

# Interchangeable Lens Digital Camera

**α**7<sub>RIV</sub>

E-mount

**Operating Instructions** 



"Help Guide" (Web manual)

Refer to "Help Guide" for in-depth instructions on the many functions of the camera.

https://rd1.sony.net/help/ilc/2060/h\_zz/

# Check out the Help Guide!



The "Help Guide" is an on-line manual that you can read on your computer or smartphone. Refer to it for details on menu items, advanced usage, and the latest information on the camera.





https://rd1.sony.net/help/ilc/2060/h\_zz/

ILCE-7RM4A Help Guide



# Operating Instructions (this book)



For the quick start guide, see "Startup guide" (page 26). The "Startup guide" introduces the initial procedures from when you open the package until you release the shutter for the first shot.

### **In-Camera Guide**



The [In-Camera Guide] shows explanations of the menu items on the monitor of the camera.

You can quickly pull up information during shooting.

Select an item for which you want to view a description, and then press the 前(Delete) button.

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# 

#### About this product

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For details on the Wi-Fi functions and NFC One-touch functions, refer to the "Help Guide" (page 2).

# Notes on using your camera

Along with this section, also see "Precautions" in the Help Guide.

#### Notes on handling the product

- This camera is designed to be dust resistant and splash resistant, but it is not guaranteed to completely prevent the ingress of dust or water droplets.
- Do not leave the lens or the viewfinder exposed to a strong light source such as sunlight. Because of the lens's condensing function, doing so may cause smoke, fire, or a malfunction inside the camera body or the lens. If you have to leave the camera exposed to a light source such as sunlight, attach the lens cap to the lens.
- If sunlight or a strong light source enters the camera through the lens, it may focus inside the camera and cause smoke or fire.
   Attach the lens cap to the lens when storing the camera.
   When you shoot with backlighting, keep the sun sufficiently far away from the angle of view.
   Note that smoke or fire may occur even if the light source is slightly away from the angle of view.
- Do not directly expose the lens to beams such as laser beams. That may damage the image sensor and cause the camera to malfunction.
- Do not look at sunlight or a strong light source through the lens when it is detached. This may result in unrecoverable damage to the eyes.

- This camera (including accessories)
  has magnet(s) which may interfere
  with pacemakers, programmable
  shunt valves for hydrocephalus
  treatment, or other medical devices.
  Do not place this camera close to
  persons who use such medical
  devices. Consult your doctor before
  using this camera if you use any
  such medical device.
- Do not leave the camera, the supplied accessories, or memory cards within the reach of infants.
   They may be accidentally swallowed. If this occurs, consult a doctor immediately.

#### Notes on the monitor and electronic viewfinder

- The monitor and electronic viewfinder are manufactured using extremely high-precision technology, and over 99.99% of the pixels are operational for effective use. However, there may be some small black dots and/or bright dots (white, red, blue or green in color) that constantly appear on the monitor and electronic viewfinder. These dots are normal due to the manufacturing process and do not affect the images in any way.
- When shooting with the viewfinder, you may experience symptoms such as eyestrain, fatigue, travel sickness, or nausea. We recommend that you take a break at regular intervals when you are shooting with the viewfinder.

 If the monitor or electronic viewfinder is damaged, stop using the camera immediately. The damaged parts may harm your hands, face, etc.

#### Notes on continuous shooting

During continuous shooting, the monitor or viewfinder may flash between the shooting screen and a black screen. If you keep watching the screen in this situation, you may experience uncomfortable symptoms such as feeling of unwellness. If you experience uncomfortable symptoms, stop using the camera, and consult your doctor as necessary.

#### Notes on recording for long periods of time or recording 4K movies

- The camera body and battery may become warm with use – this is normal.
- If the same part of your skin touches the camera for a long period of time while using the camera, even if the camera does not feel hot to you, it may cause symptoms of a low-temperature burn such as redness or blistering. Pay special attention in the following situations and use a tripod, etc.
  - When using the camera in a hightemperature environment
  - When someone with poor circulation or impaired skin sensation uses the camera
  - When using the camera with the [Auto Power OFF Temp.] set to [High].

#### Sony lenses/accessories

Using this unit with products from other manufacturers may affect its performance, leading to accidents or malfunction

# On the data specifications described in this manual

The data on performance and specifications are defined under the following conditions, except as described in this manual: at an ordinary ambient temperature of 25°C (77°F), and using a battery pack that has been fully charged until the charge lamp has turned off.

#### Warning on copyright

Television programs, films, videotapes, and other materials may be copyrighted. Unauthorized recording of such materials may be contrary to the provisions of the copyright laws.

#### Notes on location information

If you upload and share an image tagged with a location, you may accidentally reveal the information to a third party. To prevent third parties from obtaining your location information, set [] Location Info. Link Set.] to [Off] before shooting images.

# Notes on discarding or transferring this product to others

When discarding or transferring this product to others, make sure to perform the following operation to protect private information.

• [Setting Reset] → [Initialize]

#### Notes on discarding or transferring a memory card to others

Executing [Format] or [Delete] on the camera or a computer may not completely delete the data on the memory card. When transferring a memory card to others, we recommend that you delete the data completely using data deletion software. When discarding a memory card, we recommend that you physically destroy it.

#### Note on network functions

When you use network functions, unintended third parties on the network may access the camera, depending on the usage environment.

For example, unauthorized access to the camera may occur in network environments to which another network device is connected or can connect without permission. Sony bears no responsibility for any loss or damage caused by connecting to such network environments.

# Note on the 5 GHz band for wireless LAN

When using the wireless LAN function outdoors, set the band to 2.4 GHz by following the procedure below. (WW447485 only)

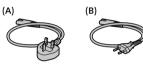
MENU → (Network) →
 [Wi-Fi Settings]

# How to turn off wireless network functions (Wi-Fi, etc.) temporarily

When you board an airplane, etc., you can turn off all wireless network functions temporarily using [Airplane Mode].

#### Power Cord

For the customers in the UK, Ireland, Malta, Cyprus and Saudi Arabia Use the power cord (A). For safety reasons, the power cord (B) is not intended for above countries/regions and shall therefore not be used there. For the customers in other EU countries/regions Use the power cord (B).



#### For Customers in the U.S.A.

For question regarding your product or for the Sony Service Center nearest you, call 1-800-222-SONY (7669).

#### Supplier's Declaration of Conformity

Trade Name: SONY Model: WW447485

Responsible Party: Sony Electronics

Inc.

Address: 16535 Via Esprillo, San Diego, CA 92127 U.S.A. Telephone Number: 858-942-2230

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# For customers who purchased their camera from a store in Japan that caters to tourists

#### Note

Some certification marks for standards supported by the camera can be confirmed on the screen of the camera.

Select MENU → (Setup) →

[Certification Logo].

# Checking the camera and the supplied items

The number in parentheses indicates the number of pieces.

