

BF325/K2 AlertBuddy Quick Reference Manual



Order Code BF325/K2 kit consists of:

- BF325 AlertBuddy unit with a combined Silence/Test button and on/off battery switch.
- BF320 vibrating pillow pad.
- Plugtop charger/adaptor.
- A durable plastic storage/carry case to facilitate easy handover to guests at hotel reception desks and other residences.



Important Notes

1. The AlertBuddy must be correctly configured using the DIP switches before use.



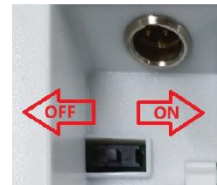
If the unit is to be used in its basic configuration with a vibrating pillow pad, DIP switch 2 **MUST** be set to ON (shown left).

All other configurations can be found in sections 4 and 5 of this document.

2. Ensure the AlertBuddy's battery is connected and switched on before use.

Remove the screw holding the battery compartment cover and take the cover off. Carefully connect the battery, position it in the compartment and replace the cover.

The on/off switch is located at the rear of the unit is used to switch the AlertBuddy's battery on and off. Ensure this switch is set to ON (pushed right) before use. The switch position is shown right:



Disclaimer

IMPORTANT - This step is essential and must not be omitted.

The AlertBuddy has been tested with various external alarm sounder devices in a wide range of scenarios. Many variables must be taken into account, including sounder type, sounder tone, sounder position, AlertBuddy position and orientation, room dimensions and room furnishing.

However, before general deployment in a particular situation, the AlertBuddy must be tested in that situation to ensure that it will be effective in the case of a real alarm event.

The test is simply to place the AlertBuddy as it is intended to be used and power it up.

At least the nearest alarm sounder device must be activated.

Allow the AlertBuddy to analyse the sound.

If the AlertBuddy recognises the sound as an alarm, the AlertBuddy's internal sounder and red Fire Alarm indicator will activate.

If the vibrating pad is connected, this will also activate.

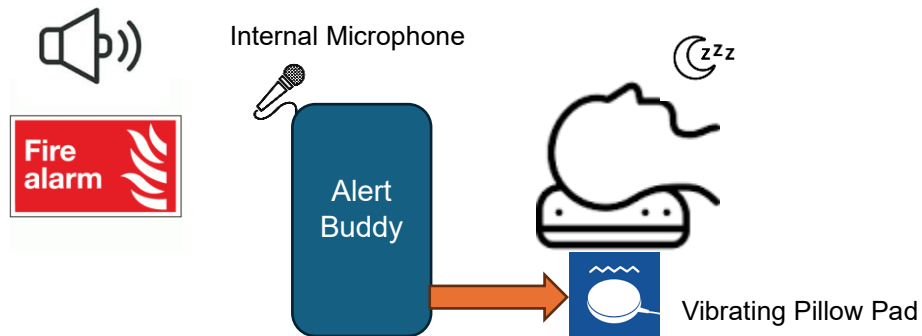
If the AlertBuddy does not activate, try changing its position and orientation. If it still does not activate, it may be that the alarm sounder type and/or alarm sounder tone is not compatible, or that the alarm sounder is too far away from the AlertBuddy.

In this case, please contact C-TEC's Technical Support Team and have the following information ready:

Alarm sounder device type, alarm sounder tone, and distance between the AlertBuddy and the alarm sounder.

1. Overview

The AlertBuddy is a disability aid for persons with impaired hearing. Its primary purpose is to listen for audible fire alarms and warn the user. For example, in nighttime operation, it attempts to awaken the user by mechanically vibrating the bed pillow.



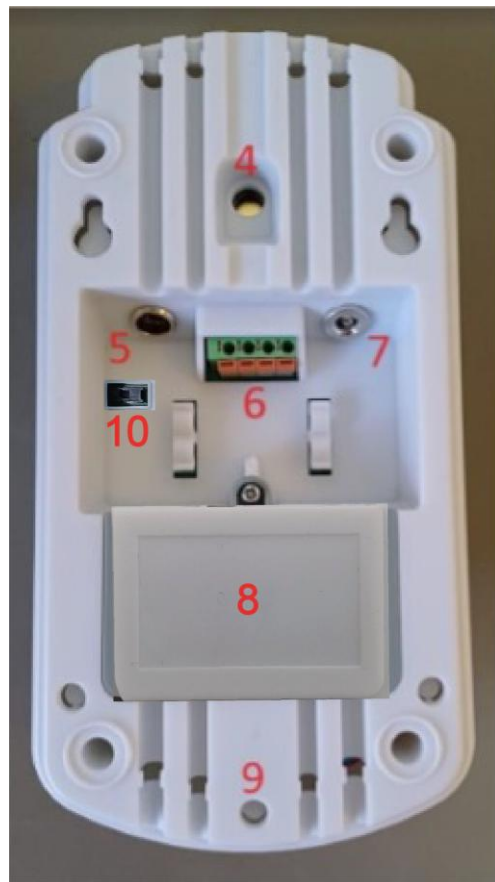
The AlertBuddy also contains an integrated sounder and Visual Alarm Device (VAD), allowing it to provide fire alarm alerts even during normal waking hours.

