

AC Loadcenter System with 8-step Sequencer

Description:

Lowell's ACLC-series AC loadcenter system with 8-step sequencer provides one switch remote control of circuit breakers for sequentially timed AC power distribution to sound system components. System includes 1- or 3-phase loadcenter bundled with Lowell's universal sequence controller Model ACSC-248ASM. The ACLC-series interfaces to life safety alarm systems, is UL Listed and engineered to provide easy ordering and simple installation. Packaged systems include a Cutler Hammer loadcenter (single-phase 100A or 200A; or 3-phase 125A or 225A main breaker) and 8-step sequence controller Model ACSC-248ASM. For installation convenience the sequencer can be mounted to the top, bottom or side of the loadcenter. Sequence delay for each circuit can be set at 0.5 to 10 seconds using a flat blade screwdriver.

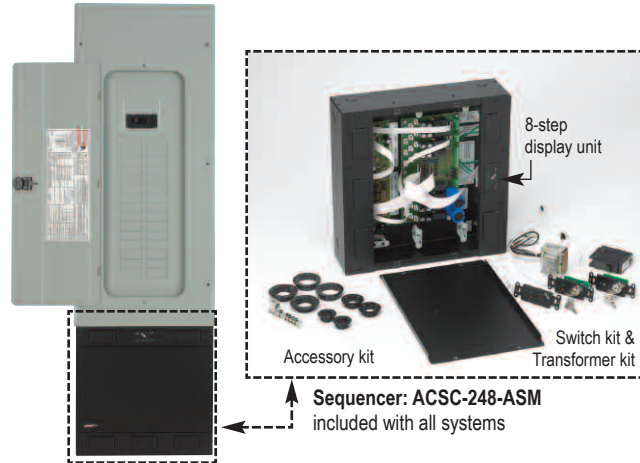
The sequence controller provides time-delayed activation/deactivation of connected equipment with two options - full system or alternate sequence mode. Full system controls up to 24 loadcenter circuits with 8-steps (3-circuits per step). Alternate Sequence mode bypasses selected circuits allowing for a subset of equipment to be sequentially turned on/off. Alternate sequence mode is ideal for rehearsals, small events or energy saving measures. The sequence controller includes an installed decora-style 8-step display unit for visual identification of loadcenter operation and status. Additionally, it includes an accessory kit with plastic bushings, cable ties and ground bar; a transformer kit with 10A circuit breaker, transformer and transformer secondary leads; and a switch kit with two switches for full-system operation and one for alternate sequence mode operation. All switches are decora-style and may be installed on the sequencer or in a remote location. *Note: additional switches (up to 10 total) may be added to provide both local and remote operation of the system.* The sequencer housing is steel painted black with knockouts and a cover plate.

Individual 20A and 30A breakers (1-pole or 2-pole) to fill the loadcenter are sold separately. Each breaker includes a control cable that plugs into the sequencer allowing the operator to easily set and change sequence operation.

Alarm system interface. If required by local building code, facility usage, or the Fire Marshal; the system switches can be overridden and the system controlled by contact closures provided by the fire alarm panel or other similarly installed device. Maintained contact functions include Lock Off, Lock On, Switch Lock.

Note: To configure a loadcenter with more than one sequencer or to retrofit an existing Cutler Hammer or compatible loadcenter; sequencer Model ACSC-248-ASM (with bundled accessory, switch and transformer kits) may be ordered separately. Additionally, Lowell's multi-circuit 20A surge suppressor Series ACSP20 and ACSP20-GTF with ground transient filter may be used in conjunction with the sequenced loadcenter system to protect sensitive equipment from surges and ground transients. Visit the www.lowellmfg.com for more information on these and other Lowell Power products.

