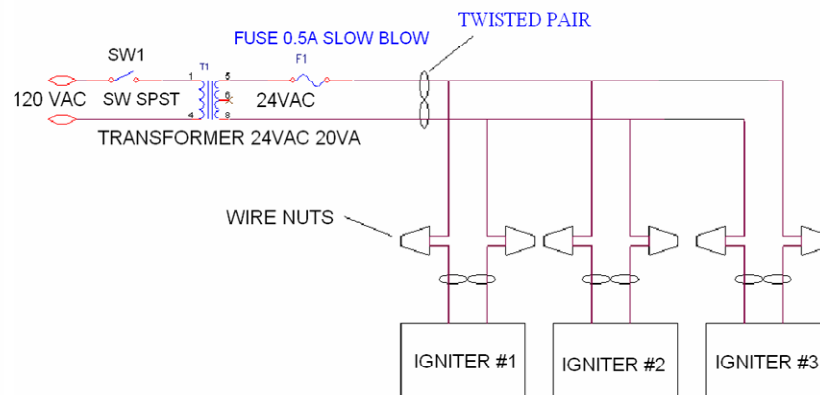
- CONNECT IGNITER POWER TO 24 VAC POWER ONLY; NEVER CONNECT TO 120 VAC.
- DO NOT SHORT 24 VAC IGNITER INPUT POWER LEADS TO GAS LIGHT CHASSIS.
- KEEP PHOTO-SENSOR LEADS WELL SEPARATED (>.75 INCH) FROM THE HIGH VOLTAGE SPARK LEAD.

ALL WARRANTIES ARE VOID IF THE ABOVE INSTRUCTIONS ARE VIOLATED.



Hookup Diagram

MODEL: KNA1-24A-S HOOKUP DIAGRAM



Igniter Installation

IMPORTANT INFORMATION FOR END USER INSTALLER



- **USE WITH 24 VAC TRANSFORMER ONLY**
- Connecting directly to 120VAC or hooking up transformer backwards will damage unit and void warranty
- **DO NOT** short 24V wires to chassis or earth ground; the 24 VAC power must be floating from the output of the transformer\*\*
- It is recommended that an inline fuse be installed at the transformer in one of the 24 VAC input lines

\*\*It is highly recommended that an ohmmeter be used to verify isolation between the 24V input wires and the igniter case before powering up igniter unit.

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

**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.



With the Ion Sensor feature, you can choose your mode of operation depending on whether the photo-sensors are covered or uncovered ( see Mode of Operation insert card).

Final Set-up

1. If installed and using, 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. If installed and using, check the alignment of the flame sensor; verify that it is pointed up toward the yellow part 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.

KNIGHTRONIX™ DIRECT WIRE HIGH VOLTAGE PROBE FOR OPEN FLAME GASLIGHT



Probe Alignment

The Direct Wire™ high voltage probe uses a NiChrome wire that runs directly from the high voltage transformer to the spark gap at the side of the burner slit.

Probe within Flame Boundary



Probe Gap



Final Probe Alignment:

Align the Direct Wire™ probe so that it is just within the Flame Boundary and perpendicular to the slit near the base of the burner tip; the probe gap should be approx. 3/16" - 1/4" for proper sparking. The probe wire should not extend out in front of the burner more than 1/4" (avoid having a large loop at the end of the wire) and should be slightly bent around to the side (away from burner) so that the spark will come off the side of the wire. Direct the spark to the brass tip at the slit area. It is important that wire sparks from the side rather than the end of the wire, the igniter will not light reliably if the wire sparks from the end. To avoid resetting, the probe needs to be securely attached to the lug or post and should not be loose.

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



Operational Checkout

24VAC Automatic Gaslight Igniter with Ion Sensor Operational Checkout

1. Depending on which mode of operation you choose, cover or uncover the photo-sensors as explained below \*(see Mode of Operation insert card).
2. If installed and using, cover the flame sensor and the daylight sensor (yellow and black wire) with black tape or otherwise to simulate darkness.
3. Turn on power to igniter. The green Power LED will light up.
4. Unit will spark once then valve will click open. Sparks will then appear across the spark probe to the pilot burner ring (mantle configurations) or burner tip (open flame configurations) and the gaslight shall light (If covered, remove the tape from the flame sensor for the gaslight to remain lit.)
5. If covered, 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.

\*If not using photo-sensors (Ion only mode), turn power on to light. Unit will spark and light as described above. If flame goes out, unit will relight. To turn unit off, you must turn off the switch to the light.