

810-3048 Light Dimming Module

Part #: 026-4215 Rev 2 Date: 01/10/2008



Overview

The CPC Light Dimming Module is used to control light dimming ballast(s). The module is approximately 3" x 5". The module uses a single 0-10V DC analog output from a MultiFlex board. The input and output voltages are listed below.

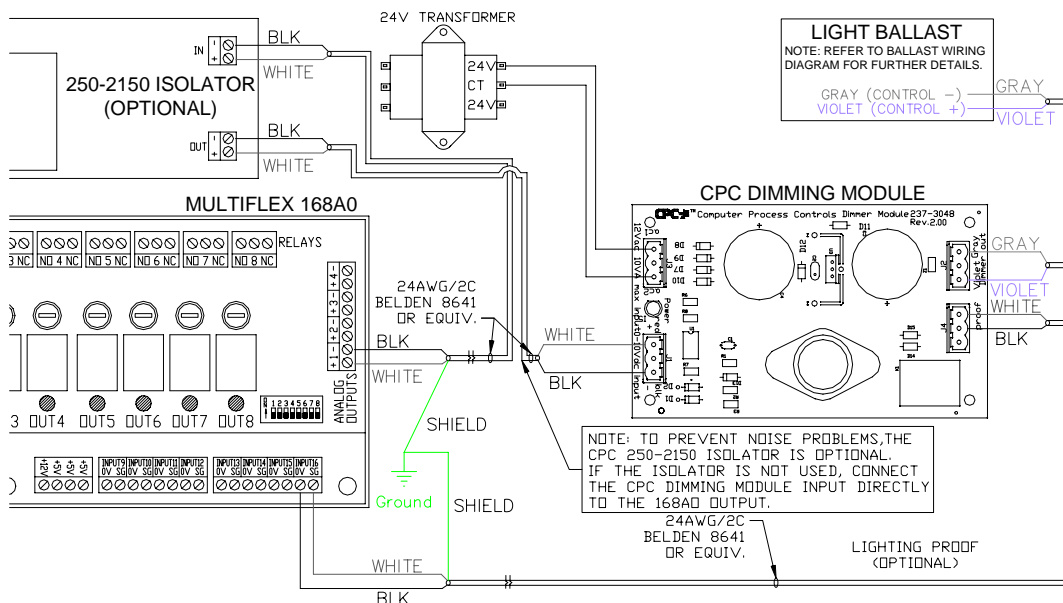
Board Input (MultiFlex)	Board Output (Light Ballast)	Light Condition
0V DC	10V DC	Full On
10V DC	0V DC	Min. On



The module has a proof output. The proof output is connected to a NC relay output. If proofing is used, the output should be connected to any available analog input on a MultiFlex board. The dip switch for the analog input should be ON.

Installation

The Light Dimming Module can be installed in any orientation. The module includes a Snap-Track. The Snap-Track should be mounted in a standard enclosure. The module requires 12VAC. **Connecting the power input to the AC1 and AC2 side of a standard 24V transformer will damage the module.** A center-tap 24V transformer should be used to power the module as shown in the wiring diagram.



TYPICAL LIGHT DIMMING MODULE WIRING DIAGRAM

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Programming

- The Light Dimming Module is configured in a Lighting Control application.
- The E2 software must be 2.40F01 or later.
- A light level sensor is required to control the light dimming.

Program the Lighting Application normally. Then, make the following additional programming changes:

1. Press **Log In/Out** and Log in to the E2 with Level 4 access
2. Press **F2** view the Lighting Summary screen. If a list of Lighting Control applications appears, highlight the one you wish to edit and press **Enter** to view the C1:Setup screen.
3. If proofing is desired, change the *Enable Proofing* field to Yes.
Change *Enable Dimming* field to Yes.

01-26-07		CX-400 Unit 1		10:18:32	
Use Ctrl-X to Select CX Tabs		SETUP		FULL *ALARM*	
C1: Setup	C2: Light Level	C3: Min On/Off	C4:	C5:	
C6:	C7:	C8: Inputs	C9: Outputs	C0: MORE	

Lighting Control: DIMMER MODULE

Setup	Value
Name	: DIMMER MODULE
Use Alt Control:	No
Enable Proofing:	Yes
Llev/Logic Mode:	LLEV ONLY
Alt Lt/Lgc Mode:	LOGIC ONLY
Schedif Mode	: LLEV/LOGIC ONLY
Alt Schedif Mode:	LLEV/LOGIC ONLY
Show Sched	: No
Show LLev	: Yes
Show Logic	: Yes
Enable Dimming	: Yes
KW Load	: 0

Enter desired text | Name of this lighting channel

F1: PREV TAB	F2: NEXT TAB	F3: EDIT	F4: STATUS	F5: CANCEL
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4. Press **F2** to view the C2: Light Level screen.
5. Set the values circled in **Red** below based on the desired lighting operation.

