

TOPPING

Pure Design
Superior Performance

A900

Ultra-Flagship Headphone Amplifier



Six-channel T'ang-ku-la circuit

Full-link differential balanced architecture



Independent Preamp



151dB

DNR/SNR New height

22000mW x 2 @16 ohm

Massive output power

<0.00003% @20-20kHz

THD(90kBW) New record

Fully balanced relay volume control



A full range of headphone outputs



Optimized T'ang-ku-la amplifier architecture

The T'ang-ku-la architecture adopts a new three-stage feedback circuit (patented technology), effectively reducing circuit noise and high-frequency distortion, thus further enhancing the dynamic range to a **record-breaking 151dB** and the full-band THD (90kHz) to **0.00003%**. Additionally, this new technology effectively lowers circuit heat generation, improving reliability and extending service life while minimizing thermal noise. The three T'ang-ku-la modules form a 6-channel fully differential balanced architecture, maintaining full differential balance from source to output, achieving a true full-link differential balanced amplification. The headphone amplifier delivers a driving power of up to 22,000mW (@16Ω).



The clean, angular lines are not just structural—they reflect a deeper appreciation for aesthetic order. Bold yet restrained, like precisely arranged notes in a composition, the design strikes a balance between logic and emotion. Beneath its cool exterior lies a sound that is refined—the essence of the A900's dual nature.



Focus on the music

A900 is TOPPING's brand new ultra-flagship HiFi headphone amplifier, born from our relentless pursuit of ultimate sound quality.

Its refined industrial design perfectly reflects our music-focused philosophy.



The rear panel features high-quality Neutrik connectors, offering three sets of stereo combo balanced inputs. This design ensures broad compatibility with a wide range of professional audio equipment, catering to both audiophiles and studio users with diverse connectivity needs.



A900 is equipped with a full range of headphone outputs, providing up to six physical ports that fully support four mainstream headphone connection standards — including 6.35mm single-ended, 4.4mm balanced, 4-pin XLR balanced, and dual 3-pin balanced outputs. Utilizing premium-grade connectors from Neutrik and Japan's NDICS company Pentaconn, these outputs deliver stable, reliable performance. Users can configure the outputs as independent or simultaneous, allowing for personalized monitoring in various



The A900 also includes preamp outputs and offers a dedicated pure preamp mode. As a preamplifier, it matches the headphone amp's flagship performance, with THD+N < 0.000055%, making it an ideal companion for power amplifiers to reproduce music with stunning fidelity.



Responsive control

A 2-inch full-color display provides clear real-time playback information. On the right, three touch-sensitive buttons work seamlessly with the volume knob to enable fast and intuitive adjustments. The knob not only offers precise volume control, but also serves as a customizable function key—tailored to suit your personal preferences.



With a simple operation, you can effortlessly switch between multiple display modes—such as playback information, FFT spectrum, or VU meter—providing real-time feedback on audio performance. The A900 also offers a choice of 9 background colors, allowing you to tailor the visual interface to your personal aesthetic preferences.





Premium remote control

The main part of remote control is crafted from a single block of high-strength aluminum alloy using precision CNC machining, followed by fine sandblasting for a refined finish.

Fully balanced relay volume control

The A900 features a fully balanced relay-based volume control system, reducing channel crosstalk to -153dB . This ensures exceptional sonic purity and separation, bringing vocals to life with vivid presence and revealing the finest textures in instruments. With precise 0.5dB step volume adjustments, changes in volume are smooth and nuanced—delivering a refined and comfortable listening experience.



Isolated power supply

The power supply for the digital processing circuit is physically isolated from the two analog amplification circuits, delivering more stable, reference-grade voltage and effectively reducing interference.

