FIX-50P-SWO 50-Point Switch-Over Module

Operating Instructions

Introduction

The FIX-50P-SWO is a 50-pole double-throw relay, powered by 12 Volts DC and controlled by a single LS-TTL compatible active-low signal. It is designed to be placed in series with the test pins attached to the unit-under-test. It is used to either isolate those test pins or, as a change-over switch to provide alternate stimulus sources.

Specifications

Number of Contacts	50 Form-C
Contact Rating	1A, 250 VAC, 220 VDC, 30 VA, Silver with gold overlay
Input/Output	3 connectors, each 25x2 pins on 0.1 inch spacing
Power Required	12V DC at .30 Amps
Control	LS-TTL compatible digital input, pulled high.
	Logic Low activates normally open contacts
Dimensions	4.8" x 5.5" x 1.5"
	Circuit board with four #6 standoffs

Description

The FIX-50P-SWO is a 50-pole double-throw relay. It is typically installed in series with the solid-state multiplexer test points from a MPX module when the test points need to be isolated during power-up, functional test. Isolation is required when voltages over +/- 12 volts may be present.

The FIX-50P-SWO may also be used as a change-over module between the low-voltage test point electronics of the TR-8-1/MPX-3-200/MPX-5-200 module and, for example, the digital test point electronics of the DIG-1 or other higher-voltage analog test points. Jumpers are available on the FIX-50P-SWO assembly so that it may be directly controlled by a single digital bit from other modules (e.g., PWR-2 or FUNC-2).

Connectors and Jumpers:

- P1 50-Pin (2x25) connector for the NORMALLY CLOSED pole of the change-over switch. This is the unpowered active pole.

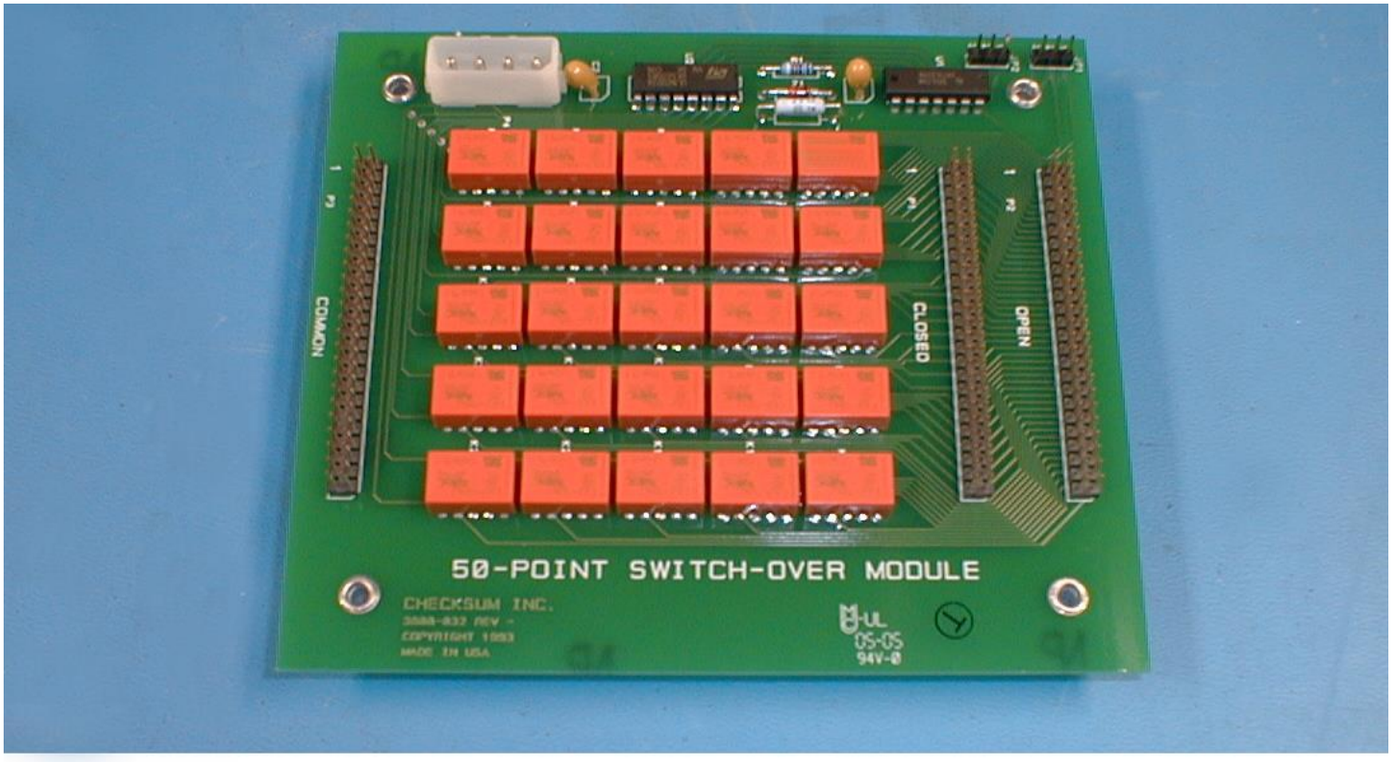
- P2 50-Pin (2x25) connector for the NORMALLY OPEN pole of the change-over switch. This pole is connected to the COMMON pole when power is applied to the module and the Digital Input Signal is at low logic.

