



DACS, STREAMING AND  
PLAY BACK OF AUDIO FILES


What do we define as File Based Audio:

Streaming

'live' download for Internet radio and Music services like Spotify and playing music over a network from NAS or PC

Play back of Audio files

Playing music files directly from laptop or PC over a USB-B connection  
This means using programs like iTunes (Amara) and JRIVER as user interface

	<b>I22 DAC</b>	<b>DAC30</b>	<b>I32mm30</b>	<b>PRE32mm30</b>	<b>NP30</b>	<b>PRE60</b>	<b>Note</b>
							
DAC version	BB-PCM1792	Crystal DSD	BB-PCM1792	BB-PCM1792	BB-PCM1792	Crystal DSD	
24/192	yes	yes	yes	yes	yes	yes	1.
Network player	no	no	yes	yes	yes	yes	2.
Primare App	no	no	yes	yes	yes	yes	3.
LAN	no	no	yes	yes	yes	yes	4.
WLAN	no	no	yes	yes	yes	yes	5.
USB-A	no	no	yes	yes	yes	yes	
USB-B asynchronous	isochronous	asynchronous	asynchronous	asynchronous	asynchronous	asynchronous	6.
	with TAS1020B						
	streaming chip						
Optical input	yes	yes	yes	yes	yes	yes	
Spdif input	yes	yes	yes	yes	yes	yes	
AES / EBU input	no	yes	no	no	no	no	
Volume control	yes	no	yes	yes	yes	yes	
Internetradio	from computer	from computer	from network	from network	from network	from network	7.
Spotify	from computer	from computer	using Music Flow app	using Music Flow app	using Music Flow app	using Music Flow app	8.
			or over USB-B	or over USB-B	or over USB-B	or over USB-B	9.
Gapless playback	yes	yes	yes	yes	yes	yes	
RCA output	yes	yes	yes	yes	yes	yes	
XLR output	no	yes	no	yes	yes	yes	
Digital output RCA	no	yes	yes	yes	yes	yes	
Firmware updates	RS232	RS232	MENU or Primare App	MENU or Primare App	MENU or Primare App	MENU or Primare App	10.

## NOTES from the comparison chart:

1. Please check streaming supported audio formats here....
2. For High Res streaming we recommend:
  1. Use of a high quality wireless router
  2. Use of high quality CAT7 Cables
  3. Use of a switch between the Primare MM30, NP30 or PRE60 and computer or NAS
  4. Use of good quality files such as WAV, AIFF or Flac-uncompressed
3. Primare App is available for both iOS and Android. (iOS version supports Voice Over for visually impaired people)
4. For High Res streaming LAN is needed.
5. WLAN: 802.11b, g, n; 2.4 GHz band; WPA, WPA2 security – Ethernet: 10/100 MBit/s – DHCP and AutoIP support
6. Advantage of an asynchronous USB connection is that the clock, present in the DAC, controls the flow of audio data from the computer to avoid the un precise clock used in the computer.  
Please use a high quality USB-B cable for connection and make sure to check your audio settings in your computer  
Also try the different USB connections on your laptop as they do sound different.  
Please make sure to download the PC audio driver from the SUPPORT section on our website
7. For playing music from PC over USB-B please download the Primare PCaudio driver from the SUPPORT page from [www.primare.net](http://www.primare.net) .  
From MAC it will play automatically.
8. How you can use Spotify with Primare:  
[http://www.primare.net/assets/managed/products/files/SpotifywithPrimare\\_1.pdf](http://www.primare.net/assets/managed/products/files/SpotifywithPrimare_1.pdf)
9. Over USB-B will give best sound quality from Spotify PREMIUM. (please audio setting in Spotify on Extreme)
10. Firmware updates can be done from the device's MENU or from Primare App.

