

ANN-LC Lite-Connect Module Product Installation Document

PN LS10158-000FL-E:C 7/28/2015 15-416

1 Overview

The ANN-LC Lite-Connect module provides a multi-FACP system solution where a single communicator and phone line for Alarm, Supervisory, and Trouble reporting to a central station are shared using fiber-optic cables. Compatible panels include the MS-9050UD Series software version 4.0 or later and the MS-9200UDLS Series software version 7.0 or later. Each FACP requires its own ANN-LC. The FACP/ANN-LC pair are referred to as a node on the fiber circuit. One hub and 16 nodes are allowed. The hub must be an MS-9050UD panel. This FACP acts as a centralized communicator to all other nodes. Each node requires a unique node address that is assigned in FACP programming. Refer to the appropriate FACP manual for programming information. The hub communicates with the nodes via fiber-optic media from one ANN-LC to the next. All ANN-LC boards must be running the same version of Lite-Connect module software. The circuit can be wired in either Class A or Class B.



NOTE: When using the IPGSM-DP(C) or IPGSM-COM Commercial Fire Communicator, node address settings 10 or above should not be used. There are no restrictions with the IPGSM-4G(C).

2 Specifications

- Operating voltage: 24 VDC
- Maximum current: 150 mA @ 24 VDC
- Maximum attenuation of the optical signal between any two ANN-LC cards for 62.5/125 or 50/125 multi-mode fiber optic cable: 5 dB.
For uninterrupted cable runs, this will equate to a maximum fiber optic cabling distance of 3.1 miles (5km) between each Lite-Connect card.



NOTE: Any attenuation incurred through the use of cable splicing, optical patch connections, or other loss inducing equipment in the fiber cable path between Lite-Connect cards shall be included in the overall attenuation calculation, along with the fiber cable, and shall not exceed in total the 5db attenuation limit.

3 Installation

The ANN-LC ships with a hardware kit containing a ground cable, a 21” long ribbon cable, 2 hex nuts, and 1 self-tapping screw.



NOTE: Installation and wiring of this device must be done in accordance with NFPA 72 and local ordinances.

1. Place the ANN-LC flat against the inside back wall of the FACP backbox. Position both bracket mounting tabs above the two embossed protrusions in the backbox and slide the tabs down into the protrusions.

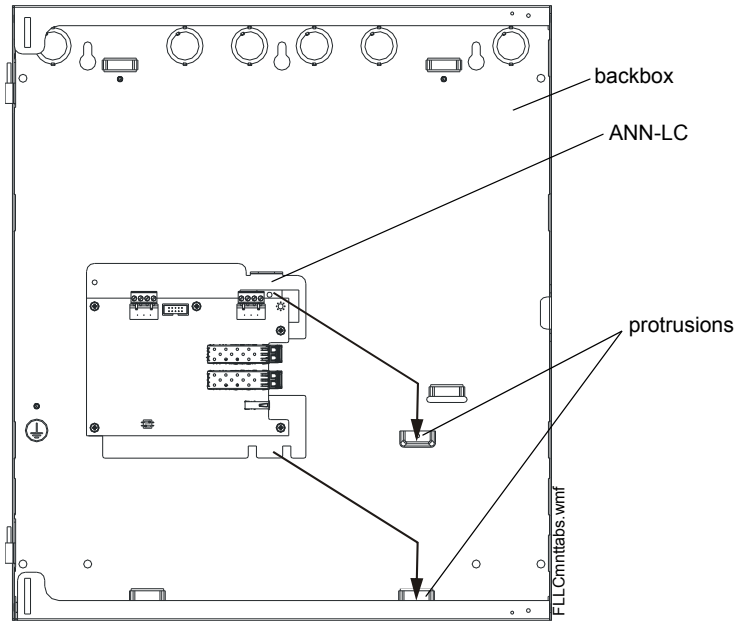


Figure 1 Mounting the ANN-LC into the Backbox

2. Secure the mounting bracket to the backbox by installing the supplied self-tapping screw into the top embossed protrusion/tab as illustrated below.
3. Attach the grounding cable from the left corner of the mounting bracket to the backbox grounding stud, securing it with hex nuts as illustrated below.

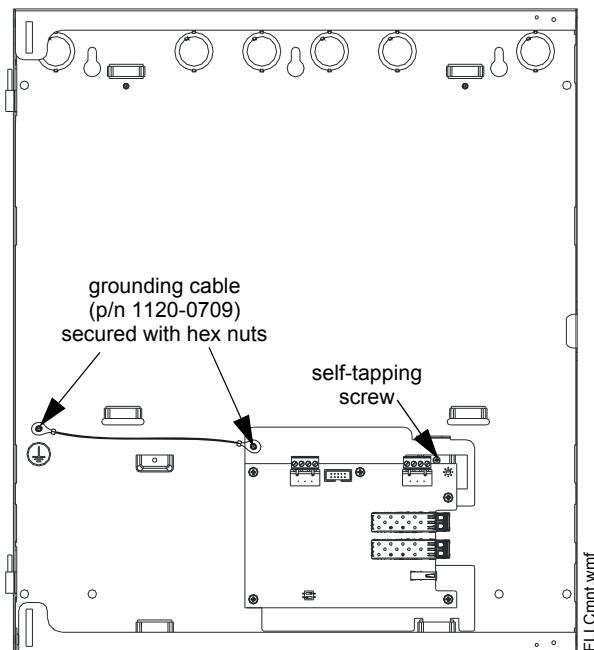


Figure 2 Securing the ANN-LC to the Backbox

Note: When securing the ANN-LC to ground, ensure that the ground cable for the AC mains is installed first, closest to the backbox.

