



# ADDRESSABLE FIRE SYSTEMS *XFP*



You're Safe with C-TEC

**WORLD CLASS** LIFE SAFETY SYSTEMS



**NEXT GENERATION FIRE DETECTION & ALARM SYSTEMS FROM C-TEC**

# INTRODUCING CAST by C-TEC.

CAST is C-TEC's own UK manufactured 'distributed intelligence' addressable fire detection and alarm system. Distributed intelligence means it isn't just CAST's control and indicating equipment that makes decisions, it's the system's field devices too.

This brochure has been designed to showcase our entire range of CAST innovations - from our powerful future-proofed CAST communication protocol to our multiple EN54-certified CAST compatible products and EN54-13 compliant systems.

Inside you will find detailed information on our CAST XFP addressable fire panels and our wide range of CAST fire detectors, manual call points, sounders, voice sounders, visual alarm devices (VADs) and interface modules.

Also featured is our new ENVISION fire 'IoT' software package that helps simplify the testing and maintenance of a CAST system and provides a verifiable audit trail for duty holders.

With hundreds of systems already installed it's no wonder CAST is fast becoming the addressable fire alarm system of choice for installers, architects, consultants, specifiers and end users in commercial and residential applications worldwide.

 *XFP* **ENVISION**



# CAST Addressable Fire Systems

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## Meet the CAST

### The future of fire alarm systems is here!

CAST by C-TEC is the result of a multi-million pound investment project by the UK's largest independent manufacturer of life safety electronic systems.

Conceived, designed and realised by C-TEC, the CAST project involved the creation of a powerful proprietary communication protocol (C-TEC Addressable System Technology, abbreviated to 'CAST') and multiple control panels & field devices and a new Cloud-based remote access, data management & system testing software package called ENVISION.

When the world's most advanced distributed intelligence protocol meets the world's most powerful control, indicating, detection and alarm equipment, the result is an array of cutting-edge features and benefits as detailed throughout this brochure.

More comprehensive technical specifications and information on our other CAST-powered products such as our EVAC-ALERT BS 8629 compliant evacuation alert system and our HUSH BS 5839 part 6 compliant domestic fire alarm systems can be found at [c-tec.com](http://c-tec.com)

The future of fire alarm systems is here!



### Key CAST Features

- ▶ Fully compatible with C-TEC's XFP addressable fire panel range and ENVISION Fire 'IoT' software package
- ▶ Up to 255 addressable devices per loop
- ▶ 40V loop drive voltage to help ensure devices work as expected even on long wiring runs
- ▶ Autonomous decision-making for faster response times
- ▶ Multiple type codes making the system easier to program and test
- ▶ Two 'soft' addressing options – automatic via the panel or manual via a powerful handheld programmer
- ▶ Powerful multi-level addressing facilitating easy device addition and swapped device identification
- ▶ Multiple volumes, tones & detector modes that can be easily changed at any CAST compatible panel via a PC laptop
- ▶ High-speed data transmission and robust data transfer ensuring rapid response to fires, faults, pre-alarms and other system events
- ▶ EN54-13 compliance providing reassurance to all that the system's components will work as expected
- ▶ Geographical location of open and short circuit faults to speed up installation and maintenance times
- ▶ The ability to easily accommodate spurs on retro-fit systems allowing the easy upgrade of existing systems
- ▶ An intuitive replace device function
- ▶ Powerful cause and effects allowing the system to be tailored to suit a specific application
- ▶ Future seamless integration with other CAST life safety systems to reduce energy, servicing and installation costs
- ▶ Designed and manufactured in the UK

## What's so special about the CAST communication protocol?

With many loop-based addressable fire alarm protocols the control panel (CIE) typically polls loop devices one after the other to determine what their status is and/or to give them a command (see Fig 1). This is termed point-to-point or node-to-node communication where devices are polled sequentially.

Each poll can be described as a data frame which, on many systems, typically involves voltage pulses going out from the panel and current pulses coming back from the devices.

If, say, device 2 is a detector and it is in a fire condition, this will take some time to be reported back to the panel especially on systems with over 100 devices as over 100 data frames would need to be sent before a message is reported back.

### BROADCAST MESSAGES

Instead of polling devices sequentially, CAST sends a broadcast message to 16 devices at a time (see Fig 2). Devices respond if they are present or have something to say. In between these broadcast messages is an opportunity for any node on a loop to report an event to the CIE. If the event reported is an alarm, the protocol's broadcast messaging can be further utilised to activate output devices (16 groups at a time).

CAST field devices are also intelligent enough to know if another device has a higher priority message (they not only listen to the panel, they listen to each other, avoiding potential collisions). This means if they are in fault they will back off from reporting the fault because they know another device is in a fire condition which is a higher priority (a feature we call autonomous decision making).

### POWERFUL GROUP ACTIVATION COMMANDS

All of this means fires can be annunciated very quickly as sounders can be activated (and silenced) within fractions of a second. This coupled with CAST's powerful group activation commands means rapid deployment of alarm signals.

The CAST communication protocol uses a combined voltage and current or hybrid return signal. This has the advantage of requiring a much larger amount of power to disrupt this signal making the system far more immune to noise and interference and thus data corruption. In fact it is greater than 20 times more immune than typical existing systems using a 20mA current return protocol. CAST really is the answer to noisy environments. And that's not all...

### SMART DEVICE ALGORITHMS

The use of embedded device intelligence has many advantages and one of these is that CAST's optical and multi-sensor detectors feature multiple smart transient rejection algorithms that negate the impact of sudden

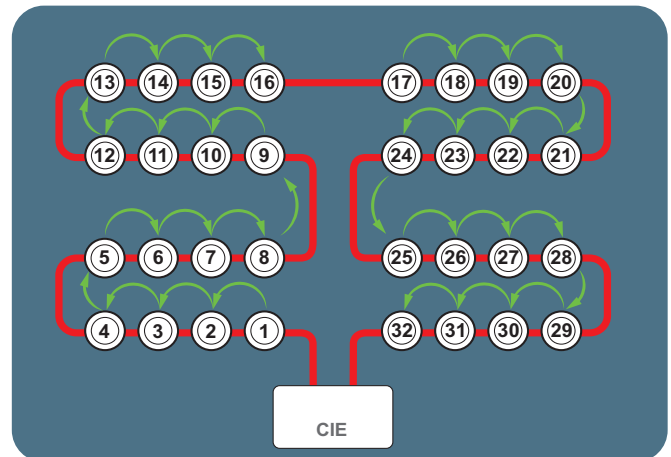


Figure 1: Typical 'point-to-point' communication

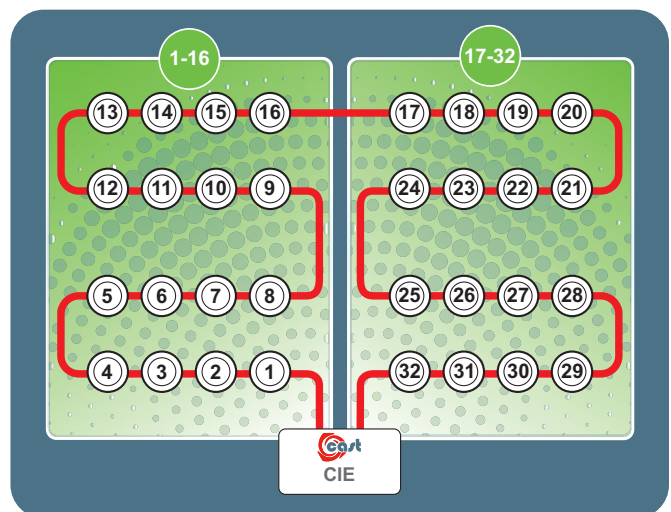


Figure 2: CAST's 'broadcast message' communication

surges of steam making them ideal for use in industrial, residential and catering environments. In addition CAST's heat detectors are embedded with our unique 'HEART' (HEat Analysis and Response Technology) algorithm which ensures each detector remains in a high state of readiness for a potential fire alarm situation. What does this mean in practice? Solid and reliable fire detection and alarm indication, less false alarms and massively reduced lifetime ownership costs.

