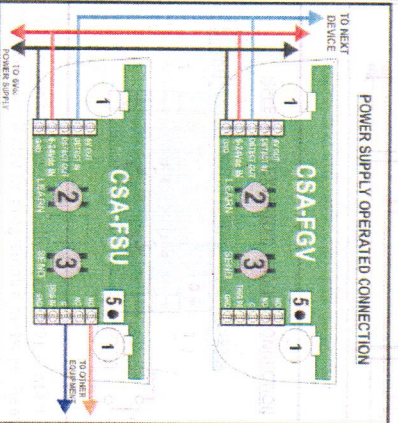


9—24 VDC PRODUCT WIRING CONNECTIONS (CSA-XXXX24)

If you are using a power supply, then decide which product will be the Master Unit of the system and connect a 9-24Vdc power supply as shown opposite. This connection is continued through to every device on the system to supply power. This will normally be the CSA-FSU installed outside the washroom area. You can connect up to 10 devices to the CSA-FSU as shown in the diagram opposite.

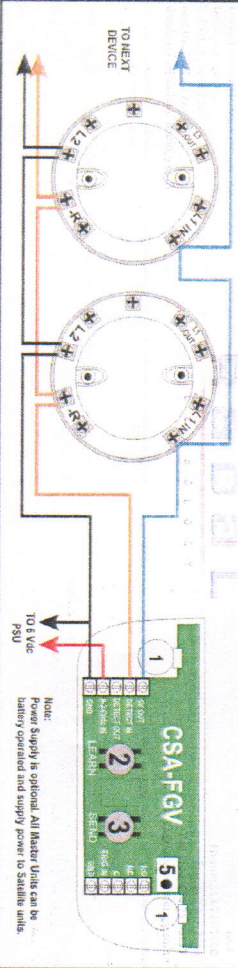
When any device generates an alarm condition, this will be relayed to the Master Unit which will also generate an alarm condition simultaneously. You can use any of the devices as a Master Unit, the diagram opposite is by way of example only.

Use 7 x 0.2mm stranded alarm cable for all the connections. Once the wiring is complete and checked, switch on the power supply at the mains. Each device will provide a message stating how it is configured. If you have a gas (smoke) element, the device will flash its LED for 2 minutes to normalise.

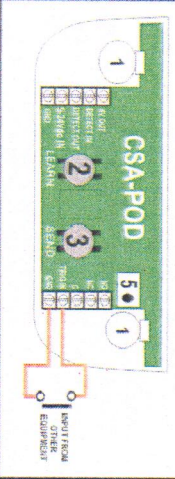


DO NOT TEST THE DEVICE UNTIL THE FLASHING STOPS. Your system is now installed and running normally. Use the above diagram to connect any of the SD Evolution products as a master unit to any of the satellite products.

CONNECTION TO EXISTING PRODUCTS CSA-SGA & CSA-FIV



SPEECHPOD EXTERNAL TRIGGER CONNECTION



Simply connect the Normally Open (NO) contact across the TRIG IN and GND input. Each time the switch closes, SpeechPOD will play its programmed message. Remember, SpeechPOD is normally battery operated but CSA-POD24 can be powered from a 9-24Vdc power supply connected to the VIN and GND inputs.

For further information or assistance with our products, please contact our Technical Department by phone or email as detailed below.

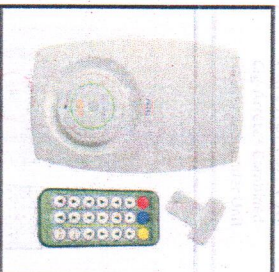
Unit 1 Webber Court,
Billington Road Burnley,
Lancashire BB11 5UB,
United Kingdom.
Tel: 01282 463 770
Fax: 01282 463 771
Email: info@radaltechnology.com

Radal
TECHNOLOGY

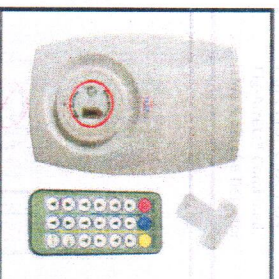
1000 Laurel Avenue
Suite A Hamilton, Ohio 45015
USA
Phone: 513 737 7800
Fax: 513 737 7444
Toll Free: 888 795-9577
Email: infousa@radaltechnology.com

