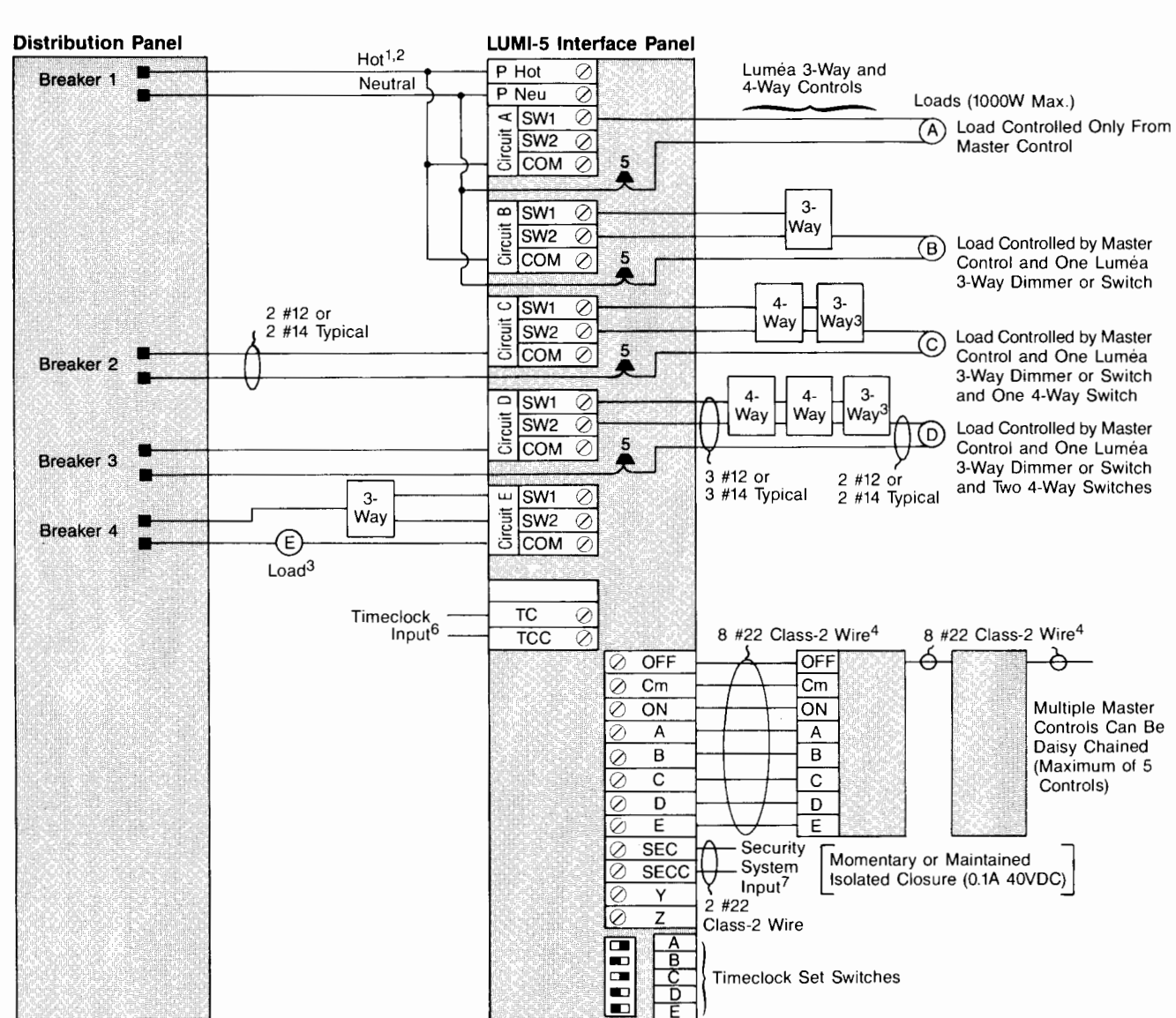


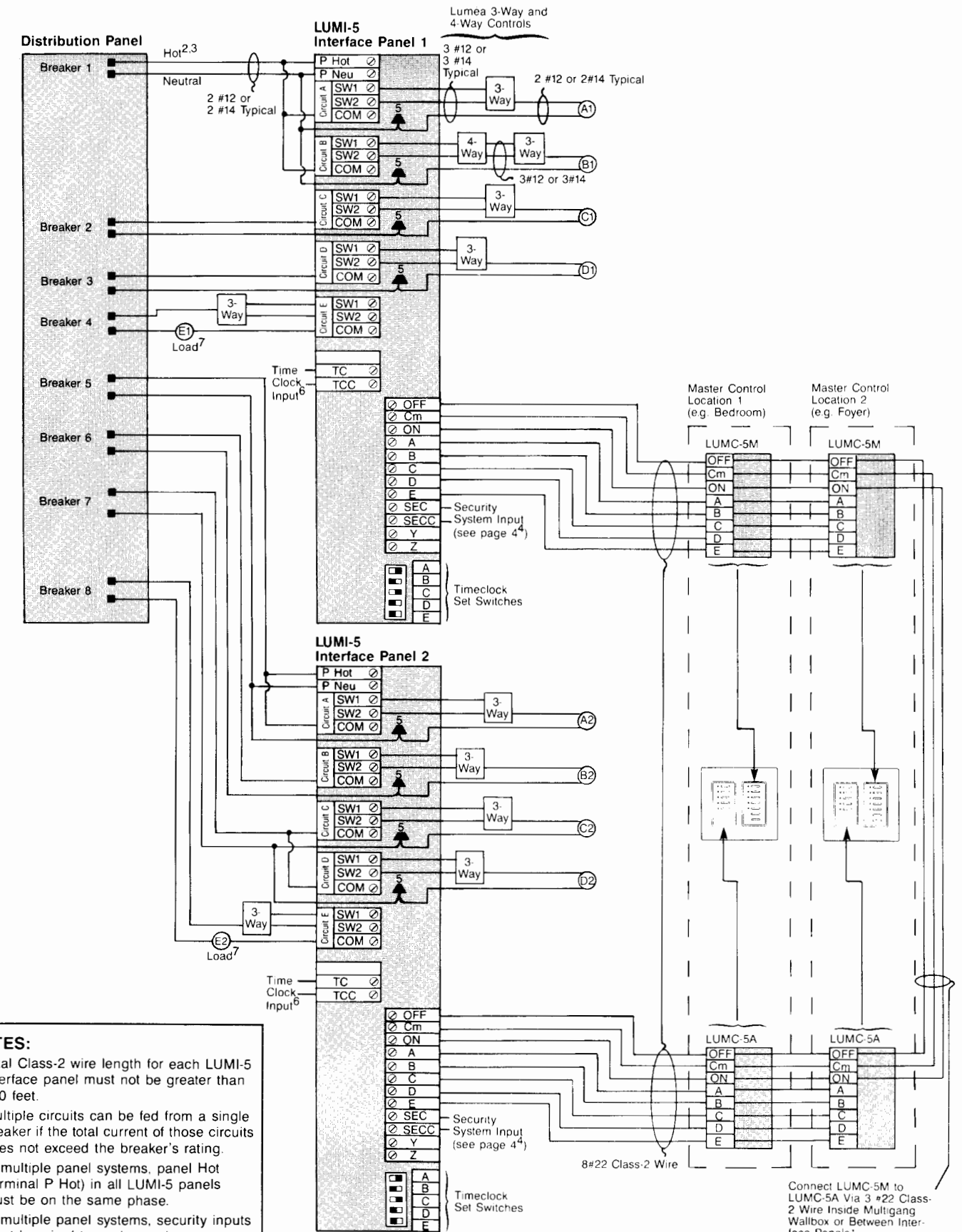
Wiring Diagram — 5-Circuit LuMaster System



NOTES:

- Panel Hot (terminal P Hot) and panel Neutral (terminal P Neu) must always be connected to 120V, 60Hz to provide power to the LUMI-5 panel.
- Multiple circuits can be fed from a single breaker if the total current of those circuits does not exceed the breaker's rating.
- Lumèa 3-way dimmers or switches may be wired line side or load side of LUMI-5 interface panel. Lumèa 4-way switches must be wired between LUMI-5 panel and the 3-way dimmer or switch.
- Total Class-2 wire length for each LUMI-5 interface panel must not be greater than 500 feet.
- Use wire connectors () to wire neutrals through panel.
- Must be maintained output device with mechanical contacts (120V, 10A).
- In multiple panel systems, security inputs must be wired to each panel.

