

RICOH
imagine. change.

A Waterproof, Dustproof, Heavy-Duty Digital Camera

G900



A Camera for the Hard-Working Professional

NEW



**Proof against water, dust, shock,
and chemicals**

5× optical zoom (28-140mm)*

RICOH G900

* All focal lengths in this catalog are equivalent to 35mm format.

A Camera for the Hard-Working Professional

Camera performance equal to the demands of the harshest worksite
 ×
 Vastly more efficient on-site information management

In addition to approximately 20 effective megapixels, 5x optical zoom, and the water-, dust-, and shock-resistance demanded of equipment used on construction worksites, the RICOH G900 offers an electronic survey slate and security features to meet the varied needs of the hard-working professional. With features for taking pictures securely and reliably and managing them efficiently, this work-site camera is sure to increase productivity.



Actual size

Water- and dust-proof*1

Impact*2 and crush-resistant*3

Chemical-resistant*4

5x optical zoom

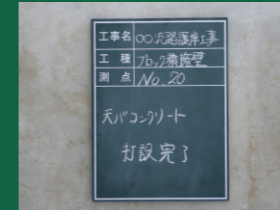
Approximately 20 megapixels

CALS mode

6.5GB of internal memory

Embedded Image Clips

- ① Record an image clip. ② Take the main photograph. ③ Insert the image clip.



NEW

Pictures can be described using embedded image clips. For example, you can write the location, photographer, measurements, and other information on a slate, photograph it, and then embed the photo in

subsequent shots. You can choose the embedded image's location (top, bottom, left, or right) and size (large, medium, or small).

For more information on image clips, see page 6. ▶

Embedding image clips

You can choose the clip's position (top, bottom, left, or right) and size (large, medium, or small).



Position: Choose from positions ① through ④.



Size: Choose from sizes 80%, 60%, or 40% of the quarter size of selected image

*1 Rated for 2 hours continuous use at depths of up to 20m/66 ft. IPX8 water resistance (equivalent to JIS Class 8), IP6X dust resistance (equivalent to JIS Class 6).
 *2 Measured according to RICOH's in-house version of the Pentagon MIL-Standard 810F Method 516.5-Shock drop test (a drop of 2.1 m/6.9 ft. onto a 5 cm/2 in. thick plywood surface while on)
 *3 Measured according to in-house tests.
 *4 Resistant to ethanol, sodium hypochlorite, and liquid chlorine dioxide.

Tough

Tough enough for the roughest worksite

Impact resistant Tough body with heightened impact resistance passes the 2.1m drop test



Although it is light and compact, the RICOH G900 features a tempered front lens element and protection at key points, tough enough to withstand the Pentagon MIL-Standard 810F 2.1m (6.9ft) drop test on all 26 sides (6 faces, 8 corners, and 12 edges) even when the power is on.

Chemical resistant Worry-free usage with sodium hypochlorite, ethanol, or liquid chlorine dioxide disinfectants



The RICOH G900 can be used with ethanol, sodium hypochlorite, and liquid chlorine dioxide disinfectants, allowing it to be used worry-free in medical facilities or on production lines.

Support for filters



Third-party 37mm filters can be attached to the lens to protect it from condensation and scratches.

Waterproof IPX 8 water resistance, good to depths of 20m for up to 2 hours



With Class 8 JIS/IEC water resistance, the RICOH G900 can take photographs for 2 hours at depths of 20m (66ft). Use it on wet worksites or in the rain or the dirt can be rinsed off.

Dust- and freeze-proof Toughness that shines on harsh jobs



Class 6 JIS/IEC dust resistance keeps out dust and sand. Able to withstand temperatures as cold as -10°C (14°F), the RICOH G900 can be used in cold environments.

Wide, long neck strap



Long enough to be worn across the chest, the strap is broad and rugged. Camera can also be hung vertically as it can also be worn around the neck so that the camera can easily be placed in a breast pocket.

Easy to hold, easy to use



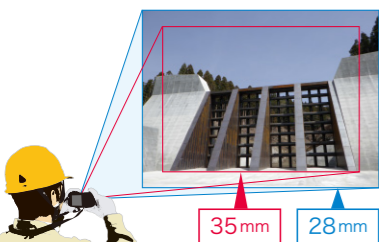
The large grip guides your fingers into a position where you can support the camera naturally. Additionally the mode dial and other controls are designed for ease of use with gloves.

