

Mains Powered Interface Unit (34440 REV 2)



This 34440 REV 2 Mains Powered Interface Unit (post Qtr2 2011) operates from mains power and incorporates its own battery-backed supply. It has 4 channels, each

channel may be configured as a conventional input (zone) or output (sector) using the Vigilon commissioning tool in a compatible system. The unit is designed for connection to a Vigilon or Nano loop circuit. It incorporates a DIN rail for mounting relays and isolators modules.

Compatibility

The 34440 REV 2 Interface unit is suitable for use in a compatible system base on panels:

	Vigilon panel	Nano panel
Main controller	≥ 4.43 / V3.97	≥ V2.50
Loop processor	≥ 4.41 / V3.97	-
Commissioning tool	≥ V1.27	≥ V2.x

≥ mean equal to or greater than

> mean greater than

Programming

Compatible system

If the 34440 REV 2 Unit is fitted in a compatible system then the programming is done using a compatible Commissioning tool.

Legacy system

Where a 34440 REV 2 Unit is to replace an existing 34440 Unit in a legacy system then it will need to be pre-programmed. Check to ensure the legacy system is based on Vigilon panel having:

Main Controller	≥ 4.10 / V3.70
Loop processor	≥ 4.11 / V3.81



The 34440 REV 2 Unit is factory configured with all four channels as 'Sector' outputs.

Use the S4 Interface Programmer (S4-INTERFACE-PROG) V1.03 or greater to configure the 34440 REV 2 Unit to the required 'Zone' inputs and 'Sector' outputs as set for the 34440 Unit being replaced.








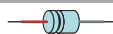

Technical Data

Designed to meet standards	EN54:part 4:1998 EN54:part 17:2005 EN54:part 18:2005
Overall dimensions in mm	height 305 x width 504 x depth 98
Assembled weight (approximate)	7.31Kg (with battery and optional components if fitted)
Enclosure	Steel
Colour	Grey and Black
Storage temperature	-20 to +70°C
Ambient operating temperature	-10 to +45°C
Relative Humidity (Non condensing)	up to 95% Temperature +5 to +45°C
Ingress Protection	IP40 (estimated)
Operating voltage	230V 50Hz +10% -6%
Rated current	0.7A
Batteries	2 x 12V 2.1Ahr (0.982Kg each)
Sector and Auxiliary Outputs	Sector and Auxiliary Output is 0.5A max. each at 24V +/-3V, electronically current limited to approximately 1A (a max. load for whole unit) at 25°C.
Zone	
Nominal voltage	16V or 22.5V (default) ±15%
Quiescent current	20mA per zone (default)
	Zone short circuit current limited to < 30mA
	EN54 compliance limitation: 32 devices OR Maximum of 20 diode bases per zone
EN54-17 : 2005 (section 4.8) data:	V _{max} 42V /C max 0.4A V _{nom} 40V /S max 1A V _{min} 24V /L max 20µA V _{SO} max 16V ZC max 0.1Ω V _{SO} min 8V
Emission	BS EN61000-6-3: 2007 EMC for residential, commercial & light Industry.
Immunity	BS EN50130-4: 1996 + A1:1998 +A2 2003 for alarm systems
Max. No. per loop	8 (with fully sectored outputs)
Load factor	1
Terminals	3-way device (terminals provided for spur connection)

Installation

The 34440 REV 2 Mains Powered Interface Unit consists of:

- Interface Enclosure
- 2 x 12V 2.1Ahr batteries

	Spare Parts	Qty
	Fuse 3.15A AS Ceramic (20mm x 5mm)	1
	Fuse 3.15A QB Glass (20mm x 5mm)	1
	Resistor 5.6K 0.6W	4
	Resistor 470R 0.6W	8
	Resistor 10K 0.5W	4
	Battery Link	1
	Battery Lead	1
	Capacitor 22uF 35V	4
	Instructions	1



keys are supplied in a plastic bag

- a. Using the **key** open the door and check all contents inside the unit.
- b. If necessary remove the door on the unit to ease installation.

- c. Knockout the required cable entry points from the back box.
- d. Mark the 3 fixing positions on the wall to which the unit is to be mounted ① and secure the unit to the wall with suitable fixings.



If the unit is to switch heavy *non-mains loads*, then optional **POWER RELAYS 19104-52** must be used ②. The relays may be installed on the DIN rail inside the unit. The relay unit must include a diode unit.