Wiring Diagram — 10-Circuit LuMaster System



NOTES:

- Total Class-2 wire length for each LUMI-5 interface panel must not be greater than 500 feet.
- Multiple circuits can be fed from a single breaker if the total current of those circuits does not exceed the breaker's rating.
- In multiple panel systems, panel Hot (terminal P Hot) in all LUMI-5 panels must be on the same phase.
- In multiple panel systems, security inputs must be wired to each panel.
- Use wire connectors () to wire neutrals through panel.
- Must be maintained output device with mechanical contacts (120V, 10A).
- Each LuMaster circuit can be wired as a 3-way switch.

Interface Panel

The interface panel operates as **five remote actuated 3-way switches**. It is located between the distribution panel and the dimmers, and/or switches.

The system is designed to run on:
 1) 120VAC single-phase supply.
 2) 120/240VAC split-phase supply.
 3) 120/208VAC 3-phase supply.

The LUMI-5 interface panel can control incandescent, fluorescent, HID, electronic low-voltage and magnetic low-voltage type lighting loads. **The maximum load per circuit is determined by the Luméa dimmers and switches installed in the LuMaster system as follows:**

Luméa Control	Maximum Circuit Load
LU-3PS, LU-4PS	1000W incandescent or electronic low-voltage 1000VA fluorescent, HID or magnetic low-voltage
LU-103P	1000W incandescent
LU-603P	600W incandescent
LULV-603P	600VA magnetic low-voltage
LUELV-303P	300W electronic low-voltage
No control installed	1000W incandescent or electronic low-voltage 1000VA fluorescent, HID or magnetic low-voltage

Panel Hot (terminal P Hot) and Panel Neutral (terminal P Neu) must always be connected to 120V, 60Hz to provide power to the LUMI-5 panel.

In multiple panel systems, Panel Hot (terminal P Hot) in all LUMI-5 panels must be on the same phase.

Multiple circuits of an interface panel can be fed from a single breaker, provided the total load connected does not exceed the current rating of the breaker (see wiring diagrams, pages 4 & 5).

Minimum load on each circuit is 10W.

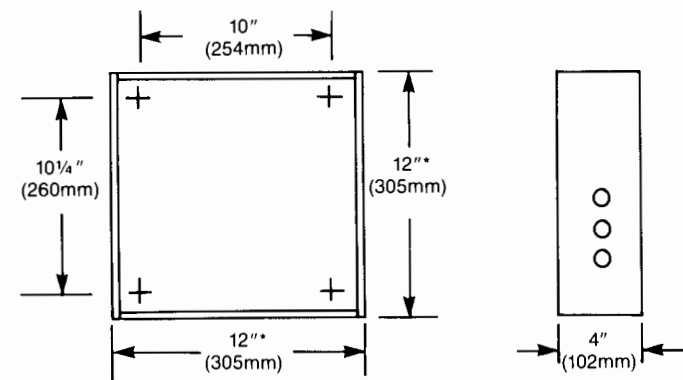


Figure A. LUMI-5 Mounting and Dimensions

Select a convenient mounting location for the interface panel, such as a basement, electrical closet, etc. The interface panel can be surface or recess mounted. Panel dimensions are given in Figure A. Observe all local and national electrical codes when installing panel.

Mark and drill mounting holes according to mounting dimensions shown in Figure A. Securely fasten the panel on the wall. Panel weight = 12 lbs. 12 oz.

Timeclocks (continued) . . .