Wide&Macro

With 5x optical zoom, a lens that handles a range of subjects

Compose shots freely with 5x optical zoom

Featuring a 28–140mm lens with 5x optical zoom and a field of view wider than that of a typical 35 mm lens, the RICOH G900 is perfect for shooting indoors and in other locations where there is little room to step back, yet also takes telephoto shots in its stride.



Get wide shots without stepping back



28mm Zoom in on distant subjects 140mm

Wide conversion lenses

Use a conversion lens for wider shots at a focal length equivalent to 22mm. When attached, conversion lenses provide JIS Class 7 water resistance and are so slim that the extra length is almost unnoticeable.



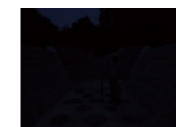
22mm Note: When used with a wide conversion lens, the flash will not illuminate objects at the edges of the frame and parts of any shots taken with the flash will be dark.

Smart

A high-performance camera for your worksite

NEW New image processing engine and back-illuminated CMOS sensor

Take clear shots of dimly-lit worksites. 20 effective megapixels ensures that details show clearly even after pictures are cropped. The latest image sensor and image processing engine can handle a wide variety of scenes, from long shots to close-ups, even under at night or under low light.



Actual brightness (simulation)



Flash: AUTO
ISO: AUTO (125-1600)
shutter speed: 1/20 sec;
aperture: F3.5



Flash: OFF
ISO: 6400
shutter speed: 1/20 sec;
aperture: F3.5

Internal memory approx.6.5GB of image storage

The camera features internal memory with space enough for 856* images. You can keep shooting without worrying even when the memory card is full. * At settings of 5184 x 3888 (L) ★★★

NEW Wide-angle 3.0-inch, 1,040k-dot monitor is easy to read, indoors and out

The large, high-resolution (3.0", aspect ratio of 3:2, approximately 1,040k-dot) monitor features a cover with an anti-reflective (AR) coating that makes it easy to view even outdoors in bright sunlight. The new outdoor view feature lets



you quickly adjust brightness in response to ambient lighting conditions for an even better viewing experience.

Note: Composite image; actual display not shown.

ADJ button

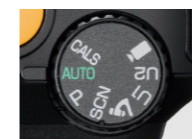


The ADJ button provides quick access to camera settings, including exposure compensation and ISO sensitivity.

Note: The ADJ button functions as a camera memo button when camera memo settings are enabled.

Select modes quickly and easily using the mode dial

For example, selecting Digital Microscope mode, which illuminates the ring lights for photos at distances as close as 1cm,



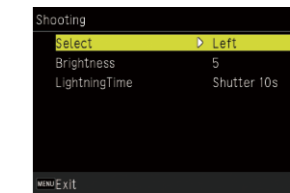
is as simple as rotating the mode dial. Frequently-used settings can be assigned to the U1 and U2 positions on the mode dial for quick recall.

Recall saved settings at the twist of a dial

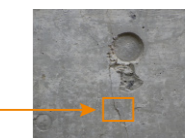
Saved settings for different scenes can be recalled instantly imply by rotating the mode dial to U1 or U2.

NEW Adjustable ring light

The lens is surrounded by a six-LED ring light. You can choose which LEDs light and adjust their brightness to get clear shots showing fine details such as the model numbers on small parts or scratches in walls or floors.



Ring light settings



Left ring lights used for a photo taken in macro mode at a distance of 1cm (0.4in)

NEW 4K resolution for sharper movies

Shoot movies in 4K (frame size 3840 x 2160 pixels, 30 fps) for high-resolution footage that gives you an overall view of a big construction site, for example, or helps you grasp the relative positions of various objects.

Note: The camera can record up to approximately 25 minutes or 4GB of footage per shot.

NEW Outline fonts

The camera uses clear-rendering outline fonts for composite images created using electronic survey slates.

Tweaks for on-site photography and photo management

■ Button hold options prevent unintended operation

To avoid unintended operation such as accidental menu display or the camera turning on during transport, use the menus to reduce the response speed of the power and menu buttons.

■ Folder-creation options

Users have a choice of three options for naming the folders used to store images: standard, user-selected, or by date.

■ Display folder at startup

While starting up, the camera displays the current folder together with the images it contains.

■ Display date at startup

The RICOH G900 displays the date from startup until the shutter release button is pressed, helping you catch errors in the camera clock before they are recorded with your pictures.

