Products Comparison

	X12	X14	X30	X35	X40	X45	X45Pro	X50/X50D	N15/N15D
Production Status	No more production	now production	No more production	now production	No more production	now production	now production	No more production	Now production
Basic Concept	All-in-One with compact size CD Ripper, Music Server and Streamer	All-in-One with compact size Music Server and Streamer CD Ripper (Optional)	All-in-One with full size CD Ripper, Music Server and Streamer	All-in-One with full size CD Ripper, Music Server and Streamer	World-Class Hi-Res Music Server, D/A Converter, CD Ripper and Streamer	World-Class Hi-Res Music Server, D/A Converter, CD Ripper and Streamer	Flagship Music Server with most advanced DAC chip for Audiophiles	Pure Digital Music Server, CD Ripper and Streamer	USB D/A Converter, Music Storage, Streamer, HiFi Network node for existing Amplifier or DAC
CPU & Memory	MIPS500Mhz Main Memory(2Gbit, DDR2 667Mhz) Firmware Memory(2Gbit)	Dual Core ARM Cortex A9, 1.0Ghz Main Memory(1Gbyte, DDR2 1066Mhz) NAND Flash 8GByte	MIPS700Mhz Main Memory(4Gbit, DDR2 800Mhz) Firmware Memory(4Gbit)	Dual Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte	MIPS700Mhz Main Memory(4Gbit, DDR2 800Mhz) Firmware Memory(4Gbit)	Dual Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte	Quad Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte	Dual Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte	Dual Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte
Ripping Function	Yes	Yes, but you need to prepare an USB Optical Disk Drive separately	Yes	Yes	Yes	Yes	Yes	Yes	No
CD Drive Supported Media	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	Yes Optional(external USB ODD)	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	No
CD Metadata	Gracenote with SEURO for one year and Freedb with free	Gracenote(two years free/ SEURO for additional one year) Freedb with free	Gracenote with SEURO for one year and Freedb with free	Gracenote(two years free/ SEURO for additional one year) Freedb with free	Gracenote with SEURO for one year and Freedb with free	Gracenote(two years free/ SEURO for additional one year) Freedb with free	Gracenote(two years free/ SEURO for additional one year) Freedb with free	Gracenote(two years free/ SEURO for additional one year) Freedb with free	No
Album Cover art	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	No
Display on the front	4.3 inch Full Color TFT LCD (480 X 272 pixels)	5 inch Full Color TFT LCD (800 X 480 pixels)	5 inch Full Color TFT LCD (800 X 480 pixels)	7 inch Full Color TFT LCD (1024 X 600 pixels)	5 inch Full Color TFT LCD (800 X 480 pixels)	7 inch Full Color TFT LCD (1024 X 600 pixels)	7 inch Full Color TFT LCD (1024 X 600 pixels)	7 inch Full Color TFT LCD (1024 X 600 pixels)	No
Interface	Remote Control GUI with 4.3 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control GUI with 5 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control GUI with 5 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control GUI with 7 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control GUI with 5 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control GUI with 7 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control GUI with 7 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control GUI with 7 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices
Supported Sample Rate	PCM 24bit/192Khz DXD 24bit/352.8Khz	PCM 24bit/192Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) MQA	PCM 24bit/192Khz DXD 24bit/352.8Khz	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) MQA	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz)	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) MQA	PCM 32bit/384Khz up to PCM 32bit/768Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) MQA	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) MQA	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) MQA
DA Converter	Cirrus Logic CS4351 up to 24bit/192Khz	Cirrus Logic CS4350 up to 24bit/192Khz	Burr-Brown PCM1792A up to 24bit/192Khz	ESS ES9018K2M. Sabre^{32} up to 32bit/384Khz	ESS ES9018K2M. Sabre^{32} up to 32bit/384Khz	Dual ESS ES9018K2M. Sabre^{32} DAC for left and right up to 32bit/384Khz	SABRE PRO Flagship ES9028PRO DAC chip supporting up to PCM 768Khz/32Bit	No	ESS ES9018K2M. Sabre^{32} up to 32bit/384Khz
Speaker Out (Amplifier)	TI TAS5715 30W + 30W @ 1Khz, 8ohm, 1% THD	TI TAS5715 30W + 30W @ 1Khz, 8ohm, 1% THD	TI TAS5112 50W + 50W @ 1Khz, 8ohm, 0.1% THD	Dual Digital Amplifiers built-in 100W + 100W @ 1Khz, 8ohm, 0.1% THD	No	No	No	No	No
Headphone Out	3.5mm Jack on the front 150mW+150mW@1Khz, 16ohm, 0.1% THD	3.5mm Jack on the front 150mW+150mW@1Khz, 16ohm, 0.1% THD	6.35mm Jack on the front 500mW+500mW@1Khz, 32ohm, 0.1% THD	6.35mm Jack on the front 100mW+100mW@1Khz, 600ohm, 0.1% THD	6.35mm Jack on the front 500mW+500mW@1Khz, 32ohm, 0.1% THD	6.35mm Jack on the front 500mW+500mW@1Khz, 32ohm, 0.1% THD	6.35mm Jack on the front 100mW+100mW@1Khz, 600ohm, 0.006% THD	No	6.35mm Jack on the front 80mW+80mW@1Khz, 32ohm, 0.1% THD
Analog Out	PRE-OUT(L/R RCA) Dynamic Range: 112dB(Max 2Vrms, Stereo) THD+N: 0.001% Volume Variable/Fixed optional	PRE-OUT(L/R RCA) Dynamic Range: 109dB(Max 2Vrms, Stereo) THD+N: 0.001% Volume Variable/Fixed optional	LINE-OUT(L/R RCA) Dynamic Range: 127dB(2Vrms, Stereo) THD+N: 0.0004% Volume Fixed	Pre-Out(L/R RCA) Dynamic Range: -120dB THD+N(Max 2Vrms, Stereo), 127dB DNR Volume Variable/Fixed optional	Balanced(Pre-Out) XLR, Dynamic Range: -120dB THD+N(Max 4.5Vrms, Stereo), 127dB DNR Unbalanced(Pre-Out) RCA/LR, Dynamic Range: -120dB THD+N(Max 2Vrms, Stereo), 127dB DNR Volume Variable/Fixed optional	Balanced(Pre-Out) XLR, Dynamic Range: -120dB THD+N(Max 4.5Vrms, Stereo), 127dB DNR Unbalanced(Pre-Out) RCA/LR, Dynamic Range: -120dB THD+N(Max 2Vrms, Stereo), 127dB DNR Volume Variable/Fixed optional	Balanced(Pre-Out) XLR, Dynamic Range: 137dB(Max 6.5Vrms, Stereo) THD+N: THD+N: 0.0003% Unbalanced(Pre-Out) RCA/LR, Dynamic Range: 137dB(Max 2Vrms, Stereo) THD+N: THD+N: 0.0003% Volume Variable/Fixed optional	No	Unbalanced(Pre-Out) RCA/LR, Dynamic Range: -120dB THD+N(Max 2Vrms, Stereo), 127dB DNR Volume Variable/Fixed optional
Digital Out	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz Volume Variable/Fixed optional	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR 110ohm x 1: 24bit/192Khz	Coaxial x 1(75ohm RCA): 24bit/192Khz Toslink x 1: 24bit/192Khz AES/EBU XLR 110ohm x 1: 24bit/192Khz USB Audio x 1: USB Audio Class2.0 HDMI Out x 1: HDMI Audio Out(* Shared with HDMI Out for external screen)	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR 110ohm x 1: 24bit/192Khz Volume Variable/Fixed optional	