

WARNING!

This transformer is to be installed in accordance with UL standard for safety number 1838.

1. Mount PowerCenter™ at least 12 inches above grade and 10 feet from standing water, where its controls can be easily seen and adjusted. Transformer should be mounted within 6' of a covered GFCI outdoor AC power outlet marked as acceptable for wet locations. **DO NOT USE EXTENSION CORD.** A transformer mounted on a residence wall may cause a minor hum due to vibrations resulting from normal operation. Please consider the impact of this effect before installing a transformer in this manner. When installing Models PC, AP, or DP be sure the photocell on the side of the housing can 'see' the sky. Suitable for use with submersible fixtures. Mount vertically so secondary connections point down and exit as intended.
2. Drill two screw pilot holes 2 1/2' OC. For models T-500 or T-1000, two holes 6 1/2" OC may be added or substituted.
3. Mount the transformer assembly using sheet metal screws (supplied).
4. Remove the transformer's wiring cover plate.
5. Loosen the cable clamps on the bottom of the transformer housing. Insert sufficient wire to reach the terminal blocks. Allow plenty of slack.
6. Each pair of terminals (white and selected color) will provide a range of AC voltages. **USE APPROPRIATE CHART AT RIGHT TO DETERMINE REQUIRED OUTPUT TERMINALS (White (common) plus desired color.) AND SELECTOR SWITCH SETTING (low-medium-high). ALWAYS VERIFY OUTPUT VOLTAGE. COMPUTE VOLTAGE DROP FOR ALL CABLE RUNS. USE A.W.G. 10 AND LARGER WITH H30-1000SS TRANSFORMERS.**
7. Use UL listed SPT-3 underground low energy circuit cable or equivalent to connect lamps to the transformer. This cable is designed for shallow burial only 6" or less deep. Additional cable and accessory items may be obtained from your systems installer.
8. To connect the cable:
 - (a.) Separate the cables two wires approximately 8 inches.
 - (b.) Remove 3/4 inch of insulation from each wire.
 - (c.) Insert one wire in either side of white continuous bus terminal block.
 - (d.) Insert the other wire in either side of the adjacent colored terminal block below.
 - (e.) After the wires have been inserted into the terminals, tighten the terminal screws, flex wires, then re-tighten screws.
 - (f.) To add additional circuits, repeat steps a through e as necessary.
 - (g.) Install wiring cover.
9. Make sure each fustat is the correct size and is screwed in tightly.
10. Insert the powercenters power cord into the power source. Turn on the power.
11. Enjoy your Nightscaping® outdoor lighting system.



SPECIAL PROGRAMMING INSTRUCTIONS---MODELS AT,AP,DT, DP (Analog or digital timer with photocell)

***Setting the Program:**

•To Set Time of Day:

Rotate the outer clock dial clockwise until the time of day that it is now lines up with the white triangle marker on the inner clock dial (2:00 position). For exact time setting turn the minute hand on the inner clock face in a clockwise direction to the exact time of day that it is now. Be sure to properly identify the AM and PM settings. The time of day will be set upon completion of these steps.

• To Set ON/OFF Times:

The timer has an outer dial lined with white tripper pins. To set the time the lights are to turn ON, pull up, away from the clock center, the white tripper pin corresponding to this time. To set the time the lights are to turn OFF, pull up, away from the clock center, the white tripper pin corresponding to this time. Pull up all of the white tripper pins between these two pins to identify ALL HOURS OF OPERATION. The pins must be pulled up IN A SERIES from ON time to OFF time for proper operation. The lights will not come ON at times corresponding to pins that are not pulled up. Be sure to properly identify the AM and PM settings. Multiple ON/OFF times can be set by repeating the above process.

• To Operate Manually:

Rotate the outer clock dial clockwise until the first up pin clicks past the white triangle marker on the inner clock dial (2:00 position). The lights will turn ON. Continue rotating the outer clock dial clockwise until the last up pin clicks past the white triangle marker on the inner clock dial (2:00 position). The lights will turn OFF. The time of day will need to be reset upon completion of manual ON/OFF process.

