

HSC110SS OWNER'S MANUAL



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1. FEATURES

- Photo-electric (PE) sensor that automatically turns ON the load at dusk and OFF at a pre-determined time, or at dawn
- Improved rugged construction to support 16A current
- Four operating modes, easily set by switches.
 - Simple dusk-dawn run mode - turns ON at dusk and OFF at dawn.
 - Delay Timer mode - turns ON at dusk and runs for a pre-set length of time.
 - Real Time Mode – turns ON at dusk and turns OFF at the same set time every night.
 - ECO mode - turns ON at dusk, OFF during the middle of the night, and back ON again for a period until dawn.
- Delay Timer Mode - ON time can be set in 30 minutes increments, from a minimum of 30 minutes to a maximum of 15.5 hours.
- Real Time Mode - User can set the time for the unit to turn OFF, the HSC110SS estimates the time using sunrise and sunset and turns the power OFF at the set time.
- ECO-mode saves electricity by only operating during the busy periods after dusk and before dawn and turning OFF during unneeded times in the middle of the night.
- A turn ON delay and a turn OFF delay of 1 minute each prevent uncertain switching in the event of momentary blocking of the sensor (during daylight), or short-term illumination when running (during night).

2. OPERATING CONDITIONS

- Operating Voltage: 220 – 240V a.c. 50Hz
- Operating Temperature: 0 to +50 °C
- Certified Standard: CISPR15, AS/NZS 61347.2.11
- Ingress Protection: IP66 (When **all** used and unused entries are sealed)
- Maximum Load: 3840W Incandescent and Halogen, 3840VA fluorescent
- Minimum Load: 0W
- Maximum Current capacity: 16A
- Light Levels: ON - 25lux, OFF - 50lux
- Turn ON/OFF Delay: 1 minute
- Timer Steps: 30 minutes
- Delay Timer Range: 30 minutes - 15.5 hours

Note: Not suitable to be driven by DC-AC inverter.

Note: This manual was correct at the time of manufacture. For the latest version of the manual and any technical or safety updates refer to the website:- www.sclick.com.au or scan the QR code with a mobile phone.

3. INSTALLATION INSTRUCTIONS

The HSC110SS is to be installed as part of a fixed wire electrical installation. By law such installations must be made by an electrical contractor or similarly qualified person.

- The HSC110SS must be installed in such a way that prevents water and dust from entering the the unit. It is recommended the HSC110SS is **NOT** installed where water can be present including under eaves near drainpipes and gutters.
- It is recommended that the wiring enters from underneath the unit.
- To maintain IP66 rating, **ALL** used and unused entries must be sealed with a silicone sealant. Front cover screws must be fully tightened with all screw blanking plugs used.

IT SHOULD NOT BE PLACED WHERE,

- the translucent front cover receives direct sun light.
- the HSC110SS may receive light from other sources which may interfere with its operation and cause unwanted switching.
- the HSC110SS receives light from the lamps it is switching, otherwise the load may switch ON and OFF at 1 minute intervals.

IT SHOULD BE PLACED WHERE,

- the HSC110SS receives sufficient indirect sunlight, preferably facing south (southern hemisphere).
- there is sufficient ambient light for the HSC110SS to operate correctly even when controlling internal lights, i.e, externally.

When power is first applied, the unit will switch ON for a one minute test period, and will then resume normal operation. To test the HSC110SS during daylight hours after the initial one minute test period, fully cover the unit with the product box (with black insert) and wait for at least one minute until the load turns ON.

