Operating Instructions for Intelligent Lighting Time Control Module

Summary

1. Product features
● With timing/longitude and latitude time control/optical control function/fire control function
● LCD, friendly human-computer interface
● RS485 interface, standard Modbus protocol
● Weekly mode/4 groups of time period setting for each route
● Astronomical clock, holiday mode

2. Technical indicators
Working power supply: AC 230V
Loop output: 4.6.8.12 circuits
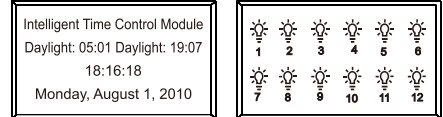Installation method: guide rail installation

Keyboard Definition

Name	Function
OPT	Select function key
SET	Setting/turning on/off/saving
+	Add/Flip
—	Reduce/Flip
↰	Return

The OPT key is a selection key. When pressed, the corresponding OPT indicator lights up. Press the SET setting key again to enter the parameter setting. When the OPT indicator is off, press K1-K4-K6-K8-K12 (1-12) to control the switch status of each circuit.
Press the OPT key and then press the SET key to enter the parameter setting:
The data selected in the box is the current cursor position. Press "+, -" to move the cursor position; The inverted data is the data that can be set and modified. Press "+, -" to modify the data, press "SET" to save, and press " ↰ " to cancel the data. Press "SET" and " ↰ " to return to the previous menu until the main interface.
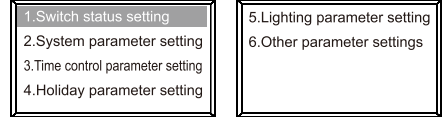
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1、Main Interface

Intelligent Time Control Module
Daylight: 05:01 Daylight: 19:07
18:16:18
Monday, August 1, 2010

When the module is running normally, the above two interfaces are displayed in turn every 5 seconds. ☀ Open ○ Off

2、Parameter Selection Setting

1.Switch status setting	5.Lighting parameter setting
2.System parameter setting	6.Other parameter settings
3.Time control parameter setting	
4.Holiday parameter setting	

The reverse display status is the selected status. Press "SET" to enter the corresponding settings, press "+ -" to select different parameter settings, and press " ↰ " to return to the main interface.

3、Switch Status Setting
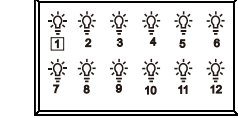
The number in the box represents which route is selected. Press the "SET" key to turn on the light or Turn off the light and press "+-" to select different circuits.
The number in the box represents which route is selected. Press the "SET" key to turn on the light or Turn off the light and press "+-" to select different circuits. For example: 1 is the number of currently selected routes. Press "-" to select all routes If the circuit or 12 is the current circuit, press the "+" key to select all circuits. When all circuits are selected, press the "SET" key to realize full opening or full closing.

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4、System Parameter Setting
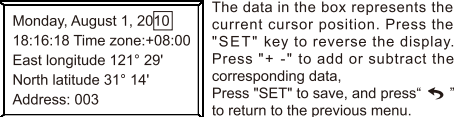
Monday, August 1, 2010
18:16:18 Time zone:+08:00
East longitude 121° 29'
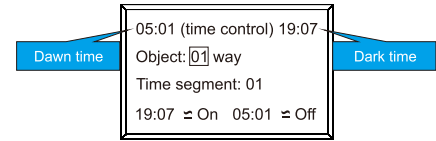North latitude 31° 14'
Address: 003

The data in the box represents the current cursor position. Press the "SET" key to reverse the display. Press "+ -" to add or subtract the corresponding data, Press "SET" to save, and press " ↰ " to return to the previous menu.

⚠ **Matters Needing Attention**

1. After modifying the value (reverse display status), press the "SET" key to save it, If you do not want to modify it, press the Back key;
2. The factory default setting is Shanghai East longitude and North latitude.
3. Time zone: in China, the default value is+08:00, and no change is required.
4. Address: refers to the module number (address code), which is unique and cannot be repeated during RS485 communication connection.