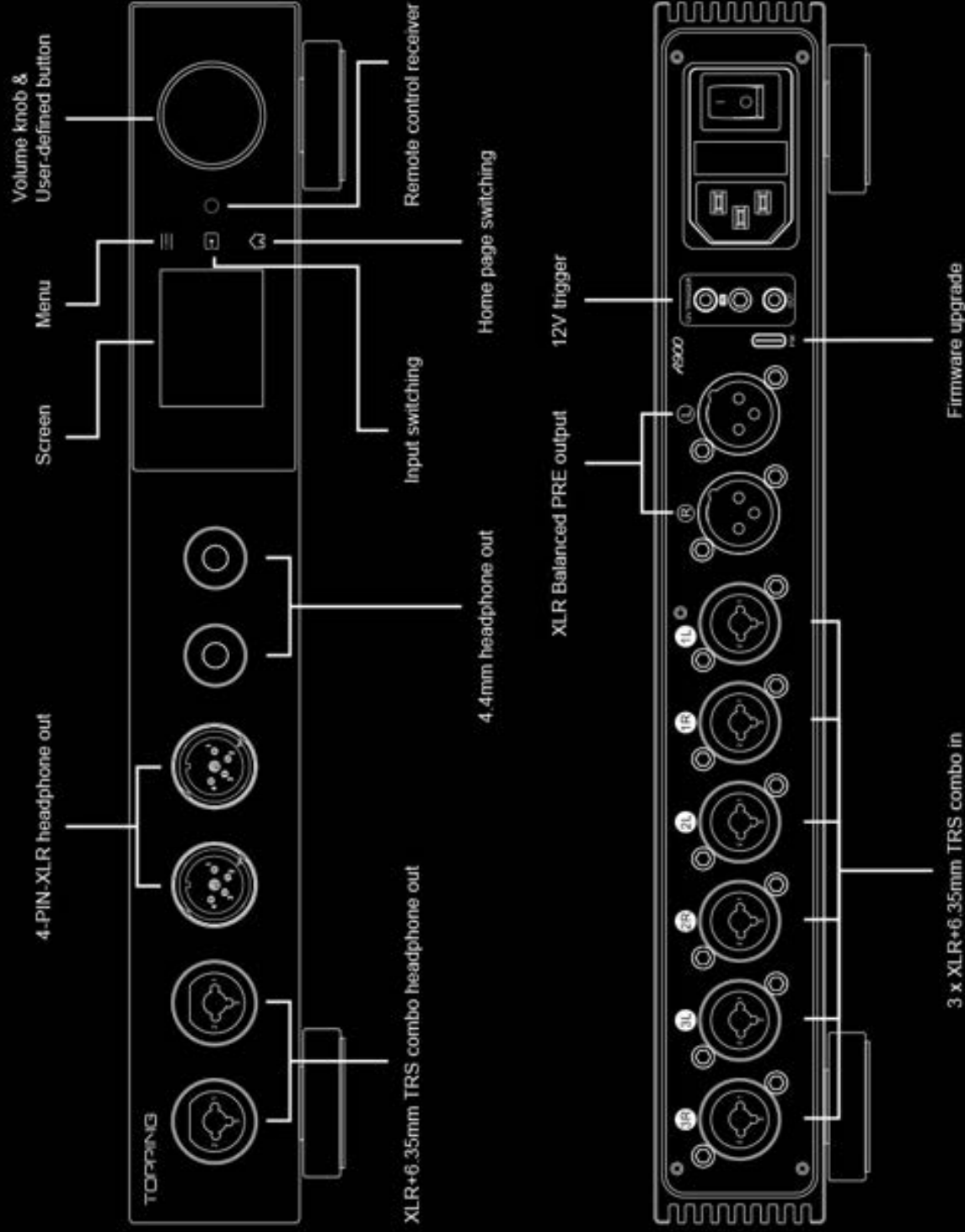


Flagship pairing

Pair with TOPPING's ultra-flagship DAC — the D900 — to form a high-performance DAC & amp combo. With a full range of input and output interfaces, this setup is not only fun to use but also lets you experience hi-end-level acoustics.



