



a MARK IV company

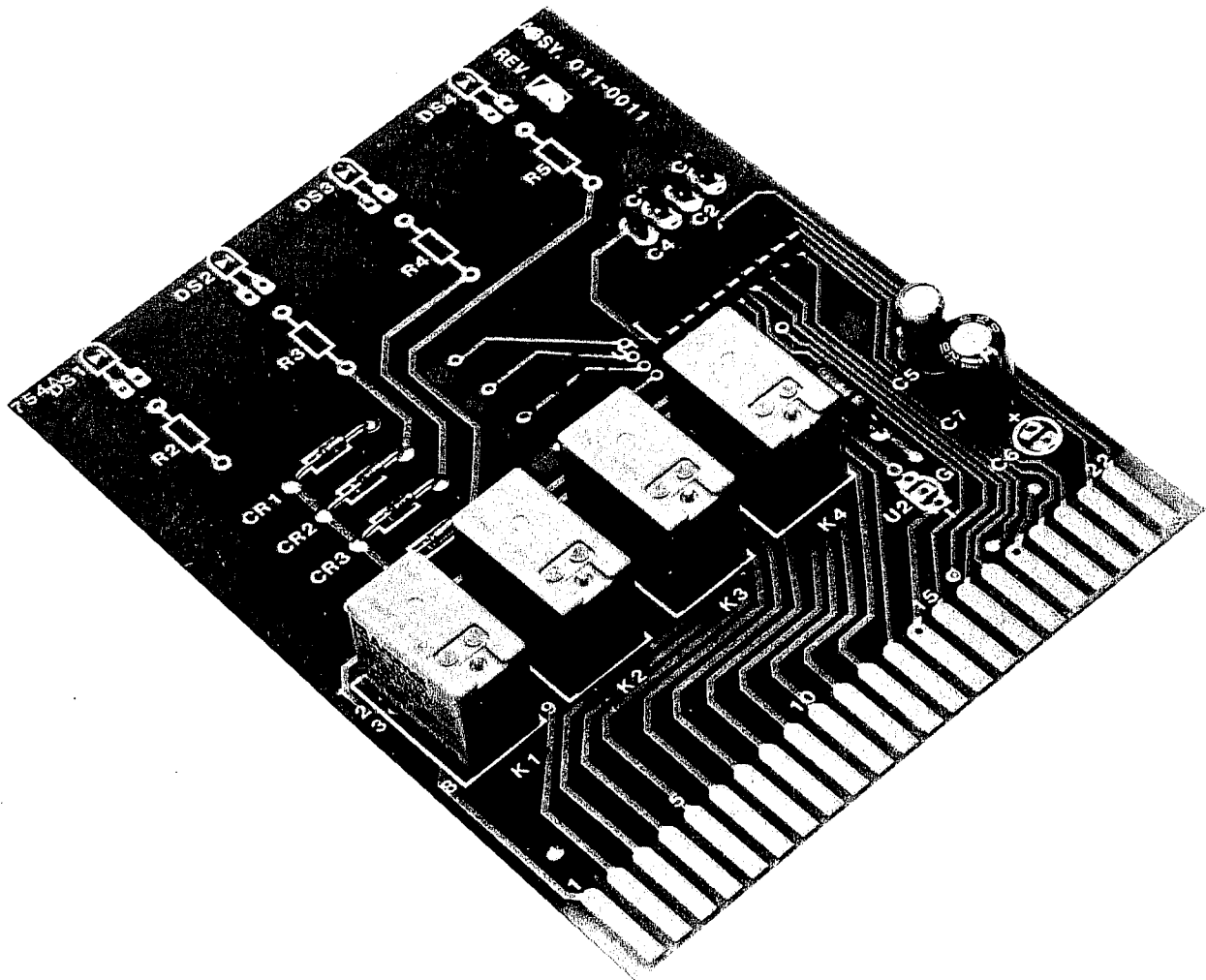
...signaling products and systems

Instruction Manual

098-0280

Model 754A

Quad Relay Card



a MARK IV company

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Model 754A Quad Relay Card

GENERAL

The Model 754A quad relay card provides four DPDT relays, four relay drivers, and four undedicated drivers. The open-collector driver outputs are available at the card edge connector to drive external logic, relays, or lamps. Each of the driver outputs will sink up to 150 mA of external current in addition to the on-card relay. Because the driver outputs are open-collector and connect to an on-card relay, a driver output may also be used as an input to operate the associated on-card relay directly. This requires the external circuit to sink 40 mA of current.

Solder bridges J1-J4 (see the Figure 1 schematic) have been provided to defeat the associated relay when only external logic (requires external pull-up) or external relays are to be used.

