IT-R4 Relay Control

Switch or Logic Level Controlled Relay Module

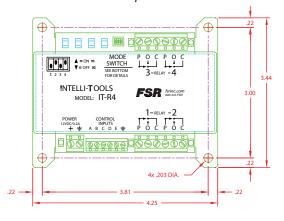




DESCRIPTION

The IT-R4 is a multi-purpose switch or logic level activated Relay Module. Four user configured relays are controlled via five input ports that are designed to accept either a switch contact closure or logic level input. A four-position configuration dip switch sets the operating behavior of the relays. Each relay can be set for different operating modes; "On, "Off", pulsed for a 1/4 of a second, or toggled, which changes the relay to the opposite state.

For a detailed description of operation and settings see the Switch Input Actuation Table.



FEATURES

- One module does the work of many
- Quick easy setup and configuration
- Small footprint
- · High quality relays
- Quick screw terminals
- Integral mounting plate

APPLICATIONS

- Shade and screen control (via relay interface)
- Logic level control
- Relay contact closure
- Speaker muting
- Relay remote control

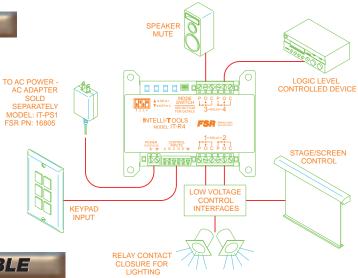




TYPICAL APPLICATION

CAUTION:

The IT-R4 and IT-R4S relay interface modules are not intended to directly switch AC line voltages. Connection to lighting and shade and screen systems should be done at the low voltage control interface provided by the manufacturer. If you must interface to AC line voltages, add a relay module designed for this purpose such as the 12 Volt AC-2 or 12 volt AC-2A.



