



SC-410 SERIES

SEQUENCING RELAY MODULE INSTALLATION GUIDE

PRODUCT SPECIFICATIONS

POWER REQUIREMENTS:	Voltage	12VDC	24VDC	12VAC	24VAC	*Depending on program selection
	Active	10.0mA	16.0mA	13.0-26.0mA*	20.0mA	
	Relay On	62.0mA	47.0mA	58.0mA	44.0mA	
POLARIZED INPUT(S):	Yes, on DC control inputs					
STATUS INDICATOR:	Dual color LED (green = sequencing circuit active; red = relay energized); one per module position					
CONTACT RATINGS:	Resistive load:	5A @ 30VDC, 120VAC, 240VAC; 1/8HP @ 250VAC				
	Inductive load:	1.5A @ 24VDC, 120VAC, 240VAC				
	Power:	150W, 1200VA				
CONTACT CONSTRUCTION:	Dry form "C" (SPDT)					
ENVIRONMENTAL:	32°F to 120°F (0°C to 49°C) @ 93% RH (@ 32°C), Non-Condensing / Non-Freezing					
WIRING:	Solid or stranded: #12 to #22 AWG terminals					
"/T" VERSIONS:	3.5" wide, low profile snap track provided with mounting screws; optional TK-CL ready					
"/C" VERSIONS:	Backbox:	18ga CRS, plated with 1/2" conduit knockouts top and bottom				
	Cover Material:	MR-411, MR-421: plastic ABS 94V-0 ("/C" Grey, "/C/R" Red)				
		MR-412, MR-413, MR-422, MR-423: 18ga CRS ("/C" Grey, "/C/R" Red)				
APPROVALS:	"/T" versions: UL Recognized Component* (UL864, UOXX2, UUKL2) (UL508, NMTR2) (UL916, PAZX2) (UL2017, UEHX2), File #S3403					
	"/C" versions: UL Listed* (UL864, UOXX, UUKL) (UL508, NMTR) (UL916, PAZX) (UL2017, UEHX), File #S3403					
	*UOXX (UL864) = Control Unit Accessories, System; 2 = Component; 7 = Certified for Canada *UUKL (UL864) = Smoke Control System Equipment, System; 2 = Component *NMTR (UL508) = Miscellaneous Apparatus, System; 2 = Component *PAZX (UL916) = Energy Management Equipment, System; 2 = Component *UEHX (UL2017) = General Purpose Signaling Devices and Systems, System; 2 = Component					

SEQUENCING RELAY OPERATION BASICS

- ONE SHOT:** Yields a relay contact transfer for one second after a sixty second delay upon control voltage input, provided the control input voltage is still present after the sixty second delay.
- TEMPORAL:** Yields a relay contact transfer at an ANSI Temporal (Code 3) rate as long as the control voltage is present.
- DUTY CYCLE:** Yields a repeated transfer of relay contacts on and off (for equal intervals) as a preset interval, as long as the control voltage is present. Options include one (DC1), five (DC5) and ten (DC10) minute on/off intervals.
- MARCH TIME BEAT:** Yields a repeated transfer of relay contacts on and off (for equal intervals) at a preset beats-per-minute (BPM) frequency, as long as the control voltage is present. Options include the following:
- March Time Slow (MTS):** 30BPM (0.5Hz); relay contacts are on for 1 second, off for 1 second
 - March Time Normal (MTN):** 60BPM (1Hz); relay contacts are on for 0.5 second, off for 0.5 second
 - March Time Fast (MTF):** 120BPM (2Hz); relay contacts are on for 0.25 second, off for 0.25second
- RESET/RESTART:** Removal of control input voltage will "reset" the module. Momentary interruption of the control input voltage will "restart" the module.

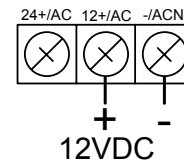
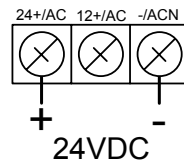
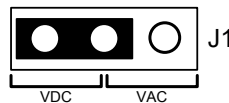


CAUTION: DE-ENERGIZE ALL POWER BEFORE INSTALLATION OR SERVICE
CAUTION: DE-ENERGIZE POWER PRIOR TO REMOVING OR INSTALLING JUMPERS
NOTE: INSTALLATION LIMITS UNDER JURISDICTION OF LOCAL AUTHORITY (NFPA STANDARDS 70, 72)

INSTALLATION STEP 1: Select control input voltage and type (Shipped with J1 in "VDC" position)

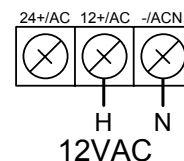
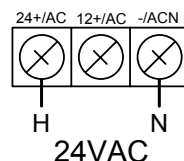
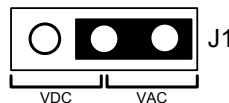
NOTE: INPUT POWER SHOULD BE UL LISTED FOR FIRE PROTECTION SIGNALING SYSTEMS WHEN USED FOR FIRE ALARM APPLICATIONS.

