

Technical Specification

Part Number:	BF454C/CC/W	BF455C/CC/W	BF457C/CC/W
Description:	Base Voice Sounder, White	Base Voice Sounder VAD, White, O-Class	Base Voice Sounder VAD, White, C-Class
Certified Standards: (PENDING)	EN 54-3:2001 + A1:2002 + A2:2006	EN 54-3:2001 + A1:2002 + A2:2006, EN 54-23:2010	
Certificate Number:	TBA ^	TBA ^	TBA ^
CPR Certificate Number:	TBA ^	TBA ^	TBA ^
Declaration of Performance (DoP):	TBA ^		
Supply Voltage:	18 to 30 Vdc		
(1) I _{max} :	25 mA *	38 mA (0.5 Hz) * 55 mA (1 Hz) *	
(2) I _{typ} :	8 mA @ 18 Vdc * 10 mA @ 30 Vdc *	17 mA @ 30 Vdc (0.5 Hz) * 24 mA @ 30 Vdc (1 Hz) * 18.5 mA @ 18 Vdc (0.5 Hz) * 30 mA @ 18 Vdc (1 Hz) *	
Power @ 30V dc:	300 mW	720 mW	
Environment Type (EN 54-3/23):	Type A (EN 54-3)	Type A (EN 54-3 & EN 54-23)	
VAD Cat. (EN 54-23) (Class):	N/A	O-R-3-2.5-16 ***	C-3-8
VAD Temporal Pattern:	N/A	1.0 / 0.5 Hz, synchronised	
Coverage Volume:	N/A	120 m ³	151 m ³
Nominal SPL at V _{max} :	96 dB(A) @ 1 m ** synchronised		
Dimensions:	112 mm diameter; 46 mm deep (with cap fitted)		
Weight:	160 g	170 g	170 g
Mounting Type:	Ceiling		
Body Material / Colour:	Polycarbonate / White + Clear		
IP Rating (EN 60529):	IP21C		
Operating Temperature:	-10°C to +55°C		
Humidity:	Max. 95% RH (non-condensing)		

(1) I_{max} - Maximum start surge, maximum running pulse current. Ensure that I_{max} current for all devices on the sounder circuit does not exceed the current limitations of the fire alarm panel.

(2) I_{typ} - Average running current.

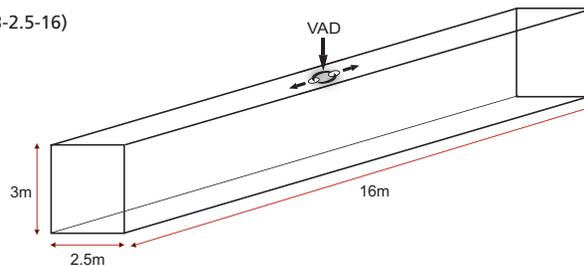
* @ maximum volume level.

** ±3 dB(A) when sounder set to PRIMARY TONE 1.

^ Certificates and DoPs available for download on C-TEC's website (PENDING).

*** Dimensions of O-Class VAD (O-R-3-2.5-16)

O = O-Class; R = Rectangular Cuboid;
3m Height; 2.5m Width; 16m Length.



Manufacturer: Compuionics 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 manufacturer's 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 Range

Conventional Audio Visual Devices

Installation Instructions

BF454C/CC/W, BF455C/CC/W, BF457C/CC/W

Product Description

The Activ Base Mount range of conventional voice sounders and combined voice sounder visual alarm devices (VADs) are designed for use with C-TEC's range of fire panels and other compatible third-party panels. However, compatibility testing with third-party panels is recommended to ensure correct operation.

Their purpose is to visually and audibly alert building occupants of a fire alarm.

The following base device variants are available:

Part Number	Description
BF454C/CC/W	Conventional Base Voice Sounder, White
BF455C/CC/W	Conventional Base Voice Sounder VAD, White, 'O' Class
BF457C/CC/W	Conventional Base Voice Sounder VAD Base, White, 'C' Class

All bases can be optionally used as either:

- a stand-alone base device using a separately available locking white cap (Part No. BF330CTLIDW) / red cap (Part No. BF330CTLIDR), or
- a combined base device and detector (detectors are separately available and wired on a separate detection circuit). The base devices are compatible with C-TEC's range of Activ conventional detectors and other compatible third-party suppliers.

The bases offer low current consumption, high sound output, high efficiency VADs, four selectable primary tones with selectable secondary tone set, seven selectable messages, two selectable volume levels and three selectable VAD flash rates. Tones, messages, volume levels and VAD flash rates are changed using the base's 8-way DIP switch.

Certification to EN 54-3 (Sounders) and EN 54-23 (Visual alarm devices - VADs) is pending.

Mounting the Base



THE SYSTEM MUST BE COMPLETELY POWERED DOWN BEFORE INSTALLATION

Ensure the bases 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.

BF454C/CC/W and BF457C/CC/W bases may be mounted in any orientation, whereas the BF455C/CC/W base must be mounted with its lenses pointing directly down the length of the corridor.

Securely fix the base to a ceiling using two screws in its mounting slots (which are designed for standard electrical termination boxes).