• To Use with Photocell:

To set the lights to turn ON at dusk and OFF at any time thereafter, follow the same set ON/OFF time instructions. Set the ON time a little before dark. This will activate the timer at the specified time, but the photocell will prohibit the lights from coming ON until activated by darkness. Set the timer to turn OFF at any time thereafter.

In case of power failure, reset the timer.

4-POS. VOLTAGE SELECTOR SWITCH

TERMINAL COLOR	LOW	MED	HI	OFF
RED & WHITE	13.0	13.4	14.2	0.0
BLUE & WHITE	12.1	12.5	13.6	0.0
YELLOW & WHITE	11.4	11.7	13.0	0.0

H30 VOLTAGES - H30-250SS
(Based on 120.0 Volt input, 20 Amp load.)

4-POS. VOLTAGE SELECTOR SWITCH

TERMINAL COLOR	LOW	MED	HI	OFF
RED & WHITE	12.1	13.0	14.0	0.0
BLUE & WHITE	11.6	12.6	13.6	0.0
YELLOW & WHITE	11.3	12.1	13.1	0.0

H30 VOLTAGES - H30-500SS, H30-1000SS
(Based on 120.0 Volt input, 40 Amp load.)

Calculate Voltage Drop for EVERY cable run to determine appropriate terminal block. Failure to do so may result in substantially reduced lamp life.

VOLTAGE DROP FORMULA

$$\frac{\text{Total Watts on Cable} \times \text{Length of Run in Feet}}{\text{Cable Size Constant}} = \text{Voltage Drop}$$

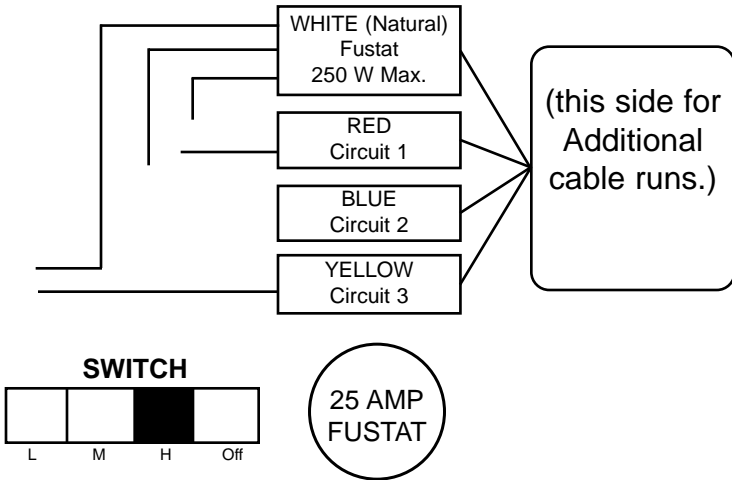
(From Chart Below)

CABLE SIZE CONSTANTS

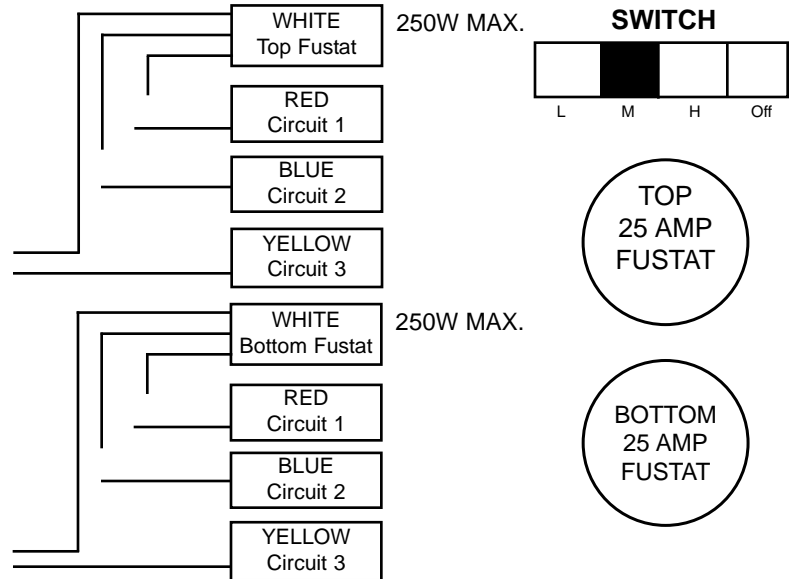
#18	1380
#16	2200
#14	3500
#12	7500
#10	11920
#8	18960
#6	30150

CAUTION! Replace Fustat only with exact same amperage and type.

