

OVERVIEW

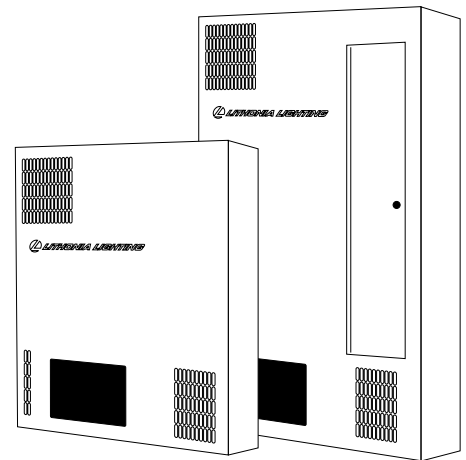
Synergy® is a unique lighting control system that integrates all aspects of lighting control into a single system platform. Synergy combines architectural dimming, low-voltage switching, lighting automation and lighting energy management functions into a single scalable package capable of meeting the requirements of virtually any lighting control application.

FEATURES

- Integrated and distributed switching and dimming
- Time scheduling with day/date/astromonic functions
- Programmable low voltage inputs
- Integral keypad and display
- Stand-alone panel operation
- Optional building-wide networked operation
- BACnet® native for interoperability with other building systems
- Physical layer connections via Arcnet 156KBS, Ethernet/IP, or MSTP
- Available Windows™ 98, 2000, NT, XP and Vista configuration, control and monitoring software
- UL, C-UL listed; CEC certified



SY Lighting Control System



Warranty

3-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

ORDERING INFORMATION

Example: SYELB 24LB1 12DB1 MLS NBAR DMX

Series		Output quantity/type	
SYES	Small enclosure, 2 modules max..	_DB1	Qty. 120V 2KW dimmers with six 20A circuit breakers, six dimmers per module ^{1,3}
SYEM	Medium enclosure, 4 modules max	_DB2	Qty. 277V 3.5KW dimmers with four 20A circuit breakers, six dimmers per module ^{1,3}
SYEL	Large enclosure, 6 modules max.	_L	Qty single-pole 30A relays @ 120, 230 and 277 volts, and 20A @ 347 volts. Eight low voltage dry contact inputs and eight 0-10VDC dimming outputs.
SYESB	Small enclosure with breaker door, 2 modules max.	_LB1	Qty single-pole 30A relays @ 120, 230 and 277 volts, and 20A @ 347 volts. Six 120V, 20A circuit breakers. Eight low voltage dry contact inputs and eight 0-10VDC dimming outputs. ^{1,3}
SYEMB	Medium enclosure with breaker door, 4 modules max.	_LB2	Qty single-pole 30A relays @ 120, 230 and 277 volts, and 20A @ 347 volts. Four 277V, 20A circuit breakers. Eight low voltage dry contact inputs and eight 0-10VDC dimming outputs. ^{1,3}
SYELB	Large enclosure with breaker door, 6 modules max.	_LB3	Qty single-pole 30A relays @ 120, 230 and 277 volts, and 20A @ 347 volts. Six 120V, 15A circuit breakers. Eight low voltage dry contact inputs and eight 0-10VDC dimming outputs. ^{1,3}
		_LB4	Qty single-pole 30A relays @ 120, 230 and 277 volts, and 20A @ 347 volts. Four 277V, 15A circuits breakers. Eight low voltage dry contact inputs and eight 0-10VDC dimming outputs. ^{1,3}
		_LB6	Qty single-pole 30A relays @ 120, 230 and 277 volts, and 20A @ 347 volts. Four 347V, 20A circuits breakers. Eight low voltage dry contact inputs and eight 0-10VDC dimming outputs. ^{1,3}
		_LB7	Qty single-pole 30A relays @ 120, 230 and 277 volts, and 20A @ 347 volts. Four 347V, 15A circuits breakers. Eight low voltage dry contact inputs and eight 0-10VDC dimming outputs. ^{1,3}
		DSO	Add to relay module to remove low voltage dry contact inputs and 0-10VDC dimming outputs.
		_SSBC	Intelligent Ballast Control module compatible with SIMPLY5 and DALI dimming ballasts. With power supply and controller for 3 ballast loops ⁶
		_CB1	Qty. 120V constant breakers, six breakers per module ^{1,3}
		_CB2	Qty. 277V constant breakers, four breakers per module ^{1,3}

