Supplementary Specification

Part Number:	HP454A/W	HP457A/W
Description:	HP Base Voice Sounder with isolator	HP Base Voice Sounder VAD with isolator, C-Class
Relevant Standards:	EN 54-3 (Sounders) EN 54-17 (Short-circuit isolators)	EN 54-3 (Sounders) EN 54-23 (VADs) EN 54-17 (Short-circuit isolators)
Communication Protocol:	Hush-Pro (C-TEC)	
Supply Voltage:	24 to 40 Vdc (sounder)	24 to 40 Vdc (sounder) 27 to 40 Vdc (VAD)
Quiescent Current (Typical):	490 µA	
Active Current (Typical):	7.2 mA *	14.8 mA *
Active Current (Max)	13.3 mA *	22.3 mA *
Power:	290 mW	600 mW
Environment Type (EN 54-3/23):	Type A (EN 54-3)	Type A (EN 54-3 & EN 54-23)
VAD Category (EN 54-23):	N/A	C-3-8
VAD Temporal Pattern:	N/A	0.5 Hz synchronised
Coverage Volume (C-Class):	N/A	170 m^3
Flash Rate / Colour:	N/A	0.5 Hz / White
Peak SPL at Vmax:	89 dB(A) @ 1 m **	
Indicator:	Polling LED	
Dimensions:	112 mm diameter; 46 mm deep (with cap fitted)	
Weight:	160 g	170 g
Mounting Type:	Ceiling	
Body Material / Colour:	Polycarbonate / White	Polycarbonate / Clear
IP Rating (EN 60529):	IP21C	
Operating Temperature:	-10°C to +55°C (Type A)	
Humidity:	Max. 95% RH (non-condensing)	

* @ maximum volume level @ Vmin; ** ±3 dB(A)

Manufacturer: Computionics Limited (C-TEC), Challenge Way, Martland Park, Wigan, Lancashire WN5 0LD. www.c-tec.com

E&OE. No responsibility can be accepted by the manufacturer or distributors of these units 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.

Base Mount Voice Range Voice Sounders & VADs

Installation Instructions Hush-Pro

Product Description

The Hush-Pro Base Mount Voice range includes voice sounders and combined voice sounder visual alarm devices (VADs). Their purpose is to visually and audibly alert building occupants of a fire alarm. They are designed for use with C-TEC's Hush-Pro BS5839-6 Grade C Controller.

The following variants are available:

Part Number	Description
HP454A/W	Ceiling Voice Sounder Base with isolator, white (Hush-Pro)
HP457A/W	Ceiling Voice Sounder VAD Base with isolator, white, C-Class (Hush-Pro)

All Hush-Pro base devices can be optionally used as either:

- a stand-alone, base device using a separately available locking white cap (BF330CTLIDW) / red cap (BF330CTLIDR) / black cap (BF330CTLIDB), or
- a combined, base device and Hush-Pro detector (Hush-Pro detectors are separately available).

The devices offer low current consumption, high sound output, high efficiency VADs, messages with tones and built-in short-circuit isolators.

The devices are designed to comply with all relevant sections of the fire alarm device standards EN 54-3 (Sounders), EN 54-23 (Visual alarm devices - VADs) and EN 54-17 (Short-circuit isolators).

Mounting the Base Device

THE SYSTEM MUST BE COMPLETELY POWERED DOWN BEFORE INSTALLATION

Ensure the base devices are installed in accordance with applicable local or national regulations. All bases are designed for ceiling mounting, indoor use only. Do not mount bases on uneven surfaces.

HP454A/W and HP457A/W may be mounted in any orientation.

The base device has screw terminals for the cable (see `Hush-Pro Connections' section) and includes rear mounting slots for standard electrical termination boxes. Securely fix the base device to a ceiling using two screws in the mounting slots provided.

Note: A Quick Connect Plate (Part No. BF431QCP) may be used as an accessory to assist with cabling to the base device (refer to BF431QCP Document No. DFU4310020 for details).