3.1 WIRING

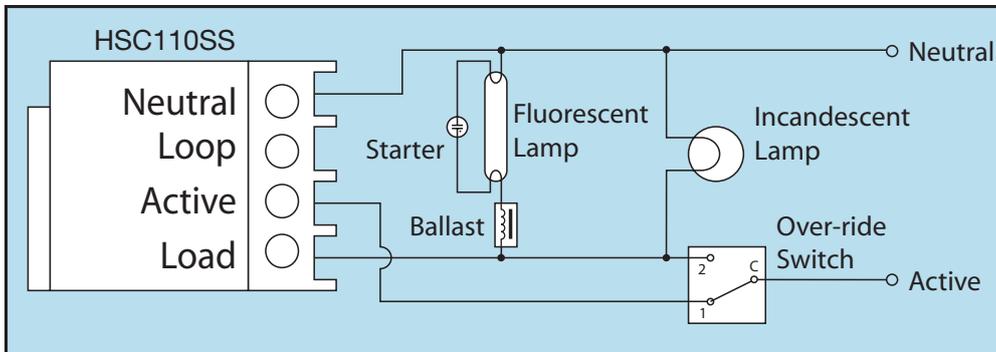


Figure 1: HSC110SS Example Wiring Diagram

4. MODES OF OPERATION

ELECTRICAL SAFETY WARNING: ISOLATE THE HSC110SS FROM THE MAINS POWER SUPPLY BEFORE SETTING THE REQUIRED MODE OF OPERATION.

• Dusk to Dawn: All switches OFF
• Midnight is 12AM
• If time setting is incorrect the unit will default to Dusk to Dawn mode

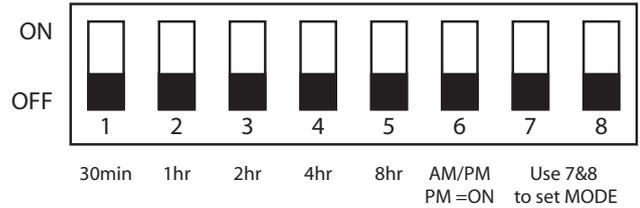
Delay Timer		Setting	Mode
		OFF	OFF
		OFF	ON
		ON	ON
		OFF	OFF
		ON	OFF

Real Time		AM/PM	Use Switches 7 & 8 to set mode as shown above
30 min	1 hr	2 hr	4 hr
8 hr	PM=ON		
1	2	3	4
5	6	7	8
			Switch

SETTING 7	SETTING 8	MODE
OFF	OFF	Dusk to Dawn
OFF	ON	ECO 50:35:15
ON	ON	ECO 50:25:25
OFF	OFF	Delay Timer
ON	OFF	Real Time

4.1 DUSK-DAWN MODE (ALL SWITCHES OFF)

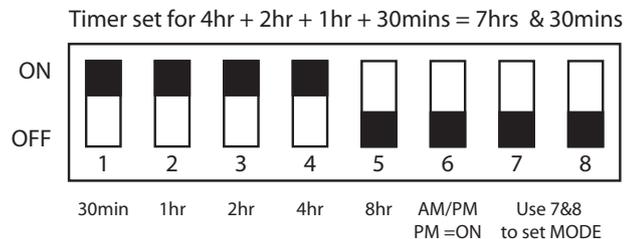
With all switches (1 to 8) set off (down) the HSC110SS will switch ON for the entire period when the ambient light is low enough to activate the unit (e.g. night time), and will only switch off again when the ambient light increases (e.g. day time).



4.2 DELAY TIMER MODE (SWITCHES 6,7 & 8 OFF)

Delay Timer mode allows the selection of a desired fixed ON time after dusk. A fixed delay time of 30 minutes up to 15 hours and 30 minutes can be set by ensuring switches 6-8 are in the off (down) position and setting Switches 1-5 with the required fixed delay time.

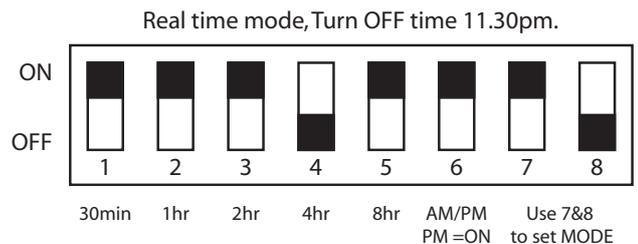
For example, for a desired ON time after dusk of 7 hours and 30 minutes. Turn on (up) switch 4 (4 hrs), switch 3 (2 hrs), switch 2 (1 hr) and switch 1 (30 mins) to give the desired 7 hours and 30 minutes ON time after dusk.