- Camera (1)
- Battery charger (1)



 Power cord (mains lead) (1)\* (supplied in some countries/ regions)



- \* Multiple power cords may be supplied with this equipment. Use the appropriate one that matches your country/region. See page 8.
- Rechargeable battery pack NP-FZ100 (1)



• USB Type-C® cable (1)



• Shoulder strap (1)



Body cap (1) (Attached to the camera)



• Cable protector (1)



Shoe cap (1) (Attached to the camera)



 Eyepiece cup (1) (Attached to the camera)

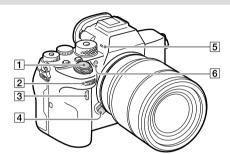


- Operating Instructions (1) (this manual)
- Reference Guide (1)

# **Identifying parts**

See the pages in parentheses for details.

#### Front side



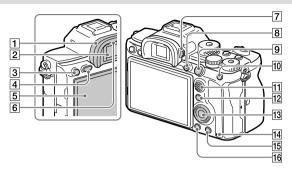
- ON/OFF (Power) switch (33)/Shutter button (34)
- 2 Front dial
  You can quickly adjust the
  settings for each shooting
  mode
- 3 Infrared remote sensor
- 4 Lens release button (32)
- Microphone
  Do not cover this part during movie recording. Doing so may cause noise or lower the volume
- 6 AF illuminator (65)/Selftimer lamp

#### When the lens is removed

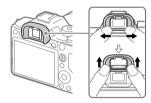


- 7 Mounting index (31)
- 8 Image sensor\*
- 9 Mount
- 10 Lens contacts\*
- \* Do not directly touch these parts.

### Rear side



1 Eyepiece cup
To remove the eyepiece cup
Push the grips at the bottom
of the eyepiece cup to the left
and right and lift up the cup.



when attaching an angle finder (sold separately).
Also, select MENU →

2 (Camera Settings 2) →
[FINDER/MONITOR], and then switch to [Viewfinder (Manual)]

or [Monitor (Manual)].

Remove the eyepiece cup

2 Viewfinder

- 3 C3 button (Custom button 3) (72)/o→ (Protect) button
- 4 MENU button (62)
- Monitor (For touch operation: Touch panel/Touch pad) (45) You can adjust the monitor to an easily viewable angle and shoot from any position.



6 Eye sensor

7 Diopter-adjustment dial Adjust the diopter-adjustment dial according to your evesight until the display appears clearly in the viewfinder. If it is hard to operate the diopter-adjustment dial, remove the eveniece cup before operating the dial.



- 8 MOVIE (Movie) button (35)
- 9 For shooting: AF-ON (AF On) button For viewing: (Enlarge Image)

button

10 For shooting: AEL button For viewing: (Image Index) button

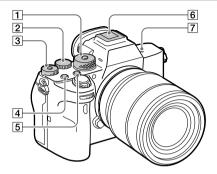
- 11 Multi-selector (21)
- 12 For shooting: Fn (Function) button (21, 72) For viewing: ★ (Send to Smartphone) button You can display the screen for [Send to Smartphone] by
- 13 Control wheel (20)

pressing this button.

14 Access lamp

- 15 For shooting: C4 button (Custom button 4) (72) For viewing: 前(Delete) button (35)
- 16 (Playback) button (35)

# Top side



- Mode dial (35)
   The mode dial is unlocked while you hold down the unlock button at the center.
- Rear dial You can quickly adjust the settings for each shooting mode.
- 3 Exposure compensation dial Pressing the lock button at the center switches the exposure compensation dial between the locked and unlocked status. The dial is unlocked when the lock button is popped up and the white line is visible.

- 4 C1 button (Custom button 1) (72)
- 5 C2 button (Custom button 2) (72)
- Multi Interface Shoe\*
  Some accessories may not go in all the way and protrude backward from the Multi interface shoe. However, when the accessory reaches the front end of the shoe, the connection is completed.

#### 

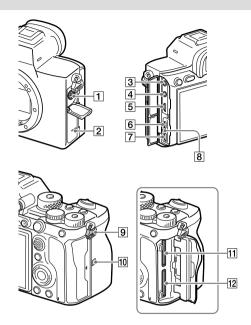


 If the subject is closer than the minimum shooting distance of the lens, the focus cannot be confirmed. Make sure you put enough distance between the subject and the camera. For details on compatible accessories for the Multi Interface Shoe, visit the Sony website, or consult your Sony dealer or local authorized Sony service facility. Accessories for the Accessory Shoe can also be used. Operations with other manufactures' accessories are not guaranteed.

Multi Interface Shoe

Accessory Shoe

### Sides



- 1 4 (Flash sync) terminal
- 2 Speaker
- (Microphone) jack When an external microphone is connected, the builtin microphone turns off automatically. When the external microphone is a plugin-power type, the power of the microphone is supplied by the camera.
- 4 ∩ (Headphones) jack
- 5 HDMI micro jack
- 6 USB Type-C terminal (17, 59)
- Multi/Micro USB Terminal\* (17, 59)
   This terminal supports Micro USB-compatible devices.
- 8 Charge lamp

Hooks for shoulder strap
 Attach both ends of the strap
 onto the camera.



#### 10 N (N-Mark) (56)

 This mark indicates the touch point for connecting the camera and an NFC-enabled Smartphone.



 NFC (Near Field Communication) is an international standard of short-range wireless communication technology.

#### 11 SLOT 1 (Memory card slot 1) (28)

Supports SD cards only (compatible with UHS-I and UHS-II)

# (30) Supports SD cards only

Supports SD cards only (compatible with UHS-I and UHS-II)

 For details on compatible accessories for the Multi/Micro USB Terminal, visit the Sony website, or consult your Sony dealer or local authorized Sony service facility.

#### Notes on USB terminals

You can use either the USB
Type-C terminal or the Multi/
Micro USB Terminal for supplying
power, charging the battery, and
USB communications. However,
you cannot conduct these
operations with both terminals
simultaneously.

- The battery charging time does not change according to the terminal you use.
- You can use accessories for the Multi/Micro USB Terminal, such as a remote commander (sold separately), while supplying power or performing PC Remote shooting using the USB Type-C terminal.

## Notes on the cable protector

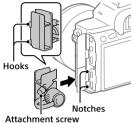
Use the cable protector to prevent a cable from being disconnected when shooting images with the cable connected.

#### To attach the cable protector

- ① Open both of the jack covers on the monitor side.
- ② Fit the two hooks on the rear side of the cable protector into the two notches to the left of the USB Type-C terminal and Multi/Micro USB Terminal, and then align the cable protector with the terminal part of the camera.
- ③ Push the attachment screw in and turn it to secure the cable protector.



⑤ Insert the cable into the holding part and then secure the cable with the fixing dial.



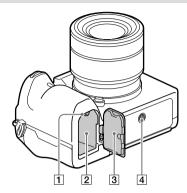


Fixing dial

#### To remove the cable protector

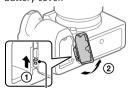
Loosen the attachment screw, and then remove the cable protector.

#### **Bottom**



- 1 Lock lever (27)
- 2 Battery insertion slot (27)
- 3 Battery cover (27) When attaching an accessory such as a vertical grip (sold separately), remove the battery cover.