- P3 50-Pin (2x25) connector for the COMMON pole of the change-over switch. This is typically connected to the UUT test points.

- P4 4-Pin power and digital connector (AMP Mate-N-Lok style).
  - Pin 1 +12 VDC
  - Pin 2 Digital Control (active-low)
  - Pin 3 Ground
  - Pin 4 Unused

- JP1 Optionally connects digital control to P1 or P2 (simplifies digital control by the G-80 or DIG-1).
  - Jumper Not Installed: Control via P4
  - Jumper JP1-1 to JP1-2: Control via Pin 1 of P2
  - Jumper JP1-3 to JP1-2: Control via Pin 1 of P1

- JP2 Optionally connects power ground to P1 or P2.
  - Jumper Not Installed: Ground not connected
  - Jumper JP2-1 to JP2-2: Ground connected to Pin 49 of P2
  - Jumper JP2-2 to JP2-3: Ground connected to Pin 49 of P1



FIX-50P-SWO 50 Point Switch-Over Module PWB PN 3800-032

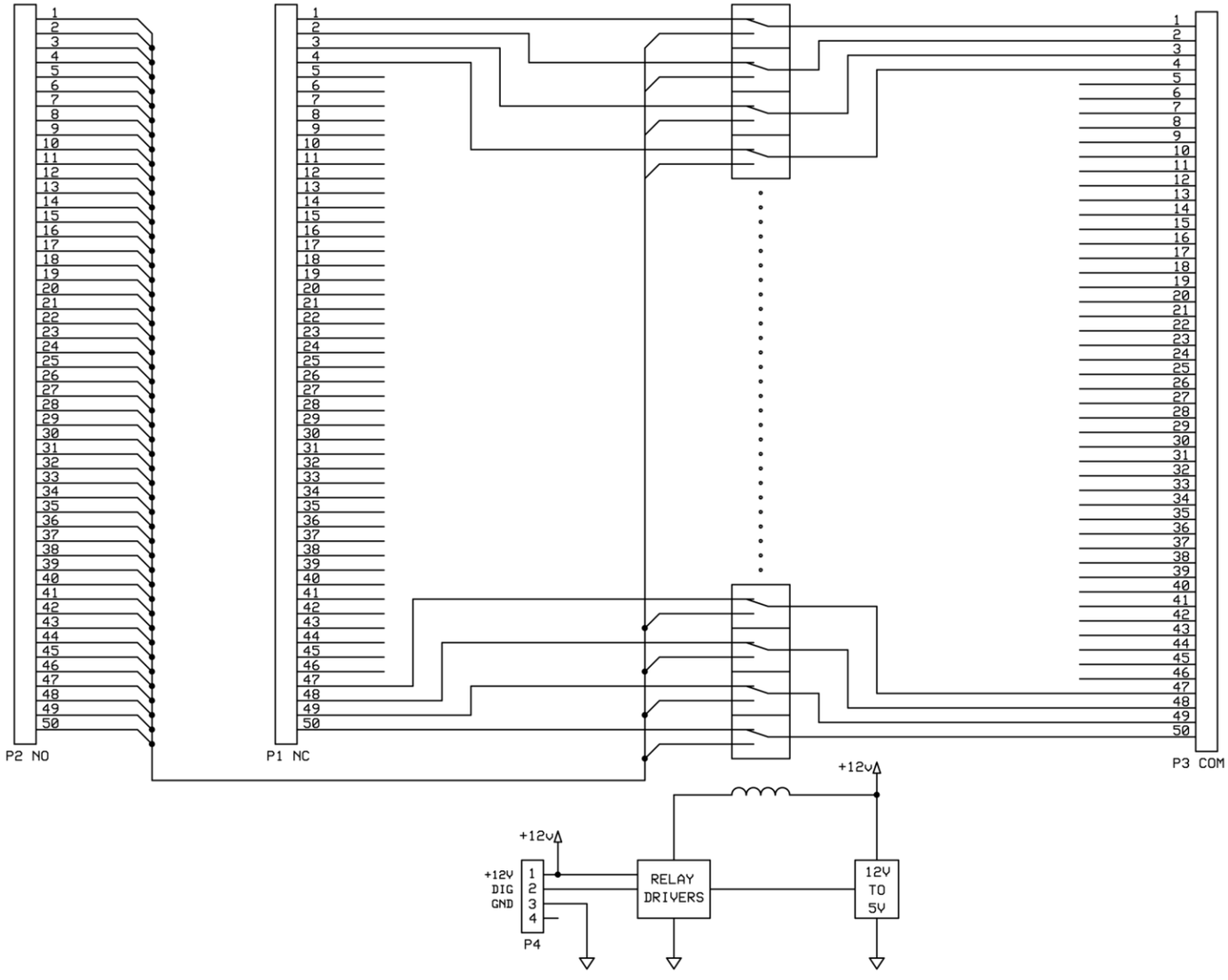


Figure 1 - FIX-50P-SWO Connector Pin-out

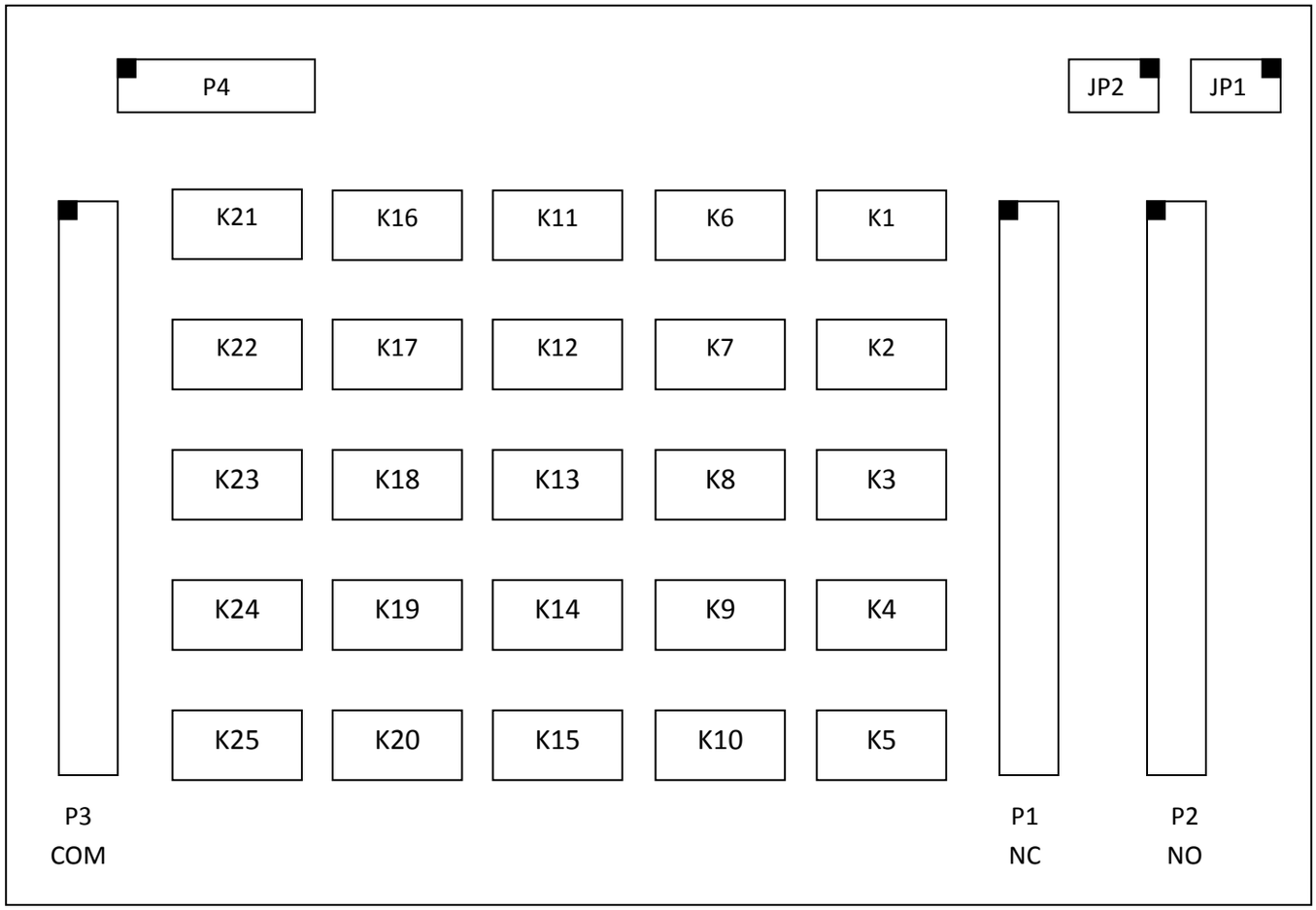


Figure 2 - Relays and Connectors