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR 110ohm x 1: 24bit/192Khz Volume Variable/Fixed optional USB Audio Out x 1: USB Audio Class 2.0	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR 110ohm x 1: 24bit/192Khz (Volume Variable/Fixed optional) USB Audio Out x 1: USB Audio Class 2.0	Toslink x 1: 24bit/192Khz Coaxial x 2(75ohm RCA): 24bit/192Khz AES/EBU XLR 110ohm x 1: 24bit/192Khz USB Audio Class 2.0 Out x 1: up to DSD256(DSD Native) I^{2}S(RJ45) x 1: up to DSD256(DSD Native) I^{2}S(HDMI) x 1: up to DSD256(DSD Native) Word Clock x 1: up to 192Khz	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz
Bluetooth	NO	Yes(Bluetooth Receiver) aptX support	No	No	No	No	No	No	No
12V Trigger	No	No	No	No	No	Yes(Max 200mA, 12V Trigger Out)	Yes(Max 200mA, 12V Trigger Out)	Yes(In - Max 12V),(Out - Max 200mA, 12V	No
Analog In	Line In x 1: L, R RCA 1Vrms 24bit/96Khz	L, R RCA, default 2Vrms (controllable 1~4Vrms) 24bit/96Khz	Line In x 1: L, R RCA 2Vrms 24bit/192Khz AUX In x 1: 3.5mm Jack, 800mVrms	Line In x 1: L, R RCA, default 2Vrms (controllable 1~4Vrms) AUX In x 1: 3.5mm Jack, default 1Vrms (controllable 0.5~2Vrms)	Line In x 1: L, R RCA 2Vrms 24bit/192Khz AUX In x 1: 3.5mm Jack, 800mVrms	Line In x 1: L, R RCA 2Vrms 24bit/192Khz AUX In x 1: 3.5mm Jack, 800mVrms	Line In x 1: L, R RCA 2Vrms 24bit/192Khz AUX In x 1: 3.5mm Jack, 800mVrms	No	No
Phono In	No	No	No	Phono In x 1: MM Input default 7.5mVrms (controllable 3.75~15mVrms)	Yes(Phono Input, MM, 7.5mV, L/R RCA)	Yes(Phono Input, MM, default 7.5mVrms, L/R RCA) (Controllable 3.75 ~ 15mVrms)	Yes(Phono Input, MM, default 7.5mVrms, L/R RCA) (Controllable 3.75 ~ 15mVrms)	No	No
Digital In	No	No	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR x 1: 24bit/192Khz	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR x 1: 24bit/192Khz	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR x 1: 24bit/192Khz	* X50 : No * X50D : Yes (Toslink / Coaxial)	
USB Audio Input (USB DAC)	No	No	No	No	No	USB B type connector, USB Audio Class 2.0 input (support up to PCM 384Khz/32Bit, DSD Native 256, MQA)	USB B type connector, USB Audio Class 2.0 input (support up to PCM 768Khz/32Bit, DSD Native 512, MQA)	No	USB Audio Class 2.0 Input * N15: Micro USB Connector * N15D: Standard USB "B" type connector
DAB+ Tuner	No	No	No	DAB/DAB+, Full Band III frequency range (174~240Mhz), MP2 audio 32 to 384kbps, AAC+(HE AAC v2 according to ETSI TS 102 653)	DAB/DAB+, Full Band III frequency range (174~240Mhz), MP2 audio 32 to 384kbps, AAC+(HE AAC v2 according to ETSI TS 102 653)	DAB/DAB+, Full Band III frequency range (174~240Mhz), MP2 audio 32 to 384kbps, AAC+(HE AAC v2 according to ETSI TS 102 653)	DAB/DAB+, Full Band III frequency range (174~240Mhz), MP2 audio 32 to 384kbps, AAC+(HE AAC v2 according to ETSI TS 102 653)	DAB/DAB+, Full Band III frequency range (174~240Mhz), MP2 audio 32 to 384kbps, AAC+(HE AAC v2 according to ETSI TS 102 653)	No
FM Radio Tuner	No	No	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance
Connectivity	2.0 USB Host Port x 3 Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle	3.0 USB Host Port x 2 2.0 USB Host Port x 1 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle	2.0 USB Host Port x 3 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle HDMI Out for external screen	3.0 USB Host Port(5V1A) x 2 2.0 USB Host Port(5V1A) x 1 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle HDMI Out for external screen	2.0 USB Host Port x 3 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle HDMI Out for external screen	3.0 USB Host Port(5V1A) x 2 2.0 USB Host Port(5V1A) x 1 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle HDMI Out for external screen	3.0 USB Host Port(5V1A) x 2 2.0 USB Host Port(5V1A) x 1 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle HDMI Out for external screen	3.0 USB Host Port(5V1A) x 2 2.0 USB Host Port(5V1A) x 1 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle HDMI Out for external screen	* USB Device: N15(Yes), N15D(No) * N15: 3.0 USB Host Port(5V1A) x 1 at rear * N15D: 3.0 USB Host Port(5V1A) x 2 at rear 2.0 USB Host Port(5V1A) x 1 at front Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle
Supported Storage	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 2TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk Maximum capacity: up to 2TB Supported file system: NTFS or Linux
Raid System	No	No	No	No	No	No	No	Yes(HDD deck X 2)	No
MQA Playback	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Codec & Format supported	APE/CUE up to PCM 24bit/192Khz HD FLAC(24t/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128) DFF/DSF, MQA up to PCM 24bit/192Khz APE/CUE HD FLAC(24t/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, CAF, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	APE/CUE up to PCM 24bit/192Khz HD FLAC(24t/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF, MQA up to PCM 32bit/384Khz APE/CUE HD FLAC(24t/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF up to PCM 32bit/384Khz APE/CUE HD FLAC(24t/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF, MQA up to PCM 32bit/384Khz APE/CUE HD FLAC(24t/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF, MQA up to PCM 32bit/384Khz APE/CUE HD FLAC(24t/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF, MQA up to PCM 32bit/768Khz APE/CUE HD FLAC(24t/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF, MQA up to PCM 32bit/384Khz APE/CUE HD FLAC(24t/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF, MQA up to PCM 32bit/384Khz APE/CUE HD FLAC(24t/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)
Network Protocols supported	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server
Internet Radio & Podcast	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable
Recording function	Yes(for Analog In, iRadio) 44.1Khz, 24bit	Yes(for Analog In, Internet Radio) 48/96/192Khz, 24bit	Yes(for Analog In, Digital In, FM/iRadio) 48/96/192Khz, 24bit	Yes(for Analog In, Digital In, FM/iRadio) 48/96/192Khz, 24bit	Yes(for Analog In, Digital In, FM/iRadio) 48/96/192Khz, 24bit	Yes(for iRadio, FM Radio, DAB+) 48/96/192Khz, 24bit	Yes(for Radio, FM Radio, DAB+) 48/96/192Khz, 24bit	Yes(for Radio, FM Radio, DAB+) 48/96/192Khz, 24bit	Yes(for iRadio) 48/96/192Khz, 24bit
CD Burning function	No	Yes(Optional, you need to prepare an external USB Disk Drive)	No	Yes(Audio CD Burning)	No	Yes(Audio CD Burning)	Yes(Audio CD Burning)	Yes(Audio CD Burning)	No
Streaminq playback from NAS	Yes up to 24bit/192Khz and DXD(24bit/352.8Khz)	Yes DSD64/128 and up to PCM 24/192Khz DXD(24bit/352.8Khz)	Yes up to 24bit/192Khz and DXD(24bit/352.8Khz)	Yes up to 32bit/384Khz and DSD256(11.2896Mhz)	Yes up to 32bit/384Khz and DSD256(11.2896Mhz)	Yes up to 32bit/384Khz and DSD256(11.2896Mhz)	Yes up to 32bit/768Khz and DSD512(22.5792Mhz)	Yes up to 32bit/384Khz and DSD256(11.2896Mhz)	Yes up to 32bit/384Khz and DSD256(11.2896Mhz)