Maintenance

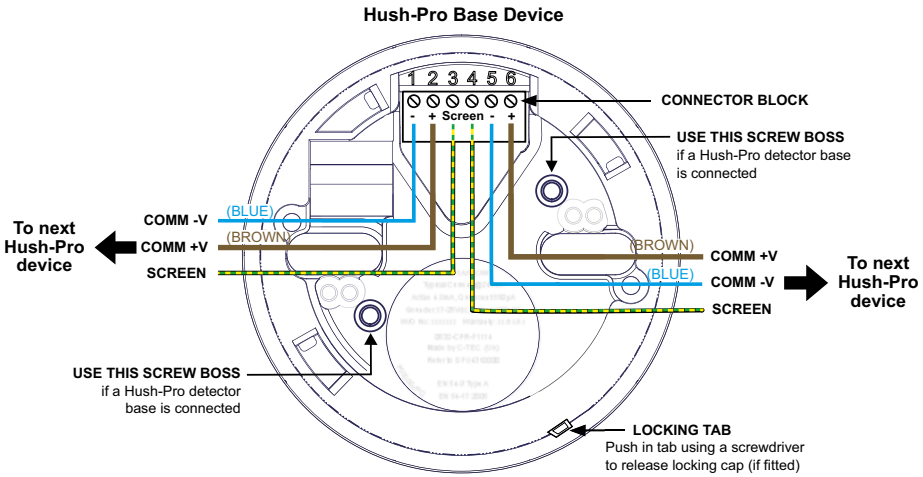
Periodic inspection, testing and maintenance of fire detection systems should be carried out in accordance with national, regional or local standards. In the UK the relevant standard is BS5839-1 Fire detection and alarm systems for buildings: Code of practice for system design, installation & maintenance of systems in non-domestic premises.

Inspection and maintenance of the system should only be carried out by a competent person with specialised knowledge of fire detection and alarm systems. This is normally a third-party fire alarm maintenance organisation.

Hush-Pro Connections

Connect the incoming and outgoing Hush-Pro cable to the base's connector block, as shown in figure 1. Note the connections are polarity sensitive.

Figure 1 - Connections (Typical)



Connector	Function
1	-Ve IN
2	+Ve IN
3 & 4	cable screen
5	-Ve OUT
6	+Ve OUT

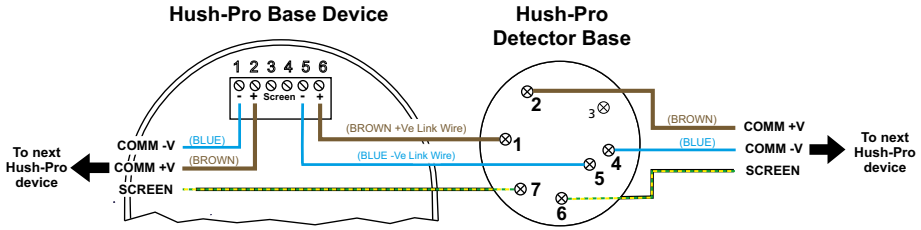
- All wiring must conform to local or national regulations.
- Correct polarity must be observed.
- Slot head terminals can accept 0.25 mm^2 to 2.5 mm^2 wiring.
- For optimum performance, it is recommended that screened cables are used.

Connection to an Optional Hush-Pro Detector

If a combined base device and Hush-Pro detector is used, wire the two bases using the supplied Brown (+Ve) and Blue (-Ve) link wires (see figure 2). Two screws are supplied to secure both bases together using the screw bosses (see figure 1).

Important Note: For optimum performance, DO NOT SPUR to the detector base. The preferred method is to run the cable into the base device, then connect to the detector base (using the link wires), then back out to the next Hush-Pro device on the circuit. Note that cable screens should be terminated to ensure continuity of the screen to and from the panel.

Figure 2 - Connection to Hush-Pro Detector Base (Typical)



Note: Cable screens are shown above terminated at connectors 7&6 in the detector base, alternatively, connectors 3&4 in the base device may be used.

Technical Specifications

EN 54-17 SC-Isolator Specification (Controllable Isolator)

Maximum Voltage (*V* max):	40 Vdc
Nominal Voltage (*V* nom):	40 Vdc
Minimum Voltage (*V* min):	22 Vdc
Maximum Current Device Isolates, switches from closed to open (*Iso* max):	55 mA
Minimum Current Device Isolates, switches from closed to open (*Iso* min):	15 mA
Maximum Rated Continuous Current with switch closed (*Ic* max):	1 A
Maximum Rated Switching Current under short circuit conditions (*Is* max):	1.6 A
Maximum Leakage Current with switch open (*IL* max):	20 µA
Maximum Series Impedance with switch closed (*Zc* max)	100 mohms

Sounder Tones

SELECTION	TONE	MESSAGE
Fire Level 1	TBD	TBD
Fire Level 2	TBD	TBD