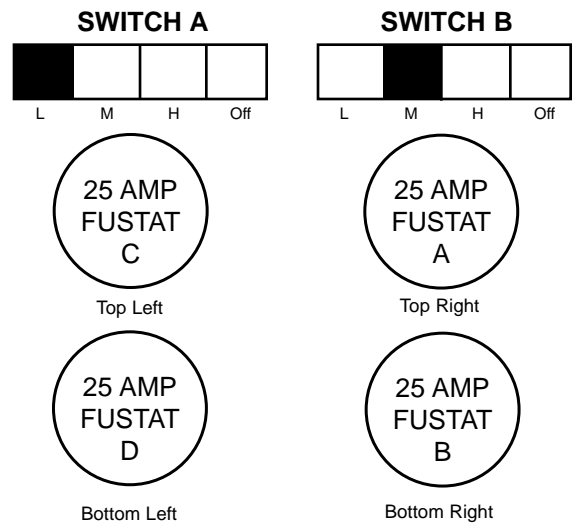
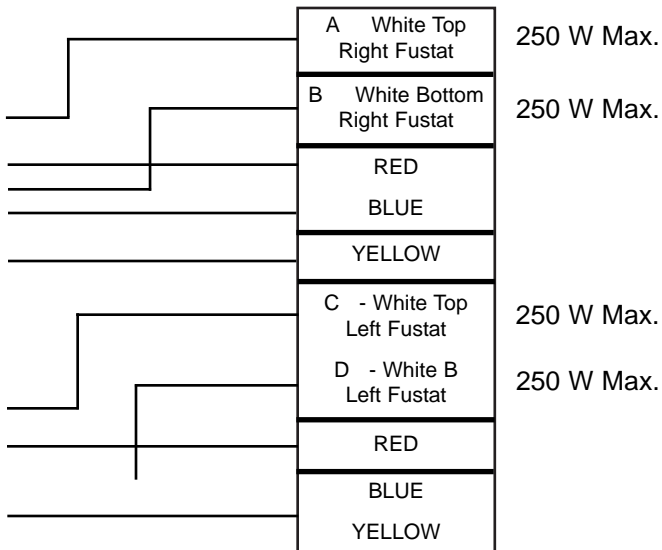
H30-250SS Wiring Diagram



H30-500SS Wiring Diagram



H30-1000SS Wiring Diagram



Nightscaping® H30 Powercenter Lifetime warranty

This powercenter™ is guaranteed to the original registered owner against defects in workmanship and materials for life. Should it ever become necessary to return this powercenter™ to the factory, Nightscaping® will, at its option repair or replace the defective item. Powercenter™ registration card must be on file with Nightscaping®. Time switches, photocells, controllers and other non-integral components covered by separate 2 year repair or replace warranty.

If for any reason this Powercenter™ or any other part of your Nightscaping® system fail to perform to your satisfaction, contact the independent Nightscaping® contractor who installed your system, or return the defective item(s) directly to Nightscaping® at the address below, shipped prepaid, where it will be repaired or replaced free of charge. (Nominal charge possible for non-warranty repairs.) Return shipping will be paid by Nightscaping®.

BUT before you do, **LET US TRY TO HELP YOU** over the phone! Experience has shown us that a five minute phone call to one of our trained product specialists will resolve most problems.

1705 E. Colton Avenue • Redlands, California 92374
 (909) 794-2121 • Fax (909) 794-7292 • Help Line (800) 544-4840
 Web <http://www.nightscaping.com> • Email wlocklin@nightscaping.com