To remove the battery cover Pull the battery cover release lever in the direction of the arrow, and then remove the battery cover.



Battery cover release lever

To attach the battery cover Insert the shaft on one side of the battery cover into the attachment site, and then push in the battery cover by attaching the shaft on the opposite side.

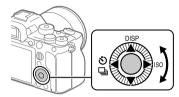


Tripod socket hole
Supports 1/4-20 UNC screws

Use a tripod with a screw less than 5.5 mm (7/32 inches) long. Otherwise, you cannot firmly secure the camera, and damage to the camera may occur.

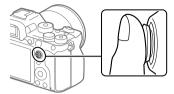
# **Basic operations**

## Using the control wheel



- You can select setting items by turning or pressing the top/bottom/left/ right side of the control wheel. Your selection is determined when you press the center of the control wheel.
- During playback, you can display the next/previous image by pressing the right/left side of the control wheel or by turning the control wheel.

# Using the multi-selector



- Put your finger right on top of the multi-selector to manipulate it more precisely.
- When [Focus Area] is set to [Zone], [Flexible Spot],
   [Expand Flexible Spot], [Tracking: Zone], [Tracking: Flexible Spot], or
   [Tracking: Expand Flexible Spot], you can move the focus area by
   pressing the multi-selector up/down/left/right.
- The [Focus Standard] function is assigned to the center of the multiselector in the default settings.

# Using the Fn (Function) button (Function menu)

The Function menu is a menu of 12 functions that is displayed at the bottom of the screen when you press the Fn (Function) button in the shooting mode. You can access frequently used functions more quickly by registering them to the function menu.



#### Hint

- You can separately register 12 functions for still image shooting and 12 functions for movie shooting to the Function menu.
- You can recall functions more quickly by using the custom key function (page 72) to assign frequently used functions to desired keys, along with the function menu.

1 Press the DISP on the control wheel repeatedly to display a screen mode other than [For viewfinder], and then press the Fn (Function) button.



2 Select the desired function by pressing the top/bottom/left/ right side of the control wheel.



- 3 Select the desired setting by turning the front dial, and press the center of the control wheel.
  - Some functions can be fine-tuned using the rear dial.

# ■To adjust settings from the dedicated setting screens

Select the desired function in step 2, then press the center of the control wheel. The dedicated setting screen for the function will appear. Follow the operating guide to adjust settings.



Operation guide

# To change the functions in the function menu (Function Menu Set.)

The following is the procedure for changing [Drive Mode] in the function menu for still images to [Grid Line].

- To change the function menu for movie shooting, select an item that you want to change from the function menu for movie shooting in step ②.
- ① MENU  $\rightarrow$  **△**2 (Camera Settings 2)  $\rightarrow$  [Function Menu Set.].
- ② Select ৩☐ (Drive Mode) from among the 12 functions for still image shooting in the function menu using the top/ bottom/left/right side of the control wheel, and then press the center.
- ③ Press the left/right side of the control wheel until [Grid Line] is displayed. Select [Grid Line], and then press the center.
  - (Grid Line) will be displayed in the former location of 

    □ (Drive Mode) in the function menu.

# How to use the Quick Navi screen

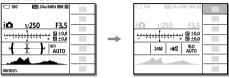
The Quick Navi screen is a function optimized for shooting with the viewfinder, that lets you control settings directly.

- **2** Place a ♥ mark on [For viewfinder] and then select [Enter].
- 3 Press the DISP on the control wheel to set the screen mode to [For viewfinder].

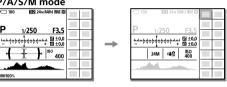
## 4 Press the Fn button to switch to the Quick Navi screen.

• The displayed contents and their positions in the illustrations are just quidelines, and may differ from the actual displays.

#### Auto mode



#### P/A/S/M mode



- 5 Select a function to set by pressing the top/bottom/left/right side of the control wheel.
- 6 Select the desired setting by turning the front dial.
  - Some functions can be fine-tuned using the rear dial.

# ■To adjust settings from the dedicated setting screens

Select the desired function in step 5, then press the center of the control wheel. The dedicated setting screen for the function will appear. Follow the operating guide to adjust settings.



#### Note

- Items that are gray on the Quick Navi screen are not adjustable.
- When using functions such as [Creative Style] or [Picture Profile], some settings can only be controlled from the dedicated screen.

# Startup guide

## Step 1: Charging the battery pack

# 1 Insert the battery pack into the battery charger.

- Place the battery pack on the battery charger in the direction of the A.
- Slide the battery pack in the direction of the arrow as far as it will go.

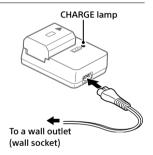


# 2 Connect the power cord (supplied) to the battery charger, and connect the battery charger to the wall outlet (wall socket).

The CHARGE lamp on the battery charger will light up in orange and charging will start.

#### **CHARGE lamp (orange)**

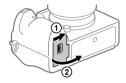
Lit: Charging
Flashing: Charging error or
charging paused temporarily
because the camera is not within
the proper temperature range



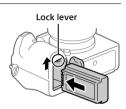
- When charging is finished, the CHARGE lamp and all indicators turn off.
- Charging time (full charge): approximately 150 min. (when charging a fully depleted battery pack at a temperature of 25°C (77°F))
- When you use a completely new battery pack or a battery pack that has not been used for a long time, the CHARGE lamp may flash quickly when the battery is charged for the first time. If this happens, remove the battery pack and then re-insert it to recharge.
- Be sure to use only genuine Sony brand battery packs.

# Step 2: Inserting the battery pack into the camera

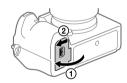
1 Open the battery cover.



2 Insert the battery pack while pressing the lock lever with the tip of the battery until the battery locks into place.



3 Close the cover.



# To charge the battery pack while it is inserted in the camera

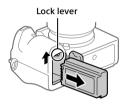
Turn the camera off and connect it to a device such as a computer using the USB cable

If you turn on the camera, power will be supplied from the computer or the device that you connected, and you will be able to operate the camera. However, the battery pack will not charge.

Use the USB Type-C cable (supplied) or a USB-standard cable.

# ■To remove the battery pack

Make sure that the access lamp (page 13) is not lit, and turn off the camera. Then, slide the lock lever and remove the battery pack. Be careful not to drop the battery pack.



# Step 3: Inserting a memory card

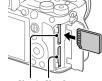
For details on memory cards that can be used with this camera, refer to page 86.

# 1 Open the memory card cover.



# 2 Insert the SD card into the slot 1.

- Both the slot 1 (upper) and the slot 2 (lower) only support SD memory cards (compatible with UHS-II).
- This camera does not support Memory Stick media.



Slot 1 Slot 2

- Insert the memory card with the terminal side facing toward you, until it clicks into place.

### 3 Close the cover.



#### Hint

• When you use a memory card with the camera for the first time, it is recommended that you format the card on the camera for more stable performance of the memory card (page 78).

