dCS Vivaldi DAC and Upsampler Release Notes

MQA Release

dCS is pleased to announce the availability of MQA decoding and rendering capabilities in the *dCS* Vivaldi separates. These notes refer specifically to the device or FPGA firmware which is responsible for all aspects of digital processing as well as device control. Streaming functions (UPnP, Tidal, Roon, Airplay, and Spotify) are all controlled by the network firmware which is common to all products and described under separate release notes.

For more information or assistance with the update please contact your *dCS* dealer or distributor. You are also invited to contact *dCS* directly using the contact details found on our website: https://www.dcsltd.co.uk

1   Vivaldi DAC changes from prior release

Release versions
Control Board: 2.11
Front Panel: 2.11

1.1   New Features

- The Vivaldi DAC now functions as an MQA renderer on all inputs (except SDIF).
- Enhanced control and status communication to Vivaldi Upsampler (see 3.1 below)

1.2   Fixes

- Corrected an issue where Universal Master Mode (UMM) might not function correctly in certain configurations.
- Corrected an issue where DSD Filter 5 would revert to DSD Filter 4 on reboot.

2   Vivaldi Upsampler changes from prior release

Release versions
Control Board: 2.10
Front Panel: 2.10
Interface Board: 2.10
Network: 398 (changes detailed in the network firmware release notes)

2.1   New Features

- The Vivaldi Upsampler now functions as an MQA decoder via its network input.
- The Vivaldi Upsampler will pass decoded MQA streams (from external MQA decoder) untouched.
- Enhanced control and status communication to Vivaldi DAC (see 3.1 below).

2.2   Fixes

- Corrected an issue on the interface board which could cause control board update to fail (see 3.2 below)

3 Update instructions and information

Please refer to the *dCS* Vivadi DAC and *dCS* Vivaldi Upsampler owner's manuals for update instructions. Please be sure to execute the post-update checks outlined in section 3.3.

3.1 Critical update information (Please Read Carefully)

This update changes the way in which the *dCS* Vivaldi DAC communicates status information back to the Upsampler. This change will greatly improve the behavior of the system when the DAC and Upsampler are coordinating activities. As the new communication mechanism is incompatible with the prior mechanism the coordination process will fail if the Upsampler and DAC are not updated together. This will result in unstable behavior during sample rate changes, improper function of the volume control in the *dCS* app and Roon, as well as apparent failure of DAC settings changes made in the *dCS* app.

It is critical that you <u>WAIT</u> to update the Vivaldi Upsampler until you are able to update the Vivaldi DAC at the same time.

Please contact your *dCS* dealer or distributor to get a copy of the Vivaldi DAC update before you update the Vivaldi Upsampler over the internet.

3.2 Potential update issues (Upsampler)

We discovered an error in the prior (2.02) release of the Upsampler interface board firmware which can cause an update of the control board to fail. We have corrected this issue in 2.10, but there is a chance that a customer upgrading from 2.02 to 2.10 may experience a failure with the control board update. This is not a cause for concern, but should the control board update fail all that is needed is to power-cycle the device and initiate the update process again.

3.3 Post-update checks

The following steps should be performed after the update to ensure that everything is in order.

1) Ensure that the RS232 serial Y-cable is properly connected to the Upsampler, DAC, and Transport (if installed).

2) Power-cycle both devices after the update is complete so that they are going through the boot process at roughly the same time.

3) Check the version numbers to ensure that the update completed correctly. The proper versions are

	DAC	Upsampler
Control Board	2.11	2.10
Front Panel	2.11	2.10
Interface Board	N/A	2.10
Network Firmware	N/A	398

Please note that there are no changes to the dCS Vivaldi app and the current release remains at 1.4.9.

4) Using the *dCS* app verify that the Vivaldi DAC serial number is being reported on the Configuration > Information > Unit Status screen.

5) Change the DAC volume level using the app as well as the volume knob and ensure that the level is synchronized between the front panel display and what is shown in the app.

6) On each device toggle the USB class to class 1 and then back to class 2 as described in the owner's manual. This ensures that the USB interfaces are loaded with the most recent firmware.

7) If Roon is used for playback please refer to the separate Network Firmware Release Notes to ensure that Roon's MQA capabilities settings are correct. If you do not have a master clock and use Universal Master Mode then please pay special attention to the known issues section for information on how to configure Roon's resync delay setting.