Interfaces and buttons





Contents list



A900 Headphone Amplifier Specifications

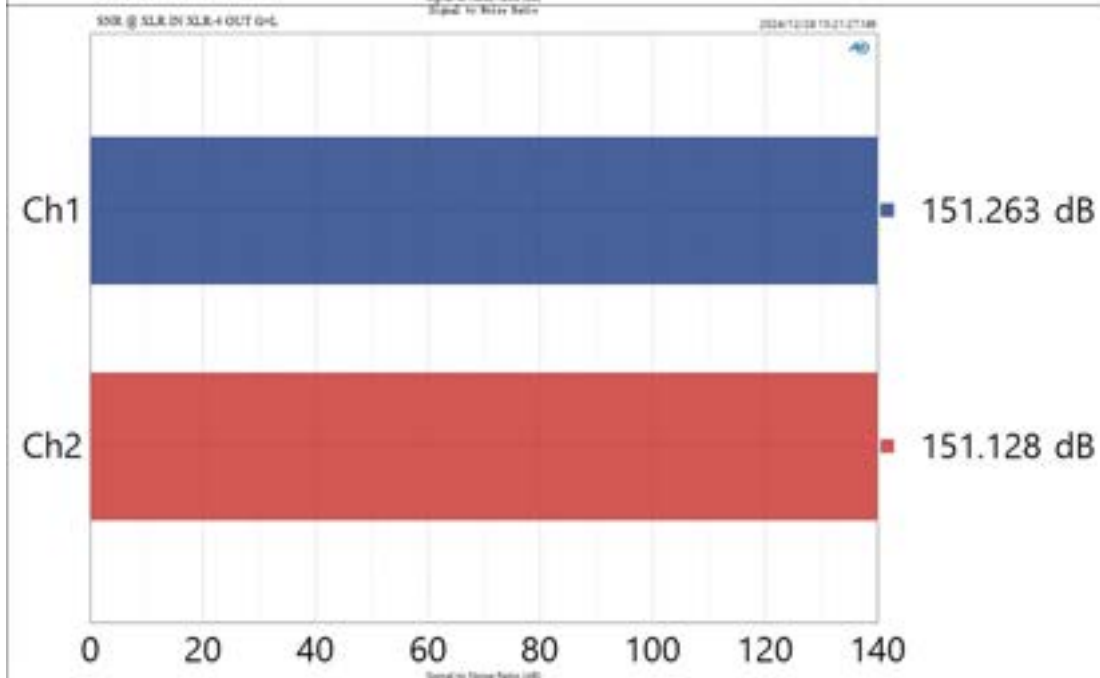
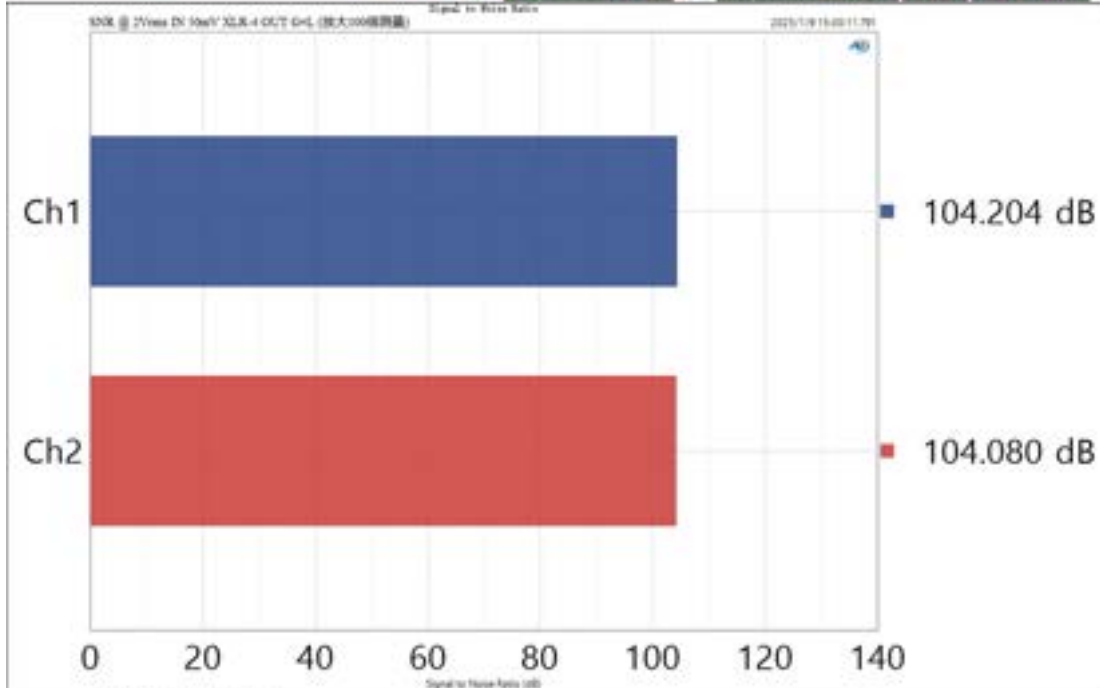
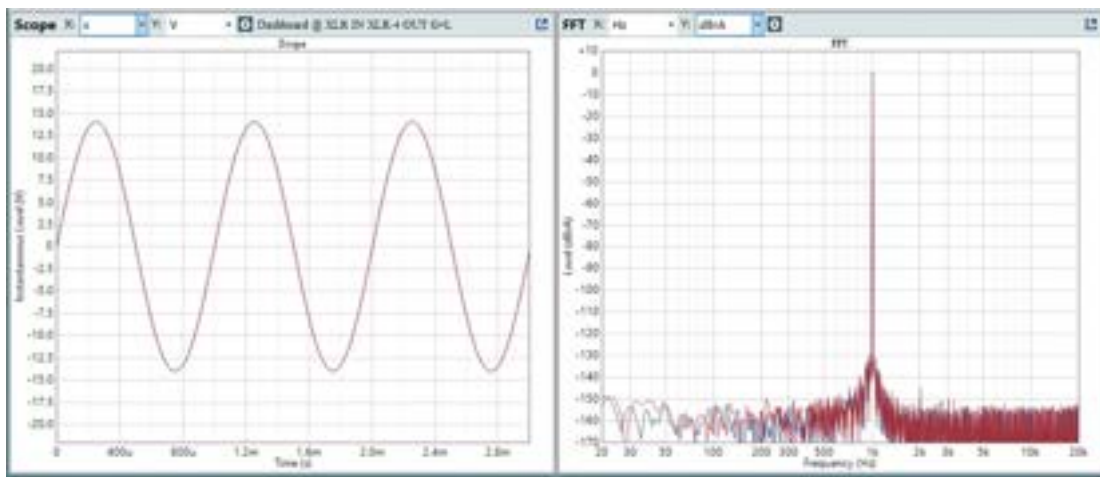
	BAL INISE OUT	BAL INBAL OUT
THD+N @1kHz A-wt	<0.000060% @Output=500mW (32Ω) <0.000055% @Output=80mW (300Ω)	<0.000060% @Output=500mW (32Ω) <0.000055% @Output=80mW (300Ω)
THD @20-20kHz 90dBW	<0.00006% @Output=500mW (32Ω) <0.00005% @Output=80mW (300Ω)	<0.00004% @Output=500mW (32Ω) <0.00003% @Output=80mW (300Ω)
SNR @MAX OUT 1kHz A-wt	143dB	151dB
Dynamic Range @1kHz A-wt	143dB	151dB
Frequency Response	20Hz-40kHz (±0.05dB) 10Hz-200kHz (±0.1dB)	20Hz-40kHz (±0.05dB) 10Hz-200kHz (±0.1dB)
Output Level	30 Vpp @G=L 30 Vpp @G=M 30 Vpp @G=H	60Vpp @G=L 60Vpp @G=M 60Vpp @G=H
