

Application Guide

Working with Monitoring



This application guide discusses how to set up your ZON system to take advantage of the embedded monitoring feature. This feature turns on a microphone built into the faceplate of a ZAC-60 and allows users in another room to listen in. Listening in on a baby's room or play room are common uses.

General Operational Guidelines for Monitoring

1. Monitoring works between ZAC-60s on the same router - there is no cross-router monitoring (for systems that have multiple routers).
2. A ZAC-60 that is listening can't be listened to.

How Basic Monitoring Works

In the examples, the arrow shows the direction of the microphone audio path (i.e., the arrow points away from the ZAC-60 being monitored).

Figure 1: This diagram shows a basic monitoring condition - One ZAC-60 monitoring another. In the example, ZAC-A is monitoring ZAC-B. (Notice the direction of the arrow). This, of course, could be ZAC-B monitoring ZAC-D or ZAC-C monitoring ZAC-A, and so on.

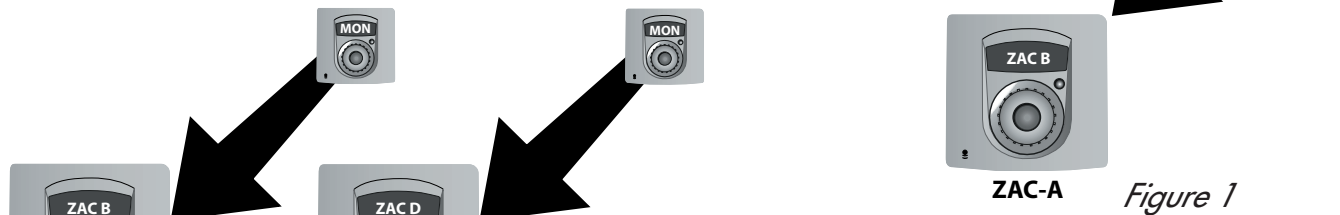


Figure 1

Figure 2: This illustration shows how two ZAC-60 controllers can be monitored simultaneously by two other ZAC-60s. In the example, ZAC-A is monitoring ZAC-B and ZAC-C is monitoring ZAC-D. Again, notice the direction of the arrows.

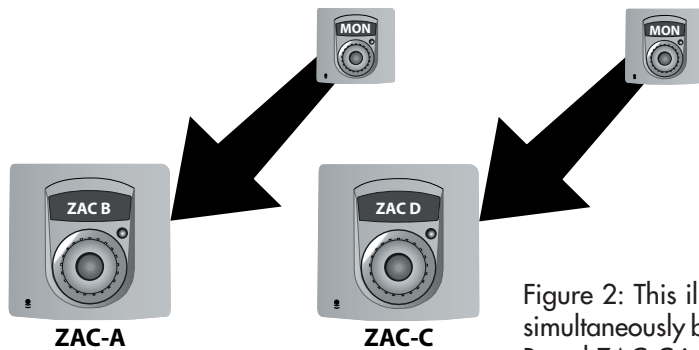


Figure 2

Figure 3: This diagram shows how one ZAC-60 can be actively monitored by three other ZAC-60s. Here, ZAC-A, ZAC-B and ZAC-C are all simultaneously monitoring ZAC-D. These controllers, of course, share the same ZR-98 router.

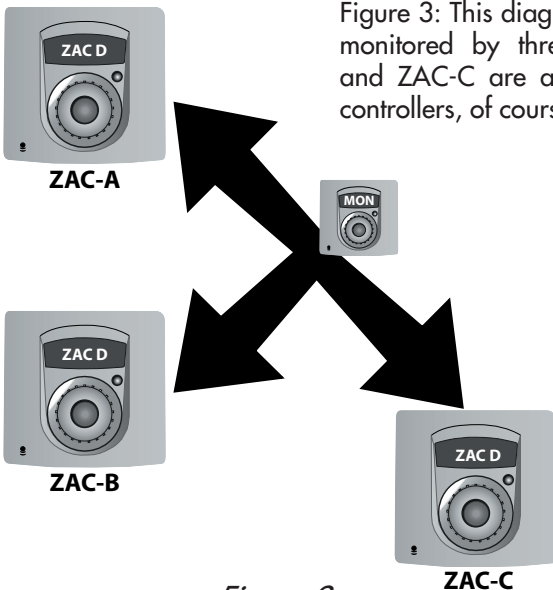


Figure 3

Figure 4: This shows a situation where monitoring is not in keeping with the system's design. ZAC-A and ZAC-B are actively monitoring ZAC-D. At the same time, ZAC-C is trying to monitor ZAC-A, which will not work because one of the basic guidelines of monitoring is being broken: A ZAC-60 that is listening can't be listened to.