You've always been safe with C-TEC, with CAST, you're even safer.

## CAST XFP 1 to 2 Loop Fire Alarm Panels

**C-TEC's CAST protocol takes the performance of our popular 1-2 loop XFP fire panels to another level.**

Thanks to CAST's multiple type codes, high speed data transmission and two speedy soft addressing options, it is now one of the most powerful, feature-packed addressable fire panels on the market.

Maintaining all of the qualities of our existing XFP panels but with the added advantage of CAST's 255 devices per loop and 40V 450mA loop drivers giving up to 18 Watts of power, never before has the installation of a high-quality and cost-effective EN54-2, EN54-4 and EN54-13 certified addressable fire system been so easy.

Available as a low-cost single loop 16 zone panel in a plastic enclosure or a robust 1 or 2 loop 32 zone metal panel, the range offers an array of user and installer-friendly features. This, and the ability to interconnect up



to eight XFP main panels or eight XFP repeaters onto a two wire RS485 network, make it ideal for use in small to medium sized applications and larger, more sophisticated installations too.

### Key Features

- ▶ LPCB certified to EN54-2/4 and Kiwa Telefication certified to EN54-13
- ▶ One or two 450mA loop drivers (dependent on model)
- ▶ Up to 255 CAST devices per loop
- ▶ Two independently programmable conventional sounder circuits
- ▶ Two programmable inputs
- ▶ A fault output relay and three programmable relay outputs with voltage free changeover contacts
- ▶ A selection of zone dependency/coincidence functions
- ▶ A day/night (building occupied/unoccupied) function
- ▶ An investigation delay period function
- ▶ Phased evacuation facility
- ▶ Built-in alarm counter
- ▶ Powerful short circuit protected loop drivers, capable of supporting multiple loop powered sounders per loop
- ▶ Earth fault monitoring
- ▶ Combined keypad / keyswitch entry to Access Levels 2 & 3
- ▶ 500 event monitoring
- ▶ ENVISION Enabled™ - fully compatible with C-TEC's powerful remote access, data management & system testing software - see page 8 for more details
- ▶ An intuitive Windows based upload-download PC program
- ▶ Optional flush-mounting bezel and glazed stainless steel enclosure also available
- ▶ Up to eight XFP main panels (any variant) can be connected onto a two-wire RS485 1km non-redundant network. Alternatively, up to eight XFP repeaters can be connected to any non-networked main panel
- ▶ Protective cover on PSU guards against live parts and facilitates compliance with the new safety requirements of EN 62368-1
- ▶ Designed and manufactured in the UK

# CAST XFP 1-2 Loop Fire Panels

## XFP 1 Loop 16 Zone Addressable Fire Panel



- ▶ LPCB certified to EN54-2/4 and Kiwa Telefication certified to EN54-13
- ▶ Cost-effective 16 zone single loop panel allowing the connection of up to 255 CAST devices
- ▶ Supplied in an attractive flush or surface mountable plastic enclosure
- ▶ ENVISION Enabled™ - see page 8
- ▶ Enclosure measures 380 W x 235 H x D 96mm with space for 2 x 3.2Ahr batteries
- ▶ Low quiescent current (50mA, loop unloaded)



**XFP501E/CA** XFP 1 Loop 16 Zone Addressable Fire Panel, CAST protocol

## XFP 1 Loop 32 Zone Addressable Fire Panel



- ▶ LPCB certified to EN54-2/4 and Kiwa Telefication certified to EN54-13
- ▶ A powerful 32 zone single loop panel supplied in a durable metal enclosure
- ▶ ENVISION Enabled™ - see page 8
- ▶ Enclosure back box measures 410 W x 250 H x 80 D mm with space for 2 x 7Ahr batteries
- ▶ Semi-flush bezels (XFP385) and glazed stainless steel enclosures (BF359/3S) also available
- ▶ Low quiescent current (80mA, loop unloaded)



**XFP501/CA** XFP 1 Loop 32 Zone Addressable Fire Panel, CAST protocol

## XFP 2 Loop 32 Zone Addressable Fire Panel



- ▶ LPCB certified to EN54-2/4 and Kiwa Telefication certified to EN54-13
- ▶ A powerful 32 zone two loop panel supplied in a durable metal enclosure
- ▶ ENVISION Enabled™ - see page 8
- ▶ Enclosure back box measures 410 W x 250 H x 80 D mm with space for 2 x 7Ahr batteries
- ▶ Semi-flush bezels (XFP385) and glazed stainless steel enclosures (BF359/3S) also available
- ▶ Low quiescent current (100mA, 2 loops unloaded)



**XFP502/CA** XFP 2 Loop 32 Zone Addressable Fire Panel, CAST protocol

## Repeaters, Enclosures & Programming Software



<b>XFP510-16</b>	XFP Repeater panel, 16 zones. Max. 2 x 3.2Ah batteries
<b>XFP510-32</b>	XFP Repeater panel, 32 zones. Max. 2 x 7Ah batteries
<b>CFP761</b>	Network communications card for XFP 16 zone panels
<b>AFP711</b>	Network communications card for XFP 32 zone panels
<b>BF359/3S</b>	Stainless steel glazed enclosure for XFP 32 zone panels
<b>BF359/3CL</b>	Cam lock kit for BF359/3S stainless steel enclosure
<b>BF359/3SL</b>	Electromagnetic solenoid lock kit for BF359/3S stainless steel enclosure
<b>AFP709</b>	XFP printer kit (printer, lead & socket) for XFP 32 zone panels
<b>CA507</b>	XFP CAST Programming software c/w SAF7070000 lead
<b>SAF7070000</b>	2m Programming lead (4 way mox to 9-way RS232 'D' female)
<b>BF232</b>	RS232 to USB convertor

## ENVISION Remote Access, Service, Test & Site Management Software



### **Introducing ENVISION, a revolutionary new secure Cloud based remote access, service, test and site management software package from C-TEC.**

Add an ENVISION 'IoT' Access Hub to your CAST fire detection and alarm system to unlock a host of powerful features that are perfect for installers, end users, duty holders, site managers, responsible persons and more.

Want to check the status of a CAST system from a remote location? Not a problem! Wherever you are in the world, ENVISION allows you to generate powerful site-specific reports that can be scheduled to arrive on your desktop daily, weekly or monthly to help demonstrate due diligence via a verifiable audit trail.

