BRINGING SURROUND SOUND SOURCE FILES INTO MEDIA COMPOSER

Avid Media Composer version 6 (Nov. 2011) has introduced 5.1 and 7.1 support. There is, however, a workaround needed when bringing in sound exported as BWF-M from DAW's like Pro Tools.

A typical 5.1 or 7.1 mix exported to BWF-M from Pro Tools will appear as 6 or 8 separate monophonic BWF files:

7.1:
filename.C.wav
filename.L.wav
filename.Lfe.wav
filename.Lsr.wav
filename.Lss.wav
filename.R.wav
filename.Rsr.wav
filename.Rss.wav

Unfortunately, **not all versions**¹ **of MC will not recognize these files as belonging to a surround group during import.**² So if you import them in the normal way, you will get 6 or 8 separate monophonic clips, which you cannot turn into a surround clip inside Media Composer.

You could add them as 6 or 8 separate monophonic tracks to a sequence, but you will then notice that you run into an issue with the LFE track. You would need to route the LFE clip/track to the LFE output channel ONLY, but the Audio Mixer will not let you route anything to the LFE channel without panning it to one or more of the other channels³. As this destroys the balance between the channels, it is not the way to go.

Here's a workaround I have been using:

At finder level, rename⁴ the files you received from the DAW:

5.1:		7.1:	
filename.C.wav	-> filename_3.wav	filename.C.wav	-> filename_3.wav
filename.L.wav	-> filename_1.wav	filename.L.wav	-> filename_1.wav
filename.Lfe.wav	-> filename_4.wav	filename.Lfe.wav	-> filename_4.wav
filename.Ls.wav	-> filename_5.wav	filename.Lsr.wav	-> filename_7.wav
filename.R.wav	-> filename_2.wav	filename.Lss.wav	-> filename_5.wav
filename.Rs.wav	-> filename_6.wav	filename.R.wav	-> filename_2.wav
		filename.Rsr.wav	-> filename_8.wav
		filename.Rss.wav	-> filename_6.wav

¹ Current versions of MC apparently do detect multichannel groups, and import them so that A1=L, A2=C, A3=R, A4=Ls, A5=Rs, A6=LFE. This works for me at least in MC 8.8.4 and up.

² If you AMA-link to a set of monophonic BWAVs labeled .C.wav, .L.wav, .R.wav etc., then MC will detect it as a 5.1 clip and create a 6-track AMA audio clip from that (which you may then consolidate so it becomes a regular master clip). I have seen MC do this in a different channel order in different versions. In 2022.4, MC appears to import in Pro Tools order, which means you should set the clip to 5.1 Pro Tools via Clip->Modify.

³ There is a console command that allows you to set a track in a sequence to LFE-only. Type 'audioextras' into the Console. From the menu that pops up, choose 'Allow LFE Only Tracks'. Right-click on a track in your audio mixer, and select the option to make the track 'LFE Only'. The panner will disappear, and whatever you place on that mono track goes straight into the LFE-output. As with all Console commands: they are not fully tested features, so use this functionality at your own risk.

⁴ Note that I propose a renaming that adheres to the SMPTE track ordering. There's is also a Pro Tools / Film style track ordering, you could also choose that and then select that track order when importing in the next step.

This renaming is a manual process, and prone to error, so often I will duplicate the files before renaming them, making sure I can refer back to the files as they were delivered to me.

Now, in Media Composer, go to File->Import, click the Options Button and go into the Audio tab.

<u>Under Multichannel Audio, click the triangle in the track gang, and select 5.1 SMPTE or 7.1</u> <u>SMPTE (note the track ordering).</u>

> IMPORTANT: The 'Set Multichannel Audio" dialogue box can either be invoked during import or via Clip->Modify-Set Multichannel Audio. It is crucial to understand that this setting does not let you 'set' or change the actual channel ordering for the clip, it merely lets you tell MC what the channel order inside the multichannel clip _is_.

Import Settings - Untitled	
	PORTS
Mutichannel Audio: Stereo: A1A2 Edt	
Set Multichannel Audio	red.01 red.01
Sempl A1 A2 A3 A4 A5 A6 A7 A8	red.01 red.01 red.01
A9 A10 A11 A12 A13 A1 Mono Stereo	
Conve	
5.1 Film: L C R Ls Rs Lfe	
OK 7.1PYO Tools: L C R Las Ras Lar Ra	r Lfe
Automatically center pan monophonic clips	
Autodetect Broadcast Wave Monophonic Groups	
OK Cancel	

Also check the box that says 'Autodetect Broadcast Wave Monophonic Groups'.5

What this actually does is trick MC into seeing the separate files as belonging to a BWF-M group as it is often received from Field Recorders. The result will be a 5.1 or 7.1 surround master clip in Avid Media Composer, which you may then add to a 5.1 or 7.1 track in your sequence.

Should you need source files to test with, here's a link to a set of files with Channel ID's for 5.1.

Job ter Burg, feb 2014.

added footnotes, nov 2015 added notes on Set Multichannel Audio and Autodetect 5.1 imports, aug 2017, corrections July 2022.

⁵ Some versions of MC (notably 7.0.4 and 8.0) have an error where ticking the box that says 'Autodetect Broadcast Wave Monophonic Groups' will cause the import to be truncated. Not sure if and when this was ever fixed.