



Technical Document

Interfacing AudioVault and Wheatstone Control Surfaces

Overview

This technical document is intended to give you general information about integrating BE AudioVault with the Wheatstone Generation and Evolution Series Radio Control Surfaces. This information also applies to the D Series TV Control Surfaces. This control is network based using TCP/IP and requires Version 9.10.45 or higher.

What do I need to get started?

- Correct version of BE software. Version 9.10.45 or higher
- Wheatstone and Playback Pc on a common subnet
- IP addresses for the Generation or Evolution control surface and AV playback pc

Setup

Wheatstone

There is no additional setup for your Wheatstone Generation or Evolution Control Surface. The necessary interface is enabled at the factory and is ready for uses.

Configuring INI Files

There are several INI files used by the interface application that allow the user to customize the level of control for their needs.

You will need to set up the “audiovau.ini” and “surface-init.txt” files on each playback machine as required. These files are located in C:\Windows and C:\audiovau\Wheatstone directories respectively. Caution should be used when editing these files, specifically the “audiovau.ini”. Modifying this file the improperly can change the operation of your software or render your system inoperative. It’s always a good idea to make a copy of the files first and work on a copy. Rename the undisturbed version with an “old” or “backup” prefix so you can revert to it in case of an emergency.

audiovau.ini

The following lines should be added to the end of the audiovau.ini file. The Hostname specifies the surface to which the playback machine will connect. The port number is a hardcoded setting and cannot be changed. Each Control surface supports up to 10 remote connections. The port number for the control surface is hard coded and cannot be changed.

```
[RemoteControl.WS]
```

```
DeviceType=Socket
```

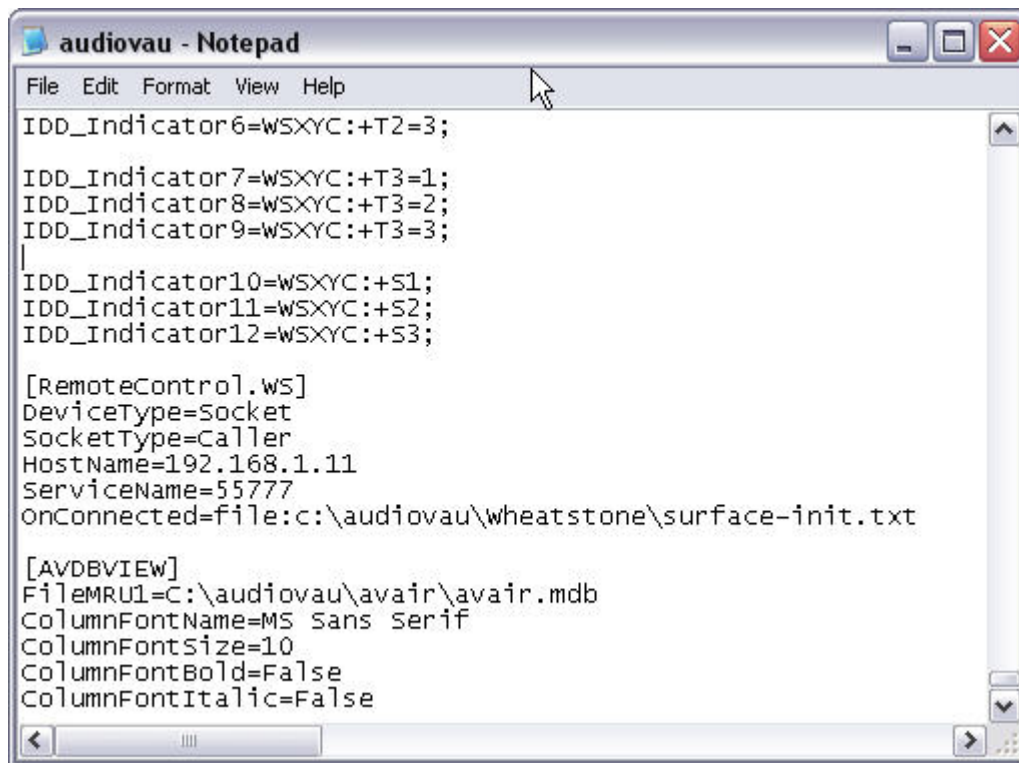
```
SocketType=Caller
```

```
HostName=<Control Surface IP address>
```

```
ServiceName=55777
```

```
OnConnected=file:c:\audiovau\wheatstone\surface-init.txt
```

Below is a sample section of the audiovau.ini file



```
audiovau - Notepad
File Edit Format View Help
IDD_Indicator6=WSXVC:+T2=3;
IDD_Indicator7=WSXVC:+T3=1;
IDD_Indicator8=WSXVC:+T3=2;
IDD_Indicator9=WSXVC:+T3=3;
|
IDD_Indicator10=WSXVC:+S1;
IDD_Indicator11=WSXVC:+S2;
IDD_Indicator12=WSXVC:+S3;

[RemoteControl.WS]
DeviceType=Socket
SocketType=Caller
HostName=192.168.1.11
ServiceName=55777
OnConnected=file:c:\audiovau\wheatstone\surface-init.txt

[AVDBVIEW]
FileMRU1=C:\audiovau\avair\avair.mdb
ColumnFontName=MS Sans Serif
ColumnFontSize=10
ColumnFontBold=False
ColumnFontItalic=False
```

