

# Cig-Arrête Weatherproof Master Flame Detector with Voice Alarm Monitor (Part No CSA-FDW)



#### **Description**

Designed for the detection of unauthorised smoking in external areas subject to high winds, rapid ventilation, smoke and gas. Typical applications include open areas, building entry/exit points, rooms with high ceilings (>3m <6m), or locations subject to intermittent smoke or vapour.

The module is designed for single applications, and will detect a 25mm cigarette lighter flame at 6 metres within 1 second. When installed a s part of a Cig-Arrête Tobacco Control System, the FDW can be combined with Flame Detection Slave units (CSA-FUV) to provide complete coverage.

Coverage 6m @120° FOV

\*\*Multi-Lingual Product

#### **Product Features**

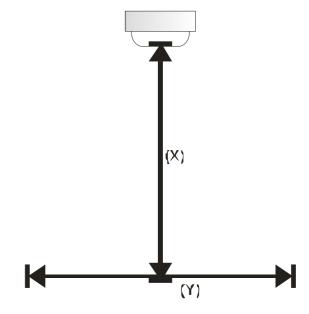
- Designed to detect a flame lighting a cigarette
- Fully self-contained, battery operated flame detector and voice sounder
- 120 degree field of view
- Operates from 1 x 9V standard alkaline PP3 battery
- Tough, aesthetic, brilliant white GRP housing
- Provides clear voice message at 90dB output in alarm, with volume control
- Optional plug-in relay for connection to remote equipment (contacts rated at 1A 24v dc)
- May be remotely powered using an optional 6V power supply (part CSA-SMPSU)

Message: "This is a no Smoking area, please extinguish your cigarette, a member of staff has been contacted"

### Coverage

The flame detector has a field of view of 120°. The table below provides a guide to the coverage area for a given installed height.

| Height     | Coverage   | Height   | Coverage |
|------------|------------|----------|----------|
| Metres (x) | Metres (y) | Feet (x) | Feet (y) |
| 1          | 3.5        | 3        | 10       |
| 2          | 7          | 6        | 20       |
| 3          | 10         | 9        | 31       |
| 4          | 14         | 12       | 42       |
| 5          | 17         | 15       | 52       |
| 6          | 21         | 18       | 62       |



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#### Installation

By default the stand alone module is factory set to DIP switches 2 and 8 in the ON position. (see table below for configuration)

Voice Message No 1 – "This is a no smoking area. Please extinguish your cigarette. Staff have been contacted."

Full volume Adjustable via potentiometer 1 message Play - (DIP Switch 3 and 4 OFF)

Set for 4 x AA batteries - The preferred battery size due to longevity of the product (DIP Switch 8 ON)

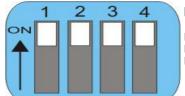
Install the unit on a ceiling or on a wall in line with the operating parameters shown overleaf. Please ensure that the sensing window is clean and free from dust and grease as this may affect the sensitivity of the unit.

#### **Battery Operation Instructions**

Remove battery holder from the unit. Insert  $4 \times 900$  quality AA alkaline batteries into battery holder - observing polarity and replace holder (or  $1 \times 9V$  PP3 battery). Fix to ceiling/wall using appropriate fixing screws. Either accept factory default settings or configure as required.

Note: Detector can be locally powered if necessary, using optional plug-in daughter board. (see PIN CSA-DBD)

THE CSA-FDW DOES NOT FLASH ITS LED. THE ONLY TIME THE LED WILL FLASH IS WHEN THE DETECTOR HAS SENSED A FLAME, AND WHEN THE DETECTOR HAS INITIATED AN ALARM CONDITION.



## **Detector Sensitivity Adjustment**

High Sensitivity = SW1 ON + SW2 OFF + SW3 OFF Normal Sensitivity = SW1 ON + SW2 ON + SW3 OFF Low Sensitivity = SW1 ON + SW2 ON + SW3 ON

| DIL SWITCH SE              | TTINGS           |     |     |     |     |     |     |     |     |
|----------------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| DIL SWITCH SI              | TINGS            | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
| Infra Red Remote           | Enabled          | ON  |     |     |     |     |     |     |     |
|                            | Disabled         | OFF |     |     |     |     |     |     |     |
| Sound Output               | Alert Tone       |     | OFF |     |     |     |     |     |     |
|                            | Speech           |     | ON  |     |     |     |     |     |     |
| Message Repeats            | 1                |     |     | OFF | OFF |     |     |     |     |
| (or tone)                  | 3                |     |     | OFF | ON  |     |     |     |     |
|                            | 5                |     |     | ON  | OFF |     |     |     |     |
| Silent (no tone or speech) | Relay On 20 Secs |     |     | ON  | ON  |     |     |     |     |
| Message Select             | 1                |     |     |     |     | OFF | OFF | OFF |     |
|                            | 2                |     |     |     |     | OFF | OFF | ON  |     |
|                            | 3                |     |     |     |     | OFF | ON  | OFF |     |
|                            | 4                |     |     |     |     | OFF | ON  | ON  |     |
|                            | 5                |     |     |     |     | ON  | OFF | OFF |     |
|                            | 6                |     |     |     |     | ON  | OFF | ON  |     |
|                            | 7                |     |     |     |     | ON  | ON  | OFF |     |
| Battery Monitor            | 9V Battery       |     |     |     |     |     |     |     | OFF |
|                            | 6V Battery       |     |     |     |     |     |     |     | ON  |

### **Fault Indication**

Low Battery 0.5 (\$) blip, once every 150 seconds - high tone Head Removal 0.5 (\$) blip, once every 150 seconds - low tone

#### **Specification**

Temperature -10 to +50 C
Humidity 0 - 95% non condensing
Operating Voltage 4 to 12V dc
Operating Current 60µA standby, 100mA during alarm
@6V dc

#### Battery Life based on quality DURACELL alkaline batteries.

| Duracell | Capacity   | Standby Time | Max No of Plays (10 secs) |  |  |  |
|----------|------------|--------------|---------------------------|--|--|--|
| AA 6V    | 2.85 A/hr  | 5 Years      | 10,000                    |  |  |  |
| PP3 9V   | 0.58 A/hr  | 1 Year       | 2,000                     |  |  |  |
| D 6V     | 15.00 A/hr | 10 Years     | 50,000                    |  |  |  |

#### Note:

The life of the battery is dependent on the number of message plays. In areas where smoking occurs frequently then utilise the D Cell battery box (Part No CSA—EBB) or purchase a plug in power supply e.g. (Part No CSA—246)

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