ADDRESSABLE
FIRE SYSTEMS
ZFP XFP

A PROUD BRITISH MANUFACTURER

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 and ZFP 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.

cast XFP ZFP 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'), 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

The future of fire alarm systems is here!

Key CAST Features

- Fully compatible with C-TEC's XFP & ZFP addressable fire panel ranges 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.

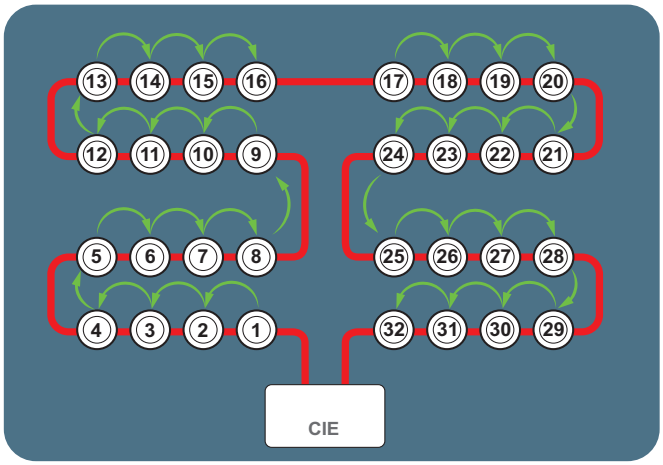


Figure 1: Typical 'point-to-point' communication

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).

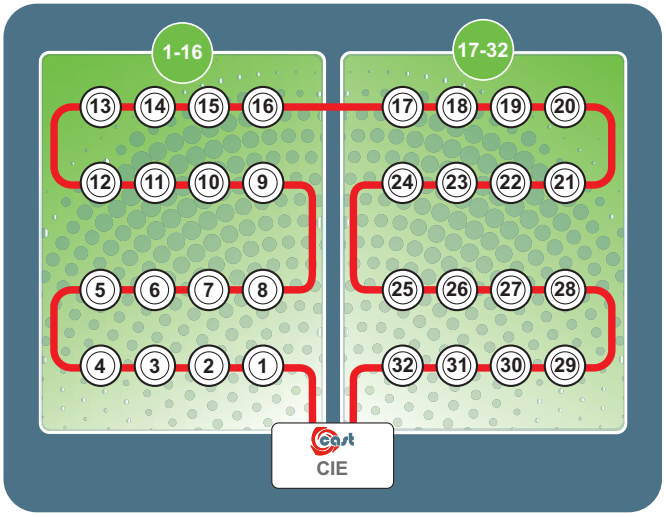


Figure 2: CAST's 'broadcast message' communication

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 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

TWO speedy device addressing options automatic at the panel or manually via **CAST's powerful** handheld programmer

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 18 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

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 18
- 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 18
- 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 18
- 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

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

CAST ZFP 1-8 Loop Fire Alarm Panels

TWO speedy device addressing options automatic at the panel or manually via **CAST's powerful** handheld programmer

Our super-advanced ZFP networkable 1-8 loop CAST protocol touchscreen-controlled fire panels represent a revolution in fire alarm technology.

Certified to EN54-2, EN54-4 and EN54-13, the ZFP can be configured to suit any application. From small 'one out, all out' systems to large multi-loop 64 node networked systems with sophisticated cause and effects, the ZFP can handle them all – with ease.

Everything about the ZFP's unique full-colour touchscreen has been designed with its users in mind. Simply tap the option you require and away you go. Whether you're the responsible person on site, the installer, the commissioning engineer or the emergency services, you can access the information you require quickly and easily - all at the touch of a virtual button.

Powerful diagnostics, rapid loop learn, 'SafeMode' and a unique 'DeviceManager' function combine to make the ZFP one of the most user-friendly control panels on the market.

Choose from a selection of pre-built off-the-shelf ZFPs or build your own panel using our online ZFP Panel Builder tool. With a vast selection of cabinet sizes, modules, controllers and ancillary 'A-Bus' PCBs available, designing your own ZFP for a specific application is simplicity itself.