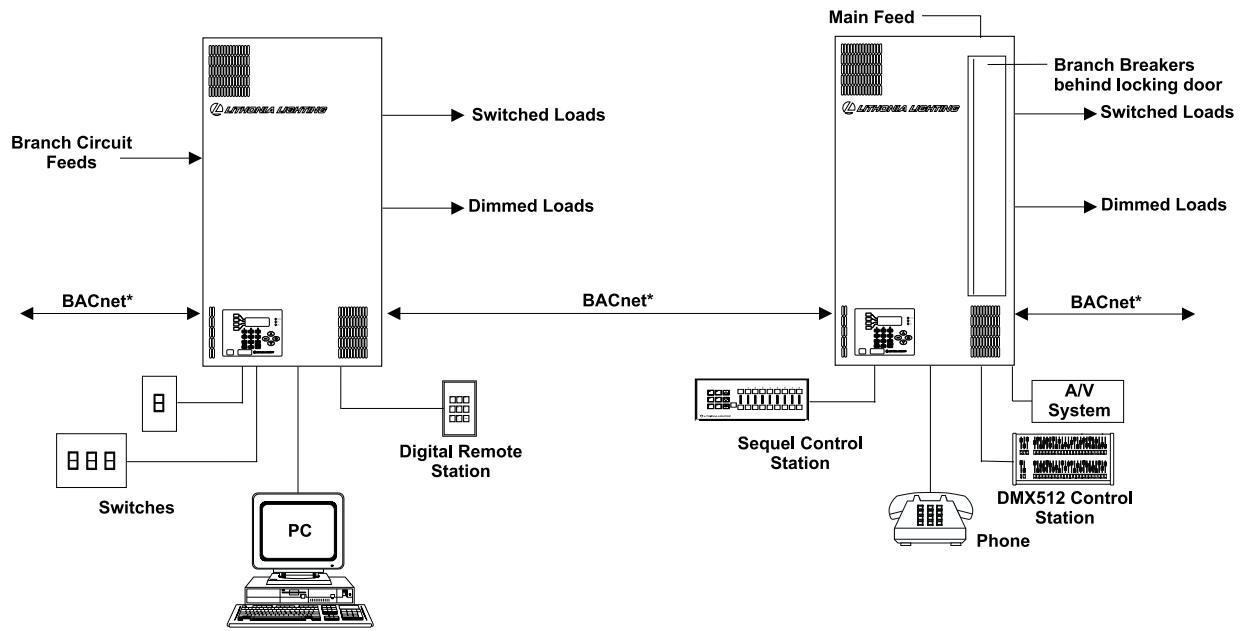
Controller Type	Main feed option	Options
MLS Stand-alone controller	(blank) No main lugs, no main breaker	DMX Dimming interface required for connection to DMX512 control
MLX Network controller	ML Main lugs for 120V, 240V or 277V operation; requires 2 module positions; requires power modules with circuit breakers ^{2,4}	DMXOUT Dimming output interface, Outputs 1st 255 slots of DMX512 data to DMX512 devices
SCP Secondary panel, less controller ⁵	MB_ Main breaker, 3 pole, specify # of amps, 100A maximum ²	ISA Three 16-bit ISA expansion slots
	NBAR 42 circuit neutral bar ²	MODEM Modem for remote dial-up access
		PHONE Modem for remote dial-up access and voice-prompted override (requires ISA option)
		LEGACY Allows control of legacy MiniPac, Sequel, and MaxStar dimmer cabinets

Panel ships as components consisting of enclosure, power modules, and controller.