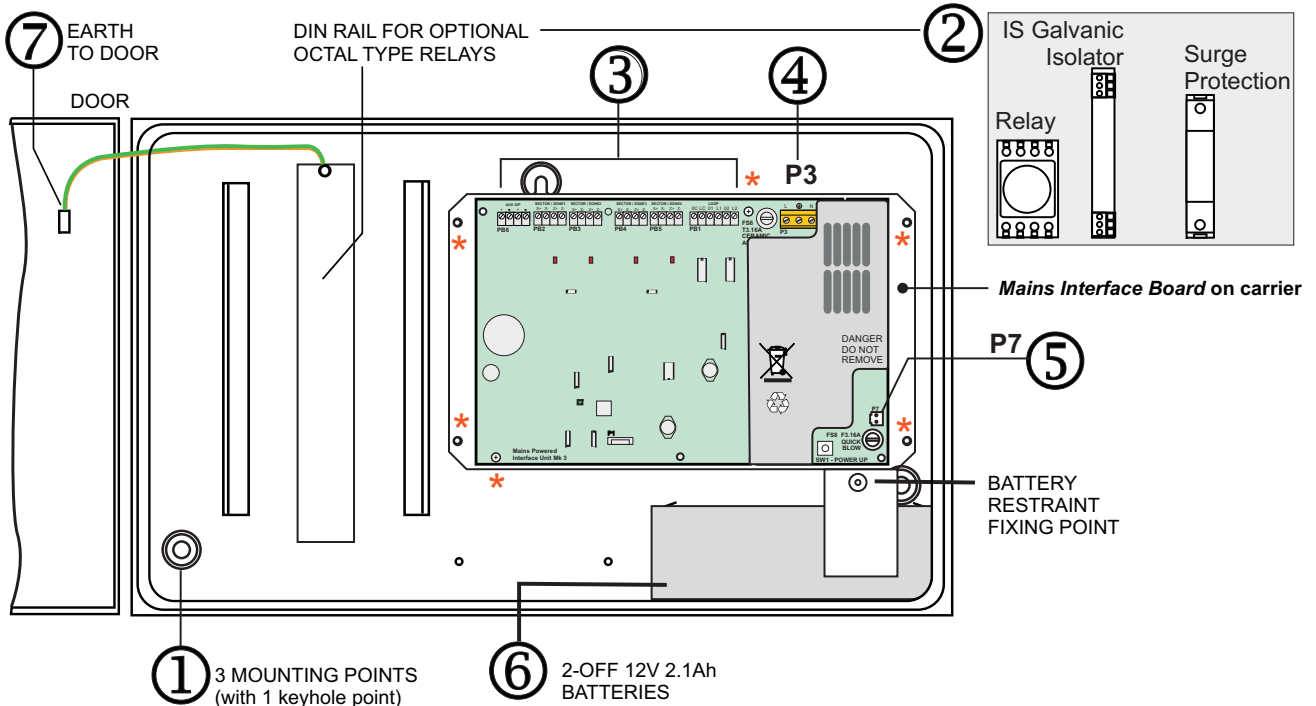
- e. Terminate each external cable adjacent to the connecting terminal block.



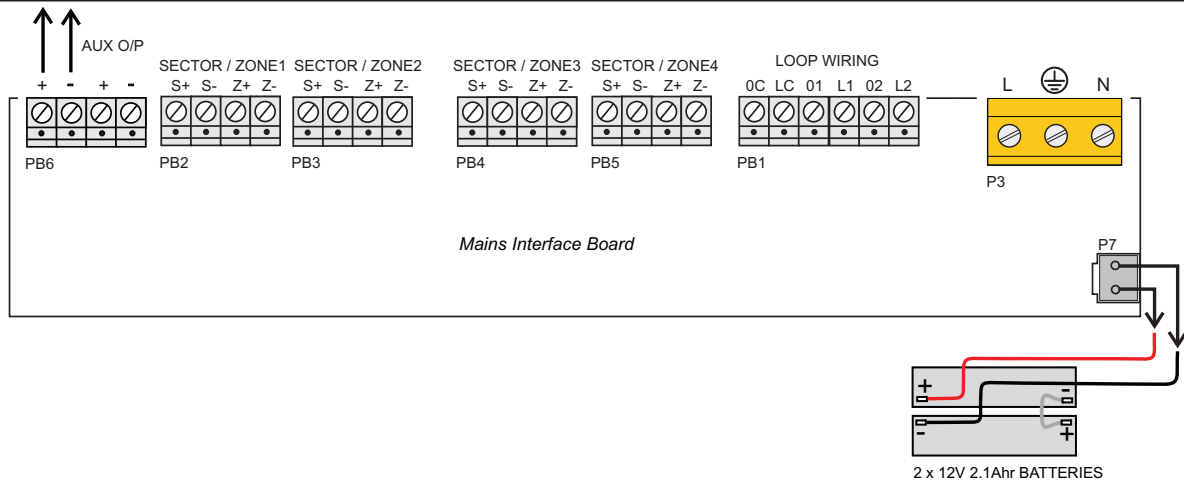
Ensure the board carrier fixing screws are securely fitted * as they form part of an earth continuity path to the metal enclosure, this is necessary for electrical safety and for EMC compliance.