## ■To remove the memory card

Make sure that the access lamp (page 13) is not lit, and then push in the memory card once to remove it



## ■To record to memory cards in two slots

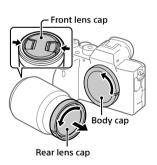
The slot 1 is used in the default settings. If you do not intend to change the settings and will only use one memory card, use the slot 1.

By inserting another memory card into the slot 2, you can record the same images to two memory cards simultaneously or record a different type of image (still images/movies) to each memory card ([Recording Mode] under [Rec. Media Settings]) (page 78).

## Step 4: Attaching a lens

# 1 Remove the body cap from the camera and the rear lens cap from the rear of the lens.

- When changing the lens, work quickly in a dust-free environment to keep dust or debris from getting inside the camera.
- It is recommended that you attach the front lens cap when you have done shooting.



- 2 Mount the lens by aligning the two white index marks (mounting indexes) on the lens and camera.
  - Hold the camera with the lens facing down to prevent dust or debris from entering the camera.



3 While pushing the lens lightly toward the camera, turn the lens slowly in the direction of the arrow until it clicks into the locked position.



#### Note

- Be sure to hold the lens straight and do not use force when attaching a lens.
- Do not press the lens release button when attaching a lens.
- The Mount Adaptor (sold separately) is required to use an A-mount lens (sold separately). For details, refer to the operating manual supplied with the Mount Adaptor.
- If you want to shoot full-frame images, use a full-frame size compatible lens.
- When carrying the camera with a lens attached, hold both the camera and the lens firmly.
- Do not hold the part of the lens that is extended for zoom or focus adjustment.

#### ■To remove the lens

Keep pressing the lens release button and turn the lens in the direction of the arrow until it stops.



Compatible lenses

Lenses compatible with this camera are as follows:

Lens		Compatibility with the camera
A-mount lens	Lens compatible with 35 mm full- frame format	(An optional Mount Adaptor (sold separately) compatible with full-frame format is required)
	APS-C size dedicated lens	(An optional Mount Adaptor (sold separately) is required)
E-mount lens	Lens compatible with 35 mm full- frame format	<b>✓</b>
	APS-C size dedicated lens	<b>/</b> *

<sup>\*</sup> Images will be recorded in APS-C size. The angle of view will correspond to approximately 1.5 times the focal length indicated on the lens. (For example, the angle of view will correspond to 75 mm when a 50 mm-lens is attached.)

# Step 5: Setting the language and the clock

1 Set the ON/OFF (Power) switch to "ON" to turn on the camera.



2 Select the desired language and then press the center of the control wheel.



- Control wheel
- 3 Make sure that [Enter] is selected on the screen and then press the center.
- 4 Select the desired geographic location and then press the center.
- 5 Select [Date/Time] using the top/bottom of the control wheel or by turning the control wheel, and then press the center.
- 6 Select the desired item by pressing the top/bottom/left/right side of the control wheel, and then press the center.

7 Repeat steps 5 and 6 to set other items, then select [Enter] and press the center.

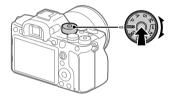
#### Hint

• To reset the date and time setting, use MENU (page 77).

#### Note

• This camera does not have a function for inserting the date into images. You can insert the date into images and then save and print them using PlayMemories Home (for Windows only).

## Step 6: Shooting images in auto mode



- 1 Press and hold the lock release button in the center of the mode dial, then turn the mode dial to set to AUTO.

  The shooting mode will be set to in (Intelligent Auto).
- 2 Look into the viewfinder or the monitor and hold the camera.
- 3 Set the size of the subject by rotating the zoom ring of the lens when a zoom lens is attached.
- 4 Press the shutter button halfway down to focus.
  - When the image is in focus, an indicator (such as ●) will light up.
- 5 Press the shutter button all the way down.

#### ■ To shoot movies

Press the MOVIE button to start/stop recording.

# ■To play back images

Press the (Playback) button to play back images. You can select the desired image using the control wheel.

## ■To delete displayed image

Press the ((Delete) button while an image is displayed to delete it. Select [Delete] using the control wheel on the confirmation screen, and then press the center of the control wheel to delete the image.

## ■To shoot images in various shooting modes

Set the mode dial to the desired mode depending on the subject or the functions you want to use.

# Shooting

# **Focusing**

#### Focus Mode

Selects the focus method to suit the movement of the subject.

# MENU $\rightarrow \triangle 1$ (Camera Settings 1) $\rightarrow$ [Focus Mode] $\rightarrow$ desired setting.

- AFS (Single-shot AF): The product locks the focus once focusing is complete. Use this when the subject is motionless.
- AF-A (Automatic AF): [Single-shot AF] and [Continuous AF] are switched according to the movement of the subject. When the shutter button is pressed halfway down, the product locks the focus when it determines that the subject is motionless, or continues to focus when the subject is in motion. During continuous shooting, the product automatically shoots with Continuous AF from the second shot.
- AFC (Continuous AF): The product continues to focus while the shutter button is pressed and held halfway down. Use this when the subject is in motion. In [Continuous AF] mode, there is no beep when the camera focuses
- DMF (DMF): You can make fine adjustments manually after performing auto focusing, letting you focus on a subject more quickly than when using the manual focus from the beginning. This is convenient in situations such as macro shooting.
- MF (Manual Focus): Adjusts the focus manually. If you cannot focus on the intended subject using auto focus, use manual focus.

### Focus indicator

- (lit): The subject is in focus and the focus is locked.
- (flashing): The subject is not in focus.
- (it): The subject is in focus. The focus will be adjusted continuously according to the movements of the subject.
- () (lit): Focusing is in progress.

### Subjects on which it is difficult to focus using auto focus

- Dark and distant subjects
- Subjects with poor contrast
- Subjects seen through glass
- Fast-moving subjects
- Reflective light or shiny surfaces
- Flashing light
- · Back-lit subjects
- Continuously repetitive patterns, such as the facades of buildings
- Subjects in the focusing area with different focal distances

#### Hint

- In [Continuous AF] mode, you can lock the focus by pressing and holding the button that has been assigned the [Focus Hold] function (page 72).
- When you set the focus to infinity in the manual focus mode or the direct manual focus mode, make sure that the focus is on a sufficiently distant subject by checking the monitor or the viewfinder.

- [Automatic AF] is available only when you are using a lens that supports phase detection AF.
- When [Continuous AF] or [Automatic AF] is set, the angle of view may change little by little while focusing. This does not affect the actual recorded images.
- Only [Continuous AF] and [Manual Focus] are available when shooting movies or when the mode dial is set to \$&Q.

## Auto focus

### **Focus Area**

Selects the focusing area. Use this function when it is difficult to focus properly in the auto focus mode.