For Each Fader channel that the playback pc will control, the control commands must be added to the AVAir section of the audiovau.ini file.

```
IDD_Start1=WS:+<INPUT:9|ON:1>, WS:<INPUT_EVENT:9|ON:1>;
IDD_Stop1= WS:+<INPUT:9|ON:0>, WS:<INPUT_EVENT:9|ON:0>;
```

```
IDD_Start2=WS:+<INPUT:10|ON:1>, WS:<INPUT_EVENT:10|ON:1>;
IDD_Stop2= WS:+<INPUT:10|ON:0>, WS:<INPUT_EVENT:10|ON:0>;
```

The examples above will control Fader 9 and 10 of the control surface. The WS:+<INPUT:X|ON:1> command tells the surface if playback starts on this output, turn channel X “ON”. The WS:<INPUT_EVENT:X|ON:1> command, in turn tells the pc to start playback on this output if channel X is turned on at the control surface.

Surface-init.txt

The Wheatstone Surface requires the application to send a Subscription to an Input in order for a response to be given. This file allows the user to define the subscriptions as needed. Users can add, modify, or remove subscription messages as needed.

Examples of the subscription request lines within the Surface-init.txt file are shown below.

```
<INPUTSUBSCRIBE:1|ON:1>
```

```
<INPUTSUBSCRIBE:2|ON:1>
```

```
<SPARESUBSCRIBE|BTN1:1>
```

```
<SPARESUBSCRIBE|BTN2:1>
```

Each entry in this file tells AVAir which channel of the specified control surface it needs to monitor for logic state changes. In the above examples the playback machine will respond to logic commands from the control surface faders 1 and 2, as well as spare buttons 1 and 2. The playback machine will ignore commands from all other faders on the control surface.

More elaborate controls can be configured. The table below provides the command structure for controlling many of the functions available on Wheatstone control surfaces. Some of these functions may require additional support info. Contact BE or Wheatstone Technical support for additional details.

NOTE: The following commands are for Wheatstone Surfaces running software: 2.23 or later

ACSII Command structure: <target : value | parameters : value>

COMMAND	DESCRIPTION	EXAMPLE
HEARTBEAT	Sent to the console every <:60 to keep connection alive	< >
<SYS TIME:HH:MM:SS>	Sets the time of the surface. Must be in exact hh:mm:ss.	<SYS TIME:14.23.00>
<SYS TAKEPROG:eventname>	Loads the Event session for the console.	<SYS TAKEPROG:MATTENCO>
<DISPLAY:n TEXT:blah>	This displays a single line of text at the bottom of the display.	<DISPLAY:1 TEXT:DRINK TEA>
<DISPLAY:n COLOR:v>	Changes the color of the above line. <i>Valid color values are listed below.</i>	SEND TEXT G '<DISPLAY:6 COLOR:7>'
<INPUT:n ON:v>	Set the Input fader number ON (1) or OFF (0).	<INPUT:1 ON:1>
<INPUT:n CUE:v>	Set the Input faders cue to ON (1) or OFF (0).	<INPUT:1 CUE:1>
<INPUT:n PGM:v>	Set the Input fader to Program ON (1) or OFF (0).	<INPUT:1 PGM:1>
<INPUT:n AUD:v>	Set the Input fader to Audition ON (1) or OFF (0).	<INPUT:1 AUD:1>
<INPUT:n AUX:v>	Set the Input fader to Auxiliary ON (1) or OFF (0).	<INPUT:1 AUX:1>
<INPUT:n UTL:v>	Set the Input fader to Utility ON (1) or OFF (0).	<INPUT:1 UTL:1>
<PHONE:n same as above>	The PHONE faders can be set by using the same parameters and values listed above.	<PHONE:1 ON:0>
<INPUTSUBSCRIBE:n event:1>	Sends a Subscription request to the Input Fader number for the event specified. Events could be ON, CUE, AUD etc. The value of 1 sets the Subscription ON.	<INPUTSUBSCRIBE:2 ON:1>

<SPARESUBSCRIBE BTNn:1>	Sends a Subscription request to the programmable buttons on the surface	<SPARESUBSCRIBE BTN1:1>
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Color values for Surface display

Color Value	Text Color	Background Color	Example Text
0	WHITE	GRAY BLUE	EXAMPLE TEXT
1	BLACK	RED	EXAMPLE TEXT
2	WHITE	DARK RED	EXAMPLE TEXT
3	BLACK	YELLOW	EXAMPLE TEXT
4	BLACK	GREEN	EXAMPLE TEXT
5	WHITE	DARK GREEN	EXAMPLE TEXT
6	WHITE	BLUE	EXAMPLE TEXT
7	BLACK	LIGHT GRAY	EXAMPLE TEXT