

slate

MEDIA TECHNOLOGY



RAVEN

Surround Considerations

This guide will aid you in using your Raven MKII Analog Section with surround speakers.

Overview

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Overview

Your Raven MKII Analog Section, when equipped with the optional Surround Card, can provide control over 5.1 and 7.1 surround systems (It can also handle Quad, if you wish to use that long defunct 1970s topology.) Because the Raven can handle many different types of monitoring, it will require a bit of understanding and planning for you to move easily between the different monitoring scenarios.

Because most of our work is still handled in Stereo, the Raven is designed to most quickly and easily handle this task. The Raven is also designed to allow users to take advantage of surround mixing without having to purchase additional I/O. Your cue sends and surround sends travel over the same cables, so even a studio with only eight channels of I/O can offer both a powerful cue system and a full 7.1 surround system without very much hassle. To achieve all these ends, however, you'll need to be aware of a few things and decide for yourself the best configuration.

Primary Considerations:

1. The audio for the Cue System/Alt Mixes travels over the same conductors as the surround inputs. Be careful when switching back and forth that you have taken this into consideration. It's possible, for instance, to send the "Mix 2" audio to your SL/RL speakers, or to send Cue A/B to the Center/LFE channels. With great power comes great responsibility.
2. 7.1 and 5.1 sometimes conflict in their use of the designation "surround." In a 5.1 setup, the rear speakers are referred to as "surround" *or* "rear," whereas in 7.1 the rear speakers are "rear" and the side speakers are "surround" *or* "side." Most modern instances of 7.1 use the designations "Lss/Rss" and "Lsr/Rsr" to name the side and rear speakers respectively, but 5.1 often uses "Ls/Rs" and "Lr/Rr" interchangeably. Keep this nomenclature in mind when configuring your system.
3. 7.1 also is sometimes conflicted about where the 5.1 surround channels go when blowing out to 7.1. Most will say that the Ls/Rs from 5.1 goes to the Lsr/Rsr, but some film mixers consider Ls/Rs to be Lss/Rss and Lsr/Rsr to be the added pair.

Our recommended solution is to create a 7.1 bus in your DAW I/O and assign the outputs to match the Raven. Then, you are able to create a 5.1 (Or stereo, or Quad) bus in the session that will chase to the correct speakers. Additionally, you can cross-patch at your patchbay as needed if you wish to preserve the DAW I/O setup in the default scheme.

If you are *rarely* doing 7.1, you may also simply connect your surround speakers to SL/SR, and use the DTS standard output.

A table follows on the next page for reference.

Current Standards vs. Raven designations

Output/D-Sub Cable #	1	2	3	4	5	6	7	8
Raven Labels	L	R	SL	SR	C	LFE	RL	RR
Raven 5.1	L	R			C	LFE	Ls/Lr	Rs/Rr
Raven 7.1	L	R	Lss	Rss	C	LFE	Lsr	Rsr
DTS 5.1	L	R	Ls	Rs	C	LFE		
SMPTE/EBU	L	R	C	LFE	Ls	Rs		
C24/Film	L	C	R	Ls	Rs	LFE		
DCommand/DControl 1	L		C		R	Ls	Rs	LFE
Pro Tools Default 7.1	L	C	R	Lss	Rss	Lsr	Rsr	LFE

Suggested Workflows

- 1) Adjust the I/O of your DAW to match our pin configuration.
 - a) Create a 7.1 bus in your I/O setup that matches the Raven's inputs.
 - b) Create any Stereo or 5.1 buses in the session, as the DAW will send the channels to their correct speakers.
- 2) Cross-Patch at your patchbay
 - a) Some users don't want a non-standard I/O, as this can create problems when moving sessions from studio to studio.
 - b) Cross-patching is convenient when a user sees multiple standards coming in from various studios.
- 3) 5.1 only systems can just use our "SL/RL" as the rear pair and it agrees with the DTS standard.