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## SUPPORTED STREAMING AUDIO FORMATS

Codec	Channels	Samplerrates in kHz	Sample format	Bitrate	Gapless	Restrictions
WAV	mono, stereo	8, 11.025, 16, 22.05, 32, 44.1, 48, 88.2, 96, 176.4, 192	Int: 8, 16, 24 Float: 32	n.a.	yes	samplerate > 48kHz not on WLAN
LPCM	mono, stereo	8, 11.025, 16, 22.05, 32, 44.1, 48, 88.2, 96, 176.4, 192	Int: 8, 16, 24	n.a.	yes	samplerate > 48kHz not on WLAN
AIFF	mono, stereo	8, 11.025, 16, 22.05, 32, 44.1, 48, 88.2, 96, 176.4, 192	Int: 8, 16, 24 Float: 32	n.a.	yes	samplerate > 48kHz not on WLAN
FLAC	mono, stereo	8, 11.025, 16, 22.05, 32, 44.1, 48, 88.2, 96, 176.4, 192	16/24	n.a.	yes	samplerate > 48kHz not on WLAN
ALAC	mono, stereo	44.1, 48, 88.2, 96	16/24	n.a.	yes	
MP3	mono, stereo	8, 11.025, 16, 22.05, 32, 44.1, 48	n.a.	max 320kBit/s CBR/VBR	yes	gapless support needs LAME extensions in file header
MP4 (AAC)	mono, stereo	8, 11.025, 16, 22.05, 32, 44.1, 48	n.a.	max 400kBit/s CBR/VBR	yes	gapless support needs iTunes extensions in file header
OGG Vorbis	mono, stereo	16, 22.05, 32, 44.1, 48	n.a.	max 500kBit/s CBR/VBR	no	
WMA	mono, stereo	8, 11.025, 16, 22.05, 32, 44.1, 48	n.a.	max 320kBit/s CBR/VBR	no	WMA9 only, no lossless or professional codec



There are two ways to play Spotify with your MM30 / NP30 / PRE60.  
A good sounding one and a convenient one. In general we recommend a Premium account for superior sound compared to a free subscription.

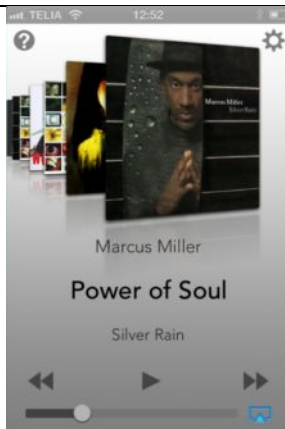
#### Good sounding

1. Connect your PC or laptop directly with a good quality cable to the MM30 or NP30 using the USB-B connection.
2. Install the app called \*REMOTELESS\* for Spotify and you have the same UI as if you would use on your PC or laptop.
3. Make sure to install REMOTELESS-helper on your PC or laptop.



#### Convenient over WiFi (iOS only)

1. Install the app called \*MUSICFLOW\* on your iOS device.
  2. Select your Primare unit in the MusicFlow using BLUE button.
- Leave the MusicFlow app and go to the Spotify app and start playing.





For the Internet Radio function of the Primare App we do use vTuner. In this document we explain how you will be able to make your own Internet Radio Favorites list which will automatically appear in the Primare App, and how you can add stations which are not listed on vTuner.

1. Open Primare App
2. Go to Source
3. Go to Internet Radio
4. Go to GET ACCESS CODE and please write down the code
5. Open this link <http://primare.vtuner.com/setupapp/primare/asp/authlogin/RegForm.asp?ngy=eng>
6. Please activate your account
7. You are now able to select your own Favorites
8. You can make multiple Favorites Folders (and you can make your own aliases).
9. If you have found a station that is not in the list, you can add it yourself. Please see point 10.
10. Enter the information for the station you would like to add. The station will be immediately added as one of your favorites

Station name	
Station URL	For example, <a href="http://62.168.116:8000/dsp1">http://62.168.116:8000/dsp1</a>
Location	For example, Germany, USA
Genre	For example, Classical, Dance, Rock
Type	MP3, Windows Media

11. In Primare App there will automatically be a **\*My Favorites\*** list