# **Key Features:**

Processor Realtek RTD1619DR
Dolby Vision
HDR10+
Zappiti MagicPixel V3 Video Processing
Dolby VS10 Video Processing
Dual HDD Rack Enclosure up to 40 TB
Massive Toroidal Power Transformer
XLR Balanced
Premium DAC ESS ES9038Q2M
XMOS XU208 Audio Processor
"Direct DSD" mode
Dolby Atmos and DTS:X
AV Sync. Adjustment
Widevine Level 1 DRM
OLED display

# Zappiti Reference combines all of the color and crisp detail of true 4K Ultra HD, HDR10+ and Dolby Vision with stunning sound.

The Zappiti Reference is at the same time a high end media player and a media server capable of streaming content to other Zappiti devices within your house through the exclusive Zappiti Share advanced streaming protocol.

The Zappiti Reference supports the majority of digital audio and video formats, including the most modern 4K HDR standards such as Dolby Vision and HDR10+, almost all recent video file formats, full BD/UHD Menus, HEVC video codec with one billion colors (10-Bit color encoding), VP-9, 3D video standards with 3D subtitles, high resolution audio files such as FLAC, ALAC, or MQA up to 352 kHz and features wide solid chassis, dual HDMI output with audio only for perfect audio video split, an audio-video sync settings option (forward/backward), 4K 60p compatibility, Dolby Atmos and DTS:X, for the best possible home theater experience. The Zappiti Reference includes Premium DAC ES9038Q2M with ultra-low jitter, bit-perfect digital audio processing, "Direct DSD" mode, Toroidal power transformer with separated circuits for both digital and analog parts, premium balanced XLR connectors and OLED display to control the media player without TV.



Zappiti Reference media player supports direct playback of full Blu-ray disc images with menus in Dolby Vision, as well as various file formats including MKV, MP4, TS, and M2TS



# **Massive Toroidal Power Supply**

The Zappiti Reference is powered by a massive toroidal power transformer, which provides superior efficiency over standard power supplies and delivers a very clean and robust power source. As a result, the Zappiti Reference provides a christal sharp picture and extreme depth of black, particularly critical in video projection systems. The flesh, sand and grass tones, very difficult to reproduce, are rendered to perfection. The materials are more detailed and the plans are more detached from the others, offering a three-dimensional aspect. Audio outputs are noise-free for more natural timbres, perfect channel balance, for perfect silence in quiet scenes and nuance breathing, and faster dynamic accents. The toroidal power transformer of the Zappiti Reference sonically "aligns" the complex analog and digital signal into something that's properly outlined and shaped. This alignment is responsible for tighter lines and an overall more insightful listening experience.





# **Premium DAC ESS ES9038 PRO**

The Zappiti Reference in based on a premium 32-bit DAC ESS ES9038Q2M with industry's leading level low distortion characteristics. The ES9038Q2M SABRE32 Reference DAC is a very high-performance, 32-bit, stereo audio D/A converter designed for audiophile-grade power sensitive applications such as digital music players, or professional applications such as audio studio recording systems, mixer consoles and digital audio workstations. Using the critically acclaimed ESS patented 32-bit HyperStream® II DAC architecture and Time Domain Jitter Eliminator, the ES9038Q2M delivers a DNR of up to 128dB and THD+N of -120dB, a performance level that will satisfy the most demanding audio enthusiasts. The Zappiti Reference handles up to 32-bit 384kHz FLAC / PCM, DSD256 via DoP and native DSD512. The ES9038Q2M SABRE32 Reference DAC sets the standard, SABRE SOUND®, for HD audio performance. You can play music in the most advanced DSD format in "Direct DSD" mode, as well as in various lossless formats.

# **XMOS Audio Processor**

The Zappiti Reference incorporates an XMOS XU208-128-QF48 audio processor that delivers perfect digital audio processing with original sample rate preservation, ultra-low jitter and reclocking. The XMOS XU208-128-QF48 chip offers significant power allowing fast and efficient data processing for the minimum latency required for bit-perfect reading. It is accompanied by 3 separate clocks precisely respecting each multiple of 44.1kHz and 48kHz from 16 to 32-bit but also by an ultra-low noise voltage regulator ADP150 and MLCC decoupling capacitors for precise and clear reproduction. The most advanced DSD formats are supported in "Direct DSD" mode, as well as various lossless formats, including FLAC / PCM up to 384kHz.



