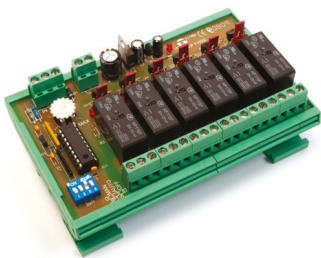


6 Stage Digital Output Module



The IO/DOM6 Digital Output Module is microprocessor based and designed to provide sequence or binary control of 6 volt free changeover relays from a 0-10V control signal.

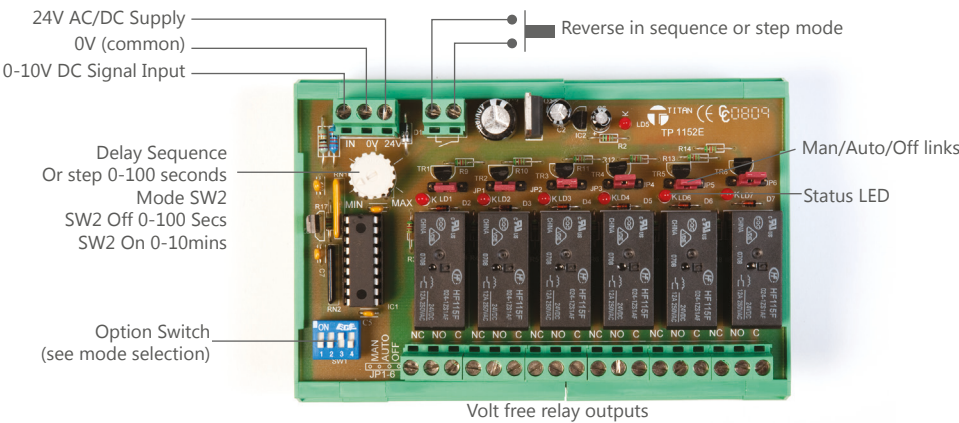
In sequence mode the module incorporates an optional time delay selection to prevent short cycling and for soft start switch on after power failure. There is also an input to reverse the control output sequence.

In binary mode the module provides a combination of 64 switching variations dependent on the value of the control voltage signal.

Specification

Power Supply:	24V AC/DC +/-10%
Input:	0-10V Control signal Reverse sequence operation
Output:	6 x Volt free 5A @ 240V AC inductive
Power Consumption:	146 mA max
LED Indication:	Power ON and Relays energised
Selectable Options:	Manual / Auto / Off (links) Sequence or Binary Control Time delay of relay operation sequence mode only (5 secs)
Terminals:	1.0mm recommended 2.5mm max
Operating Temperature:	0 to 50°C
Operating Humidity:	5-80% non-condensing
Dimensions:	82mm High, 160mm Wide, 50mm Deep
Mounting:	DIN Rail
Country of Origin:	UK
Product Code:	IO/DOM6

Connections

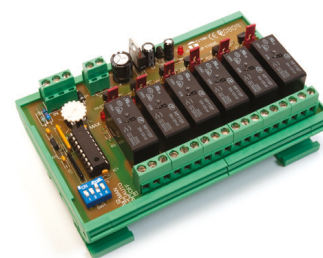


Mode Selection

SW	1	2	3	4
Sequence	Off	Off	Off	Off
Step	On	Off	Off	Off
Delay time	Off	On	Off	Off
Binary	Off	Off	On	Off
Delay start	Off	Off	Off	On
Note: SW2 ON Delay = 0-10mins				

Volts	Sequence						Step					
	R1	R2	R3	R4	R5	R6	R1	R2	R3	R4	R5	R6
0V	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
2.0V	On	Off	Off	Off	Off	Off	On	Off	Off	Off	Off	Off
3.5V	On	On	Off	Off	Off	Off	Off	On	Off	Off	Off	Off
5.0V	On	On	On	Off	Off	Off	Off	Off	On	Off	Off	Off
6.5V	On	On	On	On	Off	Off	Off	Off	Off	On	Off	Off
8.0V	On	On	On	On	On	Off	Off	Off	Off	Off	On	Off
9.5V	On	On	On	On	On	On	Off	Off	Off	Off	Off	On

