

SUPERELAY

UTILITY CONTROL INTERFACE

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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 contacts 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 200 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 plug-in euroblock connectors. The AC output is via a standard three-prong grounded outlet.

INSTALLATION

Connection to Control inputs and low voltage relays is via plug-in connectors. Remove about 1/8" of the insulation, insert wires into the connector, and tighten the screws. Be sure that no bare wires are exposed.

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 G terminals will turn the unit ON.

A *momentary* closure between OFF and G will reset it OFF.

For control with a maintained closure install a jumper between the OFF and G terminals.

A *maintained* closure between ON and G will turn the unit ON; removing the closure will reset it OFF.

(The ground closure can be a relay or switch contact, open collector, CMOS or TTL gate, opto-isolator, or any other circuit that switches to ground.) The TALLY-ON LED will light to indicate the ON state.

Superelay can also be controlled by applying an external voltage to the IN+ and G 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 the unit is ON; the C and NC terminals are active when the unit is OFF. These relays can switch up to 1A at 24VDC. (Do NOT use these relay outputs to switch AC line voltage!)

Superelay also provides a TALLY output that supplies AC line voltage for incandescent warning lights when the unit is ON. (Do not use florescent lights.) The TALLY output will flash if the front panel FLASH switch is set to ON. The Tally output load should not exceed 200 watts. The TALLLY LIGHTS FUSE, accessible from the rear panel, will blow if this limit is exceeded. (Replace with a 2A AGC fuse.) Note: The low voltage relays will continue to operate even if the Tally Lights fuse blows.

NOTE: It is normal for there to be a slight amount of leakage current through the AC output if no output load is plugged into the AC socket. If the AC output is measured with an AC voltmeter, it will show line voltage present even if the unit is OFF. This is normal; plugging a light bulb or other load into the AC socket will eliminate this false reading.

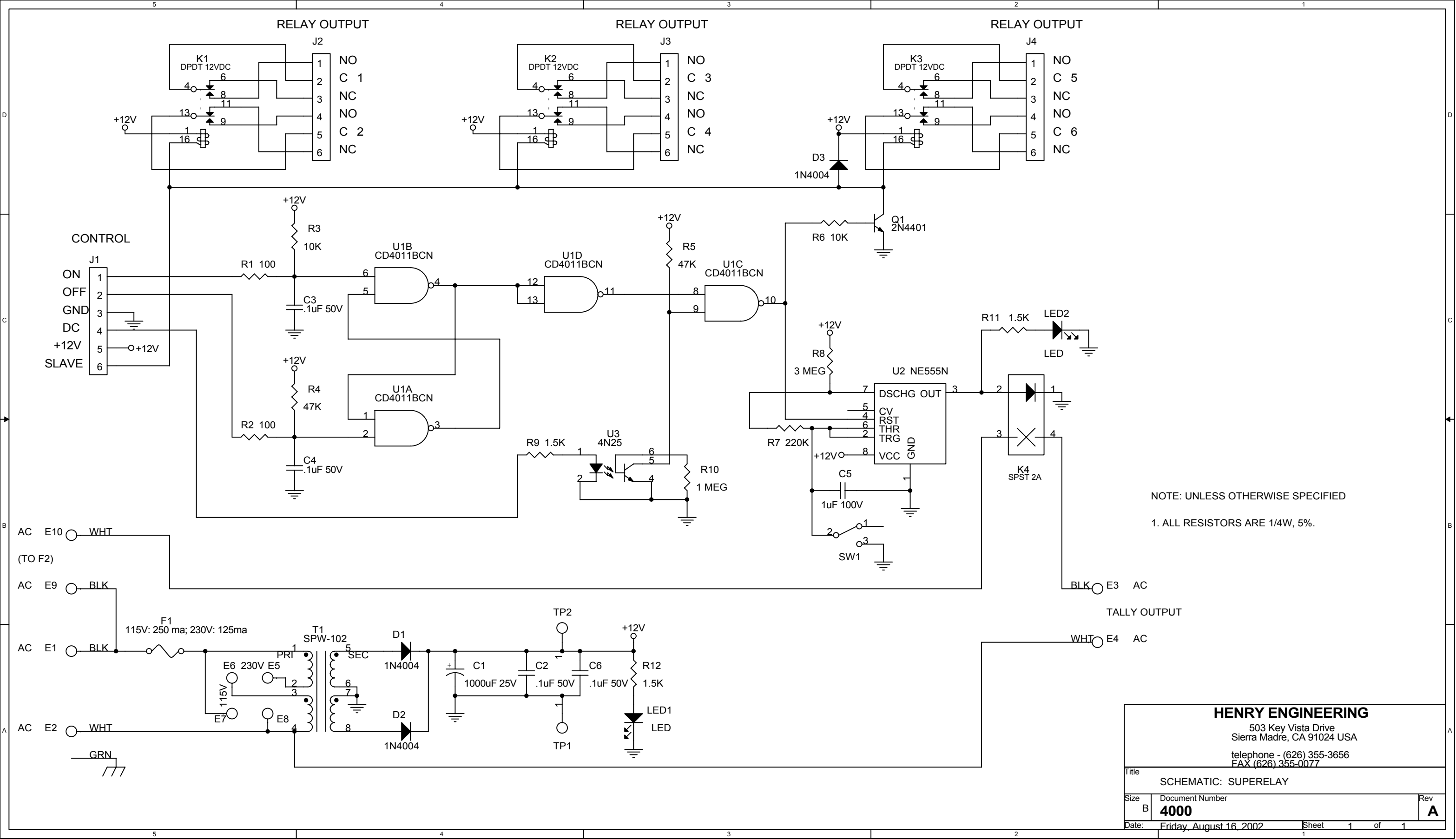
SLAVE OUTPUT

Superelay has a SLAVE output (SL) that can be used to operate another Superelay as a "slave" to the main unit. To use this output:

1. Connect the SL terminal on the main unit to the ON input of the slave unit.
2. Connect the G terminal of the main unit to the G terminal of the slave unit.
3. Connect a jumper between the OFF and G terminals of the slave unit. The slave Superelay will operate in tandem with the main unit.

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





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