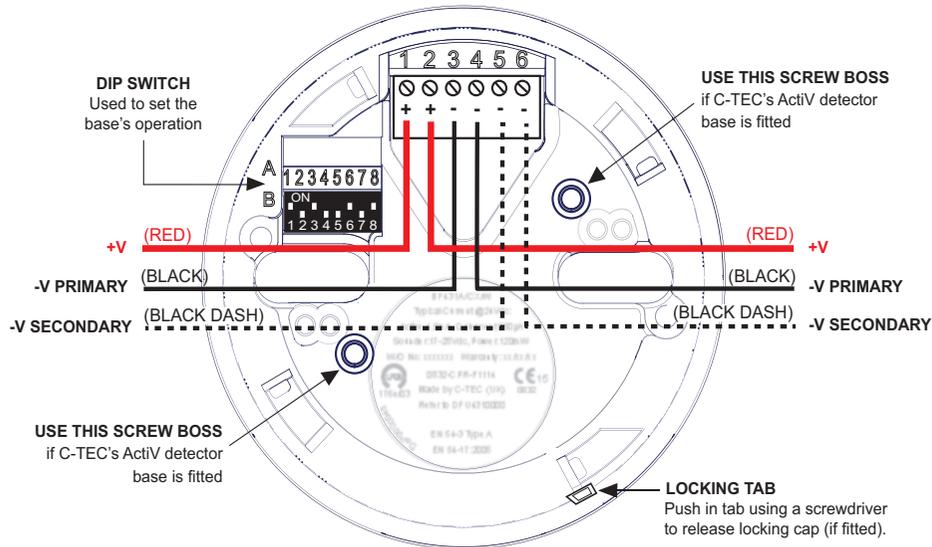
Please note the supplied Quick Connect Plate (Part No. BF431C/CC/QC) is an easy-to-fit mounting accessory that can assist with cabling to the bases.

Connections

Connect incoming and outgoing line cable to the base's connector block, as shown in figure 1.

Please note the selection of PRIMARY or SECONDARY tones and messages is made by wiring to the -V PRIMARY or -V SECONDARY connections shown below.

Figure 1 - Sounder Connections (Typical)



Connector	Function
1 & 2	+Ve
3 & 4	-Ve PRIMARY
5 & 6	-Ve SECONDARY

- All wiring must conform to local or national regulations.
- Correct polarity must be observed.
- Earth screens (not shown above) should be continuous from the CIE panel to the last device.
- Terminate sounder circuit as per panel manufacturer's instructions.
- The connector block's slot head terminals can accept 0.25 mm² to 2.5 mm² wiring.

Maintenance

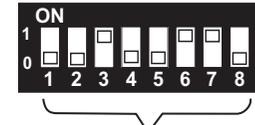
Periodic inspection, testing and maintenance of fire detection systems should be carried out in accordance with national, regional or local standards. In the UK the relevant standard is BS5839-1 Fire detection and alarm systems for buildings: Code of practice for system design, installation & maintenance.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

DIP Switch Operation

Each base's operation is set using Bits 1 to 8 on its DIP switch.

DIP switch up (ON) = 1, DIP switch down (OFF) = 0.

Use a small screwdriver to set the switches and refer to the tables below for settings. Ensure the switches are set before installation and fully pushed up or down.



Example above (assuming -V PRIMARY is wired to the base):

DIP Switch Setting = 0 0 1 0 0 1 1 0
 PRIMARY TONE 0 (Slow Two Tone)
 Message 1 'Attention please...'
 Volume Level High
 VAD Flash Rate C-3-8, 0.5 Hz

Sounder Tones (DIP Switches 1 & 2)

PAIR	PRIMARY TONE	SECONDARY TONE	DIP SWITCH 1 2
0	Slow Two Tone	Slow Two Tone	0 0
1	Fast Two Tone	Fast Two Tone	1 0
2	Sweep	Sweep	0 1
3	On-Off Tone	On-Off Tone	1 1

Messages (DIP Switches 3, 4 & 5)

PAIR	PRIMARY MESSAGE	SECONDARY MESSAGE	DIP SWITCH 3 4 5
0	No Message *	No Message	0 0 0
1	Attention please. Attention please. Fire has been reported in the building. Please leave immediately by the nearest exit. (x2)	This is a fire alert. This is a fire alert. Await further instructions. Await further instructions. (x2)	1 0 0
2	In the interest of safety please evacuate the building now. (x3)	This is a fire alert. This is a fire alert. Await further instructions. Await further instructions. (x2)	0 1 0
3	Spare	Spare	1 1 0
4	Spare	Spare	0 0 1
5	Spare	Spare	1 0 1
6	Spare	Spare	0 1 1
7	Spare	Spare	1 1 1

* When 'No Message' is selected, the preceding Sounder Tone is muted.

Volume Level (DIP Switch 6)

VOLUME LEVEL	DIP SWITCH 6
Low Volume	0
High Volume	1

VAD Flash Rate (DIP Switches 7 & 8)

FLASH RATE	DIP SWITCH 7 8
Off	0 0
C-3-8, 0.5 Hz	1 0
C-3-8, 1 Hz	0 1
Power Save, 0.5 Hz	1 1