Key Features

- LPCB certified to EN54-2/4 and Kiwa Telefication certified to EN54-13
- ENVISION Enabled™ - fully compatible with C-TEC's powerful remote access, data management & system testing software - see page 18 for more details
- 450mA loop drivers giving up to 18 Watts of power
- Up to 255 CAST devices per loop
- Three cabinet sizes - standard, medium and large
- Up to 8 loops per panel (four in standard cabinet)
- Up to 64 ZFP main panels & 64 Compact Controllers can be connected to the ZFP's Hi-integrity fault-tolerant RS485 network
- Wide range of Switch & Indicator modules
- Multiple 'A-Bus' expansion PCBs (I/O Units, Relays, etc)
- User-friendly full colour touchscreen with dynamic buttons and virtual QWERTY keyboard - touchscreen can be customised to include a company logo (.gif)
- Up to 200 separate and programmable zonal LEDs per panel (medium and large cabinets only)
- Very flexible cause and effects
- 10,000 programmable and indicatable detection zones
- Up to 38 characters of custom text per loop device
- 9,999 event memory (filterable by fire, fault & date)
- Non-fire supervisory event functionality
- Optional thermal printers
- 20-way heavy-duty brass earth bar as standard
- 72-hour standby (+ 30 min alarm) in standard cabinets
- Built-in loop status & current-reading
- Powerful engineering and commissioning functions including SafeMode and DeviceManager
- Attractive Compact Controllers
- Wide range of flush-fit bezels and attractive glazed stainless steel frames
- Powerful and intuitive PC programming tools
- Protective cover on PSU guards against live parts and facilitates compliance with the new safety requirements of EN 62368-1

CAST ZFP 1-8 Loop Fire Panels

C-TEC's vast selection of pre-built CAST protocol ZFP fire panels and the availability of multiple Switch & Indicator Modules, 'A-Bus' PCBs, Compact Controllers and other system expansion devices means creating a ZFP to meet your exact requirements is easy.

Simply take your pick from the models below and add any additional zonal indicators, programmable keyswitches, printers, relay or input/output cards to your order as required.

ZFP Touchscreen Fire Panels with Blank Modules

ZFP1/CA, ZFP2/CA & ZFP4/CA

ZFP2M/CA, ZFP4M/CA & ZFP8M/CA

- Available in standard, medium and large cabinets with 1, 2, 4, 6 or 8 loops (1 loop version in standard cabinet only)
- All versions include a ZFP touchscreen control module (Z41) and 1, 3 or 5 blank modules (ZBLANK)
- Standard cabinet variants (W450 x H462 x D127mm) can have up to 1 extra Switch & Indicator Module, Medium cabinets (W450 x H720 x D200) up to 3 and Large Cabinets (W450 x H960 x D200) up to 5
- All panels are ENVISION Enabled™ and can be extended to include expansion PCBs and other ZFP ancillary equipment
- Wide range of bezels and glazed stainless steel frames available

ZFP1/CA	ZFP 1 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP2/CA	ZFP 2 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP4/CA	ZFP 4 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP2M/CA	ZFP 2 Loop Medium Panel, CAST protocol, Max 2 x 38Ah batteries
ZFP4M/CA	ZFP 4 Loop Medium Panel, CAST protocol, Max 2 x 38Ah batteries
ZFP6M/CA	ZFP 6 Loop Medium Panel, CAST protocol, Max 2 x 38Ah batteries
ZFP8M/CA	ZFP 8 Loop Medium Panel, CAST protocol, Max 2 x 38Ah batteries
ZFP2L/CA	ZFP 2 Loop Medium Panel, CAST protocol, Max 2 x 38Ah batteries
ZFP4L/CA	ZFP 4 Loop Large Panel, CAST protocol, Max 2 x 38Ah batteries
ZFP6L/CA	ZFP 6 Loop Large Panel, CAST protocol, Max 2 x 38Ah batteries
ZFP8L/CA	ZFP 8 Loop Large Panel, CAST protocol, Max 2 x 38Ah batteries

ZFP Touchscreen Fire Panel with 20 Zonal Indicators

ZFP1/20/CA, ZFP2/20/CA & ZFP4/20/CA

- A range of pre-built ZFPs supplied with a touchscreen control module (Z41) and a 20 Programmable zonal indicators with name slots module (Z44). Medium cabinet variants can have up to 2 extra Switch & Indicator Modules
- All panels are ENVISION Enabled™ and can be extended to include expansion PCBs and other ZFP ancillary equipment
- Wide range of bezels and glazed stainless steel frames available

