

EBU Technical Recommendation R91-2004

Track allocations and recording levels for the exchange of multichannel audio signals

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The EBU expects that multichannel audio exchanges will be made in the channel format 3/2 (5.0) (or 3/2+1 (5.1) if available) recommended in ITU-R Recommendation BS.775-1[1].

For the exchange of multichannel audio programme material, the EBU *recommends* the track allocation and recording levels specified below.

1. Track allocations

Audio tracks in multichannel formats should be allocated as in the Table below. Silence should be recorded on all non-available tracks.

1	2	3	4	5	6	7	8
L	R	C	LFE (if available)	LS or MS(-3dB)	RS or MS(-3dB)	A (if available)	B (if available)

Where:

Symbol	Audio Signal	3/2 (5.0)	3/2 + 1(5.1)
L	Left	✓	✓
R	Right	✓	✓
C	Centre	✓	✓
LFE	Low frequency effects		✓
LS	Left surround	✓	✓
RS	Right surround	✓	✓
MS	Monophonic surround		
A	Left (two channel stereo)		
B	Right (two channel stereo)		

2. Recording Levels

Recording levels should be as specified in EBU Recommendation R68 (1995)[2].

All channels should use synchronous 48k sampling rates as specified in EBU Recommendation R85 (1997) [3].

Bibliography

- [1] ITU-R Recommendation BS.775-1 (1994): **Multi-channel stereophonic sound system with and without accompanying picture**
- [2] EBU Recommendation R68-1995: **Alignment level in digital audio production equipment and in digital audio recorders**
- [3] EBU Recommendation R85-1997: **Use of the Broadcast Wave Format for the exchange of audio data files**