

I. Overview

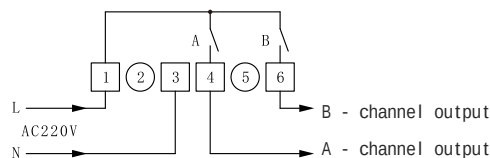
The HHQ16 street light controller (hereinafter referred to as the controller) adopts a dedicated chip and automatically adjusts the light-on and light-off times according to seasonal changes based on the local latitude and longitude. This controller meets the relevant requirements of GB/T 14536.8.

II. Main Technical Data

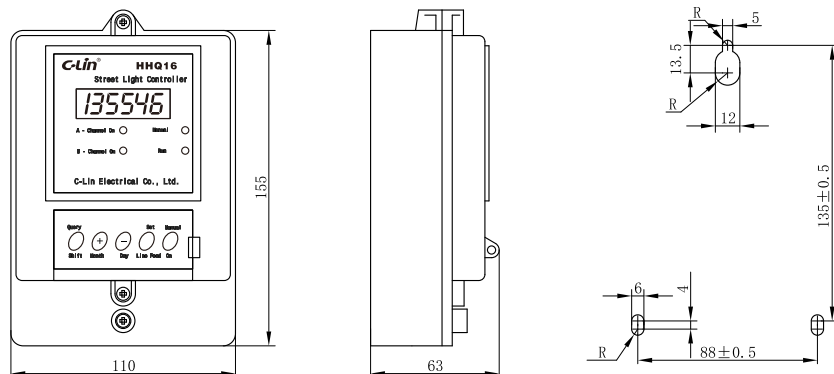
1. Working power supply (control power supply voltage): AC220V, allowable voltage fluctuation range (85%~110%) Ue;
2. Output control: Two-channel output, each channel can be set with three working modes;
3. Contact capacity: 10A AC250V (resistive) (usage category AC-15);
4. Timing error: $\leq \pm 0.5s/d$ (room temperature $23^{\circ}C \pm 3^{\circ}C$);
5. Built-in power supply: High-energy lithium battery, power failure data retention for 10 years;
6. Overall power consumption: $\leq 2W$ in the light-on state, $\leq 1W$ in other states;
7. Storage temperature: $-40^{\circ}C \sim 80^{\circ}C$;
8. Operating temperature: $-15^{\circ}C \sim 60^{\circ}C$;
9. Applicable range: East longitude $80.0^{\circ} \sim 135.9^{\circ}$; North latitude $10.0^{\circ} \sim 56.0^{\circ}$;
10. Altitude: $\leq 2000m$;
11. Humidity: When the maximum temperature at the installation site is $40^{\circ}C$, the relative humidity of the air $\leq 50\%$; Higher relative humidity is allowed at lower temperatures (e.g., up to 90% at $20^{\circ}C$). Special measures shall be taken for condensation occasionally caused by temperature changes;
12. Pollution degree: Level 3;
13. Installation method: Wall-mounted or panel-mounted;
14. Conventional heating current Ith: 5A;
15. Rated insulation voltage Ui: 400V;
16. Rated impulse withstand voltage Uimp: 2.5KV.

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III. Wiring Diagram



IV. Outline and Mounting Hole Dimensions Diagram (mm)

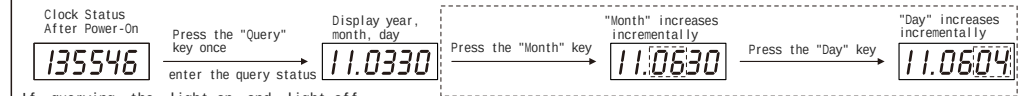


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V. Instructions for Use

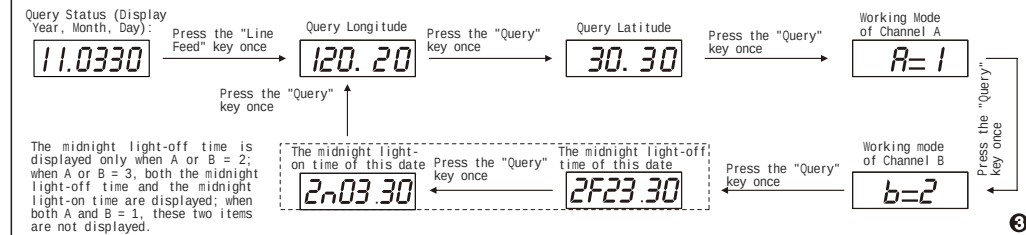
This controller has two output channels, A and B, and each channel can be set to 3 working modes: ① "A=1, B=1" means "all-night light" (i.e., turn on the light in the evening and turn it off early the next morning); ② "A=2, B=2" means "midnight light" (i.e., turn on the light in the evening and turn it off at midnight); ③ "A=3, B=3" means 2 on and 2 off (i.e., turn on the light in the evening, turn it off at midnight, turn it on again in the latter half of the night, and turn it off early the next morning). Channel B has the same function as Channel A. When leaving the factory, Channel A is set to the all-night light mode, and Channel B is set to the midnight light mode. After power is connected, the "running indicator light" flashes every second at any time. When the power is just connected, the current time is displayed. If there is no key operation for one minute continuously, the display will be turned off and enter the power-saving mode.

1. Query the light-off time and light-on time



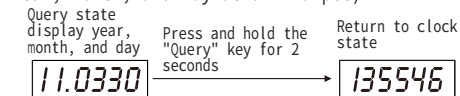
If querying the light-on and light-off times of other dates, press the "Month" and "Day" keys to change the date; if querying those of the current date, skip the steps in the dotted box.

