Installation Instructions
for the
DS7460 Dual Zone Input Module

1.0 DESCRIPTION

The DS7460 is a Dual Zone Input Module designed to operate with Detection Systems' 7400 Series Control/Communicators. It monitors conventional Normally Open or Normally Closed contacts and reports their status to the Control/Communicator as multiplex addresses. Each DS7460 occupies two multiplex zone addresses on the system and can monitor up to two separate loops. The DS7460 connects to the DS7430 Multiplex Expansion Module.

Control Panel Requirements: DS7400, DS7400X or DS7400Xi control panel with a DS7430 Multiplex Expansion Module. The DS7400 and DS7400X require ROM version 1.07 or higher.

- Current Draw: 1 mA Standby and Alarm

- Temperature: The storage and operating temperature range is 0° to +140°F (-17° to +60°C).

2.0 PROGRAMMING

Before installing the DS7460, its address and other information must be programmed into the control panel.

- Program the control panel referring to the Zone Programming section in the control panel manual.

- Complete zone programming for each DS7460 zone.

Remember that each DS7460 will require two multiplex addresses.

For example: Program zones 9 and 10 to be a multiple zone input device in partition 1 that follows zone function 1.

Procedure: • Enter the programmer's mode.
   • Enter address 0030 (DS7400 or DS7400X) or address 0026 (DS7400Xi).
   • Enter the data digits as [4] and [1] followed by the [#] button.
   • Exit the programmer's mode.

Note: When programming the DS7460, you must program the ODD numbered zone first. The control panel will automatically program the second zone of the DS7460 as the next even numbered zone. If you program the DS7460 as zones 9 and 10, Loop 1 will be zone 9 and Loop 2 will be zone 10.

- If you wish to use the BusLoc® feature you must program a 5 digit code (e.g. 5 4 3 2 1) at programming address 9999. BusLoc® is a proprietary method of tying the multiplex zones to the control panel to prevent the system from being taken over. Using BusLoc® will program an invisible identification code into the multiplex zones. If you are not using the BusLoc® feature skip the next procedure.

For example: Program the BusLoc® code to be 54321.

Procedure: • Enter the programmer's mode.
   • Enter address 9999.
   • Enter the 5 digit code followed by the [#/Command] button (do not lose this code).
   • Exit the programmer's mode.

- Once the pre-programming is done, you are ready to program the DS7460.

- Disconnect all multiplex devices from the DS7430.

- Program the DS7460 through the control panel.

   - Enter the programmer's mode.
   - Enter the multiplex programming mode by entering [9] [9] [9] [5] followed by the [#] button.
   - The control will then take a few seconds to check the multiplex connection to confirm nothing is connected to it.

   The display will show the following:

   > Checking
   > Multiplex Bus

   - The display will then call-up the first zone you have pre-programmed to be a multiplex zone. To access a different zone, press the [Reset/*] key, then enter the three digit value of the zone you want. The display will show the following:

   > 2 Input 009
   > Press # to Prog

Note: When using the DS7460 with the DS7432, the keypad display will not distinguish between the two. The display will read "2 Input" for both devices. The address you have pre-programmed for each must be used to differentiate the two.

Before doing anything else, reconnect the DS7460 (that coincides with the displayed zone) to the multiplex bus of the DS7430.

Press the [#] button now. This will program the DS7460 to the control panel. Remember, these devices take up two addresses. When address 009 (for example) is a DS7460, pressing the [#] button now will program both addresses 009 and 010.

If the DS7460 is successfully programmed, the keypad will increment to the next zone (if there is one) pre-programmed as a multiplex zone. If the zone is not successfully programmed, the keypad will sound a three-beep error tone.

Hint: Mark the zone numbers on each unit to assist with device location.

Important: Disconnect the device you just programmed and connect the next device (that belongs to the displayed zone) to the multiplex bus of the DS7430 and press the [#] button. Continue programming.

CAUTION: *Any devices that are programmed as 24-hour zones will cause an alarm when you exit programmer's mode. Reports for these zones will be sent if they are programmed.*

If no other zones have been pre-programmed, the display will show the following:

```
Mux Zone
Enter Zone
```
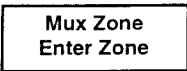
If you wish to exit the Zone Programmer's mode, press the [*/Reset] button for 2 seconds. This brings you back to the Programmer's Mode. To exit the Programmer's Mode, press the [*/Reset] button for 2 seconds.

3.0 INSTALLATION

These Installation Instructions assume the control panel is installed and in proper working condition.

NOTE: The DS7460 must be programmed **before** it is installed. See Section 2.0 Programming.

- Program the control panel's zones as described in its Reference Guide.

CAUTION: Disconnect power to the DS7430 before running wires and connecting the DS7460.

- Remove the cover of the DS7460. Press in and up with your thumb and nail directly above the lip of the DS7460 (see Figure A)
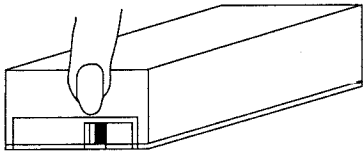

Figure A - Removing the cover

- Remove the DS7460 circuit board from the base. Press the circuit board retainer tab and pull the circuit board up and out of the base (see Figure B).
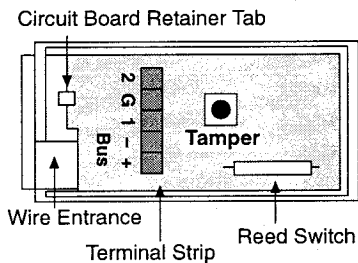

**Figure B** - Removing the PCB

NOTE: Handle this and all circuit boards carefully. Hold the board by its edges.

- Route the wiring from the DS7430 through the wire entrance of the DS7460 base.

- Mount the DS7460 base to the mounting surface using the supplied screws.

- Return the DS7460 circuit board to the base.

4.0 WIRING

- Connect wiring to the DS7460 as shown in Figure C.

For Fire Installations, order Multiplex Fire Loop EOL P/N 28010 (in qty. needed)

from DS7430
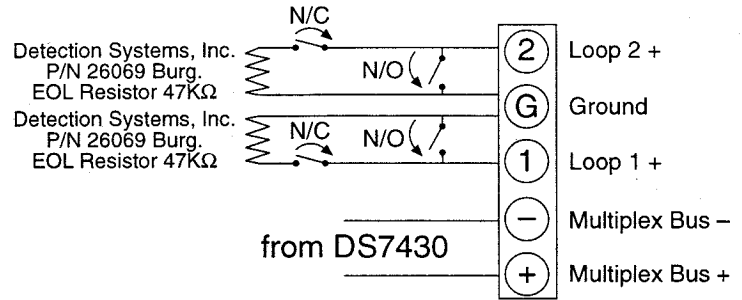
Terminal Descriptions

```
+ =  Positive Multiplex Bus input.
- =  Negative Multiplex Bus input.
1 =  Protection Loop 1 positive input.
G =  Protection Loop ground.
2 =  Protection Loop 2 positive input.
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Figure C - Wiring the DS7460 terminal strip

Protection loops are designed to monitor Normally Open or Normally Closed dry contacts. They are supervised using $47K\Omega$ end-of-line resistors.

NOTE: Loop 1 may be used as a magnetic contact by mounting a magnet in conjunction with the reed switch and removing the EOL resistor for Loop 1. Loop 1 may not be used as a magnetic contact nor used to monitor other contacts at the same time.

It may be desirable to cut the reed switch from the DS7460 circuit board if it is not being used. This will eliminate possible tampering to override Loop 1 operation.

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