# **Dolby Vision**

The ultra-vivid image of innovative visual technology Dolby Vision®, brings characters to life with darker darks, brighter brights, and a remarkable color range you can't get anywhere else. Experience a remarkable color palette, sharper contrasts, and incredible brightness that feel more like looking through a window han at a screen. This is HDR like you've never seen it before. Discover subtle details you simply can't see with a standard picture, for a viewing experience without compromise, just as the filmmakers and creators intended. Zappiti Reference media player supports direct playback of full Blu-ray disc images (BDMV and ISO) with menus in Dolby Vision (MEL and FEL), as well as various file formats including MKV, MP4, TS, and M2TS. All popular Dolby Vision profiles (P4, P5, P7 MEL and FEL, P8) are supported. The extended Dolby Vision metadata is used and transmitted to the TV to improve picture quality.

# HDR10+

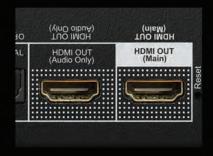
The Zappiti Reference is compatible with HDR10+ technology. HDR10+ is the latest and most advanced HDR technology, building upon HDR10 to further enhance the viewing experience. HDR10+ signals not just the dynamic range (the ratio of light to dark) of video content on a scene-by-scene (or even frame-by-frame) basis, it also provides, with minimal metadata, the scene characteristics between bright and dark so that important detail can be kept. This enables displays to reproduce images more realistically, adhering to the creator's intent. Whereas static HDR, such as HDR10, utilizes static tone mapping uniformly across the duration of the content, HDR10+ employs dynamic tone mapping to optimize each scene, individually increasing brightness and adding contrast to fit within a display's capabilities.





# DVD, Blu-ray & UHD Menu Support

Display the DVD, Blu-ray and UHD menus and get access to additional content (director's cuts, theatrical versions, bonus extras, bookmarks, etc.) This feature is compatible with both ISO and BDMV (DVD, Blu-ray, Blu-ray 3D and 4K UHD). Or, if you do not want to display menus, you can start a movie immediately without trailers or warnings. The seamless branching is also perfectly supported for perfect gapless playback on director cut editions.



# **Dual HDMI Output**

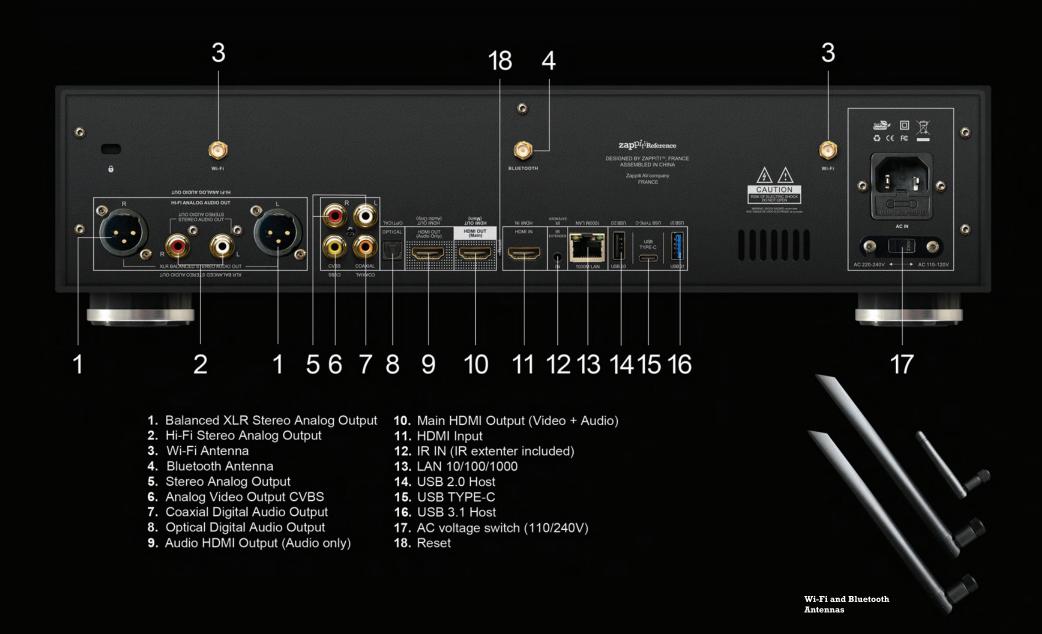
The Zappiti Reference features two HDMI outputs – one HDMI Out Main port for connecting to the latest UHD 4K TVs, projectors and A/V receivers, and an additional HDMI Out Audio Only port (v1.4) dedicated to audio for connecting to older A/V receivers and for better audio performances. The HDMI Audio Only port features a high-stability, high-precision clock. This design significantly reduces jitter and eliminates timing errors, allowing you to enjoy your audio & video contents with increased accuracy when you use the audio-only HDMI output port for connecting the audio signal to your A/V receiver. In addition, on the video output, the audio stream is automatically muted when the HDMI Audio Only output is used, thereby reducing the effects of video noise on the main HDMI output.