ZFP1/20/CA	ZFP 1 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP2/20/CA	ZFP 2 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP4/20/CA	ZFP 4 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP6M/20/CA	ZFP 6 Loop Medium Panel, CAST protocol, Max 2 x 38Ah batteries
ZFP8M/20/CA	ZFP 8 Loop Medium Panel, CAST protocol, Max 2 x 38Ah batteries

ZFP Touchscreen Fire Panel with 40 Zonal Indicators

ZFP1/40/CA, ZFP2/40/CA & ZFP4/40/CA

- A range of pre-built ZFPs supplied with a touchscreen control module (Z41) and a 40 Programmable zonal indicators with name slots module (Z47). Medium cabinet variants can have up to 2 extra Switch & Indicator Modules
- All panels are ENVISION Enabled™ and can be extended to include expansion PCBs and other ZFP ancillary equipment
- Wide range of bezels and glazed stainless steel frames available

ZFP1/40/CA	ZFP 1 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP2/40/CA	ZFP 2 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP4/40/CA	ZFP 4 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP6M/40/CA	ZFP 6 Loop Medium Panel, CAST protocol, Max 2 x 38Ah batteries
ZFP8M/40/CA	ZFP 8 Loop Medium Panel, CAST protocol, Max 2 x 38Ah batteries

ZFP Touchscreen Fire Panel with 40 Zonal Indicators, Printer & 2 Keyswitches

ZFP1/40P/CA, ZFP2/40P/CA & ZFP4/40P/CA

- A range of pre-built ZFPs supplied with a touchscreen control module (Z41) and a 40 Programmable zonal indicators, printer & 2 programmable keyswitches module (Z49). Medium cabinet variants can have up to 2 extra Switch & Indicator Modules
- All panels are ENVISION Enabled™ and can be extended to include expansion PCBs and other ZFP ancillary equipment
- Wide range of bezels and glazed stainless steel frames available

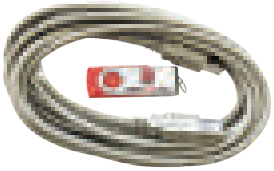
ZFP1/40P/CA	ZFP 1 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP2/40P/CA	ZFP 2 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP4/40P/CA	ZFP 4 Loop Standard Panel, CAST protocol, Max 2 x 18Ah batteries
ZFP6M/40P/CA	ZFP 6 Loop Medium Panel, CAST protocol, Max 2 x 38Ah batteries
ZFP8M/40P/CA	ZFP 8 Loop Medium Panel, CAST protocol, Max 2 x 38Ah batteries

ZFP 2 Loop Expansion PCB

- Allows a standard 2 loop ZFP fire panel to be extended to 4 loops
- Not compatible with single loop ZFP fire panels

Z02LOOP/CA	ZFP 2 Loop Expansion PCB

ZFP Programming Software



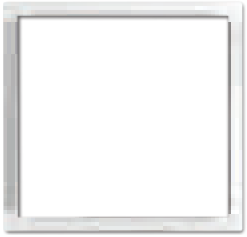
- An intuitive Windows based upload-download PC program supplied on a USB stick
- Kit also includes a USB A-to-B connector lead for connecting a ZFP fire panel to a PC
- Software compatible with Windows 7, 8 and 10 operating systems and also works using Virtual PC on a MAC

ZTOOLS	ZFP Programming Software

CAST ZFP Bezels, Frames & Vision Windows

Whatever environment your ZFP panel or Compact Controller is specified for, we have a bezel, decorative frame and/or protective window to suit. Choose from our comprehensive range of slimline flush fit bezels, our glazed tamper resistant stainless steel frames c/w optional cam or electromagnetic solenoid lock kits or our high quality tamper-resistant 'Vision' doors. Options are also available for our Compact Controllers.

