

## Volume Photography License Compatible Functions

This “Help Guide” is for those who have applied for an additional service license for a Sony digital camera. The features included in the “Volume Photography License Package” are explained here.

### **Function overview**

Introduces what you can do with the Volume Photography License.

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## Volume Photography License Compatible Functions

## Function overview

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The Volume Photography Service provides equipment and tools that can be used in settings where large numbers of photos need to be taken with the same format and operations, such as schools, sports, theme parks, or cruise ships. These functions can reduce variations in photo quality based on the skill or experience of individual photographers and enable an efficient workflow from shooting preparation to photo cropping.

- **Custom Grid Line**

You can register and use your own custom grid lines created to suit your specific needs on the camera. "Custom Gridline Generator" allows you to set cropping areas on grid lines and directly register created grid lines to the camera.

- **Scan and Tag**

The entire process from scanning a unique ID to linking a captured photo to the unique ID can be completed with just one camera.

- **Photo Cropping**

By setting a cropping area, you can save both the original image and a cropped image at the same time when shooting.

- **Volume Photography Commands**

You can use commands to remotely support on-site shooting, such as "White balance color temperature setting" and "Shooting prohibition command."

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## Activating each licensed function

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To activate each licensed function, you need to load the license file saved on a memory card to the camera.

For details on operations, refer to the following “Help Guide.”

<https://helpguide.sony.net/di/activate/v1/en/index.html>

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## Custom Grid Line

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You can register and use your own custom grid lines created to suit your specific needs on the camera. Additionally, by using “Custom Gridline Generator,” you can set cropping areas on the grid lines and directly register created grid lines to the camera.

For more information, refer to the following “Help Guide.”

[https://helpguide.sony.net/di/gridline\\_2420/v1/h\\_zz/](https://helpguide.sony.net/di/gridline_2420/v1/h_zz/)

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## Volume Photography License Compatible Functions

## Scanning and registering a barcode or QR Code with the camera

You can read a code with subject information embedded as a unique ID via the camera. The unique ID will be registered to the camera and can be written into the meta information for a captured image. This function can read ITF/Code39/Code128 barcodes and QR Codes.

This function provides two methods to scan codes with the camera.

- **Code Scan during hold**

This function needs to be assigned to a custom key to be used. The camera switches to the code scanning screen while you are holding down the assigned key and returns to the shooting screen when you release the key. You can quickly switch between scanning codes and shooting photos while holding the camera.

- **Code Scan**

If you assign this function to a custom key, the screen will switch between the code scanning screen and the shooting screen each time you press the assigned key. This method is useful when you want to scan codes and shoot images separately, as you do not need to keep holding down the assigned key.

— [Code Scan] can be selected from MENU and can also be registered to the Fn menu in [Fn Menu Settings].

**1 MENU → [Setup] → [Operation Customize] → [Custom Key/Dial Set.] → Assign [Code Scan during hold] or [Code Scan] to the desired key.**

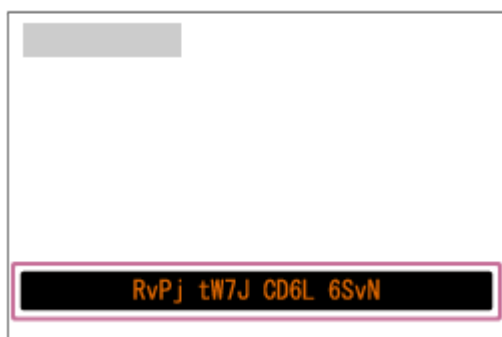
**2 Switch to the code scanning screen.**

**If using [Code Scan during hold]:** Hold down the key to which the function is assigned until code scanning is complete.

**If using [Code Scan]:** Press the key to which the function is assigned once.

**3 Keep the code you want to scan within the angle of view.**

When the code is successfully scanned, a sound will be heard, and the registered unique ID will be displayed in orange at the bottom of the screen.