2. Query Latitude, Longitude and Working Mode

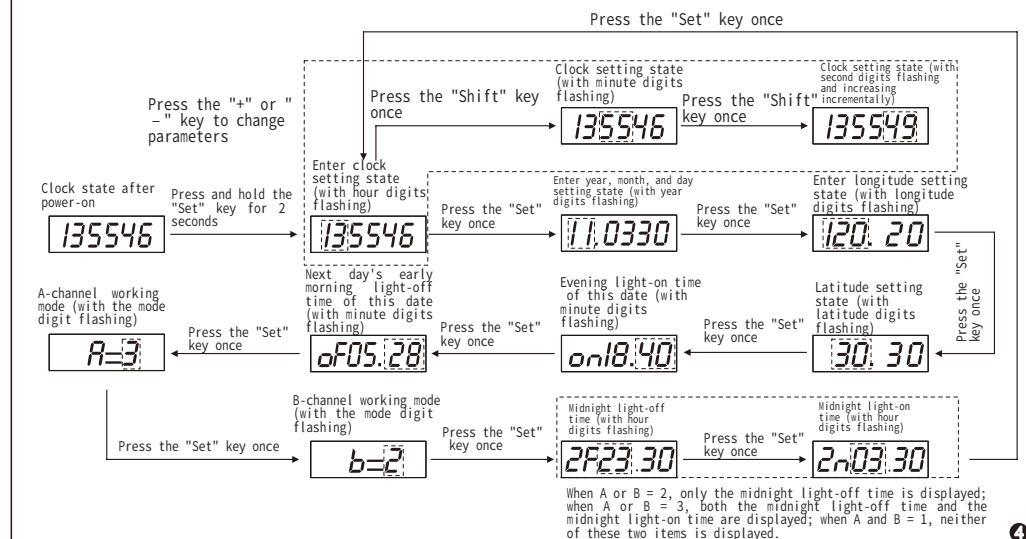


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3. Exit the Query State (Take Year, Month, and Day as an Example)



4. Parameter Setting (Take Mode A=3, B=2 as an Example)



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Set the year, month, day, longitude, latitude, light-on time, light-off time, working mode of Channel A, working mode of Channel B, midnight light-off time, and midnight light-on time in sequence according to the clock setting method.

Note: At any time during the setting process, press and hold the "Set" key for 2 seconds and then release to save the settings and return to the clock running state.

5. Manual Emergency Lighting

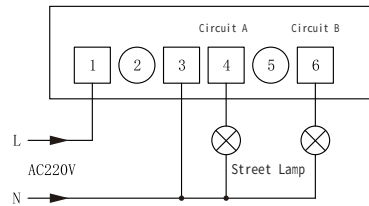
At any time, press and hold the "Manual" key for 2 seconds and then release; Channel A and Channel B will output immediately (the indicator lights of Channel A, Channel B, and "Manual" will turn on). Press and hold the "Manual" key for 2 seconds again and then release to return to the automatic operation mode (the "Manual" indicator light will turn off, and Channel A and Channel B will turn on/off automatically according to the set time).

VI. Application Circuit Examples

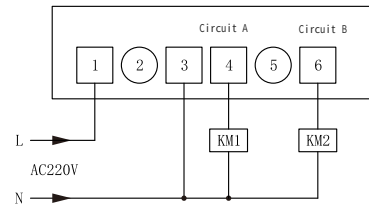
1. For the wiring method when the load capacity is within 10A AC250V, refer to Example 1.

2. When the load current exceeds 10A and the coil voltage of the expanded AC contactors KM1 and KM2 is AC220V, refer to Example 2 for the wiring method.

Example 1:



Example 2:



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VII. Reference of Latitudes and Longitudes of Major Cities in China

City	East Longitude	North Latitude	City	East Longitude	North Latitude
Beijing	116.5	40.0	Jinan	117.0	36.7
Hohhot	112.2	40.9	Qingdao	120.3	36.1
Shenyang	123.4	41.8	Nanjing	118.8	32.0
Dalian	121.6	39.0	Shanghai	121.5	31.2
Changchun	125.3	43.9	Hangzhou	120.2	30.3
Harbin	126.7	45.7	Hefei	117.3	31.9
Tianjin	117.2	39.1	Nanchang	115.9	28.7
Shijiazhuang	114.4	38.0	Changsha	113.0	28.2
Taiyuan	112.6	37.8	Nanning	108.4	22.8
Zhengzhou	113.8	34.8	Guiyang	106.7	26.6
Wuhan	114.3	30.6	Kunming	102.7	25.1
Xi'an	108.9	34.2	Fuzhou	119.3	26.1
Chengdu	104.1	30.6	Xiamen	118.1	24.4
Chongqing	106.6	29.8	Guangzhou	113.2	23.1
Lanzhou	103.6	36.0	Haikou	110.3	20.0
Yinchuan	106.4	38.5	Hong Kong	114.2	22.3
Urumqi	87.7	43.8	Macao	113.6	22.2
Lhasa	91.1	29.7	Taipei	121.5	25.0

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VIII. Ordering Instructions

It is necessary to specify the product model, voltage level, and quantity. If there are special requirements, they should be indicated separately.

For example: HHQ16 AC220V 100 pieces.



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使用说明书

Products Instructions

HHQ16

Street Lamp Controller

Thank you very much for using the C-Lin Brand Street Lamp Controller. Please read the instruction manual before using the product!

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