ACLC-series loadcenter with 8-step sequencer



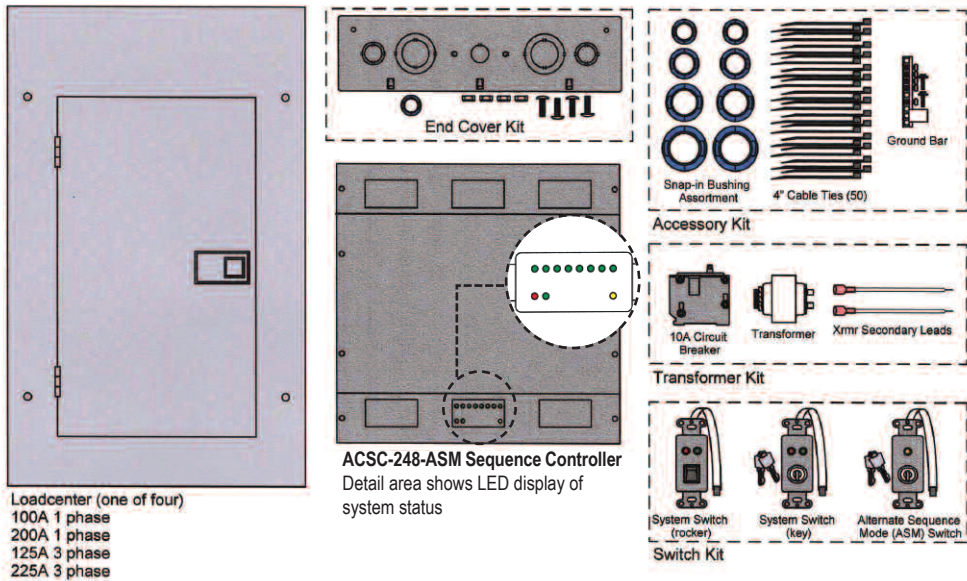
Features:

- One switch remote control of circuit breakers provides time sequenced AC power to system components.
- Systems include a loadcenter and the 8-step sequencer bundled with an accessory kit, switch kit, transformer kit, and end cover kit.
- Loadcenters are offered with single-phase (100A or 200A) or 3-phase (125A or 225A) main breaker.
- Sequencer Model ACSC-248ASM is UL508A Listed and controls up to 24 circuits with 8-steps and up to 3 circuits per step.
- Switches are Decora-style and may be installed on the sequencer or at a remote location.
- Interface for alarm systems or master control allows 'lock-on', 'lock-off' or 'switch-locked' functions.
- Breakers (order separately) include plug-in cables to set and change sequence operation.
- Made in the U.S.A.

System Model	Loadcenter (included - order breakers separately)	Sequencer (included)	Sequencer kits (included - see detail page 2)
ACLC-100-20-SC248ASM	100A main breaker 1-phase 20space 20circuit	ACSC-248ASM 24 circuit, 8-step	Accessory, Switch, Transformer, End Cover
ACLC-200-30-SC248ASM	200A main breaker 1-phase 30space 40circuit	ACSC-248ASM 24 circuit, 8-step	Accessory, Switch, Transformer, End Cover
ACLC-3P-125-30-SC248ASM	125A main breaker 3-phase 30space 42circuit	ACSC-248ASM 24 circuit, 8-step	Accessory, Switch, Transformer, End Cover
ACLC-3P-225-42-SC248ASM	225A main breaker 3-phase 42space 42circuit	ACSC-248ASM 24 circuit, 8-step	Accessory, Switch, Transformer, End Cover

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Each system includes 1 loadcenter and 1 sequencer with bundled kits:



Circuit breakers (order separately):

REMOTE CONTROLLED CIRCUIT BREAKERS

Order separately quantities required

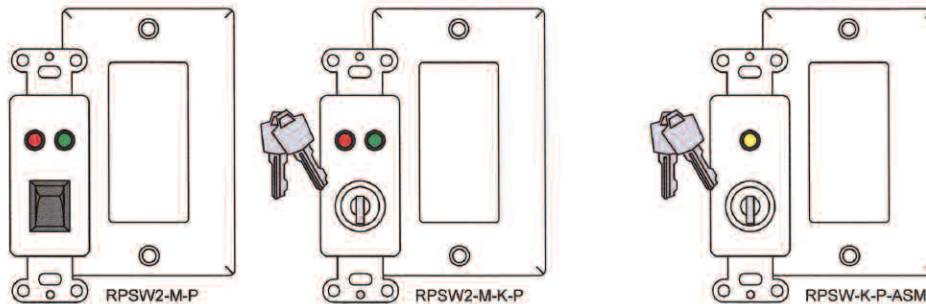
- ACRB-20-1 (20A 1 pole)
 - ACRB-20-2 (20A 2 pole)
 - ACRB-30-1 (30A 1 pole)
 - ACRB-30-2 (30A 2 pole)
- Control Cable supplied with each breaker

REGULAR CIRCUIT BREAKERS (non-controlled)