The AlertBuddy BF325/K2 kit comprises of the following items:



1. AlertBuddy Unit
2. Power Supply (18V DC, 0.9A)
3. Vibrating Pillow Pad
4. Lithium Battery (3.7V, 4000mAh). The battery provides backup power in case of a power outage or unintended disconnection. Standby monitoring for alarms under battery power is up to 48 hours.

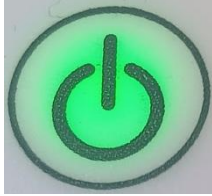
2. AlertBuddy Unit



1. LED indicators



Four LEDs are used to indicate the status of the AlertBuddy system.

	LED OFF	LED ON
<u>Power Indicator</u> Green LED OFF = No Power ON = Battery + Ext. Power FLASH = Ext. Power Problem		
<u>Fault Indicator</u> Amber LED OFF = No Warnings FLASH = Warnings (See Faults, section 3)		
<u>Fire Alarm Indicator</u> Red LED OFF = No Alerts ON = Fire Alarm Alert		
<u>Blue Indicator</u> Used for the diagnostics test (See Diagnostics, section 6)		

2. Internal VAD



WARNING: Do not look directly at the visual alarm when it is flashing!

The VAD consists of a high-visibility red LED that flashes when there is a fire alarm condition. The VAD flash luminosity is at full intensity when the AlertBuddy unit is orientated horizontally (assumed on a bedside table) or orientated vertically (wall mounted). The flash rate can be adjusted by the DIP switches (see DIP Switch Settings, section 4).

3. Silence/Test Button

The large grey Silence/Test button is multi-purpose: when a fire alarm condition occurs, the alarm condition can be cancelled by pressing it. Conversely, to perform periodic testing of the AlertBuddy to ensure it is operational, pressing the button triggers a test alarm (see Diagnostics, section 6).

4. Internal Sounder

The internal sounder is used to audibly indicate a fire alarm has been detected. Sound is emitted from the rear of the unit.

5. Vibrating Pillow Pad Connection

The vibrating pad is designed to alert hard-of-hearing individuals that the fire alarm is active. The device is placed under a pillow and awakens the user by vibrating the pillow. The vibrating pad is connected to the AlertBuddy via a 3-pin mini-DIN plug.

6. Connections are for future expansion. Do not use.

7. Power Supply Connection

An external power supply (18V DC, 0.9A) is attached to the AlertBuddy via a 2.5mm barrel connector and is used to power the AlertBuddy but also charge its Lithium battery. The power supply plugs into a mains 13A socket.

8. Battery Compartment and DIP Switches

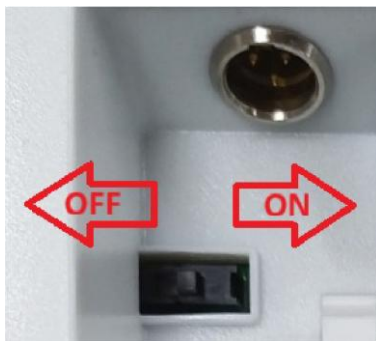
DIP switches configure the operation of the AlertBuddy. It is important to set the DIP switches to the required settings before use (see sections 4 and 5).

9. Internal Microphone

The microphone listens for alarm sounders from the external alarm system to determine if there is an active alarm condition. Once detected, the AlertBuddy enters an alarm condition, triggering its own alarm devices (VAD, sounder and vibrating pad).

10. On/Off Battery Switch

This switch is a battery saver feature and is used to switch the AlertBuddy's battery on or off. Ensure this switch is set to ON (pushed right) before use. The switch position is shown below:



3. Faults

Flashing LED indicators are used to display fault conditions on the AlertBuddy.



Green LED

When flashing indicates that the mains power supply is not operational or not connected.