■ Pitch and roll indicators help keep the camera level

The camera's built-in electronic level with pitch and roll indicators can be used to keep the camera level.

■ Rename files

Users can select the four-letter prefix used to name files. Files can be named accoxo the photographer or departmental rules to help simplify image management.

Versatile

Varied functions for a variety of situations

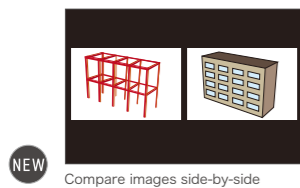
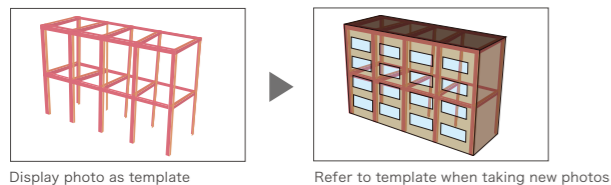
Varied functions for a variety of situations

NEW ■ Equipped with GPS and an electronic compass

The onboard GPS and electronic compass record the current location and heading with each picture taken for highly accurate positioning no matter what the time or place. The RICOH G900 supports GPS, the Japanese Quasi-Zenith Satellite System (QZSS, also known as Michibiki), and GLONASS, can use signals from Satellite-Based Augmentation Systems (SBAS), and can record track log entries once a second for both photos and movies. Set the camera clock using GPS or use the "GPS memory" button to record the locations of selected targets.

■ Compare images with "Watermark Options"

Use existing pictures as a template when composing new photos. Template transparency can be selected from 20, 40, 60, and 80 percent, or photos with the same composition as the template can be compared side-by-side. One way in which this feature can be used is for before and after shots on construction sites.



■ Skew correction

Select "Skew Correct Mode" to reduce the effects of perspective when photographing signs, business cards, and other rectangular subjects from an angle. The camera also records the uncorrected photos. Users have the option of displaying guides to help correct skew.



NEW ■ Haze penetration

Image processing is used to reduce the effects of mist or haze for sharper images in ports or among the mountains.

NEW ■ Depth-of-field composites (focus stacking)

Use focus stacking to create images where every part of the subject, from front to back, is in focus.

■ Interval-timer photography

The camera takes photos at preset intervals. Choose from intervals of 10 seconds to 99 minutes (interval-timer photography) or 1, 5, 10, 30, or 60 minutes (time-lapse movies).

■ Firefighting mode

Fires are a challenge for autofocus. Firefighting mode fixes focus at 2.5m and heightens ISO sensitivity and sharpness.

Support for FlashAir™ memory cards

Using a FlashAir card* (a SD memory card with built-in wireless LAN), you can upload pictures from the worksite to a distant office or the like. The card's wireless LAN can now be enabled or disabled from the camera, helping reduce the drain on the battery.

* An SD-UWA-series W-04 Toshiba FlashAir™ SDHC/SDXC memory card.

Secure

Create images that can be trusted; prevent leaks

Password protection restricts access to a variety of camera functions

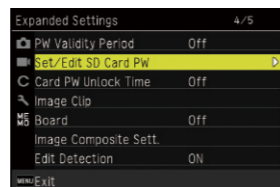
Password-protect the entire camera or internal memory or require a password only for USB access or to modify camera settings. Access can be granted by scanning a password barcode or entering the password using the camera's onscreen keyboard.

Create up to two passwords

Create separate user and administrator passwords. The administrator can restrict access to functions used on-site, for example to prevent unintended changes to camera settings when the camera is used in the workplace.

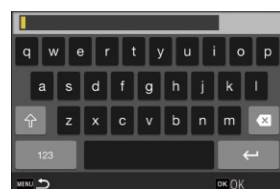
Password protection for memory cards

Two types of SD memory cards can be password protected: SDHC and SDXC. Password-protecting memory cards prevents images falling into the wrong hands should the card be lost or stolen.



Memory card password-entry dialog

Note: Do not forget your password. Password-protection cannot be removed by support personnel. Note: Password protection has been tested and approved for use with Panasonic, Kioxia, and SanDisk SDHC and SDXC memory cards of up to 256 GB capacity.



	Administrator	User
Camera access	●	●
Menu access	●	●
Viewing the contents of internal memory	●	●
USB connection	●	●

Note: When both administrator and user passwords are supplied, the administrator password takes priority.