Want fires, faults, tests and other system notifications to be sent in real time to a PC, tablet or smart phone? Job done! There's even a powerful graphics module that allows you to monitor the progress of a fire as it happens on a user-uploaded site map or building plan.

Want evidence that a client's weekly BS 5839-1 user tests are being carried out? It's all there at the touch of button.

ENVISION really comes into its own if you're an installer or a service and maintenance company. Not only does it allow authorised personnel to interrogate a CAST system prior to visiting site to determine if there are any contaminated devices or other issues, ENVISION's iOS and Android compatible Engineer App can save you masses of time and money. Simply download the App, enter a site's unique service PIN code and turn a two-man service job into a one-man service job. Not only will the App countdown the number of tests that need performing, successful and failed tests will be reported to your device and you will have the option to add comments or upload photos as required for inclusion in future client reports. No longer will you need to invent a complex verification system to prove that a device has been tested, thanks to ENVISION all the data you need will be available 24/7.

In an era when failure to carry out your fire safety responsibilities can leave you open to litigation, ENVISION not only makes your job easier, it provides indisputable evidence that you are carrying out your mandated duties effectively.

### **Key Features**

- ▶ Allows the secure Cloud based monitoring and testing of a CAST powered XFP fire detection & alarm system
- ▶ Reports fires, faults, tests and other system data to PCs, tablets and smart phones for action and analysis
- ▶ Powerful graphics module allows the easy addition of interactive building layouts and floor plans
- ▶ Allows duty holders and responsible persons to demonstrate due diligence via a verifiable audit trail
- ▶ Allows maintenance companies to schedule timely service visits based on real data such as device contaminations, etc.
- ▶ Can generate powerful user configurable reports that can be scheduled to arrive on your desktop daily, weekly or monthly.
- ▶ Dedicated iOS & Android 'Service' Apps allow speedy one man walk tests with powerful features such as 'device countdown', photo upload and engineer comments all provided as standard
- ▶ Optional SMS, 'push' or email notification alerts for tests, fires, faults, pre-alarms and escalations
- ▶ All data encrypted and stored in an ISO 27001 and ISO 9001 certified data centre

\* Firmware upgrade may be required on an existing XFP/ZFP system.

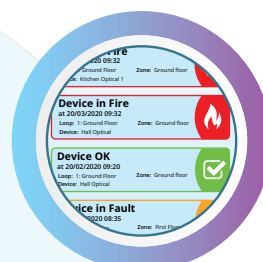


## ENVISION

ENVISION ENABLED™



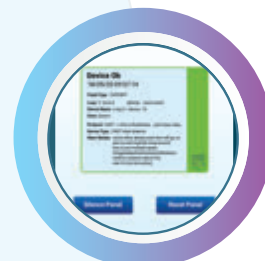
Live colour-coded site activity overviews



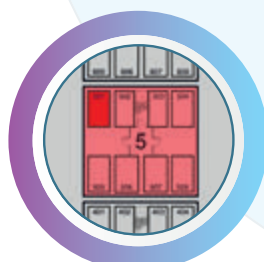
Real time notifications of Fires, Faults, Pre-Alarms & More



Comprehensive system activity reports direct to your desktop



Check a system's status from a remote location



View the progress of a fire in real time on site specific graphics



Intuitive Engineer Smartphone App

## ENVISION Fire 'IoT' Access Hub + 12 Months ENVISION Cloud Access (available early 2021)



- ▶ Designed to be mounted alongside a CAST XFP fire panel to provide access to C-TEC's powerful ENVISION Fire 'IoT' Software
- ▶ Hub measures 380 W x 235 H x 96 D mm and includes a power supply and space for standby batteries
- ▶ Connects to an XFP fire panel's RS232 serial port
- ▶ Requires an Ethernet (RJ45) connection to the building's internet
- ▶ Includes comprehensive status Indicators
- ▶ Upon activation, provides 12 months access to our ENVISION software (annual renewal fee applies thereafter)

ENV/1 ENVISION Fire 'IoT' Access Hub + 12 Months ENVISION Cloud Access

Contact our sales desk for more options /pricing information

## CAST Fire Detectors

**C-TEC's "best in class" UK manufactured optical, programmable heat and programmable multi-sensor detectors have been designed to cover every conceivable fire detector application.**

LPCB certified to the relevant parts of EN54-5, EN54-7, EN54-17 & CEA 4021 and EN54-13 certified by Kiwa Telefication, they include two ultra-bright LED indicator strips offering 360 degree visibility, an ingenious detector/base locking mechanism, a programmable multi-function status LED and an onboard short circuit loop isolator.

CAST's optical and multi-sensor detectors feature a series of smart transient rejection algorithms that negate the impact of sudden surges of steam making them ideal for use in industrial, residential and catering environments. In addition, CAST's heat detectors are embedded with our unique 'HEART' (HEat Analysis and Response Technology) algorithm which ensures each detector remains in a high state of readiness for a potential fire alarm situation. Fancy words but what do they mean in practice? In a nutshell: solid, reliable smoke & heat detection, less false alarms and massively reduced lifetime ownership costs.



With the availability of different sensitivity settings for different times of the day (e.g. building occupied/building unoccupied), C-TEC's CAST fire detectors are undoubtedly the most powerful and robust detection devices on the market.

### Key Features

- ▶ An innovative range of 'Best in Class' optical, heat and multi-sensor fire detectors all designed and manufactured in the UK
- ▶ LPCB certified to EN54-5, 7, 17 & CEA 4021 (as indicated) and Kiwa Telefication certified to EN54-13
- ▶ Heat and multi-sensor variants are programmable to cover virtually every conceivable smoke and/or heat detector application with multiple LPCB certified modes of operation (meaning less devices to stock and carry on your van or in your warehouse/distribution centre)
- ▶ Two ultra-bright LED indicator strips offering 360 degree visibility
- ▶ Ingenious detector/base locking mechanism
- ▶ Smart algorithms help reduce false alarms
- ▶ Drift compensation functionality
- ▶ Short circuit loop isolator in every device
- ▶ Different sensitivities can be selected for different times of the day (day/night, building occupied/unoccupied, etc.)
- ▶ Programmable multi-function status LED
- ▶ Compatible with C-TEC's CA408 standard and CA408R relay base
- ▶ Transparent performance data available at [c-tec.com](http://c-tec.com)
- ▶ Polling LED can be set to flashing or non-flashing
- ▶ Coloured rings denote detector type (red = heat, grey = smoke, blue = multi) to help simplify system testing
- ▶ Optional conduit adaptor boxes available to aid installation on suspended ceilings and tiles

## CAST Optical Smoke Detector



- ▶ Smart algorithms help reduce false alarms
- ▶ LPCB certified to EN54-7 & 17 and Kiwa Telefication certified to EN54-13
- ▶ Onboard short circuit loop isolator
- ▶ Drift compensation functionality
- ▶ 0.16dB/m sensitivity/obscuration level
- ▶ 5mA typical alarm current (370µA typical quiescent) @ 22-40V DC
- ▶ Compatible with C-TEC's CA408 & CA408R CAST bases
- ▶ 102.2mm diameter x 37mm (depth incl. base = 57.5mm)



<b>CA416</b>	CAST Optical Smoke Detector
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## CAST Programmable Heat Detector