- If code scanning fails, try the following:

- Make sure that the code appears as large as possible in the center of the angle of view. As a guideline, for QR Codes, the size should be at least 1/3 of the height of the entire angle of view, and for barcodes, the size should be at least 1/3 of the width of the entire angle of view.
- Check the minimum shooting distance of your lens and place the code farther than that.
- Remove high-contrast objects from the angle of view.
- QR Codes are easier to scan than barcodes when the code size is small.

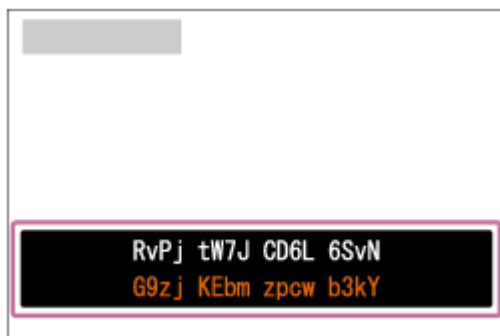
- Up to two unique IDs can be registered at the same time. If you want to register a second unique ID, simply place another code in the angle of view before shooting an image. When the code is scanned successfully, two unique IDs will be displayed above and below each other. The one above is the first unique ID, and the one below is the second unique ID.

#### 4 Switch to the shooting screen.

**If using [Code Scan during hold]:** Release the key to which the function is assigned.

**If using [Code Scan]:** Press the key to which the function is assigned once.

- The registered unique ID will turn white once you exit the code scanning screen. You can also switch back to the code scanning screen to register a second unique ID. In this case, the first unique ID will be displayed in white on the top row, and the second unique ID will be displayed in orange on the bottom row.



#### 5 Shoot a subject.

The unique ID will be written into the meta information for the captured image.

- If two unique IDs are registered, both will be written to the meta information for one image.

#### 6 Switch the camera back to the code scanning screen and keep the code within the angle of view.

The unique ID will be replaced with a new one.

- If you shoot an image with a registered unique ID and then scan the code again, the unique ID will be cleared and replaced with a new one.

### To register a unique ID scanned with a commercially available code reader to the camera

You need to use the Camera Remote SDK (Software Development Kit).

For more information about the Camera Remote SDK (Software Development Kit), refer to the following website.

<https://support.d-imaging.sony.co.jp/app/sdk/en/index.html>

1. Connect the camera to the computer and enable the remote shooting function.
  - The connection method and method of setting the remote shooting function vary depending on the camera you are using.
2. Connect a code reader to the computer.
3. Scan a barcode or QR Code with the code reader.
4. Send the scanned unique ID from the computer to the camera using the SDK.

### About writing unique IDs to image meta information

- The unique ID is written to the image meta information according to the following specifications.

- Exif IFD area: MakerNote IFD\*
- Exif Tag No.: 0x2043
- Data size: Up to 128 characters / Maximum 256 bytes
- Data format: UTF-16LE (Little Endian)

\* Depending on the application you are using, the MakerNote information may be erased.

- When two unique IDs are written to the meta information, “,” (comma) is inserted between the two unique IDs.
- Once a unique ID has been written into an image, it cannot be changed by the camera. To access the Exif MakerNote area (manufacturer-specific area) and read or edit information, you will need to prepare your own system or application.
- The unique ID in the MakerNote area is encoded in UTF-16LE. To obtain the same string as when you scanned the code, you need to convert the character code.

### Hint

- If the unique ID has too many characters, it may be abbreviated to “...” when it is displayed on the code scanning screen or shooting screen. In this case, you can check all the characters from MENU → [Shooting] → [File] → [Scan and Tag] → [Unique ID Details Info.].
- When two unique IDs are registered and a third code is scanned, the first unique ID displayed in the top row will disappear, the second unique ID will move to the top row, and the third unique ID will be added to the bottom row.