Airplay	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Online Music Services	Spotify Connect, TIDAL, Deezer, Qobuz	Spotify Connect, TIDAL, Deezer, Qobuz, Napster	Spotify Connect, TIDAL, Deezer, Qobuz	Spotify Connect, TIDAL, Deezer, Qobuz, Napster	Spotify Connect, TIDAL, Deezer, Qobuz	Spotify Connect, TIDAL, Deezer, Qobuz, Napster	Spotify Connect, TIDAL, Deezer, Qobuz, Napster	Spotify Connect, TIDAL, Deezer, Qobuz, Napster	Spotify Connect, TIDAL, Deezer, Qobuz, Napster
Roon support	No	Yes(Roon Ready)	No	Yes(Roon Ready)	No	Yes(Roon Ready)	Yes(Roon Ready)	Yes(Roon Ready)	Yes(Roon Ready)
Cooling Method	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System
Power Source	AC/DC Power Adapter Input: 100 - 240Vac, 50/60Hz(free voltage) Output: 24V/3.5A	AC/DC Power Adapter Input: 100 - 240Vac, 50/60Hz(free voltage) Output: 24V/3.5A	Isolated Power Source circuit design Linear Power Supply for Analoq Switch Mode Power Supply for Digital AC220V-240V, 50/60Hz for Europe AC110V-120V, 50/60Hz for North America, Japan and Taiwan	Isolated Power Source circuit design Toroidal Transformer for Analoq Switch Mode Power Supply for Digital AC220V-240V, 50/60Hz for Europe AC110V-120V, 50/60Hz for North America, Japan and Taiwan	Isolated Power Source circuit design Toroidal Transformer for Analoq Switch Mode Power Supply for Digital AC220V-240V, 50/60Hz for Europe AC110V-120V, 50/60Hz for North America, Japan and Taiwan	Isolated Power Source circuit design Toroidal Transformer for Analoq Switch Mode Power Supply for Digital AC220V-240V, 50/60Hz for Europe AC110V-120V, 50/60Hz for North America, Japan and Taiwan	Isolated Power Source circuit design Toroidal Transformer for Analoq Switch Mode Power Supply for Digital AC220V-240V, 50/60Hz or AC110V-120V, 50/60Hz Toroidal & SMPS are shielded to minimize electrical noise	Switch Mode Power Supply for Digital 100 - 240Vac, 50/60Hz Free Voltage	Isolated Power Source circuit design Linear Power Supply for Analoq Switch Mode Power Supply for Digital * N15: AC110V/230V, 50/60Hz Selectable * N15D: AC220V-240V, 50/60Hz for 220V AC110V-120V, 50/60Hz for 110V
Housing	Plastic injection Rear: Pressing with steel	Plastic injection Rear: Pressing with steel	Front: Aluminum(8mm thickness) Top/side/rear: Pressing with steel	Front: Aluminum(12mm thickness) Top/side/rear: Pressing with steel	Front: Aluminum(12mm thickness) Top/side/rear: Pressing with steel	Front: Aluminum(12mm thickness) Top/side/rear: Pressing with steel	Whole aluminum with beautiful glass-sanding finish, fabricated by precision CNC machine	Whole aluminum casing Front: 12mm thickness Top/side: full aluminum by CNC cutting	Whole aluminum casinq Front: 8mm thickness full aluminum by CNC cutting
Dimension	180(W) x 100(H) x 150mm(D) without foot	180(W) x 100(H) x 150mm(D) without foot	435(W) x 325(D) x 88mm(H) without foot	441(W) x 330(D) x 100mm(H) without foot	435(W) x 325(D) x 88mm(H) without foot	435(W) x 325(D) x 88mm(H) without foot	440(W) x 329(D) x 118mm(H) with foot	442(W) x 330(D) x 110mm(H) without foot	180(W) x 180(D) x 45mm(H) without foot
	X12	X14	X30	X35	X40	X45	X45Pro	X50/X50D	N15/N15D