# MENU $\rightarrow \Box$ 1(Camera Settings 1) $\rightarrow$ [Focus Area] $\rightarrow$ desired setting.

- **Wide:** Focuses on a subject covering the whole range of the screen automatically. When you press the shutter button halfway down in the still image shooting mode, a green frame is displayed around the area that is in focus.
- **Zone:** Select a zone on the monitor on which to focus, and the product will automatically select a focus area.
- [3] **Center:** Focuses automatically on a subject in the center of the image. Use together with the focus-lock function to create the composition you want.
- Flexible Spot: Allows you to move the focusing frame to a desired point on the screen and focus on an extremely small subject in a narrow area.
- **Expand Flexible Spot:** If the product cannot focus on a single selected point, it uses focus points around the flexible spot as a secondary priority area for focusing.
- Heading the left/right sides of the control wheel. You can also move the tracking using the left/right sides of the control wheel. You can also move the tracking using the left/right sides of the control wheel. You can also move the tracking using the left/right sides of the control wheel. You can also move the tracking start area to the desired point by designating the area as a zone, flexible spot or expand flexible spot.

## Examples of the focusing frame display

The focusing frame differs as follows.

### When focusing on a larger area



### When focusing on a smaller area



- When [Focus Area] is set to [Wide] or [Zone], the focusing frame may switch between "When focusing on a larger area" and "When focusing on a smaller area" depending on the subject or situation.
- When you attach an A-mount lens with a Mount Adaptor (LA-EA1 or LA-EA3) (sold separately), the focusing frame for "When focusing on a smaller area" may be displayed.

# When focus is achieved automatically based on the whole range of the monitor



 When you use a zoom function other than the optical zoom, the [Focus Area] setting is disabled and the focusing frame is shown by the dotted line. The AF operates with priority on and around the center area.

### To move the focus area

- You can move the focus area in [Flexible Spot], [Expand Flexible Spot],
   [Zone], [Tracking: Flexible Spot], [Tracking: Expand Flexible Spot],
   or [Tracking: Zone] by operating the multi-selector. If you assign
   [Focus Standard] to the center of the multi-selector beforehand, you can
   move the focusing frame back to the center of the monitor by pressing
   the center of the multi-selector.
- You can move the focusing frame quickly by touching and dragging it on the monitor. Set [Touch Operation] (page 45) to [On] and [Func. of Touch Operation] (page 46) to [Touch Focus] beforehand.

## ■To track the subject temporarily (Tracking On)

You can temporarily change the setting for [Focus Area] to [Tracking] while you press and hold down the custom key to which you have assigned [Tracking On] in advance. The [Focus Area] setting before you activated [Tracking On] will switch to the equivalent [Tracking] setting. For example:

[Focus Area] before you activate [Tracking On]	[Focus Area] while [Tracking On] is active
[Wide]	[Tracking: Wide]
[Flexible Spot: S]	[Tracking: Flexible Spot S]
[Expand Flexible Spot]	[Tracking: Expand Flexible Spot]

#### Hint

• In the default settings, [Focus Area] is assigned to the C2 button.

- [Focus Area] is locked to [Wide] in the following situations:
   [Intelligent Auto]
- The focus area may not light up during continuous shooting or when the shutter button is pressed all the way down at once.
- When the mode dial is set to **[** (Movie) or **\$&0**, or during movie shooting, [Tracking] cannot be selected as the [Focus Area].
- If [Subject Detection] under [Face/Eye AF Set.] is set to [Animal], you cannot select [Tracking] for [Focus Area].

## **Manual Focus**

When it is difficult to focus properly in the autofocus mode, you can adjust the focus manually.

1 MENU → □1(Camera Settings 1) → [Focus Mode] → [Manual Focus].

# 2 Rotate the focusing ring to achieve sharp focus.

 When you rotate the focusing ring, the focus distance is displayed on the screen. The focus distance is not displayed when the Mount Adaptor (sold separately) is attached.



3 Press the shutter button fully down to shoot an image.

#### Note

 When you use the viewfinder, adjust the diopter level to obtain the correct focus on the viewfinder (page 13).

## Direct manual focus (DMF)

You can make fine adjustments manually after performing auto focusing, letting you focus on a subject more quickly than when using the manual focus from the beginning. This is convenient in situations such as macro shooting.

- **1** MENU  $\rightarrow$   $\triangle$ 1(Camera Settings 1)  $\rightarrow$  [Focus Mode]  $\rightarrow$  [DMF].
- 2 Press the shutter button halfway down to focus automatically.
- 3 Keep the shutter button pressed halfway down, and then rotate the focusing ring to achieve a sharper focus.
  - When you rotate the focusing ring, the focus distance is displayed on the screen. The focus distance is not displayed when the Mount Adaptor (sold separately) is attached.



4 Press the shutter button fully down to shoot an image.

## **Continuous shooting**

Shoots images continuously while you press and hold down the shutter button.

# 1 Select �/ఆ (Drive Mode) on the control wheel → [Cont. Shooting].

- You can also set the drive mode by selecting MENU →
   1(Camera Settings 1) → [Drive Mode].
- 2 Select the desired mode using the right/left side of the control wheel.

Hit Continuous Shooting: Hit: Images are shot continuously at the maximum speed while you press and hold down the shutter button.

및 Hi Continuous Shooting: Hi / 니 Continuous Shooting: Mid / 니 Continuous Shooting: Lo: Subjects are easier to track because the subject is displayed in real-time on the monitor or viewfinder during shooting.

#### Hint

- To continuously adjust the focus and exposure during continuous shooting, set as follows:
  - -[Focus Mode]: [Continuous AF]
  - -[ AEL w/ shutter]: [Off] or [Auto]

- The shooting speed during continuous shooting becomes slower when [RW RAW File Type] is set to [Uncompressed].
- The shooting speed during continuous shooting becomes slower when [e-Front Curtain Shutter] is set to [Off] in [Continuous Shooting: Hi], [Continuous Shooting: Mid] or [Continuous Shooting: Lo] mode.
- When the F-value is greater than F11 in [Continuous Shooting: Hi+], [Continuous Shooting: Hi] or [Continuous Shooting: Mid] mode, the focus is locked to the setting in the first shot.
- The subject is not displayed in real-time on the monitor or viewfinder when shooting in [Continuous Shooting: Hi+] mode.
- The speed of continuous shooting decreases when you shoot with a flash.

## Displaying continuous shooting remaining time indicator (Cont. Shoot. Length)

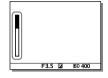
Sets whether to display an indicator of the remaining time for which continuous shooting can be performed at the same shooting speed.

MENU  $\rightarrow$   $\square$ 2 (Camera Settings 2)  $\rightarrow$  [Cont. Shoot. Length]  $\rightarrow$  desired setting.

Always Display: Always displays the indicator when the drive mode is set to [Cont. Shooting].

**Shoot.-Only Display:** Displays the indicator only while continuous shooting is performed.

Not Displayed: Does not display the indicator.



### Hint

 When the internal camera memory for buffering is full, "SLOW" will be displayed and the continuous shooting speed will decrease.

## Using touch function

### **Touch Operation**

Sets whether to activate or not the touch operation of the monitor.

MENU  $\rightarrow \clubsuit$  (Setup)  $\rightarrow$  [Touch Operation]  $\rightarrow$  desired setting.