PRODUCT INSTALLATION GUIDE

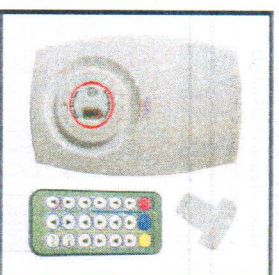
FOR THE FOLLOWING PRODUCTS



Part No: CSA-POD
Advanced SpeechPOD
Voice Warning System



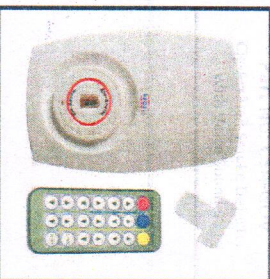
Part No: CSA-FGS
Cig-Arrête® Combined Flame,
Smoke and SpeechPOD



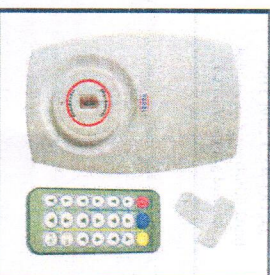
Part No: CSA-FSV
Cig-Arrête® Combined
Flame and SpeechPOD



Part No: CSA-FSU
Cig-Arrête® Combined
Flasher & Sounder Unit



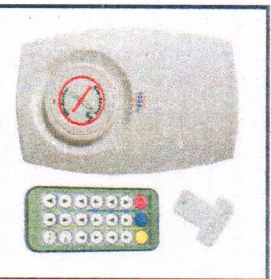
Part No: CSA-FGV
Cig-Arrête® Combined
Flame & Smoke Detector



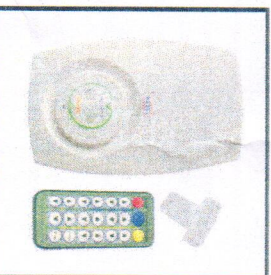
Part No: CSA-FOV
Cig-Arrête® Flame Detector
With Voice Sounder



Part No: CSA-GSV
Cig-Arrête® Combined
Smoke & SpeechPOD



Part No: CSA-GOV
Cig-Arrête® Smoke Detector
With Voice Sounder



Part No: CSA-DUAL
Advanced SpeechPOD Dual
Voice Warning System

GENERAL OVERVIEW OF PRODUCTS

Congratulations on your purchase of the most advanced smoking detection system and voice warning system available on the market today. All the Cig-Arrête and SpeechPOD products are compatible with any PC running Windows® Operating System using 'Drag and Drop' file programming. In this installation guide, we will take you through the various programming options and also how to connect your products together to form a system.

All product models have the same basic layout although functionality will vary. The diagram opposite shows where the various components are located.

1. OPENING THE FRONT COVER

Use the special key and insert the two prongs into the holes on the top side of the product. Press down firmly and pull the front cover away from the back plate. The front cover is hinged and can be removed completely past a certain point.

2. REMOVING THE SD FLASH CARD

Press the SD card into the holder and release. The SD card will spring away from the holder allowing removal. Once you have programmed the SD Flash Card, re-insert it into the holder and push gently until it clicks into position.

3. INSERTING THE BATTERIES

Insert the batteries (4 x AA Alkaline) into the battery clips and ensure that connections are firmly made. Be sure to observe the correct polarity as printed on the PCB.