Amber LED

When flashing indicates one or more faults have occurred on the AlertBuddy, see the fault table below. Faults are encoded into amber LED flashes. Flashes occur at a rate of one per second. After the final flash is sent, a one-second pause follows it, then the sequence starts again.

For example: **FAULT_VPAD_OFF_OPEN_CIRCUIT** consists of 8 flashes, a one-second pause, then 8 flashes.

[8 Amber LED flashes]

[Pause] [8 Amber LED flashes]



Fault Identification	Flash Count	Explanation
FAULT_PSU_NOT_DETECTED	1	No external power detected
FAULT_BATTERY_NOT_DETECTED	2	Battery not detected
FAULT_VPAD_OFF_OPEN_CIRCUIT	8	Open-circuit detected on the vibrating pad
FAULT_VPAD_OFF_SHORT_CIRCUIT	9	Short-circuit detected on the vibrating pad
FAULT_VPAD_ON_SHORT_CIRCUIT	10	Short-circuit detected on the vibrating pad when active



Red LED

The red LED indicates a fire alarm condition and has no associated fault conditions.



Blue LED

Used for the diagnostics test (See Diagnostics, section 6).

4. DIP Switch Settings



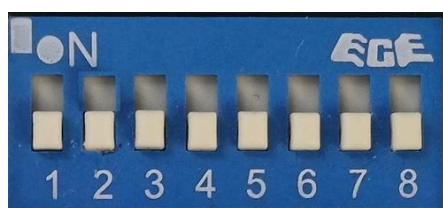
The DIP switches are located in the battery compartment at the rear of the AlertBuddy.

To access the DIP switches:

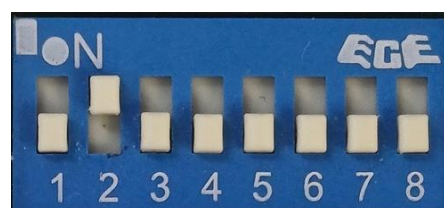
Step 1: Remove the screw holding the battery compartment cover. Take the cover off.

Step 2: Carefully remove the battery from the compartment without disconnecting from the unit.

Step 3: The DIP switches are located at the bottom of the battery compartment.



Vibrating Pad Disabled Setting



Vibrating Pad Enabled Setting

The DIP switches can be pushed into the ON or OFF setting using a small stylus/screwdriver.

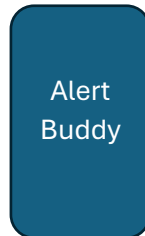
OVERVIEW	DIP No.	OPERATION	OFF	ON
Alarm Settings	1*			
	2	Vibrating Pad	Disabled	Enabled
	3*			
Alarm Patterns	4	Internal Sounder Pattern	Continuous	Pulsed
	5*			
	6	Vibrating Pad Pattern	Continuous	Pulsed
	7	VAD Pattern	Slow Flash	Fast Flash
Mode	8*			

* For future expansion. Do not change the DIP switches from the 'OFF' position.

5. Operational Modes

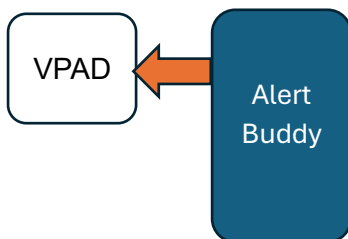
The following diagrams illustrate the AlertBuddy configurations with DIP switch settings.

- a. Stand-alone operation (can be used without a vibrating pad).



All DIP switches are OFF.

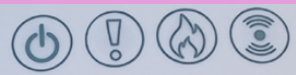
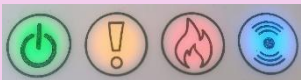
- b. Basic operation - AlertBuddy with vibrating pad (VPAD).



DIP switch 2 is ON.

6. Diagnostics

Pressing the large grey Silence/Test button on the front of the AlertBuddy executes a diagnostic routine that tests the LEDs and internal alarm devices. This test will operate for 30 seconds, then self-cancel. The diagnostic sequence is shown below:

Diagnostic Sequence	LED Test Indicators	Action
1. Press Silence/Test Button		
2. LED Test		All LEDs Flashing
3. Internal Sounder Test		Internal Sounder Activated
4. VPad Test		Vibrating Pad Activated
5. VAD Test		VAD Activated

If the vibrating pad is not connected, the AlertBuddy will still try to activate the device (the red LED will light, but no action will happen).

Once the diagnostic procedure is complete, the AlertBuddy will return to normal fire alarm monitoring.



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 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.