On: Activates the touch operation.

Off: Deactivates the touch operation.

### Touch Panel/Pad

Touch operations when shooting with the monitor are referred to as "touch panel operations," and touch operations when shooting with the viewfinder are referred to as "touch pad operations." You can select whether to activate touch panel operations or touch pad operations.

## $MENU \rightarrow \clubsuit$ (Setup) $\rightarrow$ [Touch Panel/Pad] $\rightarrow$ desired setting.

**Touch Panel+Pad:** Activates both the touch panel operations when shooting with the monitor and touch pad operations when shooting with the viewfinder.

**Touch Panel Only:** Activates only the touch panel operations when shooting with the monitor.

**Touch Pad Only:** Activates only the touch pad operations when shooting with the viewfinder.

### **Touch Focus**

With [Touch Focus], you can use touch operations to specify the position where you want to focus, when [Focus Area] is a setting other than [Flexible Spot], [Expand Flexible Spot], [Tracking: Flexible Spot], or [Tracking: Expand Flexible Spot]. Select MENU → ♣ (Setup) → [Touch Operation] → [On] beforehand.

MENU →  $\blacksquare$ 2 (Camera Settings 2) → [Func. of Touch Operation] → [Touch Focus].

# Specifying the position where you want to focus in the still image mode

You can specify the position where you want to focus using touch operations. After touching the monitor, press the shutter button halfway down to focus.

### 1 Touch the monitor.

- When shooting with the monitor, touch the position where you want to focus.
- When shooting with the viewfinder, you can move the position of the focus by touching and dragging on the monitor while looking through the viewfinder.



• To cancel focusing with touch operations, touch **b** × or press the center of the control wheel if shooting with the monitor, and press the center of the control wheel if shooting with the viewfinder.

### 2 Press the shutter button halfway down to focus.

• Press the shutter button all the way down to shoot images.

## Specifying the position where you want to focus in the movie recording mode (spot focus)

The camera will focus on the touched subject. Spot focus is not available when shooting with the viewfinder.

# Touch the subject on which you want to focus before or during recording.

- When you touch the subject, the focus mode temporarily switches to manual focus and the focus can be adjusted using the focus ring.
- To cancel spot focus, touch >x or press the center of the control wheel.

#### Hint

- In addition to the touch focus function, touch operations such as the following are also available.
  - When [Focus Area] is set to [Flexible Spot], [Expand Flexible Spot],
     [Tracking: Flexible Spot], or [Tracking: Expand Flexible Spot], the focusing frame can be moved using touch operations.
  - When the [Focus Mode] is set to [Manual Focus], the focus magnifier can be used by double-tapping the monitor.

### Note

- The touch focus function is not available in the following situations:
  - When [Focus Mode] is set to [Manual Focus]
  - When using the digital zoom
  - When using the LA-EA2 or LA-EA4

### **Touch Tracking**

You can use touch operations to select a subject you want to track in the still image and movie recording modes. Select MENU  $\rightarrow \bigoplus$  (Setup)  $\rightarrow$  [Touch Operation]  $\rightarrow$  [On] beforehand.

1 MENU → ♠2 (Camera Settings 2) → [Func. of Touch Operation] → [Touch Tracking].

## 2 Touch the subject that you want to track on the monitor.

Tracking will start.

 When shooting with the viewfinder, you can specify the subject you want to track using the touch pad operations.

## 3 Press the shutter button halfway down to focus.

• Press the shutter button all the way down to shoot images.

### Hint

• To cancel tracking, touch □ x or press the center of the control wheel.

- [Touch Tracking] is unavailable in the following situations:
  - When shooting movies with [ Record Setting] set to [120p]/[100p].
  - When [Focus Mode] is set to [Manual Focus].
  - When using the Smart Zoom, Clear Image Zoom and Digital Zoom
  - When using the LA-EA2 or LA-EA4 Mount Adaptor
  - -When [Subject Detection] under [Face/Eye AF Set.] is set to [Animal].

## Selecting a still image size/image quality

### 

Sets the file format for still images.

MENU →  $\blacksquare$ 1(Camera Settings 1) → [ $\bowtie$  File Format] → desired setting.

**RAW:** Digital processing is not performed on this file format. Select this format to process images on a computer for professional purposes.

RAW & JPEG: A RAW image and a JPEG image are created at the same time. This is suitable when you need two image files, a JPEG for viewing, and a RAW for editing.

JPEG: The image is recorded in the JPEG format.

### ☑ JPEG Quality

Selects the JPEG image quality when [ File Format] is set to [RAW & JPEG] or [JPEG].

MENU →  $\blacksquare$ 1(Camera Settings 1) → [ $\bowtie$  JPEG Quality] → desired setting.

Extra fine/Fine/Standard: Since the compression rate increases from [Extra fine] to [Fine] to [Standard], the file size decreases in the same order. This allows more files to be recorded on one memory card, but the image quality is lower.

## ☑ JPEG Image Size

The larger the image size, the more detail will be reproduced when the image is printed on large-format paper. The smaller the image size, the more images can be recorded.

# MENU $\rightarrow \Box$ 1(Camera Settings 1) $\rightarrow$ [ $\bigcirc$ JPEG Image Size] $\rightarrow$ desired setting.

### When recording in the full-frame size

When [ Aspect Ratio] is set to 3:2		
L: 60M	9504×6336 pixels	
M: 26M	6240×4160 pixels	
S: 15M	4752×3168 pixels	

When [ Aspect Ratio] is set to 4:3		
<b>L: 54M</b> 8448×6336 pixels		
M: 23M	5552×4160 pixels	
S: 13M	4224×3168 pixels	

When [ Aspect Ratio] is set to 16:9		
L: 51M	9504×5344 pixels	
M: 22M	6240×3512 pixels	
S: 13M	4752×2672 pixels	

When [ Aspect Ratio] is set to 1:1		
<b>L: 40M</b> 6336×6336 pixels		
M: 17M	4160×4160 pixels	
<b>S: 10M</b> 3168×3168 pixels		

### When recording in the APS-C-equivalent size

When [ Aspect Ratio] is set to 3:2		
<b>L: 26M</b> 6240×4160 pixels		
M: 15M	4752×3168 pixels	
S: 6.5M	3120×2080 pixels	

When [ Aspect Ratio] is set to 4:3		
<b>L: 23M</b> 5552×4160 pixels		
M: 13M	4224×3168 pixels	
S: 5.8M	2768×2080 pixels	

When [ Aspect Ratio] is set to 16:9			
L: 22M 6240×3512 pixels			
M: 13M	4752×2672 pixels		
<b>S: 5.5M</b> 3120×1752 pixels			

When [ Aspect Ratio] is set to 1:1			
L: 17M 4160×4160 pixels			
<b>M: 10M</b> 3168×3168 pixels			
<b>S: 4.3M</b> 2080×2080 pixels			

#### Note

 When [ File Format] is set to [RAW] or [RAW & JPEG], the image size for RAW images corresponds to "L."