4. CONNECTING TO AN EXTERNAL POWER SUPPLY

Only products containing the suffix 24 (eg CSA-FGV24) can be connected to an external 9-24Vdc regulated power supply. The connections are made on the bottom left hand corner of the PCB marked as Vin and GND. **DO NOT INSERT BATTERIES WHEN OPERATING THE UNIT ON A POWER SUPPLY AND DO NOT CONNECT STANDARD PRODUCTS TO AN EXTERNAL POWER SUPPLY.**

GENERAL INSTALLATION REQUIREMENTS

- Do not install Cig-Arrête® smoke detectors in outdoor areas or smoky atmospheres such as car parks, loading bays, near gas operated fork trucks, or where welding or cooking may occur as fumes and gases may cause unwanted alarms. Consider using flame detection in these areas.
- Do not exceed the coverage area of each smoke detector (3m x 3m x 3m)
- Do not place installation cabling close to mains voltage cables as they may cause interference. Always use stranded multi-core cable.
- Do not install flame detectors in direct sunlight of facing high frequency ballast lighting such as metal halide lamps as the lighting frequency may trigger unwanted alarms.
- For SpeechPOD installations, if the number of message plays is expected to be high, consider using the CSA-POD24 and connecting to an external 9-24Vdc power supply to avoid draining of batteries.

RADIO COMMUNICATION SETUP

The radio communication modules (if fitted) only transmit alarm conditions from the Cig-Arrête® elements—ie. Flame and smoke sensors. They do not transmit any PIR activations on the SpeechPOD product.

In order to configure the radio system communication you will need to prepare two devices. For example, to connect a CSA-FGV Combined Flame and Smoke Detector to a CSA-FSU Combined Sounder Flasher Unit please follow these instructions.

In this example, the CSA-FSU is the receiving unit and will operate when it receives an alarm signal from the CSA-FGV.

CIG-ARRÊTE Press the CIG-ARRÊTE button on both products to enter the Configuration menu. The product will tell you how it is configured.

On the CSA-FSU, press the LEARN button (2). The product will then ask you the following:

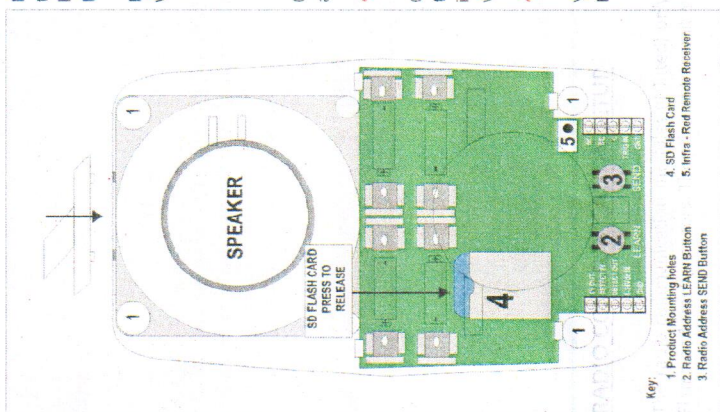
"PLEASE PRESS SEND ON THE DEVICE TO BE ADDED"

On the CSA-FGV, press the SEND button (3). This action sends a transmission and unique address to all units. Only the product that is in LEARN mode will accept the transmission. Once the CSA-FSU has verified that the data is good, it will confirm the following:

"DEVICE ADDED"

You can repeat this process and add several devices to the same CSA-FSU if required.

CIG-ARRÊTE Once you have completed your radio set up, press the CIG-ARRÊTE button to exit Configuration mode. The product will confirm by saying **"DEVICE CONFIGURED"**



BATTERY POWERED WIRING CONNECTIONS

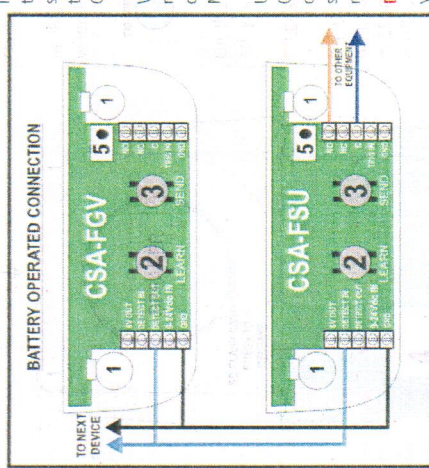
If you are not using the 24v versions with a power supply, then decide which product will be the Master Unit of the system. This will normally be the CSA-FSU installed outside the washroom area. You can connect up to 10 devices to the CSA-FSU as shown in the diagram opposite.