Use one of the following recommended timeclocks:

	Model	Description
Intermatic	ET100C	Solid-state, 24 hour, 8 set points
Paragon	EC7000	Solid-state, 7-day, 16 set points
Tork	E101	Solid-state, 24 hour, 14 set points
Paragon	EC71ST-N3/120	Solid-state, 24 hour, astronomical, sunrise/sunset, 2 events/day
Tork	DZS100	Solid-state, 365 day astronomical, sunrise/sunset, 48 events/week

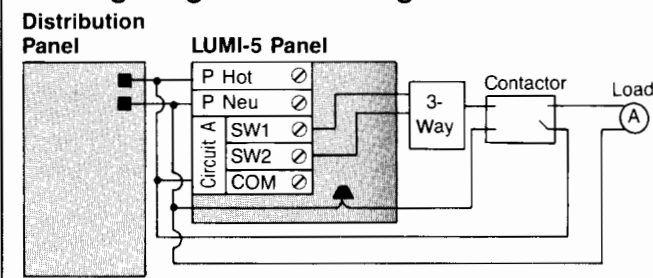
Security Systems . . .

See pages 4 and 5 for wiring diagrams.

A security system closure to the LuMaster system turns all the lights on similar to the "all on" command. Both local and master controls remain fully functional after security system inputs.

Large Load Switching . . .

Wiring diagram for a single LuMaster circuit.



For mastering **switched** loads greater than 1000W with LuMaster, use a contactor with a 120V coil and contacts rated appropriately to the load. Mount in NEMA type 1 enclosure, or as local electrical code requires. **Do not use for dimmed circuits.**

Operation Check List . . .

1. Turn on main power to all circuits.
2. On the master control, press each of the first five buttons to toggle the lighting circuits. The status indicator next to each button will indicate whether the lights are on or off.
3. On the master control model LUMC-5M only, press the sixth button 'ALL ON' to turn on all the lights simultaneously. All status indicators should turn on. Then press the dark gray seventh button 'ALL OFF' to turn all the lights off. All the status indicators should dim.
4. Repeat steps 2 through 3 for each master control installed.
5. Verify that each dimmer and switch connected to the system functions normally.

If any problems arise, refer to the Trouble-Shooting Guide.

Trouble-Shooting Guide

Problem	Probable Cause	Solution
Timeclock doesn't operate LuMaster, or controls wrong circuits.	Wiring error. Timeclock set switches in wrong position. Wrong type of timeclock.	<ul style="list-style-type: none"> • Check page 6 for recommended wiring diagram. Power must feed through timeclock. • Check page 6 for instructions on setting switches. • See list of recommended timeclocks on page 7.

(Trouble-Shooting Guide continued on pg. 8)

Trouble-Shooting Guide (cont.)

Problem	Probable Cause	Solution
No lights Breaker is on	Wiring error.	<ul style="list-style-type: none"> • Check wiring to switches and/or dimmers. • Check wiring to high-voltage (Class-1) terminal block in interface panel. • Check that terminals P Hot and P Neu are connected.
Breaker tripped IMPORTANT: Do not reset breaker until wiring is thoroughly checked	Wiring error. Breaker overloaded, load current greater than breaker rating.	<ul style="list-style-type: none"> • Check for hot to neutral or hot to ground short in fixtures, interface panel, switches, and/or dimmers. • Reduce number of circuits on breaker to ensure that total load current is lower than breaker rating. • Reduce circuit loads to ensure that total load current is lower than breaker rating.
Master control status indicator(s) stay on	Wiring error in switch or dimmer. No load connected to circuit or incandescent lamp blown. Breaker(s) off. 3-way and/or 4-way switches in circuit(s) are not in fully on or off position.	<ul style="list-style-type: none"> • Check switch or dimmer wiring. • Install or replace lamp(s). Status indicators will stay on when no load is connected to circuit. • Check all breakers wired to system. • Ensure that all switches in circuit(s) are in fully on or off position.
Nothing happens when master control buttons are pressed	Breaker(s) off. Low-voltage (Class-2) wiring error. High-voltage (Class-1) wiring error.	<ul style="list-style-type: none"> • Check all breakers wired to system. • Check wiring between interface panel and master control(s). • Check that terminals P Hot and P Neu are connected.
Buttons on master control(s) not assigned to desired circuits	Low-voltage (Class-2) wiring to each master control incorrect.	<ul style="list-style-type: none"> • At each control, rewire terminals A thru E for proper button/circuit assignment. Note: Terminals A thru E correspond to the first five controller buttons, respectively.
Status indicator flickers or blinks randomly	Loose wiring connection. Insufficient load connected to circuit.	<ul style="list-style-type: none"> • Check high-voltage wiring at interface panel, dimmers, and/or switches. • Check low-voltage wiring at interface panel and master control(s). • Ensure that load is above 10W minimum.
'ALL ON' and 'ALL OFF' buttons do not function properly	Panel Hot (terminal P Hot) in all interface panels is not connected to the same phase Hot. Low-voltage (Class-2) wiring error.	<ul style="list-style-type: none"> • Rewire so that all interface panels have P Hot on same phase. • Check wiring between interface panel and master control(s).

