

News Release January 17, 2025 Nippon Electric Glass Co., Ltd.

[World's First] Markaudio Launches Alpair 5G Speaker Drivers Incorporating Nippon Electric Glass's Ultra-thin Glass

-Overwhelming clear audio and three-dimensional sound are now a reality-

Dinorex UTG[™], ultra-thin glass for chemical strengthening developed by Nippon Electric Glass Co., Ltd. (Head Office: Otsu, Shiga, Japan; President: Akira Kishimoto), a special glass manufacturer, has been adopted by Markaudio, a manufacturer of high-quality full-range speaker drivers, in Markaudio's new speaker driver, Alpair 5G. The Alpair 5G is the world's first full-range speaker driver that uses special glass for its diaphragm and is now on sale on the crowdfunding site GREEN FUNDING (Available only in Japanese).

Sales page: https://greenfunding.jp/lab/projects/8715





Dinorex UTG[™] (ultra-thin glass for chemical strengthening)

■ About the special glass Dinorex UTG[™] used in Alpair 5G

Dinorex UTG[™], which Nippon Electric Glass produces and supplies, is a high-grade, highquality special glass, which is also used in foldable smartphones and other flexible devices. The material transmits sound faster than titanium and is lighter than aluminum, making it an attractive material for use as a diaphragm, which is why it has been adopted by Markaudio for its speaker

drivers.



The special glass Dinorex UTG[™] (ultra-thin glass for chemical strengthening) used in the Alpair 5G. Although it is glass, it is only 0.025 mm (25 µm) thick at its thinnest and can be bent to a diameter of 3 mm (radius of 1.5 mm) or less.

■ Features of the diaphragm made of Dinorex UTGTM

The use, for the diaphragm, of the special glass Dinorex UTG[™], which completely differs from the ordinary glass used for window panes and glass tableware, offers the following advantages:

- Because it is harder than materials such as paper and plastics, it has a good sound response and can reproduce accurate sound over a wide frequency range.
- Compared to metals such as aluminum that are commonly used in speaker cones, it has higher internal loss¹ and a shorter reverberation time, reducing unnecessary incidental sound and achieving clear sound.
- The diaphragm is light, delivering a more responsive sound.
- High resistance to environmental changes such as temperature and humidity reduces deterioration over time.
- 1: Internal loss refers to the rate at which energy is lost within the material when an object vibrates or transmits energy. High internal loss helps deliver clearer sound as the material's intrinsic sounds are reduced, while low internal loss means that the material's intrinsic sounds persist.

Product lineup

The following line of products has been released on the crowdfunding site GREEN FUNDING: Please view <u>here</u> (available only in Japanese) for details on prices and other information.



Sales Schedule

January 15, 2025: Start of crowdfunding March 31, 2025: End of crowdfunding

About Markaudio

Markaudio is an audio speaker product manufacturing company based in Guangzhou, China. Markaudio has progressed from supplying audio components for European audio brands to producing its own range of audio speaker drivers and accessories. Markaudio designs all its products in-house. All the major components for its speaker drivers are 100% custom made. With an aggressive design that overturns conventional concepts of speaker drivers, Markaudio develops products with the vision of continually exceeding the limits of full-range speaker drivers and enjoys a world-wide leading reputation for high-performance, top-quality full-range audio drivers.

[Company Profile]

Nippon Electric Glass Co., Ltd. is a world-class special glass manufacturer headquartered in Otsu, Shiga Prefecture. Special glass that creates novel functionality is transformed into a variety of products such as sheets, tubes, fibers, and powder, and is used in a wide range of fields, including semiconductors, displays, automobiles, electronic devices, medical care, and energy. The special glass developed using the technology and track record that we have honed over our 70-year history is highly regarded in a wide range of fields, from everyday life to cuttingedge industry.

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Head office location:	7-1 Seiran 2-chome, Otsu, Shiga 520-8639, Japan
Founded:	December 1, 1949
Business details:	Manufacture and sale of special glass products and fabrication
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