- ▶ Can be programmed to operate as a Class A1R (rate of rise), Class A2 (64°C fixed temperature) or Class B (76°C fixed temperature) heat detector. Default is A2.
- ▶ LPCB certified to EN54-5 & 17 and Kiwa Telefication certified to EN54-13
- ▶ Onboard short circuit loop isolator
- ▶ 5mA typical alarm current (370µA typical quiescent) @ 22-40V DC
- ▶ Compatible with C-TEC's CA408 & CA408R CAST bases
- ▶ 102.2mm diameter x 37mm (depth incl. base = 57.5mm)



<b>CA402</b>	CAST Programmable Heat Detector
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## CAST Programmable Multi-Sensor Fire Detector



- ▶ Onboard programmable heat & smoke sensors make it ideal for detecting a wide range of fires whilst also reducing false alarms
- ▶ LPCB certified to EN54-5, 7, 17 & CEA 4021 and Kiwa Telefication certified to EN54-13
- ▶ Onboard short circuit loop isolator
- ▶ Multiple sensitivity/sensor settings (high, std1, std 2, low, heat only)
- ▶ Smart algorithms and drift compensation functionality help reduce false alarms
- ▶ 5mA typical alarm current (370µA typical quiescent) @ 22-40V DC
- ▶ Compatible with C-TEC's CA408 & CA408R CAST bases
- ▶ 102.2mm diameter x 37mm (depth incl. base = 57.5mm)



<b>CA414</b>	CAST Programmable Multi Sensor
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## CAST Detector Bases



- ▶ Compatible with C-TEC's entire range of CAST addressable detectors
- ▶ Simple 'click and twist' easy to fit design with lots of working space
- ▶ Can be ceiling mounted in any orientation due to the true 360° degree viewing angle of the LED indicator strips on all CAST detectors
- ▶ Integrated detector/base locking mechanism, head removal tool and ID tag
- ▶ Remote LED terminals for optional connection to a BF318 Remote indicator
- ▶ 102.2mm diameter x 20.5mm deep



<b>CA408</b>	CAST Detector Base
<b>CA408R</b>	CAST Relay Base with 30V 1A relay contacts

## CAST Manual Call Points



### **Our LPCB certified CAST universal surface or flush mounting manual call point is no ordinary device.**

With an onboard short-circuit loop isolator, a smooth-action resettable element that mimics the feel of breaking glass, a photo-luminescent operating window and a red LED 'alarm ring' that illuminates the call point's face upon activation, it is without doubt one of the most sturdy and reliable call points on the market.

Press anywhere in the call point's target area to signal an alarm and its red LED 'alarm ring' will illuminate to confirm the signal has been registered.

Easy to reset using the combined reset and back box removal key supplied, the CA470 includes a plug-on loop connector block that can take up to 2.5mm<sup>2</sup> fire rated cable.

The call point is supplied with a back box and a flush mounting adaptor plate making it ideal for use in surface or flush mount applications.

For applications that are open to the elements, the range also includes an IP67 rated manual call point (order code CA47067).

### **Key Features**

- ▶ Stylishly manufactured from red ABS polycarbonate and glass fibre
- ▶ LPCB certified to EN54-11 & 17 and Kiwa Telefication certified to EN54-13
- ▶ Includes an onboard short-circuit loop isolator
- ▶ Reflective yellow and black physical alarm flag appears at the bottom of the operating window when activated
- ▶ Includes a patented smooth-action resettable element that mimics the feel of breaking glass
- ▶ Soft addressed via a CAST fire panel or CAST handheld programmer - no awkward dip switches or plastic ID cards to contend with
- ▶ Optional transparent hinged cover protects against vandalism and accidental activation
- ▶ Unique red LED 'alarm ring' illuminates the face of the call point upon activation providing 170° visibility of an alarm condition
- ▶ Combined reset and back box removal tool supplied with all units
- ▶ All electronics designed and manufactured by C-TEC in the UK
- ▶ Photoluminescent operating window remains visible for up to 5 minutes in poor lighting conditions
- ▶ IP67 weatherproof version also available
- ▶ Available in a variety of colours
- ▶ Optional 'Call Point Stoppers' also available - visit [c-tec.com](http://c-tec.com) for details

## CAST Red Manual Call Point, Universal Mounting



- ▶ A stylish yet robust red manual call point
- ▶ LPCB certified to EN54-11 & 17 and Kiwa Telefication certified to EN54-13
- ▶ Surface or flush mountable (back box and surface adaptor box supplied)
- ▶ Onboard short-circuit loop isolator
- ▶ Smooth-action resettable element mimics the feel of breaking glass
- ▶ Supplied with reset/back box removal key
- ▶ Photo-luminescent operating window remains visible for up to 5 minutes
- ▶ 5mA typical alarm current (370µA typical quiescent) @ 22-40V DC
- ▶ IP42 rated
- ▶ 87 W x 88 H x D 62mm (includes back box)



**CA470** CAST Red Manual Call Point, Universal Mounting

Also available in different colours



CA470Y Yellow version



CA470B Blue version



CA470G Green version



CA470W White version

## CAST IP67 Rated Red Manual Call Point



- ▶ A stylish IP67 rated surface-mounting red manual call point
- ▶ Robust high-quality design
- ▶ LPCB certified to EN54-11 & 17 and Kiwa Telefication certified to EN54-13
- ▶ Onboard short-circuit loop isolator
- ▶ Smooth-action resettable element mimics the feel of breaking glass
- ▶ Supplied with reset/back box removal key and 'Not in Use' label
- ▶ Photo-luminescent operating window remains visible for up to 5 minutes
- ▶ 5mA typical alarm current (370µA typical quiescent) @ 22-40V DC
- ▶ 87 W x 88 H x D 72mm (includes back box)



**CA47067** CAST IP67 Rated Manual Call Point

## Protective Call Point Cover



- ▶ A clear easy-to-fit protective plastic cover to help prevent the accidental activation of a CAST manual call point
- ▶ Simple hinged 'lift to operate' operation ensures the call point is easy to access in an emergency situation
- ▶ A range of 'call point stoppers' (pictured right) are also available to further guard against misuse, vandalism and nuisance alarms - visit [c-tec.com](http://c-tec.com) for details



**BF370SC** CAST Protective Call Point Cover

## CAST Sounders & VADS

Utilising the latest advances in sounder and LED lens technology, our powerful and highly efficient CAST Sounders and Visual Alarm Devices (VADs) are the best performing fire alarm warning devices on the market.

Three types are available, LPCB certified to EN54-3, EN54-17 and EN54-23 and Kiwa Telefication certified to EN54-13:-

**'Base'** – providing 92dB(A) sound output and C-3-8 VAD coverage - ideal for use as stand alone units or as part of a stacked sounder/VAD/detector base combination.

**'Hi-Output'** – a high-performing wall-mounting range of devices with an impressive sound output of 100dB(A) and providing W-2.75-9 rated VAD coverage.

**'Compact'** – a range of six variants offering 96dB sound output and C-3-8 or W-3-3.1 VAD coverage depending on how they are mounted.

A powerful 'open class' version of our 'Base' sounder VAD rated at O-R-3-2.5-18 is also available specifically for use in corridors.