6 Stage Digital Output Module



Steps	Input Signa mV + 80mV	R1	R2	R3	R4	R5	R6
0	0	0	0	0	0	0	0
1	221	1	0	0	0	0	0
2	377	0	1	0	0	0	0
3	533	1	1	0	0	0	0
4	690	0	0	1	0	0	0
5	846	1	0	1	0	0	0
6	1002	0	1	1	0	0	0
7	1158	1	1	1	0	0	0
8	1315	0	0	0	1	0	0
9	1471	1	0	0	1	0	0
10	1627	0	1	0	1	0	0
11	1783	1	1	0	1	0	0
12	1940	0	0	1	1	0	0
13	2096	1	0	1	1	0	0
14	2252	0	1	1	1	0	0
15	2408	1	1	1	1	0	0
16	2565	0	0	0	0	1	0
17	2721	1	0	0	0	1	0
18	2877	0	1	0	0	1	0
19	3033	1	1	0	0	1	0
20	3190	0	0	1	0	1	0
21	3346	1	0	1	0	1	0
22	3502	0	1	1	0	1	0
23	3658	1	1	1	0	1	0
24	3815	0	0	0	1	1	0
25	3971	1	0	0	1	1	0
26	4127	0	1	0	1	1	0
27	4283	1	1	0	1	1	0
28	4440	0	0	1	1	1	0
29	4596	1	0	1	1	1	0
30	4752	0	1	1	1	1	0
31	4908	1	1	1	1	1	0
32	5065	0	0	0	0	0	1
33	5221	1	0	0	0	0	1
34	5377	0	1	0	0	0	1
35	5533	1	1	0	0	0	1
36	5690	0	0	1	0	0	1
37	5846	1	0	1	0	0	1
38	6002	0	1	1	0	0	1
39	6158	1	1	1	0	0	1
40	6315	0	0	0	1	0	1
41	6471	1	0	0	1	0	1
42	6627	0	1	0	1	0	1
43	6783	1	1	0	1	0	1
44	6940	0	0	1	1	0	1
45	7096	1	0	1	1	0	1
46	7252	0	1	1	1	0	1
47	7408	1	1	1	1	0	1
48	7565	0	0	0	0	1	1
49	7721	1	0	0	0	1	1
50	7877	0	1	0	0	1	1
51	8033	1	1	0	0	1	1
52	8190	0	0	1	0	1	1
53	8346	1	0	1	0	1	1
54	8502	0	1	1	0	1	1
55	8658	1	1	1	0	1	1
56	8815	0	0	0	1	1	1
57	8971	1	0	0	1	1	1
58	9127	0	1	0	1	1	1
59	9283	1	1	0	1	1	1
60	9440	0	0	1	1	1	1
61	9596	1	0	1	1	1	1
62	9752	0	1	1	1	1	1
63	9752	1	1	1	1	1	1

Modes of operation are provided as shown below:

Sequence 1 (All switches Off)

This selection the relays operate in sequence. (see table). The switching differential on a decreasing signal is 0.5V.

Step Sequence 2 (SW1 On)

Each relay operates independently in a step sequence (see table). The switching differential on a decreasing signal is 0.5V.

Binary

With 6 relays 64 binary combinations are possible including the all Off and all On conditions ranges over a 0-10V control input signal with <156mV> steps giving switching points. See data sheet M-009 for further details.

Time Start Delay (SW4 on)

On power up the module operates in a time delay sequence. The delay start time between each relay operation is set on the potentiometer. The mode provides sequential soft start of electrical loads for up to 6 circuits.

Timing Potentiometer (Range 0 to 100 sec or 0-10mins dependant on SW2)

Provides an adjustable time delay between relays in the sequence, step sequence and Time Start Delay modes. With SW2 Off the setting range is 0-100 secs with SW2 On the setting range is 0-10 mins.