



HENRY ENGINEERING
503 Key Vista Drive
Sierra Madre, CA 91024
Tel: 626.355.3656
Fax: 626.355.0077

DESCRIPTION

SUPERELAY is a utility control interface that provides switching and control functions in a broadcast studio, control room, A/V system, or any installation requiring multiple circuit control. Superelay provides two types of outputs: isolated relay contact and switched AC. Six SPDT relay contacts can be used for audio, low voltage, or "dry circuit" switching. The switched AC output can control up to 300 watts of AC load. The AC output can be preset to 'flash' when ON for use with "ON THE AIR" warning lights. All control and relay output connections are via barrier strip terminals. The AC output is via a standard three-prong grounded outlet.

INSTALLATION

Inputs: Superelay can be switched ON and OFF by either a momentary or maintained ground closure, or by application of an external voltage.

For control by ground closure: A momentary closure between the ON and GND terminals will turn the unit ON. A momentary closure between OFF and GND will reset the unit OFF.

For control with a maintained closure: Install a jumper between the OFF and GND terminals. A closure between ON and GND will turn the unit; removing the closure will reset it OFF. The 'ground closure' referred to above can be a relay or switch contact, open collector, CMOS or TTL gate, opto-isolator, or any other circuit that switches to ground.

The Superelay can also be controlled by applying an external voltage to the "+ IN -" terminals. Any DC voltage between 5 and 24 volts will switch the unit ON. This input is opto-isolated. Observe polarity.