All models are available as sounder only, VAD only or combined sounder VAD variants and all have incredibly

Unique  
C-TEC designed  
lenses & sounder  
circuitry **reduce** current  
draw whilst providing  
**ultra-bright** light and  
**high** sound output



low alarm current (from as little as 5.5mA for sounder only variants to just 14.5mA for sounder VAD variants allowing multiple units to be connected to a CAST system.

With a short circuit isolator in every device, four selectable volume levels, 31 selectable tones, synchronisation between devices and a group addressing facility that allows multiple units to be operated simultaneously, it's no wonder our CAST sounder VADs are fast becoming the fire alarm warning devices of choice for the fire industry.

For full performance details including polar diagrams and information on installation aids such as our NCP-27 Conduit Adaptor Box visit [c-tec.com](http://c-tec.com)

### Where are VADs required?

In order to comply with the Equality Act, Building Regs and the recommendations of UK codes of practice such as BS5839-1, BS8300 and CoP0001, visual alarm devices are typically installed in:-

- ▶ Bedrooms/sleeping accommodation (in hotels, student halls, etc)
- ▶ Toilets (not just accessible WCs as the hard of hearing are just as likely to use standard WCs)
- ▶ Any other area where a deaf or hard of hearing person might be alone (stairwells and corridors are mentioned in CoP0001, isolated offices are referenced in BS8300)
- ▶ Areas where ambient noise levels exceed 90dB(A) or where people wear ear defenders
- ▶ Television, radio and recording studios

- ▶ Theatres and cinemas
- ▶ Operating theatres
- ▶ Areas where a gaseous extinguishing system is installed
- ▶ Areas where people are likely to use a personal music system
- ▶ Areas where visual alarm devices are used as part of a "staged" fire evacuation strategy

To find out more, why not attend one of our free online

**EN54-23 VISUAL ALARM  
DEVICES SIMPLIFIED SEMINARS**

Visit [c-tec.com](http://c-tec.com) for details.



## CAST 92dB(A) Base Sounder



- ▶ LPCB certified to EN54-3 & 17 and Kiwa Telefication certified to EN54-13
- ▶ Impressive 92dB(A) sound output @ 1m
- ▶ Designed to be ceiling mounted - either stand-alone with a BF330CTLIDW white or BF330CTLIDR red cap or as part of a stacked Sounder/Detector Base combination
- ▶ Supplied with a BF431QCP quick connect plate and detector spur wires
- ▶ 5.5mA typical alarm current (460µA typical quiescent) @ 24-40V DC (Sounder on max.)
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP21C (Type A) rated
- ▶ Measures 122mm diameter x 46mm deep



**CA431A/W** CAST 92db(A) Base Sounder

## CAST C-3-8 Base VAD



- ▶ LPCB certified to EN54-17 & 23 and Kiwa Telefication certified to EN54-13
- ▶ Provides 'C-3-8' rated light distribution
- ▶ Designed to be ceiling mounted - either stand-alone with a BF330CTLIDW white or BF330CTLIDR red cap or as part of a stacked VAD/Detector Base combination
- ▶ Supplied with a BF431QCP quick connect plate and detector spur wires
- ▶ 7mA typical alarm current (460µA typical quiescent) @ 27-40V DC (VAD lit)
- ▶ IP21C (Type A) rated
- ▶ Measures 122mm diameter x 46mm deep



**CA460A/W** CAST C-3-8 Base VAD

## CAST O-R-3-2.5-18 Base Corridor VAD



- ▶ LPCB certified to EN54-17 & 23 and Kiwa Telefication certified to EN54-13
- ▶ Provides 'O-R-3-2.5-18' rated light distribution - ideal for use in corridors (mount in a specific orientation for 2.5m width & 18m length rated coverage)
- ▶ Designed to be ceiling mounted - either stand-alone with a BF330CTLIDW white or BF330CTLIDR red cap or as part of a stacked VAD/Detector Base combination
- ▶ A true 'open class' visual alarm device designed by C-TEC in the true spirit of EN54-23 to enhance VAD coverage in rectangular shaped areas - effectively means you can fit corridor VADs 18m apart i.e. at every other smoke detector (subject to ambient light levels)
- ▶ Supplied with a BF431QCP quick connect plate and detector spur wires
- ▶ 7mA typical alarm current (460µA typical quiescent) @ 27-40V DC (VAD lit)
- ▶ IP21C (Type A) rated
- ▶ Measures 122mm diameter x 46mm deep



**CA459A/W** CAST O-R-3-2.5-18 Base Corridor VAD

# CAST Base Sounders & VADS

## CAST C-3-8 Base VAD c/w 92dB(A) Sounder



- ▶ LPCB certified to EN54-3, 17 & 23 and Kiwa Telefication certified to EN54-13
- ▶ Provides 'C-3-8' rated light distribution & 92dB(A) sound output @ 1m
- ▶ Designed to be ceiling mounted - either stand-alone with a BF330CTLIDW white or BF330CTLIDR red cap or as part of a stacked Sounder/VAD/Detector Base combination
- ▶ Supplied with a BF431QCP quick connect plate and detector spur wires
- ▶ Onboard short-circuit loop isolator
- ▶ 12.5mA typical alarm current (460µA typical quiescent) @ 27-40V DC (VAD lit, sounder on max)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously.
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP21C (Type A) rated
- ▶ Measures 122mm diameter x 46mm deep



**CA456A/W** CAST C-3-8 Base VAD c/w 92dB(A) Sounder

## CAST O-R-3-2.5-18 Base Corridor VAD c/w 92dB(A) Sounder



- ▶ LPCB certified to EN54-3, 17 & 23 and Kiwa Telefication certified to EN54-13
- ▶ Provides 92dB(A) sound output @ 1m & O-R-3-2.5-18' rated light distribution - ideal for use in corridors (mount in a specific orientation for 2.5m width & 18m length rated coverage).
- ▶ Designed to be ceiling mounted - either stand-alone with a BF330CTLIDW white or BF330CTLIDR red cap or as part of a stacked VAD/Detector Base combination
- ▶ A true 'open class' visual alarm device designed by C-TEC in the true spirit of EN54-23 to enhance VAD coverage in rectangular shaped areas - effectively means you can fit corridor VADs 18m apart i.e. at every other smoke detector (subject to ambient light levels)
- ▶ Supplied with a BF431QCP quick connect plate and detector spur wires
- ▶ Onboard short-circuit loop isolator
- ▶ 12.5mA typical alarm current (460µA typical quiescent) @ 27-40V DC (VAD lit, sounder on max)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP21C (Type A) rated
- ▶ Measures 122mm diameter x 46mm deep



**CA432A/W** CAST O-R-3-2.5-18 Base Corridor VAD c/w 92dB(A) Sounder



# CAST Hi-Output Wall Sounders

## CAST Hi-Output 100dB(A) Wall Sounder (shallow base)



- ▶ LPCB certified to EN54-3 & 17 and Kiwa Telefication certified to EN54-13
- ▶ Impressive 100dB(A) sound output @ 1m
- ▶ Onboard short-circuit loop isolator
- ▶ 6.5mA typical alarm current (460µA typical quiescent) @ 24-40V DC (Sounder on max.)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP21C (Type A) rated
- ▶ Measures 108mm diameter x 99mm deep



