

**CA740 4-Way Conventional Zone to CAST Addressable Zone Converter**

**THIS EQUIPMENT MUST BE INSTALLED AND MAINTAINED BY A SUITABLY SKILLED AND TECHNICALLY COMPETENT PERSON. REMOVE ALL POWER BEFORE INSTALLATION.**

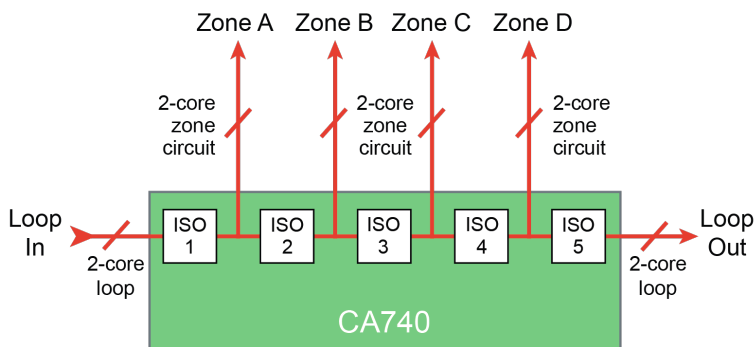
**Product Description**

The CA740 (shown right) facilitates the conversion and upgrade of a multi-zone conventional fire alarm system to an addressable CAST system utilising the pre-existing zonal wiring without the need to extend the wiring.

The loop powered unit is CAST and CAST-PRO compatible and has an onboard short circuit loop isolator and four zonal circuit isolators (see Fig.1 below).

Supplied as a 4 zone unit, the CA740 can be extended to 8 zones by connecting an extender PCB, Part No. CA740PCB (see Fig.2 overleaf).

The CA740 is compatible with CAST XFP & ZFP panels and is supplied in a standard C-TEC plastic enclosure.

**CA740 Enclosure****Fig.1 – CA740 Onboard Isolators**

The CA740 employs five onboard CAST isolators connected in series with convenient connection points for Loop In/Loop Out and four Zones A/B/C/D.

If there is a fault at the start of Zone A, then isolators 1 & 2 would open to isolate Zone A. If there was a subsequent fault at the start of Zone D, isolators 4 & 5 would open to isolate Zone D. If there are two or more circuit s/c faults, two or more zones on the CA740 will be isolated.

