dCS Vivaldi HD App

Network Control Point Application

User Manual

Software Release 1.0.x

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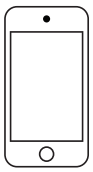
BASIC SETUP INFO

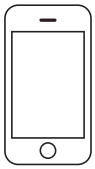
iPod® and iPhone® compatibility

The Vivaldi Upsampler is compatible with the iPod and iPhone models illustrated below.

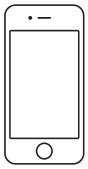
Made for:



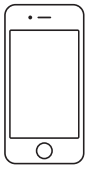
iPod touch
4th generation
8GB 32GB 64GB



iPhone 3GS
8GB 16GB 32GB



iPhone 4
8GB 16GB 32GB



iPhone 4S
16GB 32GB 64GB

"Made for iPod" and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod or iPhone respectively and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

iPad®, iPhone, iPod and iPod touch® are trademarks of Apple Inc., registered in the U.S. and other countries.

iPad® compatibility

The Vivaldi Upsampler is compatible with iPad 2 or later.

The App does not run reliably on iPad 1, due to the age of the hardware design.

iOS® compatibility

App version 1.0.1 is compatible with iOS5 or later, it has been tested with iOS5, 6 and 7.

Wireless Routers

There is a huge number of wireless routers in use and models tend to be replaced annually, so it is difficult to make sensible suggestions. There are no special requirements for the router.

Examples of routers we are currently using:

- Netgear WNR3500 RangeMax Wireless N Gigabit Router, with a Netgear GS108 Switch.
- Netgear N300 Wireless Router WNR2200.

Known router problems:

- Netgear R6300 – Reportedly takes several minutes to discover the Upsampler and it may be necessary to disconnect/reconnect the Network cable after waking the Upsampler. Solved by fitting a different router.
- If you have a LinkSys router which is not discovering the Upsampler reliably, open the router's home page, check the "Filter Multicast" option and save the setup.

UPnP Servers

The same is true of NAS drives. Examples of drives we are currently using:

- QNAP TS412
- Netgear ReadyNAS RND-2B
- Buffalo LS421D
- AVA Zara Premium

The system has been tested mainly with the following UPnP server software:

- Asset
- Twonky
- MinimServer

Renderer

dCS Vivaldi Upsampler, loaded with Control version 1.02 or later and Network version v56 or later.

dCS Vivaldi DAC, loaded with Control version 1.02 or later.

While it is possible to use other DACs with the ***Vivaldi Upsampler***, some features will not be available. A different DAC will not respond to remote control commands sent from the App, and it may not be compatible with all of the Upsampler's output modes.

Network Basics

UPnP (Universal Plug and Play) is a set of protocols designed to allow consumer devices to interact over a network. The ***Vivaldi Upsampler*** complies with the UPnP AV protocol, enabling it to communicate with other non-***dCS*** devices, provided they also comply with this protocol.

A network streaming system is made up of three standard UPnP components:

- UPnP Control Point,
- UPnP Media Renderer
- UPnP Media Server.

A system may consist of one or more of each of these components. In such a system, all of the media (songs, tracks, videos etc) is stored on the server. This storage device can be a NAS or a Computer. The control point (e.g. a tablet or smart phone) requests the address of a particular item of media from the server (e.g. a NAS drive). It then passes this address to the renderer (e.g. a Vivaldi Upsampler) to play. The renderer directly retrieves the item from the specified address on the server, decodes and plays the media as it arrives over the network from the server.

Enabling network streaming of audio using a ***Vivaldi Upsampler*** relies on the presence of standard network infrastructure in your system. A description of the network will not be discussed in this manual but at a minimum the following components are required for system setup: Router, Computer, ***Vivaldi Upsampler***, NAS, Wireless access point (WAP), Wireless control.

Please note that Ethernet cables are required to connect the devices and the NAS must have UPnP media server software (e.g. Twonky, Asset) pre-installed, with UPnP mode turned on. Obviously, your music must be loaded on the NAS drive.

The ***dCS Vivaldi*** HD App is a control point application that will allow users to view / select available renderers, view / select available media servers and browse / select / playback music via the Vivaldi Upsampler. The ***dCS Vivaldi*** HD App is currently available for iPad.

At the time of writing, versions of the App for iPhone/iPod Touch, Mac OSX, Windows and Android are in development.

STEP BY STEP INSTRUCTIONS

STEP 1 - Set-up

- Download the ***dCS Vivaldi*** HD App from the App Store and install it on your control device.
- Connect the Upsampler's **Network** interface to the Ethernet network.
- Set the control device (e.g. iPad) to connect to the network via WiFi.

Using a ***Vivaldi*** Upsampler and DAC with a NAS

Make sure the Control Point, NAS and Upsampler are all connected to the same network!

- Connect the Upsampler's **AES1+2** output to the Vivaldi DAC's **AES3+4** input, as this interface will accept tunnel commands from the Upsampler.

