

TECHNICAL NOTE

Audio equipment manufacturer

SAS S.A. Ch. de la Naz 38 CH-1052 Le Mont-sur-Lausanne Switzerland Tel +41 21 651 01 01 email sonosax@sonosax.ch website www.sonosax.ch

SX-R4+ SD CARD TESTING PROCEDURE

Document revision 1.0, April 2019

SD card testing procedure to ensure seamless recordings

Format your SD card while inserted the recorder using exclusively the SX-R4+ formatting utility in the SD card menu.

Prepare a specific configuration to test your SD Cards as below:

- Route an input to all 16 tracks such as XLR1 to all tracks (no need to feed any audio signal)
- Arm all 16 tracks
- Turn the Generator ON in the Output menu (any level can be chosen) and check that all tracks display the modulation level
- If you wish to test both cards at the same time, make sure the "SD2 Rec Tracks" is set to MIRROR
- Set the sampling freq to 96k and a pre-record time of 4 seconds
- On the main screen check the two orange bars just under each of the SD1 and SD2 cards remaining time indicator, these two bars indicate by how much the internal RAM buffer is filled

Start recording and witness these two orange bars, they must drop rapidly to almost to zero as soon as the recording has started, indicating that the RAM buffer is flushing correctly.

- A bar staying high or continuously raising indicate that the SD card is two slow for that particular setting
- A bar raising high occasionally, then dropping again may indicate that the SD card may have some issues

Continue recording until the SD Card is full, at which point the recorder will stop automatically. If the recording stop earlier and the SPEED warning is flashing, then your SD card is too slow for that setting. It usually happens within a minute after the recording has started. If this happen later at any moment, then one can assume that the card is slow in writing on some sectors.

Testing your cards for 192kHz recordings

Once your SD Cards have successfully passed the test described above, reformat them and then set the sampling frequency to 192kHz.

The maximum number of tracks that can be safely and seamlessly recorded at 192kHz may vary from 8 to 12 tracks depending on your SD cards.

The number of recordable tracks decreases when using both cards simultaneously, therefore use only one card at a time to record a higher count of tracks @ 192kHz.

To check the maximum number of tracks your SD Cards is capable to record, use the same procedure as above but arming 8 tracks only. Check that the RAM buffer is flushing properly, then successively increase the number of armed track by 1 until the RAM buffer no longer flushes, which will lead to a SPEED error. At this point you know that the maximum number of track is one count below the SPEED error.