- g. Connect the incoming cable ends to the appropriate terminals ③ and ④ to site specific requirements. Ensure there is segregation between mains and extra low voltage cables. Also each unused cable entry point must be fitted with a plastic bung.

34440 rev2 Mains powered interface unit (post Qtr2 2011)



* Ensure these screws are securely fitted as they provide earth continuity to the enclosure.



- i. Place the batteries inside the back box ⑥, however **do not make the connection**, this is done during commissioning by the Servicing organisation.
- k. If the door was removed to ease the installation then re-fit the door and ensure the earth lead ⑦ is refitted.

i The Capacitor unit and the 10k Resistor must be fitted to the end-of-line (EOL) of each Zone and Sector circuits. It is useful for identification purposes to stick an EOL label on the last device in which has EOL unit fitted.

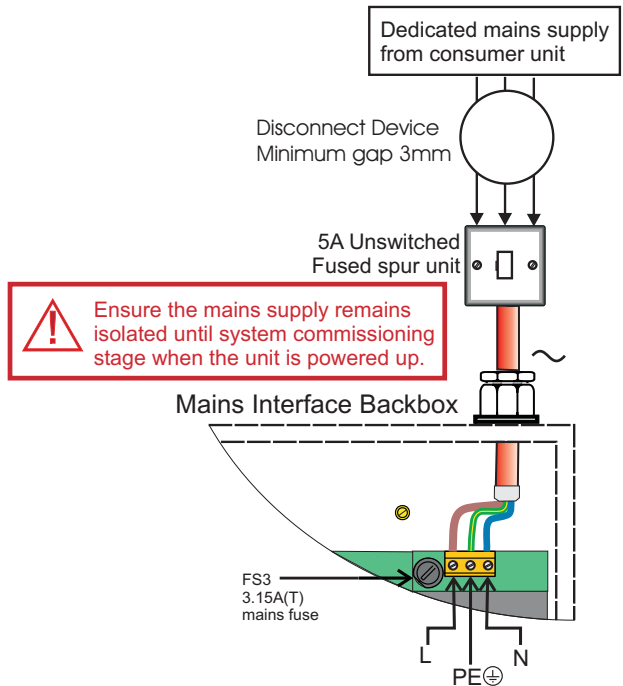
- l. Close the door on the Unit using the Key.

Mains supply

The mains supply cable must be a standard fire resisting type and should meet PH30 classification, such as any of the standard or enhanced loop cables. Requires a minimum conductor cross sectional area of 0.75mm².

! Ensure that the mains supply cable enters the enclosure through a dedicated cable entry, located adjacent to the mains terminal block and that is also segregated from loop wiring.

i These fire alarm system products are not designed to be powered from IT Power systems.



