



Using Supervisor for Serial Control of Automation Systems

Using the vGuest feature in Supervisor, a Hard Disk Automation System can send serial strings to turn on and off devices and busses on the Logitek AE-32 Audio Engine.

We will use the B2 and B3 commands from the Logitek Audio Engine Protocol along with a three byte vGuest header. Numbers in brackets (<>) are hexadecimal notation; the brackets are omitted when sending strings to and from Supervisor.

The vGuest Header

<bc> <0c><xx>

Definitions:

<bc> <0c> denotes the start of the vGuest Header

<xx> denotes the audio engine number, in hex. For example, Audio Engine 1 would be <01>, Audio Engine 2 would be <02>, etc.

B2h — Set Channel/Bus/Relay On

Description

This command turns the selected channel, bus or relay ON.

Command Structure

Byte Sequence	Byte Value	Description
1	<02>	Starting byte
2	<03>	Byte count for the command length
3	<B2>	Command value – set on
4	<cn>	Channel number
5	<bn>	Bus number

Example —

Close (turn on) relay 9 on the audio engine.

<02> <03> <B2> <01> <09>

B3h — Set Channel/Bus/Relay Off

Description

This command turns the selected channel, bus or relay OFF (mutes the input and/or output bus) and the associated attributes (machine control – relays and inputs, flags).

Command Structure

Byte Sequence	Byte Value	Description
1	<02>	Starting byte
2	<03>	Byte count for the command length
3	<B3>	Command value – set off
4	<cn>	Channel number
5	<bn>	Bus number

Example —

Open or Turn off Relay 12 on Audio Engine

<02> <03> <B3> <01> <0C>

B4h — Set Input Assign

Description

This command assigns and input to a fader.

Command Structure

Byte Sequence	Byte Value	Description
1	<02>	Starting byte
2	<04>	Byte count for the command length
3	<B4>	Command value - ping
4	<cn>	Channel number
5	<hh>	Device number – high byte
6	<ll>	Device number – low byte

Example —

Assign Device Number 17 to Surface 2 Fader 8

<02> <04> <B4> <3A> <00> <11>

Setting up Supervisor for vGuest Operation

1. Ensure that you have an available COM port on the Supervisor computer.
2. Connect your automation PC to that Supervisor PC COM port using a NULL MODEM cable. For best results, use a COM port that is a higher number than the one your last audio engine is connected to.
3. In Supervisor, click on COM Port Control.
4. At the bottom of the screen, you will see a box reading vGuest COM Ports. In the "Lowest vGuest Port" box, type the com port number that your Automation PC is connected to. In the "Number of vGuest Ports" box, type the number of ports you will be using (if connecting one PC, type "1").
5. The vGuest Com Port line will turn pink and show that the port is closed.
6. Right-click on the vGuest COM Port line (in the pink area) inside the vGuest Protocol box. The Parameters box will open. Change the protocol, baud rate, data bits, stop bits, and parity to match the settings of your Automation PC.
7. Finally, click the vGuest Ports Active box to open the port and begin communication. If this box is unchecked, Supervisor will ignore traffic on the port(s).

Applications

The B2h and B3h commands in the Audio Engine protocol allow you to turn any device number and bus combination on and off. This can be used to turn a fader on and off or to turn program or audition off on the console faders.

In applications where the automation system needs to turn a fader, the B2h and B3h commands can only be applied to turn off a specific fader. For example, you can send a command to turn off fader 1, but you cannot send a command to turn off the source named device 100 and have the engine find which fader it is routed to.

If the automation system cannot predict which fader a particular source is routed to, triggers may be set up using the Command Builder scripting language to turn off combinations of device and bus numbers.

Here is an example of that type of trigger in action. First, we'll create a serial string that would turn on Device 2 Bus 16 on Engine 1. The first three bytes denote the vGuest Header, the following five bytes denote the B2h engine protocol command. As throughout this document, the brackets (<>) are hexadecimal notation; omit the brackets from the actual serial string.

```
<bc><0c><01><02><03><b2><02><10>
```

This serial string turns off Device 2 Bus 16 on Engine 1

```
<bc><0c><01><02><03><b3><02><10>
```

Then, in Command Builder, you would create a trigger like this to turn the fader off:

```
trigger ae1 device2 bus16 on
```

```
cmd ae1 surface 1 s[Starguide 2 L] bus 0 off
```

Upon executing the trigger, Supervisor will find the first instance of the specified source on the specified surface and turn the bus off.

Further information about triggers may be found in the Command Builder Users Manual as well as by contacting Logitek Support.