### Note

- Even if you scan the same unique ID repeatedly, the unique ID registered in the camera will not change.
- When the focus mode for shooting is set to autofocus, the focus mode on the code scanning screen is locked to AF-C (Continuous AF).
- When the focus mode for shooting is set to manual focus, the focus mode on the code scanning screen is also locked to manual focus. You need to focus on the code yourself.
- If code scanning fails, a different sound will be heard than if it is successful. Check the error message displayed on the monitor.
- The unique ID will be reset when the camera is turned off.
- The maximum length of the unique ID is 128 characters. If you register two unique IDs, the maximum length for each will be 63 characters.
- The unique ID can consist of alphanumeric characters and the symbols listed below. “,” (comma) cannot be used.  
 . - \_ ' @ ! ? # \$ % & \* + / = ^ ` { | } ~ " ( ) : ; < > [ \ ] space

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## Displaying unique IDs on the screen

You can set whether or not to display the registered unique ID on the shooting screen.

**1** MENU → [Shooting] → [File] → [Scan and Tag] → [Unique ID Display] → **desired setting**.

- The default setting is [On].

### Menu Item Details

**On:**

The unique ID is displayed on the shooting screen.

**Off:**

The unique ID is not displayed on the shooting screen.

### To display the unique ID on the playback screen

- On the playback screen, whether the unique ID is displayed or not depends on the screen display mode. When the screen display mode is [Histogram] or [No Disp. Info.], the unique ID is not displayed. In this case, press the DISP (Display Setting) button to switch the screen display mode.
- If you want to display the unique ID while playing back images captured by continuous shooting, set [Playback] → [Playback Option] → [Display as Group] to [Off].

#### Hint

- If you assign [Unique ID Display] to the desired key in MENU → [Setup] → [Operation Customize] → [Custom Key/Dial Set.], you can turn the unique ID display on or off simply by pressing the assigned key.
- If the unique ID has too many characters, it may be abbreviated to “...” when it is displayed on the code scanning screen or shooting screen. In this case, you can check all the characters from MENU → [Shooting] → [File] → [Scan and Tag] → [Unique ID Details Info.].

#### Note

- On the shooting screen, the unique ID is displayed with priority over other information. If you want to see information that is hidden by the unique ID, set [Unique ID Display] to [Off].



## Checking unique ID information

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You can check all the characters of unique IDs registered on the camera.

**1 Register a unique ID to the camera.**

**2 MENU → [Shooting] → [File] → [Scan and Tag] → [Unique ID Details Info.].**

- If you assign this function to the desired key in advance using [Custom Key/Dial Set.], you can quickly check detailed information about unique IDs simply by pressing the assigned key on the shooting screen.
- You can also register this function in the Fn menu in [Fn Menu Settings].

### Hint

- Unique IDs are displayed in increments of 4 characters. If a unique ID begins with the four letters “http,” it will be recognized as a URL and will be displayed without separations.
- If two unique IDs are registered, they will be displayed above and below each other. The first unique ID will be displayed as [ID1:] and the second unique ID will be displayed as [ID2:].

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## Clearing a unique ID from the camera

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You can clear a unique ID that was registered incorrectly or that you do not want to use.

**1 MENU → [Shooting] → [File] → [Scan and Tag] → [Reset Unique ID].**

**2 Select [OK] and press the center.**

The unique ID registration will be reset.

### Hint

- If you assign [Reset Unique ID] to the desired key in MENU → [Setup] → [Operation Customize] → [Custom Key/Dial Set.], you can reset the unique ID registration simply by pressing the assigned key.

### Note

- The unique ID will be reset when the camera is turned off.
- If two unique IDs are registered, both registrations will be cleared.



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## Volume Photography License Compatible Functions

## Photo Cropping




You can save cropped images at the same time when shooting by using grid lines with a predefined cropping area.

To enable [Photo Cropping], all of the following conditions must be met:


- A cropping area is set on the grid lines.
- The grid lines are registered to any of the settings  (Custom 1) to  (Custom 4).
- MENU → [Shooting] → [Shooting Display] → [Photo Cropping] is set to [On].
- MENU → [Shooting] → [Shooting Display] → [Grid Line Display] is set to [On].