Order separately quantities required

- ACB-20-1 (20A 1 pole)
- Also available from local electrical distributor

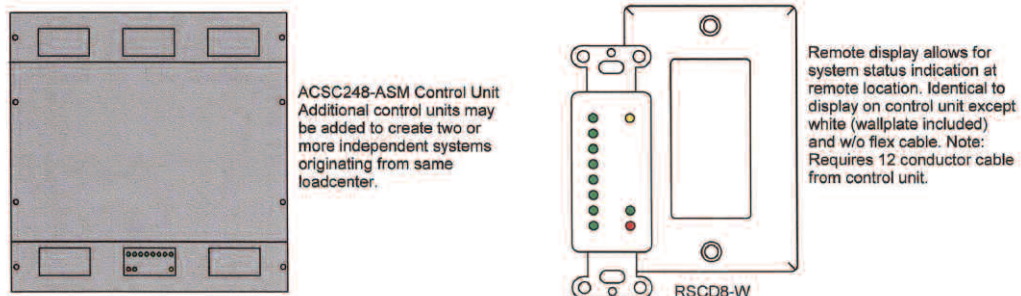
Optional Remote Switches (order separately):



System Switches: Identical to switches provided with unit except white (wallplate included) and w/o flex cable. May be utilized in remote locations, connect per hook-up diagram.

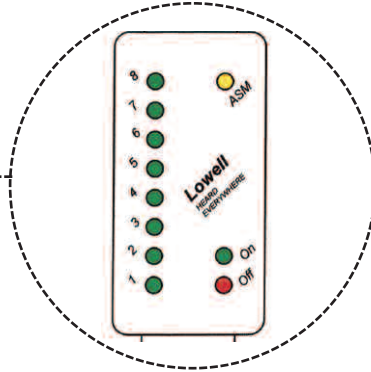
Alternate Sequence Mode (ASM) activation switch. Identical to ASM switch provided except white (wallplate included) and w/o flex cable. May be utilized in remote location INSTEAD of ASM switch provided with unit.

Optional 2nd Sequence Control Unit and Display (order separately):



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Sequencer front display function:

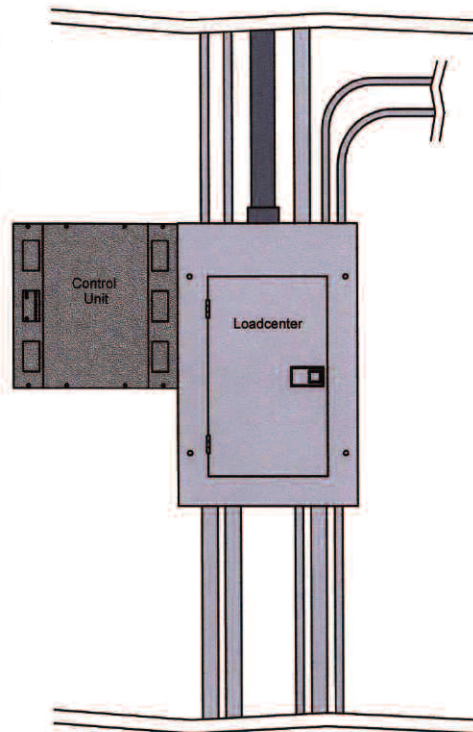


Display LED's provide visual indication of sequential loadcenter operation and status.

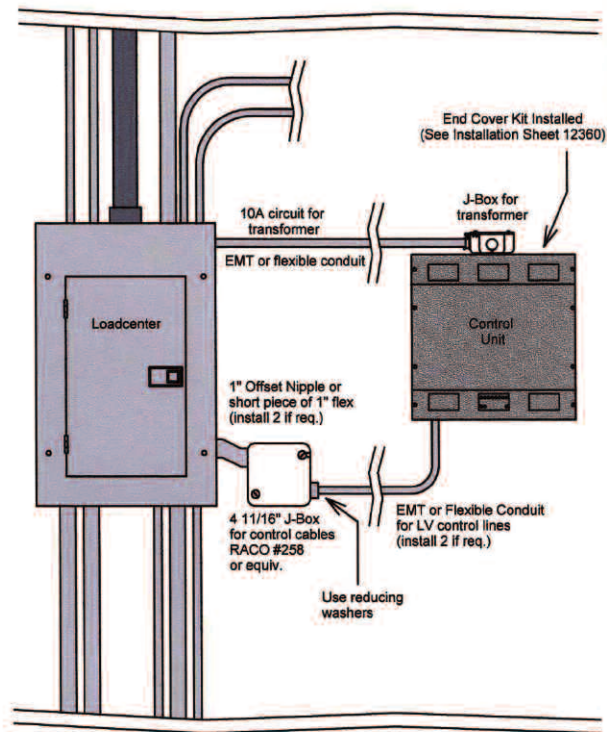
- **Green 1-8** Indicates progress of sequencer cycle up and down.
- **Green 'ON'** Flashing: Up cycle in progress
Steady: Up cycle complete, system ready for use
- **Red 'OFF'** Flashing: Down cycle in progress.
Steady: Down cycle complete, system shut down.
- **Yellow 'ASM ON'** Alternate Sequence Mode enabled, selected steps programmed at controller to be skipped.