AP Measured Noise Level @A-wt	<0.7uVrms @G=L <0.9uVrms @G=M <1.5uVrms @G=H	<0.7uVrms @G=L <1.2uVrms @G=M <2.5uVrms @G=H
Actual Noise Level @A-wt	<0.3uVrms @G=L <0.7uVrms @G=M <1.4uVrms @G=H	<0.3uVrms @G=L <1.0uVrms @G=M <2.3uVrms @G=H
Channel Crosstalk @1kHz	-105dB	-153dB
Input Sensitivity	22.0Vrms @G=L 7.0Vrms @G=M 2.1Vrms @G=H	22.0Vrms @G=L 7.0Vrms @G=M 2.1Vrms @G=H
Gain	-6.1dB @G=L +4.3dB @G=M +13.8dB @G=H	-0.1dB @G=L +10.3dB @G=M +19.8dB @G=H
Output Impedance	< 0.1Ω	< 0.1Ω
Output Power	6000mW x 2 @16Ω THD+N<0.1% 3000mW x 2 @32Ω THD+N<0.1% 1550mW x 2 @64Ω THD+N<0.1% 600mW x 2 @150Ω THD+N<0.1% 330mW x 2 @300Ω THD+N<0.1% 165mW x 2 @600Ω THD+N<0.1%	22000mW x 2 @16Ω THD+N<0.1% 14000mW x 2 @32Ω THD+N<0.1% 7000mW x 2 @64Ω THD+N<0.1% 3000mW x 2 @150Ω THD+N<0.1% 1500mW x 2 @300Ω THD+N<0.1% 750mW x 2 @600Ω THD+N<0.1%
Adapter Impedance	~8Ω	