**CA430A/SR** CAST Hi-Output 100dB(A) Wall Sounder (shallow base)

## CAST Hi-Output 100dB(A) Wall Sounder (deep base)



- ▶ LPCB certified to EN54-3 & 17 and Kiwa Telefication certified to EN54-13
- ▶ Impressive 100dB(A) sound output @ 1m
- ▶ Onboard short-circuit loop isolator
- ▶ 6.5mA typical alarm current (460µA typical quiescent) @ 24-40V DC (Sounder on max.)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP33C (Type B) rated
- ▶ Measures 114mm diameter x 131mm deep



**CA430A/DR** CAST Hi-Output 100dB(A) Wall Sounder (deep base)

## CAST Hi-Output IP55C protected 100dB(A) Wall Sounder (deep base)



- ▶ LPCB certified to EN54-3 & 17 and Kiwa Telefication certified to EN54-13
- ▶ Impressive 100dB(A) sound output @ 1m
- ▶ Onboard short-circuit loop isolator
- ▶ 6.5mA typical alarm current (460µA typical quiescent) @ 24-40V DC (Sounder on max.)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP55C rated
- ▶ Measures 114mm diameter x 131mm deep



**CA430A/DR/65** CAST Hi-Output IP55C Protected 100dB(A) Wall Sounder (deep base)

# CAST Hi Output Wall Sounder VADS

## CAST Hi-Output W-2.75-9 Wall VAD c/w 100dB(A) Sounder (shallow base)



- ▶ LPCB certified to EN54-3, 17 & 23 and Kiwa Telefication certified to EN54-13
- ▶ Provides 'W-2.75-9' rated light distribution (also rated as a W-4-4 VAD)
- ▶ Impressive 100dB(A) sound output @ 1m
- ▶ Onboard short-circuit loop isolator
- ▶ 13.5mA typical alarm current (460µA typical quiescent) @ 27-40V DC (VAD lit, sounder on max)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP21C (Type A) rated
- ▶ Measures 108mm diameter x 99mm deep



**CA433A/SR** CAST Hi-Output W-2.75-9 Wall VAD c/w 100dB(A) Sounder (shallow base)

## CAST Hi-Output W-2.75-9 Wall VAD c/w 100dB(A) Sounder (deep base)



- ▶ LPCB certified to EN54-3, 17 & 23 and Kiwa Telefication certified to EN54-13
- ▶ Provides 'W-2.75-9' rated light distribution (also rated as a W-4-4 VAD)
- ▶ Impressive 100dB(A) sound output @ 1m
- ▶ Onboard short-circuit loop isolator
- ▶ 13.5mA typical alarm current (460µA typical quiescent) @ 27-40V DC (VAD lit, sounder on max)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP33C (Type B) rated
- ▶ Measures 114mm diameter x 131mm deep



**CA433A/DR** CAST Hi-Output W-2.75-9 Wall VAD c/w 100dB(A) Sounder (deep base)

## CAST Hi-Output IP55C protected W-2.75-9 Wall VAD c/w 100dB(A) Sounder (deep base)



- ▶ LPCB certified to EN54-3, 17 & 23 and Kiwa Telefication certified to EN54-13
- ▶ Provides 'W-2.75-9' rated light distribution (also rated as a W-4-4 VAD)
- ▶ Impressive 100dB(A) sound output @ 1m
- ▶ Onboard short-circuit loop isolator
- ▶ 13.5mA typical alarm current (460µA typical quiescent) @ 27-40V DC (VAD lit, sounder on max)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP55C rated
- ▶ Measures 114mm diameter x 131mm deep



**CA433A/DR/65** CAST Hi-Output W-2.75-9 IP55C Wall VAD c/w 100dB(A) Sounder (deep base)

# CAST Compact Ceiling Sounders & VADS

## CAST Compact 96dB(A) Ceiling Sounder



- ▶ LPCB certified to EN54-3 & 17 and Kiwa Telefication certified to EN54-13
- ▶ Impressive 96dB(A) sound output @ 1m
- ▶ Onboard short-circuit loop isolator
- ▶ 5.5mA typical alarm current (460µA typical quiescent) @ 24-40V DC (Sounder on max.)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP21C (Type A) rated
- ▶ Measures 102mm diameter x 63mm deep



**CA450A/SW** CAST Compact 96dB(A) Ceiling Sounder

## CAST Compact C-3-8 Ceiling VAD



- ▶ LPCB certified to EN54-17 & 23 and Kiwa Telefication certified to EN54-13
- ▶ Provides 'C-3-8' light distribution when ceiling mounted
- ▶ Can also provide 'W-3-3.1' light distribution when wall mounted
- ▶ Onboard short-circuit loop isolator
- ▶ 7mA typical alarm current (460µA typical quiescent) @ 27-40V DC (VAD lit, sounder on max.)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ IP21C (Type A) rated
- ▶ Measures 102mm diameter x 63mm deep



**CA458A/SW** CAST Compact C-3-8 Ceiling VAD

## CAST Compact C-3-8 Ceiling VAD c/w 96dB(A) Sounder



- ▶ LPCB certified to EN54-3, 17 & 23 and Kiwa Telefication certified to EN54-13
- ▶ Provides 'C-3-8' light distribution when ceiling mounted
- ▶ Can also provide 'W-3-3.1' light distribution when wall mounted
- ▶ Impressive 96dB(A) sound output @ 1m
- ▶ Onboard short-circuit loop isolator
- ▶ 12.5mA typical alarm current (460µA typical quiescent) @ 27-40V DC (VAD lit, sounder on max.)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP21C (Type A) rated
- ▶ Measures 102mm diameter x 63mm deep



**CA451A/SW** CAST Compact C-3-8 Ceiling VAD c/w 96dB(A) Sounder

# CAST Compact Wall Sounders & VADS

## CAST Compact 96dB(A) Wall Sounder



- ▶ LPCB certified to EN54-3 & 17 and Kiwa Telefication certified to EN54-13
- ▶ Impressive 96dB(A) sound output @ 1m
- ▶ Onboard short-circuit loop isolator
- ▶ 5.5mA typical alarm current (460µA typical quiescent) @ 24-40V DC (Sounder on max.)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP21C (Type A) rated
- ▶ Measures 102mm diameter x 63mm deep



**CA450A/SR** CAST Compact 96dB(A) Wall Sounder

## CAST Compact C-3-8 Wall VAD ONLY



- ▶ LPCB certified to EN54-17 & 23 and Kiwa Telefication certified to EN54-13
- ▶ Provides 'W-3-3.1' light distribution when wall mounted
- ▶ Can also provide 'C-3-8' light distribution when ceiling mounted
- ▶ Onboard short-circuit loop isolator
- ▶ 7mA typical alarm current (460µA typical quiescent) @ 27-40V DC (VAD lit, sounder on max.)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ IP21C (Type A) rated
- ▶ Measures 102mm diameter x 63mm deep



