



ALCN-960MISO and ALCN-960D Quad Loop Adder Motherboard and Daughter Board Installation Instructions

The ALCN-960MISO Quad Loop Adder Isolated module provides two addressable loops plus an additional two loops as part of the daughter board ALCN-960D which is mounted over the ALCN-960MISO. The Quad Loop Adder module may be mounted over the main chassis of the Network Fire Alarm Panel or on any chassis that supports adder boards. This module is mounted using four #6 screws and (if necessary) four 1 1/2" spacers.

| | |
|---------------|--|
| Power | The power is supplied to the board via cable from the main chassis board or from the previous loop controller module into the P1 POWER IN connector. Connect the P2 POWER OUT connector to the next loop controller module or other adder module. One power cable is supplied with this module. |
| RS-485: | The RS-485 cable comes attached at P4 on ALCN-960MISO and is either connected to P3 of the main fire alarm controller module or connected from the previous loop controller module or other adder board. If the next connected loop controller module is used, connect the RS-485 out at P3 on ALCN-960MISO to the next loop controller module; if it is not used, leave without connection. |
| DIP Switches: | Use the DIP switches to set the binary address of the board. SW1-1 is the lowest significant digit and ON is active. For example, an address of two would be created by turning SW1-1 OFF, SW1-2 ON and DIP switches SW1-3 to SW1-8 OFF. Refer to DIP switch settings in table below. |
| Loop 1: | These are the terminals for SLC loop 1 addressable devices. Wire the loop as shown in the Network Fire Alarm Manual. |
| Loop 2: | These are the terminals for SLC loop 2 addressable devices. Wire the loop as shown in the Network Fire Alarm Manual. |
| Shield: | If the SLC loops are shielded, connect the shields to the terminals marked COM(-). To prevent the board reporting a ground fault, do not connect shields on SLC lines to earth ground. Note: Unshielded wiring is preferred. |
| Jumpers: | ALCN-960MISO: <ul style="list-style-type: none">• JW1: Factory use only. Leave open.• JW2: Factory use only. Leave closed. |
| JTAG Port: | This connection is for factory use only. |
| USB Port: | This connection is for factory use only. |

ALCN-960MISO DIP Switch Setting

Set the DIP switches on SW1 starting at address 1 for the first ALCN-960MISO adder and consecutively up to seven for the next six loop adder modules. Refer to the Network Fire Alarm Manual for the maximum number of loop adders allowed per node.

ALCN-960MISO Loop Adder Module Address Setting (DIP SWITCH SW1)

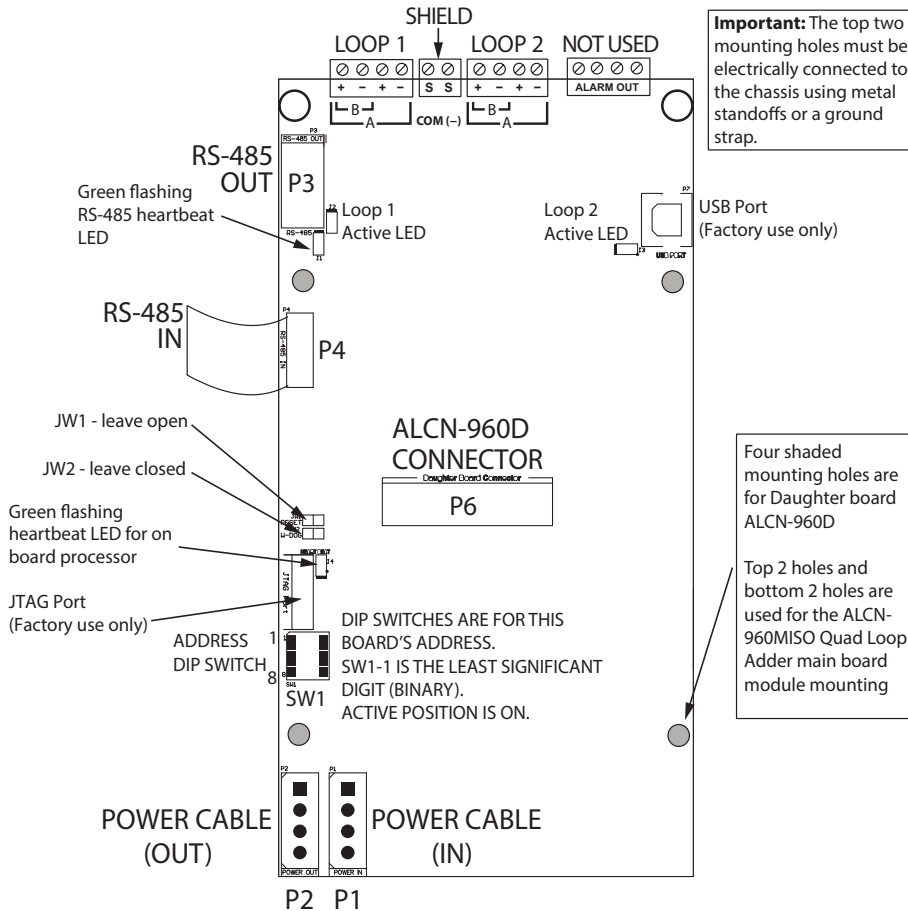
| ALCN-960MISO | ADDR | SW1-1 | SW1-2 | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 |
|---|------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 1 | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| | 2 | OFF | ON | OFF | OFF | OFF | OFF | OFF | OFF |
| | 3 | ON | ON | OFF | OFF | OFF | OFF | OFF | OFF |
| | 4 | OFF | OFF | ON | OFF | OFF | OFF | OFF | OFF |
| Refer to Network Fire Alarm Manual as to whether addresses 5, 6 and 7 are available | | | | | | | | | |
| | 5 | ON | OFF | ON | OFF | OFF | OFF | OFF | OFF |
| | 6 | OFF | ON | ON | OFF | OFF | OFF | OFF | OFF |
| | 7 | ON | ON | ON | OFF | OFF | OFF | OFF | OFF |