When any device generates an alarm condition, this will be relayed to the Master Unit which will also generate an alarm condition simultaneously. You can use any of the devices as a Master Unit, the diagram opposite is by way of example only.

Use 7 x 0.2mm stranded alarm cable for all the connections. Once the wiring is complete insert 4 x AA batteries into each device to power them. Each device will provide a message stating how it is configured. If you have a gas (smoke) element, the device will flash its LED for 2 minutes to normalise.

DO NOT TEST THE DEVICE UNTIL THE FLASHING STOPS.

Your system is now installed and running normally.



SPEECHPOD CONFIGURATION AND SETUP PROCEDURE

Once you have accessed the configuration menu by pressing the SpeechPOD button, you have access to all the functions relevant to the SpeechPOD element. All these functions are shown below, but remember if you do not have a particular element (e.g. PIR Motion sensor) on the device you have purchased, you will not be able to set the configuration menu for this element.

Pressing the LANGUAGE button UP or DOWN will scroll through the list of available languages and the device will tell you which language is currently selected. The languages programmed by the factory are as follows and once selected all the menu settings will be spoken in the selected language.

"ENGLISH", "FRANCAIS", "DEUTSCHE", "ESPAÑOL", "AMERICAN", "OTHER"

Pressing the MESSAGE button UP or DOWN will scroll through the list of available messages you have programmed in the Cig-Arrete® folder on the SD Flash Card. You can program several messages in this folder and use the MESSAGE button to select the particular message to be played in the event of a smoking detection. Please note that whichever message you select will be played for an alarm event from either the flame detector, or the smoke detector.

Pressing the MODE button UP or DOWN will scroll through the options for the available SpeechPOD functions. The options are shown below with a brief description for each one. The MODE button works together with the TIME DELAY button which selects the various options or time delays for each MODE selected.

"CLEANER MODE—PLEASE SELECT TIME TO OFF"

Used by cleaning staff to change the normal operational mode to play a message alerting partially sighted people that the floor may be wet and slippery. Use the TIME DELAY button to select the time required for the floor to dry (10 mins to 60 mins). After the time period SpeechPOD will return to its normal mode and time delays etc.

"DELAY AFTER ACTIVATION—PLEASE SELECT TIME DELAY"

SpeechPOD will play the selected message immediately sensing motion, but will not play any message again for a time period which is selected by pressing the TIME DELAY button UP or DOWN. Typically this function is used for infection control messages to use hand gel prior to visiting patients and relatives.

"DELAY BEFORE ACTIVATION—PLEASE SELECT TIME DELAY"

SpeechPOD will be activated on sensing motion but will not play the selected message for a time period which is selected by pressing the TIME DELAY button UP or DOWN. Typically this function is used for hand washing, where a person enters a washroom and the product waits for 60 seconds before reminding them about the importance of hand hygiene.

"SEQUENTIAL MESSAGES—PLEASE SELECT ON OR OFF"

Press the TIME DELAY button to switch this ON or OFF. When ON, at the first detection of motion SpeechPOD will play the first message in the SPOD folder, on subsequent activations, the next message in the folder will be played and so on. This avoids any message fatigue and always makes the announcement fresh.

"MESSAGE REPEATS"

Once you have pressed the MODE button above, you can press the TIME DELAY button UP or DOWN to scroll through the MESSAGE REPEATS (the number of times that the device will play the message in alarm). The factory default setting is ONE. The options available are:

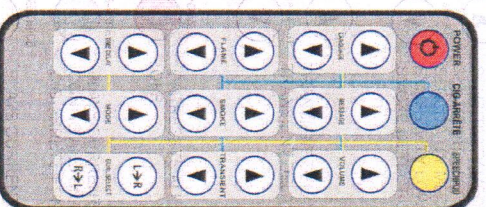
"OFF", "ONE", "TWO", "THREE"

Once you have configured the SpeechPOD® element present on your device, press the SPEECHPOD button again to return to 'RUN MODE' which makes the device run normally and ready to generate alarm conditions. On exiting the configuration mode the device will provide the following message:

"DEVICE CONFIGURED"

GENERAL OVERVIEW OF PROGRAMMING FUNCTIONS

The chart below provides at a glance all the programming functions detailed in the next few pages of the guide.



