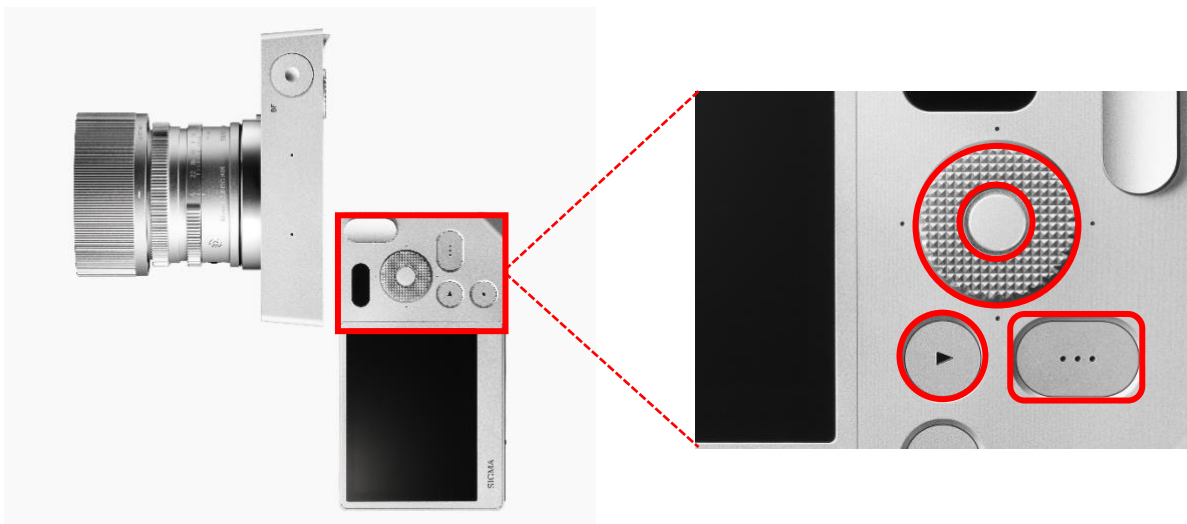


Press Information

Kyocera integrates HAPTIVITY® technology into Sigma BF mirrorless camera

Groundbreaking piezoelectric innovation improves user experience with realistic tactile sensations.

Kyoto/London, 6th May 2025. Kyocera Corporation announced that HAPTIVITY®¹, its proprietary tactile technology that replicates realistic touch sensations, has been integrated into the [Sigma BF](#), a full-size mirrorless camera which was released last month. This is the first application of HAPTIVITY® in a mirrorless camera.



“Sigma BF” full-size mirrorless camera with recessed buttons incorporating Kyocera’s HAPTIVITY® technology (*image courtesy of Sigma*)

HAPTIVITY® is a groundbreaking technology that harnesses Kyocera’s piezoelectric ceramic vibrating elements to create truly immersive tactile sensations. Biomechanically engineered vibration waveforms provide tactile feedback by stimulating neural receptors in the user’s fingertip, providing physical verification when a button is depressed and released — or even simulating the feel of a physical button where none exists.

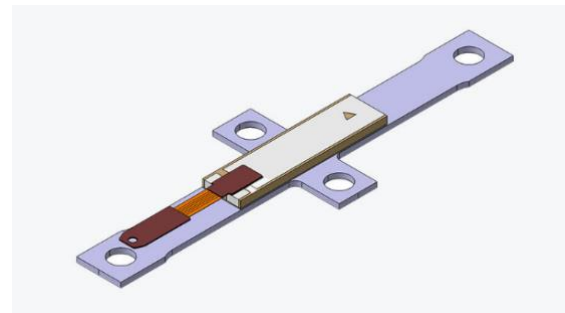
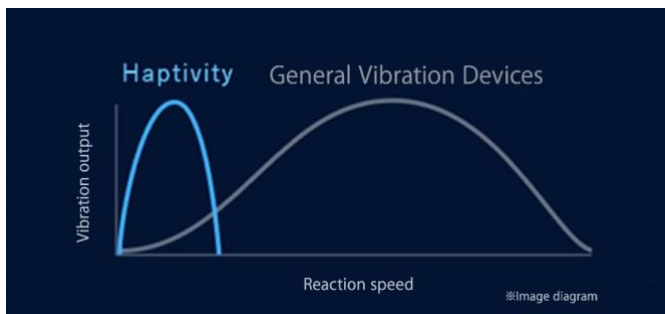
¹ HAPTIVITY is a registered trademark of Kyocera Corporation. Kyocera’s patented tactile transmission technology optimally controls pressure detection, reproduction of the feeling of pressing a mechanical button, and vibration activation using a combination of piezoelectric elements, vibration amplification mechanisms, control circuits, and software.

