

Knightronix™ KnightLighter™ Automatic Gaslight Igniter

24VAC IGNITER/2-MANTLE BURNER INSTALLATION IN MHP VK-7A, GLM 1200 OR EQUIVALENT

(With QuickConnect Gas Light Plug-in Receptacle Kit – KNQPR4 or KNQPR5)

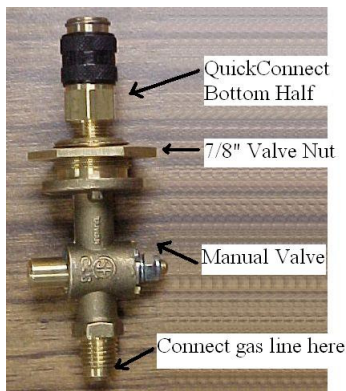
The KnightLighter™ igniter with the solenoid valve mounted on the side of the igniter box is designed to be installed in the bottom of the gaslight head. It should fit almost on the floor of the gaslight so as to be inconspicuous.



KNA1-24A -S-M2 KnightLighter Automatic Gaslight Igniter



KnightLighter 24VAC Side-mount Igniter with 2-Mantle Burner installed in aluminum six-sided gaslight.



Gas line connection with optional QuickConnect fitting.



KnightLighter QuickConnect Receptacle in bottom of gaslight head.

24VAC IGNITER/2-MANTLE BURNER INSTALLATION IN MHP VK-7A, GLM 1200 OR EQUIVALENT (With QuickConnect Gas Light Plug-in Receptacle Kit – KNQPR4 or KNQPR5)

Upgrading and new installation procedures for installing the 24VAC igniter in the MHP VK-7A or GLM 1200 2-mantle burner gaslights or equivalent post, wall, or pier mount gaslights. (Start at instruction 7 for installations in new gaslight heads.)

1. Turn off the gas to the gaslight at the source going to the gaslight so that the gaslight with its manual valve can be removed.
2. Remove the glass from the gaslight.
3. Loosen the screws that hold the gaslight on the pier/post and raise the gaslight to allow disconnecting the manual valve from the copper tubing.
4. Remove the burner from the manual valve and save the burner and chimney.
5. Remove the manual valve.
6. Clean and repair the gaslight if necessary.

Start here for installation in new gaslight head:

7. The quick-connect fitting with modified manual shut-off valve shall be pre-assembled (See Figure 1) before installing in the light. NOTE: Apply TFE Paste thread sealer to each connection if not already applied.

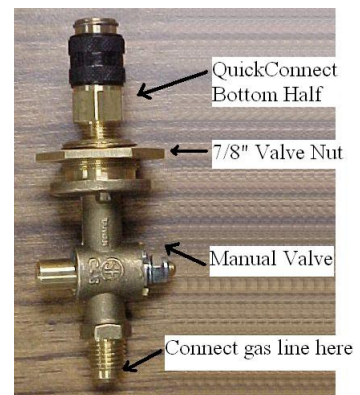


Figure 1

8. Install the quick-connect fitting by inserting into the pre-existing access hole in the base of the gaslight. (See Figure 2). Attach and tighten the 7/8" valve nut.



Figure 2

9. Drill access holes for the 24VAC input line (on the bottom of the gas light head); if using Daylight Photo-sensor, drill a hole for the Daylight Sensor in either of the two locations shown. Make sure the daylight sensor is not pointed toward any bright lights (street lights, Holiday lights, etc.) The daylight sensor must have a clear view of daylight for the lamp to shut off during the day. (See Figure 3)



Figure 3

10. Install the Igniter/Mantle Burner (See Figure 4) in the gaslight by snapping the unit into the quick connect fitting. Check to make sure connection is secure.



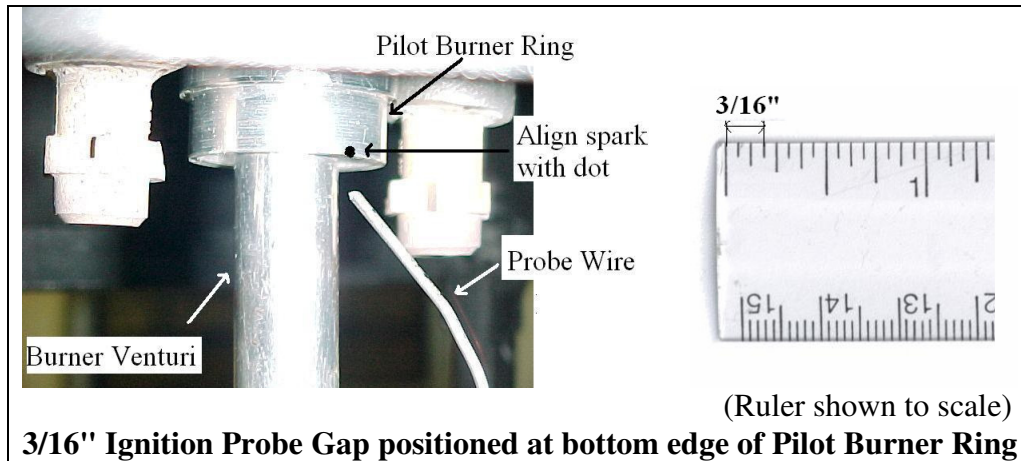
Figure 4

11. Reinstall the gaslight on the post or pier; apply TFE Paste thread sealer and connect the 1/4" copper gas line by tightening the 1/4" Flare Nut onto the input to the gaslight valve. If using another type of valve, attach a 1/4" x 1/8" Flare fitting if necessary. Push the copper tubing down into the post (for post installations).

Skip steps 12 – 15 if not using Daylight Photo-sensor

12. Align the igniter and insert the daylight sensor (photo sensor on yellow and black twisted wires) into the access hole that was drilled in step 9. Be sure that the daylight sensor does not view the lamp flame or reflections off the glass.
13. The back of the daylight sensor is also sensitive to light; cover it sheath or with black electrical tape so the lamp does not shine on the back side of the plastic sensor.
14. Check the alignment of the lamp sensor; verify that it is pointed up toward the position of the flame.
15. Apply sheath to lamp sensor (Optional).

16. Check the alignment of the ignition probe. **The igniter/burner is a single unit with an open wire probe leading from the high voltage transformer to the probe gap at the edge of the pilot burner ring. 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 below.) No ceramic insulator or bracket is required. This arrangement has the added advantage that soot will not build up on the probe.**



17. 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.
18. Use small wire nuts to connect the 24VAC power wires to the input power wires on the KnightLighter Igniter. The input wires on the 24VAC igniter are not polarized or color coded.

NOTE: NEVER CONNECT 120 VAC DIRECTLY TO THE IGNITER. The 24VAC igniter will not withstand 120 VAC. A transformer must be used to convert 120VAC to 24VAC.

19. Replace the mantles.
20. Replace the glass in the gaslight.
21. Turn on the gas.

This completes the installation of the automatic gaslight.

Quick Checkout of the Automatic gaslight:

1. Cover the lamp sensor and the daylight sensor with black tape or otherwise to simulate darkness. Turn on power to igniter.
2. Sparks shall appear across the spark probe to the pilot burner ring and the solenoid valve shall open. The gaslight shall light. Remove the tape from the flame sensor and the gaslight shall remain lit.
3. Remove the tape from the daylight sensor and the lamp shall go out in about 30 seconds. Replace the glass panels.
4. This completes the gaslight checkout. It is ready to operate.