



®

DSX Access Systems, Inc.

Input Circuit Types

DSX Controller Input Circuit Types

Systems using WinDSX support two, three, and four state supervised input monitoring. There are five programmable circuit types, which are shown below. Two and three state inputs use a 1K-ohm resistor. Four state inputs utilize a 180-ohm and 820-ohm resistor each. All inputs can be individually programmed for any one of the five circuit types. Three and Four State inputs support trouble conditions. Inputs that are armed will report an alarm if they go into trouble.

Note /// Input Circuit Types: 0 = 2 States, Type 1 & 2 = 3 States, Type 3 & 4 = 4 States.

Note /// These Input Circuit Types apply to all Controllers except the DSX-1043.

Input Circuit Type 0

Reports **2 states** of the circuit. If the circuit changes by 100 Ohms an alarm is sent to the PC.

- 1) This circuit is normal at 1000 Ohms.
- 2) This circuit alarms at + or - @ 100 Ohms.

Normally Open & or Normally Closed Sensors
Circuit Normal at 1000 Ohms = State 1
Sensor (NO) Closes = Alarm = State 2
Sensor (NC) Opens = Alarm = State 2

State 1 = 1000 Ohms = Normal
State 2 = More than 1100 Ohms = Alarm
State 2 = Less than 900 Ohms = Alarm

Input Circuit Type 1

Reports **3 states** of the circuit.

- 1) This circuit is normal at 1000 Ohms.
- 2) This circuit will show trouble if the circuit shorts.
- 3) This circuit alarms if the (NC) sensor opens.

Normally Closed Sensors
Circuit Normal at 1000 Ohms = State 1
Circuit Shorts = Trouble = State 2
Sensor (NC) Opens = Alarm = State 3

State 1 = 1000 Ohms = Normal
State 2 = Short = Trouble
State 3 = Open = Alarm

Input Circuit Type 2

Reports **3 states** of the circuit.

- 1) This circuit is normal at 1000 Ohms.
- 2) This circuit will show trouble if the circuit opens.
- 3) This circuit alarms if the (NO) sensor closes.

Normally Open Sensors
Circuit Normal at 1000 Ohms = State 1
Circuit Opens = Trouble = State 2
Sensor (NO) Closes = Alarm = State 3

State 1 = 1000 Ohms = Normal
State 2 = Open = Trouble
State 3 = Short = Alarm

Input Circuit Type 3

Reports **4 states** of the circuit.

- 1) This circuit is normal at 820 Ohms.
- 2) This circuit will show trouble if the circuit shorts.
- 3) This circuit will show trouble if the circuit opens.
- 4) This circuit alarms if the (NC) sensor opens.

Normally Closed Sensors
Circuit Normal at 820 Ohms = State 1
Circuit Shorts = Trouble = State 2
Circuit Opens = Trouble = State 3
Sensor (NC) Opens = Alarm = State 4

State 1 = 820 Ohms = Normal
State 2 = Short = Trouble
State 3 = Open = Trouble
State 4 = 1000 Ohms = Alarm

Input Circuit Type 4

Reports **4 states** of the circuit.

- 1) This circuit is normal at 1000 Ohms.
- 2) This circuit will show trouble if the circuit shorts.
- 3) This circuit will show trouble if the circuit opens.
- 4) This circuit alarms if the (NO) sensor closes.

Normally Open Sensors
Circuit Normal at 1000 Ohms = State 1
Circuit Shorts = Trouble = State 2
Circuit Opens = Trouble = State 3
Sensor (NO) Closes = Alarm = State 4

State 1 = 1000 Ohms = Normal
State 2 = Short = Trouble
State 3 = Open = Trouble
State 4 = 820 Ohms = Alarm