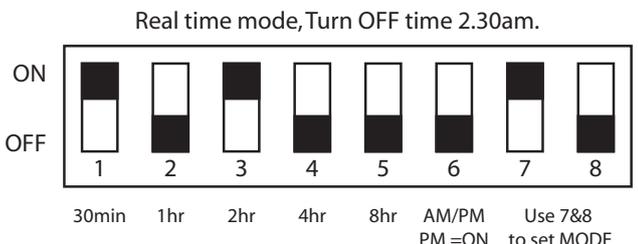
4.3 REAL TIME MODE (SWITCH 7 ON & SWITCH 8 OFF)

Real Time mode allows the selection of a desired turn OFF time for the load every night. In real time mode the load will turn ON at dusk and will turn OFF consistently at the same desired time every night. Turning switch 7 on (up) and Switch 8 off (down) will set the HSC110SS to run in Real Time Mode, with switches 1-6 used to set the required turn OFF time.

For example, for a desired turn OFF time of 11:30 PM, turn on (up) switch 7 to choose the Real Time mode. Turn on (up) the AM/PM switch (switch 6) for PM. Then, turn on (up) switch 5 (8 hrs), switch 3 (2 hrs), switch 2 (1 hr) and switch 1 (30 mins) to give the desired turn OFF time of 11:30PM.



For a desired turn OFF time of 2:30 AM, turn on (up) switch 7 to choose the Real Time mode. Turn the AM/PM switch (switch 6) off (down) for AM. Then, turn on (up) switch 3 (2 hours) and switch 1 (30 minutes) to give the desired turn OFF time of 2:30AM.



In Real Time mode, when power is first applied to the unit, the load will run in dusk-dawn mode on the first night and then will turn OFF at the desired time from the second night on. If the chosen turn OFF time occurs after sunrise (or before sunset) the unit will continue to run in dusk-dawn mode (i.e., will turn on at dusk and turn off at dawn).

Note that daylight savings (where observed) will shift the desired turn off time by one hour, earlier or later depending on the time of year when power is applied to the unit.

NOTE: Incorrect settings such as the following 00:00AM, 00:00PM, 13:00AM, 13:00PM, 13:30AM, 13:30PM, 14:00AM, 14:00PM, 14:30AM, 14:30PM, 15:00AM, 15:00PM, 15:30AM, 15:30PM will result in the unit running in dusk-dawn mode.

4.4 ECO MODE (SWITCH 8 ON)

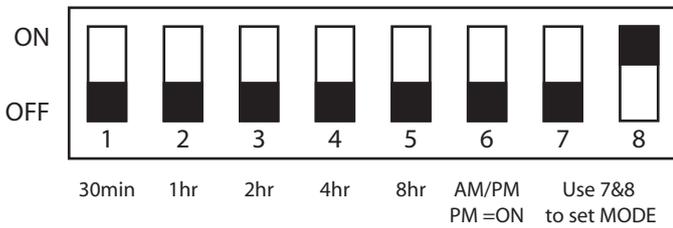
In ECO mode, the HSC110SS will switch ON after dusk for approximately half the night, it will then switch OFF for several hours, then ON again until dawn (when it turns off and remains off during the day). Switch 8 is used to set the HSC110SS to run in ECO Mode.

When power is first applied to the HSC110SS, it will take between 24 to 48 hours for the HSC110SS to determine the appropriate switching times. Consequently, during the first night it will run in dusk-dawn mode. If power is lost to the unit at any time, the HSC110SS will again require 24 to 48 hours to recalculate the switching times. During the year, the ON and OFF times will adapt to the changing seasons. Changes will occur gradually over a number of nights.

