You completed this test on *10/21/2021, 13:42*
Your score is 100.00%

Congratulations! You have proven your Digital Audio knowledge is sufficient for this stage.
Now make sure to pass the other tests to complete your Dante Certification Level 1.

CORRECT

What audio sample rates are supported by Dante?

Dante supports only 48kHz and 96kHz, the professional standards.

Dante supports exclusively 44.1kHz, the CD-quality link.

✓ ***Dante supports most common sample rates from 44.1kHz to 192kHz.***

All audio is resampled to 48kHz for easy connectivity between Dante devices.

CORRECT

Roughly how many channels of 24-bit, 48kHz audio can be carried on a 1 Gbps connection?

64x64

96x96

✓ ***512x512***

1024x1024

CORRECT

A 1Gbps network switch can manage more Dante channels than a single 1Gbps link can.

✓ ***True. A non-blocking network switch will be able to handle the total of all ports capacity at all times.***

False. The maximum amount of channels in a 1Gbps network switch is 512x512 at 96kHz..

CORRECT

If we increase the sample rate of a device from 48KHz to 96KHz, what is the impact to the network?

- ✓ ***A 96kHz subscription will require (roughly) twice as much bandwidth as a 48kHz subscription.***

  A 96kHz subscription will require (roughly) doubled the latency of a 48kHz subscription to handle the additional DSP demand and network management.

  A 96kHz subscription will reduce the maximum CAT or fiber optic cable length by 50% compared to a 48kHz subscription to manage the higher frequencies.

  Devices are renamed to reflect the new sample rate.

CORRECT

The bit depth of an audio system dictates:

- ✓ ***the resolution of the audio signal's amplitude. A greater bit depth increases dynamic range.***

  the highest audio frequency that can be captured. According to the Nyquist Theorem, the bit-depth must be at least twice the highest audio frequency to be captured.

  the minimum packet size on the network. 24-bit and 32-bit audio require jumbo frames on the network.

CORRECT

Dante audio is sent:

- ✓ ***Uncompressed, bit-perfect.***

  Compressed using high quality MP3 encoding.

  Compressed using a variable bit-rate, lossless ALAC encoding.

  Compressed with a unique codec developed by Audinate.

CORRECT

An audio subscription (connection) can be established between two Dante interfaces operating at different bit depths.

✓ ***True. Like most digital audio devices, Dante devices will usually be able to add missing bits or truncate extraneous bits to match the expected internal operation.***

False. Dante chipsets, firmware and software options do not provide bit depth conversion.

CORRECT

A Dante audio subscription (connection) can be established between two Dante interfaces operating at different audio sample rates.

True. Dante chipsets, firmware and software options have sample rate conversion built in and can make this adjustment.

✓ ***False. Each Dante interface can only operate at one sample rate at a time. If a sample rate converter is employed, it will sit behind the Dante network port.***

CORRECT

The sample rate of an audio system dictates:

the resolution of the audio signal's amplitude. A greater sample rate increases dynamic range.

✓ ***the audio resolution in time. According to the Nyquist Theorem, the sample rate must be at least twice the highest audio frequency to be captured.***

Sample rate isn't an audio term - it is a video term. You're trying to trick me.

CORRECT

On a Dante network, there must be a different clock leader for each sample rate on the network.

True. Each sample-rate requires a separate clock leader.

✓ ***False. One Clock Master will provide synchronization to all Dante devices, regardless of their individual sample-rates or frame rates..***