eurotech ®
fire systems limited

100-2015V   ALTAIR FLEXIPLUS BASE SOUNDER
100-2016V   ALTAIR FLEXIPLUS BASE SOUNDER + WHITE VAD
100-2017V   ALTAIR PLUS FLEXIPLUS BASE SOUNDER
100-2018V   ALTAIR PLUS FLEXIPLUS BASE SOUNDER + WHITE VAD

Products compatibility and general description

These products are to be used in conjunction with the following Altair, Altair Lite and Altair Plus detectors:

A1000	(AT5910CPR)	Altair smoke detector	**100-2015V**, **100-2016V**
A2000	(AT5910CPR)	Altair smoke / temperature detector	**100-2015V**, **100-2016V**
A3500	(AT5910CPR)	Altair temperature detector	**100-2015V**, **100-2016V**
A1000L	(AT5010CPR)	Altair smoke detector without isolators	**100-2015V**, **100-2016V**
A2000L	(AT5010CPR)	Altair smoke / temperature detector without isolators	**100-2015V**, **100-2016V**
A3500L	(AT5010CPR)	Altair temperature detector without isolators	**100-2015V**, **100-2016V**
A1000+	(AT5910CPR)	Altair Plus smoke detector	**100-2017V**, **100-2018V**
A2000+	(AT5910CPR)	Altair Plus smoke / temperature detector	**100-2017V**, **100-2018V**
A3500+	(AT5910CPR)	Altair Plus temperature detector	**100-2017V**, **100-2018V**

(In brackets, DOP reference)

These products are compatible only with control panels that use the Vega protocol.
In order to work, these sounder bases require a suitable host detector.

Following the triggering of an alarm condition on the host detector, the **Altair Flexiplus** base sounder activates its acoustic output, previously selected through its selector; similarly, **Altair Plus Flexiplus** base sounders activate the acoustic output, but in this case its pattern is previously selected from the control panel.

Base sounders equipped with VAD (Visual Alarm Device), in conjunction with the acoustic signal, also emit an alarm visual signal; specifically:

- for **100-2016V** and **100-2018V** white optical alarm signal

Product parts

Ceiling mounting bracket (picture 1)

1. Sound diffuser cone.
2. Loop cables passage.
3. Pre-cut holes for screwing the bracket to the ceiling.
4. Fixing pins.

Base sounder (picture 2)

1. Adaptor base for the host detector.
2. Loop cables passage.
3. Selector for the acoustic tone, volume and VAD output intensity (**Altair Flexiplus** only).
4. Bracket-base sounder screw fixing location.
5. VAD output.
6. Acoustic alarm signal outlet.
7. Bracket's pins hosting holes.

Picture 1

Picture 2
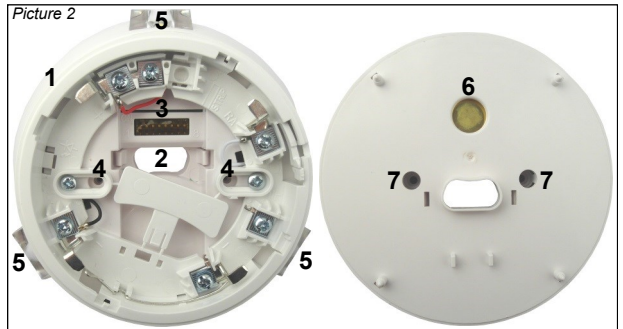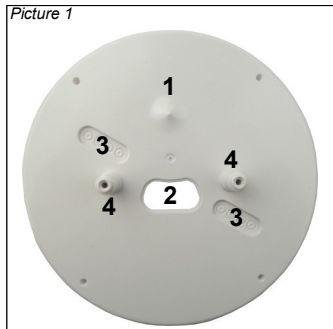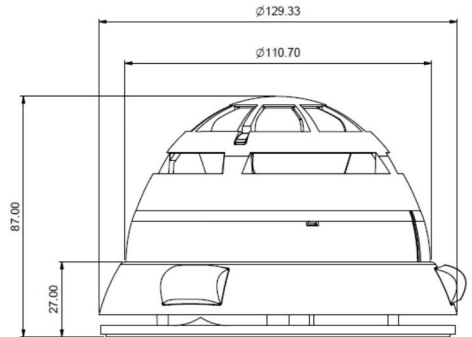
Installation - general procedure

1. Install the mounting bracket onto the ceiling.
2. Select the acoustic alarm tone, its volume and the VAD light emission power using the selector (**Altair Flexiplus** only).
3. Install the base sounder on the mounting bracket.
4. Connect the Vega loop to the base sounder.
5. Install the host detector.
6. Set the acoustic alarm tone, its volume and the VAD light emission power on the control panel (**Altair Plus Flexiplus** only).
7. Test the base sounder-host detector assembly.