Note: An additional display module may be ordered for remote status indication. Order Model RSCD8W with white face and white wall plate.

Typical surface installation:



Example 1
Control Unit may be installed at upper or lower left, upper or lower right, top or bottom positions (upper left shown).



Example 2
Control Unit Installed In "Remote" Location

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Specifications:

Sequencer (included with all systems):

Safety Agency Approvals:	UL Listed UL508A
Control capacity	Up to 24 circuits with 8-steps and up to 3 circuits per step.
Delay between steps:	0.5 - 10 seconds
Front LED's	Green, Red and Yellow with labeling to indicate system status
Sequencer Accessory Kit:	8 snap-in bushings, 50 4" cable ties, 1 ground bar.
Sequencer End Cover Kit:	1 snap-in bushing, 4 screws and 4 nuts
Sequencer Switch Kit	Decora-style black switches with flex cable leads include: 1 pushswitch with red & green LED, 1 keyswitch with red & green LED, 1keyswitch with yellow LED for ASM use.
Sequencer Transformer Kit	24V transformer, pair of secondary transformer leads, 10A circuit breaker
External Control Connections:	Barrier strip terminal blocks
Alarm Interface:	Lock on, lock off and switch lock functions for alarm system or master control panel applications.
Remote Switch Contacts	Single terminal block connects up to 8 momentary switches in parallel to activate sequencer from a remote location.
Chassis construction:	Steel with black powder epoxy paint finish.
Dimensions / weight:	14"Wx14.5"Hx4"D/13lbs.

Loadcenter (1 of 4 included with each system)

Cutler Hammer	100A, 1-phase, 3-wire, 120/240V AC
Cutler Hammer	200A, 1-phase, 3-wire, 120/240V AC
Cutler Hammer	125A, 3-phase, 4-wire, 120/208V AC
Cutler Hammer	225A, 3-phase, 4-wire, 120/208V AC

Loadcenter breakers with sequencer control cable (order separately)

20A, 1-pole:	ACRB-20-1
20A, 2-pole:	ACRB-20-2
30A, 1-pole:	ACRB-30-1
30A, 2-pole:	ACRB-30-2

Optional Remote Wall Switches (Decora-style white, order separately):

System pushswitch	RPSW2-MP
System keyswitch	RPSW2-MKP
ASM keyswitch	RPSW-KP-ASM
Sequence display	RSCD8W

A & E Specifications:

Loadcenter with sequence controller shall be UL Listed Lowell Model _____ (ACLC-100-20-SC248ASM, ACLC-200-30-SC248ASM, ACLC-3P-125-30-SC248ASM, ACLC-3P-225-42-SC248ASM) It shall include a Cutler Hammer loadcenter _____ (single-phase 100A, single-phase 200A, 3-phase 125A or 3-phase 225A) and Lowell's 8-step sequence controller Model ACSC248-ASM. Sequence controller shall provide time-delayed (0.5 to 10 seconds) activation/deactivation of connected equipment with two options - full system or alternate sequence mode. Full system shall control up to 24 loadcenter circuits with 8-steps (3-circuits per step). Alternate Sequence mode shall bypass selected circuits allowing for a subset of equipment to be sequentially turned on/off. The sequence controller shall include an installed decora-style 8-step display for visual indication of loadcenter operation and status. It shall also include an accessory kit with plastic bushings, cable ties and ground bar; a transformer kit with 10A circuit breaker, transformer and transformer secondary leads; and a switch kit with two switches for full-system operation and one for alternate sequence mode operation. All switches shall be decora-style for installation on the sequencer or in a remote location. The sequencer housing shall be steel painted black with knockouts and a cover plate and shall mount to the top, bottom or side of the loadcenter.

Accessories: Loadcenter circuit breakers with control cable for plug-in operation with the sequencer shall be 20A model _____ (ACRB-20-1, ACRB-20-2) or 30A model _____ (ACRB-30-1, ACRB-30-2). Optional wall switches for remote operation of system shall include Lowell Model _____.