Schneider Electric

AP200 Series Intelligent Alarm Devices WST-PC-x33

Instruction Sheet
R10015GB0

Contents

1   AP200 Series Intelligent Alarm Devices WST-PC-x33

Intelligent AP200 series alarm devices WST-PC-x33 for Esmi Sense FDP and FX 3NET fire detection system.

The intelligent AP200 series alarm devices are used in the Esmi Sense FDP and FX 3NET fire detection system. They have been designed to reduce significantly the total cost of installation. Product performance has been optimized to allow the maximum permissible number of devices to be installed on an intelligent loop.
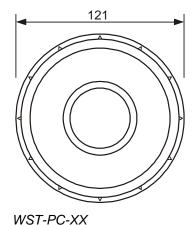
The sounders and visual alarm devices are installed in exactly the same manner as an intelligent fire detector. The devices use the B501AP detector base.
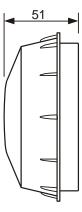
At final commissioning, the sounder or strobe simply twists into the base and the installation is complete. This simple but effective concept significantly reduces the time and cost of installing audible visual warning devices when compared with previous designs. In addition, fire systems designers benefit from the flexibility of being able to change the type of installed device if the protected building is reconfigured by the occupiers.

Fault finding is also easy. The suspect device is removed with a simple twist action without having to disconnect any loop wiring; a replacement is then mounted into the base.

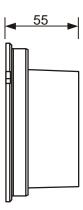The visual alarm devices VADs are EN54-23 approved as open class devices and sounders are EN54-3 approved.

1.1   Mechanical dimensions

WST-PC-XX

55

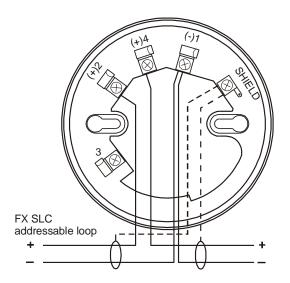*Deep Base BPW-E010 and Waterproof Base WPW-E010*

1.2 Electrical installation, Base B501AP

1.3   Mechanical installation

Bases/IP rating

B501AP Base (IP21C)

Deep Base BPW-E010 (IP44)

Waterproof Base WPW-E010 (IP65)

If the waterproof option is required then the wall gasket must be fitted behind the deep base, and the sealing o-ring fitted after attaching the low profile base.
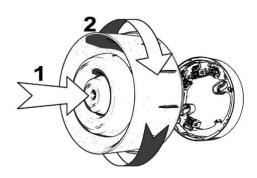
Mounting

Affix B501 AP base to suitably flat wall or ceiling. Terminate the cable to the appropriate terminals. For surface mount wiring the cable can enter the B501 AP base via the break outs provided. Select the appropriate tone and volume settings via the DIP switch.

Locate the main assembly on to the base by rotating until it locks into place.
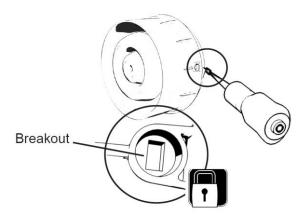
Wall mount:

Anti tamper lock

The B501 AP base also includes a tamper resistant feature that when activated prevents removal of the unit without the use of a special tool. This method is consistent with the tamper feature across all devices using this base. This prevents the device being turned to enable its release.

Wall mount:

1.4   Address setting

The address setting in the devices is simply done with two rotary decimal switches, thus having a range of 1 … 159. In addition the panel can distinguish between detector addresses, I/O-module addresses and sounder addresses, and thus providing a total address capacity per loop of 001 … 159 and 201 … 359, altogether 318 addresses.

Two rotary switches are located either side of the dip switch unit.

Examples:

Address setting 035

Address setting 135

Note!   Address setting 01…99 is used with the FX-LC loop controller.

1.5 Volume and tone setting

(WST-, WSS-)

Volume setting is selected by SW6 and SW7 of the 8 way DIP switch (see table Volume settings). The appropriate tone set is selected by SW1 to 5 of the 8 way DIP switch (see table Tone settings). The 2nd stage tone (related to the 1st stage tone) is controlled by the fire panel via the protocol.
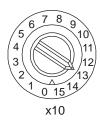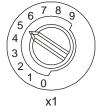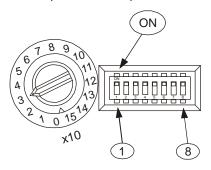