DC TYPE VOLTAGE (Polarized)



NOTE: DC COIL INPUT IS POLARIZED

AC TYPE VOLTAGE

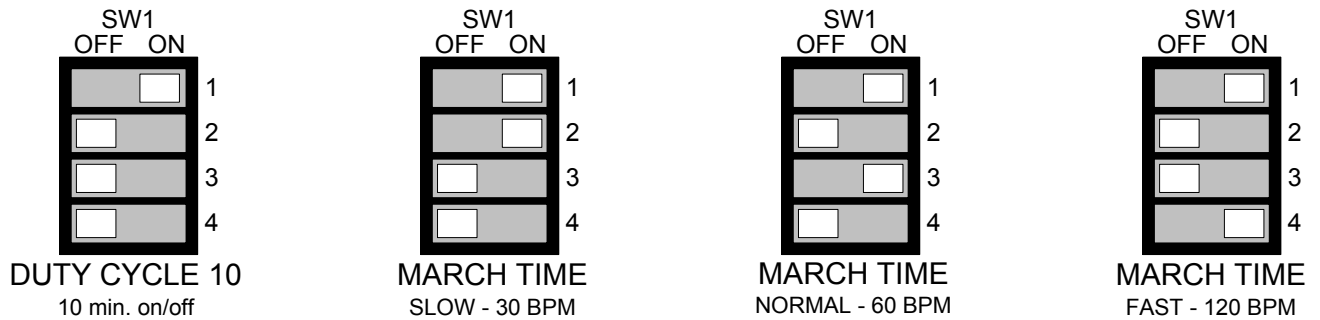
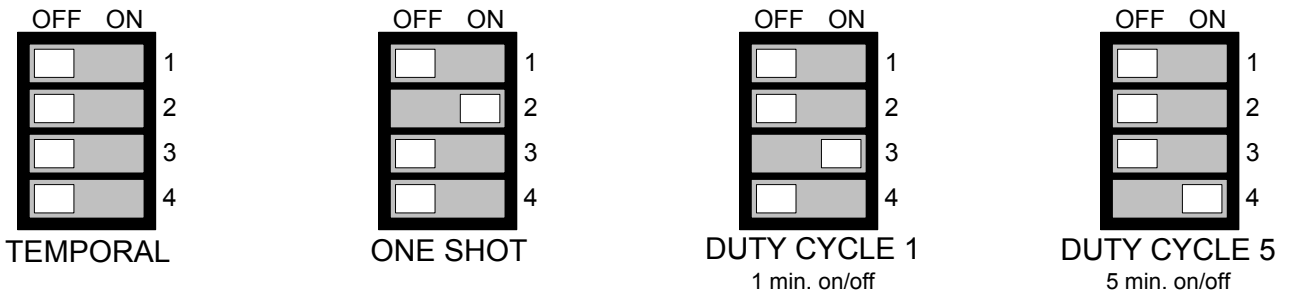


RECOGNIZED COMPONENT



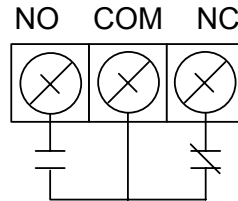
FOR ADDITIONAL APPLICATION INFORMATION AND/OR ASSISTANCE, PLEASE CONTACT OUR TECHNICAL SUPPORT HOTLINE. (888) 332-2241

INSTALLATION STEP 2: Select sequencing mode (Shipped with all switches in "OFF" position = Temporal)



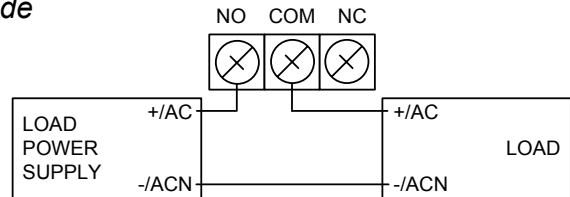
INSTALLATION STEP 3: Connect relay contacts to load

Resistive load: 5A @ 30VDC, 120VAC, 240VAC; 1/8HP @ 250VAC
 Inductive load: 1.5A @ 24VDC, 120VAC, 240VAC
 Power: 150W, 1200VA



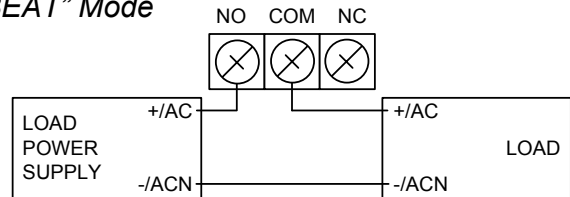
INSTALLATION EXAMPLE 1: Use in "ONE SHOT" Mode

When control voltage is applied, the status LED is illuminated GREEN for the 60 second delay period. After the delay period, the status LED illuminates RED and the relay turns ON the load for one second, provided the control voltage is still present.



INSTALLATION EXAMPLE 2: Use in "MARCH TIME BEAT" Mode

When control voltage is applied, the load is turned ON the status LED is illuminated RED at the selected pulse rate. The status LED alternately illuminates GREEN when the relay is de-energized, turning OFF the load during this part of the sequence.



INSTALLATION EXAMPLE 3: Use of two sequencing modules; one in "TEMPORAL" Mode, one in "DUTY CYCLE 1" Mode

The same control input voltage source is used in parallel for both sequencing relay modules, and must be applied constantly.

The "DUTY CYCLE" module will pulse at the rate of one minute on and one minute off. When the "DUTY" CYCLE" module is on (relay energized), the load will be switched on and off at the the "TEMPORAL" pattern pulsed rate.