Warranty

Lutron warrants each new unit to be free from defects in material and workmanship, and to perform under normal use and service.

This warranty shall run only for a period of one year from the date of purchase and Lutron's obligations under this warranty are limited to remedying any defect or replacing any defective part and shall be effective only if the defective unit is shipped to Lutron postage prepaid within 12 months after purchase.

Damage due to abuse, misuse, inadequate wiring or insulation is not covered by this warranty.

In no event shall Lutron or any other seller be liable for any other loss or damage including consequential or special damages that may arise through the use by a purchaser or others of this device and the purchaser assumes and will hold harmless Lutron in respect of all such loss.

Worldwide Technical and Sales Assistance

For help with applications, systems layout or installation, call the toll-free **Lutron Hotline: (800) 523-9466 (U.S.A.)**

(215) 282-3800 Outside U.S.A.

FAX (215) 282-3090

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Made and printed in U.S.A. 4/92 P/N 030-295 Rev. B

LuMaster™

System Installation Instructions Please Leave for Occupant

Interface Panel LUMI-5

Table of Contents

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Dimmers and Switches	3		
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10-Circuit LuMaster System	5		

Read all instructions before beginning installation

Warnings

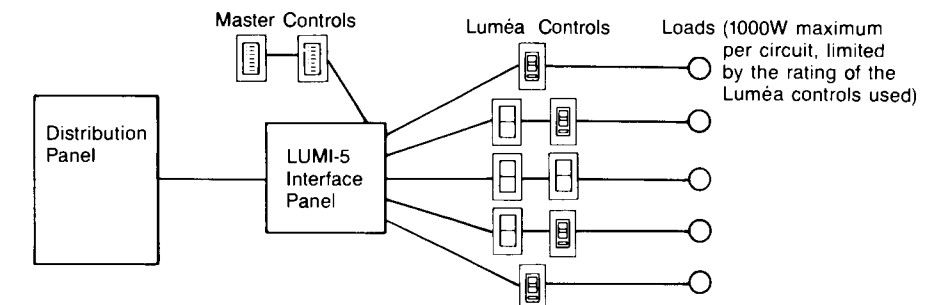
Only a qualified electrician should wire this system, be sure power is off at the circuit breakers, or remove fuses before wiring.

DO NOT WIRE HOT.

Wire in accordance with all national and local electrical codes. Improper wiring can result in personal injury or damage to the control or other equipment. Damage will not be covered by product warranty.

Description

The LuMaster system consists of master control(s), remote mounted interface panel(s) and Luméa 3-way dimmer(s) and/or 3-way and/or 4-way switch(es). **Each interface panel operates as five remote actuated 3-way switches.** A maximum of four interface panels can be tied together to provide control of 20 lighting circuits. The LuMaster system can accommodate up to 5 master control locations.



System Components

This instruction sheet provides a LuMaster system overview and LUMI-5 interface panel installation instructions. See component instruction sheets for specific installation instructions.