FIX-50P-SWO 50-Point Switch-Over Module

P1-1 NC K21A-2	**P2-1 NO K21A-4**	**P3-1 COM K21A-3**
P1-2 NC K16A-2	**P2-2 NO K16A-4**	**P3-2 COM K16A-3**
P1-3 NC K11A-2	**P2-3 NO K11A-4**	**P3-3 COM K11A-3**
P1-4 NC K6A-2	**P2-4 NO K6A-4**	**P3-4 COM K6A-3**
P1-5 NC K1A-2	**P2-5 NO K1A-4**	**P3-5 COM K1A-3**
P1-6 NC K21B-9	**P2-6 NO K21B-7**	**P3-6 COM K21B-8**
P1-7 NC K16B-9	**P2-7 NO K16B-7**	**P3-7 COM K16B-8**
P1-8 NC K11B-9	**P2-8 NO K11B-7**	**P3-8 COM K11B-8**
P1-9 NC K6B-9	**P2-9 NO K6B-7**	**P3-9 COM K6B-8**
P1-10 NC K1B-9	**P2-10 NO K1B-7**	**P3-10 COM K1B-8**
P1-11 NC K22A-2	**P2-11 NO K22A-4**	**P3-11 COM K22A-3**
P1-12 NC K17A-2	**P2-12 NO K17A-4**	**P3-12 COM K17A-3**
P1-13 NC K12A-2	**P2-13 NO K12A-4**	**P3-13 COM K12A-3**
P1-14 NC K7A-2	**P2-14 NO K7A-4**	**P3-14 COM K7A-3**
P1-15 NC K2A-2	**P2-15 NO K2A-4**	**P3-15 COM K2A-3**
P1-16 NC K22B-9	**P2-16 NO K22B-7**	**P3-16 COM K22B-8**
P1-17 NC K17B-9	**P2-17 NO K17B-7**	**P3-17 COM K17B-8**