Kyocera's HAPTIVITY® technology integrates seamlessly into Sigma BF's three recessed rear buttons (Function Dial, Options, and Playback — including the dial's up, down, left, and right touchpoints), for accurate, comfortable, intuitive operation. Haptic feedback ensures reliable performance by enhancing user confidence and avoiding duplicate commands.

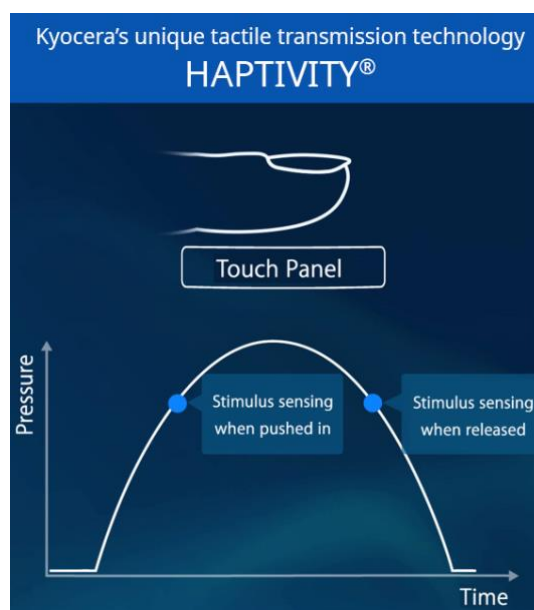
Kyocera envisions a future where HAPTIVITY® becomes a ubiquitous, high-performance tactile technology. With its piezoelectric ceramic vibrating elements, HAPTIVITY® has the potential to revolutionize consumer and automotive applications as an essential component of the next-generation human-machine interface. It can improve the user experience for any device having physical buttons, or having screens and panels designed to provide tactile feedback.

Features of HAPTIVITY®

1. Excellent vibration response: HAPTIVITY® uses a piezoelectric ceramic vibrating element with excellent touch-response, delivering physical feedback that instantly confirms user input and eliminates duplicate commands.



2. Realistic tactile feeling: A mechanical button delivers two sensations: on press, and on release. Conventional tactile technology generates a single sensation (when pressed), which differs from the tactile feeling of a button. In contrast, HAPTIVITY® generates an initial vibration when pressed, and a second vibration when released, providing a more realistic button sensation.



3. Tactile confirmation improves operation: Immediate tactile feedback confirms user input instantly, ensuring reliable operation and eliminating ambiguity. This makes HAPTIVITY® ideal for demanding applications, including mobility, telemedicine, and industrial equipment.

4. Recessed buttons save space, increasing design freedom: HAPTIVITY® facilitates compact, thin, flat designs, allowing recessed buttons that promote space-saving and greater freedom of design.

Details on HAPTIVITY®:

https://europe.kyocera.com/products/lcds_glass_glass_touch_panels/prd/haptivity/index.html



For more information on Kyocera: uk.kyocera.com

About Kyocera

Kyocera has been successful in Europe for over 50 years. From its European headquarters in Esslingen am Neckar, KYOCERA Europe GmbH operates 28 sites including manufacturing facilities, with products ranging from fine ceramics, electronics, automotive, semiconductor and optical components to industrial tools, LCDs, touch solutions, industrial printing components, solar systems and consumer goods such as kitchen and office products.

KYOCERA Europe GmbH is a company of the KYOCERA Corporation headquartered in Kyoto/Japan, a world leader in semiconductor, industrial and automotive components as well as electronic components, printing and multifunction systems, and communications technology. The technology group is one of the world's most experienced manufacturers of smart energy systems, with more than 45 years of industry expertise. The Kyocera Group comprises 292 subsidiaries (31 March 2024). In England, Kyocera has a subsidiary in Frimley, KYOCERA Fineceramics Ltd. With around 79,200 employees, Kyocera generated net annual sales of around EUR 12.29 billion in the 2023/2024 fiscal year.

Kyocera is ranked 874 on Forbes magazine's 'Global 2000' list for 2024, and ranked as 'The 100 Most Sustainably Managed Companies in the World' according to the Wall Street Journal. For the second year in a row, Kyocera qualified for the Dow Jones Sustainability Index (Asia-Pacific). As well, Kyocera receives a Bronze rating on EcoVadis Sustainability Survey and was acknowledged as a 'Top 100 Global Innovator 2025' for the ninth time by Clarivate, being one of the world's leading innovators.

Kyocera also takes an active interest in cultural affairs. The Kyoto Prize, a prominent international award, is presented each year by the Inamori Foundation — established by Kyocera founder Dr Kazuo Inamori — to individuals worldwide who have contributed significantly to the scientific, cultural, and spiritual betterment of humankind (equivalent to approximately €596,500 per prize category).

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