

RICOH IMAGING EUROPE S.A.S.
Parc ICADE Paris Orly-Rungis
7-9 avenue Robert Schuman
94150 Rungis
France

Paris, 25. January 2022

**The RICOH THETA X
360-degree camera, streamlining business with the first RICOH
THETA series camera equipped with a large touch screen**



Ricoh Company, Ltd. (President and CEO: Yoshinori Yamashita) today announced the launch of the new RICOH THETA X. As an advanced model of the RICOH THETA series of 360-degree cameras able to shoot 360-degree still images and videos in a single shot, this new model is equipped with a large touch screen display, achieves high-resolution images and has been designed in pursuit of usability and outstanding quality.

Keeping in line with the original product concept for RICOH THETA, the RICOH THETA X has a compact, lightweight body that can be easily carried around anywhere, and the new RICOH THETA X offers high-resolution image equivalent to a maximum of approximately 60 megapixels (output pixel). In a first for the RICOH THETA series, the new model is equipped with a large 2.25-inch full-color touch screen display, improving operability during standalone camera use. Also a first for the RICOH THETA series, the new model also supports use of an interchangeable battery and an external memory card for more efficient and reliable shooting in a business setting.

Background



Since the RICOH THETA was released as the world's first* 360-degree camera in 2013, it has been utilized in a wide range of fields as a tool that expands the possibilities of photographic and video expression. Recently, with the need to balance efforts to prevent the spread of COVID-19 with economic activity, 360-degree content has penetrated the business world as an important tool for improving sales activities and boosting business efficiency, particularly for the advanced remote viewing of real estate properties and automobiles or to record and manage progress at building and construction sites. In the "new normal," the use of this type of content is expected to expand in numerous industries and businesses from facility showcases to educational, healthcare and nursing settings, in addition to those industries where THETA is already in widespread use.

*As a mass-produced consumer product capable of capturing the scene around, above, and below the device in a fully spherical image (as of October 2013 based on Ricoh research).

Features

1. Large 2.25-inch touch screen display for significantly improved operability

The RICOH THETA X is equipped with a large user-friendly 2.25-inch touch screen display. With the ability to preview the scene before capture, adjusting shooting settings and view captured images, a range of operations from capture to viewing can be done without using a smartphone, offering vastly improved shooting efficiency.



2. High-resolution 360-degree still image and video capture

The CMOS image sensor, main processor and lens design have all been renewed. Incorporating a new sensor with approximately 48MP, it is now possible to capture high-resolution 360-degree still images with a maximum output of approximately 60MP. Two image sizes are available to match the scene: 11K for a high-resolution bright-light indoor photography, and 5.5K to capture images easily and efficiently in other scenarios. In addition, enhanced image stabilization realizes vivid and smooth shooting for 360-degree videos to be captured at a 5.7K-equivalent resolution of 5760 × 2880 pixels at 30 frames per second (fps).

3. Ability to switch battery and memory cards



For the first time in the RICOH THETA series, the new RICOH THETA X is powered by an interchangeable battery and the memory storage capacity can be increased with the use of an external memory card (microSDXC). Even when shooting long hours or capturing many images, users can continue shooting without worrying about remaining battery levels or storage capacity. The separately sold Rechargeable Battery DB-110 can be used as a spare battery.

4. Increased compatibility with smartphone



The RICOH THETA X can easily make a wireless connection to a smartphone without the need to enter an SSID by establishing a Bluetooth connection.

Incorporated MIMO* wireless communication technologies and real-time processing such as top/bottom correction while shooting videos made possible to transfer still images and videos from the RICOH THETA X to a smartphone at higher speeds**.

*Multiple Input Multiple Output technology that communicates using multiple antennas

** Approximately 1.5 times faster compared with the conventional camera RICOH THETA V while shooting 5.5K still images under the same condition according to actual measurements taken by Ricoh.

5.Improved expandability of the camera body

Continuing on from the RICOH THETA V and RICOH THETA Z1, the RICOH THETA X utilized an Android-based OS, allowing third-party developers to develop and release applications (plug-ins) to expand the function of the camera. Additionally, the RICOH THETA X is equipped with a large touch panel monitor, significantly extending the scope for plug-in development.