Mounting bracket installation

1. Pass the loop cables through their bracket's passage.
2. Set the bracket in the intended installation location.
3. Fix the bracket to the ceiling, using the supplied screws and wall anchors; use the pre-cut holes.

Tone, volume and VAD power selection (Altair Flexiplus only)

Use the internal micro-switches for selecting the acoustical tone, volume and VAD power (if present).

To move the single micro-switches use the tip of a little screw-driver.

In the tone, volume and VAD power selection tables of this manual, the micro-switch positioned at the high end is indicated as "1", while when at the low end with "0" (picture 3).

1. Set the acoustic tone with the first 5 micro-switches and referring to table 1.
2. Set the volume with position 6 and 7 micro-switches and referring to table 2.
3. If applicable, set the VAD power with position 8's micro-switch and referring to table 3.

Picture 3

Tone, volume and VAD power selection (Altair Plus Flexiplus only)

Alarm tone, volume and VAD power (if present), must be set on the control panel; possible setting options are given in table 1, 2 and 3.

In order to perform this operation, refer to the control panel's manual.

Installing the device on the mounting bracket

1. Pass the loop's cables through their device passage.
2. Assemble the bracket together with the device, inserting the pins of the fist into the corresponding holes of the second.
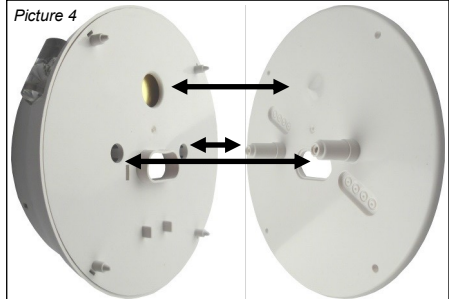3. Fix the device to the bracket using the supplied screws.

Wiring the base sounder to the Vega loop

Connect the loop's wires to the adaptor base of the host detector (picture 5); in any case, refer to the detector manual for further data.
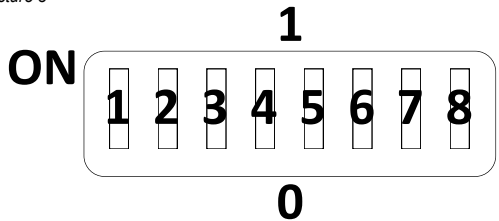
Picture 4

> ⚠️ **Make sure that the bracket's sound diffuser cone corresponds to the device's sound outlet.**

> ⚠️ **Power off the loop before performing any wiring.**

Host detector's installation

Install the host detector on the base sounder; refer to the detector's installation manual.

Base sounder - host detector testing

1. Alarm and check the detector's effectiveness as described in its manual.
2. Check that the base sounder's alarm acoustic signal and volume correspond as selected.
3. If present, check the VAD's effectiveness and intensity.

Loop In Positive (+)
Loop Out Positive (+)
Loop In Negative (-)
Shield
Loop Out Negative (-)
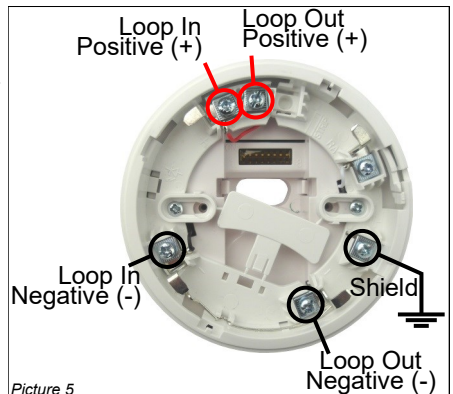
Picture 5