Volume settings

SW6	SW7	Volume setting
OFF	OFF	High
OFF	ON	Medium
ON	OFF	Low
ON	ON	Low

OFF = 0, ON = 1

Tone settings

DIP setting O=Off/1=On SW 1,2,3,4,5	No	Pattern	Nominal Frequency	Switching Frequency	Description	Standard	2nd Stage Tone
0,0,0,0,0	1	Alternating	554/440	2Hz (100ms/400ms)	French Fire Sound AFNOR	NFS 32-001	7
1,0,0,0,0	2	Alternating	800/970	1Hz		BS5839 Pt1	8
0,1,0,0,0	3	Alternating	800/970	2Hz	Alternating tone telecoms	BS5839 Pt1 FP1063.1	8
1,1,0,0,0	4	Alternating	2400/2900	3Hz	Alternating High Frquency		10
0,0,1,0,0	5	Alternating	2500/3100	2Hz	Security Alarm		10
1,0,1,0,0	6	Alternating	988/645	2Hz			8
0,1,1,0,0	7	Continuous	660		All Clear		1
1,1,1,0,0	8	Continuous	970			BS5839 Pt1	2
0,0,0,1,0	9	Continuous	1200				2
1,0,0,1,0	10	Continuous	2850		HF Continuous		4

0,1,0,1,0	11	Sweep	500 - 1000	Raising from 150Hz to 1000Hz in 10 seconds, then 40 seconds at 1000Hz, then falling from 1000Hz to 150Hz in 10 seconds, then 20 seconds at 150 Hz, then repeating. Total period 80 seconds.	"Gasalarm" Tone		22
1,1,0,1,0	12	Intermittent	420	0.625s on,0.625s off	AS2220 alert tone	AS2220	13
0,0,1,1,0	13	Sweep	500-1200	0.25s off, 3.75s off	AS2220 evacuate tone	AS2220	12
1,0,1,1,0	14	Intermittent	660	3.33Hz 150ms on, 150ms off	Swedish Alarm Tone		7
0,1,1,1,0	15	Intermittent	970	0.8Hz 0.25s on, 1s off	Intermittent Tone	BS5839 Pt1	8
1,1,1,1,0	16	Intermittent	970	0.5Hz 1s on, 1s off	Backup alarm LF & BS5839 Pt1	BS5839 Pt1	8
0,0,0,0,1	17	Intermittent	2850	1Hz	Backup alarm HF & BS5839 Pt1 2nd Tone	BS5839 Pt1	10
1,0,0,0,1	18	Intermittent	970	1Hz 500ms on, 500ms off	BS5839 Pt1	BS5839 Pt1	8
0,1,0,0,1	19	Intermittent	950	0.22Hz (0.5s on, 0.5s off)*3, 1.5s off		ISO8201	12
1,1,0,0,1	20	Continuous	800	4Hz 150ms on, 100ms off		BS5839 Pt1	22
0,0,1,0,1	21	Sweep	400-1200	(0.5s on, 0.5s off)*3, 1.5s off	Temporal 3 Evacuation tone	ISO8201 Temporal 3	12
1,0,1,0,1	22	Sweep	1200 - 500	0.99Hz 1s on, 0.01s off	Evacuate, DIN tone & PFEER	DIN, PFEER	20
0,1,1,0,1	23	Sweep	2400 - 2850	7Hz	Fast Sweep Vds	Vds	10
1,1,1,0,1	24	Sweep	500 - 1200	0.5sec off 3.5sec on	Slow whoop evacuate Netherlands	NEN 2575	8
0,0,0,1,1	25	Sweep	800 - 970	50Hz	LF buzz BS5839 Pt1	BS5839 Pt1	8
1,0,0,1,1	26	Sweep	800 - 970	7Hz	Fast sweep LF BS5839 Pt1	BS5839 Pt1	8
0,1,0,1,1	27	Sweep	800 - 970	1Hz	Medium sweep LF buzz BS5839 Pt1, Vds	BS5839 Pt1 VdS	8
1,1,0,1,1	28	Sweep	2400 - 2850	50Hz	High frequency buzz		10
0,0,1,1,1	29	Sweep	500 - 1000	7Hz	Fast whoop		8
1,0,1,1,1	30	Sweep	500 - 1200 - 500	0.166 Hz rise 1 s, stable 4s, fall 1s	Siren style tone		8
0,1,1,1,1	31	Sweep	800 - 1000	2Hz			8
1,1,1,1,1	32	Sweep	2400 - 2850	1Hz			10

1.6   O-Class Coverage Shape

WST-PC-x33:

1.7   Product Codes

Product Codes	
WST-PC-I33, isolation	FFS06711747
WST-PC-N33, non isolation	FFS06711748

Bases	IP rating	Product codes
B501AP	IP21	FFS06710600
BPW-E010	IP44	FFS06711742
WPW-E010	IP65	FFS06711743