
AEBN: 083110

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Subject: E-FSA Panel Sounder Base Programming

Version 2.0 of the E-FSA panel firmware and version 3.2 of the FSA-CU configuration utility program includes several new features. One of them is the ability to program sounder bases to activate in groups with out the need for E-RLY relay modules. The sounder bases can now be programmed to activate from any input, just like a NAC (signal circuit).

The most common application for this would be in hotels. Often times hotel rooms will have smoke detectors with sounder bases. When the smoke detector alarms, however, usually you do not want to evacuate the building (sound all the signals throughout). Instead, the detector will just activate signals within the room. This is because of the potential for “false alarms” from cigarette smoke or someone burning toast, for example. If it were a real fire, the person in the room would be alerted, then pull a pull station in the hallway for general alarm as they exited the building.

If a hotel room has multiple smokes with sounder bases, you would want all the bases within that room to activate if any one of the smokes went into alarm. If there is a general alarm within the building (someone pulls a pull station), then you may want *all* the sounders bases in *all* the rooms to activate. With the latest version of the panel firmware and FSA-CU software, you can do this easily through programming correlation groups.

The following will show an example of how you can program smoke detectors with sounder bases. Always be sure to check with the AHJ for the correct sequence of operation for your particular system.

In the Device Configuration section of the FSA-CU, be sure the base type for all smoke detectors that have sounder bases is set for Sounder. (Note: If you had autoprogrammed the panel, the base type will default to Relay. You must change it to Sounder.) .

The screenshot shows the 'Configuration' window for 'Loop 1 Devices'. The 'Quantity' is set to 10. A list of models is shown on the left, with 'FD' selected. The main table lists 10 devices, all of type 'Smoke' and 'PD', with message lines ranging from Room 101 to Room 110. The 'Properties' window on the right shows settings for the selected device, with the 'Base' dropdown menu set to 'Sounder'. Below the main table is an 'Event Notifications' table, and at the bottom are buttons for 'Change Address', 'Add Device', 'Select All', 'Delete Selected', and 'Close'.

Addr	Model	Device Type	Message Line 1	Message Line 2
1	PD	Smoke	Room 101	
2	PD	Smoke	Room 102	
3	PD	Smoke	Room 103	
4	PD	Smoke	Room 104	
5	PD	Smoke	Room 105	
6	PD	Smoke	Room 106	
7	PD	Smoke	Room 107	
8	PD	Smoke	Room 108	
9	PD	Smoke	Room 109	
10	PD	Smoke	Room 110	

Event	Printer	Telco Account	IP Account	DD
Active	Yes	Account 1	Account 1	111
Alarm Verify	Yes	None	None	118
Disable	Yes	Account 1	Account 1	570
Maintenance Alert	Yes	Account 1	Account 1	393
Pre Alarm	Yes	None	None	118
Test	Yes	Account 1	Account 1	614
Trouble	Yes	Account 1	Account 1	373

Model	PD
Device Type	Smoke
Device Address	1
Message Line 1	Room 101
Message Line 2	
Coder	0-0-0-0
Sensitivity	Least
Alt Sensitivity	Least
Pre Alarm	None
Alt PreAlarm	None
Verification	N/A
Alt Verification	N/A
Base	Sounder
Follow	Standard Relay Isolator Sounder

Next, you can select how the sounder base will activate. Under the Follow settings, if you select Head, the sounder will only activate when its detector activates. If you select Alarm, the sounder will activate when the detector activates, *and* can be programmed to activate from other inputs. If you select None, the sounder will only activate using correlation groups. For this example we want the sounder base to work as a local alarm for the smokes in the rooms, and have the ability to activate the sounders in groups, so Alarm will be selected.

Configuration

Loop 1 Devices

Quantity: 1

Models

- HD
- ISD
- PD
- PDD
- PHD
- 270
- 270BC
- 270FC
- 278
- 2WIRES
- IDCTA
- IDC1B
- IDC2B
- IDCWS
- NAC
- RLY

Addr	Model	Device Type	Message Line 1	Message Line 2
1	PD	Smoke	Room 101	
2	PD	Smoke	Room 102	
3	PD	Smoke	Room 103	
4	PD	Smoke	Room 104	
5	PD	Smoke	Room 105	
6	PD	Smoke	Room 106	
7	PD	Smoke	Room 107	
8	PD	Smoke	Room 108	
9	PD	Smoke	Room 109	
10	PD	Smoke	Room 110	
11				
12				
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26				
27				

