

APPLICATION NOTE

Document Title Addressable Input Module (AMU-A2-A & A2-C)

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Addressable Input Module (AMU-A2-A & A2-C)

The AMU-A2 is an input module capable of monitoring and transmitting two individual signals back to the control panel. There are two different models available, the AMU-A2-A and the AMU-A2-C.

Product Features

- Full monitoring against malfunction or disconnection, together with a self-test feature, ensure the integrity of the module at all times.
- Both inputs may be switched to monitor either normally open or normally closed type contacts.
- Input 1 is 'semi-latched'. That is, the AMU-A2 ensures that even a fleeting signal on the input, is registered by the control panel. Input 1 is across leads A2 and B1.
- Input 2 is 'non-latched'. That is, if a change of state is not present long enough to allow it to be scanned (approx. 3 secs) the control panel will not register the condition. Input 2 is across leads A1 and B1.
- There are two LED's visible through the front cover. The alarm LED lights instantly with the operation of input 1 only, and latches on until the control panel is reset (AMU-A2-A only).
- The AMU-A2-C is identical to the AMU-A2-A except that a signal from input 2 will always be treated as a fault by the control panel.

Applications

The AMU-A2 may be used to interface with a variety of inputs such as, sprinkler flow/pressure switch, plant equipment faults and door contacts.

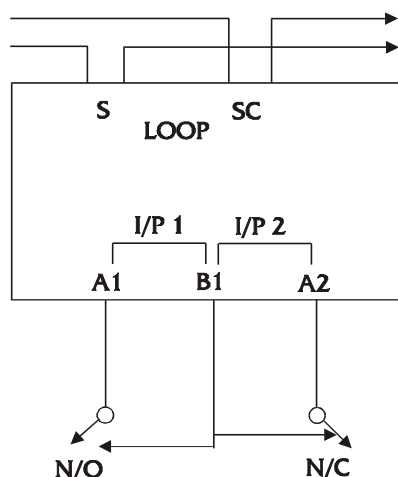
Care should be taken to use the correct type of input for certain types of signal, please find below some typical applications for these modules and which inputs could be used.

Input 1 'semi-latching' could be used for a door contact where it may be possible for an unauthorised person to go through the door within the polling time of the AMU-A2. Since the input is held until the control panel has registered the condition, the event will then be annunciated.

In some cases, it may be useful to take advantage of the 'non-latching' function of input 2. Sprinkler pressure switches often give spurious operation and this would be ignored for approximately three seconds.

Installations / Connections

The loop connection leads S and SC are both red. The polarity of these connections is not critical, however, care should be taken not to cross the S and SC on the loop cable itself as other field devices may be polarity critical. Please refer to the connection diagram overleaf for further information.



Address and contact monitoring setting

The address is set using a seven bit DIL switch which is mounted on the PCB, ensure the system is switched off before setting the address.



The contact monitoring settings can be selected to be either normally open or normally closed volt free contacts, this is achieved by using the six bit DIL switch marked SW1, which is mounted on the PCB. Please find below a table below showing the DIL switch settings for the AMU-A2-A and AMU-A2-C. (Please note the switch settings are different for both modules.)

	<table border="1"> <thead> <tr> <th></th> <th>AMU-A2-A</th> <th>AMU-A2-C</th> </tr> </thead> <tbody> <tr> <td>INPUT 1</td> <td>N/C</td> <td>N/C</td> </tr> <tr> <td>INPUT 2</td> <td>N/C</td> <td>N/O</td> </tr> </tbody> </table>		AMU-A2-A	AMU-A2-C	INPUT 1	N/C	N/C	INPUT 2	N/C	N/O
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