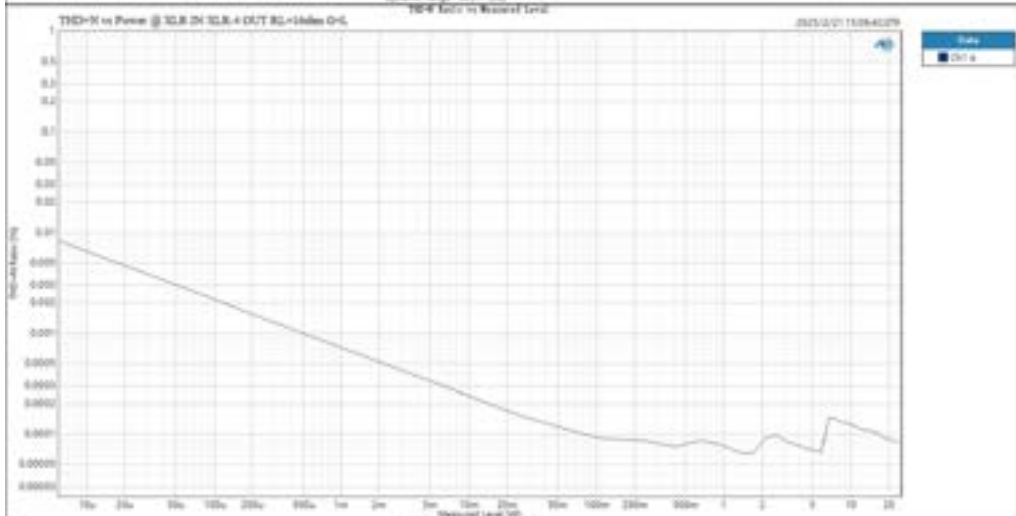
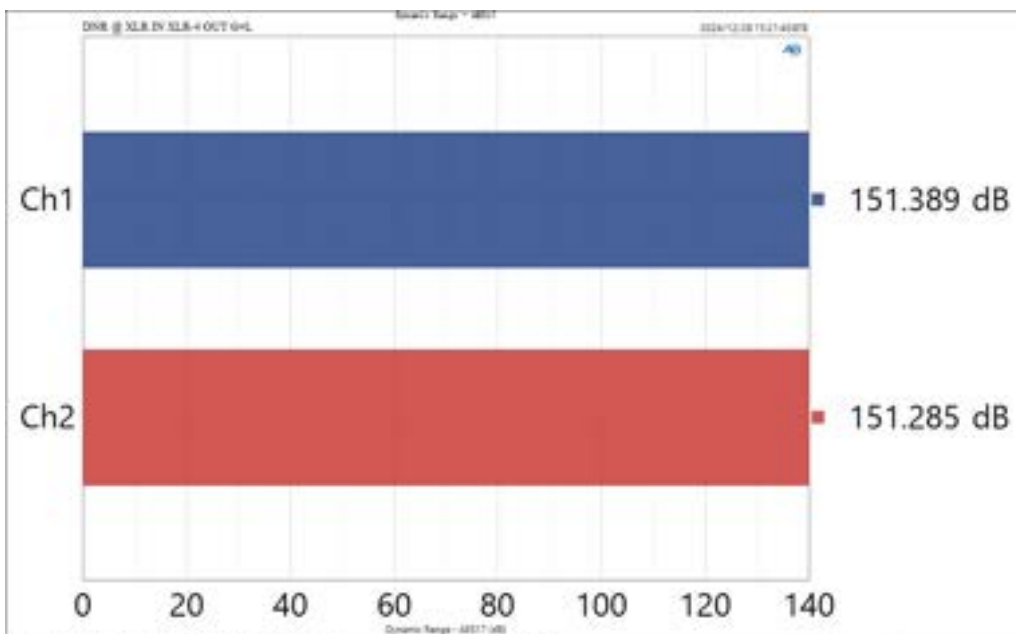
*Note: The actual noise level is obtained by boosting the noise of A900 by 40dB using a low noise amplifier in front of the APx555B then dividing the measured noise by 100 times.