ZFP Flush Fit Bezels

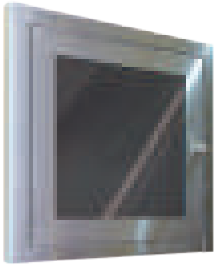


ZBEZS

- Finished in mild steel
- Allow standard, medium or large sized ZFP fire panels to be semi-flush mounted
- Attractive slimline design

ZBEZS	Flush-fit Bezel for ZFP Standard Cabinet (W492 x H504 x D30mm)
ZBEZM	Flush-fit Bezel for ZFP Medium Cabinet (W492 x H762 x D30mm)
ZBEZL	Flush-fit Bezel for ZFP Large Cabinet (W492 x H1002 x D30mm)

ZFP Glazed Stainless Steel Frames



ZBEZDS/SS

- Decorative tamper-resistant glazed stainless steel frames for use with standard, medium or large ZFPs
- Can be used to enhance the visual appearance of ZFPs located in reception areas, etc.
- Require a separately available lock kit, the ZBEZD/CL Camlock Kit or the ZBEZD/SL Electromagnetic Solenoid Lock Kit
- Other frame finishes available - contact our sales desk for details

ZBEZDS/SS	Glazed Stainless Steel Frame for ZFP Standard Cabinet
ZBEZDM/SS	Glazed Stainless Steel Frame for ZFP Medium Cabinet
ZBEZDL/SS	Glazed Stainless Steel Frame for ZFP Large Cabinet

Tamper Resistant Vision Door for use with ZFP Standard Cabinets

ZRDOORS

- A high-quality IP20 rated tamper-resistant and lockable door for use with flush or surface mounted ZFP Standard Cabinet Fire Panels
- Can be used to prevent unauthorised access to the panel's controls
- Front 'Vision' window allows the panel's indicators to remain visible at all times
- Supplied with two key operated camlocks and all necessary fixings
- 450 W x 463 H x 45 D mm

ZRDOORS	Tamper Resistant Vision Door for use with ZFP Standard Cabinets

ZFP Single Module Cabinets

ZMBOXS

- Typically used alongside Compact Controllers
- Alignment plates also available should you need to add zonal indicators

ZMBOXF	ZFP Flush Single Module Cabinet c/w Bezel
ZMBOXS	ZFP Surface Single Module Cabinet c/w Bezel
ZMBOXAL	Alignment Plate (connects Single Module Cabinets vertically)
ZMBOXAS	Alignment Plate (connects Single Module Cabinets horizontally)

CAST ZFP Modules

All ZFP panels are supplied with a minimum of one Z41 touchscreen control module. Depending on the pre-built ZFP panel you choose it may be possible to add additional Switch & Indicator modules to provide additional zonal indicators, control keyswitches and/or printer facilities to meet the specific requirements of a particular site.

Eight modules are available, many with 'slide-in' labels which can be easily customised using the templates supplied and available online at c-tec.com

Remember, if you want us to put a non-standard ZFP fire panel together for you and test it prior to despatch, check out our interactive ZFP Panel Builder tool at c-tec.com/info/zfp-panel-builder.html

Touchscreen Control Module

- Supplied as standard in all pre-built ZFP panels and all core ZFP panels
- Includes a user-friendly full-colour 4.3 inch 480 x 272 pixel LCD touchscreen
- Separate distinct LEDs for mandatory EN54 indications plus five spare engineer programmable LEDs
- Keyswitch or dynamic touchscreen button access to AL2 (Authorised User Level).
- Digital QWERTY keyboard
- Touchscreen can be customised to include a company logo (.gif)
- Galvanically isolated USB port (for system programming)
- Indicator naming template (Microsoft Word format) downloadable from c-tec.com

Z41	ZFP Touchscreen Control Module

ZFP 20 Zone Indicator Module c/w Name Slots

- An optional ZFP compatible 20 Zone Indicator Module c/w Name Slots
- Zone naming template (Microsoft Word format) downloadable from c-tec.com
- Easily installed in a ZFP's Switch & Indicator chassis

Z44	ZFP 20 Zone Indicator Module c/w Name Slots

ZFP 20 Zone Indicator Module c/w Name Slots & 5 Switches

- An optional ZFP compatible 20 Zone Indicator Module c/w Name Slots & 5 Switches
- Zone and Keyswitch naming templates (Microsoft Word format) downloadable from c-tec.com
- Easily installed in a ZFP's Switch & Indicator chassis

Z45	ZFP 20 Indicator Module c/w Name Slots & 5 Switches

ZFP 20 Zone Indicator Module c/w Name Slots, Printer & 2 Switches

- An optional ZFP compatible 20 Zone Indicator Module c/w Name Slots, Printer & 2 Switches
- Zone and keyswitch naming templates (Microsoft Word format) downloadable from c-tec.com
- Easily installed in a ZFP's Switch & Indicator chassis