LANGUAGE
ENGLISH
FRENCH
GERMAN
SPANISH
AMERICAN
OTHER

MESSAGE SCROLL AND PLAY EACH MESSAGE FOUND IN FOLDER

**DEVICE VOLUME HIGH
DEVICE VOLUME MEDIUM
DEVICE VOLUME LOW**

FLAME
SENSITIVITY HIGH
SENSITIVITY MEDIUM HIGH
SENSITIVITY NORMAL
SENSITIVITY MEDIUM LOW
SENSITIVITY LOW
FLAME DETECTION OFF

TIME DELAY
OFF
30 SECONDS
60 SECONDS
90 SECONDS
3 MINUTES
5 MINUTES
10 MINUTES
20 MINUTES
30 MINUTES
40 MINUTES
50 MINUTES
60 MINUTES

SMOKE
SENSITIVITY HIGH
SENSITIVITY MEDIUM HIGH
SENSITIVITY NORMAL
SENSITIVITY MEDIUM LOW
SENSITIVITY LOW
SMOKE DETECTION OFF

MODE
CLEANER MODE TIME TO OFF
DELAY AFTER ACTIVATION
SEQUENTIAL MESSAGES
MESSAGE REPEATS

TRANSIENT
TRANSIENT DELAY ON
TRANSIENT DELAY OFF

TIME DELAY
SCROLL AND PLAY MESSAGE IN FOLDER FOR LEFT TO RIGHT
SCROLL AND PLAY MESSAGE IN FOLDER FOR RIGHT TO LEFT

POWER
ON (RESETS ALL TIMERS)
OFF

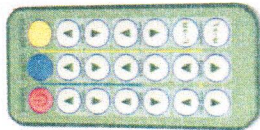
CIG-ARRETE
PLAYS CURRENT SETUP CONFIG AND ENABLES CIG-ARRETE FUNCTIONS

CIG-ARRETE: MESSAGE: "THIS IS A NO SMOKING AREA....."
PRODUCT STAYS IN CIG-ARRETE MODE UNTIL BUTTON PRESSED AGAIN TO

SPEECHPOD
PLAYS CURRENT SETUP CONFIG AND ENABLES SPEECHPOD FUNCTIONS

SPEECHPOD: MESSAGE: "THIS FLOOR IS WET AND....."
PRODUCT STAYS IN SPEECHPOD MODE UNTIL BUTTON PRESSED AGAIN TO EXIT

GENERAL OPERATING PROCEEDURE



All our products whether Cig-Arrête® or SpeechPOD can only be operated by use of the CSA-IR2 Infra Red remote Control handset. The products have a number of advanced features to allow the facility management team to change messages, flame and smoke sensitivity, volume and timer functions when necessary. In addition, in SpeechPOD mode, the product can provide an additional message to alert visually impaired personnel or visitors to potential risk or hazards such as wet and slippery floors.

Standard and wire-free products are powered by 4 x AA alkaline batteries which are inserted into the on board battery clips. All products with a 24 suffix in the part number (eg CSA-GOV24) can be powered from a separate regulated 9-24Vdc power supply. Once powered, the products will then immediately power up and begin normal operation.

On initial power up, your particular product configuration will provide a message, stating its current configuration, which will be one of the following:

- PART No CSA-FGS "This device is configured as Flame Detector, Smoke Detector, SpeechPOD"
- PART No CSA-FGV "This device is configured as Flame Detector, Smoke Detector"
- PART No CSA-FDV "This device is configured as Flame Detector"
- PART No CSA-GOV "This device is configured as Smoke Detector"
- PART No CSA-GSV "This device is configured as Smoke Detector, SpeechPOD"
- PART No CSA-FSV "This device is configured as Flame Detector, SpeechPOD"
- PART No CSA-POD "This device is configured as SpeechPOD"
- PART No CSA-DUAL "This device is configured as SpeechPOD Dual"
- PART No CSA-SFU "This device is configured as Combined Sounder Beacon"

Whichever message is played depending on the model number, the device will then begin to initialise and power up. In the case of a smoke detector forming part of the product, the blue LED will begin to flash to indicate that the product is normalising (learning its environment). For both flame detectors and SpeechPOD there is no external indication until either a flame or motion is detected at which point the device will play its programmed message.