Smooth

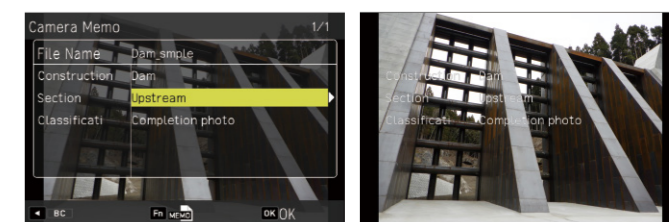
Automatize post-shooting sorting

Reducing the work for sorting files with Camera memos

Camera memos: You can select pre-generated camera memos listing job information or other data to be added to pictures as they are taken.

Hard-to-identify images can be clearly labeled with written descriptions in the form of camera memos saved simultaneously with the picture and consisting of up to 100 items of 999 lines each, each with descriptions of up to 128 characters. Choose from multiple camera memo lists, which can be stored in the camera's internal memory.

Note: Camera memo lists can be created using the supplied LE2 software.



Note: Composite image; actual display not shown.

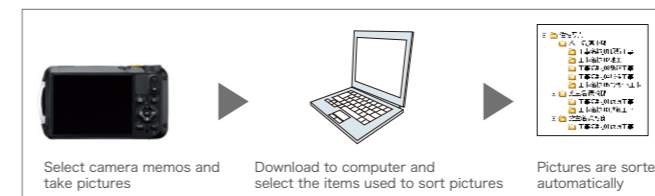
Versatile functions help you manage and sort images after shooting

Here are some features that will greatly reduce your post-shooting workload when it comes to such tasks as data management and manually sorting images by viewing them one at a time.

■ Categorize images automatically

Import memo data and use it to categorize images automatically, reducing the work involved in sorting files after shooting.

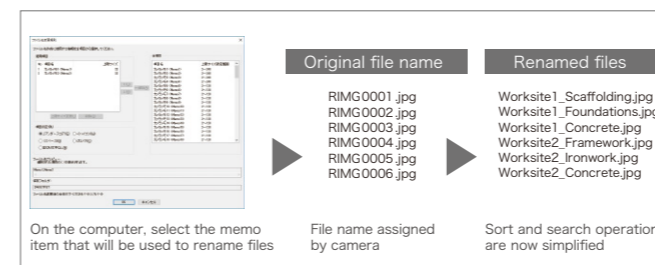
Note: Requires the supplied DL-20 and EX2 software.



■ Sorting and searching are a snap

Rename files automatically based on memo contents to streamline sort and search operations. Files can also be renamed based on information read from barcodes.

Note: Requires the supplied EX2 software.



■ Barcodes help with memo and password entry

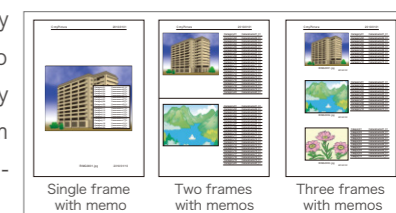
The RICOH G900 reads linear and matrix barcodes. Barcodes can be stored as camera memos that can help with such tasks as managing goods for distribution and preventing patient mix-ups at medical institutions.

Note: Reading barcodes requires a camera memo list.



■ Camera memos make generating reports a snap

It's easy to generate handy reports with memos. No need to write them out by hand—simply print them and use them in statements or reports.



Note: Requires the supplied ME1 software.

■ Stamp memo data on pictures

Camera memo data can be stamped on images so that their content can be verified as text.

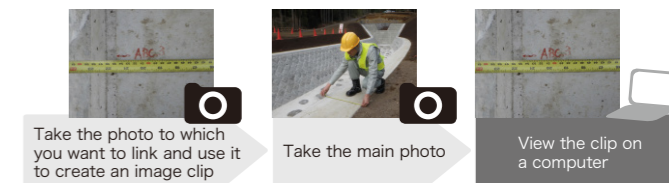


Note: Composite image; actual display not shown.

■ Link related images with image clips

For example, you can clip shots of survey data onto worksite photos so that the relationship between the photos and the survey data is clear when the photos are viewed. Users can choose a clip size that suits their needs; options range from 3M to VGA.

Note: Requires the supplied ME2 software.



■ Add camera memos to movies

Simplify movie file management with camera memos that can be viewed using the supplied ME2 software. The technique for adding memos to movies is as same as for photos.