Tone	Name designation	Description	Selectors 12345 (Altair Flexiplus only)
0	Silent	No sound	11111
1	Warble Tone	800Hz for 500ms, then 1000Hz for 500ms	11101
2	Continuous tone	970Hz continuous	01011
3	Slow Whoop (Dutch)	500-1200Hz for 3500ms, then off for 500ms	10101
4	German DIN tone	1200-500Hz for 1000ms (1Hz)	00111
5	Alternate HF slow sweep	2350-2900Hz for 333ms (3Hz)	10010
6	Alternative warble	800Hz for 250ms, then 960Hz for 250ms	11110
7	Alternative warble	500Hz for 250ms, then 600Hz for 250ms	11100
8	Analogue sweep tone	500-600Hz for 500ms (2Hz)	10100
9	Australian Alert (intermittent tone)	970Hz for 625ms, then off for 625ms	10001
10	Australian Evac (slow whoop)	500-1200Hz for 3750ms, then off for 250ms	10110
11	FP1063.1-Telecom	800Hz for 250ms, then 970Hz for 250ms	00001
12	French tone AFNOR	554Hz for 100ms, then 440Hz for 400ms	00101
13	HF Back up interrupted tone	2800Hz for 1s, then off for 1s	11011
14	HF Back up interrupted tone - fast	2800Hz for 150ms, then off for 150ms	11001
15	HF Continuous	2800Hz continuous	01001
16	Interrupted tone	800Hz for 500ms, then off for 500ms	01111
17	Interrupted tone medium	1000Hz for 250ms, then off for 250ms	01101
18	ISO 8201 LF BS5839 Pt 1 1988	970Hz for 500ms, then off for 500ms	01110
19	ISO 8201 HF	2850Hz for 500ms, then off for 500ms	01100
20	LF Back up Alarm	800Hz for 150ms, then off for 150ms	11010
21	LF Buzz	800-950Hz for 9ms	01010
22	LF Continuous tone BS5839	800Hz continuous	11000
23	Siren 2 way ramp (long)	500-1200Hz rising for 3000ms, then falling for 3000ms	00000
24	Siren 2 way ramp (short)	500-1200Hz rising for 250ms, then falling for 250ms	00010
25	Swedish all clear signal	660Hz continuous	00100
26	Swedish Fire signal	660Hz for 150ms, then off for 150ms	00110
27	Sweep tone (1 Hz)	800-900Hz for 1000ms	10111
28	Sweep tone (3 Hz)	800-970Hz for 333ms (3Hz)	10011
29	Sweep tone (9 Hz)	800-970Hz for 111ms (9Hz)	01000
30	US Temporal Pattern HF	(2900Hz for 500ms, 500ms off) x3, then off for 1500ms	00011
31	LF Sweep (Cranford tone)	800-1000Hz for 500ms (2Hz)	10000

Table 1

Volume	Selectors 67 (Altair Flexiplus only)
High	11
Medium high	01
Medium low	10
Low	00

Table 2

VAD intensity	Selector 8 (Altair Flexiplus only)
High	1
Low	0

Table 3

Technical specifications

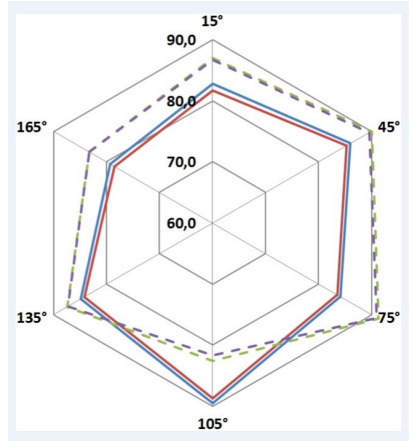|	
Voltage range	From 16 to 40 V (typical 24 V)
Max load current for the **100-2015V** and **100-2017V** 24 V applied High volume selected Tone 1, 2, 3 and 4 only Base sounder only	3,5 mA
Max load current for the **100-2016V**, **100-2018V** 24 V applied High volume selected VAD set to max power Tone 1,2,3 and 4 only Base sounder with beacon	21 mA
Max load current for the **100-2015V** and **100-2017V** 16 V applied High volume selected Tone 1, 2, 3 and 4 only Base sounder only	4 mA
Max load current for the **100-2016V**, **100-2018V** 16 V applied High volume selected VAD set to max power Tone 1,2,3 and 4 only Base sounder with beacon	32 mA
Max load current for the **100-2015V** and **100-2017V** 40 V applied High volume selected Tone 1, 2, 3 and 4 only Base sounder only	2,5 mA
Max load current for the **100-2016V**, **100-2018V** 40 V applied High volume selected VAD set to max power Tone 1,2,3 and 4 only Base sounder with beacon	13 mA
VAD's signal frequency All VAD models	0.5 Hz
VAD typical flash coverage for the **100-2016V** and **100-2018V** VAD set to high power	C 3 - 15 and O 4.5 - 15.2
VAD typical flash coverage for the **100-2016V** and **100-2018V** VAD set to low power	C 3 - 9.2
VAD's signal colour	**100-2016V** and **100-2018V** (white)
Acoustic output frequency range (all tones)	From 440 to 2900 Hz
Maximum acoustic intensity Tone 1,2,3 and 4 only	92.6 dB(A)
Ambient temperature range	From -10 to +55 °C
Maximum tolerated humidity	95% RH (without condensation)
IP	21C
Weight (**100-2015V** and **100-2017V**)	200 g
Weight (**100-2016V**, **100-2018V**)	210 g

