AUTOSWITCH USER GUIDE.
MODEL SW1096-R2

CUSTOMER SUPPORT INFORMATION
Call our Technical Support Specialists to discuss your application.
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Mode 1

Reliable switching action is provided by subminature sealed relays approved to BT Type 47W.

MODE 1 - DATA ACTIVITY

A "one" data bit is a voltage of +3v to +24v, and a "zero" data bit is a voltage of -24v to 0v, or open circuit.

Data activity - The first "one" bit of data sent on pin 2 or pin 3 of port A or port B causes that port to be switched to port C. This only occurs if the other port (A or B) is not already switched to port C, in which case it is necessary to wait until the other port has cleared down.

TO CLEAR DOWN BY DATA TIMEOUT:-

Allow the timeout period to elapse during which no "one" bit of data is sent on pin 2 or pin 3 of the switched port (A or B) or on pin 2 or pin 3 of port C.

The jumper link settings to select timeout period are shown on page 5.

TO CLEAR DOWN BY BREAK SIGNAL:-

Send a break signal on pin 2 or pin 3 of the switched port (A or B) or on pin 2 or pin 3 of port C. The length of the break signal may be selected to allow a short break to pass through the autoswitch without clearing down, while a long break signal will cause cleardown. A break signal is a "one" bit of period as defined.

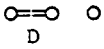
After cleardown the autoswitch rests in the state of port A switched to port C.

MODE 1 - DATA ACTIVITY - JUMPER LINK SETTINGS

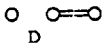
JUMPER LINKS A AND B

JUMPER LINK C

JUMPER LINK D



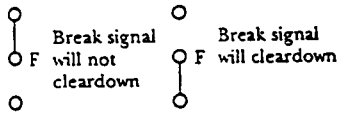
Minimum break signal to cleardown 62 milliseconds



Minimum break signal to cleardown 500 milliseconds

JUMPER LINKS E AND H. FOR TIME DELAY SETTINGS SEE PAGE 4

JUMPER LINK F



For jumper link locations refer to page 5.

Mode 2

MODE 2 - DTR (PIN 20)

High is a voltage of +3v to +24v, and low is a voltage of -24v to 0v, or open circuit.

Pin 20 on port A is held high, while pin 20 on port B is low. Port A is switched to port C.

Pin 20 on port B is held high, while pin 20 on port A is low. Port B is switched to port C.

Pin 20 on both port A and B is held high. The port (A or B) whose pin 20 was held high first is switched to port C.

Pin 20 on both port A and B is low. Port A is switched to port C.

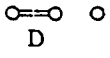
When the controlling pin 20 on port (A or B) is lowered the switching condition will end after a time delay determined by timeout jumper links E and H shown on page 5.