It is now also possible to easily set up the “client mode” (a mode used to directly connect the RICOH THETA to a wireless router) without using a smartphone. This allows plug-ins to be installed and firmware to be updated simply by operating the RICOH THETA X itself without using a computer or smartphone, making it easy to expand functions to suit the user's needs.

6.Linking with image sharing services

The RICOH THETA X links with image sharing services provided by Ricoh to improve user's workflows.

It links with RICOH360 Tours *4 for the real estate industry to provide a dedicated RICOH THETA X plug-in that streamlines on-site photography



* RICOH360 Tours: 360° panorama tour production service provided by RICOH

7. Additional Features

- With built-in GPS and support for A-GPS function, accurate positional information can be obtained from the device.
- The camera employs magnesium alloy for the body exterior, ensuring robustness and excellent heat dissipating properties.
- Through the USB Type-C port on the side of the main body, power can be supplied to the camera even during tripod use without using the optional extension adapter.
- Time Shift Shooting mode allows the photographer to capture an image without being in the frame, and continuous shooting mode continuously captures 20 still images per second (when shooting 5.5K still images).
- Incorporates a touch shutter function that allows a photo to be taken by tapping on the touch screen display in addition to pressing a shutter button.
- Images can be registered as favorites from the list of images shown on the touch screen display. The images marked as favorites can be viewed on the THETA app on a smartphone.
- Still image playback orientation can be selected in shooting settings. The RICOH THETA X features AI Auto which utilizes AI recognition technology to identify the subject in images captured and display from that point.
- Exposure compensation and white balance can be adjusted with the camera itself before livestreaming.
- Easily switch between various shooting modes (still image, video, custom settings, livestreaming, plug-in) using only the mode button on the camera.

Specifications

RICOH THETA X main Body Color: Gray

Lens construction	7 Elements in 7 Groups
Lens F number	F2.4
Object distance	Approx. 40cm - ∞ (from front of lens)
Image Sensor Size	1/2.0 type (x2)
Image Sensor Effective Pixels	Approx. 48 megapixels (x2)
File Size Still Images	11K: 11008 x 5504 (Approx. 60 megapixels) 5.5K: 5504 x 2752 (Approx. 15 megapixels)
File Size Videos	5.7K: 5760 x 2880 /30fps /120Mbps,64Mbps,32Mbps (*) 4K: 3840 x 1920 /60fps /120Mbps,64Mbps,32Mbps (*) 4K: 3840 x 1920 /30fps /100Mbps,54Mbps,32Mbps 2K: 1920×960 /30fps /32Mbps,16Mbps,8Mbps
Live Streaming (USB)	4K: 3840×1920 /30fps /100Mbps *1
File format	Still image: JPEG (Exif Ver. 2.3.1) Video:MP4(Video: MPEG-4 AVC/H.264, Audio: AAC-LC(1ch)) Live Streaming : Video: H.264, Audio: AAC-LC(1ch)
Recording medium	Internal memory: Approx. 46GB microSDXC Memory Card (64GB or higher, and conforms to UHS-I interface and Video speed class V30, exFAT format)

<p>Number of photos that can be recorded, time *2</p>	<p>Still image: (11K) Approx. 4600 photos, (5.5K) Approx. 11500 photos</p> <p>Video (time per recording): Max. 5minutes/Max. 25 minutes *1</p> <p>Video (total recording time):</p> <p>5.7K/30fps/64Mbps: Approx. 100 minutes</p> <p>4K/60fps/64Mbps: Approx. 100 minutes</p> <p>4K/30fps/54Mbps: Approx. 115 minutes</p> <p>2K/30fps/16Mbps: Approx. 395 minutes</p> <p>* With an Internal memory (Approx. 46GB)</p>
<p>Exposure control mode</p>	<p>Auto, Shutter Priority, ISO Priority, Manual</p>
<p>Shutter speed</p>	<p>Still image: [AUTO] 1/16000 sec. to 1/8 sec (When the camera is determined to be stationary: Up to 1/2 seconds), [Shutter Priority, ISO Priority] 1/16000 sec. to 15 sec. , [Manual] 1/16000 sec. to 60 sec.</p> <p>Video: 1/16000 sec. to 1/30 sec.</p> <p>Live Streaming : 1/16000 sec. to 1/30 sec.</p>
<p>ISO sensitivity (standard output sensitivity)</p>	<p>Still image, Video: [AUTO, Shutter Priority] ISO50 to 3200, The Upper Limit settings ISO100 to 3200, [ISO Priority, Manual] ISO50 to 3200</p> <p>Live Streaming : ISO50 to 3200</p>
<p>Exposure compensation</p>	<p>-2.0 to +2.0EV, 1/3EV step</p>
<p>White balance mode</p>	<p>Auto,outdoor,shade, cloudy, incandescent lamp 1, incandescent lamp 2, daylight color fluorescent lamp, natural white fluorescent lamp, white fluorescent lamp, light bulb color fluorescent lamp, Underwater, Color temperature(2500K-10000K) *3</p>
<p>Shooting mode</p>	<p>Still image, Video: Auto, Shutter Priority, ISO Priority, Manual</p> <p>Live Streaming : Auto</p>