Z46	ZFP 20 Indicator Module c/w Name Slots, Printer & 2 Switches

ZFP 40 Zone Indicator Module c/w Name Slots

- An optional 40 Zone Indicator Module c/w Name Slots
- Zone naming template (Microsoft Word format) downloadable from c-tec.com
- Easily installed in a ZFP's Switch & Indicator chassis

Z47	ZFP 40 Zone Indicator Module c/w Name Slots

ZFP 40 Zone Indicator Module & 5 Switches

- An optional ZFP compatible 40 Zone Indicator Module & 5 Switches
- Keyswitch naming template (Microsoft Word format) downloadable from c-tec.com
- Easily installed in a ZFP's Switch & Indicator chassis

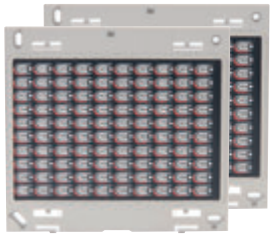
Z48	ZFP 40 Zone Indicator Module c/w 5 Switches

ZFP 40 Zone Indicator Module c/w Printer & 2 Switches

- An optional ZFP compatible 40 Zone Indicator Module c/w Printer & 2 Switches
- Keyswitch naming template (Microsoft Word format) downloadable from c-tec.com
- Easily installed in a ZFP's Switch & Indicator chassis

Z49	ZFP 40 Zone Indicator Module c/w Printer & 2 Switches

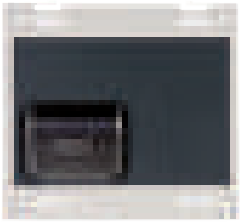
ZFP 100 Zone Indicator Module, Numbered 1-100 or 101-200



- An optional ZFP compatible 100 Zone Indicator Module
- Easily installed in a ZFP's Switch & Indicator chassis
- Two versions available, one numbered 1 to 100 (order code Z50/1-100) and one numbered 101 to 200 (order code Z50/101-200)

Z50/1-100	ZFP 100 Zone Indicator Module numbered 1-100
Z50/101-200	ZFP 100 Zone Indicator Module numbered 101-200

Printer Module



- An optional ZFP compatible Printer Module
- Easily installed in a ZFP's Switch & Indicator chassis

Z51	ZFP Printer Module

CAST ZFP Compact Controllers

Our classy Compact Controllers (think Repeaters) not only do the job, they look the part too. Ideal for plush reception areas where a large metal cabinet may not be what the architect or end user has in mind, they are perfect for getting across key system information in an eye-catching yet straightforward manner.

Why not locate the main ZFP panel out of sight and let a state-of-the-art CAST compact controller enhance the design of the reception area whilst still providing the controls and features the fire and rescue service and authorised users need? Surface and flush versions are available and up to 64 can be used per system.

Should you need to add Zonal Indicators alongside a Compact Controller, you can do so using an appropriate Switch & Indicator Module, surface or flush single module cabinet and alignment plate.

ZFP Compact Controllers

ZREP1F

ZREP1S

- Attractive compact controllers that can be used as traditional repeater panels but with added functionality
- Flush and surface versions available
- Each controller includes touchscreen control module (Z41) and a 'Hi-NET' multipath fault-tolerant network PCB (ZHN)
- Full Access Level 2 functionality (silence, disable, reset, etc.)
- Requires a separate EN54-4 boxed PSU such as C-TEC's BF360-24 1A 24V PSU
- Up to 64 Compact Controllers can be connected to a ZFP network (each controller is classed as one network node)
- Glazed stainless steel frames (ZBEZDC/SS) and vertical and horizontal alignment plates (ZMBOXAL & ZMBOXAS) also available

* If using a Compact Controller a separate ZHN PCB must be fitted at the ZFP main panel.