# **Top-Quality Components**

The Zappiti Reference also includes Hi-End components from famous vendors such as JEC power connector (used in aerospace industry), Neutrik audio connectors (Germany) Philips diodes (NL), Nichicon Audio Series and Nippon Chemi-Con capacitors (Japan), ERO series from Vishay Roederstein and WIMA capacitors (Germany). WIMA filter capacitors are designed based on low loss polypropylene film and feature high AC capacity at high frequencies as well as low ESL and ESR values.







# **AUDIO OUTPUTS / INPUTS**

- HDMI Out 2.0b (Video & Audio).
- HDMI Out 1.4 (Audio-Only).
- HDMI In 2.0b (Video & Audio).
- Digital Out (Coaxial RCA & Optical).
- Analog Audio Stereo RCA & Video CVBS Out.
- Analog HiFi Stereo RCA Out.
- Analog Balanced XLR Out.

#### DRMs

 Widevine L1 DRM: Watch premium online video services in 1080p and UHD. Security Level 1 (L1) is a complete processing performed in a Trusted Execution Environment (TEE). This level refers to the highest level of DRM (hardware DRM) and let Zappiti to stream premium video services at resolutions up to UHD quality. Level 2 cannot stream videos higher than 480p.

# TECHNICAL

- Chipset Realtek RTD1619DR.
- CPU ARM Cortex-A55 (hexa core). +77% faster than 4-core ARM A53 used in the previous generation media players.
- GPU ARM Mali-G51 MP3. +50% faster than Mali
   T-820 used in the previous generation.
- 4GB RAM. 2x more than in the previous generation media players.
- 32GB NAN eMMC. 2x more than in the previous generation media players.

#### **DIMENSIONS**

• 16.92in × 4.33in × 13.5in (W × H × D) (43.0cm × 11cm × 34.3cm).

#### WEIGHT

• 14.77lb (6.7 Kg).

### **POWER**

- Max consumption: 50W.
- Typical: 45W (Without HDD).
- High power standby: 12W.
- Low power standby: 0.02W.
- AC ~220-240/110-120V, 50/60Hz with detachable line cord.

# **NETWORK**

• Gigabit Ethernet (1000 Base-T), Wi-Fi, Bluetooth.

# **OTHER CONNECTIONS**

USB 3.1, USB 2.0 (x2 front, x1 back), USB Type-C.

#### CONTROL

- Ethernet control from Crestron, Control4, Savant, RTI, ProControl, URC, Elan, Logitech, the Zappiti Media Control App for tablet and spartphones. (Coming Soon).
- IR input with provided IR Extender.

#### STORAGE

• Dual HDD Rack up to 40 TB of internal storage.

#### VIDEO DISPLAY FORMATS

- Resolutions: 2160p60/50/30/25/24, 1080p60/50/24, 1080i60/50, 720p60/50, 576i, 576p, 480i, 480p.
- Chroma: 4:4:4 8-bit up to 2160p60,
   4:4:4 10/12-bit up to 2160p30, 4:2:2
   12-bit up to 2160p60, 4:2:0 8/10/12-bit at 2160p50/60 only.
- Color spaces: BT.2020, BT.709, BT.601.
- Aspect ratios: 1.78:1 and 2.35:1 (Cinemascope), user interface selectable.
- HDR support for HDR10, HDR10+, Dolby Vision and metadata.
- Audio Video Sync. (backward/forward).

## **AUDIO FORMATS**

- DTS-WAV, MPEG, MP3, ALAC, APE, M4A, M4A, AIFF, WAV, WavPack, VSELP, FLAC, AAC, AAC-LC, HEAAC, HE-AAC v2, AMR-NB, OGG, LPCM, PCM, ADPCM, MQA, SACD ISO, DSF, DFF (DSD).
- DTS:X Pro, DTS:X, Dolby Atmos, Auro3D.
- DTS-HD MA, DTS-HD HRA, Dolby TrueHD, EAC3.

#### MEDIA

- Video File Formats: UHD ISO, 3D BD ISO, BD ISO, BDMV, MKV, MKV 3D, MK3D, MPEG-TS, MPEG-PS, MPEG, MPE, MPG, TS, TP, M2TS, VOB, AVI, MOV, MP4, QT, WebM, DVD-ISO, VIDEO\_TS, RMVB, RM, DAT, VOB, 3GP, FIV, DAT, AVCHD 2.0 (AVCHD 3D, AVHD Progressive).
- Video Codecs: HEVC, H.265, x265 (up to Main10 Level 6.1 High 60p in 4K), MVC, AVC, MPEG-2, MPEG-4, VC-1, H.264/x.264 (up to 60p in Full HD and 24p/20 Mbps in 4K), FLV, AVS, XVID, DIVX (from version 4), Sorenson Spark L70, VP9 HW (up to 4K 60p); ultra high bitrate support (up to 400 Mbit/s in HEVC 4K).