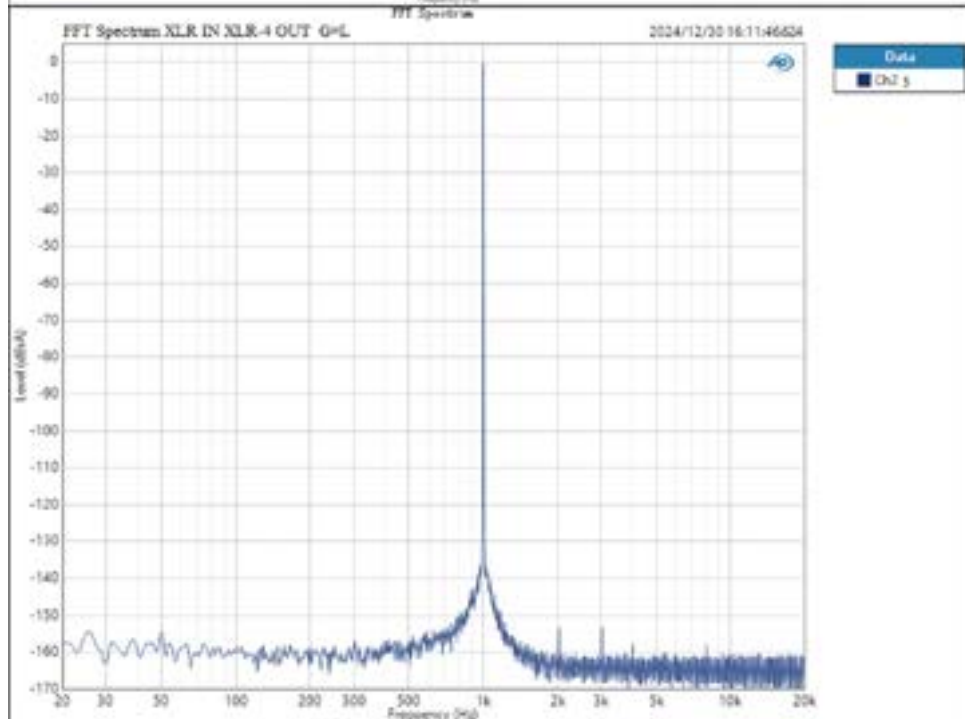
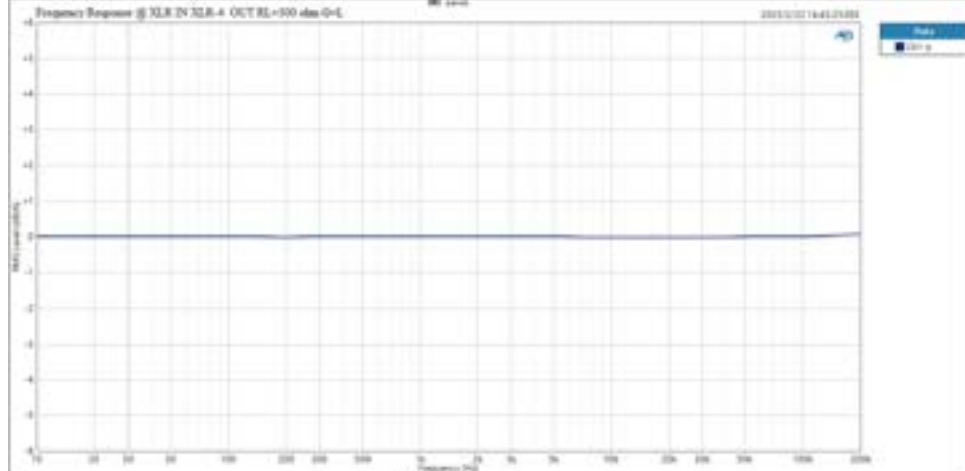
