AoFrio

USER MANUAL

SCS Controller
Alarms External Indications

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P: +64 9 477 4500 **E:** sales@aofrio.com
www.aofrio.com

Summary

This feature allows some of the alarms on a SCS Controller to be shown through a light and/or buzzer connected to one of the connection ports.

The enabled alarms are split into three groups, each of them showing a different pattern:

Group	Alarms	Pattern	Priority
1	• Door Left Open	• continues blinking/beeping 1 sec. period	highest
2	• Low Product Temperature • High Product Temperature	• 3 fast blinking/beeping • stop 30 seconds • repeat for 10 min • stop 30 min • restart	medium
3	• Run - Lockout Time • Grace - Lockout Time • Missing Tracking (New alarm. Please see working mode below)	• 1 long blink/beep (2 sec. long) • stop 2 min • repeat for 10 min • stop 120 min • restart	lowest

If two alarms from different groups are simultaneously active, the pattern of the group with the highest priority will show.

SCS Advanced

SCS Advanced can be configured with two different ports to show the alarms - one of them intended for a light and the other for a buzzer.

The user will be able to choose which alarms they want to show and in which way: light port, buzzer port or both.

Parameter Configurations

For some configurations to work, power cycling the SCS Controller is required.

Alarms External Light Port Configuration

Selects the Alarms External Light connection port.

Subcategory	Available options	Default
Hardware Set-up	S1, S2, LE1, LE2, LE3 or NC	NC

LE1, LE2 and LE3 are available so that alarms can be shown using any LED lighting connected to these inside the equipment.

S1 and S2 are useful for AC lights, while LE1, LE2 and LE3 are only capable of handling DC lights. Please follow hardware specifications in the SCS manual (#WT9748) when choosing the external component.

Alarms External Buzzer Port Configuration

Selects the Alarms External Buzzer connection port.

Subcategory	Available Options	Default
Hardware Set-up	S1, S2, LE1, LE2, LE3 or NC	NC

LE1, LE2 and LE3 are usually used to connect the LED lighting inside the equipment. If connecting a buzzer to one of these outputs, please make sure it is not connected and configured to work with the LED as well.

S1 and S2 are useful for AC buzzers, while LE1, LE2 and LE3 are only capable of handling DC buzzers. Please follow hardware specifications in the SCS manual (#WT9748) when choosing the external component.

Missing Tracking Alarm

This alarm will indicate when the SCS Controller has not connected to any of the AoFrio Track, Field or Lab apps for more than the defined time.

The alarm will only reset when:

- the AoFrio Track app connects to the SCS Controller, or;
- the AoFrio Field or Lab app is connected to the SCS Controller and the event log is uploaded.

Subcategory	Increment & Units	Parameter Range	Default
General Alarms Menu	1 week	4 to 52 or disabled	disabled

External Indication Selection

Select if the alarm should be shown through the configured outputs or not.

This relates to the following parameters:

- External Indication for ‘Door Left Open’ Alarm
- External Indication for ‘High Product Temperature’ Alarm
- External Indication for ‘Low Product Temperature’ Alarm
- External Indication for ‘Missing Tracking’ Alarm
- External Indication for ‘Run - Lockout Time’ Alarm
- External Indication for ‘Grace - Lockout Time’ Alarm

Subcategory	Increment & Units	Parameter Range	Default
General Alarms Menu	integers	0 to 3	disabled

- 0 = disabled
- 1 = only light port
- 2 = only buzzer port
- 3 = light and buzzer ports

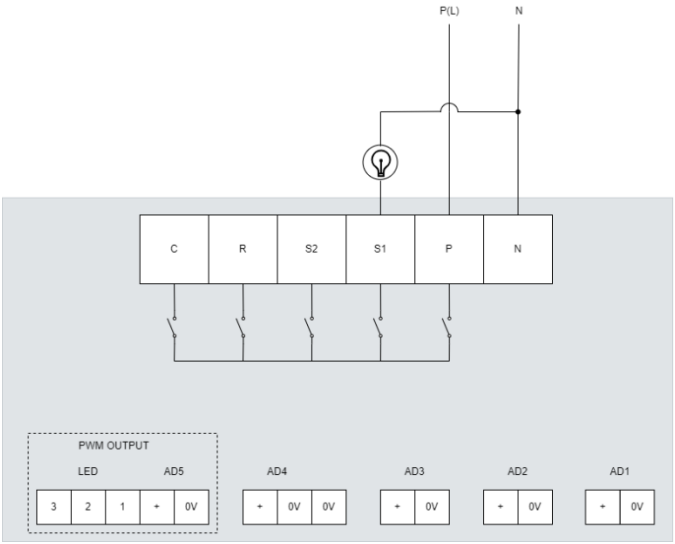
Alarms must be fully configured before they will be operational.

If an alarm is, for example, set to show through the buzzer port (option 2), but **Alarms External Buzzer Port Configuration** is set to NC, then the alarm will not be indicated.