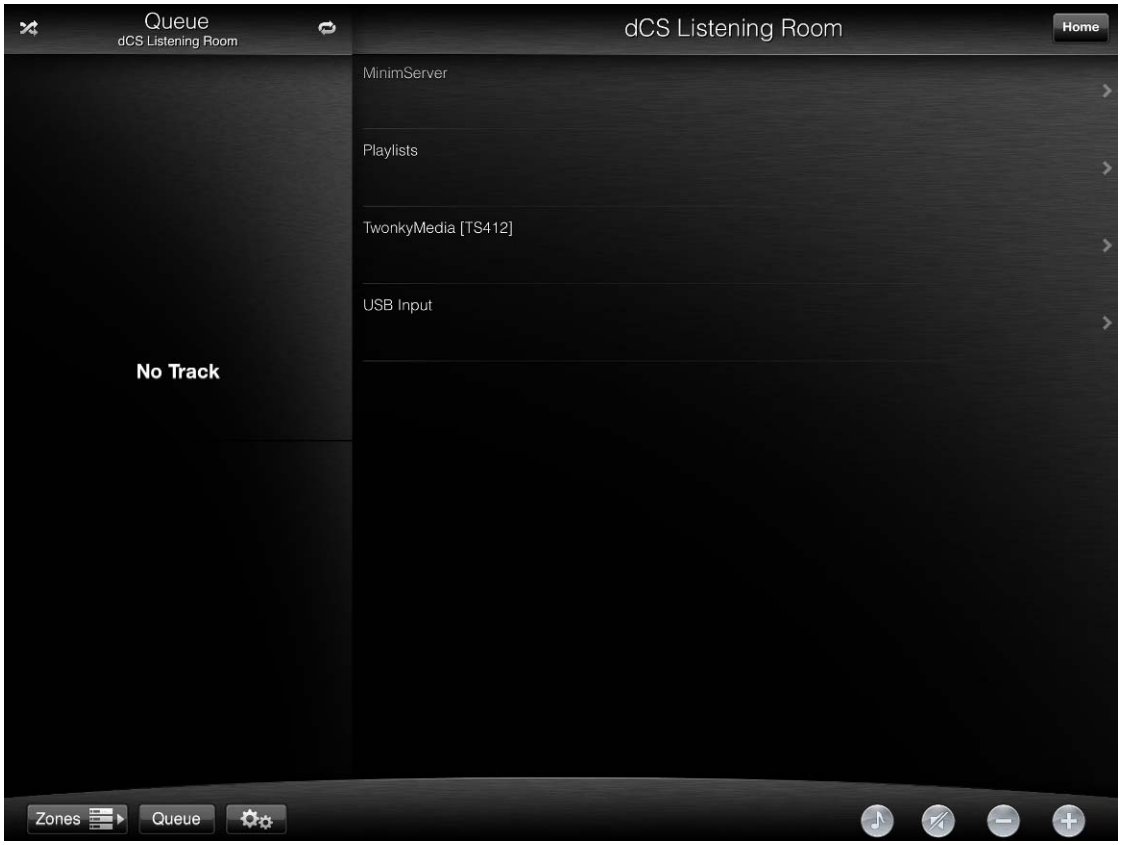
The Vivaldi DAC's other inputs such as **AES1+2** do not accept tunnel commands from the Upsampler.

- Set the Upsampler to the **Network** input, set the Dual AES menu page to On.
- Set the DAC to the **AES3+4** input, set the Dual AES 3+4 menu page to Auto.
- Connect the DAC's analogue outputs to your amplifier and loudspeakers.
- Launch the dCS Vivaldi HD App. The system will search for compatible zones (media renderers, such as Vivaldi Upsampler). When the zone list appears, tap the Upsampler icon in the zone you want to use. If there is only one zone connected, it will be selected automatically.

STEP 2 - Music Playback and Control

The system will search for networked servers, they are normally displayed within 30 seconds. In this example, MinimServer and TwonkyMedia servers have been discovered. The other music sources are (saved) Playlists and the Upsampler's USB Input (**USB2**).

- Tap on the music source you want to use.