Event Notifications

Event	Printer	Telco Account	IP Account	DD
Active	Yes	Account 1	Account 1	111
Alarm Verify	Yes	None	None	118
Disable	Yes	Account 1	Account 1	570
Maintenance Alet	Yes	Account 1	Account 1	393
Pre Alarm	Yes	None	None	118
Test	Yes	Account 1	Account 1	614
Trouble	Yes	Account 1	Account 1	373

Properties

Model: PD
 Device Type: Smoke
 Device Address: 1
 Message Line 1: Room 101
 Message Line 2:
 Coder: 0-0-0-0
 Sensitivity: Least
 Alt Sensitivity: Least
 Pre Alarm: None
 Alt PreAlarm: None
 Verification: N/A
 Alt Verification: N/A
 Base: Sounder
 Follow: Alarm

Help

Base Follow

Click the type of input event that will activate the relay or sounder detector base. Select from the following values:
 Possible values:

Change Address Select All
 Add Device Delete Selected Close

If there is a general alarm situation, like if someone pulls a pull station or a smoke detector in a common area alarms, we want all the signals to sound, including all the sounder bases in all the rooms. In the Correlation section of the CU, the screen is broken into 4 areas (the very top right lists the current correlation group number being programmed). In the upper left is a list of all the input devices connected to the system. In the lower left is a list of all the output devices connected to the system. Notice that the output devices include detectors with sounder bases. This may not look right, since a smoke is an input device, but the program is really looking at the sounder base, which is considered an output in this case. (Note: If you had selected Head in the Base Follow section on the Device Configuration screen, detectors with sounder bases would not be listed as an output.)

To correlate an input to an output, select the input(s) in the upper left and drag (or click on right pointing arrow) to the upper right. To add output devices to the group, select it (them) from the lower left and move it (them) to the lower right. Any input device in the upper right will now activate all output devices in the lower right. In the example below, we want the first floor pull station to activate general alarm, including all the sounder bases, which are part of Correlation Group 1.

Some things to note: When you Autoprogram a system, Correlation Group 1 will automatically contain all the alarm input devices and all the alarm output devices. If you do not want the smoke detectors in the individual hotel rooms to activate general alarm, you must remove them from the *input* side (upper right) of Correlation Group 1. Also, detectors with sounder bases are *not* automatically included in the *outputs* of Correlation Group 1 (lower right). They must be added as needed as described above.

To activate multiple sounder bases in the same room, you'll have to create a separate correlation group for each of those rooms. In the screen shot below, room 101 has two smoke detectors, each with sounder bases. The two smoke detectors were added to a new Correlation Group (2) to both the input and output sections (on the right side). Remember, the sounder base can be treated like a signal circuit, which is why it's available as an output (shown in lower left). Since we do not want these smoke detectors to activate a general alarm, they would have been removed from correlation group 1.

The screenshot displays the 'Correlations' configuration window. It is divided into several sections:

- Available inputs and outputs:** Shows a list of inputs and outputs that can be assigned to correlation groups.

Group	Description	Loop	Address	Type	Message line 1	Message line 2
Detector	PD	1	1	Smoke	Room 101	Smoke 1
Detector	PD	1	2	Smoke	Room 101	Smoke 2
Detector	PD	1	3	Smoke	Room 102	
Detector	PD	1	4	Smoke	Room 103	
Detector	PD	1	5	Smoke	Room 104	
Detector	PD	1	6	Smoke	Room 105	
Detector	PD	1	7	Smoke	Room 106	
Detector	PD	1	8	Smoke	Room 107	
Detector	PD	1	9	Smoke	Room 108	
Detector	PD	1	10	Smoke	Room 109	
Module	270	1	11	Pull Station	First Floor Hallway	
Event					Loop 1 Unconfigured ...	
Event					Common Trouble	
- Correlations:** Shows the selected correlation group 'Correlation 2' with an activation count of 1 and an option for 'In Suite Signal Silence'.

Group	Description	Loop	Address	Type	Message line 1	Message line 2
Detector	PD	1	1	Smoke	Room 101	Smoke 1
Detector	PD	1	2	Smoke	Room 101	Smoke 2
- Inputs:** A table showing the inputs assigned to the selected correlation group.

Group	Description	Loop	Address	Type	Message line 1	Message line 2
Detector	PD	1	1	Smoke	Room 101	Smoke 1
Detector	PD	1	2	Smoke	Room 101	Smoke 2
- Outputs:** A table showing the outputs assigned to the selected correlation group.

Group	Description	Loop	Address	Type	Message line 1	Message line 2
Detector	PD/Sounder	1	1	Smoke	Room 101	Smoke 1
Detector	PD/Sounder	1	2	Smoke	Room 101	Smoke 2
- Event notifications:** A table showing event notification settings.

Event	Printer	Telco Account	IP Account	CID
Disable	Yes	Account 1	Account 1	570