SWITCH INPUT ACTUATION TABLE

Relay	Relay Operation Chart					Mode Dipswitch Settings			
Operation	Control Inputs (Switch Inputs)								
	Α	В	С	D	E	1	2	3	4
Interlock	R1	R2	R3	R4	All Off	0	0	0	1
Alternate Action	R1	R2	R3	R4	All Off	0	0	1	į
Momentary	R1	R2	R3	R4	All On	0	1	0	i
Push On, Push Off	R1&R2 On	R1&R2 Off	R3&R4 On	R3&R4 Off	All Off	0	1	1	į
Alternate Action	R1&R2	-	R3&R4	All On	All Off	1	0	0	i
Alternate Pulse (0.25 Sec)	R1 On R2 Off	_Edge Trig	R3 On R4 Off	Edge Trig	-	1	0	1	
All Selections	R1 to R4 On	R1 to R4 Off	R1 to R4 Alt Action	-	-	1	1	0	
Special Purpose	R1&R2 On Pulse R3	R1&R2 Off Pulse R4	R1&R2 On/Off Pulse R3 On, 4 Off	Edge Trigger _= Column A _= Column B	-	1	1	1	ļ
	Operation Interlock Alternate Action Momentary Push On, Push Off Alternate Action Alternate Pulse (0.25 Sec) All Selections Special	Operation A Interlock R1 Alternate Action R1 Momentary R1 Push On, Push Off R1&R2 On Alternate Action R1 &R2 Alternate Pulse (0.25 Sec) R1 On R2 Off All Selections R1 to R4 On Special R1&R2 On	Operation Control A B Interlock R1 R2 Alternate Action R1 R2 Momentary R1 R2 Push On, Push Off R1&R2 On R1&R2 Off Alternate Action R1&R2 - Alternate Pulse (0.25 Sec) R1 On R2 Off Edge Trig =R1	Control Inputs (Switc) A B C Interlock R1 R2 R3 Alternate Action R1 R2 R3 Momentary R1 R2 R3 Push On, Push Off R1&R2 On R1&R2 Off R3&R4 On Alternate Action R1&R2 - R3&R4 On Alternate Pulse (0.25 Sec) R1 On R2 Off Edge Trig R3 On R4 Off R4 Off All Selections R1 to R4 On R1 to R4 Off R1 to R4 Alt Action R1 to R4 Off Special R1&R2 On R1&R2 Off R1&R2 On/Off Pulse R1&R2 On/Off Pulse R1&R2 On/Off Pulse	Control Inputs (Switch Inputs) A B C D Interlock R1 R2 R3 R4 Alternate Action R1 R2 R3 R4 Momentary R1 R2 R3 R4 Push On, Push Off R1&R2 On R1&R2 Off R3&R4 On R3&R4 Off Alternate Action R1&R2 - R3&R4 On R3&R4 Off Alternate Pulse (0.25 Sec) R1 On R2 Off Edge Trig R3 On R4 Off R4 Off R1 to R4 Off All Selections R1 to R4 On R1 to R4 Off R1 to R4 Alt Action - Special R1&R2 On R1&R2 Off R1&R2 On/Off Pulse Edge Trigger Fulse Fedge Trigger Fulse Fedge Trigger Fulse Fedge Trigger Fulse	Control Inputs (Switch Inputs) A B C D E Interlock R1 R2 R3 R4 All Off Alternate Action R1 R2 R3 R4 All Off Momentary R1 R2 R3 R4 All Off Momentary R1 R2 R3 R4 All On Push On, Push Off, Push Off R1&R2 On R1&R2 Off R3&R4 On R3&R4 Off All Off Alternate Action R1&R2 - R3&R4 All On All Off All Selections R1 to R4 On R1 to R4 Off R1 to R4 Off R1 to R4 Alt Action - - Special R1&R2 On R1&R2 Off R1&R2 On/Off Pulse Edge Trigger Fe Column A	Control Inputs (Switch Inputs) A B C D E 1 Interlock R1 R2 R3 R4 All Off 0 Alternate Action R1 R2 R3 R4 All Off 0 Momentary R1 R2 R3 R4 All On 0 Push On, Push Off R1&R2 On R1&R2 Off R3&R4 On R3&R4 Off All Off 0 Alternate Action R1&R2 - R3&R4 Off All On All Off 1 Alternate Pulse (0.25 Sec) R1 On R2 Off Edge Trig R3 On R4 Off R4 Off R1 to R4 Off R1 to R4 Off R1 to R4 Alt Action - - 1 All Selections R1 to R4 On R1 to R4 Off R1&R2 On/Off R1&R2 On/Off Edge Trigger F Column A - - 1	Control Inputs (Switch Inputs) Sett	Control Inputs (Switch Inputs) Settings

SPECIFICATIONS

Relay Ratings					
Relay Contact material	Ag alloy				
Max. Switching voltage	50 VAC, 30 VDC				
Max. Switching current	5 A (NO)/3 A (NC)				
Max. Switching capacity	NO: 250 VA (AC), 150 W (DC Resistive) NC: 150 VA (AC), 90 W (DC Resistive)				
Min. permissible load	10 mA @ 5 VDC (for contact cleaning)				
Switch Input Characteristics					
land to Maltage	Logic High range: 2.0 – 24V				
Input Voltage	Logic Low range: -1.0 - +1.0V				
Input Impedance	7k				
Minimum Actuation Time to recognize a valid switch input	0.1 Sec				
Power					
Power supply	12 VDC @ 160mA fully loaded. FSR				
1 Ower Supply	IT-PS1 #16805 may be ordered separately				
Mechanical and Environmental					
Connectors	Screw terminals				
Overall dimensions (see drawing for details)	4.25"L x 3.44" W x 1.57" H				
Shipping weight	0.9 lbs.				
Ambient temperature	0 to 50°C				
Ambient humidity	5% to 95% non-condensing				
Accessories					
12VDC Interface Relay Module	FSR AC-2 (SPDT) or AC2A (DPDT)				