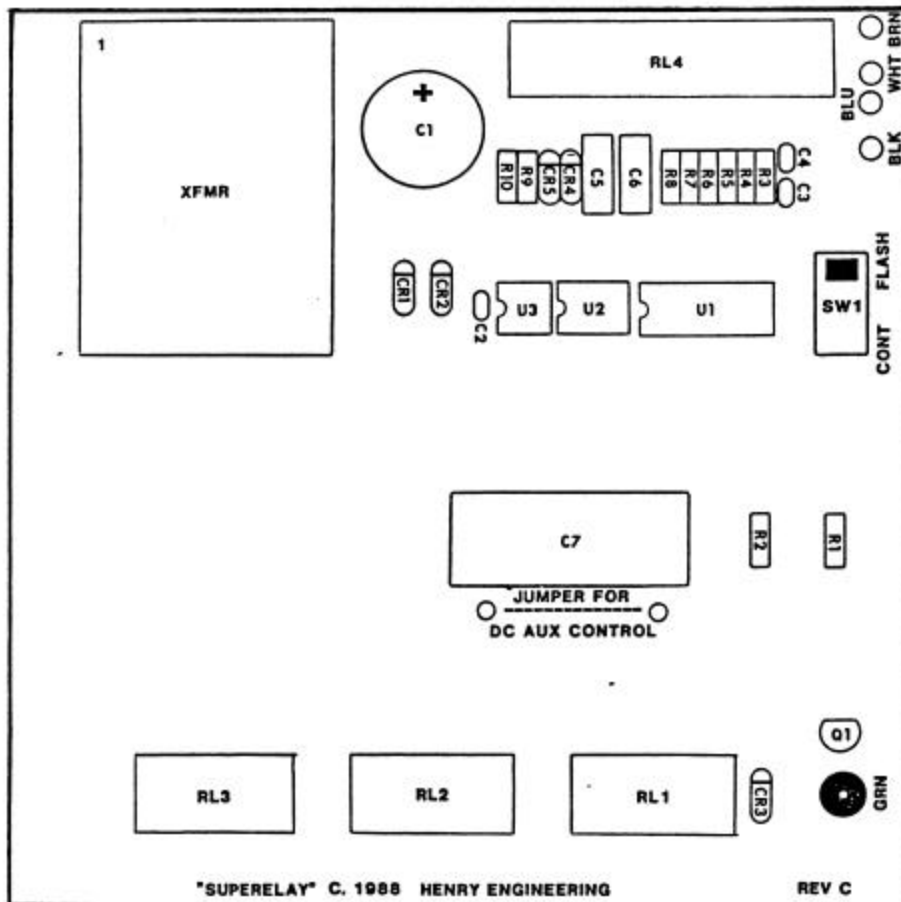
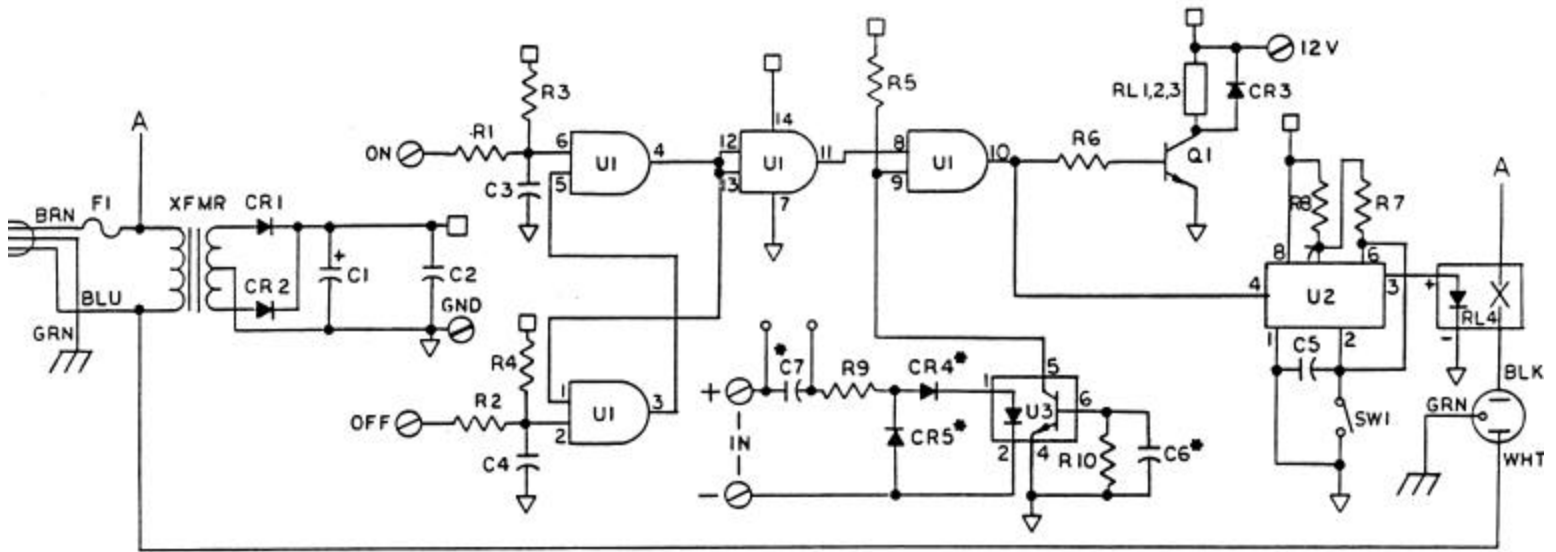
Outputs: Superelay provides six SPDT relay contacts for utility use. All six relays operate simultaneously. The "C" and "NO" terminals are active when then unit is ON; the "C" and "NC" terminals are active when the unit is OFF. These contacts switch 30W/50VA, 1A/100V maximum.

Superelay also provides a switched AC output which supplies 115 VAC when the unit is ON. An internal 'flasher' circuit is included for use with ON THE AIR warning lights. If a constant-ON mode is desired, the internal MODE switch should be moved to it's CONT position. (See component layout on other side.) The AC output load should not exceed 300 watts.

The 12V terminal provides 12 volts DC for utility use, 250 ma maximum.



"SUPERELAY" REV C C. 1988



COMPONENTS LIST

R1,R2	100 OHM, $\frac{1}{4}$ W
R3	10K
R4,R5	47K
R6	10K
R7	220K
R8	3 MEG
R9	1.5K
R10	1 MEG
C1	1000UF/25V
C2-C4	.1UF/50V
C5	1.0UF/63V
*C6	1.0UF/63V
*C7	.47UF/400V
CR1-CR3	1N4004
*CR4,CR5	1N4004
Q1	2N4401
U1	CD4011B
U2	NE555N
U3	4N25
RL1-RL3	RZ-12
RL4	70S2 SERIES
F1	3 A. FUSE

* NOT LOADED, REV. C