MODE 2 - DTR (PIN 20) - JUMPER LINK SETTINGS

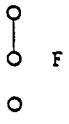
JUMPER LINKS A AND B

JUMPER LINK C

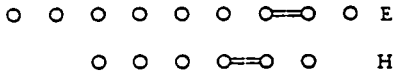
JUMPER LINK D



JUMPER LINK F

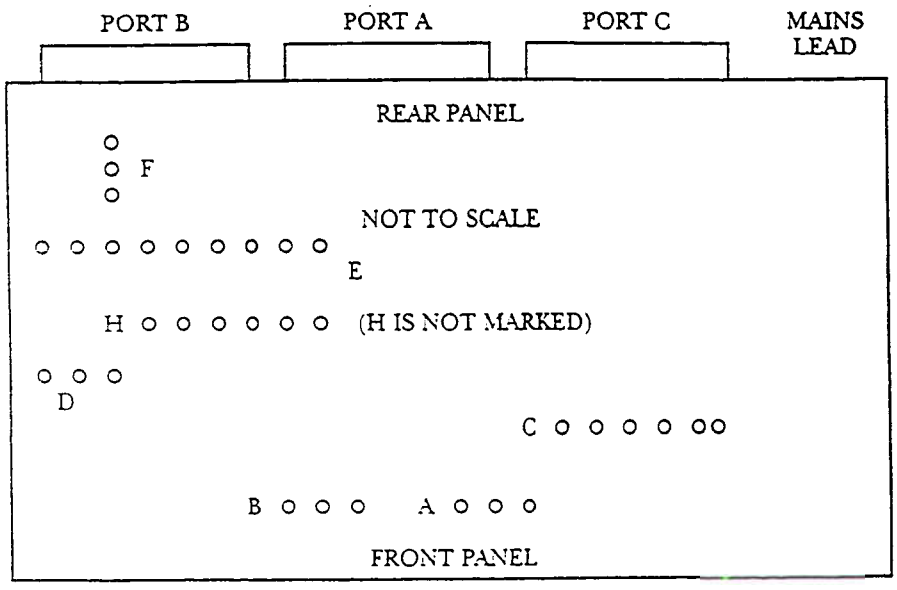


JUMPER LINKS E and H for immediate cleardown when DTR (PIN 20) is driven low



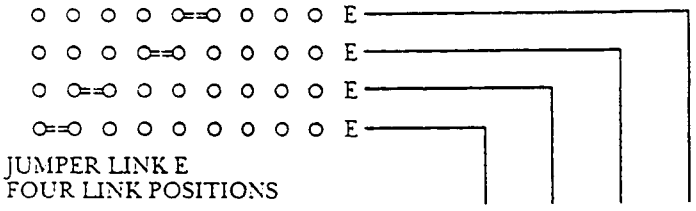
If time delay is required use settings for E and H shown on page 5.

For jumper link locations refer to page 5.



JUMPER LINK LOCATIONS

A timeout value from 0.5 to 4096 seconds may be selected by the timeout jumper links E and H as shown below. This is applicable to MODE 1 - DATA ACTIVITY and MODE 2 - DTR (PIN 20)



JUMPER LINK E
FOUR LINK POSITIONS

H	0.5	1	2	4 SECONDS
H	8	16	32	64 SECONDS
H	128	256	512	1024 SECONDS
H	512	1024	2048	4096 SECONDS

JUMPER LINK H
FOUR LINK POSITIONS

LOCATED BETWEEN INTEGRATED CIRCUITS 2 AND 3
LETTER H IS NOT MARKED

Mode 3

MODE 3 - MANUAL CONTROL

Manual control by alternate action front panel switch.When the switch is in, port B is switched to Port C, and when the switch is out, port A is switched to port C.

MODE 3 - MANUAL CONTROL - JUMPER LINK SETTINGS

C O O O O=O O

Jumper links A, B, D, E, F and H may be in any position or left off.

For jumper link locations refer to page 5.

Mode 4

MODE 4 - REMOTE CONTROL PIN 10 PORT B

Pin 10 on port B. Pin 10 high causes port B to be switched to port C, and pin 10 low causes port A to be switched to port C.

Pin 10 may be driven high by connecting it to pin 9 on port B. If pin 10 is open circuit it is in the low state.

MODE 4 - REMOTE CONTROL PIN 10 PORT B - JUMPER LINK SETTINGS

Jumper links A, B, D, E, F and H may be in any position or left off.

For jumper link locations refer to page 5.

Mode 5

MODE 5 - REMOTE CONTROL PIN 10 PORT C

Pin 10 on port C. Pin 10 high causes port B to be switched to port C, and pin 10 low causes port A to be switched to port C.

Pin 10 may be driven high by connecting it to pin 9 on port B. If pin 10 is open circuit it is in the low state.

MODE 5 - REMOTE CONTROL PIN 10 PORT C - JUMPER LINK SETTINGS

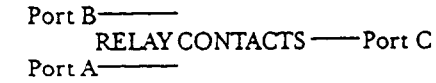
C o o=o o o o

Jumper links A, B, D, E, F and H may be in any position or left off.

For jumper link locations refer to page 5.

All Modes

In all modes the pins switched are -
2 3 4 5 6 8 15 17 20 24



Port A is switched to port C on initial powering up.

The port (A or B) switched to port C is indicated by the front panel LED display.

As switching is by relay contacts a bidirectional connection exists between idential pins. Signals may pass in either direction so that any port may be DCE or DTE. After initially powering up, or if mains power is disconnected port A is switched to port C.

Signals applied to pins on port C will appear on the same numbered pin on port A or B via the relay contacts according to the switched state.

On all ports pin 7 is signal ground, and pin 1 is connected to pin 1 on the other two ports.

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