**CA458A/SR** CAST Compact C-3-8 Wall VAD

## CAST Compact C-3-8 Wall VAD c/w 96dB(A) Sounder



- ▶ LPCB certified to EN54-3, 17 & 23 and Kiwa Telefication certified to EN54-13
- ▶ Provides 'W-3-3.1' light distribution when wall mounted
- ▶ Can also provide 'C-3-8' light distribution when ceiling mounted
- ▶ Impressive 96dB(A) sound output @ 1m
- ▶ Onboard short-circuit loop isolator
- ▶ 12.5mA typical alarm current (460µA typical quiescent) @ 27-40V DC (VAD lit, sounder on max.)
- ▶ Group addressing facility allows multiple devices to be operated simultaneously
- ▶ 4 selectable volume levels and 31 selectable tones
- ▶ IP21C (Type A) rated
- ▶ Measures 102mm diameter x 63mm deep



**CA451A/SR** CAST Compact C-3-8 Wall VAD c/w 96dB(A) Sounder

## CAST Base Voice Sounder



- ▶ Includes the same electronics as our LPCB & Kiwa Telefication certified base 'tone' sounder
- ▶ Highly intelligible with 4 selectable volume levels
- ▶ Onboard short-circuit loop isolator
- ▶ 6 selectable voice messages (2 evacuate, 1 alert, 1 all clear and 2 system test messages)
- ▶ 15.5mA typical alarm current (470µA typical quiescent) @ 24-40V DC
- ▶ Custom messages and **CAST 'Lockdown' Sounders** also available to special order

<b>CA454A/W</b>	CAST Base Voice Sounder
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## CAST Base Voice Sounder VADs



- ▶ Include the same electronics as our LPCB & Kiwa Telefication certified base 'tone' sounder VADs
- ▶ Highly intelligible with 4 selectable volume levels
- ▶ 'C-3-8' and 'O-R-3-2.5-18' variants available
- ▶ Onboard short-circuit loop isolator in each device
- ▶ 6 selectable voice messages (2 evacuate, 1 alert, 1 all clear and 2 system test messages)
- ▶ 26.5mA typical alarm current (470µA typical quiescent) @ 27-40V DC
- ▶ Custom messages and **CAST 'Lockdown' Sounders** also available to special order

<b>CA455A/W</b>	CAST O-R-3-2.5-18 Base Voice Sounder VAD
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<b>CA457A/W</b>	CAST C-3-8 Base Voice Sounder VAD
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## CAST Hi-Output Voice Sounders



- ▶ Include the same electronics as our LPCB & Kiwa Telefication certified hi-output 'tone' sounder
- ▶ Highly intelligible with 4 selectable volume levels
- ▶ Onboard short-circuit loop isolator in each device
- ▶ IP21C shallow and IP33C deep versions available
- ▶ 6 selectable voice messages (2 evacuate, 1 alert, 1 all clear and 2 system test messages)
- ▶ 15.5mA typical alarm current (470µA typical quiescent) @ 24-40V DC
- ▶ Custom messages and **CAST 'Lockdown' Sounders** also available to special order

<b>CA446A/SR</b>	CAST Hi-Output Voice Sounder VAD, shallow base
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<b>CA446A/DR</b>	CAST Hi-Output Voice Sounder VAD, deep base
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## CAST Hi-Output Voice Sounder VADs



- ▶ Include the same electronics as our LPCB & Kiwa Telefication certified hi-output 'tone' sounder VADs
- ▶ Highly intelligible with 4 selectable volume levels
- ▶ 'W-2.75-9' or 'W-4-4' VAD coverage dependent on mounting position
- ▶ Onboard short-circuit loop isolator in each device
- ▶ IP21C shallow and IP33C deep versions available
- ▶ 6 selectable voice messages (2 evacuate, 1 alert, 1 all clear and 2 system test messages)
- ▶ 26.5mA typical alarm current (470µA typical quiescent) @ 27-40V DC (Sounder on max.)
- ▶ Custom messages and **CAST 'Lockdown' Sounders** also available to special order

<b>CA447A/SR</b>	CAST W-2.75-9 Hi-Output Voice Sounder VAD, shallow base
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<b>CA447A/DR</b>	CAST W-2.75-9 Hi-Output Voice Sounder VAD, deep base
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## CAST Interfaces & Modules

**Want to expand your CAST addressable fire alarm systems to work with third party systems or peripheral equipment? Our extensive range of CAST interfaces and modules are just the job!**

Six variants are available:-

- ▶ A standard input output module supplied on a standard UK double gang plate certified to EN54-13, 17 and 18
- ▶ A mains switching input output module supplied on a standard UK double gang plate certified to EN54-13, 17 and 18
- ▶ A zone monitor module supplied on a standard UK double gang plate certified to EN54-13, 17 and 18
- ▶ A mini input/output unit measuring just 65 x 65 x 20mm certified to EN54-13, 17 and 18
- ▶ A single-way sounder control module supplied on a standard UK double gang plate
- ▶ A flush or surface mounting four to eight way sounder control module

All models can be located anywhere on a CAST loop



### Key Features

- ▶ Multiple variants
- ▶ Input output modules, zone monitor modules and single-way sounder control modules mount on standard UK 25mm double gang back boxes
- ▶ Multi-way sounder controllers supplied in a flush or surface mountable plastic enclosure
- ▶ Mini I/O unit designed to mount inside or alongside third party peripherals
- ▶ Onboard polling LEDs
- ▶ Low Alarm Current (3mA to 7mA dependent on model purchased)
- ▶ All models can be located anywhere on the CAST loop
- ▶ Most items LPCB certified to EN54-17 & 18 and Kiwa Telefication certified to EN54-13 (as indicated)
- ▶ Designed and manufactured in the UK

## CAST Input Output Module



- ▶ LPCB certified to EN54-17 & 18 and Kiwa Telefication certified to EN54-13
- ▶ Incorporates the functions of a switch monitor, zone monitor and output unit
- ▶ Can be configured to monitor any combination of:-
  - Up to 20 conventional ActiV fire detectors & 10 manual call points
  - Any normally open switch with an EOL resistor fitted
- ▶ Onboard short-circuit loop isolator
- ▶ 5.5mA typical alarm current (1.3mA typical quiescent) @ 22-40V DC
- ▶ Indicators for Loop polling, input faults and relay status
- ▶ Can switch 1A@30V DC (or 0.3A@125V AC)
- ▶ Includes volt free changeover contacts that can be used to trigger rollershutter doors, gas shut-off valves, smoke vents, etc.
- ▶ Mountable on a standard UK 25mm double gang back box (not supplied)



**CA730** CAST Input Output Module

## CAST Mains Switching Input Output Module



- ▶ LPCB certified to EN54-17 & 18 and Kiwa Telefication certified to EN54-13
- ▶ A mains-switching version of our CA730 input output module
- ▶ Capable of switching 5A @ 230 VAC or 5A @ 30 VDC.
- ▶ Incorporates the functions of a switch monitor, zone monitor and output unit
  - Up to 20 conventional ActiV fire detectors & 10 manual call points
  - Any normally open switch with an EOL resistor fitted
- ▶ Onboard short-circuit loop isolator
- ▶ 6mA typical alarm current (1.7mA typical quiescent) @ 22-40V DC
- ▶ Indicators for Loop polling, input faults and relay status
- ▶ Includes volt free changeover contacts that can be used to trigger rollershutter doors, gas shut-off valves, smoke vents, etc.
- ▶ Mountable on a C-TEC NCP-26 surface box or a standard UK 25mm double gang back box (not supplied)



