

Application Note:

How to Trigger an On-Air Light with Axia GPIO

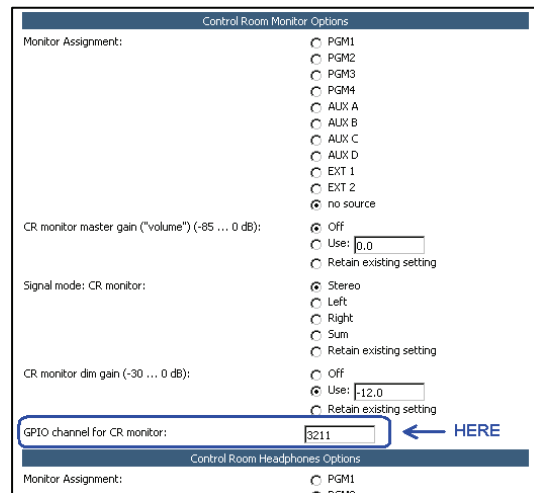
9 August 2007

One of the questions asked most often of Axia Support is how to control an on-air light using a console mic channel to trigger GPIO. It's easy! This document will walk you through the process, using the GPIO ports built into each Element Power Supply as an example (stand-alone GPIO nodes will work for this operation as well).

- 1) In a Web browser, open the Element HTTP pages and choose the **GPIO configuration** menu. In this HTTP page, each of the 8 GPIO ports are represented and a *Livewire channel number* is assigned to each of the ports.

To use one of these ports to trigger an ON AIR light, you must give the port you wish to use the same channel number assigned to the CR MONITOR GPIO.

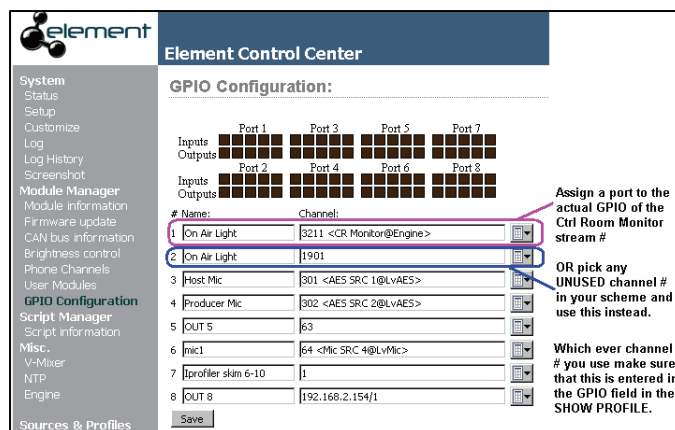
Navigate to the **Configuration** menu for your Element and go to the **Show Profile** section. Each **Show Profile** has a **Monitor Section** selection. The Monitor Section HTTP page includes the heading "CR MONITOR OPTIONS" (shown on the right).



At the bottom of this section is a field labeled "GPIO channel for CR Monitor". In this field, you may enter in a channel number of your choice. **NOTE:** the channel number can not be a duplicate of an existing channel number that has GPIO data on it. We suggest either selecting a channel number not yet used by any source, or to use the same channel number that the CR MONITOR is assigned to.

Note also that this step must be performed in **every Show Profile** in which you wish to have the Mic trigger the ON AIR light!

- 2) Once a channel number has been assigned to the field described in step (1) above, return to the GPIO configuration page of the device whose port will trigger the ON AIR light (Element GPIO or standard GPIO Node).





On the port you'll use for your ON AIR light trigger, type in the Channel Number that you assigned to "GPIO channel for CR Monitor" in the Show Profiles. This port will now follow the logic that is associated with the CR Monitors. When the monitors mute, Output 1 of the GPIO port will be active low; wire this output accordingly to a device that will provide the needed voltage to activate the ON AIR light.

GPIO Control Room Monitor Logic			
Name	Pin	Type	Notes
OUTPUTS			
CR ON AIR Lamp	1	Open Collector to Logic Common Return	Illuminates whenever CR monitors are muted
DIM CR Lamp	2	Open Collector to Logic Common Return	Illuminates whenever control room monitors are DIMMED
PREVIEW Lamp	3	Open Collector to Logic Common Return	Illuminates when PREVIEW is active.
Not Used	4	Open Collector to Logic Common Return	
TALK (to CR) Active Lamp	5	Open Collector to Logic Common Return	Active whenever a source has activated its TALK (to CR) function

➤ Taken from GPIO LOGIC chart that can be found in your ELEMENT manual.

If you have questions or need further assistance, please contact Axia Support at +1-216-241-3551, or e-mail support@AxiaAudio.com.