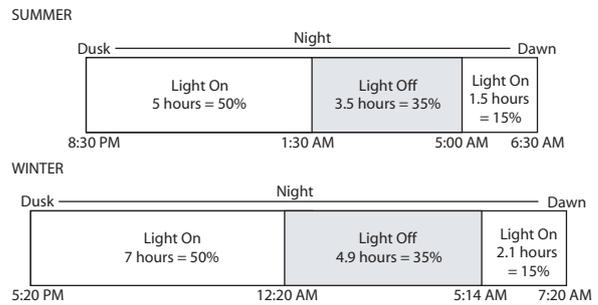
In ECO Mode (Switch 8 Up), switch 7 is used to set the length of the OFF period during the middle of the night. With switch 7 set off (down), the HSC110SS will switch ON after dusk for approximately 50% of the night, it will then switch OFF for approximately 35% of the night, then ON again until dawn (when it turns off and remains off during the day). With switch 7 set on (up), the HSC110SS will switch ON after dusk for approximately 50% of the night, it will then switch OFF for approximately 25% of the night, then ON again until dawn (when it turns off and remains off during the day).

For example, with switch 7 set off (down), if dusk is at 8:30PM and dawn is at 6:30AM (night time = 10 hours), then in ECO Mode the HSC110SS will turn the light ON at dusk for approximately the first half of the night until 1:30AM, when it will turn the light OFF for approximately the next 35% of the night until 5:00AM, when it will turn the light ON again for the last quarter of the night until dawn.

ECO Mode, 50% : 35% : 15% Setting

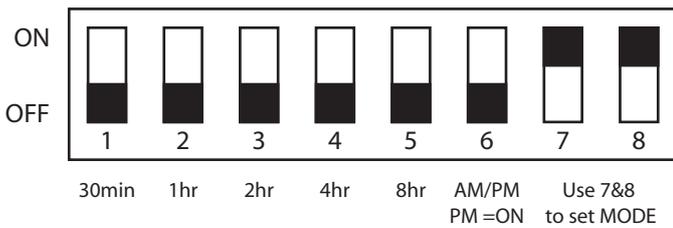


ECO mode: Switch 7 OFF (down) & Switch 8 ON (up)

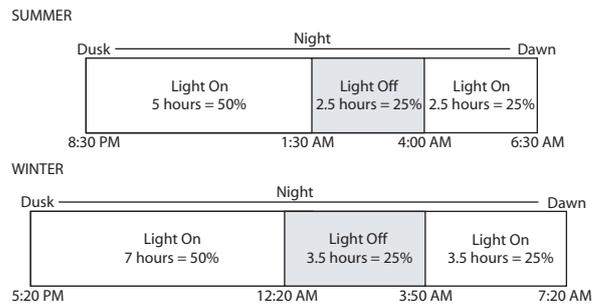


The second example, with switch 7 set on (up), if dusk is at 8:30PM and dawn is at 6:30AM (night time = 10 hours), then in ECO Mode the HSC110SS will turn the light ON at dusk for approximately the first half of the night until 1:30AM, when it will turn the light OFF for approximately the next quarter of the night until 4:00AM, when it will turn the light ON again for the last quarter of the night until dawn.

ECO Mode, 50% : 25% : 25% Setting



ECO mode: Switch 7 ON (up) & Switch 8 ON (up)



5. WARRANTY AND DISCLAIMER

Legend Corporation Limited warrants the product against manufacturing and material defect from the date of invoice to the initial purchaser for a period of 12 months. During the warranty period Legend Corporation Limited will replace products that prove to be defective where the product has been correctly installed and maintained and operated within the specifications defined in the product data sheet and where the product is not subject to mechanical damage or chemical attack. The warranty is also conditional on the unit being installed by a licensed electrical contractor. No other warranty is expressed or implied.

Legend Corporation Limited shall not be liable for any direct, indirect, incidental or consequential damages.

Note: This manual was correct at the time of manufacture. For the latest version of the manual and any technical or safety updates refer to the website:- www.sclick.com.au or scan the QR code with a mobile phone.