■ Add temporary voice memos to pictures

Up to 30 seconds of voice data can be recorded when a photo is taken. Use this feature to add temporary memos giving onsite survey data and other up-to-the-minute information.



RICOH G900

Accessories included

- USB Cable
- USB Power Adapter
- Rechargeable Battery
- Power Plug
- Battery Charger
- Neck Strap
- Macro Stand
- Instruction Manual (Camera User Guide)
- Warranty Card

Optional Accessories for the RICOH G900

• RICOH SC-900 Soft Case

A sleeve-style camera case that allows the camera to be readied easily and used quickly.

• RICOH O-CC 174 Protector Jacket

A silicone jacket that protects the camera from dirt and scratches.



Principal Specifications for the New RICOH G900 Digital Camera

Product Name		RICOH G900
Lens		RICOH lens, 11 elements in 9 groups (5 aspherical elements)
Focal Length (in 35mm format equivalent)	Focal Length	5 - 25 mm (Approx. 28 - 140mm)
	Maximum Aperture	F3.5 (W) - F5.5 (T)
Zoom	Optical Zoom	5X
	Digital Zoom	approx. 8.1X
	Intelligent Zoom	approx. 7X at 10M, approx. 40.5X at 640 (including optical zoom)
Motion Blur Reduction	Still	Pixel Track SR, Hi-sensitivity anti-shake mode (Digital SR)
	Movie	Movie shake reduction mode (Movie SR, Movie SR+)
Focus	Type	9-point AF, Spot AF, Auto tracking AF
	Focus Range (From lens face)	Standard: 0.5m - infinity / 1.64ft. - infinity (entire zoom range) Macro: 0.1 - 0.6m / 0.33 - 1.97ft. (entire zoom range) 1cm Macro: 0.01 - 0.3m / 0.03 - 0.98ft. (middle zoom position) Infinity-landscape, Pan Focus, Manual Focus: available, 2.5m / 8.20ft. (Firefighting Mode)
Number of Effective pixels		Approx. 20 megapixels
Image Sensor		1/2.3" CMOS
Number of Recorded pixels	Still	Size: L(20M), M(10M), S(5M), XS(3M), 2M, 1M, VGA () in aspect 4:3. • 2M and 1M are available only in the CALS mode. Aspect: 4:3, 3:2, 1:1 • In the CALS mode, the aspect ratio is fixed to 4:3.
	Movie	4K, 1920, 1280
Sensitivity (Standard Output Sensitivity)		AUTO, Manual (ISO 125 - 25600)
White Balance		Auto, Daylight, Shade, Cloudy, Tungsten light, Fluorescent light (D: Daylight Color, N: Daylight White, W: Warm White), Ring light, Manual
Display	Type	3.0" LCD, approx. 1040K dots, AR Coating (Cover only)
	Adjustments	Brightness, Outdoor View Setting: ±2 Steps
Exposure Control	Metering System	Multi-segment metering, Center-weighted metering, Spot metering
	Exposure Compensation	± 2 EV (1/3 EV steps)
Scene modes		Auto Picture, Program, HDR, Movie, High Speed Movie, Digital Microscope, Interval Shot, Interval Movie, Surf & Snow, Digital SR, Report, watermark, Firefighting, Skew Correct, Text, Zoom Macro, Haze removal, Depth of field composition,
Playback modes		Slideshow, Image Rotation, Small Face Filter, Ink Rubbing Filter, Digital Filter (B&W/ Sepia, Toy Camera, Retro, Color, Extract Color, Color Emphasis, High Contrast, Starburst, Soft, Fish-eye, Brightness, Miniature), HDR Filter, Movie Edit, Red-eye Edit, Resize, Cropping, Image Copy, Protect, Start-up Screen, Recover File, Auto Image Rotation, Skew Correct
Shutter Speed		1/4000 - 1/4 sec. (Mechanical and electronic shutter)
Built-in flash	Modes	Flash-on and Flash-off modes. "Red-eye" compensation function employs a pre-discharge.
	Flash Range	Wide: approx. 0.2 - 5.5m / 0.66 - 18 ft. (ISO Auto) Tele: approx. 0.2 - 3.5m / 0.66 - 11 ft. (ISO Auto)
Drive Modes		One shot, Self-timer, Continuous Shooting, Burst Shooting, M Continuous, S Continuous, Remote Control, Auto Bracketing
Storage Media		Built-in Memory (approx. 6.5GB), SD/SDHC/SDXC Memory Card, FlashAir™ Card
Power Source	Battery life	Still*1: approx. 340 shots (Rechargeable Battery) Playback*2: approx. 260 min. (Rechargeable Battery)
	GPS	GPS, GLONASS, QZSS (Michibiki) + SBAS GPS display mode: LAT/LON, UTM, MGRS GPS logging, GPS lock, GPS time adjustment, GPS data imprint, UTC data imprint
Electronic Compass		Compass heading: Cardinal, Degrees, Cardinal/Degrees Declination, Compass data imprint
Interfaces		USB 3.0 (Type-C), HDMI output terminal (Type D)
Water proof / Dustproof		Equivalent to JIS Class 8 waterproof and JIS Class 6 dustproof capabilities
Dimensions		Approx. 118.2 (W) x 65.5 (H) x 33.1 (D)mm / 4.7 (W) x 2.6 (H) x 1.3 (D) inches (including lens depth)
Weight		Approx. 252g / 8.9 oz. (Included dedicated battery and SD memory card), Approx. 225g / 7.9 oz. (Body only)
Included Accessories		Rechargeable Battery DB-110, Battery Charger BJ-11, USB Power Adapter, Power Plug, USB Cable I-USB 173, Neck Strap, Macro Stand
Languages		English, French, Germany, Spanish, Portuguese, Italy, Dutch, Japanese, Danish, Swedish, Finnish, Polish, Czech, Hungarian, Turkey, Greek, Russian, Thai, Korean, Simplified Chinese, Traditional Chinese