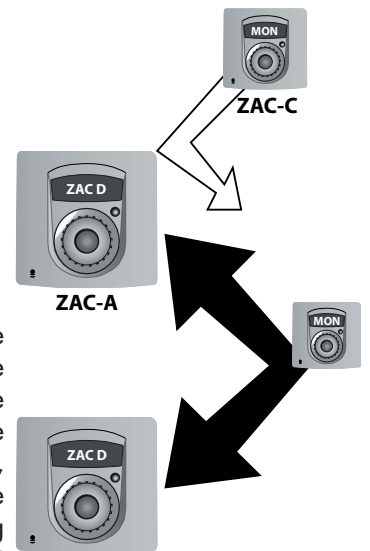


Figure 4

Preferred Monitoring Setup

When a ZAC-60 is being monitored, its loudspeakers are not muted - that means that a ZAC-60 listening in will hear any audio playing along with the other sounds in the room. While this is fine for most monitoring situations (because it does not interrupt the audio playing on the monitored controller), it may not be ideal for other monitoring applications. Here's a quick example of how to create and use a "null source" along with your monitoring design:

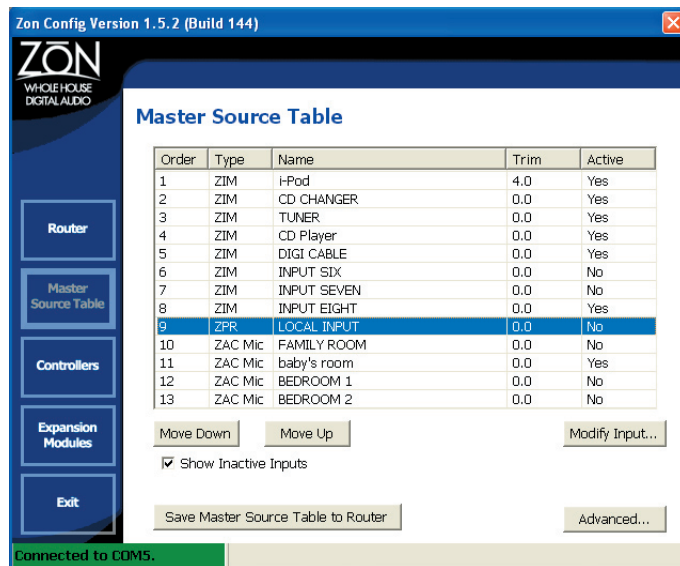


Figure 5

Connect to the ZON Router with ZON Config. Move to the MASTER SOURCE TABLE screen (Figure 5). Choose an input that you are not using (e.g., an input that has a STATUS of "No").

Double-click, or highlight and choose "Modify Input."

Name the input something obvious for its purpose. In our example (Figure 6), we named the null source "MONITORING". Set the "Input Active?" field to YES. Click OK to continue.

In some cases, it may be necessary to check that the newly created source has not been left un-selected in the RESTRICT SOURCES tables for each of the connected controllers.

Go to the CONTROLLERS menu. Select each controller by double-clicking its line in the table (or highlight and click MODIFY CONTROLLER). Click on the RESTRICT SOURCES button to view the source restriction status. Verify that the newly created source is not restricted.

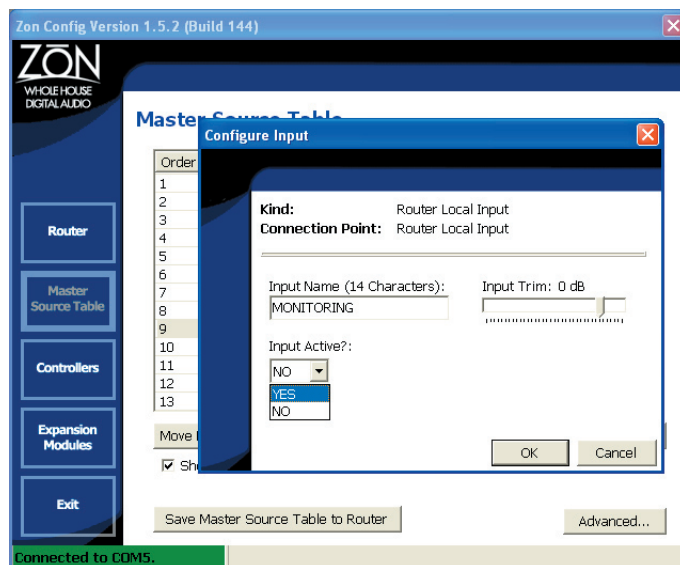


Figure 6

While you are in the CONTROLLER CONFIGURATION screen, it's a good idea to make sure that you have your monitoring selections correct. You should only allow monitoring for the controller(s) that plan to be actively monitored.

Save your changes to the ZON System, reboot the ZON router and do a test.

Go to the ZAC-60 you wish to monitor, press and briefly hold the jog wheel until you see SELECT SOURCE on the top line of the display. Turn the jog wheel until you see the name of the null source just created. Press the jog wheel to select.

Move to another ZAC-60 on the same ZON router as your target ZAC-60, press and briefly hold the jog wheel until you see SELECT SOURCE on the top line of the display. Turn the jog wheel until you see the name of the ZAC-60 that is to be monitored. Press the jog wheel to select.

For more information on working with monitoring and ZON Config, consult both the ZON Installation Guide and the ZON Configuration User's Guide.