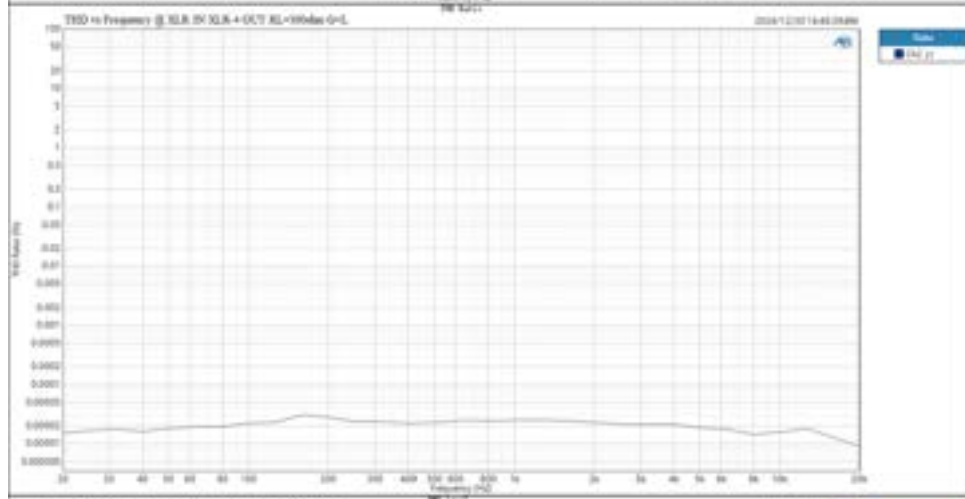
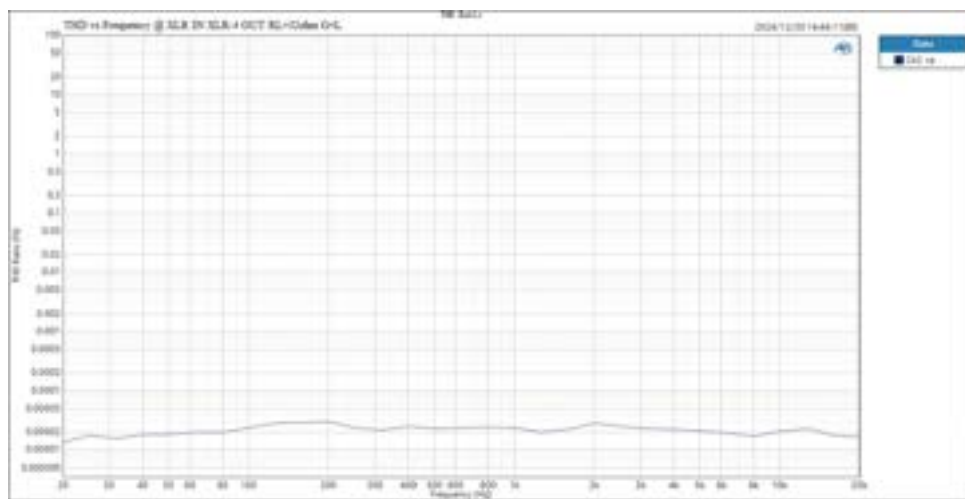
A900 Pre-Amplifier Specifications