ZREP1F	ZFP Flush Compact Controller (214 W x 178 H x 70 D mm) c/w ZHN network PCB
ZREP1S	ZFP Surface Compact Controller (214 W x 178 H x 70 D mm) c/w ZHN network PCB

ZFP Hi-Net Multi-Path Fault Tolerant Network PCB

- Allows the interconnection of up to 64 ZFP Main Panels (any mix) and up to 64 ZFP Compact Controllers over a two-wire RS485 ring-wired, multi-path, fault-tolerant 'Hi-Net' network
- One ZHN required per ZFP Main Panel (ZFP Compact Controllers include a ZHN PCB as standard)
- RS485 Protocol
- Max. cable length between nodes = 1KM
- Max. cable length of entire network = 128KM
- For retrofits, multiple ZHNs can be wired in a non-fault tolerant, single-path network configuration (Max. 8 nodes; Max length of entire network must not exceed 1KM)

ZHN	ZFP Hi-Net Multi-Path Fault Tolerant Network PCB

'A-BUS' expansion cards are typically located inside a ZFP's cabinet to add extra functionality such as relay outputs, digital input/outputs, conventional sounder circuits and detection zones.

Up to 15 A-BUS cards can be connected to a ZFP's RS485 'A-BUS' network dependent on the model purchased (the larger the cabinet size, the more A-BUS cards can be fitted).

Although typically located inside the cabinet, for non-EN54 functions, A-BUS cards can be located up to 1KM away from the panel.

All versions include polling, power and activated indicators.

ZFP 4 Relay PCB (half size)

- A 4-Way Relay PCB designed to enhance the functionality of a ZFP fire panel with 4 additional relay outputs
- 4 x 1A 30V single pole contacts programmable via the ZFP's PC Tools
- Polling, power and separate Relay Activated LED indicators

Z11	ZFP 4 Relay PCB (half size)

ZFP 8 Relay PCB (full size)

- An 8-Way Relay PCB designed to enhance the functionality of a ZFP fire panel with 8 additional relay outputs
- 8 x 1A 30V single pole contacts programmable via the ZFP's PC Tools
- Full size PCB can be scored in the middle to produce a half size 4 way relay PCB
- Polling, power and separate Relay Activated LED indicators

Z12	ZFP 8 Relay PCB (full size)

ZFP 8 Way Input Output PCB (half size)

- An 8-Way Input Output PCB designed to enhance the functionality of a ZFP fire panel
- Provides 8 monitored switch inputs/open collector outputs (dependent on wiring configuration used)
- Full size PCB can be scored in the middle to produce a half size 8 Input Output PCB.
- Programmable via the ZFP's PC Tools
- Polling, power and separate Input/Output Activated LED indicators

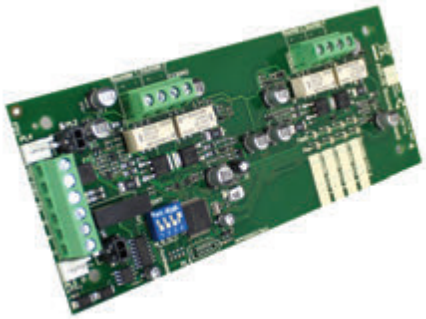
Z13	ZFP 8 Way Input Output PCB (half size)

ZFP 16 Way Input Output PCB (full size)

- A 16-Way Input Output PCB designed to enhance the functionality of a ZFP fire panel
- Provides 16 monitored switch inputs/open collector outputs (dependent on wiring configuration used)
- Full size PCB can be scored in the middle to produce a half size 8 Input Output PCB
- Programmable via the ZFP's PC Tools
- Polling, power and separate Input/Output Activated LED indicators

Z14	ZFP 16 Way Input Output PCB (full size)

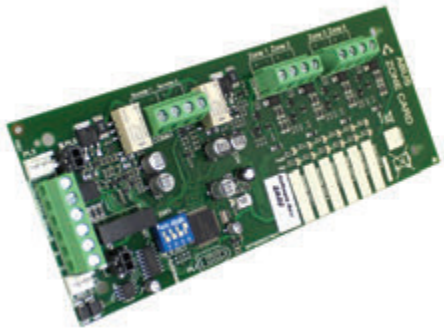
ZFP 4 Way Conventional 1A 6K8 Sounder Circuit PCB (full size)



- Adds four additional 1A 6K8 conventional sounder circuits to a ZFP fire panel
- All circuits fully monitored and programmable via the ZFP's PC Tools
- Requires a separate EN54-4 PSU mounted external to the panel
- Programmable via the ZFP's PC Tools
- Polling, Power and separate Sounder Circuit activated indicators