The 754A card can be driven by Cetec Vega Model 751 DTMF decoder, Model 752 address, or Model 753 logic cards, or by circuits with similar active-low outputs. When the 754A is to be driven by TTL or other 5-volt logic, provision has been made for the addition of a 5-volt regulator IC and a capacitor. (See the Figure 1 schematic.) When these components are installed and solder bridge J5 is opened, the inputs operate from active-low 5-volt logic.

INSTALLATION

The 754A is supplied with a "dual-readout" (44-pin) card edge connector and mounts in a Cetec Vega Model 211, P-217, or P-218 panel.

The 754A can be used as a plug-in replacement for the older 754, which was a dual relay card. The K1 and K3 relays, as well as the K2 and K4 relays, operate in parallel when the 754A is plugged into the older 754 "single-readout" (22-pin) connector. If power is a concern, two of the relays may be defeated.

Avoid mounting in areas of high temperature or strong magnetic fields.

SAFETY AND LIFE SUPPORT POLICY

WARRANTY

Cetec Vega signaling products are guaranteed to be free from defects in materials and workmanship for a period of three years from the date of shipment. Warranty is for factory repair or replacement only.

SPECIFICATIONS

Supply Voltage: 10 to 15 Vdc

Supply Current: 200 mA maximum

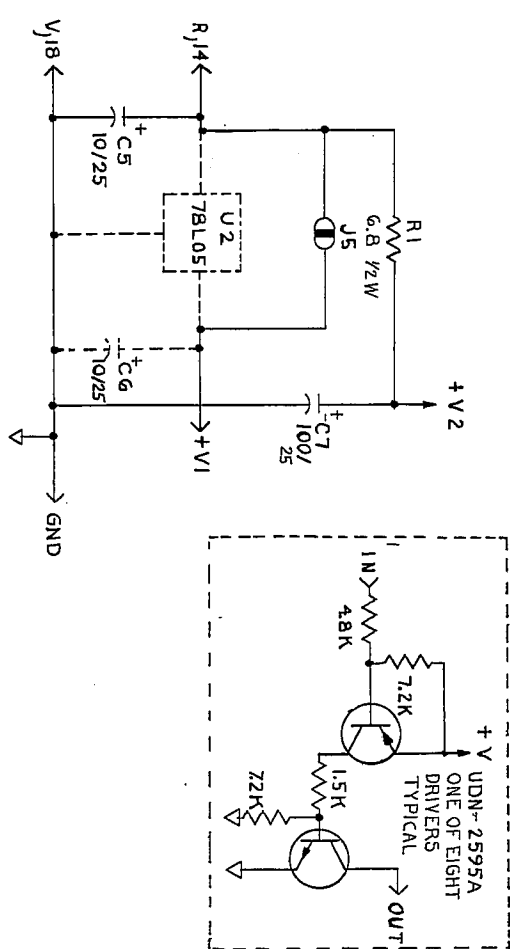
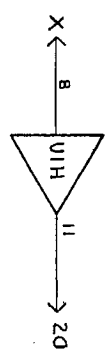
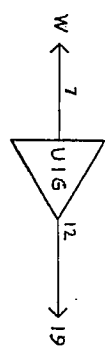
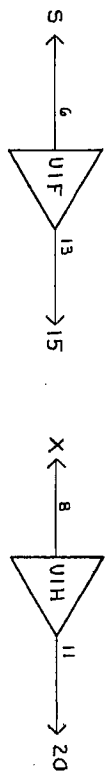
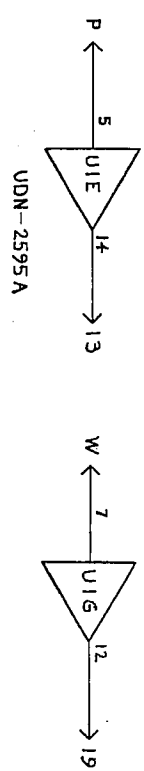
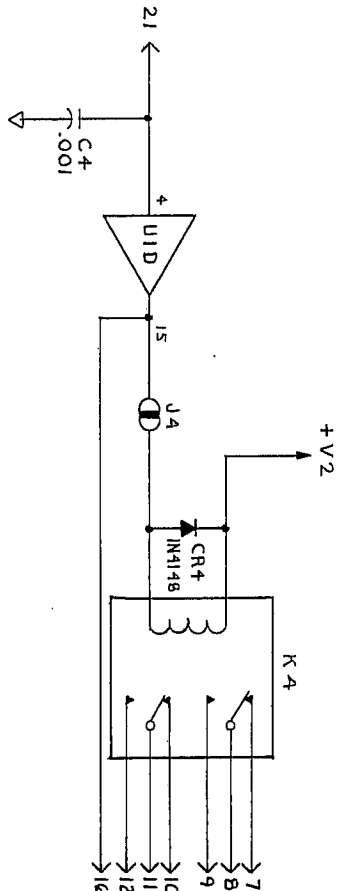
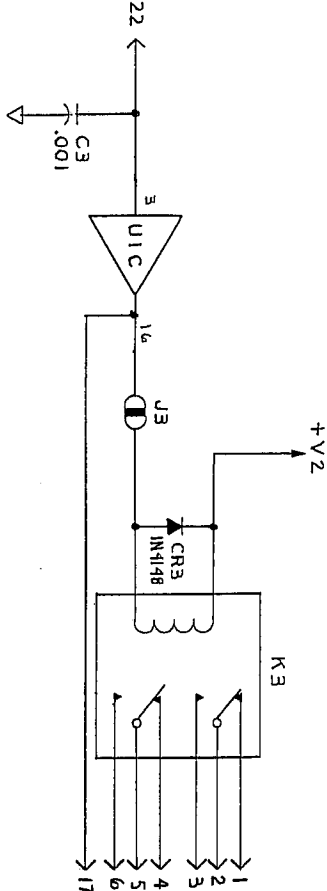
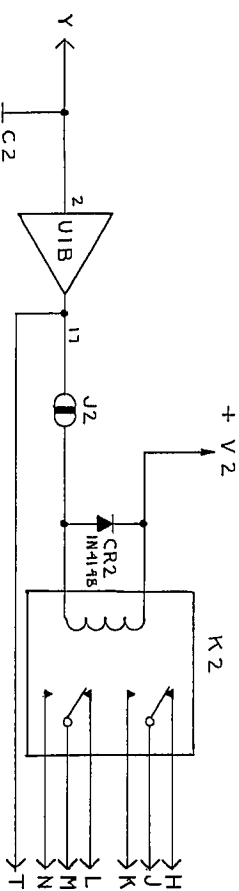
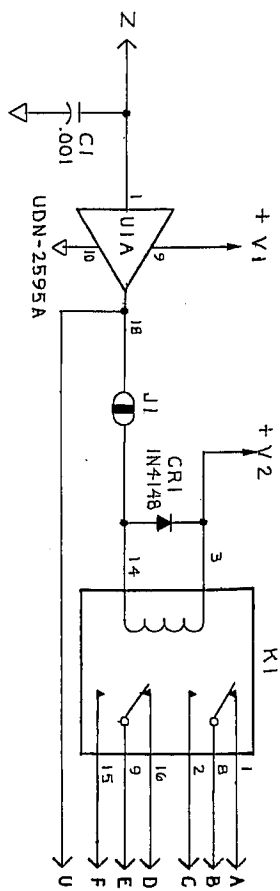
Relay contacts: 2 A, 30 Vdc maximum