Dim Upper %: Light output percent at Dim LL @ Upper % light level**Dim LL @ Upper %:** Light level for Dim Upper % output**Dim Lower %:** Light output percent at Dim LL @ Lower % light level**Dim LL @ Lower %:** Light level for Dim Lower % output**Dim Ramp Speed:** Ramp speed in percent change per minute.**Dim fail %:** Light level output if light level sensor fails.

01-26-07 01:19:14 CX-400 Unit 1 FULL

Use Ctrl-X to Select CX Tabs SETUP

C1: Setup	C2: Light Level	C3: Min On/Off	C4:	C5:
C6:	C7:	C8: Inputs	C9: Outputs	C0: MORE

Lighting Control: DIMMER MODULE

Light Level	Value
CUTON	: 800.0
CUTOFF	: 2200
UNOCC CUTON	: NONE
UNOCC CUTOFF	: NONE
LLEV OCCUP	:
Cut ON Delay	: 0:00:00
Cut OFF Delay	: 0:00:00
USE ALT LL COMB:	:
Cut ON Dly UNOC:	: 0:00:00
Cut OFF Dly UNO:	: 0:00:00
LIGHT LEVEL IN	: THIS.01.1 GLOBAL DATA :LIGHT LEVEL OUT
Dim Upper %	: 100.0
Dim LL @ Upper%	: 800.0
Dim Lower %	: 0
Dim LL @ Lower%	: 2200
Dim Ramp Speed	: 100.0
Dim Fail %	: 100.0

Enter FIC | Unoccupied light level cut ON setpoint

F1: PREV TAB F2: NEXT TAB F3: EDIT F4: STATUS F5: CANCEL

6. Press **Ctrl** + **9** to view the C9: Outputs screen.
7. Assign the Dimmer % output to the MultiFlex Analog Output connected to the dimmer module.

01-26-07 01:19:56 CX-400 Unit 1 FULL

Use Ctrl-X to Select CX Tabs SETUP

C1: Setup	C2: Light Level	C3: Min On/Off	C4:	C5:
C6:	C7:	C8: Inputs	C9: Outputs	C0: MORE

Lighting Control: DIMMER MODULE

Outputs	Board	Point
LIGHTS OUTPUT	:	:
LLEVIF OUT	:	:
PROOF STATUS	:	:
ALG STATUS	:	:
IN BYPASS	:	:
DIMMER %	: 1	: 1

Enter Board/Controller | Lights output

F1: PREV TAB F2: NEXT TAB F3: EDIT F4: LOOK UP F5: CANCEL

Typically lighting gateway board or physical relay output

Set Analog Output scaling to 0.1V – 10.0V

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8. Press **F2** to view the C0: More screen.
9. Change the Proof Type to ON Only
10. Assign the Proof IN input to the MultiFlex Analog Input connected to the dimmer module.

01-26-07 CX-400 Unit 1 10:55:11
 Use Ctrl-X to Select CX Tabs SETUP FULL

C1: Setup	C2: Light Level	C3: Min On/Off	C4:	C5:
C6:	C7:	C8: Inputs	C9: Outputs	C0: MORE

Lighting Control: DIMMER MODULE

Proof	Value
Proof Type	: ON Only
PROOF IN	: 1 :16
Proof Delay	: 0:00:30
Proof Latch	: 0:00:00
Clear Any Match:	No
Pr Fail Adv Pri:	20

Typically lighting gateway board proof output

Scroll using Next/Prev keys | Commanded state to proof

F1: PREV TAB F2: NEXT TAB F3: EDIT F4: LOOK UP F5: CANCEL

Application Notes

1. Typically the physical proof output from the 810-3048 Light Dimming Module is used as an alarm from a Digital Sensor Control application in the E2 controller. A delay of 5 minutes is recommended to minimize nuisance alarms.
2. The optional 250-2150 isolator is needed when the control wires from the light dimming ballast are not isolated. If either side of the control wire circuit is intentionally or accidentally connected to ground, the 250-2150 isolator is required for the 810-3048 Light Dimming Module to function properly. The isolator separates the ground on the control wire from the CPC input board.