*1 Recording capacity shows approximate number of shots recorded during CIPA-compliant testing.
Actual performance may vary depending on operating conditions.

*2 According to the result of RICOH in-house testing.

RICOH G900 Optional Accessories

Product Name	Model Name
Soft Case	RICOH SC-900
Protector Jacket	RICOH O-CC 174
Wide Conversion	DW-5
Remote Control Waterproof	O-RC 1
Rechargeable Battery	DB-110
Battery Charger	BJ-11

RICOH G900 Software

DL-20	Copy pictures to a computer
LE2	Create camera memo lists
ME2	View pictures, edit camera memos, and print reports
EX2	Rename files based on camera memo data and export camera memo data

RICOH G900 System Requirements

Operating Systems Supported	Windows®
	Windows® 10 (32bit/64bit) Windows® 8.1 (32bit/64bit) Windows® 7 SP 1(32bit/64bit) Windows Server® 2019(64bit) Windows Server® 2016(64bit) Windows Server® 2012 R2(64bit) Windows Server® 2008 R2(64bit)

SD Memory Card Storage Capacity (Number of Images and Time)

				Internal Memory (approx. 6.5GB)	16GB
Still Image*1	5184 × 3888	L	★★	1478	3233
	3648 × 2736	M	★★	2916	6379
	2592 × 1944	S	★★	5394	11801
	2048 × 1536	XS	★★	8299	18155
	1600 × 1200*2	2M	★★	11988	26225
	1280 × 960*2	1M	★★	14386	31470
Movie	640 × 480	VGA	★★	53949	118013
	3840 (3840 × 2160)	30 fps		00:09:26	00:20:44
	1920 (1920 × 1080)	30 fps		00:47:36	01:44:15
	1280 (1280 × 720)	30 fps		01:18:41	02:52:14

Note: The maximum recording time is the estimated total recording time.

*1 In aspect 4:3

*2 In the CALS mode

For more information, visit:

<https://industry.ricoh.com/en/dc/>



• The SDXC logo is trademark of SD-3C, LLC. • This product supports PRINT Image Matching III. PRINT Image Matching-enabled digital still cameras, printers, and software help photographers produce images that are more faithful to their intentions. Some functions are not available on printers that are not PRINT Image Matching III compliant. • All copyrights regarding PRINT Image Matching, PRINT Image Matching II, and PRINT Image Matching III are reserved by Seiko Epson Corporation. • Windows and Windows Server are registered trademarks of Microsoft Corporation in the United States and other countries. • HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and/or other countries. • FlashAir™ is a trademark of Toshiba Memory Corporation. • This product is compatible with the "Michibiki" Quasi-Zenith Satellite System. • USB Type-C is a trademark of the USB Implementers Forum. • All other product/brand/corporate names are trademarks or registered trademarks of their respective companies.

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