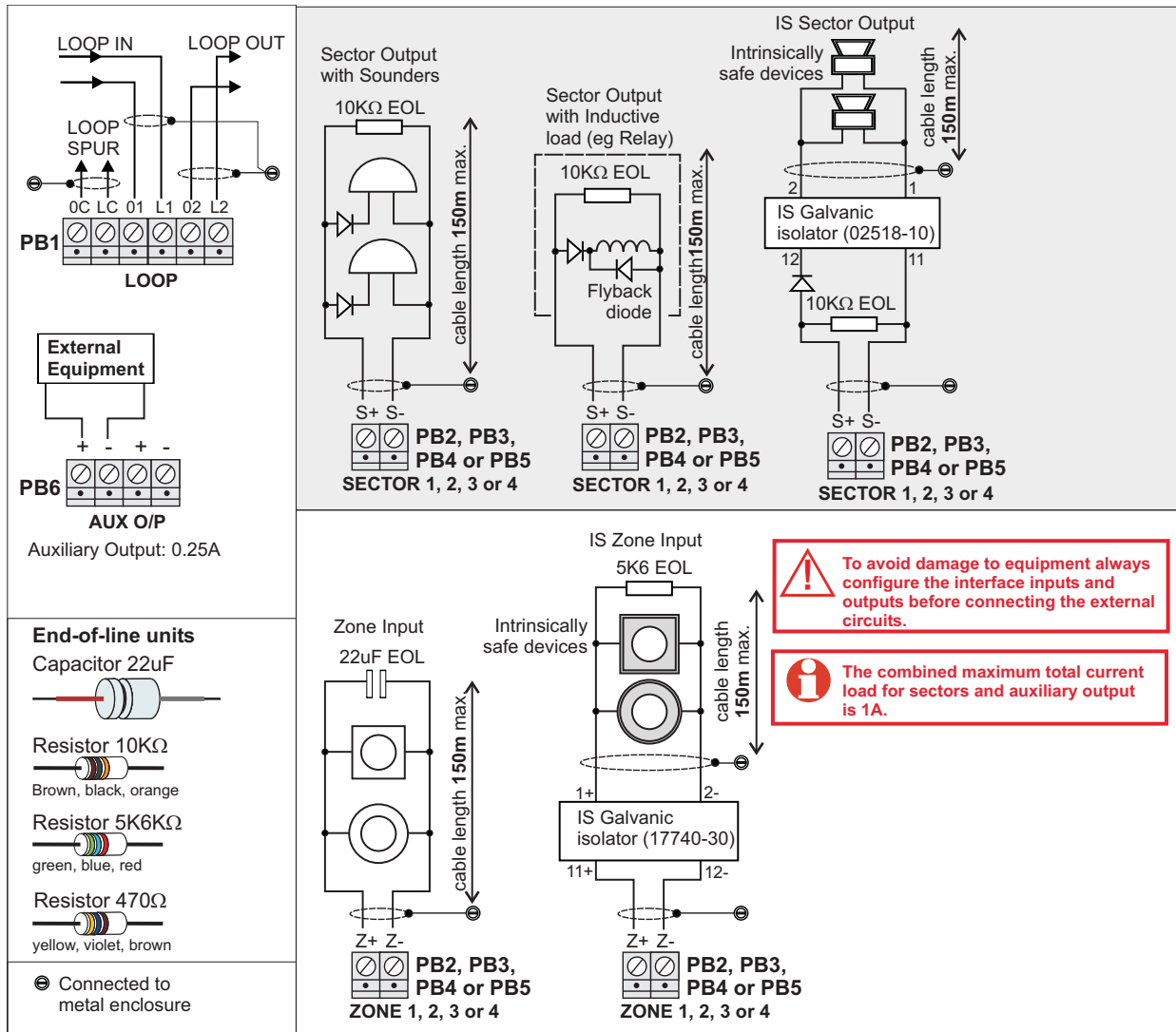
! Ensure the mains supply remains isolated until system commissioning stage when the unit is powered up.

All mains powered equipment must be earthed. Mains supply to any fire alarm control and indicating equipment must be via an unswitched 5A fused spur unit. A disconnect device must be provided to disconnect both poles and must have a minimum gap of 3mm. The **disconnect device** should be available as part of the building installation and must be easily accessible after installation is complete.

Wiring test

! DO NOT undertake high voltage insulation tests WITH THE CABLES CONNECTED to the Mains Interface unit and external equipment. Such a test may damage the electronic circuitry in external equipment and in the Mains Interface unit.

External Wiring to a 34440 REV 2 Mains Powered Interface Unit



Power relay

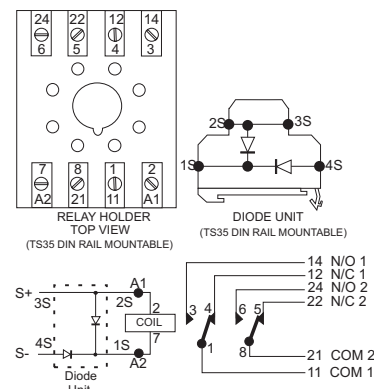
The din rail mountable Relay (19104-52) operates from a 24V supply and has a coil resistance of 470R and contacts rated 10A.

Options

These optional products should be mounted on the DIN rail.

⚠ The relays and intrinsically safe products listed below should be mounted apart, a metal screen is provided inside the enclosure.

- 19104-52 Low voltage Power relay
- 17740-30 Intrinsically safe galvanic isolator for IS detectors and call points
- 02518-10 Intrinsically safe galvanic isolator for IS sounders



At the end of their useful life, the packaging, product and batteries should be disposed of via a suitable recycling centre and in accordance with national or local legislation.

WEEE Directive: At the end of their useful life, the packaging, product and batteries should be disposed of via a suitable recycling centre. Do not dispose of with your normal household waste. Do not burn.

Gent by Honeywell reserves the right to revise this publication from time to time and make changes to the content hereof without obligation to notify any person of such revisions of changes.

	Hamilton Industrial Park, Waterside Road, Leicester LE5 1TN, UK	Website: www.gent.co.uk
	Telephone: +44 (0) 116 246 2000	Technical support: www.gentexpert.co.uk