Shooting Functions	Still image: Noise reduction, HDR Rendering, Continuous shooting, Time shift, Interval shooting, Multi bracket shooting, Self-timer (1~10sec.), My Settings Video: Self-timer (1~10sec.), My Settings
Display Panel	Type: 2.25 inch TFT color LCD, 360 x 640 dots, Automatic brightness adjustment function Touch Screen: Capacitive sensing method
Wireless Communications Standard	IEEE802.11 a/b/g/n/ac (2.4GHz/5GHz) *4 IEEE802.11 b/g/n (2.4GHz Only) Bluetooth 5.0
GNSS	GPS, SBAS(WAAS, EGNOS, MSAS, GAGAN), QZSS, A-GPS
External interface	USB Type-C, USB3.2 gen1
Remote Shutter	Remote Control TR-1
Power source	Rechargeable battery DB-110 (1350mAh) *5
Battery life	Still image:Approx. 220 photos *6 Video:5.7K 30fps Approx. 30 minutes, 4K 30fps Approx. 55 minutes *6
Exterior/external dimensions	51.7mm (W) x 136.2mm (H) x 29.0mm (21.5mm *7) (D)
Weight	Approx. 170g (Included dedicated battery and SD memory card) Approx. 144g (Body only)
Included Accessories	Rechargeable battery DB-110, Soft case, USB Cable, Quick Start Guide, Important Message to Customers

*1 If the temperature in the camera rises, shooting will end automatically. The maximum shooting time for recording 5.7K/30 fps and 4K/60 fps videos is approx. 10 minutes (at an ambient temperature of 25°C) due to the temperature rise of the camera. The maximum time for streaming 4K/30 fps live streaming is approx 25 minutes (at an ambient temperature of 25°C). The firmware update adds 2K mode, which means that the maximum time for 2K/30 fps live streaming can be distributed for even longer periods of time.

If the temperature in the camera rises rapidly due to the surrounding environment or shooting conditions, the shooting time will be even shorter.

*2 The number of photos and time are guides only. The actual number differs according to the photography conditions.

*3 The Color temperature can be set for Still image or Video mode.

*4 That differs depending on the region.

*5 Charge the battery by connecting it to a PC using the supplied USB cable.

*6 The number of photos that can be taken is a guide based on RICOH's measurement method. The actual number differs according to usage conditions.

*7 Excluding lens section.

- Android is a trademark of Google LLC.
- microSDXC is a trademark of SD-3C, LLC.
- Bluetooth® is a trademark or registered trademark of Bluetooth SIG Inc. in the United States and other countries.
- USB Type-C™ is a trademark of USB Implementers Forum.
- All other product names or company names mentioned herein are the trademarks or registered trademarks of their respective companies.
- Specifications, designs, and other aspects are subject to change without notice.

| About Ricoh |

Ricoh is empowering digital workplaces using innovative technologies and services that enable individuals to work smarter from anywhere.

With cultivated knowledge and organizational capabilities nurtured over its 85-years history, Ricoh is a leading provider of digital services and information management and print and imaging solutions designed to support digital transformation and optimize(optimize) business performance.

Headquartered in Tokyo, Ricoh Group has major operations throughout the world and its products and services now reach customers in approximately 200 countries and regions. In the financial year ended March 2021, Ricoh Group had worldwide sales of 1,682 billion yen (approx. 15.1 billion USD).

For further information, please visit www.ricoh.com

© 2022 RICOH COMPANY, LTD. All rights reserved. All referenced product names are the trademarks of their respective companies.