Model No.	Description
LUMI-5	Interface panel
LUMC-5M	5-button master control component with 'ALL ON' and 'ALL OFF' function*
LUMC-5A	5-button master control component*
LU-3PS, LU-4PS	Luméa 3-way and 4-way switch controls*
LU-603P, LU-103P	Luméa 3-way dimmer controls*
LULV-603P, LUELV-303P	Luméa 3-way low-voltage dimmer controls*

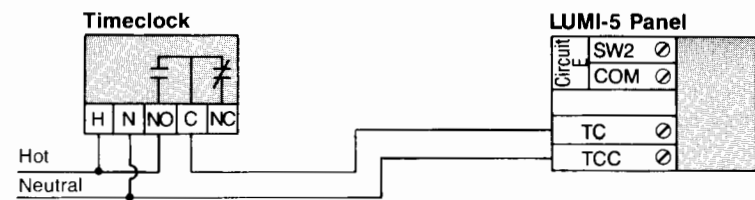
*Wallplate kits sold separately.

This product is covered by one or more of the following U.S. patents: RE 33,504; 4,803,380; 4,835,343; 4,889,999; 4,939,383 and corresponding foreign patents. U.S. and foreign patents pending. Lutron, Luméa and the Sunburst logo are registered trademarks. LuMaster is a trademark of Lutron Electronics Co., Inc. © 1992 Lutron Electronics Co., Inc.

Connecting LuMaster to Other Manufacturer's Equipment

Timeclocks . . .

Wiring diagram for a 5-circuit system*



Wiring diagrams for a 10-circuit system*

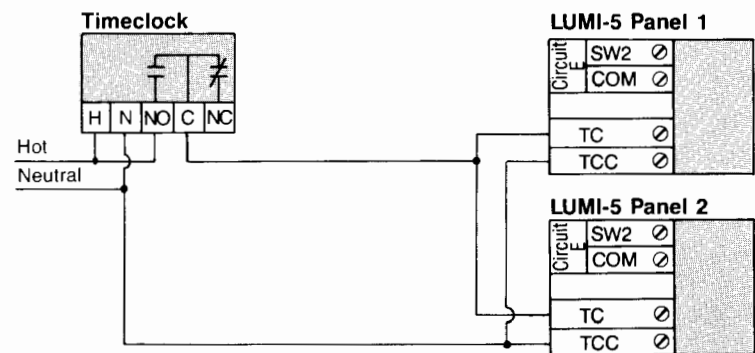


Figure I. One timeclock for multiple panels

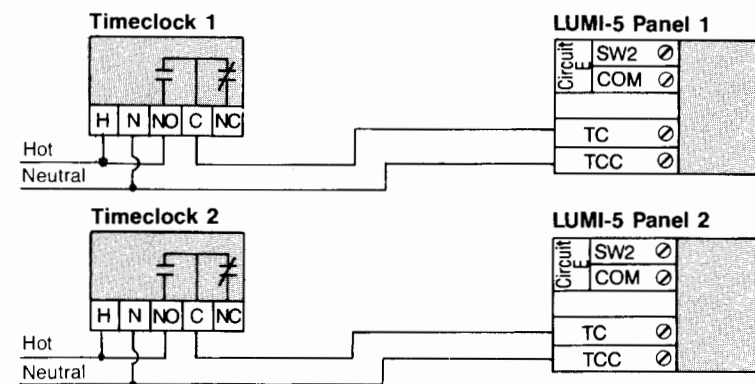
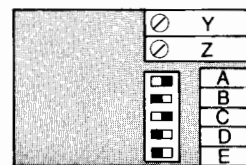


Figure J. Different timeclocks for each panel

*Total Class-2 wire length connecting LUMI-5 panels must not be greater than 500 feet.

Which circuits are timeclock controlled?

To set which circuits are controlled by the timeclock, first find the timeclock set switches (small box next to the timeclock input terminals). For each circuit to be controlled by the timeclock, move the corresponding dip switch in this box to the **on** position (see Figure K). The circuits with dip switches in the **off** position will not be effected by the timeclock inputs.



Timeclock set switches positioned to have circuits A and C controlled by the timeclock input.

Figure K.

A circuit that is controlled by timeclock input will turn on when the timeclock turns on and off when the timeclock turns off. Both local and master controls remain fully functional after timeclock commands.