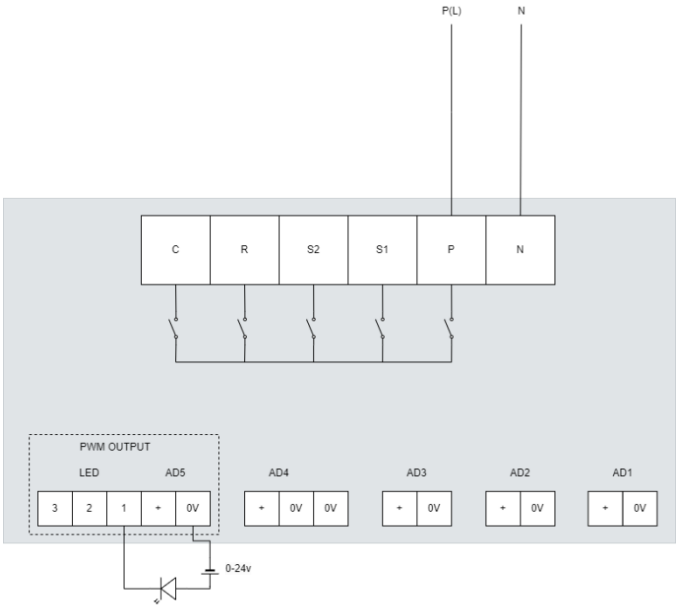
If two alarms in the same group are set to show in different ways, i.e. one only light and the other one only buzzer, and the two alarms are triggered, then both the light and the buzzer will activate.

Connection Examples

The following diagrams show just two setups for the SCS Advanced Controller. Other parallel configurations are also possible such as an AC buzzer connected to S1 port, and a DC buzzer connected to LE1 port.



Example of AC Light/Buzzer connection on the SCS Advanced Controller



Example of DC Light/Buzzer connection on the SCS Advanced Controller

SCS Basic

Only the S1 port can be used for this feature. The user can choose to connect a light, a buzzer or both to the same port.

Parameter Configurations

For some configurations to work, power cycling the SCS Controller is required.

Alarms External Port Configuration

Selects the Alarms External connection port.

Subcategory	Available Options	Default
Hardware Set-up	S1 or NC	NC

S1 is useful for AC lights and/or buzzers. Please follow hardware specifications in the SCS manual (#WT9748) when choosing the external component.

Missing Tracking Alarm

This alarm will indicate when the SCS Controller has not connected to any of the AoFrio Track, Field or Lab apps for more than the defined time.

The alarm will only reset when:

- the AoFrio Track app connects to the SCS Controller, or;
- the AoFrio Field or Lab app is connected to the SCS Controller and the event log is uploaded.

Subcategory	Increment & Units	Parameter Range	Default
General Alarms Menu	1 week	4 to 52 or disabled	disabled

External Indication Selection

Select if the alarm should be shown through the configured outputs or not.

This relates to the following parameters:

- External Indication for ‘Door Left Open’ Alarm
- External Indication for ‘High Product Temperature’ Alarm
- External Indication for ‘Low Product Temperature’ Alarm
- External Indication for ‘Missing Tracking’ Alarm
- External Indication for ‘Run - Lockout Time’ Alarm
- External Indication for ‘Grace - Lockout Time’ Alarm

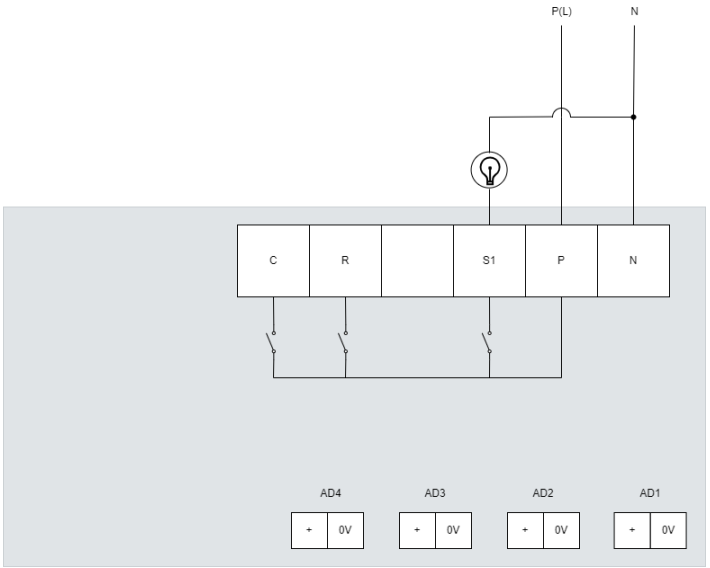
Subcategory	Increment & Units	Parameter Range	Default
General Alarms Menu	integers	0 to 1	disabled

- 0 = disabled
- 1 = enabled

If an alarm is enabled to show (option 1), but **Alarms External Port Configuration** is set to NC, then the alarm won’t be indicated.

Connection Examples

The following diagram shows a set up for the SCS Basic Controller. Connection of parallel components is also permitted.



Example of an AC Light/Buzzer connection on the SCS Basic Controller

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