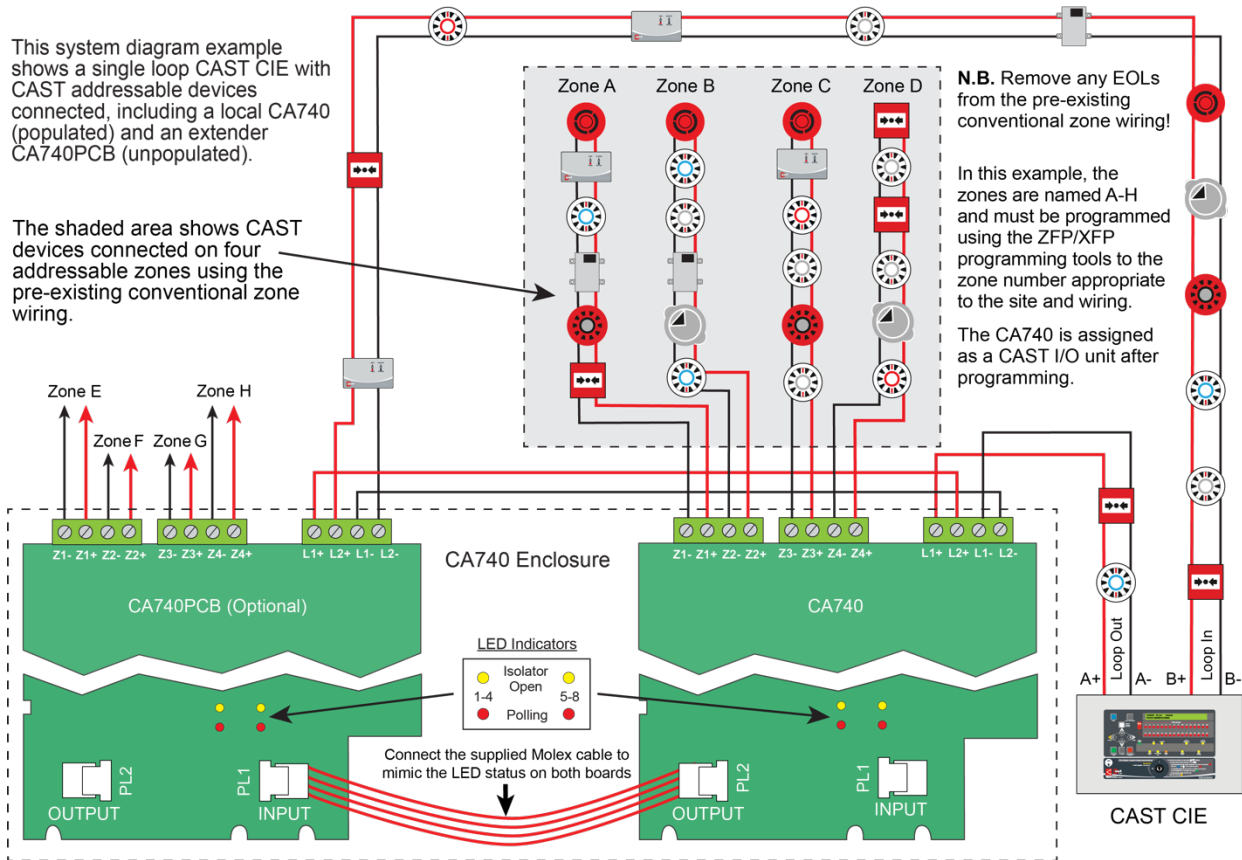
**Features**

- Ideal for use on retrofit sites where conventional devices are being replaced in situ with CAST addressable devices and the existing wiring needs to be retained.
- Fully complies with the requirements of BS 5839-1 and eliminates the need to provide extra wiring to extend loops while maintaining loop and individual zone circuit integrity.
- Four individual zonal circuits accommodate CAST addressable devices on separate isolated circuits.
- Designed to sit on a CAST fire panel's addressable loop and communicate its status back to the host CIE.
- Supplied as a 4 zone unit extendable to 8 zones using a CA740PCB, which is housed in the same enclosure and allocated a separate loop address by the CIE.
- CA740 plastic enclosure provides ample space to connect CAST loop and CAST zone cabling.
- No EOLs, PSU or batteries are required; entirely loop powered.
- Compatible with C-TEC's range of CAST CIE.

## Wiring and Connections (see Fig.2)

All system wiring must be installed in accordance with applicable national, regional or local standards. In the UK, this is 5839-1 (Fire detection and fire alarm systems for buildings – Code of practice for design, installation, commissioning and maintenance of systems). All CA740 plug-on terminals can accept cables up to 2.5mmØ.

**Fig.2 – Example CAST CIE System using CA740 & CA740PCB Units (8 addressable zones available)**



## Installation and Testing

This product must be installed and tested in accordance with applicable national, regional or local standards. Assess the condition and construction of the wall and use suitable screw fixings for the in-service weight of the product. Drill centre points are provided in the enclosure base for loop and zonal wiring. Cut out suitable holes in the enclosure base using a hole saw directed by a pilot bit in the centre of the hole saw. Always ensure that if a hole is cut out, it is filled with a good quality strain relief cable gland.

## Specification

<b>Order Codes:</b>	CA740 4-Way Conventional Zone to CAST Addressable Zone Converter, Boxed
	CA740PCB 4-Way Conventional Zone to CAST Addressable Zone Converter Extender PCB
<b>Operating Voltage:</b>	CAST loop voltage 22-40V
<b>Current:</b>	1.4mA
<b>Addressable Zones Guidelines:</b>	In a single CA740 enclosure: 4 zones (as standard), extendable to 8 zones using a CA740PCB. <b>Note:</b> Maximum number of 4-way CA740 units per loop = 20, but the maximum number of CAST devices on a single loop must not exceed 255, including the CA740. Maximum cable length per zone <500m; Maximum of 20 CAST devices per zone.
<b>Monitoring:</b>	Loop and zone isolators are monitored and report events to the host CIE
<b>Addressing Options:</b>	The CA740 is soft addressed from the panel OR by using a hand-held programmer (CAPROG). The unit takes an address on the loop and is assigned as a CAST I/O unit after programming.
<b>Indicators:</b>	Polling LED (Red) for Zones 1-4; Polling LED for Zones 5-8 (if CA740PCB fitted). Isolator Open LED (Yellow) for Zones 1-4; Isolator Open LED (Yellow) for Zones 5-8 (if CA740PCB fitted).
<b>Compatible CIE:</b>	C-TEC's CAST XFP & ZFP addressable fire panels
<b>Compatible Devices:</b>	C-TEC's CAST and CAST-PRO range of addressable fire detectors, MCPs, I/O units, sounders/VADs
<b>Communication Protocol:</b>	C-TEC's CAST protocol
<b>Body Material/Colour:</b>	PVC lid and base/Light Grey RAL 7035
<b>Dimensions:</b>	380 (W) x 235 (H) x 96 (D) mm
<b>Weight:</b>	1.75kg
	<b>IP Rating (to EN 60529):</b> IP30 (Indoor use only)
	<b>Operating Temperature:</b> -10°C to +40°C
	<b>Max Relative Humidity:</b> 95% (non-condensing)



Manufacturer: Computationics Limited (C-TEC), Challenge Way, Martland Park, Wigan, Lancashire WN5 0LD. [www.c-tec.com](http://www.c-tec.com)  
 E&OE. No responsibility can be accepted by the manufacturer or distributors of these devices for any misinterpretation of this instruction, or for the compliance of the system as a whole. The manufacturers' policy is one of continuous improvement and we reserve the right to make changes to product specifications at our discretion and without prior notice.