P1-18 NC K12B-9	**P2-18 NO K12B-7**	**P3-18 COM K12B-8**
P1-19 NC K7B-9	**P2-19 NO K7B-7**	**P3-19 COM K7B-8**
P1-20 NC K2B-9	**P2-20 NO K2B-7**	**P3-20 COM K2B-8**
P1-21 NC K23A-2	**P2-21 NO K23A-4**	**P3-21 COM K23A-3**
P1-22 NC K18A-2	**P2-22 NO K18A-4**	**P3-22 COM K18A-3**
P1-23 NC K13A-2	**P2-23 NO K13A-4**	**P3-23 COM K13A-3**
P1-24 NC K8A-2	**P2-24 NO K8A-4**	**P3-24 COM K8A-3**
P1-25 NC K3A-2	**P2-25 NO K3A-4**	**P3-25 COM K3A-3**
P1-26 NC K3B-9	**P2-26 NO K3B-7**	**P3-26 COM K3B-8**
P1-27 NC K8B-9	**P2-27 NO K8B-7**	**P3-27 COM K8B-8**
P1-28 NC K13B-9	**P2-28 NO K13B-7**	**P3-28 COM K13B-8**
P1-29 NC K18B-9	**P2-29 NO K18B-7**	**P3-29 COM K18B-8**
P1-30 NC K23B-9	**P2-30 NO K23B-7**	**P3-30 COM K23B-8**
P1-31 NC K4A-2	**P2-31 NO K4A-4**	**P3-31 COM K4A-3**
P1-32 NC K9A-2	**P2-32 NO K9A-4**	**P3-32 COM K9A-3**
P1-33 NC K14A-2	**P2-33 NO K14A-4**	**P3-33 COM K14A-3**
P1-34 NC K19A-2	**P2-34 NO K19A-4**	**P3-34 COM K19A-3**
