

## NEG and GAIT's Ultra-thin Glass Diaphragm Won the "Technical Special Award" at the 41st HiVi Grand Prix

A HiFi speaker diaphragm utilizing Ultra-thin Glass developed by Nippon Electric Glass Co., Ltd. (Headquarters: Otsu, Shiga, Japan; President: Akira Kishimoto; "NEG") has won the "Special Technology Award" at the "41st HiVi Grand Prix 2025," hosted by the audio-visual specialized magazine "HiVi" published by Stereo Sound Co., Ltd.

The Ultra-thin Glass diaphragm utilizes NEG's Ultra-thin Glass, with thicknesses ranging from 25 $\mu$ m to 200 $\mu$ m (0.025mm to 0.2mm). GAIT processes this glass into diaphragms using its proprietary 3D forming technology. This achieves faster sound attack<sup>\*1</sup> and clearer reproduction than conventional materials such as paper, metal, and resin.



Ultra-thin Glass Diaphragm Speaker Unit



Grand Prix Logo

### ■About the 41st HiVi Grand Prix 2025

The HiVi Grand Prix is one of the most prestigious annual awards in the audio-visual industry, hosted by HiVi, an audio-visual specialized magazine with over 30 years of history.

The award selects outstanding products that led the audio-visual scene in 2025 from all audio-visual products released that year. This year's winners were determined through rigorous judging by renowned critics Reiji Asakura (selection committee chair), Haruo Ushio, Yoshio Obara, Kazutoyo Torii, Yosuke Fujiwara, and Koji Yamamoto, along with seven members of the HiVi editorial department.

■Regarding the Ultra-thin Glass diaphragm

Ultra-thin Glass (UTG™) is among the world's thinnest glass, with a thickness ranging from 25μm to 200μm. By 3D forming this glass and strengthening its surface through special chemical treatment, it has been evolved into a diaphragm. As a diaphragm, it exhibits the following acoustic characteristics:

- Compared to materials like paper or metal, it has a faster sound attack<sup>※1</sup>, allowing sound to reach you with greater clarity and precision.
- The material itself has low inherent resonance (high internal damping) and fast sound decay<sup>※1</sup>, resulting in minimal sound distortion.
- Lightweight and highly responsive, capable of accurately reproducing the subtle nuances of delicate sounds
- The glass surface is strengthened with a special chemical treatment, enabling it to withstand intense vibrations from heavy bass.
- Resistant to environmental changes such as temperature and humidity, and less prone to aging over time



Ultra-thin Glass Diaphragm

※1 "Sound attack" refers to the time or speed of response from when a sound begins to its peak. A fast attack time results in clear sound contours, allowing the attack of percussion and string instruments to be reproduced distinctly. Conversely, "sound decay" indicates how quickly the sound fades after it has finished sounding. A fast decay prevents unwanted lingering sound, allowing the next note to be heard clearly. This results in a tighter, overall sound with less distortion.

【Related Articles on Our Website】

- [Ultra-thin Glass Diaphragms, the Key to Next-Generation Quality Sound Speakers | Nippon Electric Glass \(NEG\)](#)
- [Que UTG—World-first Earphones Incorporating Ultra-thin Glass Diaphragms Launched | Nippon Electric Glass \(NEG\)](#)

■ About GAIT (Glass Acoustic Innovations Co., Ltd.)

GAIT is the world's only glass processing company capable of precise 3D processing of Ultra-thin Glass. Founded in 2020, this startup is headquartered in Taipei, Taiwan.

In April 2024, we entered into a strategic partnership with NEG to jointly advance the development, manufacturing, and market deployment of Ultra-thin Glass diaphragms for the audio industry.

**[Company Profile]**

Nippon Electric Glass Co., Ltd. is a world-class specialty glass manufacturer headquartered in Otsu City, 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 cutting-edge industry.

Company name: Nippon Electric Glass Co., Ltd.

Representative: Akira Kishimoto, President

Head office location: 7-1 Seiran 2-chome, Otsu, Shiga 520-8639, Japan

Founded: December 1, 1949

Business details: Production and sale of special glass products; manufacture and sale of glassmaking machinery

URL: <https://www.neg.co.jp/en/>

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<Contact regarding products>

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