Ricoh launches the RICOH THETA X 360-degree camera —offering businesses efficient and reliable shooting—

TOKYO, January 25, 2022 – Ricoh Company, Ltd. announced the launch of RICOH THETA X, an advanced model of the RICOH THETA series of 360-degree cameras capable of shooting 360-degree still images and videos in a single shot. Equipped with a large touch screen display, this new model achieves high-resolution quality images with greater usability.

The RICOH THETA X retains its signature high portability with a compact, lightweight body as the original RICOH THETA. It also offers a high-resolution image equivalent to a maximum of approximately 60 megapixels (output pixel). The model is the first in the RICOH THETA series to have a large 2.25-inch full-color touch-screen display, improving operability as a standalone camera. RICOH THETA X also supports an interchangeable battery and an external memory card for more efficient and reliable shooting in business settings.

[Sample Images] The RICOH THETA X

Product Name	RICOH THETA X
Body Color	Metallic Gray

Background

Since the RICOH THETA was released as the world's first*[1] 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. The explosion of 360-degree image content has been invaluable in the business world as an essential 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 construction progress at building and other sites. This type of content is expected to continue to expand into numerous other industries and businesses, from facility showcases to educational, healthcare, and nursing settings, in addition to industries where THETA is already in widespread use.

*[1]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 of the New RICOH THETA X

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, adjust 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 been renewed. Incorporating a new sensor with approximately 48MP makes it 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 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. The separately sold Rechargeable Battery DB-110 can be used as a spare. An external memory card increases memory storage capacity (microSDXC). Users can continue shooting without worrying about the remaining battery levels or storage capacity even when shooting long hours or capturing many images.

4. Increased compatibility with smartphone
   - The RICOH THETA X easily connects to a smartphone by establishing a Bluetooth connection without entering an SSID.
   - Incorporated MIMO*[2] wireless communication technologies and real-time processing such as top/bottom correction while shooting videos make it possible to transfer still images and videos from the RICOH THETA X to a smartphone at higher speeds*[3].

*[2] Multiple Input Multiple Output technology that communicates using multiple antennas

*[3] Approximately 1.5 times faster than 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
   - As with the RICOH THETA V and RICOH THETA Z1, the RICOH THETA X utilizes an Android-based OS, allowing third-party developers to develop and release applications (plug-ins) expanding the camera's functionality. Additionally, the RICOH THETA X's large touch panel monitor significantly extends the scope for plug-in development.
   - Simple "client mode" set up (a mode used to directly connect the RICOH THETA to a wireless router) without using a smartphone. Plug-ins can be installed and firmware updated simply through the RICOH THETA X itself without connecting to a computer or smartphone, making it easy to expand functionality to suit users' needs.

6. Linking with image sharing services
   - RICOH THETA X links with Ricoh's image-sharing services to improve users' workflows.
   - Links with RICOH360 Tours*4 for the real estate industry to provide a dedicated RICOH THETA X plug-in that streamlines on-site photography

   *4 RICOH360 Tours: 360º 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's magnesium alloy body exterior ensures robustness and excellent heat-dissipating properties.
   - Power can be supplied to the camera through the USB Type-C port on the side of the main body 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. Continuous shooting mode continuously captures 20 still images per second (when shooting 5.5K still images).
   - The shutter can be activated by a button on the camera or touch screen.
   - Images can be marked as "favorites" from the touch screen display and 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 utilizing AI recognition technology to identify the subject in images captured and displayed from that point.
   - Exposure compensation and white balance can be adjusted on the camera before live streaming.
   - Easily switch between various shooting modes (still image, video, custom settings, live streaming, plug-in) using the camera's mode button.

[New Optional Accessories]

Lens Cap TL-3
- A dedicated compact cap to protect RICOH THETA X lenses.
- Thanks to a meticulous design with inner material and construction, the cap can be affixed or removed without touching the lenses. The lens cap can also be attached to the bottom of the camera or the upper lens area.
- Offers stable shooting when the cap is attached to the bottom of the camera and placed on a flat table, in combination with the touch shutter function.

Compatible Model: RICOH THETA X
Main Body Color: Gray

	RICOH THETA X
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)
Number of photos that can be recorded, time *2	With an Internal memory (Approx. 46GB) Still image: (11K) Approx. 4600 photos, (5.5K) Approx. 11500 photos Video (time per recording): Max. 5minutes/Max. 25 minutes *1 Video (total recording time): 5.7K/30fps/64Mbps: Approx. 100 minutes 4K/60fps/64Mbps: Approx. 100 minutes 4K/30fps/54Mbps: Approx. 115 minutes 2K/30fps/16Mbps: Approx. 395 minutes
Exposure control mode	Auto, Shutter Priority, ISO Priority, Manual
Shutter speed	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. Video: 1/16000 sec. to 1/30 sec. Live Streaming: 1/16000 sec. to 1/30 sec.
ISO sensitivity (standard output sensitivity)	Still image, Video: [AUTO, Shutter Priority] ISO50 to 3200, The Upper Limit settings ISO100 to 3200, [ISO Priority, Manual] ISO50 to 3200 Live Streaming: ISO50 to 3200

Exposure compensation	-2.0 to +2.0EV, 1/3EV step
White balance mode	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
Shooting mode	Still image, Video: Auto, Shutter Priority, ISO Priority, Manual Live Streaming: Auto
Shooting Functions	Still image: Noise reduction, HDR Rendering, Continuous shooting, Timeshift, 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 (2.4GH z 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 increases, 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) to prevent camera overheating.

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 durations.

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 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

###