



Controlling the Unity 4000

Broadcast Electronics Tech Note

THE INFORMATION IN THIS ARTICLE APPLIES TO:

All AudioVAULT products

SUMMARY

AudioVAULT products can send a serial string to the Unity 4000 switcher. The COM port should be set to 9600-N-8-1, no flow control.

MORE INFORMATION

The Unity4000 looks for a string like this to execute a switch:

```
SETAUDIO 1 S MB2 [attn]
```

The syntax works like this:

SETAUDIO (Port) (Route) [Program] [attn] <enter>

SETAUDIO	The command to execute. This must be at the beginning of all valid serial strings.
Port	Value of 1 to 6 indicating an audio port.
Route	S - Stereo (ch 1 on L, ch 2 on R) 1 - Ch 1 on both 2 - Ch 2 on both R - Reverse stereo (ch 2 on L, ch 1 on R)
Program	Can be a three character name or an '*'. If the 3-character name is specified, the unit will route the audio program with the specified name to the port. If '*' is specified, the unit will default to the first audio program that is not routed to another port.
Attn	Db attenuation
<enter>	Execute the command \x0D

AUDIOVAU.INI Programming: Using Indicators

To send the kind of string the Unity 4000 requires, we need a section like this in the C:\AUDIOVAU.INI:

```
[UNITY4000]
IDD_Indicator1=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 1 AA1 10 \x0D
IDD_Indicator2=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 2 AA1 10 \x0D
IDD_Indicator3=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 1 FN1 10 \x0D
IDD_Indicator4=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 2 FN1 10 \x0D
IDD_Indicator5=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 1 FN2 10 \x0D
IDD_Indicator6=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 2 FN2 10 \x0D
IDD_Indicator7=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 S SR2 10 \x0D
IDD_Indicator8=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 S SR1 10 \x0D
IDD_Indicator9=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 S SNN 10 \x0D
IDD_Indicator10=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 S US1 10 \x0D
IDD_Indicator11=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 S SGT 10 \x0D
IDD_Indicator12=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 1 FN3 10 \x0D
IDD_Indicator13=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 2 FN3 10 \x0D
IDD_Indicator14=COM2:+UNMUTE A/1 \x0D;COM2:+SETAUDIO 1 S SKY 10 \x0D
IDD_Indicator15=COM2:+MUTE A/1 \x0D
```

Each channel is hard coded to a specific Indicator. To change channels through an AudioVAULT playlist command, simply call the required Indicator. To "activate" the Indicators, the UNITY4000 section must be "included" in the section of the controlling machine. Additionally, to make the Indicators momentary, durations must be assigned each Indicator. For example:

```
[AVSAT]
Include=UNITY4000
AVSAT_Load=Indicator1.Duration=250:Indicator2.Duration=250:...
```

AUDIOVAU.INI Programming: Using Custom Lines

Using Custom Lines gives the user more flexibility in his use of the Unity 4000. Instead of hard coding each channel to a specific indicator, we can use the same INI line for multiple channels, and "fill in the blanks" using the AudioVAULT playlist. To send the kind of string the Unity 4000 requires, we need a section like this in the C:\AUDIOVAU.INI:

```
[UNITY4000]
IDD_Custom4=COM2:+SETAUDIO 1 S ;COM2:-\x0D;
IDD_Custom5=COM2:+SETAUDIO 2 S ;COM2:-\x0D;
IDD_Custom6=COM2:+SETAUDIO 3 S ;COM2:-\x0D;
IDD_Custom7=COM2:+SETAUDIO 4 S ;COM2:-\x0D;
```

The INI line outputs everything but the "Program" component. We specify that component in the playlist. For example,

Inserting an event like this will create a playlist line like this:

12:00AM @ Custom4="MB2" X

This playlist event would send this string out of COM1:

SETAUDIO 1 S MB2 <return>

Using the INI line:

```
IDD_Custom4=COM1:+SETAUDIO 1 S ;COM1:-\x0D;
```



The value defined in the playlist (MB2) fills in the blank.

Including the UNITY4000 Section with AVSat

Be sure to "include" the new section when AVSat loads. In the AVSat section, add the UNITY 4000 section to the Include= statement:

```
[AVSat]
Include=UNITY4000
```

For additional information on this topic, please contact Broadcast Electronics Digital Customer Service at 217.224.4700. You can also email specific questions to service@bdcast.com.