Sontay®
Four Elms Road - Edenbridge
Kent - TN8 6AB - UK

# UI-AA-1-F
# 1-Channel Alarm Annunciator

Issue Number 7.2
30/09/2021


## Features and Benefits

- Audible alarm mute button
- Audible alarm disable selectable by jumper placement
- Alarm relay output
- Green & red led's for alarm ok/alarm indication
- Adjustable input delay time to help avoid spurious alarms

## Technical Overview

The UI-AA-1-F interface is used in conjunction with either 0-10Vdc, 4-20mA, VFC or 24Vac input's, 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 re-set until the monitored parameter returns to within its desired range.

## Product Code

| | |
|---|---|
| **UI-AA1-F** | 1-Channel alarm annunciator |

***PLEASE NOTE***
*Terminal input connection changes from 05/06/2020. Please contact Sontay for products purchased before this date for connection clarification.*

## 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 repeat. | 0.1Vdc | 0.6mA | 100% | >10Vac |
| Hysteresis | 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 | | Terminals for 0.5-2.5mm² cable | | |
| Ambient range | | -10 to +40°C | | |
| Housing type | | Flush mtg. plate | | |
| Dimensions | | 85 x 85 x 9mm | | |
| Country of origin | | UK | | |
| Conformity | | EMC, LVD, CE & UKCA Marked | | |

**WEEE Directive:**

At the end of the products useful life please dispose as per the local regulations.
Do not dispose of with normal household waste.
Do not burn.

Tel: +44 (0)1732 861200 - E-mail: sales@sontay.com - Web: www.sontay.com

## Installation


Antistatic precautions must be observed when handling these sensors. The PCB contains circuitry that can be damaged by static discharge.

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

2. The UI-AA-1-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.

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 levels. Adjust the pots to achieve the desired alarm thresholds and delays.

## Jumper Settings

UI-AA-1-F:

| 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 |

* 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.

## Potentiometer Settings

| | 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% |

## 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.

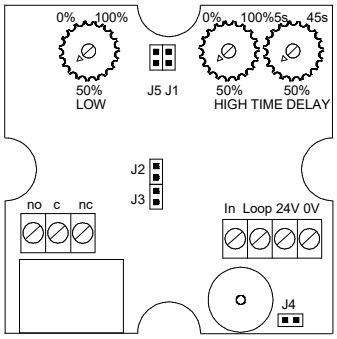
## Jumper Settings & Options

**Inputs:**

| | |
|---|---|
| IN | Input signal |
| LOOP | Loop through |
| 24V | 24Vac/dc |
| 0V | 0V |

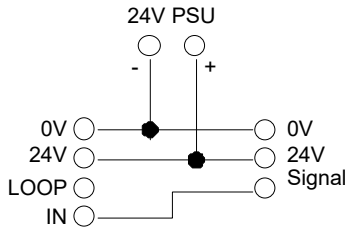
**Output:**

| | |
|---|---|
| c | Common |
| nc | Normally closed |
| no | Normally open |

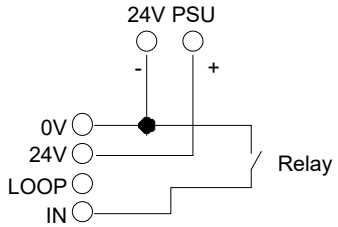



## Connection Examples

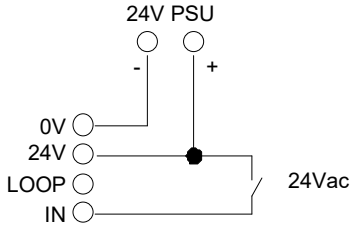
Voltage/current input:




Relay input:




24Vac input:






Tel: +44 (0)1732 861200 - E-mail: sales@sontay.com - Web: www.sontay.com