Notes:

- Breaker modules (_DB1, _DB2, _LB1, _LB2, _LB3, _LB4, _LB6, _LB7, _CB1, _CB2 types in Output field) require:
 - Enclosure with breaker door (SYESB, SYEMB, or SYELB)
 - A neutral bar (NBAR or ML option)
- NBAR takes up a single module position and MB_ takes up a single module position. When ordered together, the combination only takes a single module position.
- Breaker modules of different voltages cannot be combined in a single enclosure:
 - Any modules with xxB1 and xxB3 can be combined (both are 120V)
 - Any modules with xxB2 and xxB4 can be combined (both are 277V)
 - Any modules with xxB6 and xxB7 can be combined (both are 347V)
- The breaker modules are equipped with integral main lugs, enabling field configuration for 3 phase, 4 wire or 2 phase, 3 wire main feeds. The "ML" option is only required when multiple panels need to be tap fed from a single main feed circuit.
- A secondary panel must be mounted next to the master panel if both are being controlled by the master controller
- _SSBC outputs must be ordered with a MLS or MLX controller

SYSTEM ARCHITECTURE

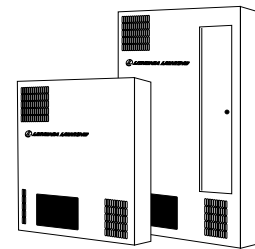


* RS-485 Arcnet 156KBS, Ethernet/IP, MSTP. Available with MLX only. Additional equipment may be needed.

SYSTEM CONTROLLER OPTIONS

System Functions	MLS Controller	MLX Controller
Relay Capacity (No Breakers)	48 96 Total w/ Secondary Cabinet	48 96 Total w/ Secondary Cabinet
Relay Capacity (With Breakers)	40 80 Total w/ Secondary Cabinet	40 80 Total w/ Secondary Cabinet
Dimmer Capacity (No Breakers)	30 60 Total w/ Secondary Cabinet	30 60 Total w/ Secondary Cabinet
Dali Capacity (Loops)	18 36 Total w/ Secondary Cabinet	18 36 Total w/ Secondary Cabinet
DMX512 Input	DMX Channel-to-Output Configured via controller software	DMX Channel-to-Output Configured via controller software
DMX512 Output	DMX Output Configured via controller software	DMX Output Configured via controller software
Scheduling	100 schedules/unlimited events	100 schedules/unlimited events
Analog Input	YES	YES
PC Support	YES	YES
Script Logic	YES	YES
Logging	YES	YES
Priority Logic	YES	YES
Network	NO	YES
Telephone Override	YES, optional	YES, optional
BACnet®	NO	YES
RS232	YES	YES
Modem	YES, optional	YES, optional
Sequel Stations	YES	YES
Legacy Dimmers	YES, optional	YES, optional
Digital Remotes	YES	YES

SYSTEM COMPONENTS



Synergy Enclosures (SYE)

(Reference spec sheet SYE)

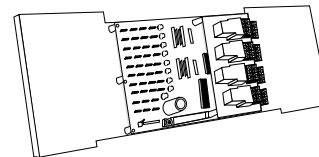
Dimensions:

Shown in inches (millimeters)

Small (SYES, SYESB): 21(533) H x 20(508) W x 6(152) D

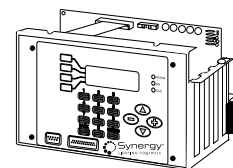
Medium (SYEM, SYEMB): 34.5(876) H x 20(508) W x 6(152) D

Large (SYEL, SYELB): 48(1,219) H x 20(508) W x 6(152) D



Synergy Power Modules (SYPM and SYPMB Series)

(Reference spec sheets SYPM 8L, SYPMB 6D, SYPMB CB, and SYPM 55BC)



Synergy System Controller (SYSC)

(Reference spec sheets SYSC MLS and SYSC MLX)