

# R&S<sup>®</sup> WV-K51, R&S<sup>®</sup> SFU-K221 T-DMB/DAB Streams Specifications

|                   |  |  |  |
|-------------------|--|--|--|
| T-DMB/DAB streams | sequences in line with ETS 300799<br>TRP player (R&S <sup>®</sup> SFx-K22) | see description of option for details<br>required for playout  |  |
| Transmission      | transmission mode  | depending on loaded stream and<br>transmission mode setting used in the<br>R&S <sup>®</sup> SFU, R&S <sup>®</sup> SFE, R&S <sup>®</sup> SFE100 |  |
|                   | stream format  | ET1 (NI, G.703)  |  |
| Signal set        | streams  | DAB, T-DMB and DAB   |  |
|                   | number of streams  | 22 DAB streams and<br>288 T-DMB/DAB streams  |  |
|                   | content  | depending on loaded stream   |  |
|                   | playback   | endless  |  |
|                   | video and audio  | not seamless   |  |
|                   | DAB  |  |  |
|                   | service  | DAB service  |  |
|                   | content  | tones, audio, audio and data, CISPR and<br>radio equipment directive tests (RED)   |  |
|                   | DAB mode   | 1  |  |
|                   | audio sampling rate  | 48 kHz   |  |
|                   | tones  |  |  |
|                   | subchannel   | subchannel 1   |  |
|                   | sequence   | 100 Hz, 1 kHz, 10 kHz sine, 16 tones   |  |
|                   | mode   | stereo, mono   |  |
|                   | convolutional coding   | UEP, EEP   |  |
|                   | data rate  | 128 kbps   |  |
|                   | duration   | 12 s to 59 s, 120 s  |  |
|                   | audio  |  |  |
|                   | subchannel   | subchannel 1   |  |
|                   | sequence   | music (Bach), live scenario (applause and<br>park scene), synthetic audio, frequency<br>sweep  |  |
|                   | mode   | stereo   |  |
|                   | convolutional coding   | UEP  |  |
|                   | data rate  | 128 kbps   |  |
|                   | duration   | 7 s to 49 s  |  |
|                   | audio and data   |  |  |
|                   | subchannel   | subchannels 1 to 9   |  |
|                   | sequence   | audio and data   |  |
| audio             | 1 kHz, full scale to 0 dB  |  |  |
| subchannel        | subchannel 1   |  |  |

|                    |                        |   |
|--------------------|------------------------|---|
| Signal set (cont.) | audio and data (cont.) |   |
|                    | mode                   | stereo  |
|                    | data rate              | 192 kbps  |
|                    | mode                   | stereo  |
|                    | convolutional coding   | UEP   |
|                    | data                   | all 0   |
|                    | subchannel             | subchannels 2 to 9  |
|                    | data rate              | 8/16/32/64/96/128/384 kbps  |
|                    | convolutional coding   | EEP   |
|                    | duration               | 120 s   |
|                    | CISPR                  |   |
|                    | test scenario          | in line with CISPR 13, CISPR 14   |
|                    | subchannel             | 1, 1 to 3   |
|                    | DAB mode               | 1   |
|                    | protection level       | 3, 3-A  |
|                    | sequence               | 1 kHz (6 dB, digital zero, 0 dB)  |
|                    |                        | 1 kHz (full scale to 0 dB), 1 kHz (6 dB)  |
|                    |                        | 1 kHz (silent to digital zero)  |
|                    | mode                   | stereo  |
|                    | convolutional coding   | UEP   |
|                    | data rate              | 128 kbps, 192 kbps  |
|                    | duration               | 120 s   |
|                    | RED                    |   |
|                    | test scenario          | in line with ETSI EN 303345   |
|                    | subchannel             | subchannel 1  |
|                    | DAB mode               | 1   |
|                    | protection level       | 3-A   |
|                    | sequence               | 1 kHz (full scale to -3 dB)   |
|                    | mode                   | mono  |
|                    | convolutional coding   | EEP   |
|                    | data rate              | 128 kbps  |
|                    | duration               | 120 s   |
|                    | T-DMB/DAB <sup>1</sup> |   |
|                    | service                | one T-DMB service and one DAB service   |
|                    | subchannel             | subchannel 1  |
|                    | DAB mode               | 1, 2, 3, 4  |
|                    | protection level       | 1-A, 1-B, 2-A, 2-B, 3-A, 3-B, 4-A, 4-B  |
|                    | total data rate        | 256 kbps to 1152 kbps   |
|                    | T-DMB encoding         |   |
|                    | video                  | ISO/IEC 14496 (MPEG-4) Part 10 AVC baseline profile level 1.3                                     |
|                    | subchannel             | subchannel 1  |
|                    | content                | diver sequence  |
|                    | frame rate             | 25 frames/s, 30 frames/s  |
|                    | video resolution       | QVGA, CIF   |
|                    | data rate              | 136/151/240/255/256/268/320/332/360/<br>358/384/400/410/460/462/527/540/592/<br>620/877/1023 kbps |

<sup>1</sup> Audio specific config (ASC) data flag contains sampling rate value of 96000 Hz.

|                    |              |   |
|--------------------|--------------|---|
| Signal set (cont.) | DAB encoding |   |
|                    | audio        | ISO/IEC 14496 (MPEG-4) Part 3 BSAC baseline profile level 1.3, MPEG-4 HE-AAC v1, MPEG-4 HE-AAC v2 |
|                    | content      | music of diver sequence   |
|                    | subchannel   | subchannel 1  |
|                    | level        | 0 dB  |
|                    | mode         | stereo  |
|                    | data rate    | 56 kbps   |
| Stream support     | R&S®SFU      | full support of all streams   |
|                    | R&S®SFE      | full support of all streams   |
|                    | R&S®SFE100   | full support of all streams   |
|                    | R&S®BTC      | full support of all streams   |

# Ordering information

| Designation                                     | Type         | Order No.    |
|---|--------------|--------------|
| T-DMB/DAB Streams<br>(requires specific option) | R&S®WV-K51   | 2116.9364.02 |
| T-DMB/DAB Streams<br>(requires specific option) | R&S®SFU-K221 | 2110.4348.02 |

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R&S®WV-K51, R&S®SFU-K221 T-DMB/DAB Streams

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