## APS-C/Super 35mm

Sets whether to record in APS-C-equivalent size for still images and in Super 35mm-equivalent size for movies. If you select [On] or [Auto], you can use an APS-C size dedicated lens on this product.

# MENU → $\blacksquare$ 1(Camera Settings 1) → [APS-C/Super 35mm] → desired setting.

On: Records in either APS-C-equivalent size or Super 35mm-equivalent size.

**Auto:** Automatically sets the capture range depending on the lens.

Off: Always captures 35mm full-frame image sensor pictures.

- When you attach an APS-C compatible lens and set [APS-C/Super 35mm] to [Off], shooting may fail.
- When you set [APS-C/Super 35mm] to [On], the angle of view is equivalent
  to approx. 1.5 times the focal length indicated on the lens during still image
  shooting, and approx. 1.6 times that value during movie shooting (approx. 1.8
  times the focal length indicated on the lens during XAVC S 4K movie shooting
  at 30p).

## **Shooting movies**

## Changing settings for movie recording

### **♯ File Format**

Selects the movie file format.

# MENU → $\blacksquare$ 2 (Camera Settings 2) → [ $\boxplus$ File Format] → desired setting.

File Format	Characteristics	
XAVC S 4K	Records movies in 4K resolution (3840×2160).	You can save movies on
XAVC S HD	Records movies in crisper quality than AVCHD with larger amounts of data.	a computer using the PlayMemories Home software.
AVCHD	The AVCHD format has a high degree of compatibility with storage devices other than computers.	You can save movies on a computer or create a disc that supports this format using the PlayMemories Home software.

For details on memory cards that can be used for these formats, refer to page 86.

### Note

- When [III File Format] is set to [AVCHD], the file size of movies is limited to approx. 2 GB. If the movie file size reaches approx. 2 GB during recording, a new movie file will be created automatically.
- When recording XAVC S 4K movies with [APS-C/Super 35mm] set to [Auto], the angle of view becomes narrower. When [且 Record Setting] is set to [25p 100M], [25p 60M], [24p 100M]\*, or [24p 60M]\* during XAVC S 4K movie shooting, the angle of view is equivalent to approx. 1.6 times the focal length indicated on the lens. When [且 Record Setting] is set to [30p 100M] or [30p 60M] during XAVC S 4K movie shooting, the angle of view is equivalent to approx. 1.8 times the focal length indicated on the lens.
  - \* Only when [NTSC/PAL Selector] is set to NTSC

### **III** Record Setting

Selects the frame rate and bit-rate for movie recording.

# MENU → $\blacksquare$ 2 (Camera Settings 2) → [ $\blacksquare$ 1 Record Setting] → desired setting.

• The higher the bit-rate, the higher the image quality.

### When [III File Format] is set to [XAVC S 4K]

Record Setting	Bit-rate	Description
30p 100M/25p 100M	Approx. 100 Mbps	Records movies in 3840×2160 (30p/25p).
30p 60M/25p 60M	Approx. 60 Mbps	Records movies in 3840×2160 (30p/25p).
24p 100M*	Approx. 100 Mbps	Records movies in 3840×2160 (24p).
24p 60M*	Approx. 60 Mbps	Records movies in 3840×2160 (24p).

<sup>\*</sup> Only when [NTSC/PAL Selector] is set to NTSC

## When [耳File Format] is set to [XAVC S HD]

H-H	-u	
Record Setting	Bit-rate	Description
60p 50M/50p 50M	Approx. 50 Mbps	Records movies in 1920×1080 (60p/50p).
60p 25M/50p 25M	Approx. 25 Mbps	Records movies in 1920×1080 (60p/50p).
30p 50M/25p 50M	Approx. 50 Mbps	Records movies in 1920×1080 (30p/25p).
30p 16M/25p 16M	Approx. 16 Mbps	Records movies in 1920×1080 (30p/25p).
24p 50M*	Approx. 50 Mbps	Records movies in 1920×1080 (24p).
120p100M/100p100M	Approx. 100 Mbps	Records high-speed movies in 1920×1080 (120p/100p). You can record movies in 120 fps or 100 fps.  • You can create smoother slow-motion movies by using compatible editing devices.
120p 60M/100p 60M	Approx. 60 Mbps	Records high-speed movies in 1920×1080 (120p/100p). You can record movies in 120 fps or 100 fps.  • You can create smoother slow-motion movies by using compatible editing devices.

 $<sup>^{\</sup>star}\,$  Only when [NTSC/PAL Selector] is set to NTSC

## When [間 File Format] is set to [AVCHD]

Record Setting	Bit-rate	Description
60i 24M (FX)/ 50i 24M (FX)	24 Mbps at maximum	Records movies in 1920×1080 (60i/50i).
60i 17M (FH)/ 50i 17M (FH)	Approx. 17 Mbps on average	Records movies in 1920×1080 (60i/50i).

- Creating an AVCHD recording disc from movies that were recorded with [60i 24M (FX)]/[50i 24M (FX)] as the [註 Record Setting] takes a long time because the image quality of movies is converted. If you want to store movies without converting them, use a Blu-ray Disc.
- [120p]/[100p] cannot be selected for the following settings.

  –[Intelligent Auto]
- When [Px Proxy Recording] is set to [On], images cannot be output to an HDMI device while recording a 4K movie. When [Px Proxy Recording] is set to [Off], images are not displayed on the monitor of the camera while recording a 4K movie in a recording mode other than 24p\*.
- When recording XAVC S 4K movies with [APS-C/Super 35mm] set to [Auto], the angle of view becomes narrower. When [且 Record Setting] is set to [25p 100M], [25p 60M], [24p 100M]\*, or [24p 60M]\* during XAVC S 4K movie shooting, the angle of view is equivalent to approx. 1.6 times the focal length indicated on the lens. When [且 Record Setting] is set to [30p 100M] or [30p 60M] during XAVC S 4K movie shooting, the angle of view is equivalent to approx. 1.8 times the focal length indicated on the lens.
  - \* Only when [NTSC/PAL Selector] is set to NTSC

# Using the Wi-Fi/One-touch (NFC)/ Bluetooth functions

You can perform the following operations using the camera's Wi-Fi, NFC One-touch, and Bluetooth functions.

- · Saving images to a computer
- Transferring images from the camera to a smartphone
- · Using a smartphone as a remote control for the camera
- Viewing still images on a TV
- Recording location information from a smartphone to images
- · Transferring images to the FTP server

For details, refer to the "Help Guide" (page 2).

## Installing Imaging Edge Mobile

Imaging Edge Mobile is required to connect the camera and a smartphone. If Imaging Edge Mobile is already installed on your smartphone, be sure to update it to the latest version. For details on Imaging Edge Mobile, refer to the support page (https://www.sony.net/iem/).



- To use the camera's NFC One-touch function, an NFC-enabled smartphone or tablet is required.
- The Wi-Fi functions introduced in this manual are not guaranteed to operate on all smartphones or tablets.
- Depending on future version upgrades, the operational procedures or screen displays are subject to change without notice.

