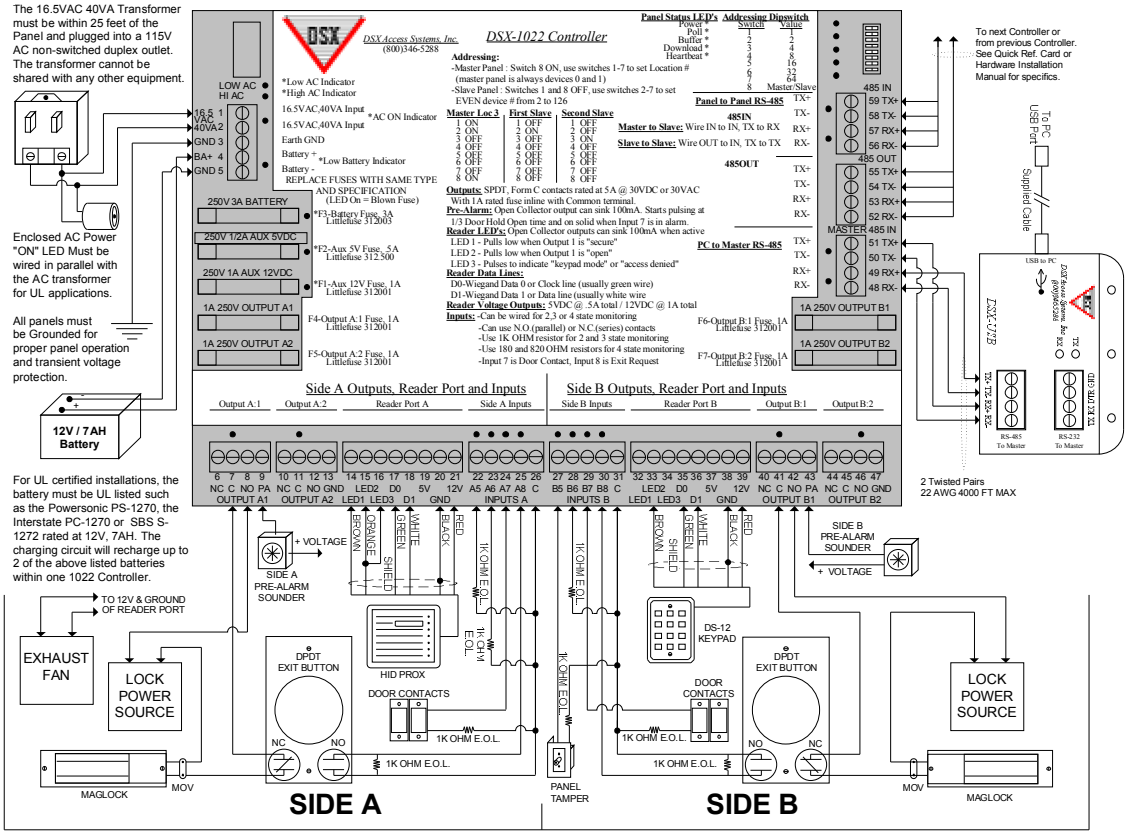
DSX Access Systems, Inc.

DSX-1022 Typical Connections

DSX-1022 Intelligent Controller Typical Connections



Reader Connection Definitions:
Pre-Alarm connection is an open collector capable of -100mA DC current. Pre-Alarm normally connects to a sounder located near a controlled door to indicate a door has been held open too long.
LED 1 provides (-100mA) to the Reader Secure LED when "Secure".
LED 2 provides (-100mA) to the Reader Open LED when "Open".
LED 3 provides 2 (-100mA) pulses to the Reader Access Denied LED when there is an "Access Denied" condition.
DATA 0 provides a Data 0 or "Clock" signal to the controller.
DATA 1 provides a Data 1 or "Data" signal to the controller.
+5VDC provides up to 5VDC rated at 500mA to power Readers.
NEGATIVE aka GND provides the Reader with a Ground.
+12VDC provides 12VDC rated at 1A to power Readers.
Note: The +12VDC connection also can be used to provide voltage to other components, such as the DSX Modem. This power supply is shared between the Side A and the Side B Reader Ports.

MOV Usage: If voltages higher than 50 volts are to be switched through the Output relay contact, the individual MOV's (V1&V2, V3&V4, V5&V6 or V7&V8) should be removed from the specific Output.

Output Extender: Use the DSX-OX4 to provide 4 additional Form-C Output Relays, One Extender can connect to a DSX-1022 at the Master (485 IN) port of a SLAVE CONTROLLER. (Required Terminations include TX-RX, RX-TX & +12VDC & GND).

Panel LED Definitions:
POLL Flashes at a Slave to indicate Comm. to Master panel.
BUFFER is On to indicate panel is storing all history events.
DOWNLOAD is On to indicate the panel is being programmed by the Master.
HEARTBEAT Flashes to indicate the panel is operating.
AC LED is On to indicate AC voltage is present.
LOW AC is On when the AC at panel is approx. 15V or lower.
LOW BATTERY is On when battery voltage drops to approx. 11.5V or lower.
INPUT LEDs are On to indicate the input is normal.
OUTPUT LEDs are On when the relay coil is energized.

Input Circuit Types:
Type 0 - Can monitor NO and/or NC switches, req. 1k Ohm EOL, no Trouble.
Type 1 - Can monitor NC switches, req. 1k Ohm EOL, Sensor open = Alarm, Circuit short = Trouble.
Type 2 - Can monitor NO switches, req. 1k Ohm EOL, Sensor short = Alarm, Circuit open = Trouble.
Type 3 - Can monitor NC switches, req. 180 and 820 Ohm EOLs, Sensor open = Alarm, Circuit open = Trouble, Circuit short = Trouble.
Type 4 - Can monitor NO switches, req. 180 and 820 Ohm EOLs, Sensor closed = Alarm, Circuit open = Trouble, Circuit short = Trouble.

Output Type:
Output Relays Provide Form C, Dry Contact, SPDT, rated at 5A at 30VDC or 30VAC. Contacts provided include NO, C, NC. Each Output Relay includes a 1A fuse inline with the Common terminal.