IMPORTANT! Only 7 AH or 18 AH batteries will fit in front of the ANN-LC when installed inside the FACP backbox. If 12 AH batteries are to be used, they must be installed vertically and sit on the left side of the bottom of the backbox.

4 Wiring

4.1 FACP Wiring

Refer to the *MS-9050UD Series (#52413) and MS-9200UDLS Series (#52750) Manuals* for wiring the ANN-LC to the FACP.

4.2 Fiber-Optic Cables

Multi-mode fiber-optic cables must be used. Connections must be made using duplex LC connectors (per IEC 61754-20). The over-bending of fiber-optic cables can cause breakage. Consult manufacturer's guidelines for minimum radius of bend for fiber-optic media.

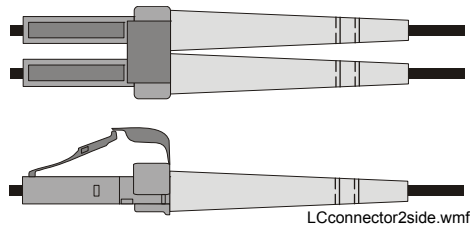


Figure 3 LC Connector

4.3 Class B Wiring

Class B wiring begins at the MS-9050UD being used as the hub and ends with the last node on the circuit.

Consult manufacturer's guidelines for minimum radius of bend for fiber-optic media

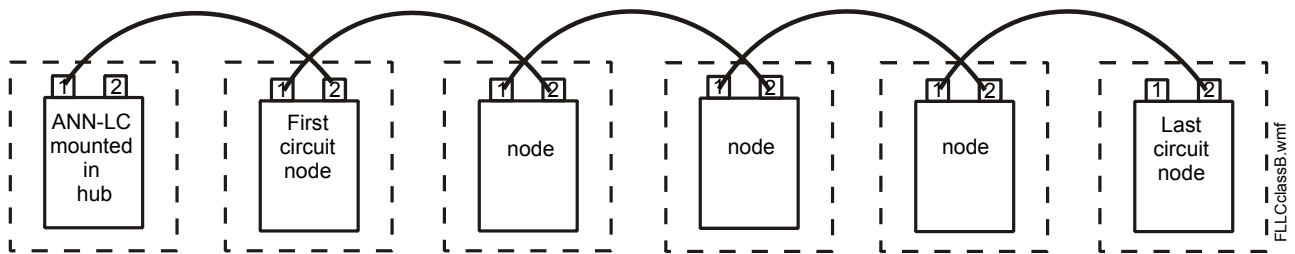


Figure 4 Class B Wiring

4.4 Class A Wiring

Class A wiring begins at the MS-9050UD being used as the hub and returns to the hub after wiring to the last node on the circuit. In class A wiring, a single open will not result in fragmentation of the circuit. Communication will continue while the hub and every installed node display a trouble condition on their host FACP.

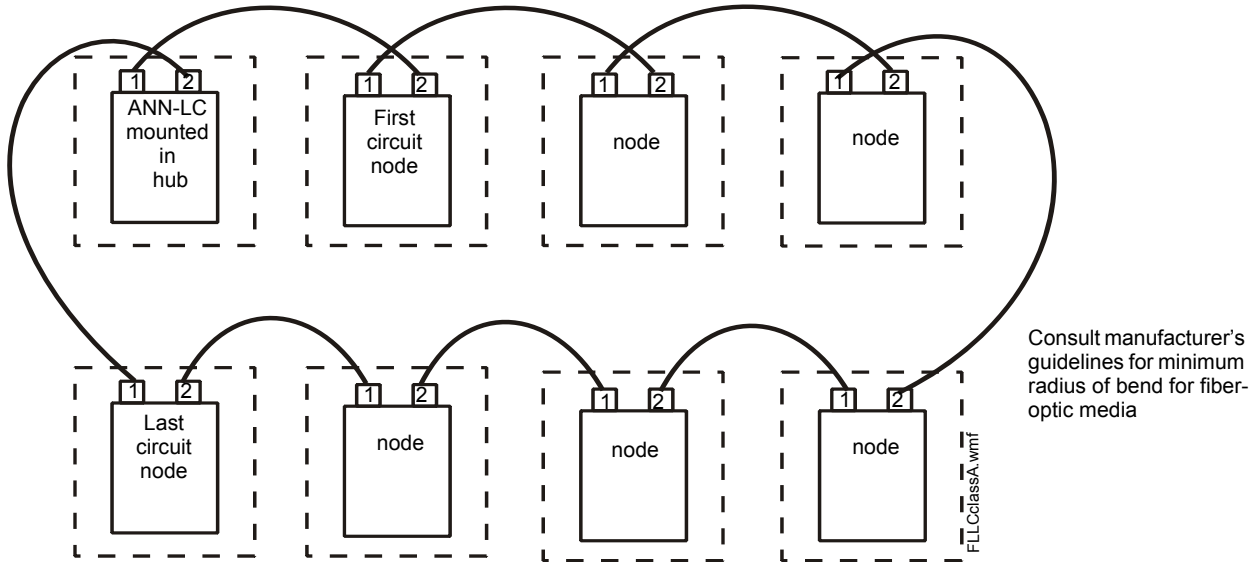


Figure 5 Class A Wiring