### Using Surround Sound (5.1) in Room 115

There are two main ways the surround system in 115 can be used: Discreet Channels and DVD Surround (Dolby Digital, DTS etc)

The rooms surround speakers are configured on the following output channels:

1 - L

- 2 R
- 3 Ls
- 4 Rs
- 5 C
- 6 LFE

Discreet Surround:

Discreet surround is primarily used for sending a speaker specific content, an example of this would be in MaxMSP or Logic when you set the output to the corresponding speaker and control what sound goes there.

- Logic The surround channels should be set as above, so you just set you channels output to the speaker you want. You can use Mono channels for one speaker, stereo for a pair or a surround channel to pan between all speakers.
- Max MSP In MaxMSP you need to use the Options/AudioStatus window to ensure your using the MOTU sound card and that the I/O mappings are set as above. Then in your DAC~ Object you can include arguments for the output channel, each argument gives an input for that speaker e.g.



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#### DVD Surround:

The 115 iMac is set-up to allow playback of DVD's with surround audio content. Here is a quick guide to get you started:

- 1. Turn on the iMac, Sound Card and All speakers
  - 1. Make sure the sound output (system preferences/sound) is set to MOTU Traveller and that the surround volume controller is set to the Computer output.
  - 2. Set the speaker Volumes to the defaults below. The room has been balanced but with discreet use and changes to speaker volumes it may well differ when you get there.



- 2. Insert the DVD into the external CD drive
  - 1. VLC Video Player is set to auto open (make sure you use this as the system 'DVD Player' doesn't work for surround)
- 3. In the VLC top bar click File/Open Disk, locate your disc (usually auto found) and click Open.



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- 4. Your Disc will now open, you will need to select surround playback from the DVD menus. This can differ from disc to disc but is usually under either settings or under play.
- 5. To ensure all sound is balanced, open Audio Midi Preferences, then click Window/ Show Audio Devices and click on the MOTU. Here you will see all of the MOTU's output levels. The first 6 should be set to the same volume to ensure balanced sound (-6 is usually a good starting point).

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нәт	HDMI 0 in/ 2 out		Input Output			
40	MOTU Traveler		Analog			Ŷ
.o.	22 in/ 22 out	<b>6</b>	Source: Default			
-		<u>-</u>				
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			Master	-		
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			2: An	0.879	-6	
			3: An	0.879	-6	
			4: An	0.879	-6	
			5: An	0.879	-6	
			6: An	0.879	-6	
			7: Ana	1	0	
			8: An	1	0	
			9: AE	1	0	10
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6. Finally, to show the video playback on the Large screen click on VLC, then in the menu click Video/Full Screen Playback Device and select the Samsung screen. Now when you full screen the video it will open onto the 4K screen.

#### Additional Notes:

- 1. You may find you need to adjust the centre speaker volume. This is because in most instances of surround sound all speech runs through the centre speaker.
- 2. In the event you don't have sound please double check the following:
  - 1. That the output controller is set correctly



- 2. That you can see audio output on the MOTU (if you cant it suggests the MOTU isn't set as the audio output)
- 3. That the surround and speakers are all on.
- 3. To eject your disc you need to drag it to the trash can (bottom right).

If you have any problems please contact the Music Technology Technician on avsupport.music@trinitylaban.ac.uk