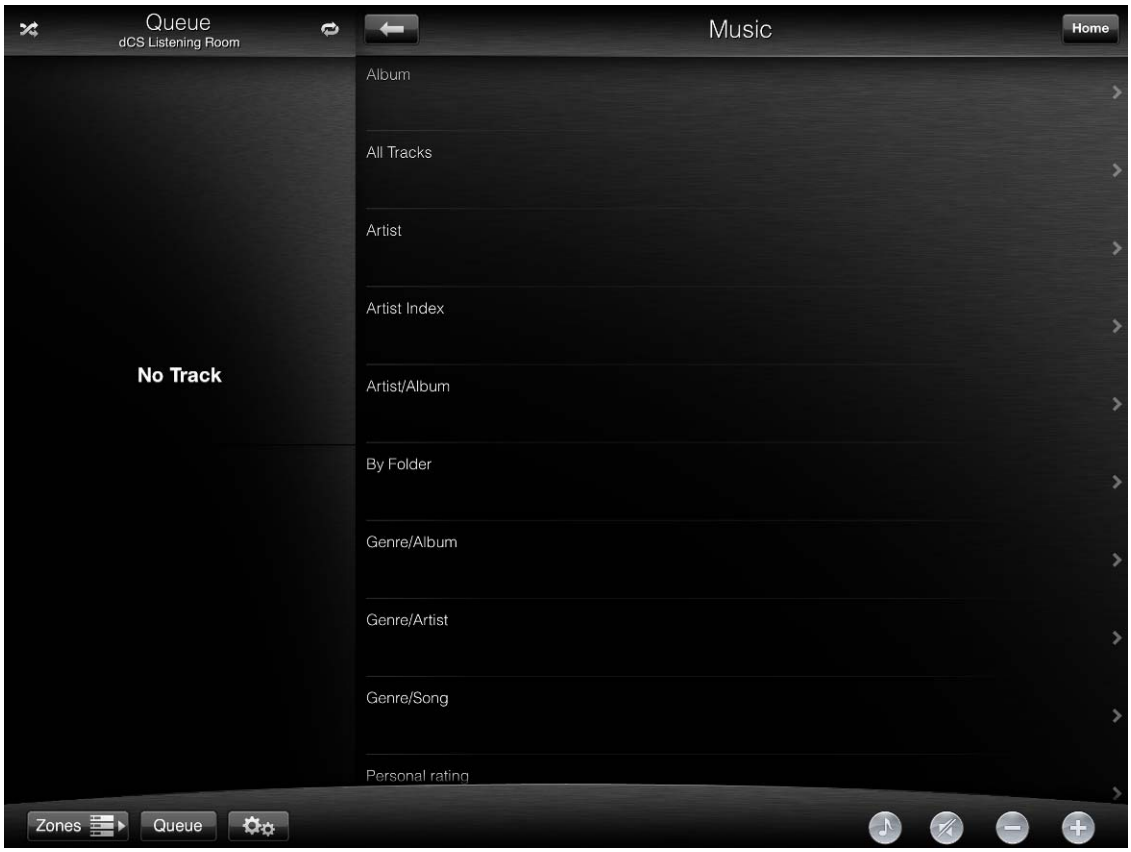


Selecting Music

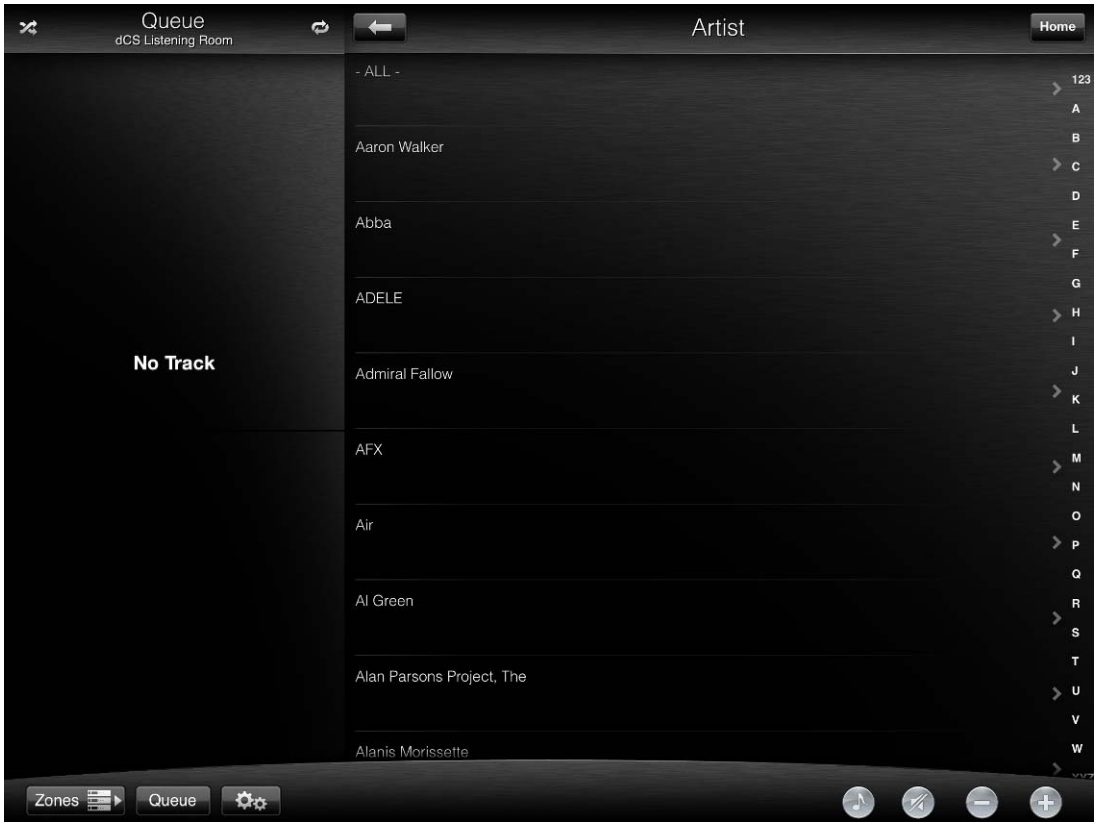
You can view the music stored on a NAS drive in a variety of different ways:

- by Artist
- by Album
- by Folder
- by Genre
- by Composers/Conductors
- by Personal Rating
- by Playlist

Playlists can be saved to the Control Point device or to certain brands of Server. Saving Playlists will be explained later.

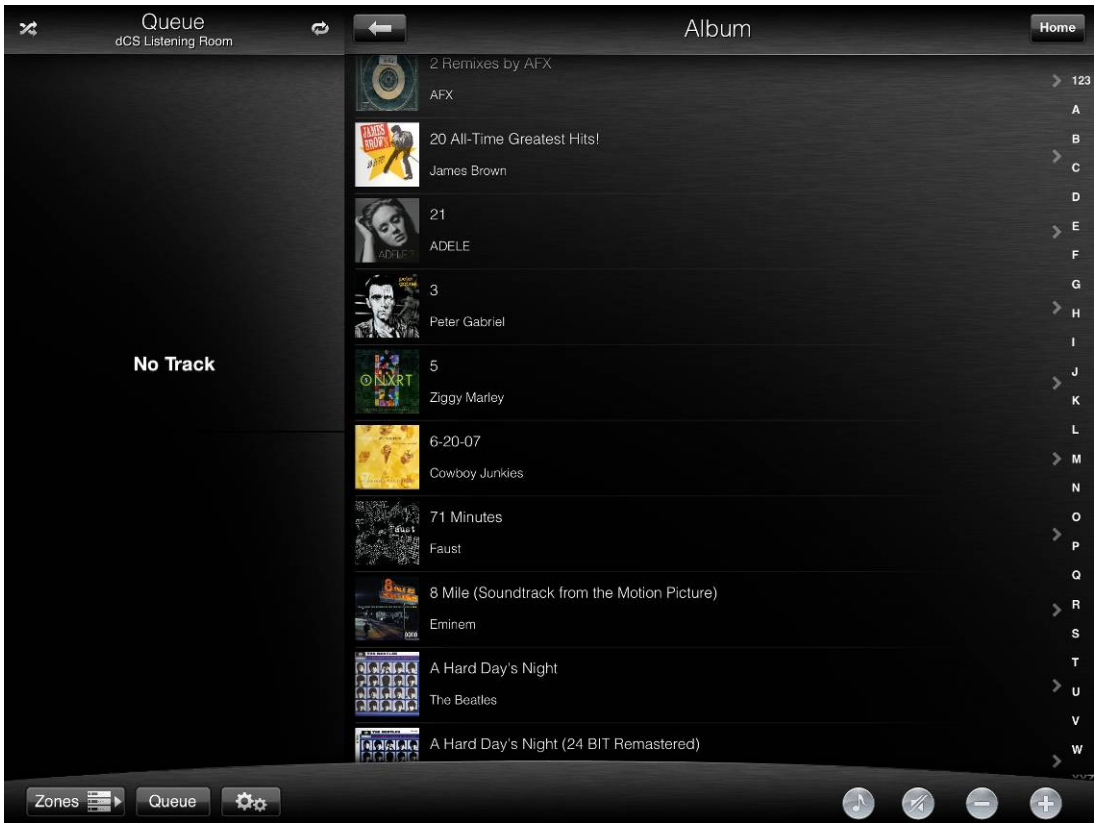


For example, you can browse by **Artist** ...

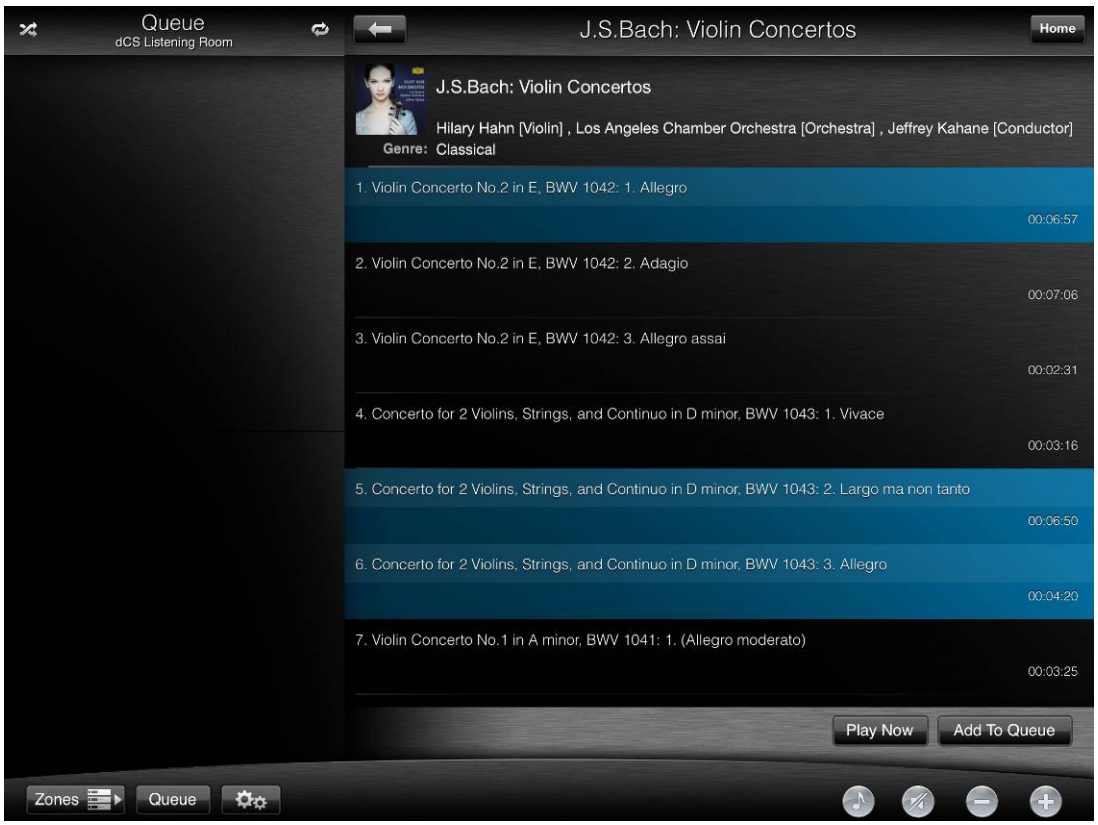


- Swipe to scroll up / down or tap in the alphabet at the right side to find Artists starting with a given letter, then tap on the Artist's name.

You can browse by **Album** ...



- Tap on the Album's name or artwork to open an Album. Tap the tracks you want to add to the Queue – they will be highlighted in blue.



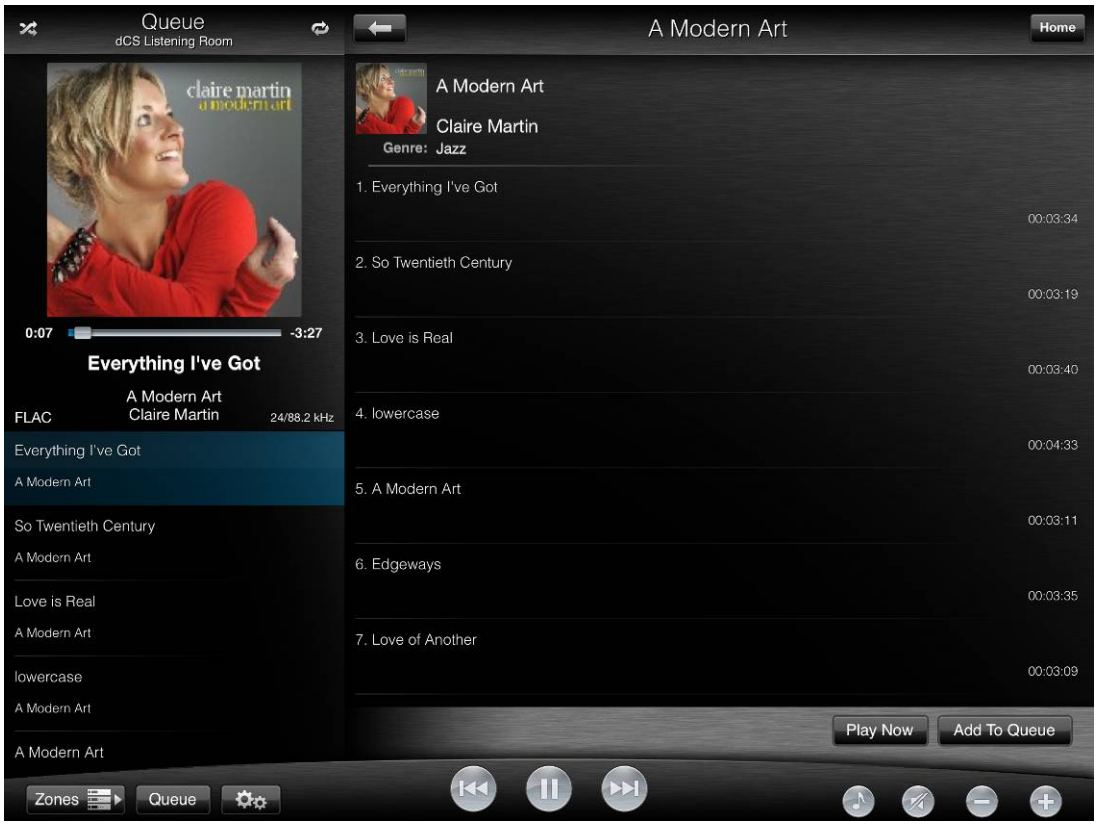
- Tap again if you want to de-select a track.
- Do not tap any tracks if you want to add the whole album to the Queue.

Tap **Play Now** to cancel anything in the Queue and play your selection immediately.

Otherwise, tap **Add To Queue** and select one of the options from the pop-up box:

Start – inserts your selection at the start of the playlist.
Now – inserts the track in front of the track currently playing and plays it immediately.
Next – inserts the track directly after the track currently playing.
End – adds the track to the end of the playlist.

In the example below, the whole album has been loaded into the Queue and the first track (highlighted in blue) is playing.



Tap a track in the Queue to start playing that track immediately.

You can load tracks from different albums into the Queue by tapping the **Back** button at the top of the screen, selecting a different album and choosing some tracks.

Tap the currently playing artwork to expand the Queue section. Tap the artwork again to change back.

Controls

The 3 buttons in the bottom centre control playback.

Fast Rewind **Play/ Pause** **Fast Forward**

If you are playing a track, pressing Fast Rewind once will return to the start of that track. Press twice to play the previous track in the Queue.

While playback is paused, the Pause button changes to the Play button.

The 4 buttons in the bottom right-hand corner control the ***Vivaldi DAC***.

Phase invert **Mute on/off** **Volume up/down**

The Shuffle and Repeat buttons are at the top of the Queue section:

Shuffle

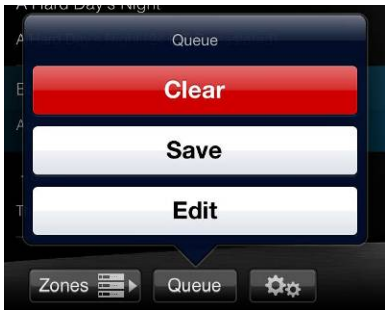
Repeat

Tap **Shuffle** to play the tracks in the Queue in a random order. Tap again to turn Shuffle off.

Tap **Repeat** once to play the current track over and over – the icon will turn partly blue. Tap **Repeat** again to play the whole Queue over and over – the icon will turn fully blue. Tap **Repeat** again to return to normal play mode.

Editing the Queue

Tap the **Queue** button to open the Queue menu.



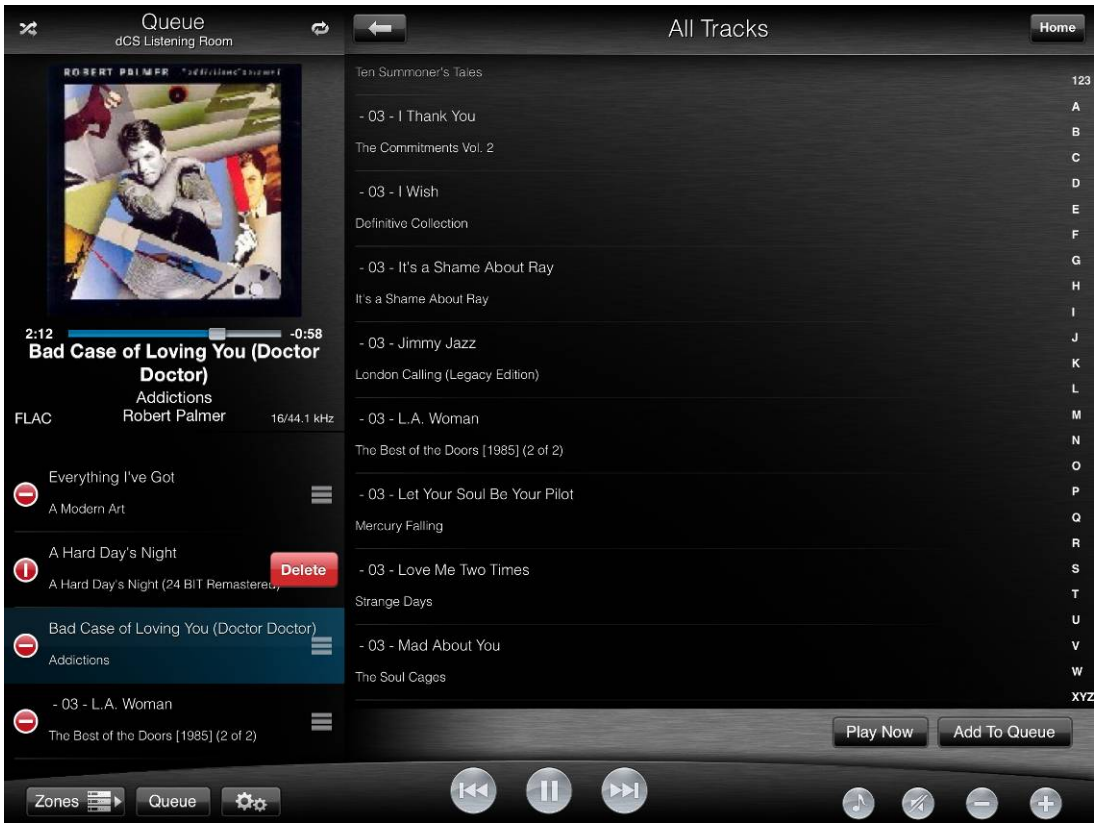
Clear stops playback and deletes the Queue.

Save allows the queued tracks to be saved as a Playlist.

Edit allows the queued tracks to be rearranged or deleted.

When you use these features, **Done** appears at the bottom of the Queue menu.

Tap the **Edit** button to delete tracks from the Queue or change the order.



To delete a track, tap on the icon, it will change to , tap .

To move a track in the list, drag the icon to a different position.

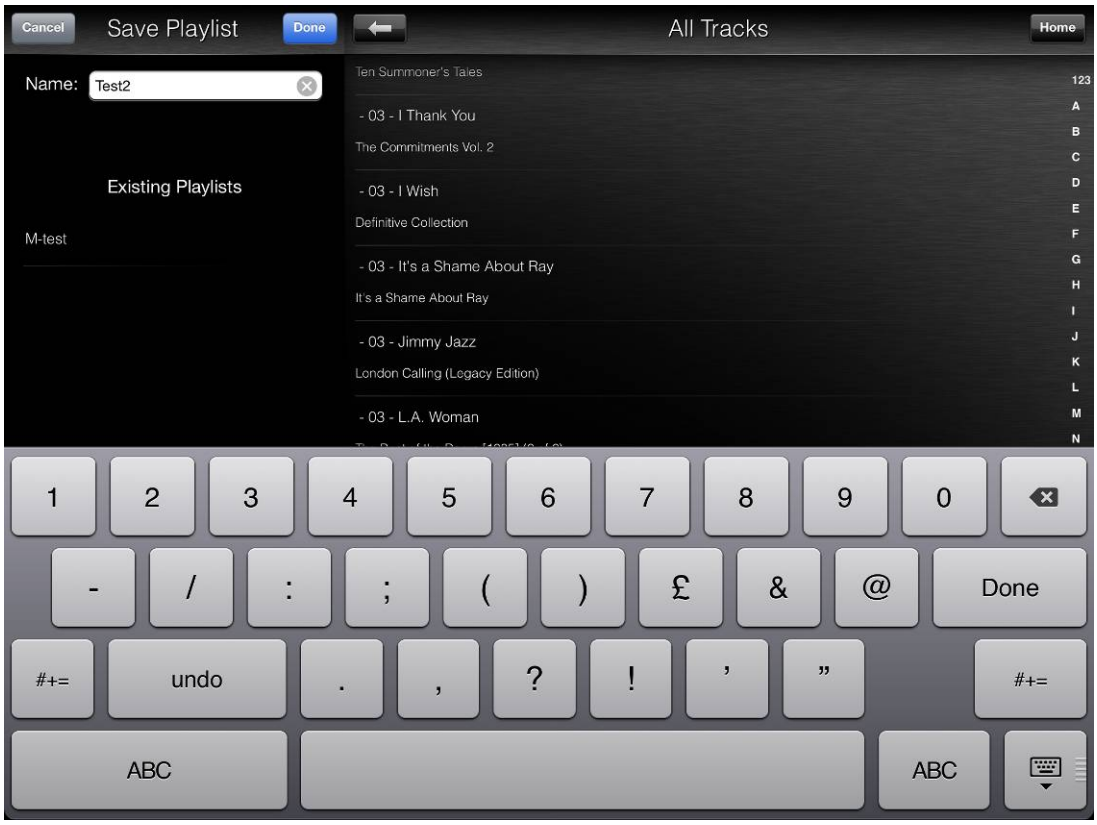
Tap **Done** when you have finished.

Changing zone

- To set the Control point to a different zone (an Upsampler or other renderer in a different room), tap on .
- Tap on the new zone.
- Tap on to hide the zone list.

Saving a Playlist

Open the Queue menu and tap **Save** to bring up the list of existing playlists and the keyboard.



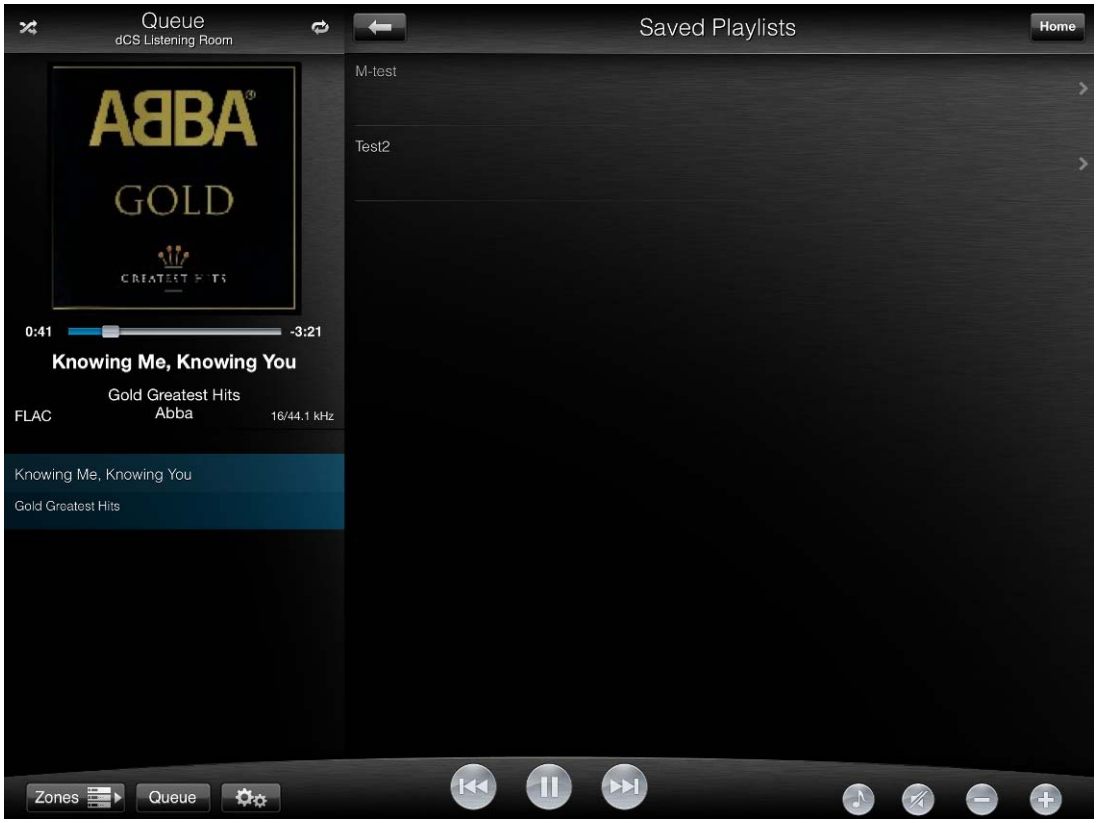
Either:

- Tap the name of an existing playlist and tap **Done** to overwrite it.
- Type a new name in the **Name** field and tap **Done** to save the list. Some NAS drives allow you to save the playlist to the Server rather than to the Control Point.

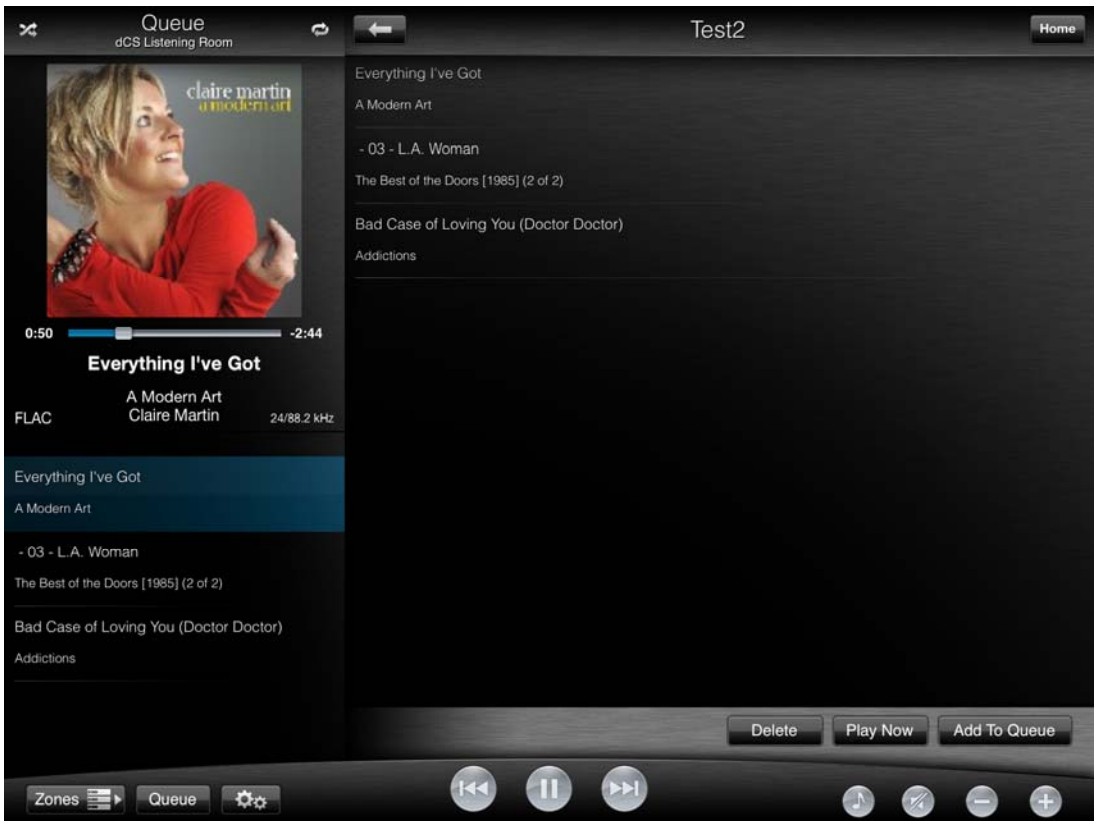
- You cannot save a playlist containing a mixture of USB flash drive files and NAS files.
- The tracks identified in a playlist will not be accessible if the drive containing the music files is disconnected from the system.

Loading a saved Playlist

- Tap on **Home** and then **Playlists**.



- Tap the name of the Playlist you want to load (**Test2** in this example) and play tracks in the usual way.

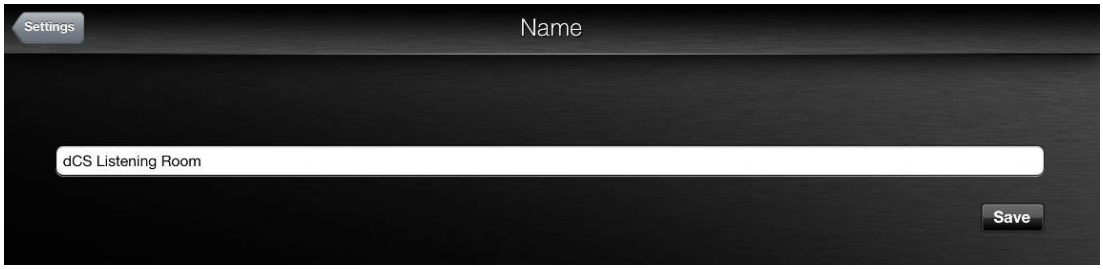


STEP 3 - dCS System Configuration

- Tap **Zones**, then **Settings** to see the settings page.

General settings

- To rename the zone (i.e. the Upsampler), tap **Name** in the General section.



- Tap in the text bar to bring up the keyboard, delete the old name, type the new name and tap **Save**. Tap **Settings** to return to the settings page.

The **System Power** page allows you to set the Vivaldi Upsampler and DAC to Sleep mode, On or turn Off completely.

- Tap either **Done** (to close the Settings page) or **Settings** (to return to the Settings page).

Upsampler and DAC settings

The Upsampler section reports the Input Rate, allows remote selection of the **Input Source**, **Output Rate**, **Filter** and **Upsampler Power** (On, Sleep, Off).

Filter - The Upsampler has optional filters for 10 Input Rate / Output Rate combinations, please see the Upsampler manual for details. You will not be able to change the Filter setting from Filter 1 for combinations that have only one filter available.

- Tap the parameter you want to change, tap the new setting and tap either **Done** (to close the Settings page) or **Settings** (to return to the Settings page).

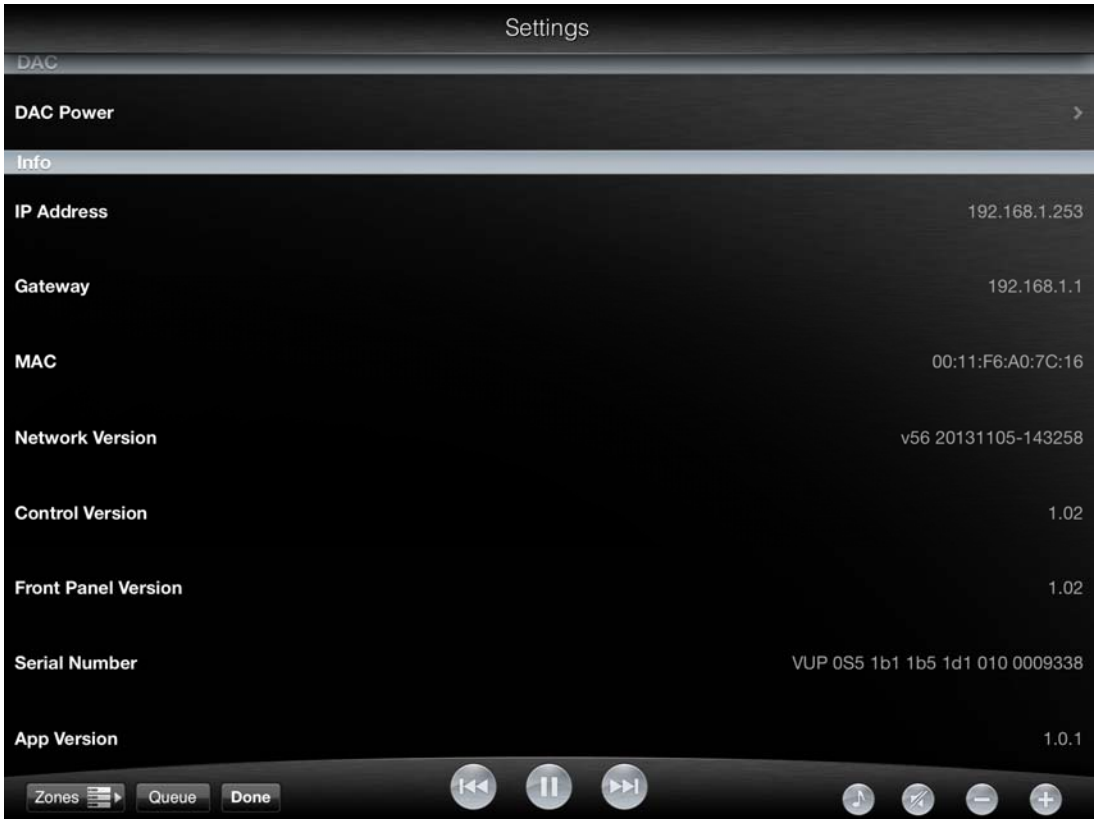
The Upsampler **Input Source** page is shown below, with the Network input selected.

The Upsampler **Output Rate** page is shown below, with 352.8k selected.

The DAC section allows remote selection of the **Input Source** and **DAC Power** in the same way as for the Upsampler.

Info

In the Info section, you will see the network & MAC addresses, Upsampler software issues, Upsampler serial number and App version.



We suggest that you record this information in the form at the end of the manual for reference.

- When you have finished, tap **Done**.

If you need more help

In the first instance, you should contact your dealer. If they cannot resolve the issue, contact your national distributor.

dCS, our distributors and dealers are not able to provide I.T. support for your system. If you have a problem with your network that is not directly related to the ***dCS*** components, please consult the computer equipment supplier or an IT professional.

The ***Vivaldi Upsampler*** is manufactured by:

Data Conversion Systems Ltd.
Unit 1, Buckingway Business Park,
Anderson Road,
Swavesey,
Cambridgeshire. CB24 4AE
UK

www.dcsltd.co.uk info@dcsltd.co.uk

This manual may be downloaded from our web-site, a bound copy may be ordered from ***dCS***.

NETWORK INFORMATION SHEET

Name:	Date:

PLEASE TREAT THE INFORMATION ON THIS PAGE AS CONFIDENTIAL!
KEEP IT SAFE, AS YOU MAY NEED TO REFER TO IT IN THE FUTURE.

ISP Information

Current ISP		Account No.	
Login		Password	
ISP support tel.			
Router model		Backup loc.	
Router login		Password	
LAN Gateway		Subnet mask	
DHCP block from		…to	

Wireless Network Information

SSID		Encryption Passkey	
WAP 1 location		Channel	
WAP 2 location		Channel	
WAP 3 location		Channel	

Infrastructure Device Information

Device Name	Static IP?	Dyn IP?	Mac address	Login	Password
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			