Z15	ZFP 4 Way Conventional 1A 6K8 Sounder Circuit PCB (full size)

ZFP 4 Way Detection Zone & 2 Way x 1A 6K8 Sounder Circuit PCB (full size)



- A powerful expansion PCB for use with a ZFP fire panel
- Provides four monitored conventional Zone circuits and two 1A 6K8 rated conventional sounder circuits
- All circuits fully monitored and programmable via the ZFP's PC Tools
- Requires a separate EN54-4 PSU mounted external to the panel
- Up to 10 conventional detection devices per Zone
- Programmable via the ZFP's PC Tools
- Polling, Power and separate Sounder Circuit activated indicators

Z16	ZFP 4 Way Detection Zone & 2 Way x 1A 6K8 Sounder Circuit PCB (full size)

ZFP Paging Equipment

- A range of alphanumeric paging equipment that allows a ZFP's fire conditions to be reported directly to one or more alphanumeric pagers
- BF874QAQ transmitter provides up to 500m coverage (BF876DQ dipole extension aerial increases coverage to up to 1500m)
- One AFP600S wall socket required per system
- Connects to the ZFP's RS232 port

BF874QAQ	Serial Alphanumeric Display Paging Transmitter, up to 500m range
BF876DQ	Dipole 400mHZ Aerial c/w 10m Lead, extends paging range up to 1500m
BF877QAQ	40 Character Alphanumeric Pocket Display Pager
AFP600S	RS232 Isolated Wall Socket

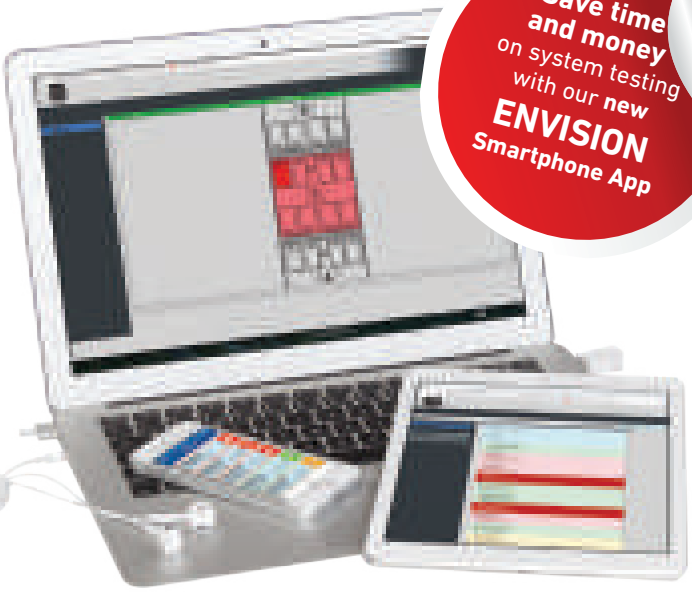
ZFP Fibre Optic Transceivers

- Allows a ZFP's RS485 network to be wired in fibre optical cable for applications where standard or enhanced fire resistant cable is not suitable
- Maximum distance between networked panels = 2km
- Two BF356 transceivers required per networked panel (if networking two ZFP panels, 4 x BF356's are required)
- Also required per networked panel are 2 x short circuit optical fibre connectors and a BF560-12 PSU and back-up batteries

BF356	Fibre Optic Transceiver (requires 1 x BF360-12 PSU & 7Ahr battery)
BF560-12	12V 2A EN54-4 Power Supply Unit

ENVISION

Remote Access, Service, Test & Site Management Software



Save time and money on system testing with our **new ENVISION Smartphone App**

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

- Designed to be mounted alongside a CAST XFP or ZFP 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 or ZFP 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
- 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)

CA416	CAST Optical Smoke Detector

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)

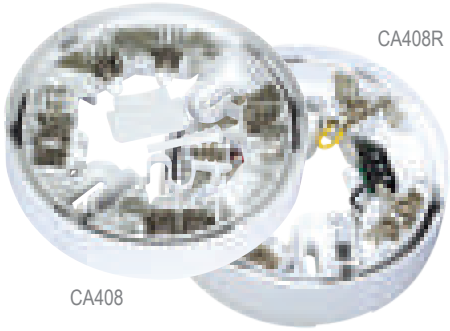
CA402	CAST Programmable Heat Detector

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)