To use this function, you also need a license for the Custom Grid Line function. For more information on the Custom Grid Line function and how to set cropping areas on grid lines, refer to the following “Help Guide.”

[https://helpguide.sony.net/di/gridline\\_2420/v1/h\\_zz/](https://helpguide.sony.net/di/gridline_2420/v1/h_zz/)

- 1 Save grid lines with a cropping area on a memory card and insert it into the camera.**
- 2 MENU → [Shooting] → [Shooting Display] → [Grid Line Type] → Select the registration destination from  (Custom 1) to  (Custom 4), and then select [Import].**
- 3 Select the grid lines with the cropping area, press the center, and select [OK].**  
The grid lines will be registered as custom grid lines.
- 4 MENU → [Shooting] → [Shooting Display] → [Grid Line Display] → [On].**
- 5 MENU → [Shooting] → [Shooting Display] → [Photo Cropping] → [On].**  
An icon () appears on the screen indicating that [Photo Cropping] is enabled.
- 6 Shoot a subject.**  
The original image and a cropped image will be saved.

## Hint

- Cropped images are indicated with the  (Crop) icon on the playback screen.

## Note

- If [Photo Cropping] is enabled, the following functions cannot be used.
  - Auto review
  - Continuous shooting
- [Photo Cropping] cannot be used in the following situations:
  - When the drive mode is set to an item other than [Single Shooting]
  - When [File Format] is set to [RAW]
  - During interval shooting
  - During composite RAW shooting

- During executing [Recall Custom hold 1]/[Recall Custom hold 2]/[Recall Custom hold 3]
- Even if [Photo Cropping] is enabled, the cropping area is not displayed on the shooting screen. If you want to check the cropping area while shooting, draw grid lines of the same position and size as the cropping area in your custom grid lines.
- Cropped images with an aspect ratio different from the one available on the camera cannot be enlarged during playback.
- Cropped images cannot be trimmed.
- When playing back a cropped image, the grid lines are not displayed.
- For remote shooting, if [Still Img. Save Dest.] is set to [Destination Only] or [Dest.+Camera], the cropped image will not be transferred; only the original image will be.
- There may be a maximum deviation of 15 pixels between cropping areas created with “Custom Gridline Generator” and actual cropping positions.
- If the camera has two memory card slots, the slot to which the cropped image is saved will be determined by the camera settings.
  - If [Recording Media] is set to [Simult. Recording], the cropped image will be saved to the slot set in [Play Set of Multi. Media].
  - If [Recording Media] is set to [Sort Recording], and [File Format] is set to [RAW & JPEG] or [RAW & HEIF], the cropped image will be saved to the slot that records JPEG or HEIF images. In this case, [Play Set of Multi. Media] will be set to the slot where the cropped image is saved.

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## Volume Photography Commands

This function provides commands for extending remote operation. The extension commands provided under this license can be used in applications developed using the “Camera Remote SDK (Software Development Kit).”

For more information about the Camera Remote SDK (Software Development Kit), refer to the following website.

<https://support.d-imaging.sony.co.jp/app/sdk/en/index.html>

### White balance color temperature setting

The white balance color temperature can be precisely adjusted in 10 K increments via remote operation.

#### Note

- This command is for remote operation only and cannot be executed on the camera itself.
- Color temperature is set on the camera in increments of 100 K, so any value set in 10 K increments via remote operation will be overwritten to a value in 100 K increments when the color temperature is changed on the camera itself. To set the value in 10 K increments, perform the remote operation again.

### Shooting prohibition command

This function allows you to remotely prohibit the camera from shooting. The conditions under which shooting is prohibited can be set arbitrarily through programming, preventing photography in unexpected settings.

When shooting is prohibited, a message will be displayed if you press the shutter button or on the shooting screen. [Pre-Capture] is also prohibited on cameras with this function.

#### Note

- This command is for remote operation only and cannot be executed on the camera itself.
- The shooting prohibition setting is cancelled when the camera is turned off, but it will not be cancelled if the camera automatically turns off due to power saving or other reasons.

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