TRANSDUCERS

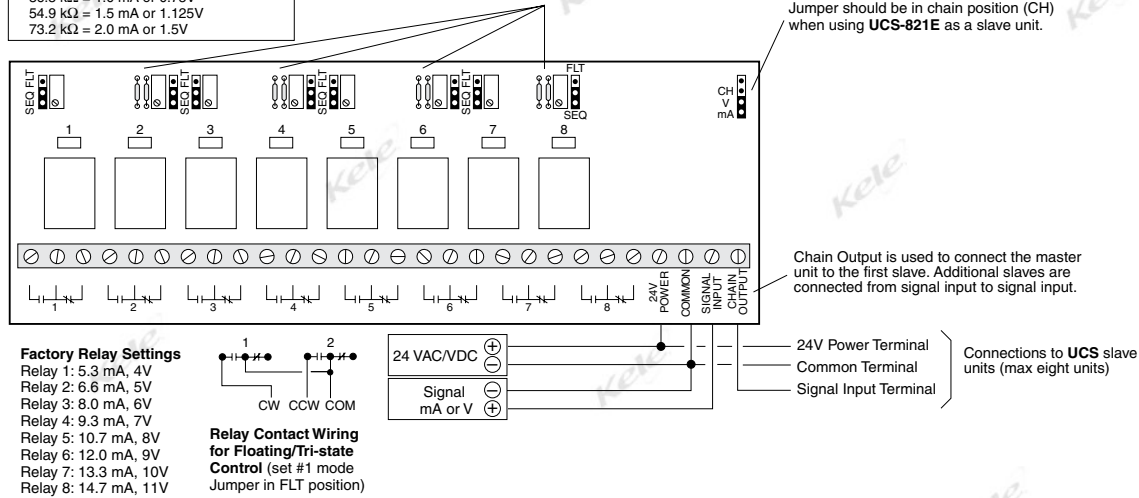## SEQUENCER CONTROL MODULE - EIGHT STAGE
UCS-821E

WIRING

Make all connections according to the diagram below or as shown on the job diagrams and in compliance with national and local codes. Make all connections with power removed. Failure to do so could result in circuit board damage. Use shielded #18-gauge cable for connections from the **UCS-821E** to the controller, shield grounded at the controller.

TABLE 1. OTHER DIFFERENTIALS
Other differential resistors can be used (customer-supplied):
9.1 kΩ = 0.25 mA or 0.1875V
36.5 kΩ = 1.0 mA or 0.75V
54.9 kΩ = 1.5 mA or 1.125V
73.2 kΩ = 2.0 mA or 1.5V

Plug-in Differential Resistors (1/4W, 1%)
18.2 kΩ = 0.5 mA or 0.375V (factory supplied)
See Table 1 for other differentials.

Jumper should be in chain position (CH) when using **UCS-821E** as a slave unit.

Chain Output is used to connect the master unit to the first slave. Additional slaves are connected from signal input to signal input.

Factory Relay Settings
Relay 1: 5.3 mA, 4V
Relay 2: 6.6 mA, 5V
Relay 3: 8.0 mA, 6V
Relay 4: 9.3 mA, 7V
Relay 5: 10.7 mA, 8V
Relay 6: 12.0 mA, 9V
Relay 7: 13.3 mA, 10V
Relay 8: 14.7 mA, 11V

Relay Contact Wiring for Floating/Tri-state Control (set #1 mode Jumper in FLT position)

24 VAC/VDC
Signal mA or V

24V Power Terminal
Common Terminal
Signal Input Terminal

Connections to **UCS** slave units (max eight units)

SETUP / CALIBRATION

1. Set jumpers to desired position as follows:
   Mode jumpers - In FLT position, the relays energize on a decrease in signal. In the SEQ position, the relays energize on an increase in signal.
   Input jumpers - Select mA position for a 0-20 mA input or V position for a 0-15 VDC input. If the UCS-821E is used as a slave unit, place the bottle plug jumper in the chain position.
2. Connect a meter in series with the SIGNAL INPUT terminal and the 0-20 mA (+) signal to read a current signal. To read a voltage input, connect across the COMMON (-) and SIGNAL INPUT(+) terminals.
3. Adjust the input signal to the desired pull-in current or voltage for Relay 1.
4. If Relay 1 LED is on, turn its setpoint adjustment clockwise (counterclockwise if Relay 1 has mode jumper in FLT position) until it de-energizes; otherwise, proceed to step 5.
5. Adjust Relay 1 pull-in point by turning its setpoint adjustment counterclockwise (clockwise if Relay 1 has mode jumper in FLT position) until the relay energizes. (The potentiometers are 25-turn potentiometers.)
6. Repeat steps 3, 4, and 5 for relays 2 through 8 using setpoint adjustments.
7. When using a 0-20 mA input, the CHAIN OUTPUT produces a 0-12 VDC signal, which is proportional to the input signal. Connections should be made between CHAIN OUTPUT and COMMON. If a voltage input is used, the CHAIN OUTPUT is directly proportional to the input.

ORDERING INFORMATION

MODEL	DESCRIPTION
UCS-821E	Sequencer control module, eight relay outputs, field calibrated
UCS-821E-C	Sequencer control module, eight relay outputs, pre-calibrated (specify settings when ordering)

	RELATED PRODUCTS
B-12	12" x 12" x 3" Aluminum Box