5、Time Control Parameter Setting

Dawn time

05:01 (time control) 19:07
Object: 01 way
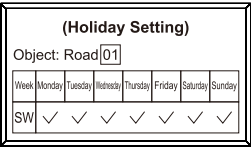Time segment: 01
19:07 ⇌ On   05:01 ⇌ Off

Dark time

1. The data in the box represents the current cursor position. Press the "SET" key to display it reversely, Press "+-" to add or subtract corresponding data, and press "SET" to save, Press " ↰ " to return to the previous menu.
2. ' ⇌ ' refers to longitude and latitude control, and ' = ' refers to timing control;
3. Press " ↰ " to exit the modified data or return to the previous menu.

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4. Object: circuit 01 represents the first circuit, and different circuits can be selected according to the number of circuits in the module;
5. Time segment: 01 represents the first segment, and segment 01-04 can be selected. The four fixed time segments cannot cross each other
6. Time control type setting:
1) ' ⇌ ' refers to latitude and longitude control, and time segment 01 refers to latitude and longitude time control or time control setting, The longitude and latitude time control calculates the sunrise and sunset time of each day according to the longitude and latitude algorithm, The change rule of the four seasons automatically adjusts the time. Time setting: set the reference value according to the time of darkness and daylight displayed in the upper left and right corners of the page. The time of darkness and dawn can be set in advance or later.
2) ' = ' refers to timing control, and segments 02, 03 and 04 refer to ordinary timing control.

6、Holiday Parameter Setting

(Holiday Setting)
Object: Road 01

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
SW	√	√	√	√	√	√	√

The holiday setting must be enabled for timing control and illumination control, otherwise it will be invalid

1. The data in the box represents the current cursor position. Press the "SET" key to display it reversely, Press "+-" to add or subtract corresponding data, and press "SET" to save, Press " ↰ " to return to the previous menu.
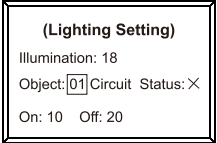2. ' √ ' means enabled; ' × ' Is deactivated.

⚠ **Matters Needing Attention**
Press'+/- 'to select the queried object when the circuit is inverted.

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7、Light Control Settings

1. The data in the box represents the current cursor position. Press the "SET" key to reverse the display. Press "+-" to add or subtract the corresponding data. Press "SET" to save it. Press " ↰ " to return to the previous menu.

(Lighting Setting)
Illumination: 18
Object: 01 Circuit Status: ×
On: 10   Off: 20

2. ' √ ' is enabled; ' × ' Is deactivated; When the optical control sensor is not connected, the status is set to disabled

8、Other Settings

1. Baud rate: 24004800960019200, factory setting: 9600.
2. Fire fighting mode: when the fire fighting 24V voltage input is divided into forced switching (off) and forced starting (on), All circuits of the controller are switched on or off, and the state before execution is restored after 24V voltage is switched off.
3. Main switch delay: the opening or closing interval time between each circuit when the main switch is opened or closed.
4. Restore factory settings: After confirming the factory settings, all the subsequent internal settings are cleared, and the factory settings are reset Return to the factory state.
5. The time control parameters are the same as those of 01 circuit 01 section: if it is necessary to set the timing of each circuit of the controller to be the same, you can set the timing of the first circuit section 1 or section 2, 3 and 4, and use this setting to set the timing of other circuits to be the same as that of the first circuit section 1 or section 2, 3 and 4. PS: If other circuits are the same as the first segment of the first circuit, select segment 01, segment 02 if they are the same as segment 2, segment 03 if they are the same as segment 3, and segment 04 if they are the same as segment 4.
6. Holiday parameters are the same as circuit 1: if all circuits of this controller have the same holiday settings, use this setting to save setting time after setting the first circuit.
7. The illuminance parameter is the same as that of circuit 01: if the illuminance settings of all circuits of this controller are the same, the first circuit can be set well, and the setting time can be saved by using this setting.
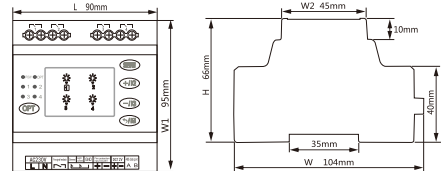
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⚠ **Matters Needing Attention**