Acoustic operational performance - EN 54-3 Certified Tones

Tone 1
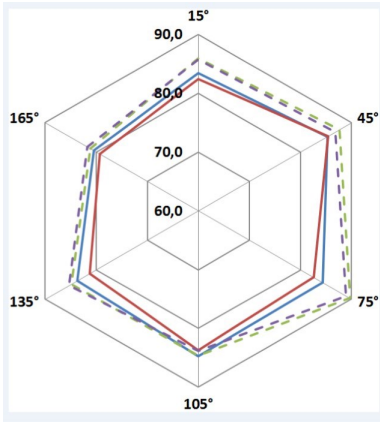
Tone 2

Legend:
- 16 V - Hor
- 40 V - Hor
- 16 V - Vrt
- 40 V - Vrt

Tone 3

Tone 4

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Hampshire - PO7 7XN - United Kingdom

www.eurotechfire.com

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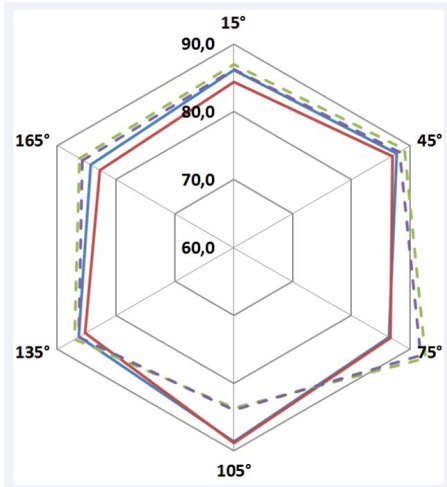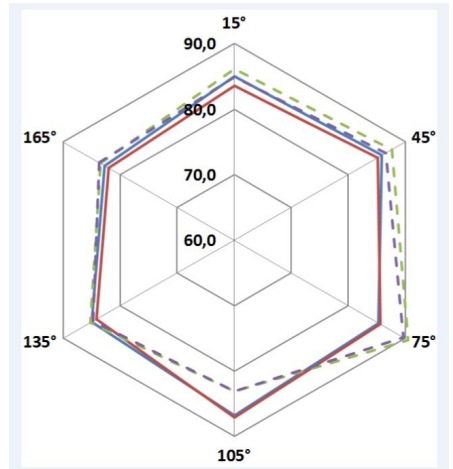
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BS0110CPR1	BS0110CPR-1UK
BS0110CPR-2	BS0110CPR-2UK
BS0110CPR-3	BS0110CPR-3UK *
BS0110CPR-4	BS0110CPR-4UK

Eurotech Fire Systems Ltd 19/20 Stratfield Park, Elettra Avenue Waterlooville, Hampshire PO7 7XN - United Kingdom

EN 54-3:2001+A1:2002+A2:2006
Fire alarm devices - Sounders

100-2015V
100-2016V *
100-2017V
100-2018V

EN 54-23:2010
Fire alarm devices - Visual Alarm Devices

100-2016V
100-2018V

Type A - Intended for indoor use only
For use in compatible fire detection and alarm systems
Other technical data: see TDS-BSXXX held by the manufacturer

Category rating:
C 3 - 15 & O 4.5 - 15.2
100-2016V & **100-2018V** (high power)

C 3 - 9.2
100-2016V & **100-2018V** (low power)

Duration of operation: Pass
Provision for external conductors: Pass
Flammability of materials: Pass
Enclosure protection: Pass
Access: Pass
Manufacturer's adjustments: Pass
On-site adjustment of behaviour: Pass
Requirements for software controlled devices: Pass
Coverage volume: Pass
Variation of light output: Pass
Minimum and maximum light intensity: Pass
Light colour: White (**100-2016V** & **100-2018V**)
Light temporal pattern / frequency of flashing: N/A / 0.5 Hz
Marking and data: Pass
Synchronization: Pass
Durability: Pass
Temperature resistance: Pass
Humidity resistance: Pass
Shock and vibration resistance: Pass
Corrosion resistance: Pass
Electrical stability: Pass

WARNINGS AND LIMITATIONS

Our devices use high quality electronic components and plastic materials that are highly resistant to environmental deterioration.
However, after 10 years of continuous operation, it is advisable to replace the devices in order to minimize the risk of reduced performance caused by external factors.
Ensure that this device is only used with compatible control panels.
Detection systems must be checked, serviced and maintained on a regular basis to confirm correct operation.
Smoke sensors may respond differently to various kinds of smoke particles, thus application advice should be sought for special risks.
Sensors cannot respond correctly if barriers exist between them and the fire location and may be affected by special environmental conditions.
Refer to and follow national codes of practice and other internationally recognized fire engineering standards.
Appropriate risk assessment should be carried out initially to determine correct design criteria and updated periodically.

WARRANTY

All devices are supplied with the benefit of a limited 3 years warranty relating to faulty materials or manufacturing defects, effective from the production date indicated on each product.
This warranty is invalidated by mechanical or electrical damage caused in the field by incorrect handling or usage.
Product must be returned via your authorized supplier for repair or replacement together with full information on any problem identified.
Full details on our warranty and product's returns policy can be obtained upon request.