NOTE: Put in "ON" position for firmware restore to defaults during power up. At all other times put in "OFF" state.

ALCN-960MISO Module Layout

The location of Loop 1 and 2 terminals, cable connectors, DIP switch location, and jumper locations on ALCN-960MISO are shown in Figure 1 below.

Figure 1: ALCN-960MISO Isolated Quad Loop Adder Module



Notes for ALCN-960MISO and ALCN-960D:

- All circuits are power limited and must use type FPL, FPLR, or FPLP power limited cable.
- Loop wiring: maximum loop resistance is 40 ohms total. These lines are power-limited and fully supervised.
- For more information, refer to wiring instructions in the Network Fire Alarm Manual. Wiring is identical to that provided for ALCN-792M / ALCN-792MISO and ALCN-792D.

ALCN-960D Daughter Board Installation

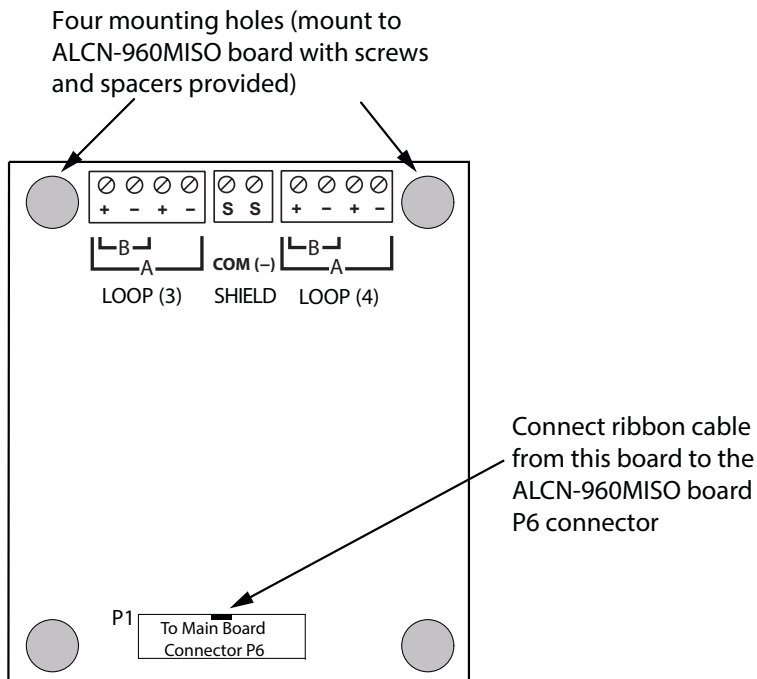
The location of Loop 3 and 4 terminals on ALCN-960D are shown in Figure 2 below.

The ALCN-960D Daughter Board provides another two addressable SLC loops when connected to the ALCN-960MISO Quad Loop Adder Board. This daughter board is mounted over the ALCN-960MISO using the four screws and spacers provided. Wire the two addressable loops on the ALCN-960D Daughter Board in the same manner as the ALCN-960MISO addressable loops are wired.

If the SLC loops have shielding, connect the shields to the terminals marked COM(-). To prevent the board reporting a ground fault, do not connect shields on SLC lines to earth ground.

Note: Unshielded wiring is preferred.

Figure 2: ALCN-960D Daughter Board



Notes for ALCN-960D:

- All circuits are power limited and must use type FPL, FPLR, or FPLP power limited cable.
- Loop wiring: maximum loop resistance is 40 ohms total. These lines are power-limited and fully supervised.
- For complete wiring instructions, refer to the Network Fire Alarm Manual.