1. Press the '+/-' key in the inverted loop display state to select the queried object.
2. Object: Select each circuit of the controller, and each circuit is set separately.
3. Status: Whether the light control function is enabled.
4. "On" means: when the light is lower than the set value, turn on the light; "Off" means: light Turn off the light when the light is higher than the set value.
5. Factory default settings: When the light value is 12, it is the daily darkness illuminance. When the light value is 20, it is the daily brightness. The on value must be less than the off value, and the on and off values cannot be too close to each other greater than 3.
6. The user can refer to the current light intensity to set and summarize the usage experience Check to set the lighting value.

9、Overall Dimensions:
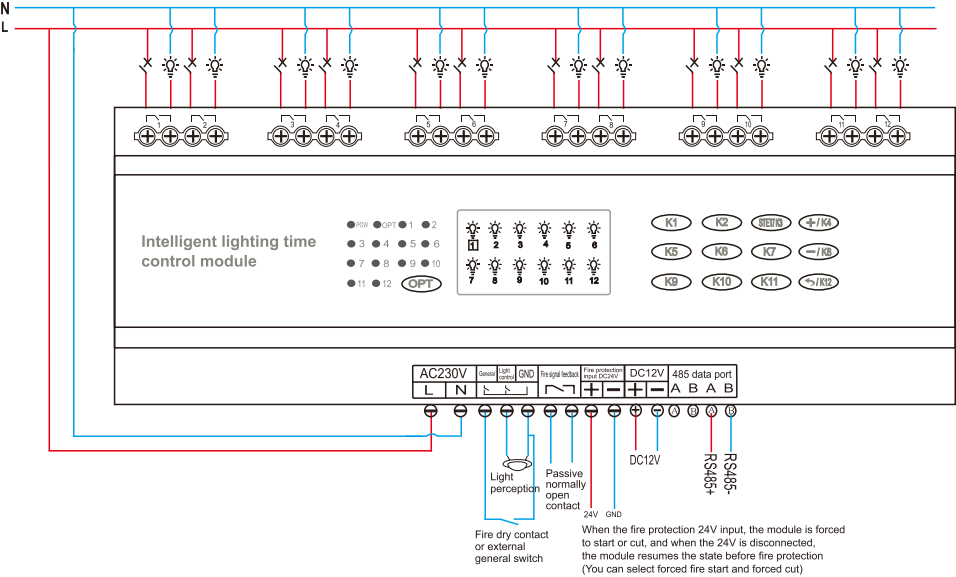
Model and specification	L	W	W1	H	W2
4-channel intelligent lighting time control module	90	104	95	66	45
8-channel intelligent lighting time control module	126	104	95	66	45
6-channel intelligent lighting time control module	162	104	95	66	45
12 channel intelligent lighting time control module	216	104	95	66	45

Detail

L 90mm
W1 95mm
W2 45mm
W 104mm
H 66mm
10mm
35mm
40mm

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10、Controller Wiring Diagram

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L

Intelligent lighting time control module

POW OPT ●1 ●2
●3 ●4 ●5 ●6
●7 ●8 ●9 ●10
●11 ●12 OPT

K1 K2 SET/K3 +/K4
K5 K6 K7 —/K8
K9 K10 K11 ↰/K12

AC230V | Control | Light control | GND | Fire signal feedback | Fire protection input DC24V | DC12V | 485 data port
L N | | | | | | + — + — | A B A B

Light perception
Passive normally open contact
Fire dry contact or external general switch

24V GND
DC12V
RS485-
RS485+

When the fire protection 24V input, the module is forced to start or cut, and when the 24V is disconnected, the module resumes the state before fire protection (You can select forced fire start and forced cut)

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