P1-35 NC K24A-2	**P2-35 NO K24A-4**	**P3-35 COM K24A-3**
P1-36 NC K4B-9	**P2-36 NO K4B-7**	**P3-36 COM K4B-8**
P1-37 NC K9B-9	**P2-37 NO K9B-7**	**P3-37 COM K9B-8**
P1-38 NC K14B-9	**P2-38 NO K14B-7**	**P3-38 COM K14B-8**
P1-39 NC K19B-9	**P2-39 NO K19B-7**	**P3-39 COM K19B-8**
P1-40 NC K24B-9	**P2-40 NO K24B-7**	**P3-40 COM K24B-8**
P1-41 NC K5A-2	**P2-41 NO K5A-4**	**P3-41 COM K5A-3**
P1-42 NC K10A-2	**P2-42 NO K10A-4**	**P3-42 COM K10A-3**
P1-43 NC K15A-2	**P2-43 NO K15A-4**	**P3-43 COM K15A-3**
P1-44 NC K20A-2	**P2-44 NO K20A-4**	**P3-44 COM K20A-3**
P1-45 NC K25A-2	**P2-45 NO K25A-4**	**P3-45 COM K25A-3**
P1-46 NC K5B-9	**P2-46 NO K5B-7**	**P3-46 COM K5B-8**
P1-47 NC K10B-9	**P2-47 NO K10B-7**	**P3-47 COM K10B-8**
P1-48 NC K15B-9	**P2-48 NO K15B-7**	**P3-48 COM K15B-8**
P1-49 NC K20B-9	**P2-49 NO K20B-7**	**P3-49 COM K20B-8**
P1-50 NC K25B-9	**P2-50 NO K25B-7**	**P3-50 COM K25B-8**

Figure 3 - Switch Point Connectors to Relays