CA414	CAST Programmable Multi Sensor

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

CA408	CAST Detector Base
CA408R	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^2 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 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 for details

BF370SC	CAST Protective Call Point Cover

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

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 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

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** 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 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 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 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 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 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

CA454A/W	CAST Base Voice Sounder

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

CA455A/W	CAST O-R-3-2.5-18 Base Voice Sounder VAD
CA457A/W	CAST C-3-8 Base Voice Sounder VAD

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

CA446A/SR	CAST Hi-Output Voice Sounder VAD, shallow base
CA446A/DR	CAST Hi-Output Voice Sounder VAD, deep base

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

CA447A/SR	CAST W-2.75-9 Hi-Output Voice Sounder VAD, shallow base
CA447A/DR	CAST W-2.75-9 Hi-Output Voice Sounder VAD, deep base

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!

Seven variants are available - two input output modules (standard and mains-switching), a zone monitor module, a single-way sounder control module, a 4-8 way sounder controller and a mini input/output unit that measures just 65 x 65 x 20mm.

We've even got a special landlord interface that allows a CAST fire detection and alarm system to be used in residential tower blocks with multiple BS 5839-6 compliant domestic dwelling systems to offer features such as remote off-site monitoring and the automatic or manual evacuation of occupants when there is a confirmed alarm condition or when the fire & rescue services activate secure controls. Visit c-tec.com for further details.

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)
- Dedicated landlord interface unit also available for use in tower blocks with C-TEC's powerful 'Hush-Pro' range of residential fire alarm solutions
- 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)

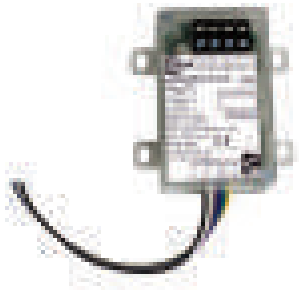
CA731	CAST Mains Switching Input Output Module

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

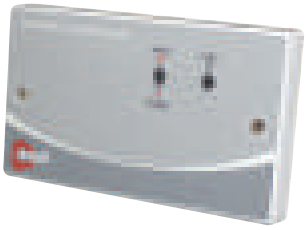
CAST Mini I/O Unit



- 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

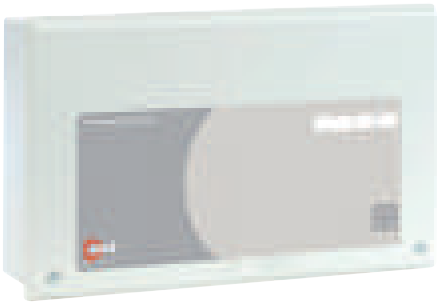
CAST Single Way Sounder Control Module



- 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)

Hush-Pro Landlord System Interface

- Allows a stand-alone Hush-Pro domestic fire alarm system to be connected to a CAST powered XFP or ZFP landlord/communal system to unlock a series of powerful functions such as remote off-site monitoring via the Cloud, automatic evacuation of dwellings in a 'Fire Level 2' condition, manual keyswitch evacuations by the fire and rescue services and more
- 4mA typical alarm current (500µA quiescent) @ 22-40V DC
- Visit c-tec.com for more information on Hush-Pro - a new approach to integrating domestic and communal/landlord fire alarm systems

HP733/CA	Hush-Pro Landlord System Interface, CAST protocol

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 auto-shutdown feature helps to preserve battery life.

CAPROG	CAST Handheld Device Programmer

CAST Training

C-TEC offers two free-of-charge CAST training sessions.

Module 1 explains the key features & 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.

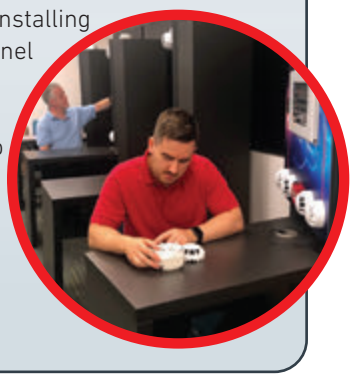
MODULE 1: KEY FEATURES & SYSTEM OVERVIEW

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 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 & 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 stating whether you are interested in XFP CAST or ZFP CAST training.

You're Safe with C-TEC

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