Master Controls

The master control component, model LUMC-5M, (Figure B) controls five lighting circuits in the LuMaster system (Figure D). Each of the top five buttons is assigned to control one circuit. The LUMC-5A (Figure C) can be used in conjunction with the LUMC-5M to provide a 10-circuit (Figure E), a 15-circuit (Figure F) or a 20-circuit (Figure G) LuMaster system.

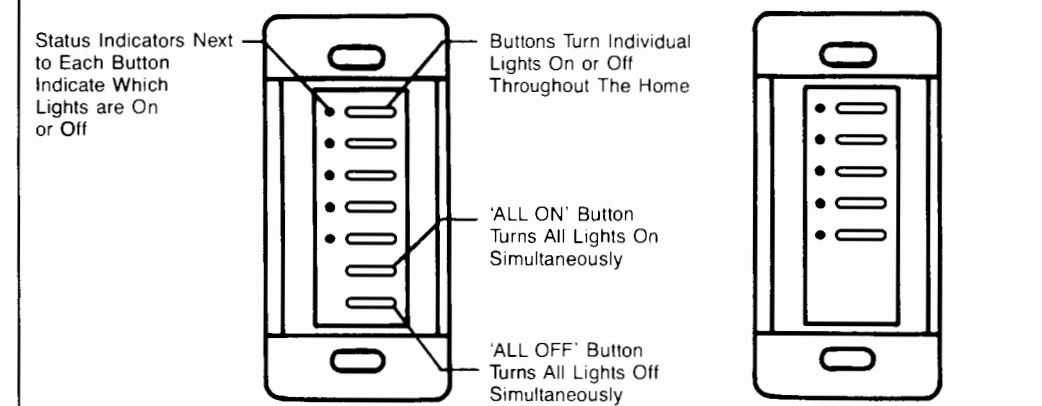


Figure B. LUMC-5M

Figure C. LUMC-5A

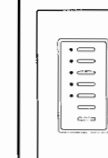


Figure D. 5-button control consists of one LUMC-5M and one LUMK-1 wallplate kit

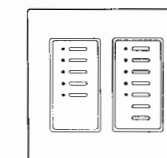


Figure E. 10-button control consists of one LUMC-5M, one LUMC-5A, and one LUMK-2 wallplate kit

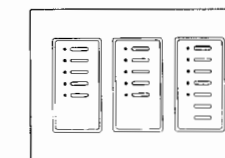


Figure F. 15-button control consists of one LUMC-5M, two LUMC-5A, and one LUMK-3 wallplate kit

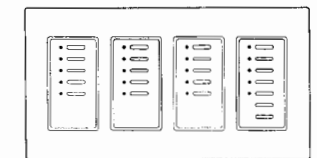


Figure G. 20-button control consists of one LUMC-5M, three LUMC-5A, and one LUMK-4 wallplate kit

Dimmers and Switches

For coordinated lighting control, the LuMaster system works with Luméa 3-way and 4-way switches and 3-way dimmers.

- Luméa dimmers: LU-603P, LU-103P, LULV-603P, LUELV-303P
- Luméa switches: LU-3PS, LU-4PS

Luméa dimmers and switches may be wired line side or load side of the LUMI-5 interface panel (Figure H). Luméa 4-way switches must be wired between the LUMI-5 panel and the 3-way dimmer or switch (Figure H).

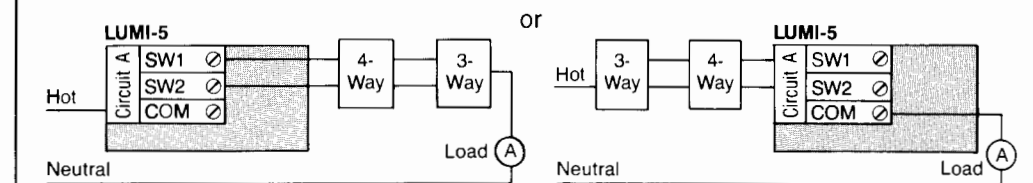


Figure H.