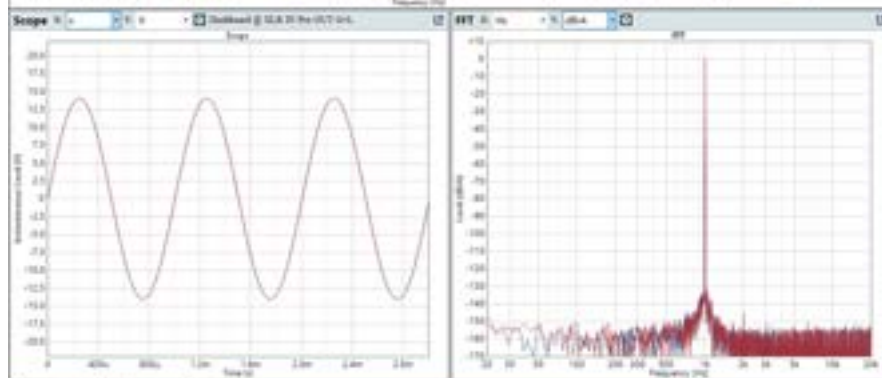
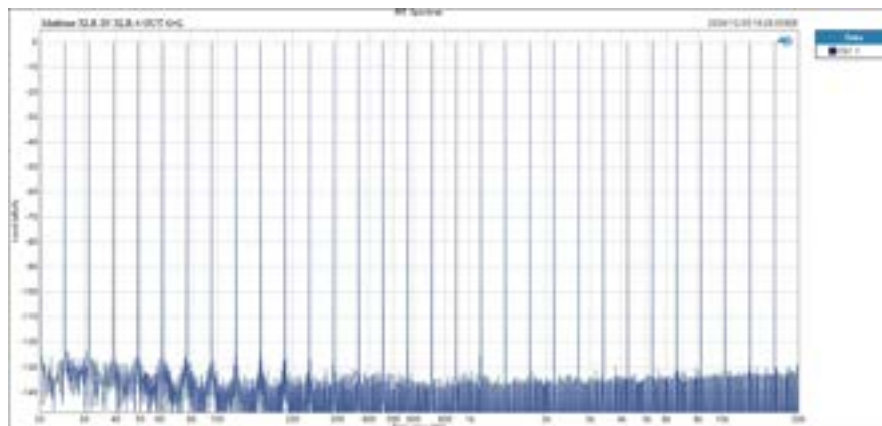
THD+N @1kHz A-wt	<0.000055%
THD @20-20kHz 90dBW	<0.00003%
SNR @MAX OUT 1kHz A-wt	151dB
Dynamic Range @1kHz A-wt	151dB
Frequency Response	20Hz-40kHz (±0.05dB) 20Hz-200kHz (±0.1dB)
Output Level	60Vpp @G=L 60Vpp @G=M 60Vpp @G=H
AP Measured Noise Level @A-wt	<0.7uVrms @G=L <1.2uVrms @G=M <2.5uVrms @G=H
Actual Noise Level @A-wt	<0.3uVrms @G=L <1.0uVrms @G=M <2.3uVrms @G=H
Channel Crosstalk @1kHz	-153dB
Input Sensitivity	22.0Vrms @G=L 7.0Vrms @G=M 2.1Vrms @G=H
Gain	-0.1dB @G=L +10.3dB @G=M +19.8dB @G=H
Output Impedance	100Ω

*Note: The actual noise level is obtained by boosting the noise of A900 by 40dB using a low noise amplifier in front of the APx555B then dividing the measured noise by 100 times.









Parameter	Ch1	Ch2
RMS Level	9.874 Vrms	9.871 Vrms
THD+N Ratio	0.000051 %	0.000051 %
Frequency	1.00013 kHz	1.00013 kHz
SINAD	125.934 dB	125.894 dB