GENERAL FUNCTIONS



Pressing the ON/OFF button will cause the device to turn either ON or OFF. You cannot access any of the configuration menu or change any settings until you select the appropriate device type.



Pressing the SPEECHPOD button will select the configuration menu for the SpeechPOD element and the device will list its current configuration and allow access to function buttons.



Pressing the CIG-ARRETE button will select the configuration menu for the Flame and Smoke Detection elements and the device will list its current configuration and allow access to function buttons.

Once you have selected either SPEECHPOD or CIG-ARRETE, the specific function buttons are activated.



Pressing the VOLUME control either UP or DOWN will scroll through the available options. These are:

- "Device Volume HIGH"
- "Device Volume MEDIUM"
- "Device Volume LOW"

CIG-ARRETE CONFIGURATION AND SETUP PROCEEDURE

Once you have accessed the configuration menu by pressing the Cig-Arrête® button, you have access to all the functions relevant to your particular device. All these functions are shown below, but remember if you do not have a particular element (e.g. Flame detector) on the device you have purchased, you will not be able to set the configuration menu for this element.



Pressing the LANGUAGE button UP or DOWN will scroll through the list of available languages and the device will tell you which language is currently selected. The languages programmed by the factory are as follows and once selected all the menu settings will be spoken in the selected language.

"ENGLISH"; "FRANCAIS"; "DEUTSCHE"; "ESPAÑOL"; "AMERICAN"; "OTHER"



Pressing the MESSAGE button UP or DOWN will scroll through the list of available messages you have programmed in the Cig-Arrête® folder on the SD Flash Card. You can program several messages in this folder and use the MESSAGE button to select the particular message to be played in the event of a smoking detection. Please note that whichever message you select will be played for an alarm event from either the flame detector, or the smoke detector.



Pressing the FLAME button UP or DOWN will scroll through the FLAME SENSITIVITY options to allow the device to be set up for the particular environment. Factory default setting is NORMAL. You can also turn off the FLAME sensor by selecting OFF. The settings are as follows:

"HIGH"; "MEDIUM HIGH"; "NORMAL"; "MEDIUM LOW"; "LOW"; "OFF"



Pressing the SMOKE button UP or DOWN will scroll through the SMOKE SENSITIVITY options to allow the device to be set up for the particular environment. Factory default setting is NORMAL. You can also turn off the SMOKE sensor by selecting OFF. The settings are as follows:

"HIGH"; "MEDIUM HIGH"; "NORMAL"; "MEDIUM LOW"; "LOW"; "OFF"



Pressing the TRANSIENT button UP or DOWN will select either ON or OFF. The transient delay is normally used to filter out unwanted alarms due to lactose intolerance, which can upset the sensitive detection elements. The factory default is OFF. The settings are as follows:

"ON"; "OFF"



Pressing the MODE button UP or DOWN will scroll through the MODE options which for Cig-Arrête® elements are MESSAGE REPEATS (the number of times that the device will play the message in alarm). The factory default setting is ONE. The options available are set by pressing the TIME DELAY button.



Once you have pressed the MODE button above, you can press the TIME DELAY button UP or DOWN to scroll through the MESSAGE REPEATS (the number of times that the device will play the message in alarm). The factory default setting is ONE. The options available are:

"OFF"; "ONE"; "TWO"; "THREE"



Once you have configured the Cig-Arrête® elements present on your device, press the CIG-ARRETE button again to return to 'RUN MODE' which makes the device run normally and ready to generate alarm conditions. On exiting the configuration mode the device will provide the following message:

"DEVICE CONFIGURED"