Application Guide:
ZC-4 Fire Alarm System

dbx
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{ This guide provides an overview for using a ZC-4 in place of a ZC-FIRE to recall a scene dependent upon the state of a fire alarm system. This design utilizes a dbx ZonePRO 640M, but any ZonePRO model will suffice to an extent. Please see the below warning.

WARNING
Your feature set will be limited if using any non-M version ZonePRO. You will lose the ability to mute the program material while allowing the announcement microphone to still be heard. In other words, you are forced to mute everything.

NOTE
You must configure the ZC-4 before you create the scenes it will recall.

Step 1   First, open your Configuration Wizard. **(FIGURE 1)**
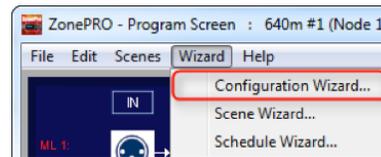
▶ **FIGURE 1**

Step 2   Make any necessary changes to the Source and Zone configuration and then click "Next" until you are at the ZC Panel Configuration screen. **(FIGURE 2)** When using the ZC-4 as a scene selector, you must assign it to ZC Input 1. Figure 2 also indicates which port the ZC-4 needs to be connected to on the back of the ZonePRO. It is highlighted yellow.
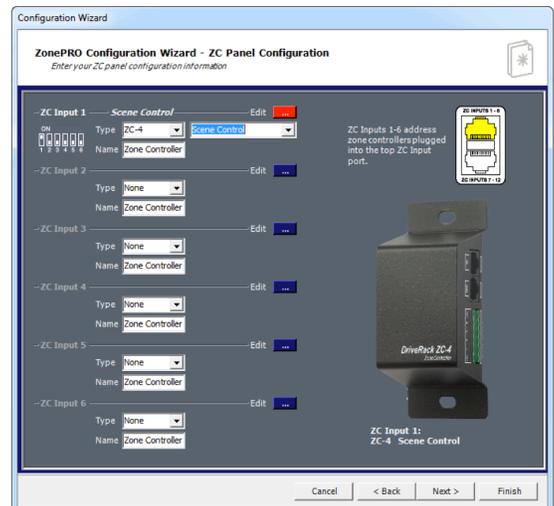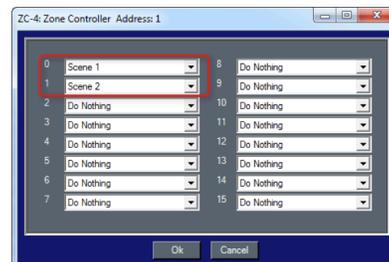
▶ **FIGURE 2**

Step 3   Click on the red Edit button **(FIGURE 3)** to open the Scene Control Edit window. In this application we are only going to use the binary combinations 0 and 1 to recall Scenes 1 and 2 respectively. Click "Ok" after associating Scenes 1 and 2, and proceed to finish the rest of your configuration.

> **NOTE**
> It is highly recommended that you finalize your Configuration Wizard before creating any scenes. If you make any edits to the Configuration Wizard after creating scenes, you will then lose those scenes.
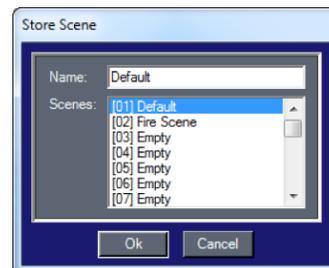
▶ **FIGURE 3**

Step 4 We will assume our fire alarm system is normally open, so Scene 1 will be used as our default scene. Make any necessary processing changes and store this to Scene 1 by clicking on the "Store Scene" button. **(FIGURE 4)** Select the Default scene, and click "Ok". **(FIGURE 5)**
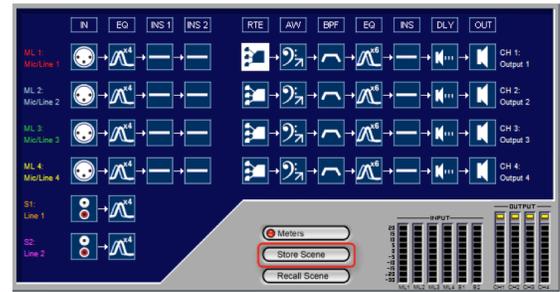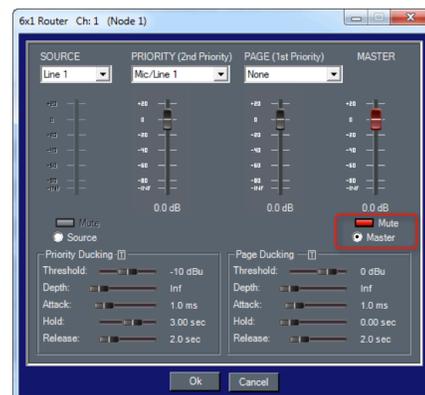

