

Aug 31, 2017

Panasonic to Unveil Technics Direct Drive Turntable with the World's Top-level*1 S/N Ratio and Rotational Stability at IFA Commercial launch of SP-10R aimed in early summer 2018

Osaka, Japan - Panasonic Corporation announced today that it will exhibit a development prototype of a direct-drive turntable with the world's top-level*1 S/N (signal-to-noise) ratio and rotational stability at IFA 2017*2. Panasonic will accelerate the further development of the technology toward the market launch of a production version, the Technics SP-10R, in the early summer of 2018.

Demand for analogue records has been rising in recent years not only among audio enthusiasts but also among young people who are accustomed to digital products. In 2015, which was the 50th anniversary of the Technics brand, Technics took on the challenge once again to develop new turntables that would redefine the term "direct-drive turntable" by combining traditional analogue technology and cutting-edge digital technology. The SL-1200GAE/G released in 2016 and the SL-1200GR released in 2017 were highly acclaimed the world over. Technics continued to address the development of turntables by maximising and advancing its accumulated technologies and know-how in pursuit of the creation of turntables with the world's highest performance. By further advancing the digital and analogue technologies, Technics strives to deliver the emotional excitement of music through high-quality sound.

The development prototype turntable has the following features:

1) A coreless direct-drive motor featuring a new structure

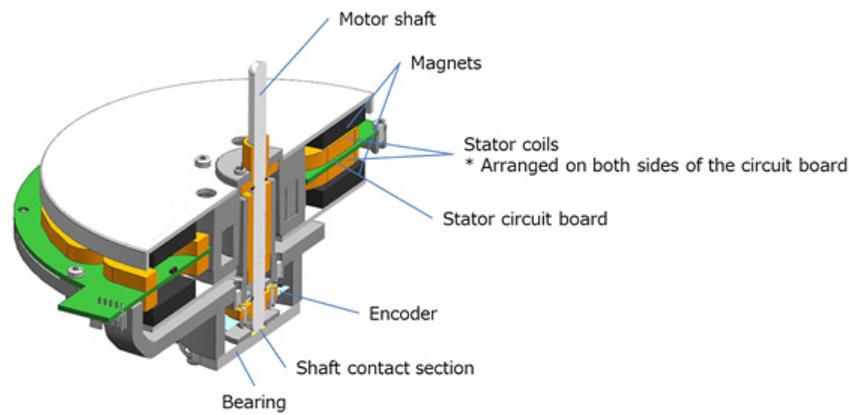
- In addition to the two-sided rotor drive system adopted by the coreless direct-drive motor used in the SL-1200G, the new motor features stator coils on both sides of the rotor, instead of only on one side. This produces more than twice the torque of the SL-1200G.
- The increased rigidity of the platter connection eliminates minute vibration caused by shaft rotation.
- The surface that contacts the rotating shaft is made from a super engineering plastic with excellent resistance to heat, friction and wear. The bearing is made of high-rigidity stainless steel to offer outstanding strength and durability.

2) Platter weight increased for more stable rotation

- The platter features a three-layer structure consisting of brass, aluminium die-cast and deadening rubber, just like the platter of the SL-1200G. By optimising the natural frequency of each layer, external vibrations are thoroughly suppressed.
- The platter weighs about 7 kg, which is more than twice as heavy as the platter of the SL-1200G. It boasts a maximum inertial mass of approximately 1 ton-cm² to ensure steady and stable rotation.

3) Newly developed, ultra-low-noise power supply

- Technics has newly developed an ultra-low-noise switching power supply by making full use of technology accumulated in the development of digital amps. Compared to a power supply unit using a transformer, the new power supply unit better suppresses the generation of noise, such as humming (a low-frequency component corresponding to the power supply frequency) and vibration.
- The power supply unit is completely separated from the main turntable unit, thus preventing the transmission of noise components to the turntable unit, which processes very small analogue signals.



Cutaway view of direct drive motor structure

Technics is working diligently toward launching the Reference Class analogue turntable, the SP-10R, in the early summer of 2018 as a high-end product of the Technics Hi-Fi audio brand. The SP-10R will be interchangeable with systems using the SP-10MK2 (released in 1975) or SP-10MK3 (released in 1981)^{*3} which had been evaluated highly by broadcasting stations and other professionals and are still used by many audiophiles. Technics also plans to market a full turntable system that includes the tonearm and other components.

Notes:

*1 S/N ratio of 92 dB and wow & flutter (unevenness of rotation) of 0.015%, as of August 30, 2017, according to a Technics survey.

*2 An international consumer electronics fair in Berlin, Germany, to be held September 1 to 6

*3 The SP-10MK2 was introduced in 1975 as a successor to the SP-10 turntable (released in 1970) that featured a direct-drive system for the first time in the world. It was not only favoured by audiophiles around the world but also used by broadcasting stations in some 30 countries in professional applications.

About Panasonic

Panasonic Corporation is a worldwide leader in the development of diverse electronics technologies and solutions for customers in the consumer electronics, housing, automotive, and B2B businesses. Celebrating its 100th anniversary in 2018, the company has expanded globally and now operates 495 subsidiaries and 91 associated companies worldwide, recording consolidated net sales of 7.343 trillion yen for the year ended March 31, 2017. Committed to pursuing new value through innovation across divisional lines, the company uses its technologies to create a better life and a better world for its customers. To learn more about Panasonic:

<http://www.panasonic.com/global>.

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