# INPUT CIRCUIT TYPES

## OVERVIEW

Systems using WinDSX support two, three, and four state supervised input monitoring.
The Five programmable circuit types are shown below.
Applies to all Controllers except the DSX-1043

Input Circuit Type 0 = 2 states  Uses 1K-ohm resistor.
Input Circuit Type 1 = 3 states  Uses 1K-ohm resistor.
Input Circuit Type 2 = 3 states  Uses 1K-ohm resistor.
Input Circuit Type 3 = 4 states  Uses 180-ohm and 820-ohm resistor. Supports trouble conditions.
Input Circuit Type 4 = 4 states  Uses 180-ohm and 820-ohm resistor. Supports trouble conditions.

Inputs that are armed will report an alarm if they go into trouble.

### 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.

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

Normally Open  & or Normally Closed Sensors
Circuit Normal at  1000 Ohms = State 1
Sensor (NO) Closes = Alarm = State2
Sensor (NC) Opens = Alarm = State2

### 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 .

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

Normally Closed Sensors
Circuit Normal at  1000 Ohms = State 1
Circuit Shorts  = Trouble  = State 2
Sensor (NC) Opens = Alarm = State3

### 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 .

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

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

### 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 .

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

Normally Closed Sensors
Circuit Normal at  820 Ohms = State1
Circuit Shorts  = Trouble  = State 2
Circuit Opens  = Trouble  = State 3
Sensor (NC) Opens = Alarm = State4

### 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 .

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

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