▶ **FIGURE 4**

▶ **FIGURE 5**

Step 5 We will now set up our second scene (when the fire alarm system closes) to mute all program audio, but still allow the announcement microphone to be used for emergency situations. In this application we are using Mic/Line 1 as the announcement microphone and Line 1 as our program audio. It is assumed there are no other microphones being used as a priority override. The key to making this possible is dependent upon whether we are using the Source Mute or Master Mute in the ZonePRO's Router (RTE) block. Turn on the Source Mute. **(FIGURE 6)** Select the Master Mute if you prefer to have the program audio and announcement microphone both muted. **(FIGURE 7)**
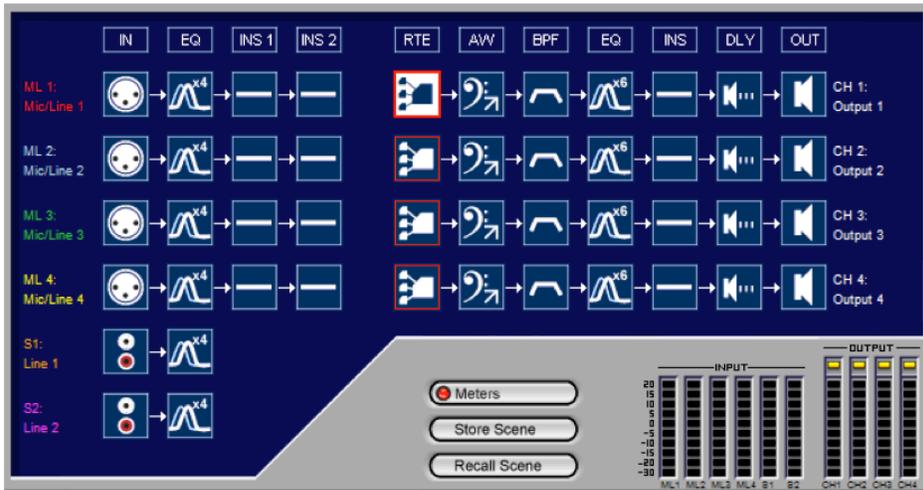

▶ **FIGURE 6**

▶ **FIGURE 7**

Step 6 Replicate these settings for every output intended to be muted when the fire alarm system is activated. We will assume every output should be muted, so we should see something similar to **(FIGURE 8).**
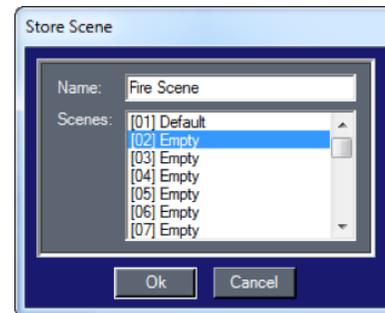

▶ **FIGURE 8**

NOTE
Priority Ducking settings will vary.

Click on the "Store Scene" button, and then select Scene 2. Give this a valuable name like, "Fire Scene". **(FIGURE 9)**
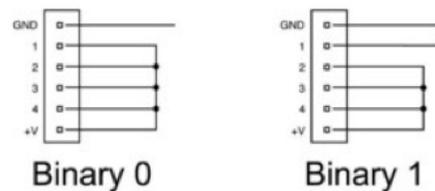

▶ **FIGURE 9**

Step 7 Now you will need to test that your scenes recall appropriately depending on the state of fire alarm system. Make the proper connection between the ZonePRO and ZC-4 using a straight-thru Cat-5 cable. Wire the fire alarm system to the ZC-4.

▶ **FIGURE 10**

NOTE
The ZC-4 will not respond to control voltage. It must be used with contact closures. Any pins not directly connected to a switch switch or relay should be connected to the +V pin. Please refer to the image below for wiring the binary combination 0 and 1. **(FIGURE 10)**