**CA731** CAST Mains Switching Input Output Module

## CAST Zone Monitor Module



- ▶ LPCB certified to EN54-17 & 18 and Kiwa Telefication certified to EN54-13
- ▶ A single-zone addressable Zone Monitor capable of supporting up to 20 conventional ActiV fire detectors and 10 manual call points
- ▶ Onboard short-circuit loop isolator
- ▶ 4mA typical alarm current (1.1mA typical quiescent) @ 22-40V DC
- ▶ Indicators for Loop polling, input faults and relay status
- ▶ Alternatively, can be used as general purpose input monitor
- ▶ Mountable on a C-TEC NCP-26 surface box or a standard UK 25mm double gang back box (not supplied)



**CA732** CAST Zone Monitor

# CAST Interfaces & Modules

## CAST Mini I/O Unit



- ▶ LPCB certified to EN54-17 & 18 and Kiwa Telefication certified to EN54-13
- ▶ Includes a switch monitor, signal relay & onboard short circuit loop isolator
- ▶ 7mA typical alarm current (1mA typical quiescent) @ 22-40V DC
- ▶ Four plastic tabs for surface or panel mounting
- ▶ Includes a 1A @ 30V DC volt-free changeover relay. Can also switch 0.3A @125V AC.
- ▶ Offers Switch +Ve & -Ve, LED +Ve & -Ve & changeover relay contact connections
- ▶ Future header pin offers expansion opportunities for peripheral input/output devices



**CA734** CAST Mini I/O Unit

## CAST Single Way Sounder Control Module



- ▶ Allows a zone/circuit of conventional fire alarm sounders and visual alarm devices to be connected to a CAST compatible fire alarm system
- ▶ Includes an onboard short circuit isolator
- ▶ Conventional sounder circuit is continually monitored for open and short circuit faults
- ▶ 3mA typical alarm current (530µA typical quiescent) @ 22-40V DC
- ▶ Can provide up to 50mA output current (taken from the CAST addressable loop)
- ▶ Polling, sounder circuit active and sounder circuit fault indicators
- ▶ Mounts on a C-TEC NCP-26 surface box or a standard UK 35mm double gang back box

**CA738** CAST Single Way Sounder Control Module

## CAST 4 Way Sounder Controller (expandable to 8 ways)



- ▶ A powerful 4 way CAST sounder control unit supplied in a robust plastic enclosure
- ▶ Provides four 12.5mA constant current conventional sounder circuits (expandable to 8 ways using a CA739PCB)
- ▶ Includes connections for an optional CA739PSU to accommodate larger alarm loads
- ▶ Includes an onboard short circuit loop isolator
- ▶ Uses one loop address per 4 sounder circuits
- ▶ Measures 380 W x 235 H x 96 D mm
- ▶ 4mA typical alarm current (1.5mA quiescent) @ 22-40V DC

**CA739** CAST 4-Way Sounder Controller (expandable to 8 ways using a CA739PCB)



## CAST Handheld Device Programmer



**If you don't want to use CAST's fully automatic programming capability or want to check what address and parameters have been auto-assigned to a device, our CAST Handheld Device Programmer is for you. You can programme entire systems with it, as well as testing a device.**

So how does the Programmer work?

As well as allowing you to address devices sequentially, it allows you to read the address of a pre-programmed CAST device and, if required, change it. It also allows you to activate a sounder's sounder to check it is working correctly and/or to test a detector's optical chamber by applying test 'smoke' to it whilst it is on the Programmer (note this does not replace the requirement for full BS 5839-1 in-situ device testing).

Robust and easy to operate, the Programmer is compatible with our entire range of CAST detectors, manual call points, sounders, VADs, voice sounders and interface modules.

Detectors and compact sounders connect directly to the Programmer's built-in CAST base. Other devices connect to the Programmer's positive and negative jack sockets using a remote connection lead (supplied).

The Programmer is battery powered (requiring four x 1.5V AA batteries) and features an easy-to-read backlit LCD with an adjustable contrast control.

An automatic shutdown feature helps to preserve battery life.

<b>CAPROG</b>	CAST Handheld Device Programmer
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## CAST XFP Training

**C-TEC offers two free-of-charge CAST XFP training courses. Module 1 explains the key features and benefits of CAST. Module 2 is a hands-on training course with a test exercise that aims to provide engineers with the knowledge they need to install and commission a CAST system suitable for use in the majority of applications.**

### **MODULE 1: KEY FEATURES & SYSTEM OVERVIEW**

**Location:** Online or at C-TEC's HQ in Wigan

**Duration:** 1 hour (approx)

**Course content:**

- ▶ An overview of the CAST protocol
- ▶ An explanation of the inner workings of the CAST XFP panel
- ▶ Menu structure
- ▶ Features & benefits
- ▶ Device familiarisation – detectors, manual call points, sounders/VADs and interface modules
- ▶ C-TEC's new ENVISION 'IoT' software

### **MODULE 2: INSTALLATION, PROGRAMMING AND COMMISSIONING**

**Location:** Online (training kit required) or at C-TEC's HQ in Wigan

**Duration:** 2-3 hours (approx)

**Course content:**

- ▶ Planning & designing a CAST system;
- ▶ Installation & wiring;
- ▶ Commissioning & programming;
- ▶ Test exercise.

**Prerequisites:** Anyone attending a CAST Module 2 course must have prior knowledge of addressable fire alarm systems and some experience of installing a C-TEC addressable fire alarm panel (any protocol). As Module 2 is a hands-on course you will need to bring a suitable Windows laptop to the session.

**To register your interest email: [marketing@c-tec.co.uk](mailto:marketing@c-tec.co.uk)**



### **Other C-TEC training courses and seminars that may be of interest to you:-**

CFP Conventional Fire Alarm Systems

EN54-23 Visual Alarm Devices Simplified (CPD certified)

A Guide to BS 5839-6 2019 Domestic Fire Alarm Systems (CPD certified)

Fire Alarm Systems for Purpose Built Flats & Apartments – a new approach (CPD certified)

Fire Alarm Systems: A Brief History and the Current State of the Industry (CPD certified)

A Guide to BS 8629:2019 Evacuation Alert Systems (CPD certified)

A Guide to BS 5839-9 Disabled Refuge Systems (CPD certified)

Hearing Assistance Solutions -The Route to DDA/Equality Act Compliance (CPD certified)

Quantec Addressable Call Systems

The PDA Range of Audio - Frequency Hearing Loop Systems

For further details visit [c-tec.com](http://c-tec.com)

Established in 1981, C-TEC is a leading UK independent manufacturer of quality life safety electronic equipment.

Trading in over 70 countries and with product certifications and factory process approvals from six different test

bodies (LPCB, BSI, VdS, Intertek, UL and Kiwa), whatever your life safety system requirements, You're Safe with C-TEC.

As well as our CAST addressable fire alarm systems, we also manufacture the following:-



Conventional Fire Systems



Extinguisher Systems



Two-Wire Fire Systems



Sprinkler Monitoring Systems



Disabled Refuge Systems



Hearing Loop Systems



Accessible Toilet Alarm Systems



Addressable Call Systems



Conventional Call Systems

For further information visit [c-tec.com](http://c-tec.com)



**You're Safe with C-TEC**

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