

## Description

Harding fire control systems provides for Addressable Loop Modules (ALM3-IP) that may be installed throughout a protected facility in any number up to the system maximum of 50 modules. Harding ALM3-IP modules offer addressable signaling line (SLC) circuits that may each have up to 126 detectors or 126 addressable control devices in any combination.

Harding Sounder Control Modules (IOM2107) are addressable devices that provide a means to remotely locate a fully supervised circuit for the operation of signal appliance such as horns, strobes and horn/strobes. The IOM2107 can also monitor and control PA speaker circuits from the main Harding control system via the SLC.

IOM2107 Sounder Control Modules connect to the SLC, are programmed via an 8 pin DIL switch (1-7 for addressing, 8 for Class A/B) and are polarity insensitive.

The IOM2107 notification appliance circuits are rated for 2A. A separate external 24V power supply must be used. The external supply must be power limited per NFPA.

In standby mode, the IOM2107 monitors its internal circuitry for status of the device itself and supervises the NAC or speaker circuits for faults. In the event a fault is detected, the IOM2107 will report a trouble to the Harding fire control.

The IOM2107 module incorporates a synchronization facility which allows the outputs of groups of modules to be synchronized by commands from the Harding control panel. Multiple IOM2107 devices may be programmed to multiple Group Addresses through the Group Addressing switch (S2).

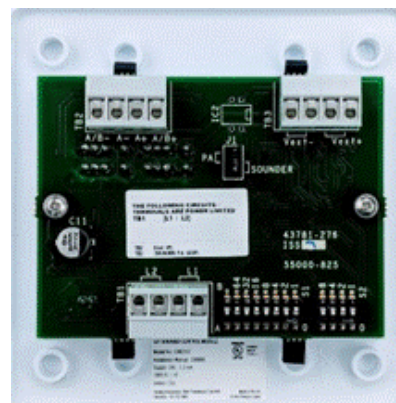
When used as a PA speaker circuit a separate audio amplifier is required (35-70V). The audio amplifier must have wire supervision capability as per NFPA.

### Terminal Block Assignments

Terminals are suitable for 14-26 AWG cables.

TB1	L1 – Loop In/Out L2 – Loop In/Out L1 and L2 are non-polarized
TB3	External Supply +ve and –ve Input and Output
TB2	Class A or B NAC circuit

These devices all use end of line monitoring resistance of 47k $\Omega$ .



## Features

- Supervises and operates addressable notification appliance circuit
- Supervises DC power in
- Class A or B NAC circuit
- Group addressing for DXP-SDR/NAC synchronization
- LED annunciates activation
- Fully supervised
- PA Speaker Circuit (35-70V)
- Plate mounted versions available for surface/flush mounting in 4" square boxes
- LED for polling/alarm annunciation
- DIL switch addressing
- RoHS Compliant

## Listing

UL Standard 864 9th Edition

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9564 Yellowhead Trail NW  
Edmonton, Alberta, T5G 0W4  
[sales@harding-tech.com](mailto:sales@harding-tech.com)  
Tel 780.462.7100  
Fax 780.450.8396  
[www.harding-tech.com](http://www.harding-tech.com)



Represented by:

## Engineer Specification

The contractor shall furnish and install, where indicated on the plans, addressable interface devices for the monitoring and supervision of contact type devices connected to the Fire Alarm control. The devices shall monitor a normally open dry contact. The addressable interface devices shall communicate to the main fire control via the addressable circuit. The addressable interface device must be UL listed and UL listed as compatible with Harding network fire controls. The addressable interface device shall be Harding part numbers IOM2101, IOM2104, IOM2105, IOM2107, IOM2108 and IOM2109.

## Technical Data

### **S21 Sounder Control Module:**

Dimensions: 4 ½"W x 4 ½"H x 1 ¾"D  
Weight: 3 oz  
LED visible through fascia plate label  
Current Consumption:  
Normal Operation/Sounder drive active): 1mA typically  
Relay Activated: 4mA typically pulsed for 150ms  
Power up surge: 6mA max for 150ms  
LED on: 4 mA  
Operating Temp: -4°F to 158°F  
Humidity: 0% to 95% (no condensation or icing)  
Shock: To UL 864  
Vibration: To UL 864

### **Sounder:**

Relay output is 4PCO, UL de-rated contact 2A @ 30VDC, .6A @ 125VAC  
Opto-isolated input for external 24V power supply  
EOL monitoring resistance 47kΩ

### **PA Speaker Supply:**

Opto-isolated input for 35V-70V Audio input.  
(To avoid fault conditions when using in PA mode, move jumper J1 to 'PA' mode to disable supply monitoring)

### **Synchronization:**

Switch S2 sets the 'Group Address' to synchronize multiple Sounder modules on the same SLC

## Ordering Information

Part Number	Description
IOM2107	S21 Sounder Control Module

## Related Modules

Part Number	Description
IOM2104	S21 Switch Monitor Module
IOM2109	S21 Mini Switch Monitor Module
IOM2105	S21 Priority Switch Monitor Module
IOM2108	S21 Mini Priority Switch Monitor Module)
IOM2101	S21 DIN Rail Switch Monitor Module
IOM2106	S21 Switch Monitor I/O Module, Low Voltage
IOM2103	S21 Dual Priority Switch Monitor Module
IOM2111	S21 Relay Output Module
IOM2102	S21 Switch Monitor I/O Module, 120V AC)
IOM2110	S21 Switch Monitor I/O Module, 120V AC

## Related Data Sheets

Series 21 Detectors: PHOTO (DET2104), DS-DET2104; HEAT (DET2101), DS-DET2101; MULTI (DET2105), DS-DET2105;  
Series 22 Detectors: PHOTO (DET2204), DS-DET2204; HEAT (DET2201), DS-DET2201; MULTI (DET2205), DS-DET2205; Addressable Base  
Options: All Bases, DS-DET2310

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9564 Yellowhead Trail NW  
Edmonton, Alberta, T5G 0W4  
[sales@harding-tech.com](mailto:sales@harding-tech.com)  
Tel 780.462.7100  
Fax 780.450.8396  
[www.harding-tech.com](http://www.harding-tech.com)



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