1-Channel Alarm Annunciator

Features

- Audible alarm mute button
- Audible alarm disable selectable
- Alarm relay output

Specification

Input signals:			
0-10Vdc	4-20mA	Relay	24Vac
Setting range:			
0.1 to 9.9Vdc	0.2 to 19.8mA	N/A	N/A
Alarm repeatability:			
0.1Vdc	0.6mA	100%	>10Vac
Hysteresis (peak):			
0.3Vdc	0.6mA	98%	14Vac
Alarm delay time (sec.)	5 to 35 seconds		
Relay output	5A @ 240Vac SPCO		
Buzzer output	85dB @ 0.1 meter		
LED indication:			
Green	OK		
Red	Alarm		
Power supply	24Vac/dc (±15%)		
Power consumption	1VA (plus transmitter power)		
Electrical connections	Screw terminals for 0.5-2.5mm² cable		
Ambient range	-10 to +40°C		
Loop resistance	250W		
Housing:			
Type	Flush mtg. plate (6mm profile)		
Dimensions	85 x 85 x 9mm (24mm overall) (to fit standard single sinking box)		
Country of origin	UK		

Product Codes

UI-AA1-F
1-Channel alarm annuniator

Technical Overview

The UI-AA1-F is used in conjunction with an 0-10Vdc, 4-20mA, VFC or 24Vac input, to provide a low cost local audible and visual alarm facilities. Alarm threshold's and time delay are adjustable.
On detection of an alarm condition, a buzzer is triggered and the alarm LED comes on. The alarm mute button enables the audible alarm to be muted at any time. The visual alarm will not reset until the monitored parameter returns to within its desired range.

Installation

1. The UI-AA1-F can be powered from a grounded 24Vac supply or a 24Vdc supply.

2. The UI-AA1-F is designed to flush mount into a sinking box or switch pattress. Check that the unit fits the sinking box chosen with sufficient space for the wiring behind. Terminate the cores as required.

3. Select the appropriate input mode by moving the jumpers as necessary.
   * J3 should be OFF if the unit is to be used in a current loop with another device such as a BEMS controller or display.

Mode	0-10Vdc	4-20mA	VFC	24Vac
J1	Off	On	Off	Off
J2	Off	On	Off	Off
J3	On	On*	On	On
J5	Off	Off	Off	On

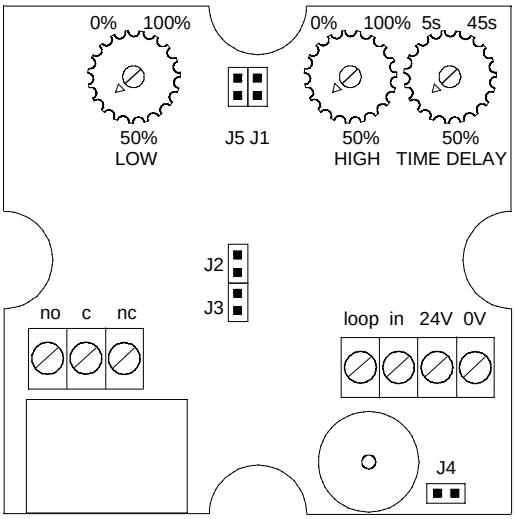
4. Select whether the audible alarm is active or not by moving the jumper on J4. ON enables the alarm buzzer, OFF disables it.

5. Apply power and check correct operation of the unit by changing the input status/signal level. Adjust the pots to achieve the desired alarm thresholds (see examples) and delay. For relay and 24Vac input's set the alarm threshold pots as shown in the table.

	Threshold Pot	
Relay input	Low	High
N/O	25%	100%
N/C	0%	25%

	Threshold Pot	
24Vac input	Low	High
N/O	0%	50%
N/C	50%	100%

Connections



Inputs:

loop	Loop through
In	Input signal
24V	24Vac/dc
0V	0V

Output:

c	Common
nc	Normally closed
no	Normally open

Example alarm settings

Low alarm 4Vdc
High potentiometer set to 100%
Low potentiometer set to 40%
The device will alarm when the input voltage falls below 4Vdc.

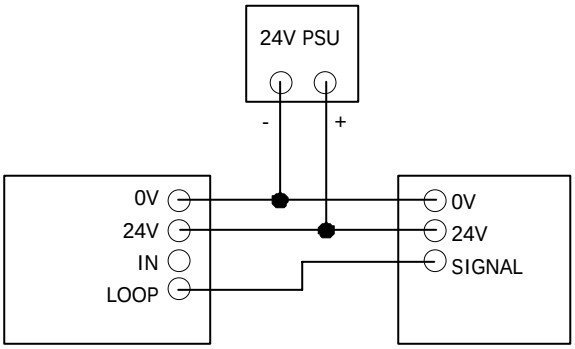
High alarm 7Vdc
High potentiometer set to 70%
Low potentiometer set to 0%
The device will alarm when the input voltage is above 7Vdc.

High/Low alarm 4-7Vdc
High potentiometer set to 70%
Low potentiometer set to 40%
The device will alarm when the input voltage is above 7Vdc, and falls below 4Vdc.

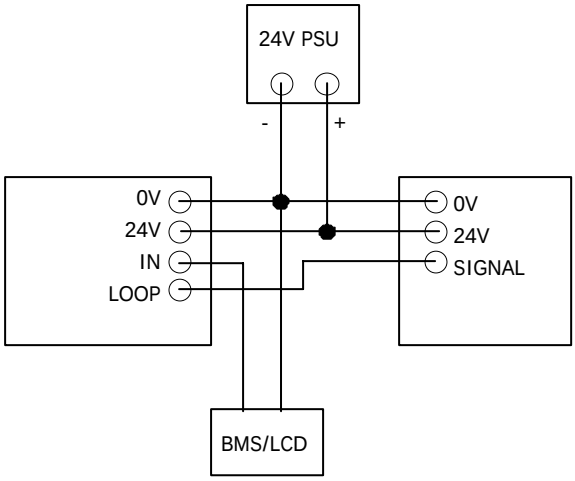
The time delay settings can be adjusted between 5 and 45 seconds. This allows a time period before the UI-AA1-F alarm switches on, preventing nuisance switching.

Example Connections

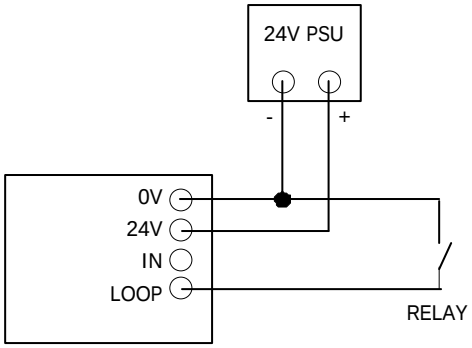
Voltage Input:



Current Input:



Relay Input:



Example Connections (continued)

24Vac Input: