



Getting Started with AA Music Server

Updated on 27 March 2023

Unbox the AA Music Server (AAMS) and put in on the shelf. Stacking another component above the streamer is not recommended due to heat generated inside which needs proper ventilation.



Figure 1 AAMS on the shelf

The AAMS comes without power cord and cables. The following cables are required:

- AC power cord
- LAN cable
- USB Audio Cable

The only audio output from the AAMS is USB Audio; hence a DAC or DDC with USB Audio interface is required.



Connect the AC power cord, LAN cable, and USB Audio Cable into the back of AAMS. Make sure the USB Audio Cable to the DAC / DDC is connected before AAMS is powered on.



Figure 2 Wired LAN connection to motherboard

Notes:

- LAN cable goes to the motherboard I/O LAN port. There is only 1 LAN port.
- USB Audio cable goes into the AA USB2 Isolator board type A USB receptacle.
- AC power cord goes into the Furutech FI-09 NCF.
- AC power rocker switch is underneath the Furutech FI-09 NCF.
- The motherboard I/O blue USB3 ports can be used to connect external 2.5" USB3 drive to copy music into AAMS internal storage. Please connect one external drive at a time. Do not play music directly from the external 2.5" USB drive – noise will be added to motherboard's 5V rail.



Figure 3 USB Audio and AC power cord

Starting AAMS for the first time

AAMS is a PC-based music streamer running Windows 10 IoT Enterprise LTSC (long-term service channel) and JPLAY FEMTO music server + renderer. Basic knowledge of Windows is required.

The AC power rocker switch is on back of AAMS under the AC power connector. The soft start and shutdown button is on the front left of AAMS. For long shutdown, it is recommended to switch off the AC power using the back AC power switch.

When AC power is turned on, the front left white LED turns on briefly indicating motherboard's power on self-test (POST) activity. The white LED then goes off.



Figure 4 AAMS soft power button and power indicator white LED

To start AAMS, press the front power button once. The white LED turns on and the boot process takes about half a minute. If DAC is connected and the DAC driver is already installed with the hi-fi system already powered on and not muted, Windows startup sound can be heard if the USB DAC connection is successful.

The first time AAMS is powered on, Windows 10 will configure the network connection. It may take a minute or two before JPLAY services are visible on the network.

To shutdown AAMS, stop playing music, quit BubbleUPnP or Hi-Fi Cast, then press the front left soft power button twice. Shutdown takes about 20 seconds. Once the white LED is off, the AC power rocker switch at the back can be switched off.

To get remote assistance, connect to AAMS using RD Client or Remote Desktop from another computer. Double click “Quick Assist” and wait for instructions from us.

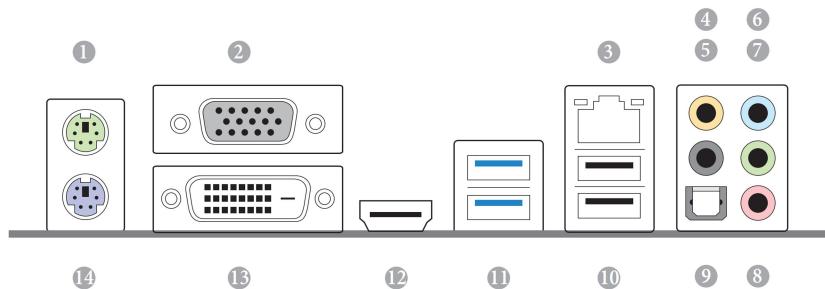
Copying Music files into Library

AAMS has two internal SSDs:

- 250 GB Samsung EVO for Windows 10 Operating System
 - C: labeled as **Win10 IoT Ent LTSC 21H2**
- 2TB Samsung EVO for local music files
 - D: labeled as **Local Music**. Music files inside **D:\Music**

J5040-ITX
J4125-ITX

1.4 I/O Panel



No.	Description	No.	Description
1	PS/2 Mouse Port	8	Microphone (Pink)
2	D-Sub Port	9	Optical SPDIF Out Port
3	LAN RJ-45 Port*	10	USB 2.0 Ports (USB_01)
4	Central / Bass (Orange)	11	USB 3.2 Gen1 Ports (USB3_01)
5	Rear Speaker (Black)	12	HDMI Port
6	Line In (Light Blue)	13	DVI-D Port
7	Front Speaker (Lime)**	14	PS/2 Keyboard Port

Figure 5 Motherboard I/O back panel

With RD Client connected, plug the external USB drive (one at a time) to the USB3 port behind, labeled as No. 11 in Figure 5 above. Please select one of the blue ports (No. 11) for high-speed USB3. Copy the music files into **D:\Music**. Eject and disconnect the external USB drive from Windows when done.

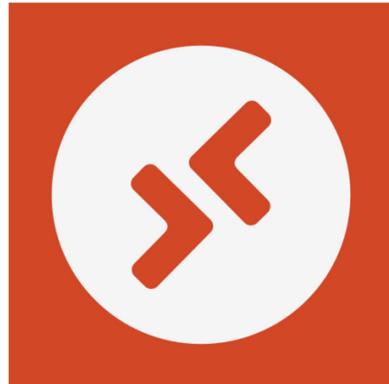
Restart AAMS so that JPLAY can recognize the newly copied music files.

Enjoy listening to music with AAMS!

Controlling AAMS

The following Android apps are required and need to be installed:

RD Client (an app from Microsoft)



BubbleUPnP

JPLAY website recommends BubbleUPnP but we prefer Hi-Fi Cast which gives more precise and better sound quality.



Hi-Fi Cast

Our preferred UPnP Controller App



For remote connection to AAMS, the machine name is AAMUSICSERVER.

User name : AudioPC

Password : aaaudio

The password is case sensitive.

If you already have a laptop or desktop with keyboard, mouse, and monitor in your system (connected to the same private LAN), it can also be used for Remote Desktop connection with AAMS. However, the AAMS device name and credential need to be entered manually.

From Android's RD Client, the screenshots below show how to setup and save the connection to AAMUSICSERVER.

First time using RD Client

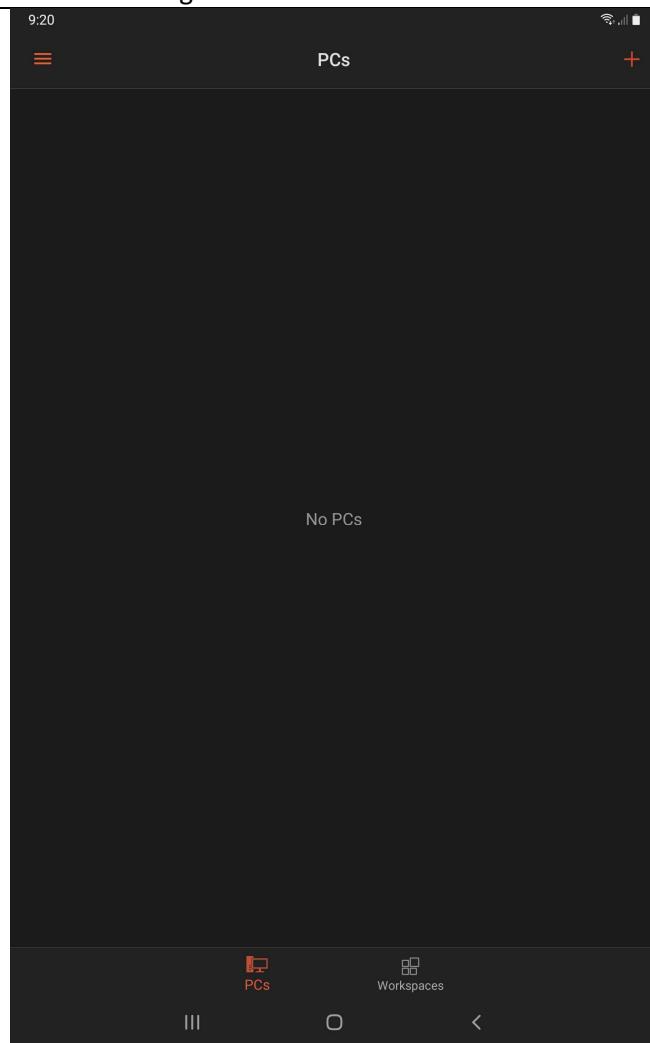


Figure 6 RD Client initial empty screen

Select "+" then "Add PC"

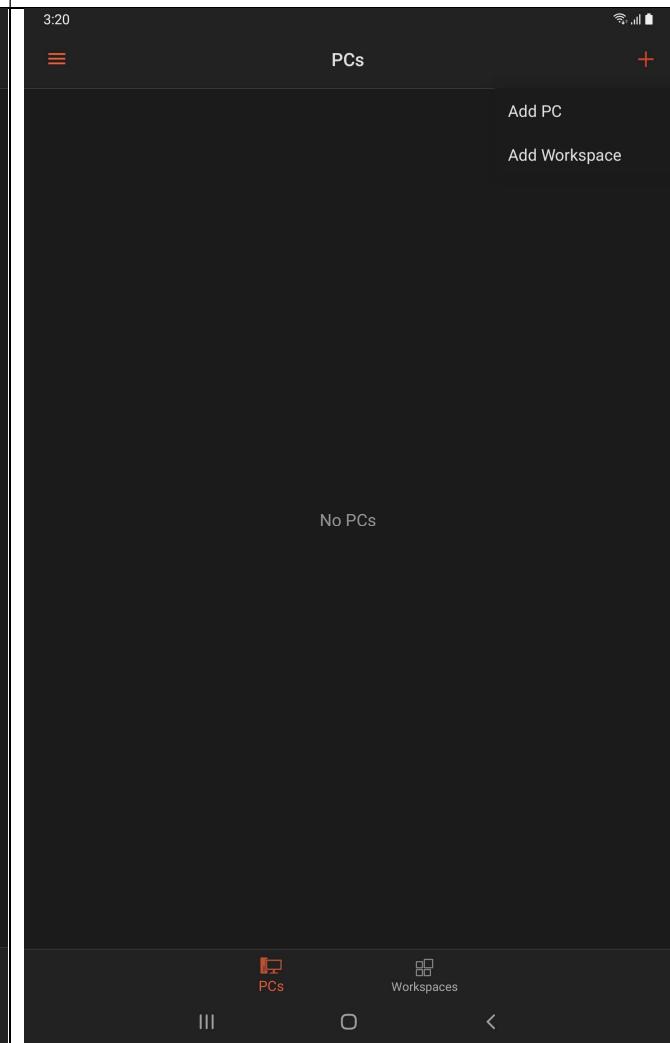


Figure 7 RD Client add PC (top right + button)

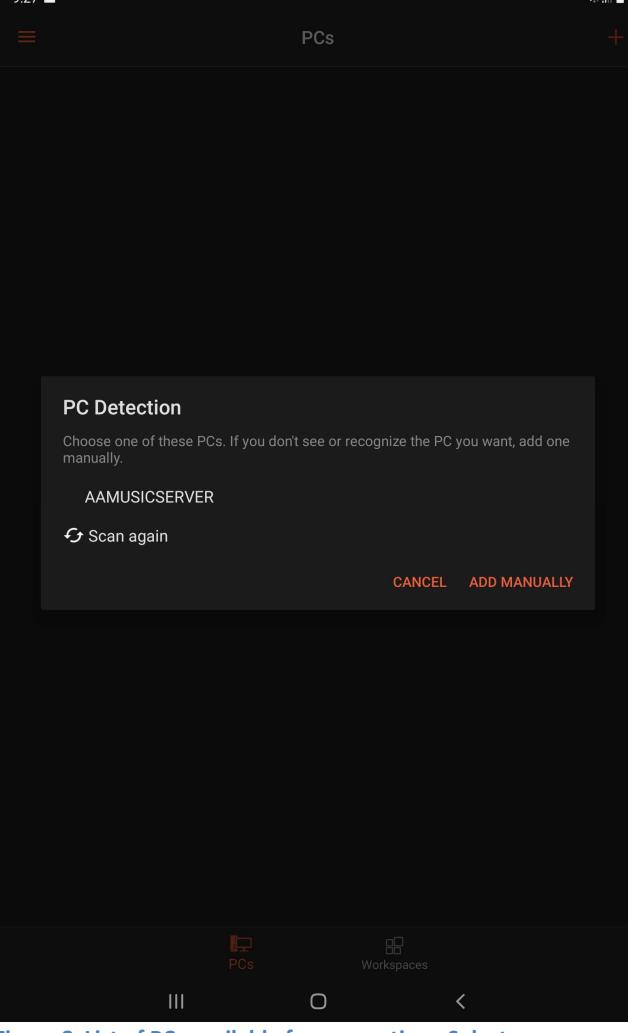
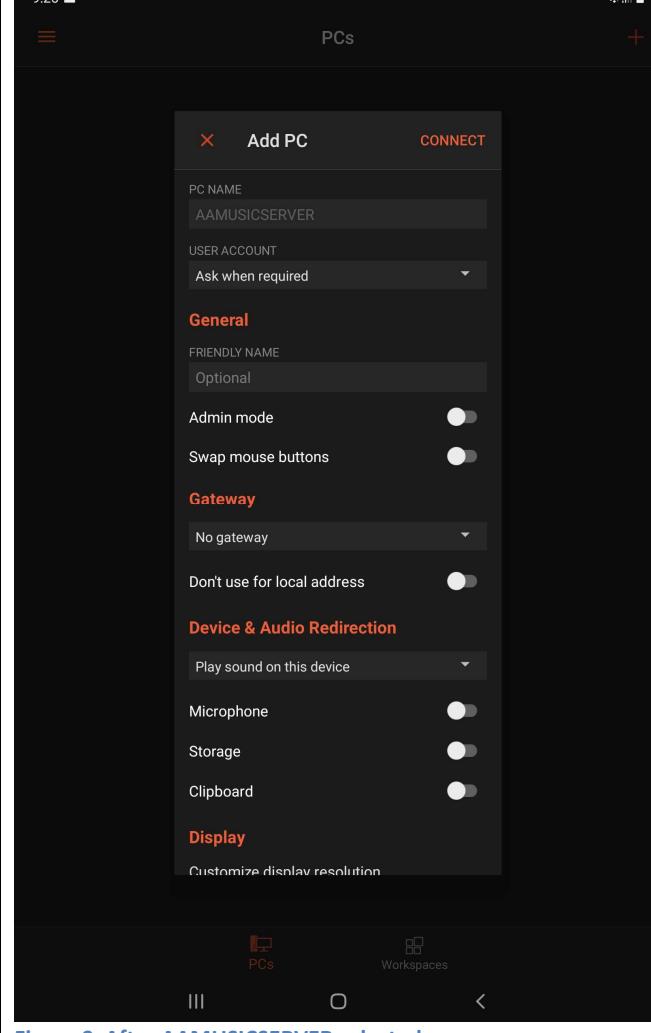
<p>Select "AAMUSICSERVER" Press "Scan again" if it is not listed</p> 	<p>"Add PC" dialog box shows up</p> 
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Figure 8 List of PCs available for connection. Select AAMUSICSERVER

Figure 9 After AAMUSICSERVER selected

Add User Account

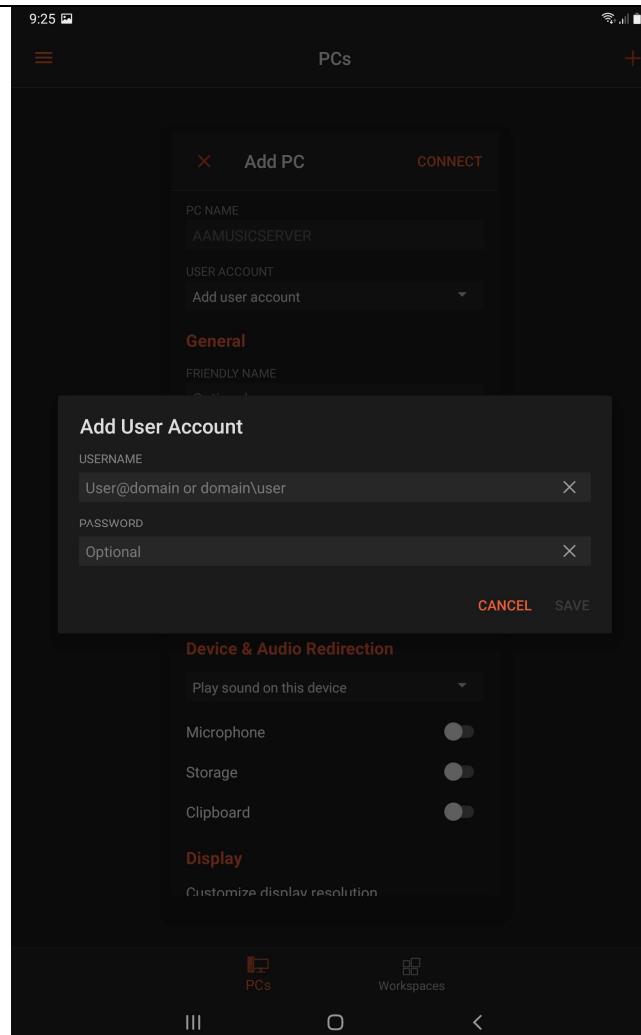


Figure 10 Add User Account

Enter user credentials, then Save

Username: AudioPC
Password: aaaudio

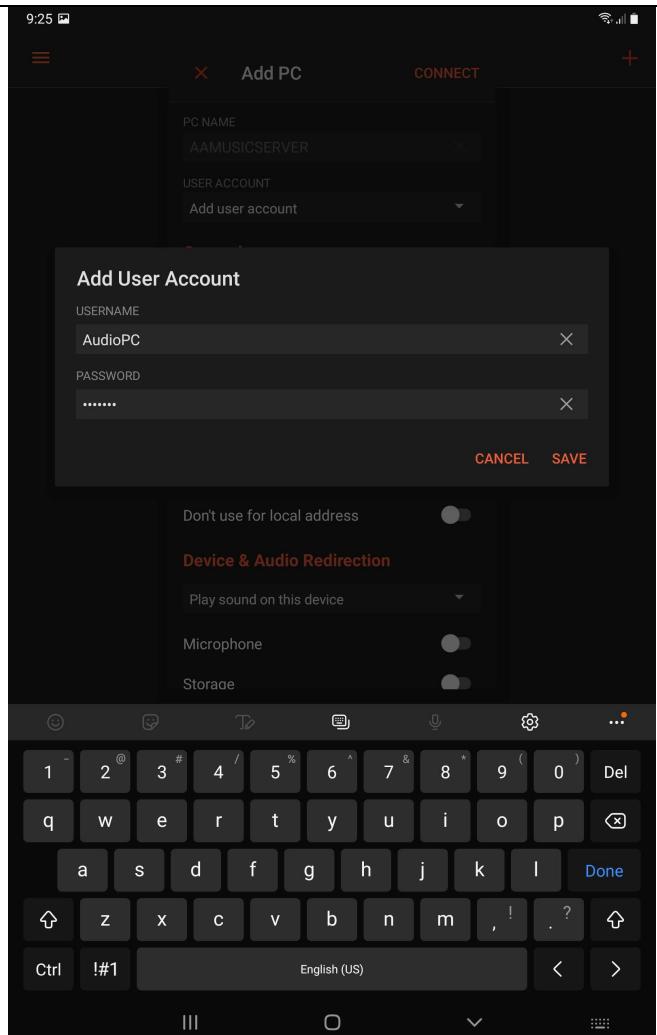


Figure 11 Enter user credentials, then Save

Under General, turn on “Admin mode”.
 Under Device & Audio Redirection, select “Play sound on the remote PC”. Hit CONNECT

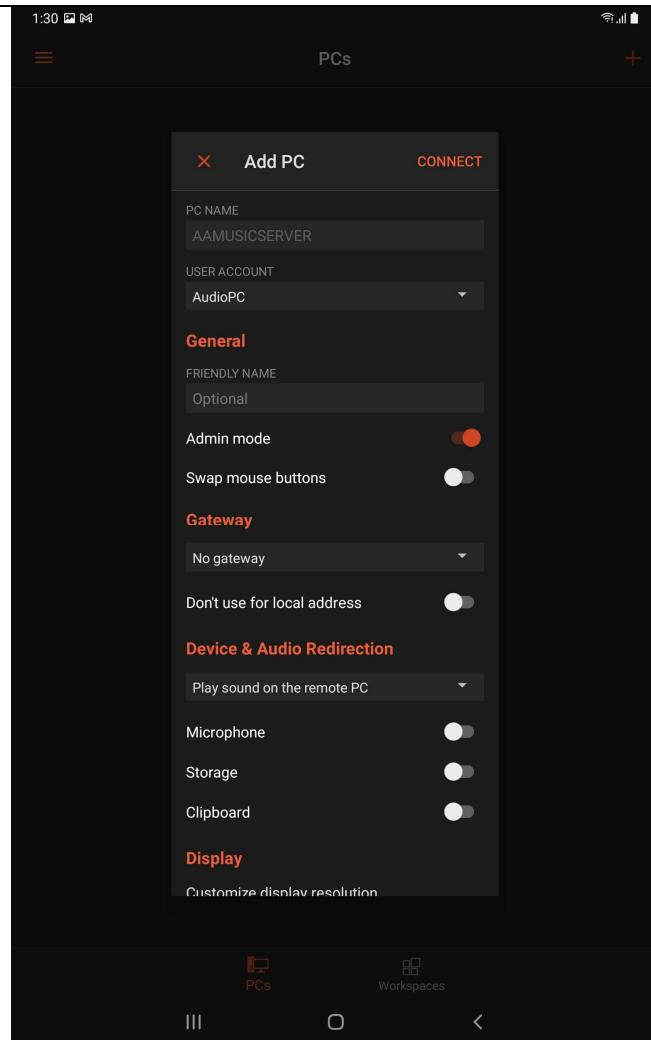


Figure 12 Changes to connection setup

Windows 10 screen will appear on the tablet



Figure 13 Windows screen after successful connection

Windows 10 Remote Desktop purpose	Double click JPlaySettings desktop shortcut. The following JPLAY screen appears. Use this to select DAC connection and set JPLAY parameters.
<p>Once Remote Desktop connection to AAMUSICSERVER has been established, the following can be done:</p> <ul style="list-style-type: none"> • Install or uninstall USB DAC driver • Manage music folders, i.e. copy additional files from external USB storage <ul style="list-style-type: none"> ○ Note: When copying music files into AAMS, copy into D:\Music ○ Please do not play music while copying additional music files into D:\Music ○ Newly copied folders will be visible in BubbleUPnP only after AAMS has been restarted / rebooted • Perform Windows Updates manually • JPLAY settings <p>More information on JPLAY usage and settings is available here: http://jplay.eu/manual/</p>	 <p>The JPLAY Settings window displays the following configuration:</p> <ul style="list-style-type: none"> Playing via: KS: SA-1051 Engine: ULTRAsream (selected), DAC Link (~20 Hz) AudioPC: This computer [112] (selected), Xtremsize 1000 Bitstream: Native (Best) (selected), Throttle ON Bitperfect Volume: OFF (selected), Hibernate mode OFF Status: Memory OK, Audio OK, Clock 0.5ms <p>At the bottom of the window, there are 'OK' and 'CANCEL' buttons, and the footer includes 'jplay 7.0 + jplay.eu 2011' and 'support@jplay.eu'.</p>

Figure 14 JPLAY Settings

To disconnect RD Client, press Windows logo at the bottom left of the screen

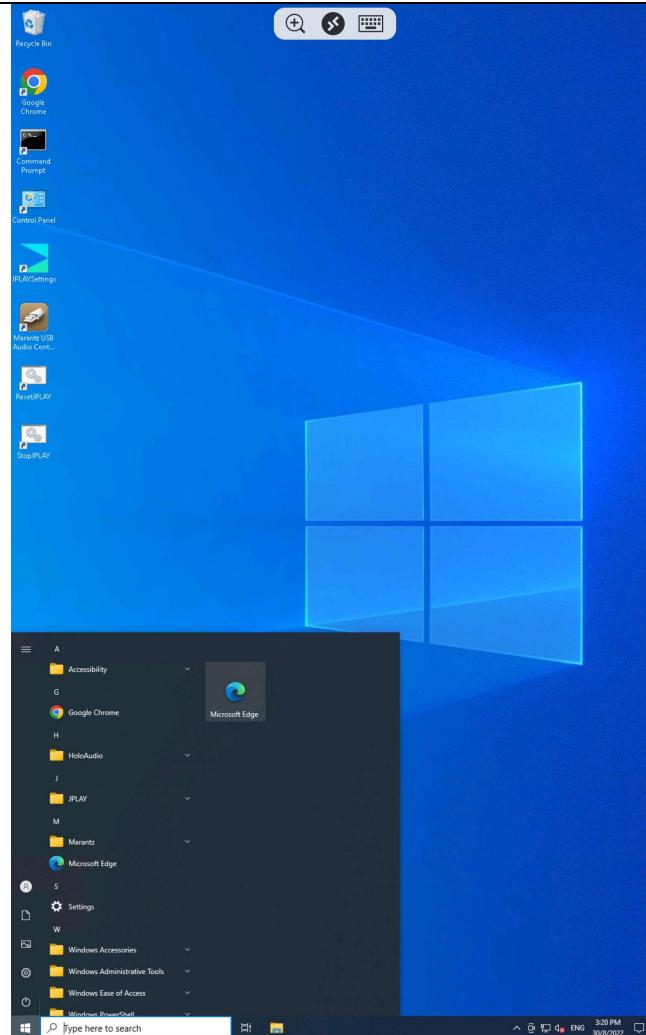


Figure 15 To Disconnect, press Windows logo first

Press Power button, then select Disconnect

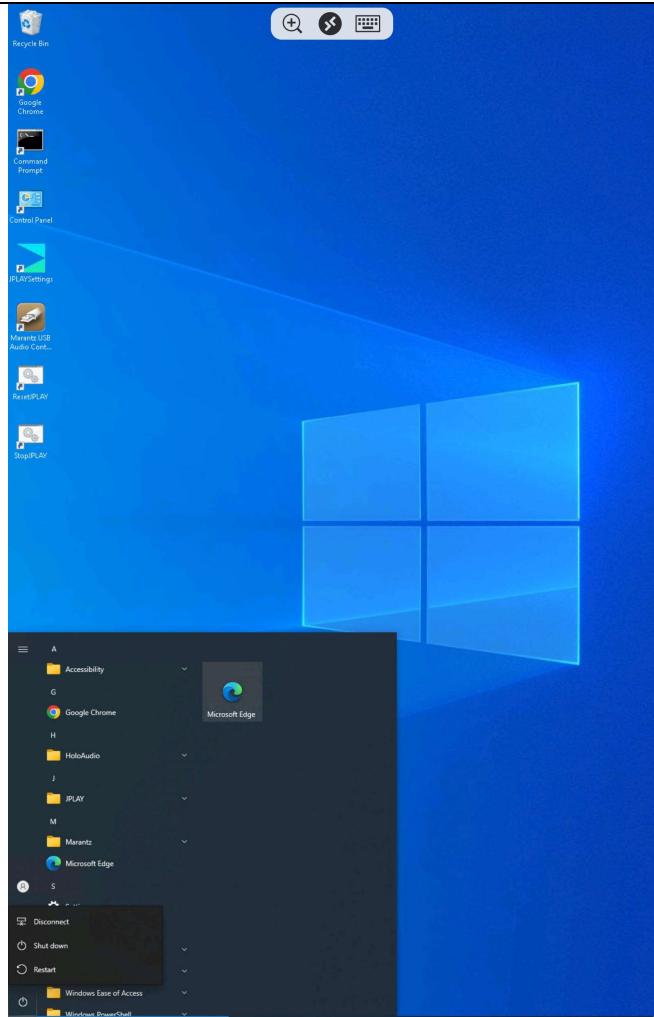


Figure 16 Press Power button and then select Disconnect when done with setups

AAMS sounds the best when Windows is not logged in. Hence, for serious music playback and listening, it is recommended logging off from RD Client after it is no longer required.

BubbleUPnP Setup

JPLAY website has a good reference on how to setup BubbleUPnP:

- <http://jplay.eu/manual/>

Since JPLAY is already installed and license activated, please skip the following steps:

- Installing JPLAY
- Activating JPLAY

All instructions for JPLAY Classic are not relevant.

It is very important to disable FFmpeg audio decoding from BubbleUPnP Renderer Settings menu.

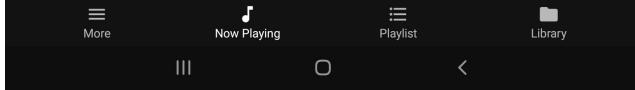
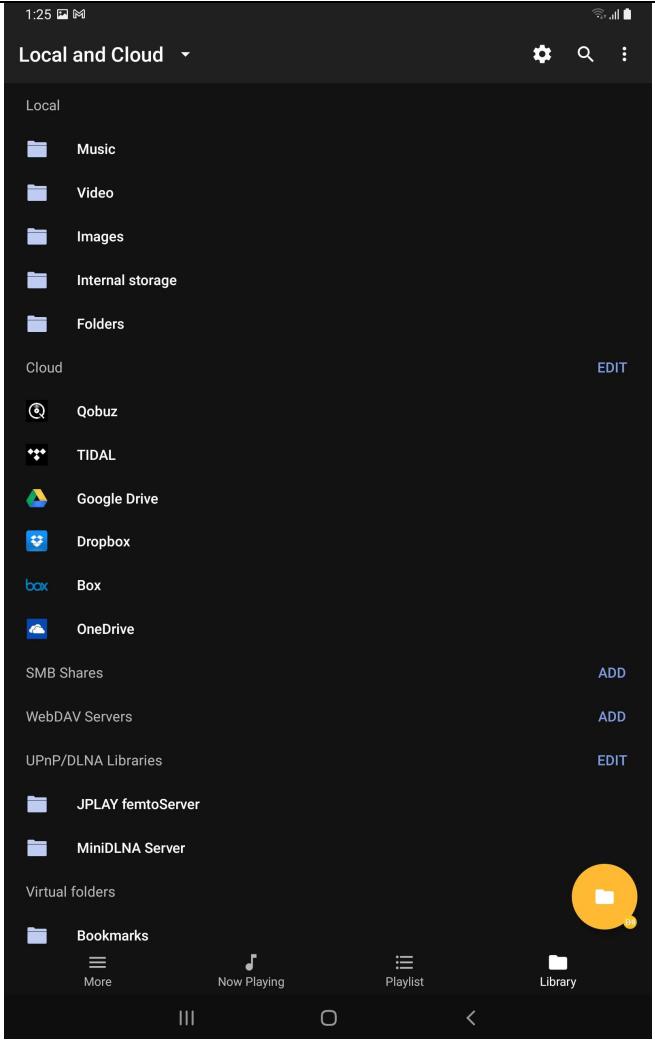
Every time the IP address of AAMS changes, BubbleUPnP Renderer Settings need to be done again.

Browsing and Playback

Select “JPLAY FEMTO” as the Renderer and “JPLAY femtoServer” as the Library.

If BubbleUPnP cannot find it, please wait for a few minutes or try and reboot AAMS.

Below are the screenshots of setting up BubbleUPnP using a Samsung Galaxy Tab.

<p>First time starting BubbleUPnP</p> <p>There are 4 main menus which can be selected at the bottom of the screen:</p> 	<p>Press Library to select the music source</p> 
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Press the yellow circle (bottom right) to select Library, then select **JPLAY femtoServer**

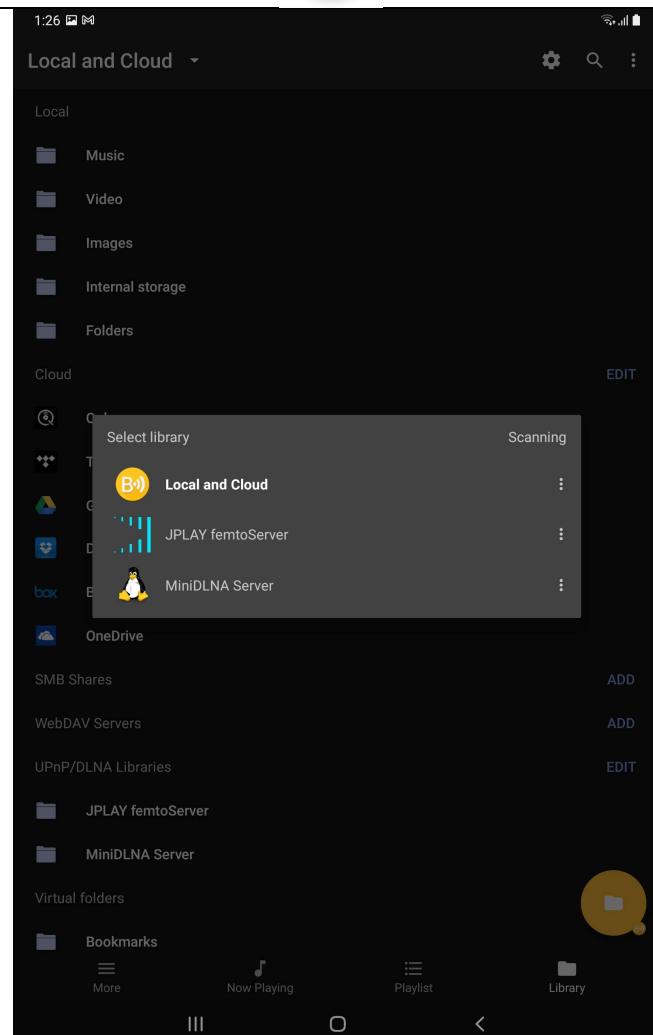


Figure 19 Library Selection

JPLAY femtoServer music folders shown

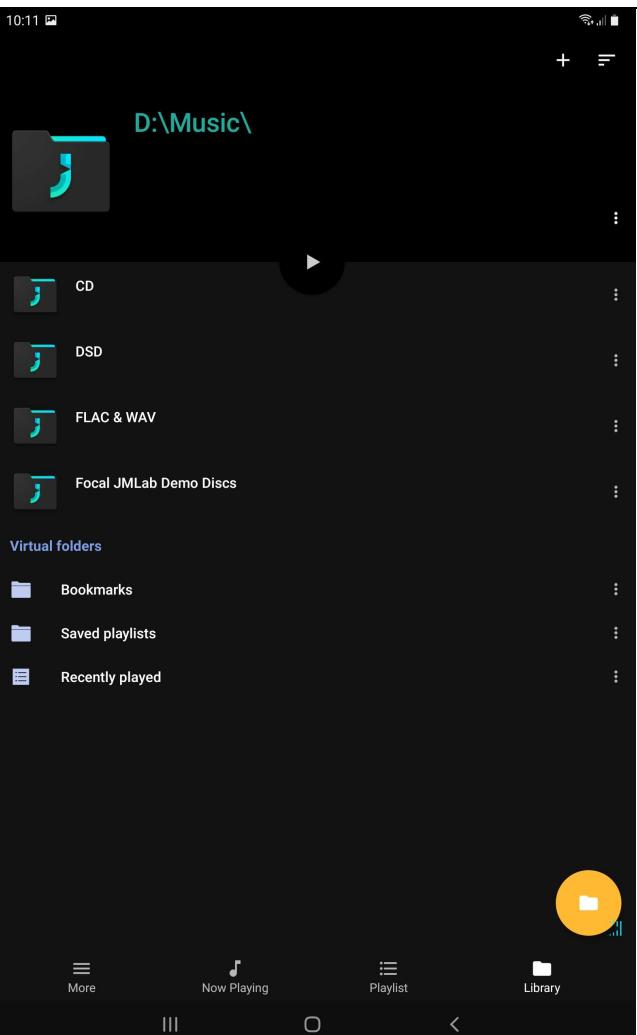


Figure 20 Folders inside local SSD will show up after JPLAY femtoServer selected

Press "Now Playing"

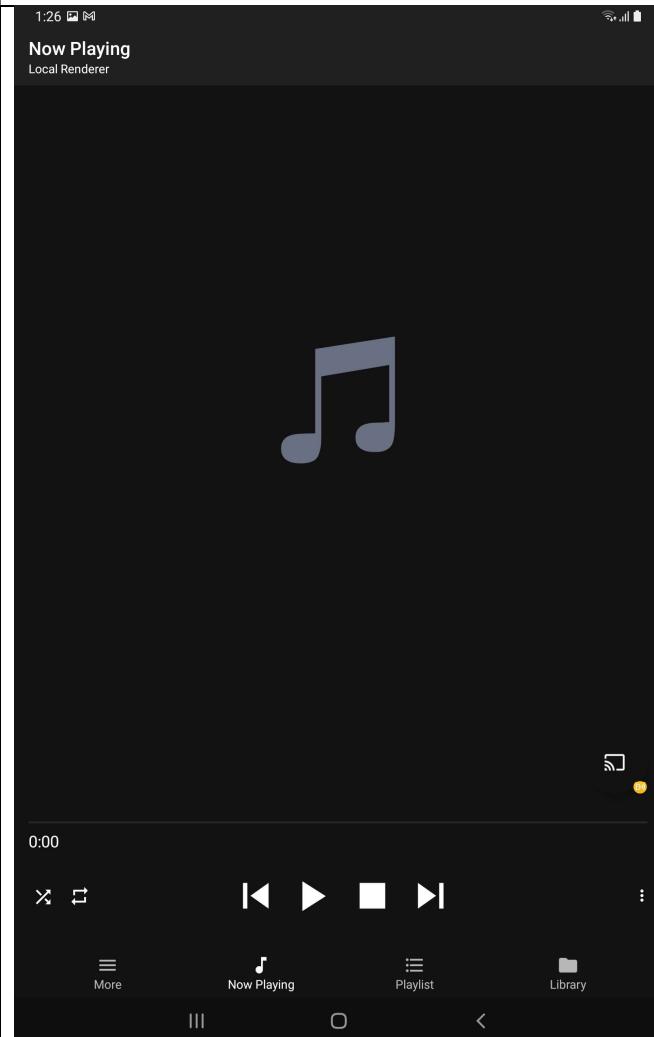


Figure 21 "Now Playing" screen before Renderer selected

Press the logo below then "Select renderer" window pops up. Select **JPLAY FEMTO**

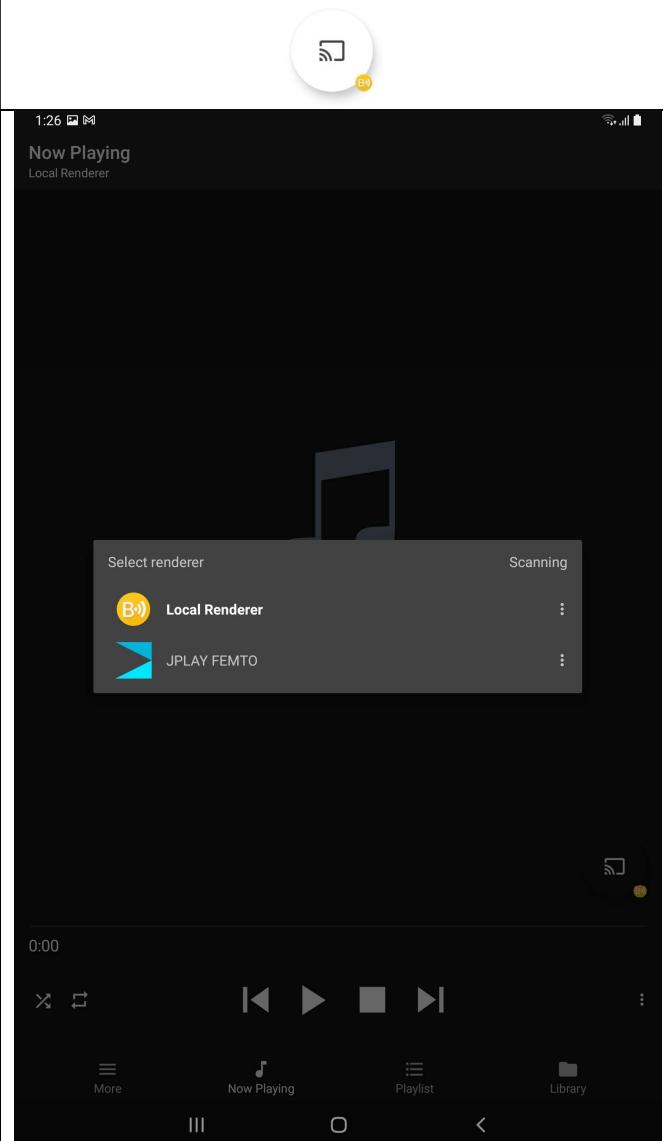


Figure 22 Press "Now Playing" then select JPLAY FEMTO as the renderer

After JPLAY FEMTO selected as the renderer, "Now Playing" shows JPLAY FEMTO at top right and JPLAY blue graphics symbol under the album artwork area

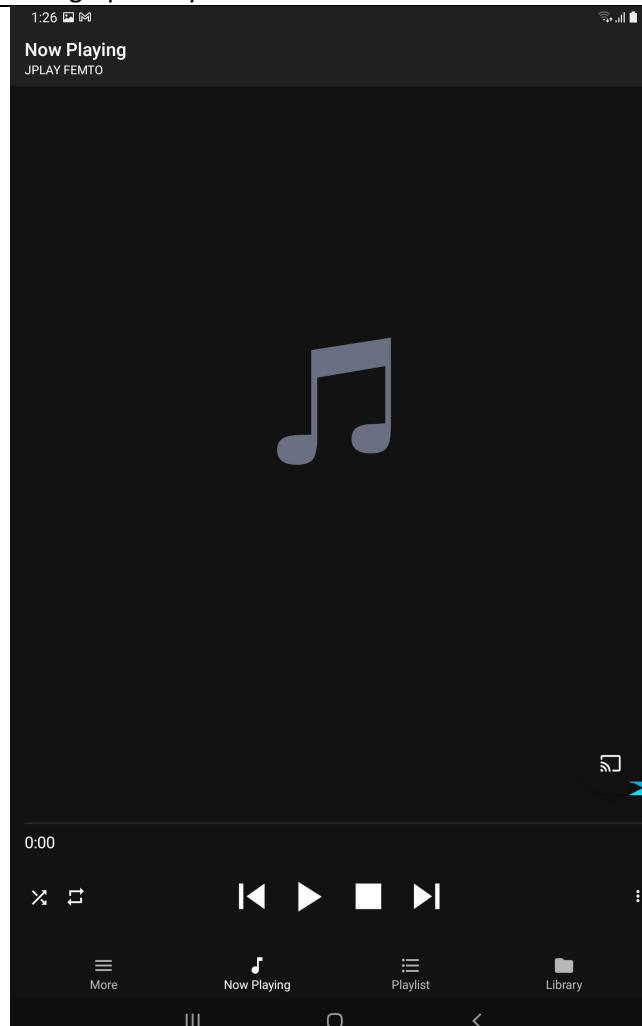


Figure 23 "Now Playing" after JPLAY FEMTO selected as the renderer

Press Library and select the folder to browse. In the example below, CD folder was selected.

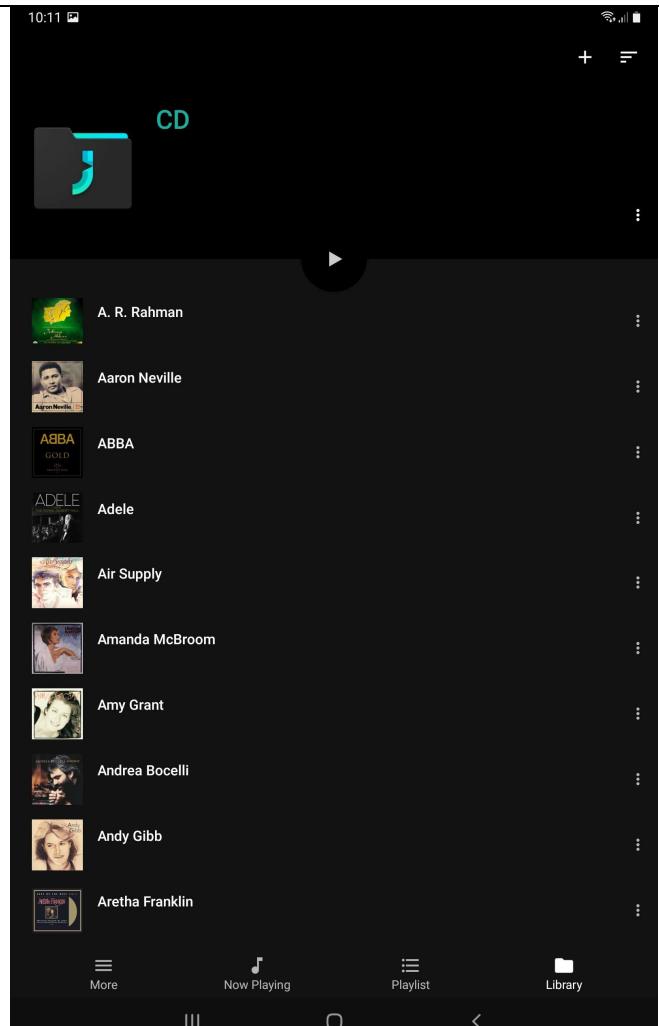


Figure 24 Browsing Library folders

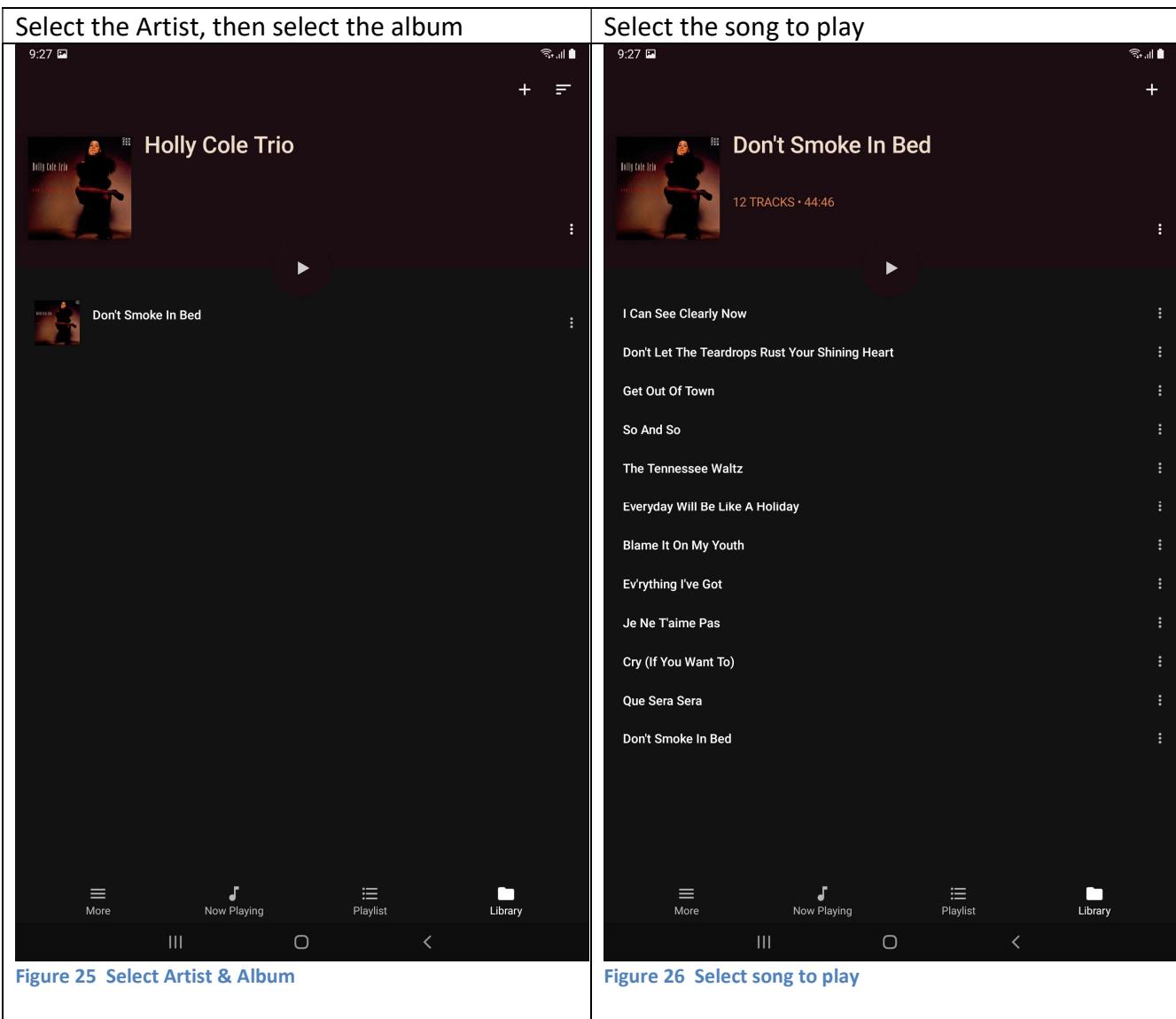


Figure 25 Select Artist & Album

Figure 26 Select song to play

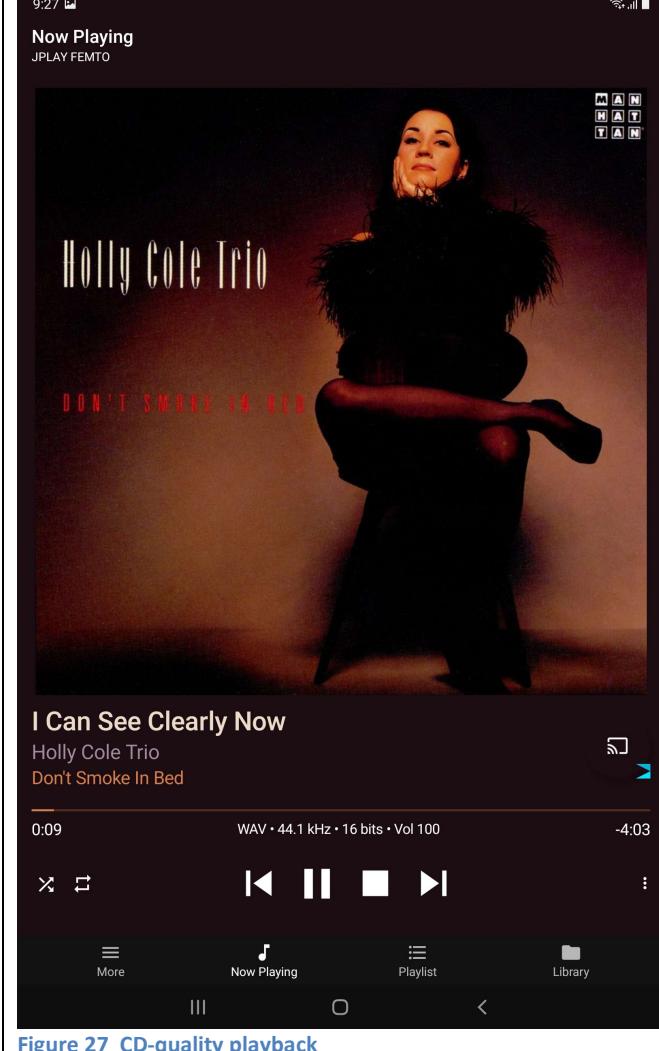
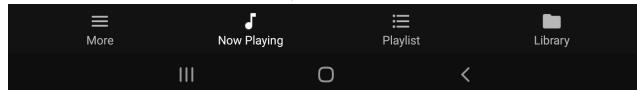
"Now Playing" showing album artwork and CD-quality bitrate information	"Now Playing" showing album artwork and SACD-quality bitrate information
 <p>Now Playing JPLAY FEMTO</p> <p>Holly Cole Trio</p> <p>DON'T SMOKE IN BED</p> <p>I Can See Clearly Now Holly Cole Trio Don't Smoke In Bed</p> <p>0:09 WAV • 44.1 kHz • 16 bits • Vol 100 -4:03</p> <p>More Now Playing Playlist Library</p>	 <p>Now Playing JPLAY FEMTO</p> <p>SHELBY LYNNE JUST A LITTLE LOVIN'</p> <p>LOST HIGHWAY</p> <p>Just A Little Lovin' Shelby Lynne</p> <p>1:37 DSF • 2822.4 kHz • 1 bit • Vol 100 -3:44</p> <p>More Now Playing Playlist Library</p>

Figure 27 CD-quality playback

Figure 28 SACD-quality playback

It is very important to do this BubbleUPnP setup each time AAMS gets a new IP address

From the bottom Menu,



select More. The following sub-menu appears.



Select Settings

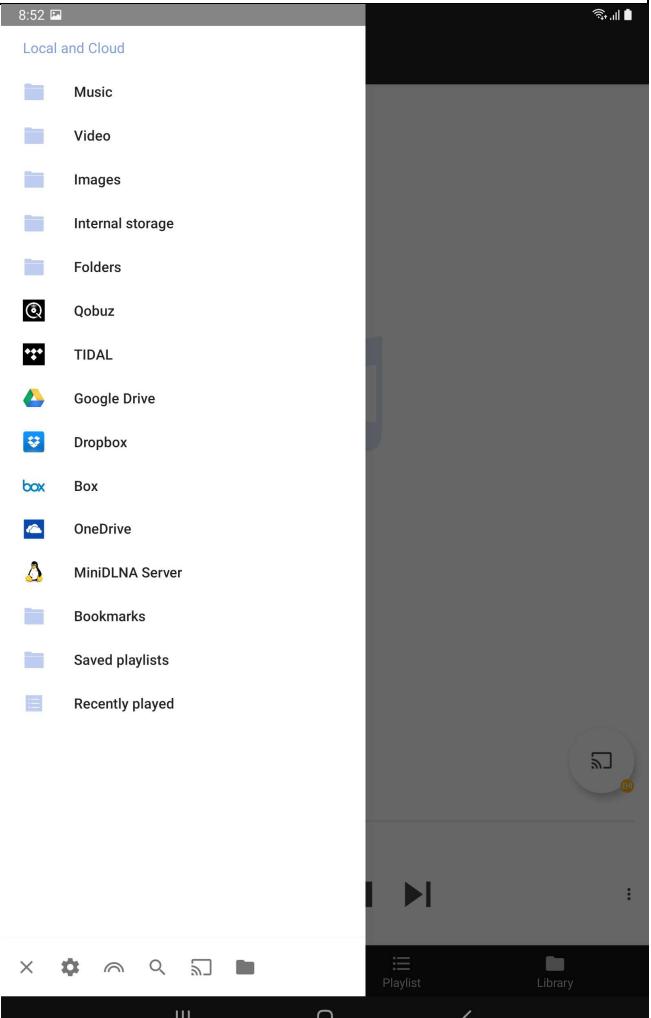


Figure 29 "More" Menu

The Settings Menu has more than 1 screen

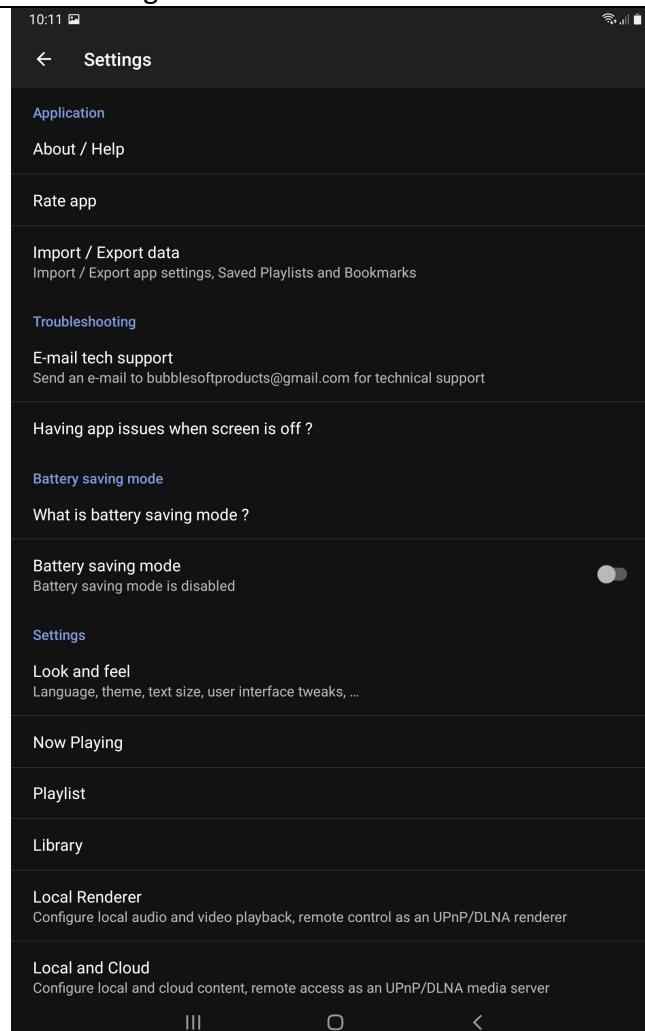


Figure 30 Settings screen

Scroll down until “Renderer settings” is visible

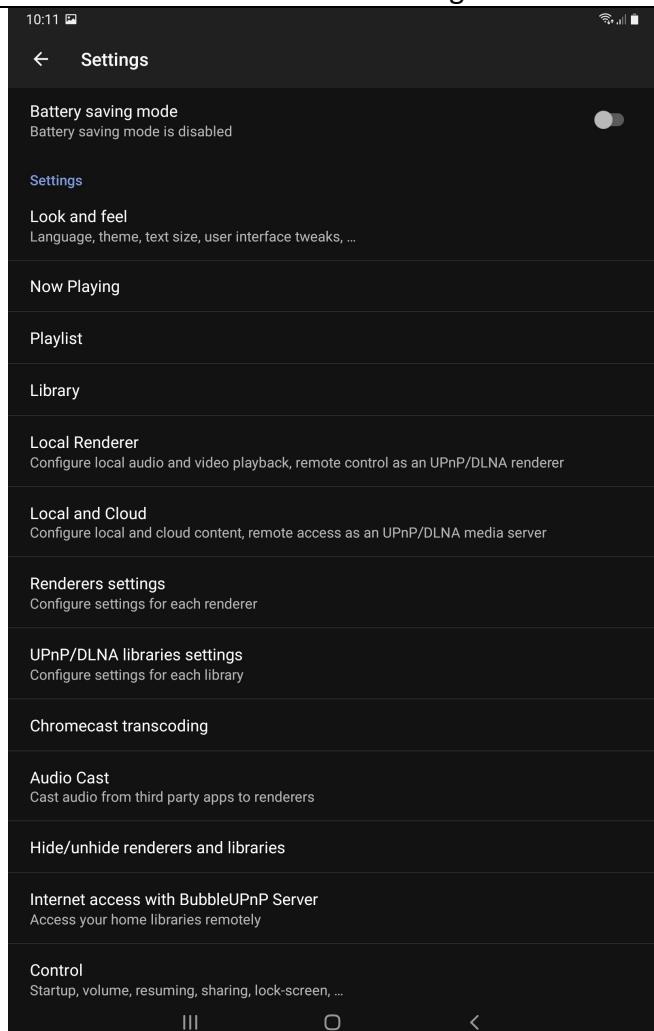


Figure 31 Scroll down Settings until “Renderer settings” visible

Select “Renderer settings” and the following pop-up screen appears. Select JPLAY FEMTO

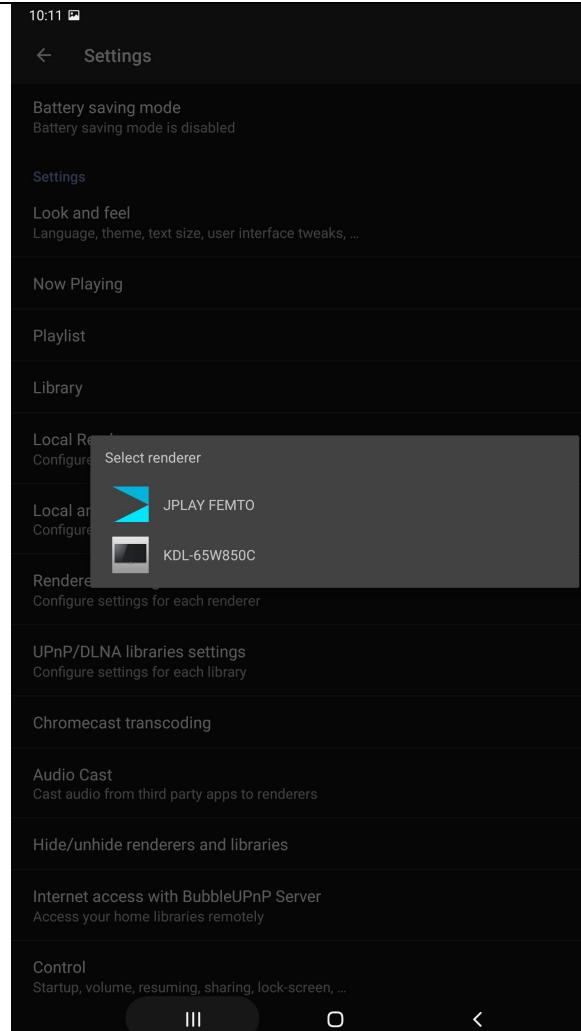


Figure 32 Select JPLAY FEMTO as renderer to change Settings

Select “FFmpeg audio decoding” and select “Never use”. Check “Gapless control”

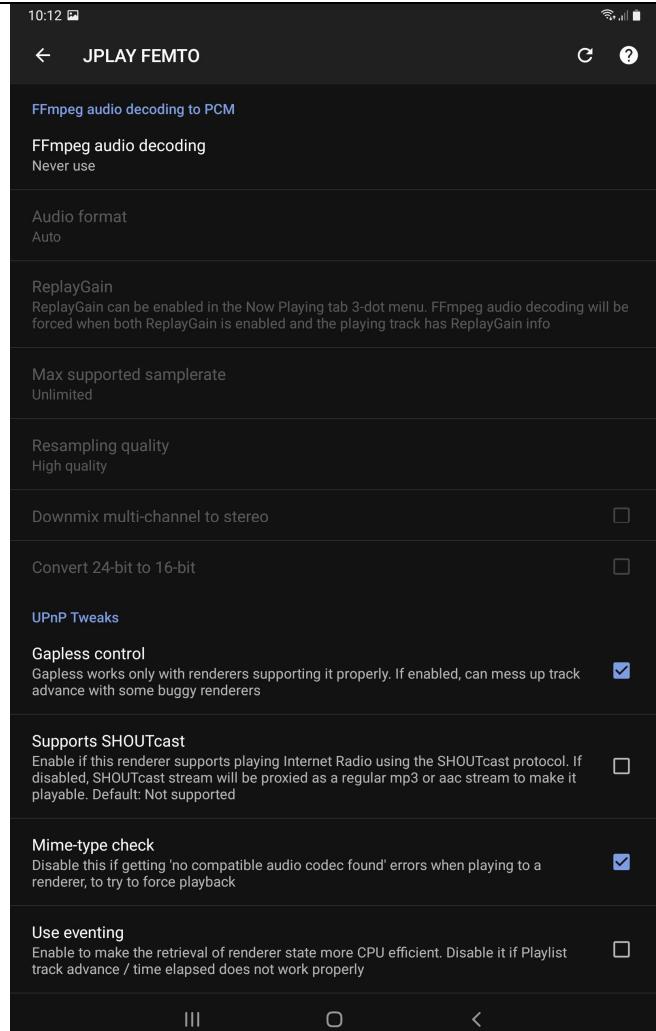


Figure 33 Disable FFMPEG audio decoding inside tablet (select Never Use), then check the box for Gapless control

Hi-Fi Cast Setup

“Hi-Fi Cast” is our preferred UPnP Controller app. The following screenshots show its setup.

After Hi-Fi Cast has been installed and started, the following screen appears. There is no need to cast media from the device to JPLAY, hence can select “Don’t allow”.

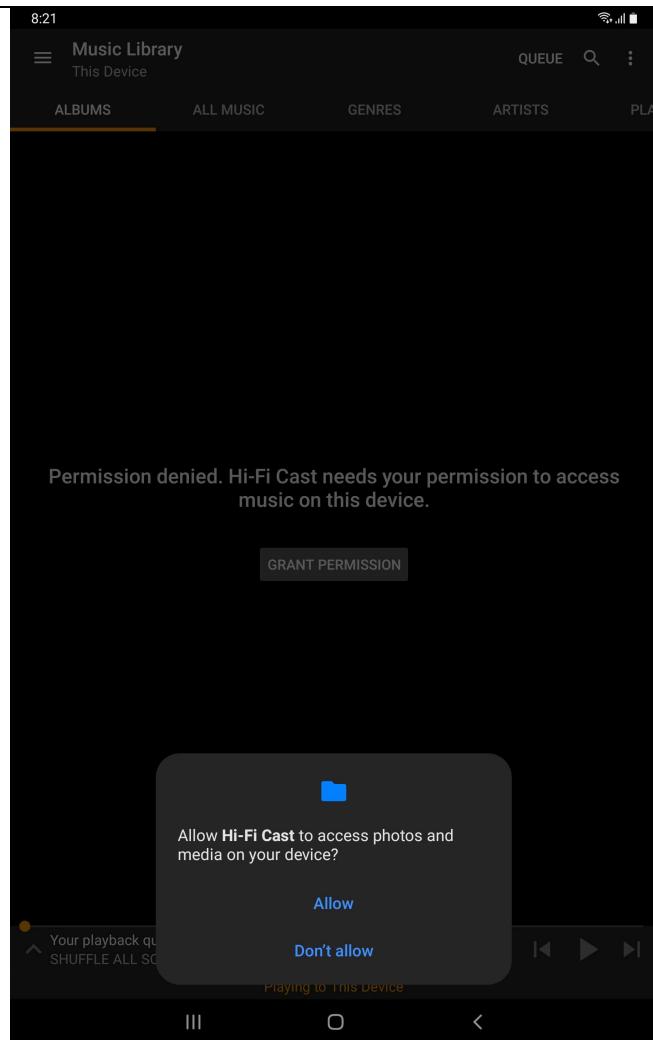


Figure 34 Hi-Fi Cast Startup Screen

The app will remind about the permission. Ignore the screen.

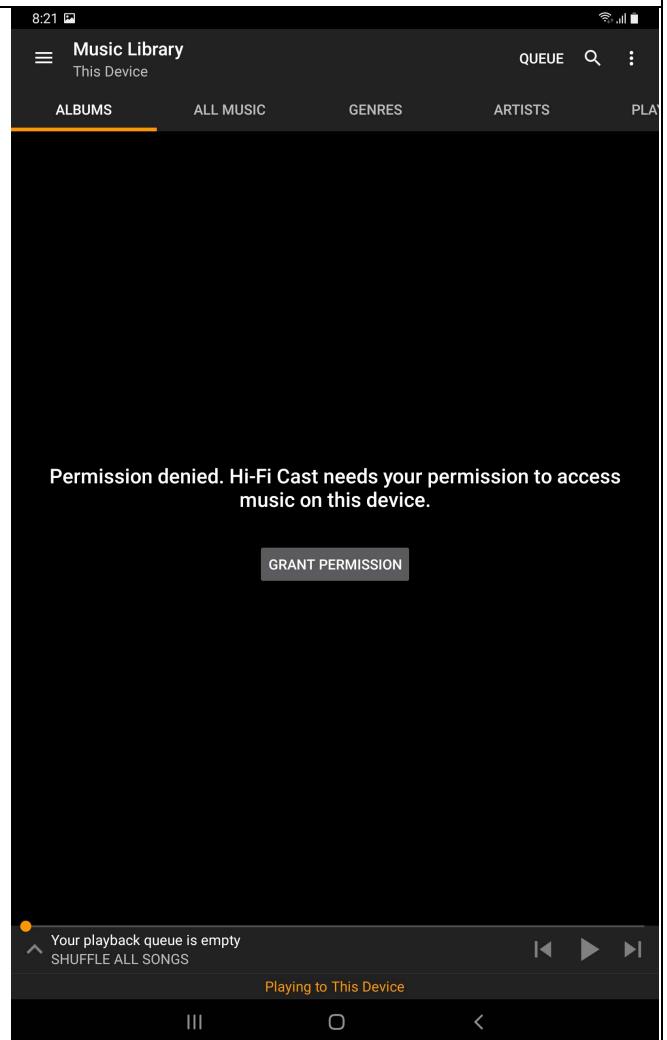


Figure 35 Hi-Fi Cast Reminder on permission

Press the 3 horizontal bars at the top left to invoke the Main Menu, select Music Source

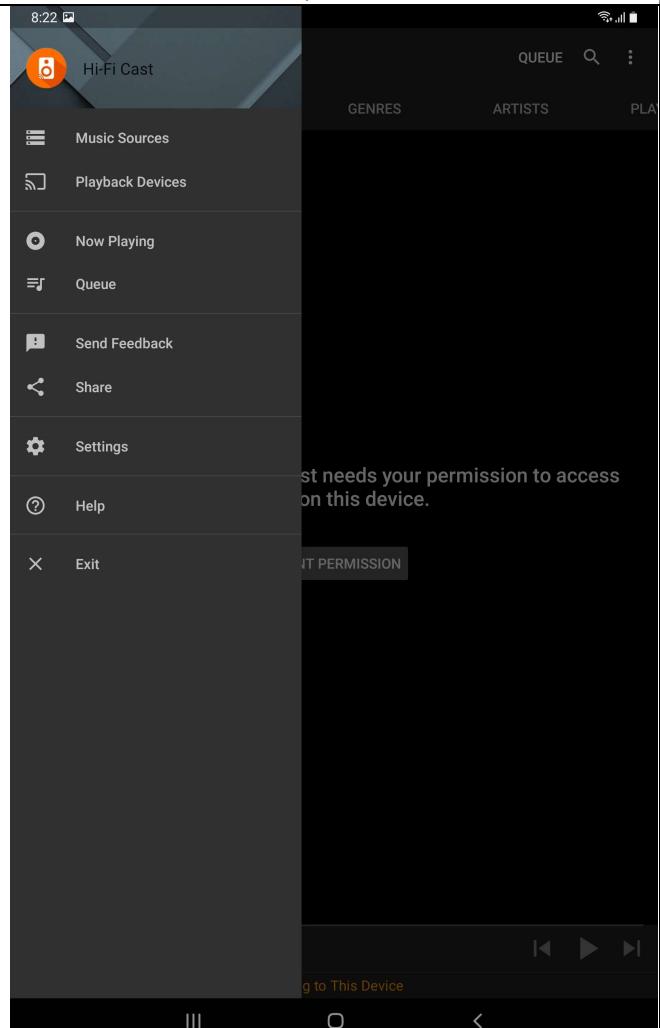


Figure 36 Hi-Fi Cast Main Menu

Under Music Sources, select UPNP/DLNA

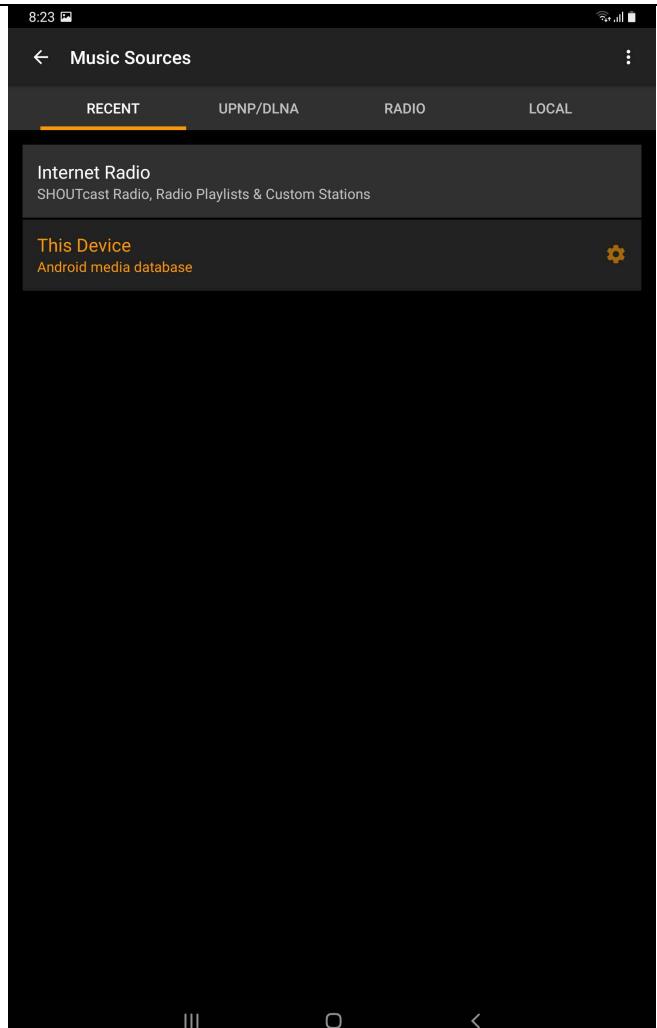


Figure 37 Music Source Selection

Under UPNP/DLNA, select JPLAY femtoServer

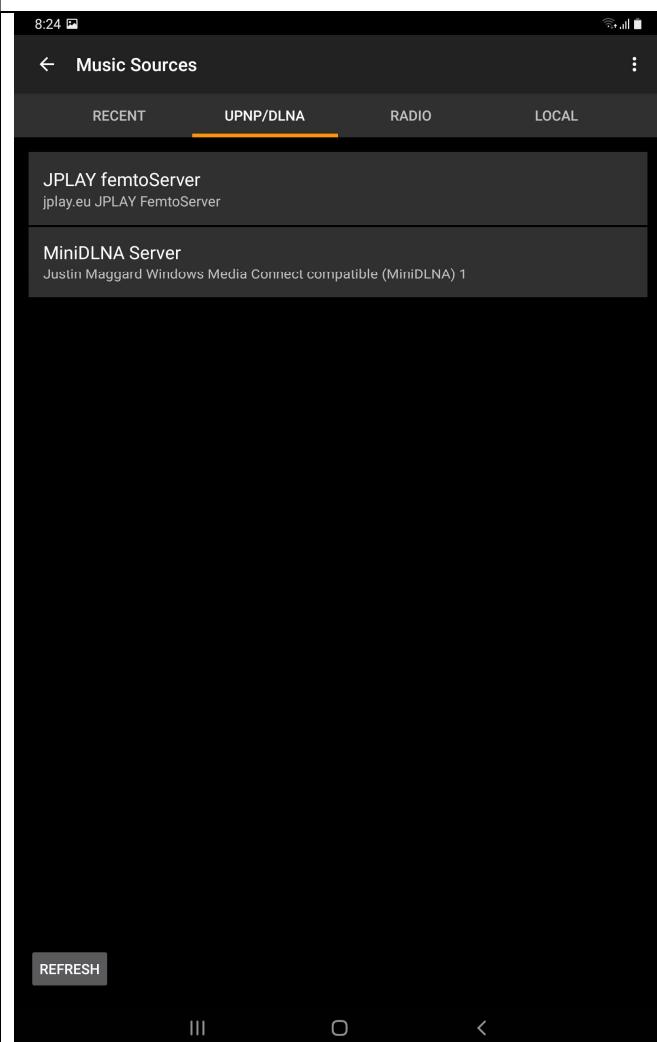


Figure 38 Select UPNP Music Source

The following screen appears.

D:\Music is the default AAMS local music library

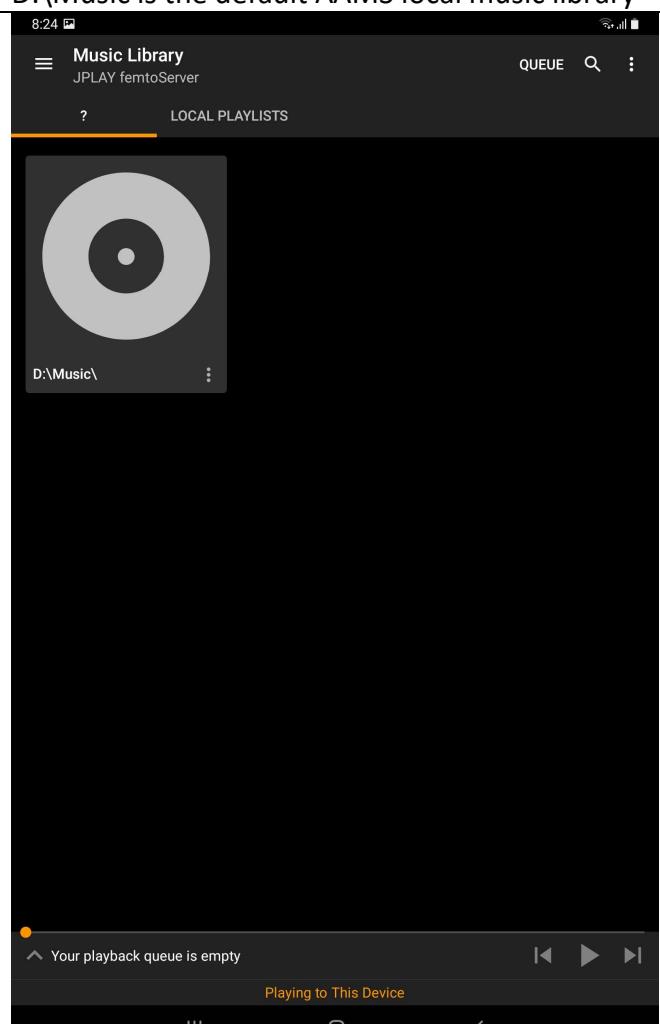


Figure 39 After JPLAY femtoServer Selected

From Main Menu, select “Playback Devices”, then select JPLAY FEMTO

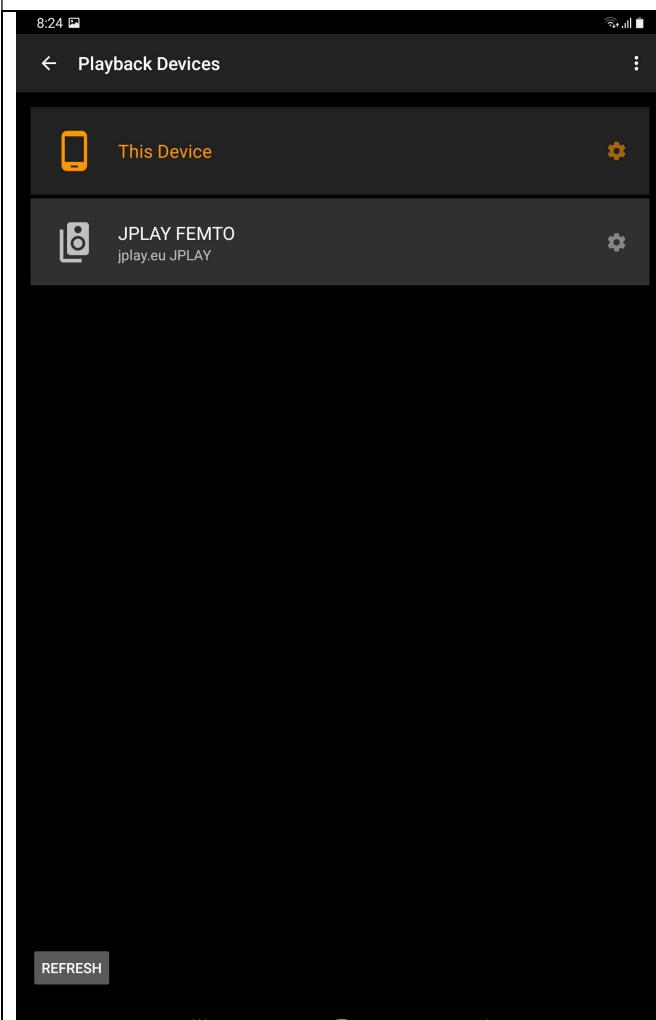


Figure 40 Select Playback Devices

After Music Library and Playback Device selected, the screen appears as below showing Library at the top and Device at the bottom.

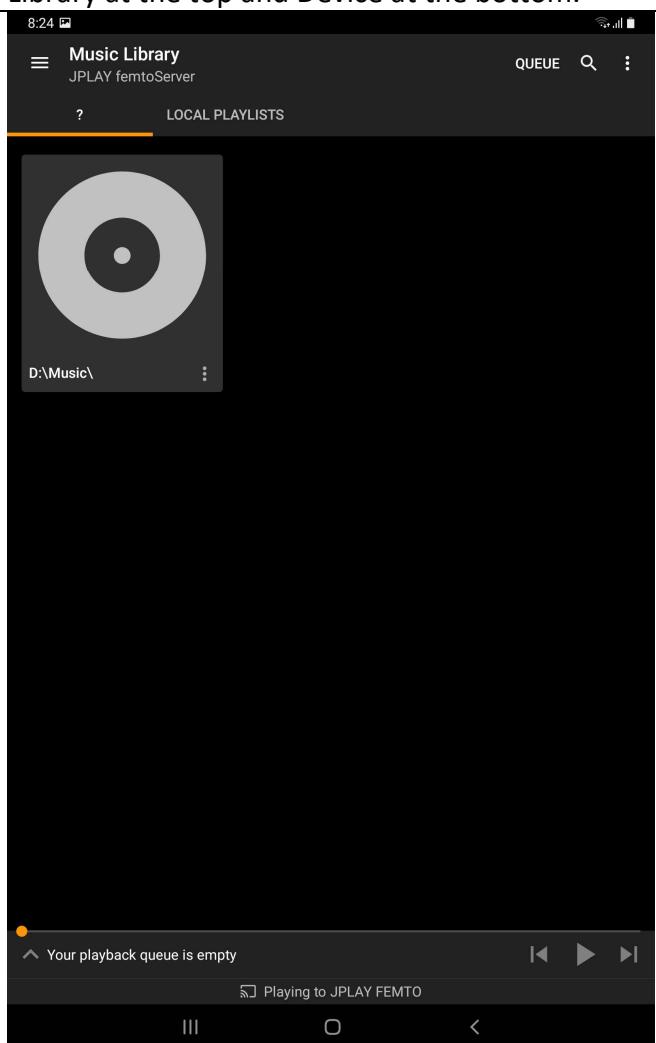


Figure 41 Both Library and Device Selected

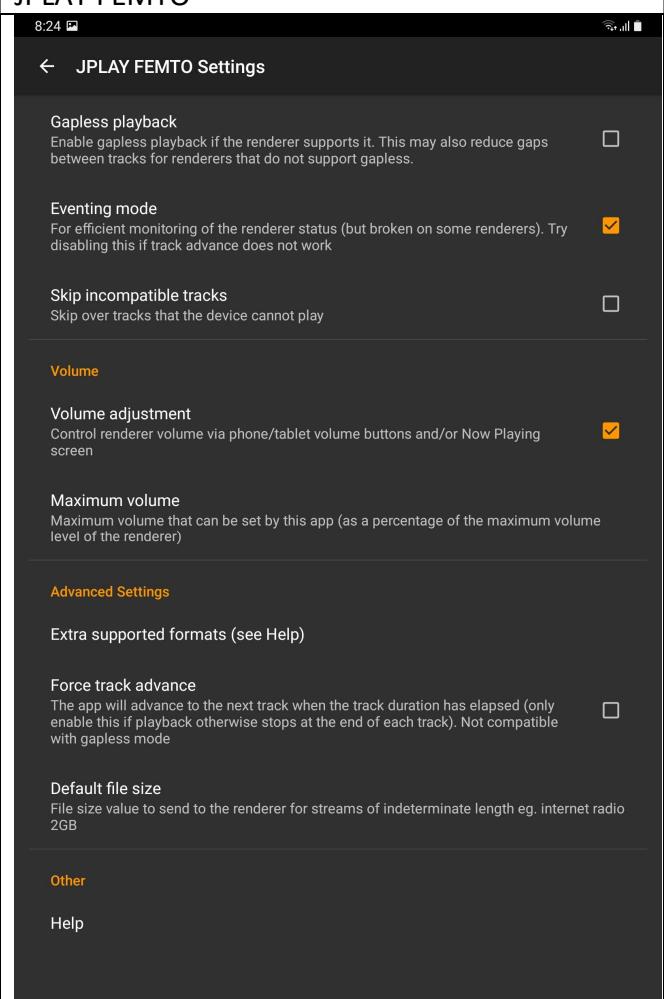
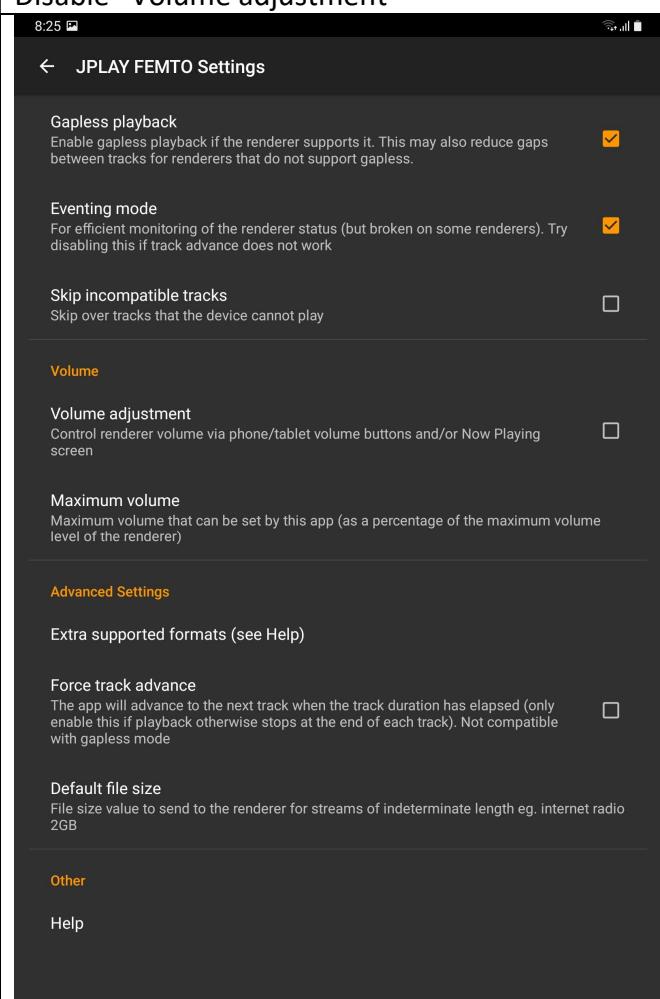
From Playback Devices, hit the Setup button of JPLAY FEMTO	Enable “Gapless playback” Disable “Volume adjustment”
 <p>8:24  </p> <p>← JPLAY FEMTO Settings</p> <p>Gapless playback Enable gapless playback if the renderer supports it. This may also reduce gaps between tracks for renderers that do not support gapless. <input type="checkbox"/></p> <p>Eventing mode For efficient monitoring of the renderer status (but broken on some renderers). Try disabling this if track advance does not work. <input checked="" type="checkbox"/></p> <p>Skip incompatible tracks Skip over tracks that the device cannot play. <input type="checkbox"/></p> <p>Volume</p> <p>Volume adjustment Control renderer volume via phone/tablet volume buttons and/or Now Playing screen. <input checked="" type="checkbox"/></p> <p>Maximum volume Maximum volume that can be set by this app (as a percentage of the maximum volume level of the renderer)</p> <p>Advanced Settings</p> <p>Extra supported formats (see Help)</p> <p>Force track advance The app will advance to the next track when the track duration has elapsed (only enable this if playback otherwise stops at the end of each track). Not compatible with gapless mode. <input type="checkbox"/></p> <p>Default file size File size value to send to the renderer for streams of indeterminate length eg. internet radio 2GB</p> <p>Other</p> <p>Help</p> <p>III  <</p>	 <p>8:25  </p> <p>← JPLAY FEMTO Settings</p> <p>Gapless playback Enable gapless playback if the renderer supports it. This may also reduce gaps between tracks for renderers that do not support gapless. <input checked="" type="checkbox"/></p> <p>Eventing mode For efficient monitoring of the renderer status (but broken on some renderers). Try disabling this if track advance does not work. <input checked="" type="checkbox"/></p> <p>Skip incompatible tracks Skip over tracks that the device cannot play. <input type="checkbox"/></p> <p>Volume</p> <p>Volume adjustment Control renderer volume via phone/tablet volume buttons and/or Now Playing screen. <input type="checkbox"/></p> <p>Maximum volume Maximum volume that can be set by this app (as a percentage of the maximum volume level of the renderer)</p> <p>Advanced Settings</p> <p>Extra supported formats (see Help)</p> <p>Force track advance The app will advance to the next track when the track duration has elapsed (only enable this if playback otherwise stops at the end of each track). Not compatible with gapless mode. <input type="checkbox"/></p> <p>Default file size File size value to send to the renderer for streams of indeterminate length eg. internet radio 2GB</p> <p>Other</p> <p>Help</p> <p>III  <</p>

Figure 42 JPLAY FEMTO Settings

Figure 43 Gapless and Volume Settings

From Main Menu, select Settings, then select Music Library

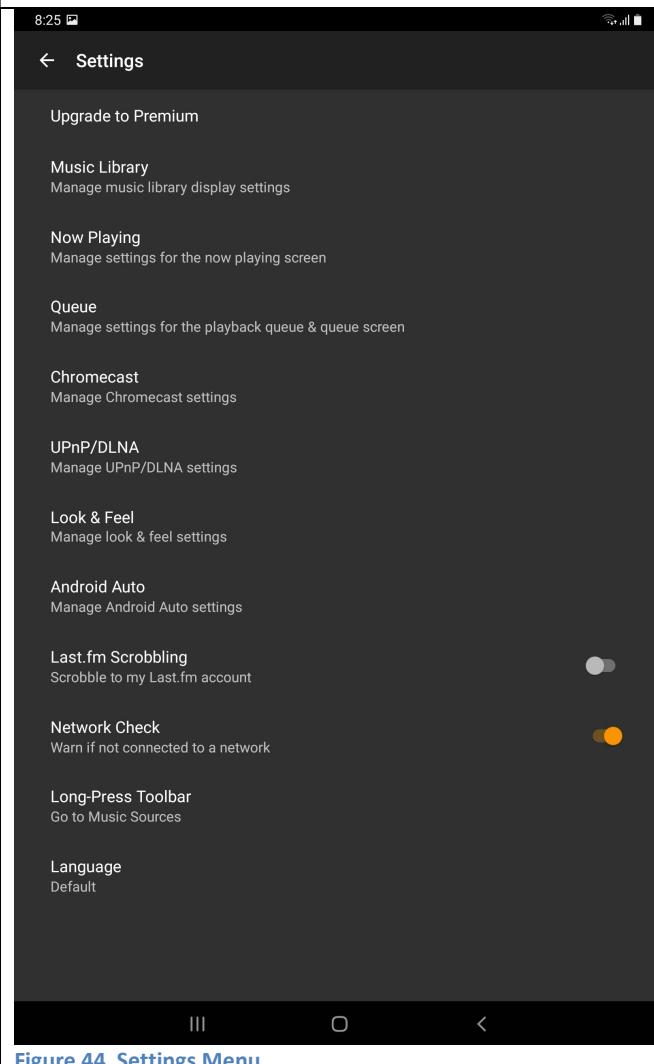


Figure 44 Settings Menu

Under Music Library Display Settings, change “Album view display model” from Grid to List, especially with small phones or tablets

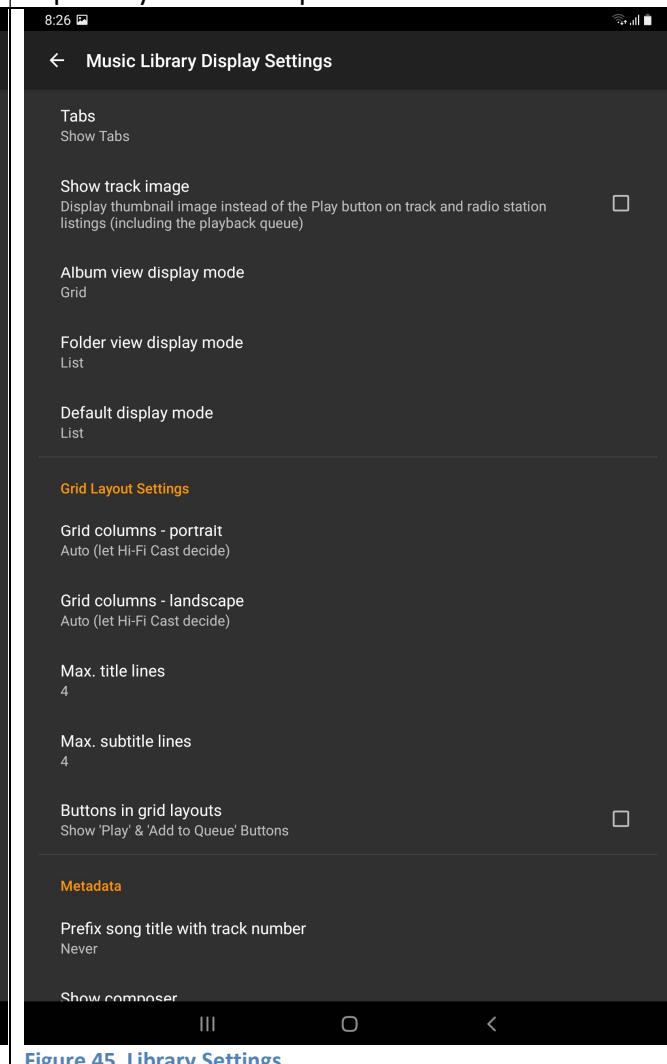


Figure 45 Library Settings

Album view set to “List”

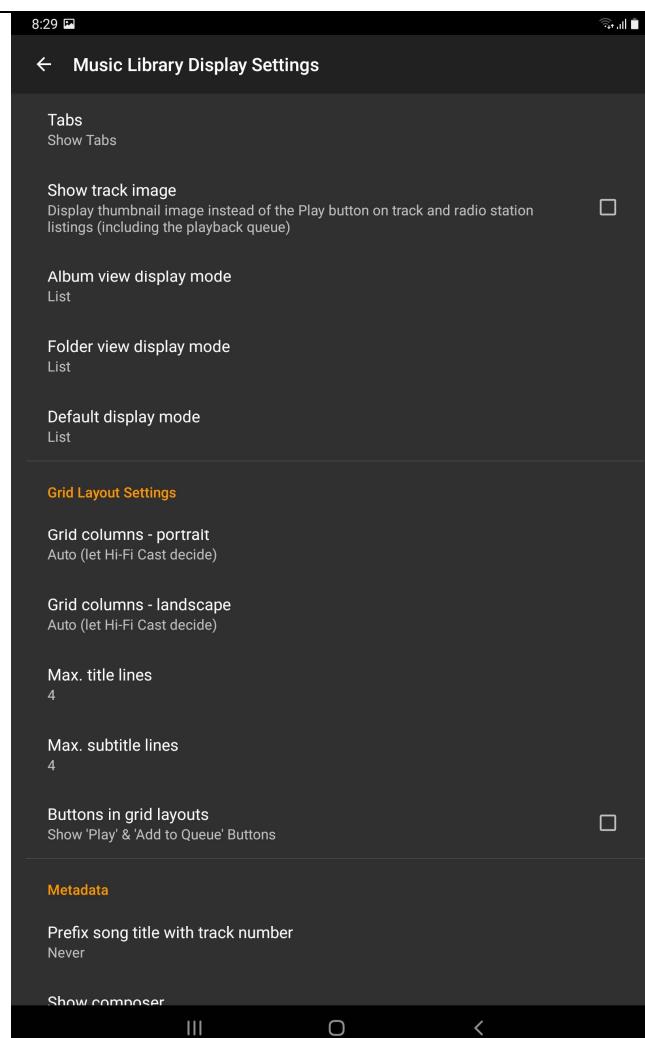


Figure 46 Album view options

From Settings Menu, select “Now Playing”. Ensure the volume control is hidden.

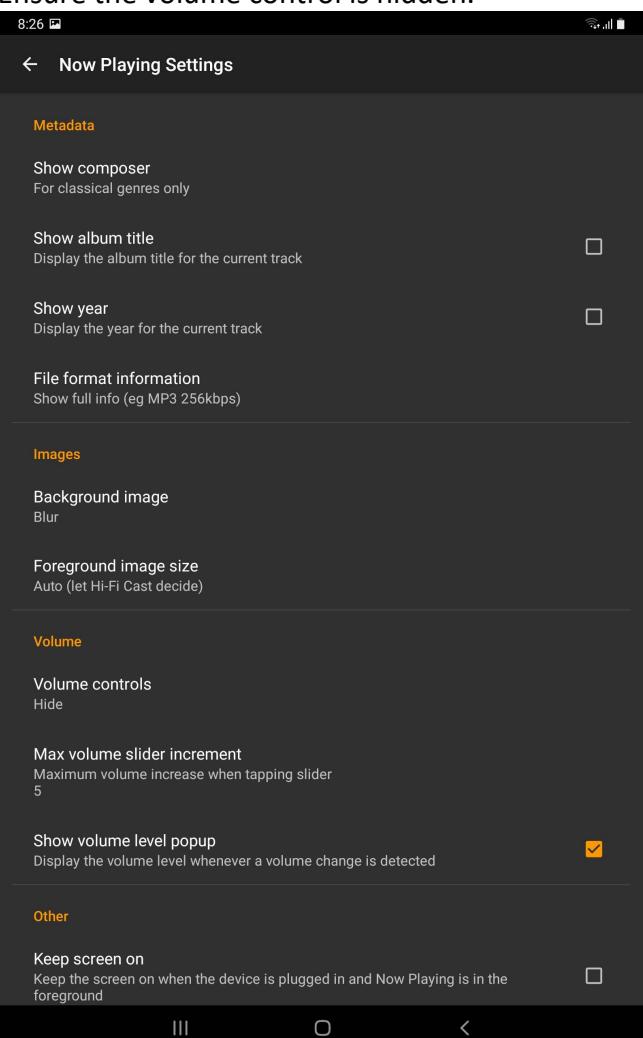


Figure 47 Now Playing Settings

Scroll down and check the following:

- Keep screen on
- Show stop button

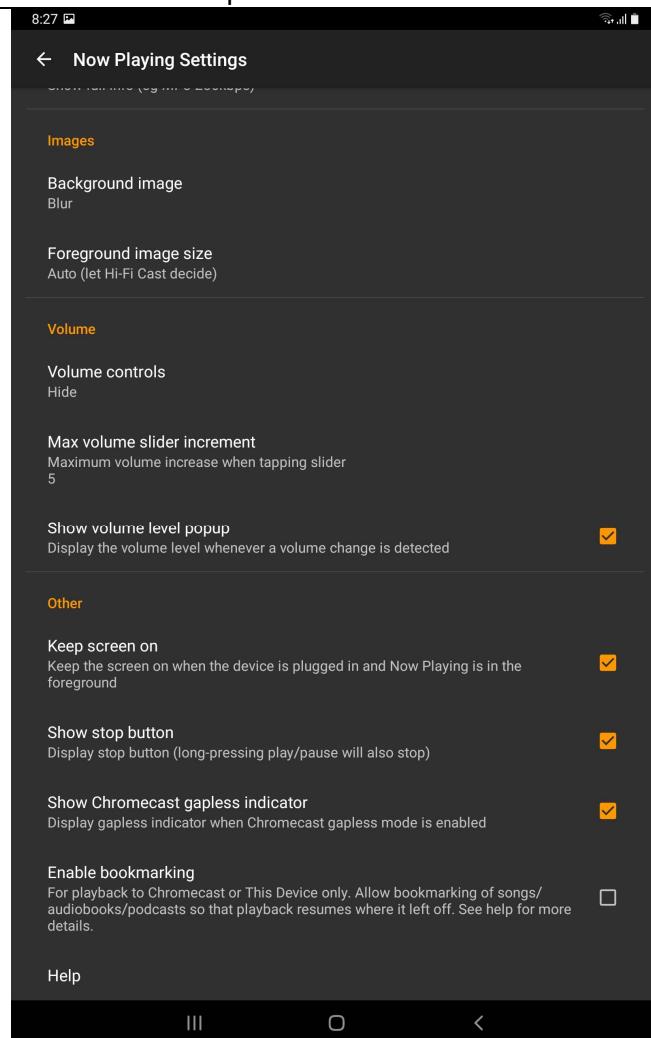


Figure 48 Now Playing Recommended Settings

Under Settings Menu, select “Look & Feel”, uncheck Image Animation buttons to preserve tablet battery

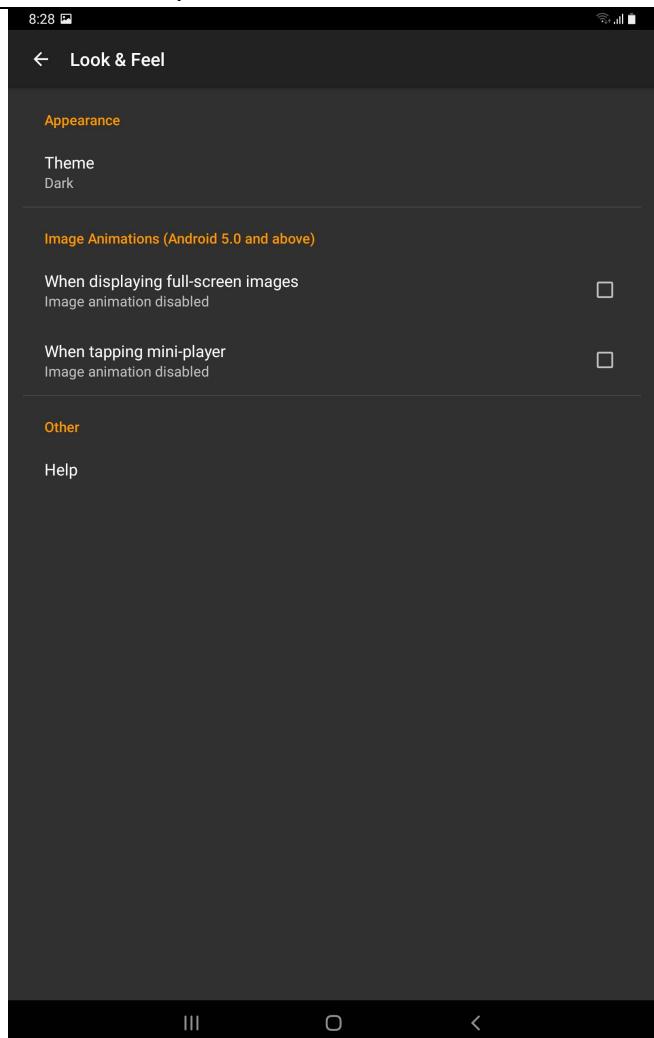


Figure 49 Look & Feel

Exit Settings Menu, and then browse and select the Library folder.

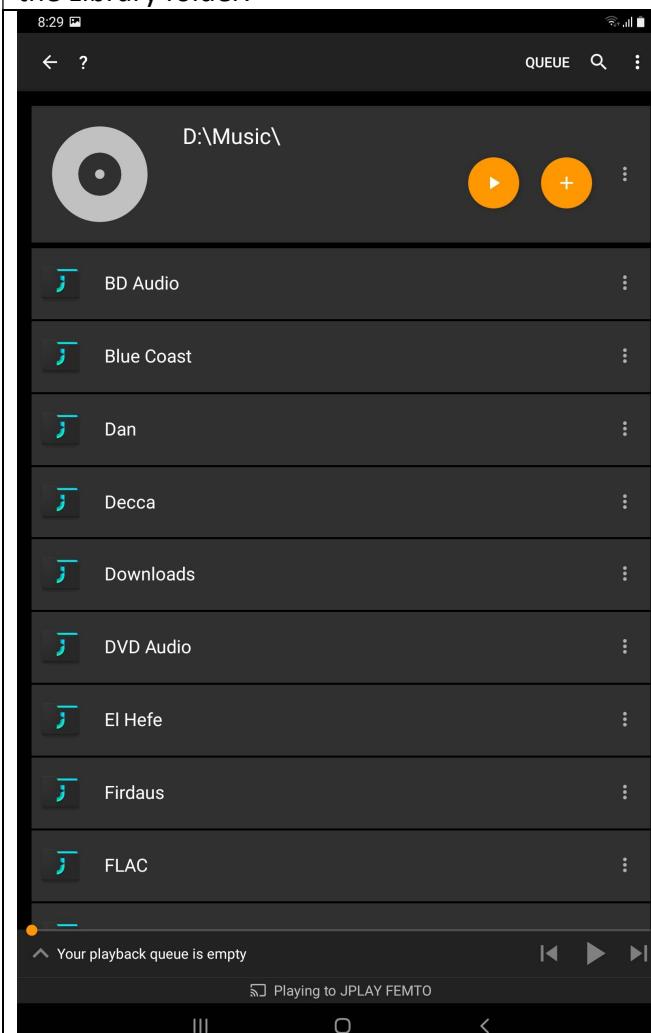


Figure 50 Browsing Library

In the example below, “Imported” folder was selected. All sub-folders are displayed

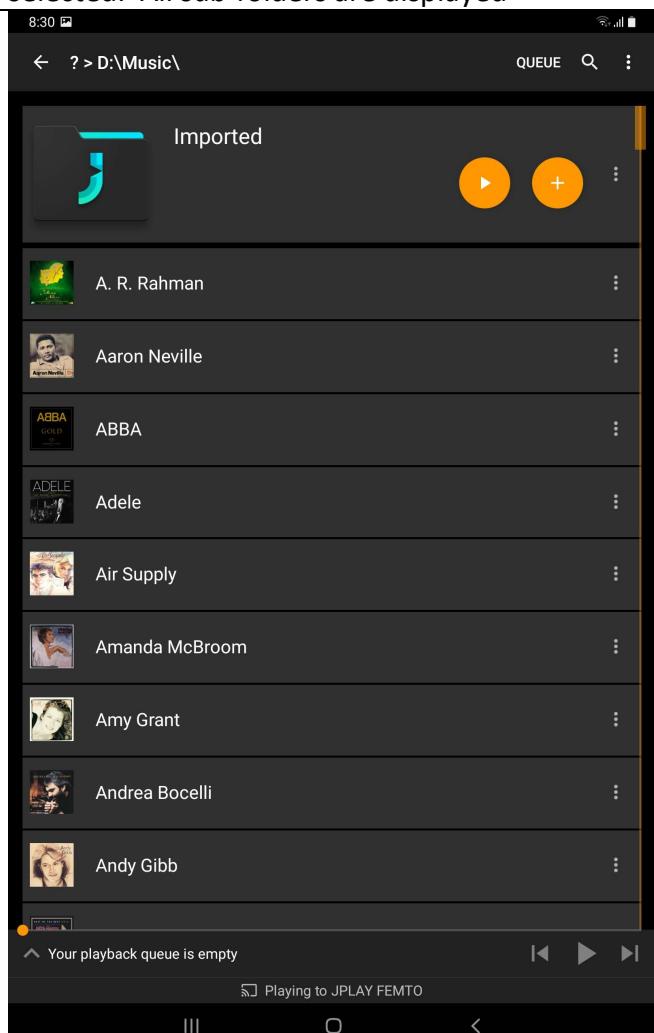


Figure 51 Browsing Sub-folders

Select the Artist

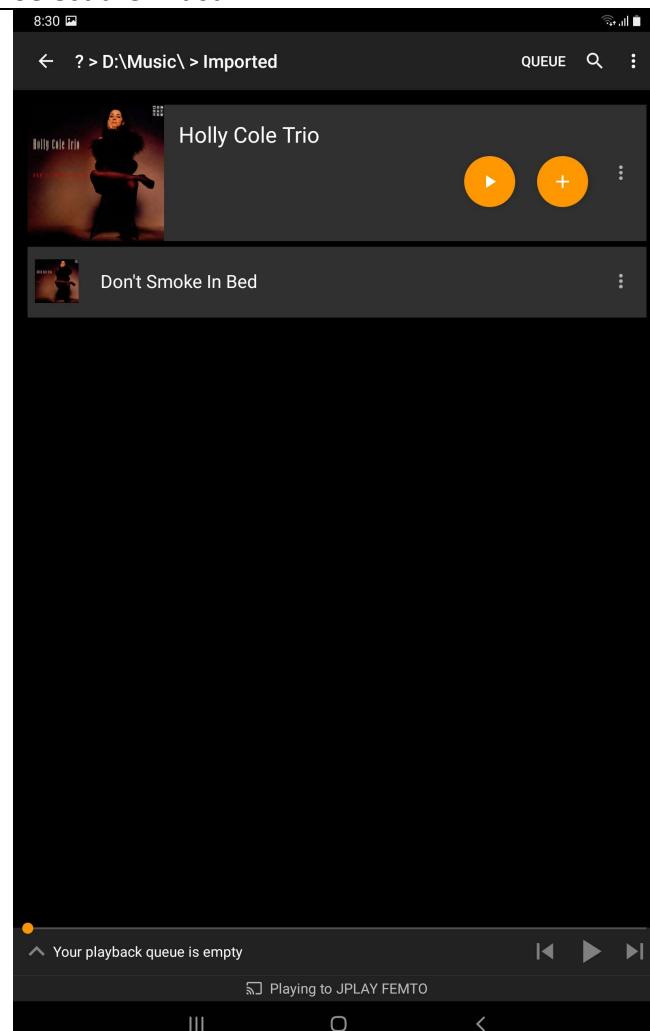


Figure 52 Select Artist and Album

Select the Album, then select which song to play

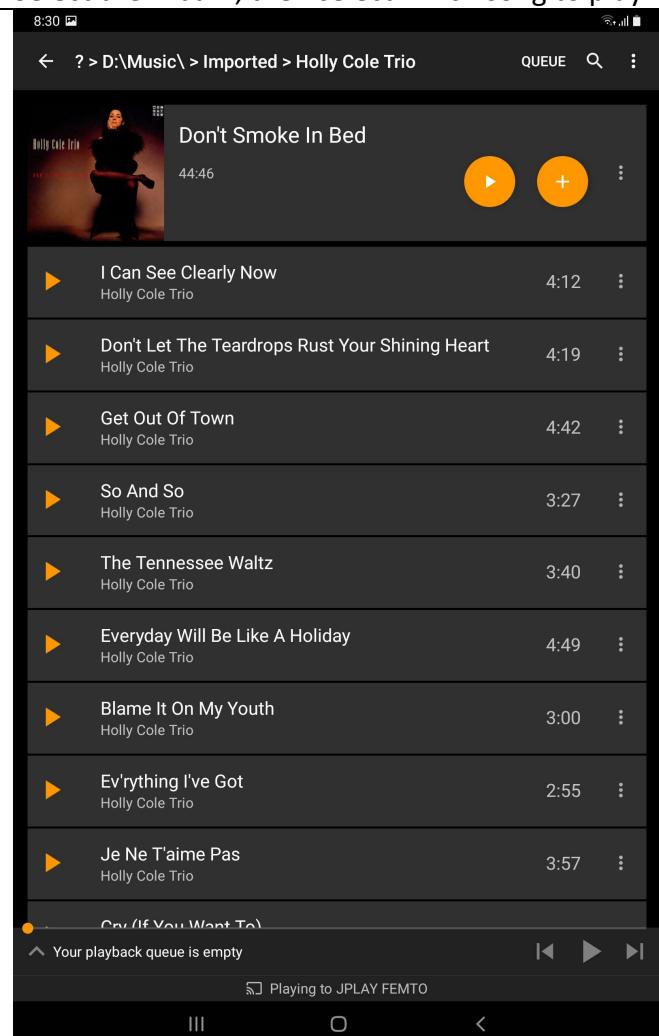


Figure 53 Songs in Selected Artist/Album

In the example below, the first song was selected

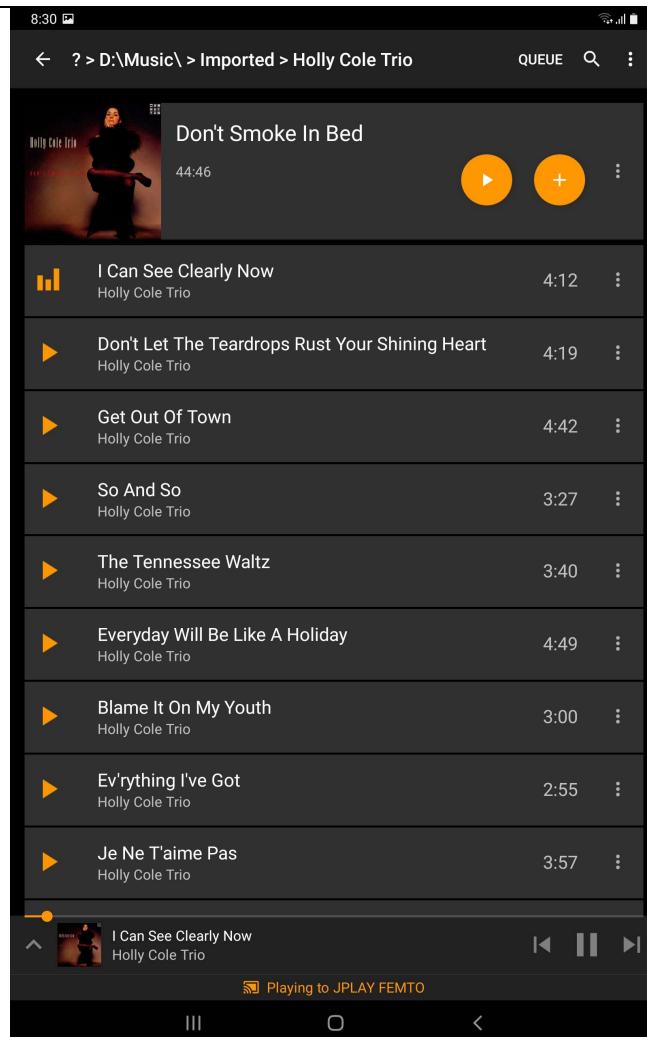


Figure 54 Play has Started

If the bottom (currently playing song) is pressed, Now Playing screen is shown



Figure 55 "Now Playing" screen when playing music

From “Now Playing”, press QUEUE to see the songs to be played

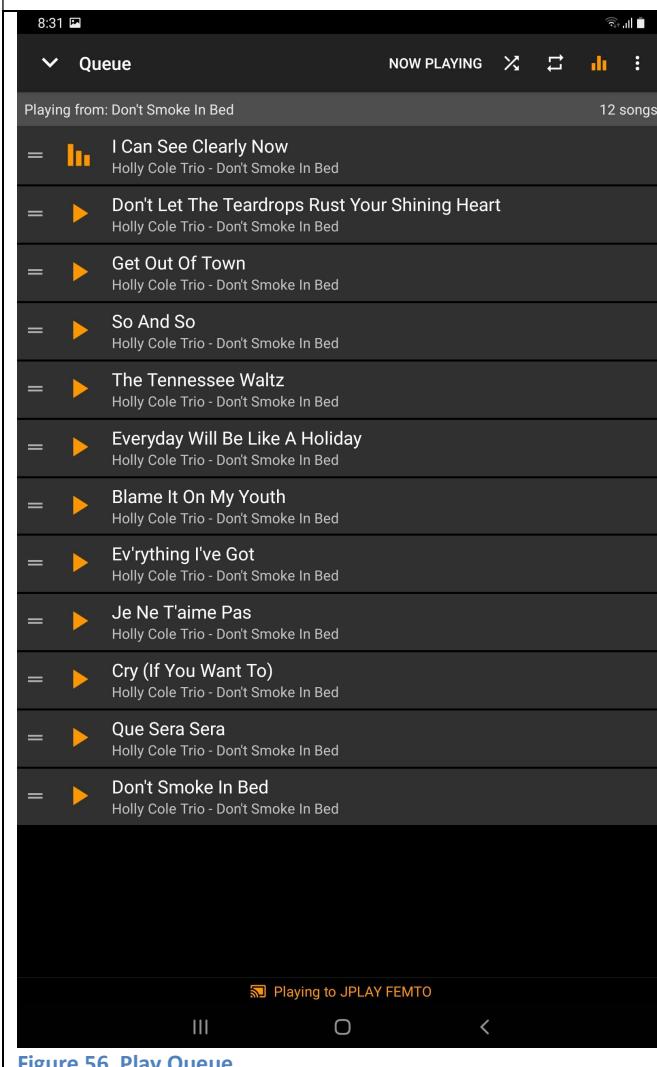
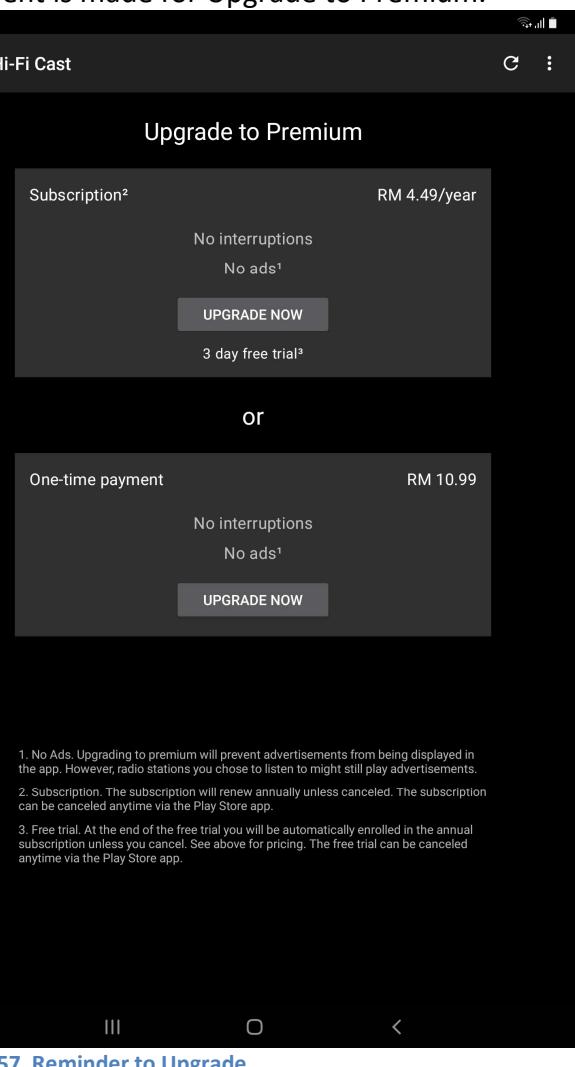


Figure 56 Play Queue

When using the free version of Hi-Fi Cast, the following screen appears occasionally until payment is made for Upgrade to Premium.



1. No Ads. Upgrading to premium will prevent advertisements from being displayed in the app. However, radio stations you chose to listen to might still play advertisements.

2. Subscription. The subscription will renew annually unless canceled. The subscription can be canceled anytime via the Play Store app.

3. Free trial. At the end of the free trial you will be automatically enrolled in the annual subscription unless you cancel. See above for pricing. The free trial can be canceled anytime via the Play Store app.

Figure 57 Reminder to Upgrade

Troubleshooting

If the album artwork does not work properly, please do the following:

- Clear Playlist from BubbleUPnP, then quit.
- Launch RD Client and connect to AAMUSICSERVER. Run the batch file “ResetJPLAY” which is visible on the desktop. Disconnect RD Client.
- Launch BubbleUPnP.

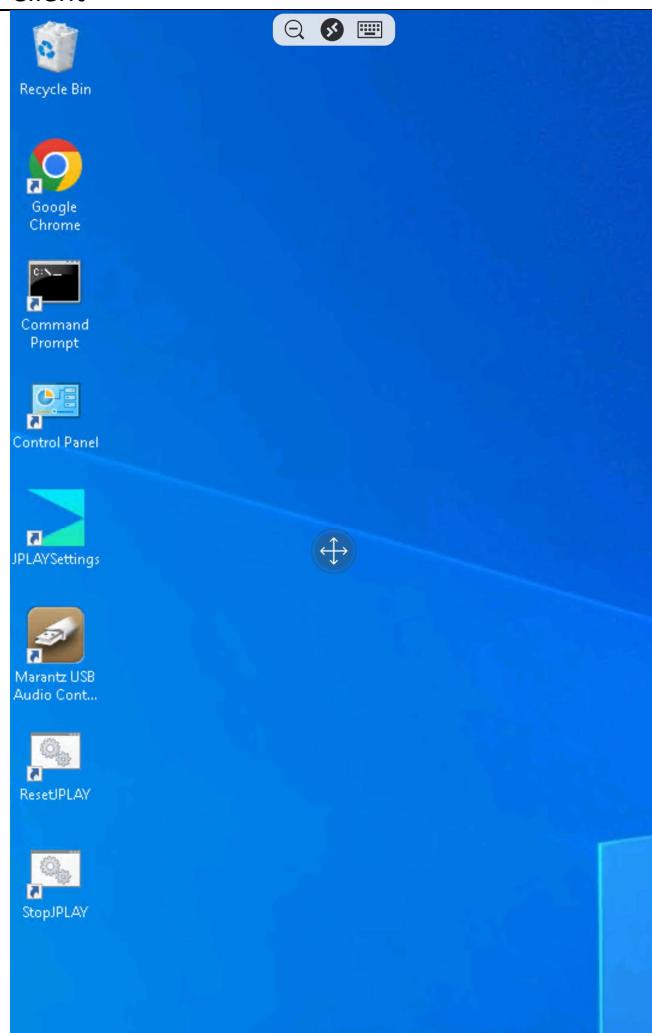
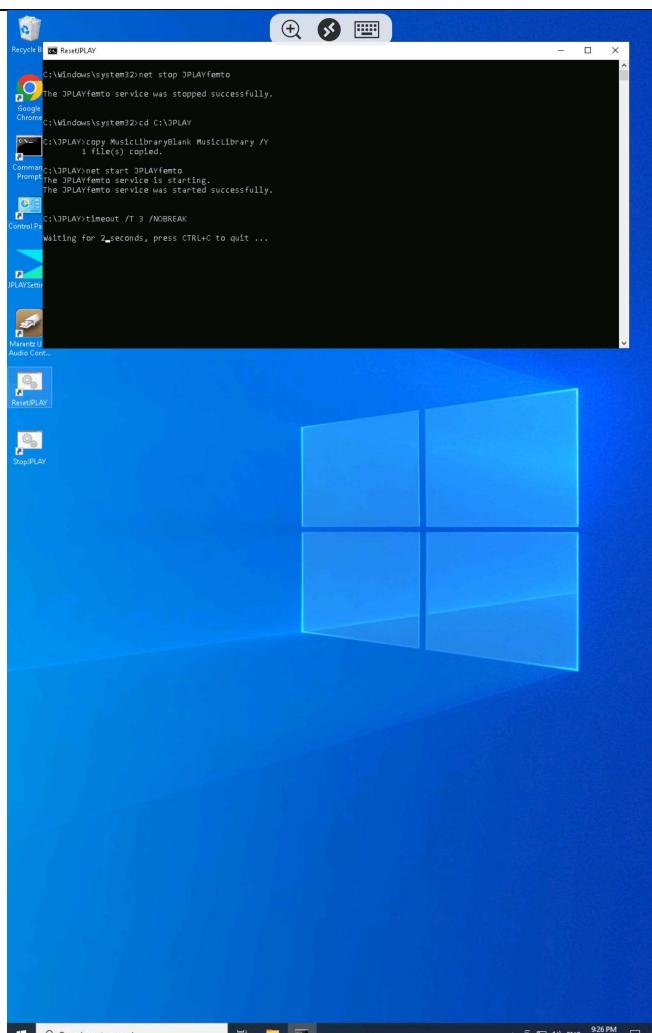
Zoomed-in view of Windows from tablet via RD Client	Launch “ResetJPLAY” batch file from desktop
	 <pre>C:\Windows\system32>net stop JPLAYfento The JPLAYfento service was stopped successfully. C:\Windows\system32>cd C:\JPLAY C:\JPLAY>copy MusicLibrary\Blank MusicLibrary /Y 1 file(s) copied. C:\JPLAY>start JPLAYfento The JPLAYfento service is starting. The JPLAYfento service was started successfully. C:\JPLAY>timeout /t 3 /NOBREAK Waiting for 2 seconds, press CTRL+C to quit ... JPLAYSettings Marantz Audio Control ResetJPLAY StopJPLAY</pre>

Figure 58 Windows zoomed-in view

Figure 59 ResetJPLAY will stop JPLAY service, reset the artwork cache, then restarts JPLAY service

If the USB DAC is not recognized by AAMS, ensure the DAC is powered on and its USB input selected. If still not recognized, disconnect and reconnect the USB Audio cable.