Driver output current: 200 mA total sink current each maximum (150 mA maximum external current when operating an on-card relay)

Size: 3.6 W, 4.7 D, 0.7 H inches; 9.1 W, 11.7 D, 1.8 H centimeters

754A PARTS LIST

Part No.	Description	Ckt Sym
010-0711	754A quad relay module	---
001-1665	JK-44 connector kit	---
011-0011	754A PCB assembly	---
065-0359	PCB for 754A	---
098-0280	Instruction manual, 754A	---
110-1320	0.001 μ F ceramic cap., 20%, 50 V	C1
		C2
		C3
		C4
112-1606	10 μ F elec. cap., 25 V	C5
112-1609	100 μ F elec. cap., 20%, 25 V	C7
136-1967	6.8 Ω comp. res., 5%, 1/2 W	R1
161-0426	1N4148 diode	CR1
		CR2
		CR3
		CR4
180-0321	DPDT relay, 12 V	K1
		K2
		K3
		K4
425-0426	UDN-2595A driver IC	U1



- NOTES: UNLESS OTHERWISE SPECIFIED
1. RESISTOR VALUES ARE IN OHMS, 5% 1/4W
 2. CAPACITOR VALUES ARE IN UF 20%
 3. ALL JUMPERS ARE NORMALLY CLOSED
 4. OPEN J5 AND INSTALL U2, C6 TO INTERFACE 5VOLT (TTL) LOGIC
 5. RELAYS K1, K2, K3, K4, ARE AROMAT HBZE-DC12V

Vega

SCHEMATIC 754A
QUAD RELAY CARD