## Recording location information to captured images

By using Imaging Edge Mobile, you can obtain location information from a connected smartphone (via Bluetooth communication) and record it to captured images.

For details on the operating procedure, refer to the "Help Guide" (page 2) or the following support page.



https://www.sony.net/iem/btg/

## Transferring images to the FTP server

You can use the camera's Wi-Fi function to transfer images to the FTP server.

For details, refer to the "FTP Help Guide." https://rd1.sony.net/help/di/ftp/h\_zz/

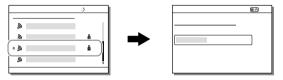


• Basic knowledge of FTP servers is required.

# Connecting the camera to a wireless access point

Connect the camera to your wireless access point. Before starting the procedure, make sure you have the SSID (name of the access point) and password of your wireless access point with you.

- 1 MENU → ⊕ (Network) → [Wi-Fi Settings] → [Access Point Set.].
- 2 Use the control wheel to select the access point to which you want to connect. Press the center of the control wheel and enter the password for the wireless access point, then select [OK].



### Note

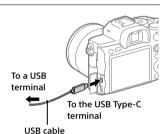
 If a connection is not established, see the wireless access point operating instructions or contact the administrator of the access point.
 To save images to a computer, install PlayMemories Home on your computer.

PlayMemories Home https://www.sony.net/pm/

## Connecting the camera to a computer

## Connecting to a computer

- 1 Insert a sufficiently charged battery pack into the camera.
- 2 Turn on the camera and the computer.
- 3 Check that [USB Connection] under (Setup) is set to [Mass Storage].
- 4 Connect the camera to the computer using the USB cable.
  - When you connect the camera to the computer for the first time, the procedure for recognizing the camera may start automatically on the computer. Wait until the procedure is finished.
  - If you connect the camera to your computer using the USB cable when [USB Power Supply] is set to [On], power is supplied from your computer. (Default setting: [On])
  - Use the USB Type-C cable (supplied) or a USB-standard cable.
  - Use a USB 3.2-compatible computer and the USB Type-C cable (supplied) for higherspeed communications.



#### Note

 Do not turn on/off or restart the computer, or wake the computer from sleep mode when a USB connection has been established between the computer and the camera. Doing so may cause a malfunction. Before turning on/ off or restarting the computer, or waking the computer from sleep mode, disconnect the camera from the computer.

## Disconnecting the camera from the computer

Perform steps 1 and 2 below before performing the following operations:

- · Disconnecting the USB cable.
- · Removing a memory card.
- Turning off the product.

# 1 Click (Safely Remove Hardware and Eject Media) in the taskbar.

## 2 Click the displayed message.

- On Mac computers, drag and drop the memory card icon or the drive icon into the "Trash" icon. The camera will be disconnected from the computer.
- Depending on the computer you are using, the disconnection icon may not appear. In that case, you can skip the steps above.
- Do not remove the USB cable from the camera while the access lamp is lit. The data may be damaged.

## Introduction to computer software

We offer the following computer software to enhance your enjoyment of photos/movies. Access one of the following URLs using your Internet browser and then download the software by following the onscreen instructions.

If one of these software is already installed on your computer, update it to the latest version before use.

For details on the software for computers, refer to the following URL: https://www.sony.net/disoft/

You can check the recommended operating environment for the software from the following URL:

https://www.sony.net/pcenv/

## **Imaging Edge Desktop**

Imaging Edge Desktop is a software suite that includes functions such as remote shooting from a computer, and adjusting or developing RAW images recorded with the camera.

For details on Imaging Edge Desktop, refer to the following URL. https://www.sony.net/iex/

## **PlayMemories Home**

PlayMemories Home allows you to import still images and movies to your computer and view or use them.

You need to install PlayMemories Home to import XAVC S movies or AVCHD movies to your computer.

You can access the download website directly from the following URL:

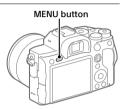
https://www.sony.net/pm/

 When you connect the camera to your computer, new functions may be added to PlayMemories Home. Connecting the camera to your computer is therefore recommended even if PlayMemories Home has already been installed on the computer.

## **Using MENU items**

You can change settings related to all the camera operations including shooting, playback, and operating method. You can also execute camera functions from the MENU.

Press the MENU button to display the menu screen.



2 Select the desired setting you want to adjust using the top/bottom/left/right sides of the control wheel or by turning the control wheel, and then press the center of the control wheel.



- Select the MENU tab at the top of the screen and press the left/right side of the control wheel to move to another MENU tab.
- You can also move to another MENU tab by turning the front dial.
- You can move to the next MENU tab by pressing the Fn button.
- You can go back to the previous screen by pressing the MENU button.
- 3 Select the desired setting value, and press the center to confirm your selection.

#### Hint

• You can display the menu screen by assigning the [MENU] function to a custom key using [ Custom Key] or [ Custom Key], and then pressing that key.

## List of MENU items

For details on each MENU items, refer to the reference page in the last column or the Help Guide.

## △1(Camera Settings 1)

Red tab

Quality/Image Size		
File Format	Sets the file format for still images. ([RAW] / [JPEG], etc.)	49
RAW File Type	Selects the file type for RAW images.	Help Guide
☑ JPEG Quality	Selects the JPEG image quality for [RAW & JPEG] or [JPEG] under [ File Format].	49
JPEG Image Size	Selects the size of still images. (L / M / S)	50
Aspect Ratio	Selects the aspect ratio for still images.	Help Guide
APS-C/Super 35mm	Sets whether to record in APS-C-equivalent size for still images and Super 35 mm-equivalent size for movies.	51
Long Exposure NR	Sets noise reduction processing for shots with a shutter speed of 1 second or longer.	Help Guide
High ISO NR	Sets noise reduction processing for high-sensitivity shooting.	Help Guide
Color Space	Changes the color space (range of reproducible colors).	Help Guide
Lens Comp.	Selects the type of lens compensation.	Help Guide
Shoot Mode/Drive		
Drive Mode	Sets the drive mode, such as for continuous shooting. ([Self-timer] / [Cont. Bracket], etc.)	43, Help Guide

Sets self-timer shooting in bracket mode, shooting order for exposure bracketing, and white balance bracketing.   Help Guide Shift Multi Shoot.   Activates pixel shift multi shooting, which allows you to create higher-resolution images on a computer.   Help Guide			
Shooting.   Guide	Bracket Settings	mode, shooting order for exposure bracketing, and white balance	
which allows you to create higher-resolution images on a computer.  Calls up settings pre-registered to [Mile of Voo 2 Memory].  Registers the desired modes and camera settings.  Registers the desired modes and camera settings.  Selects the memory card slot from which settings are recalled or to which settings are registered for M1 through M4.  Reg. Custom Shoot Set  Assign functions to the custom key to recall when shooting.  Focus Mode  Selects the focus mode. [[Single-shot AF] / [Continuous AF], etc.)  Priority Set in AF-S  Sets the timing of the shutter release when [Focus Mode] is set to [Single-shot AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a still subject.  Focus Area  Selects the area of focus. [Wide] / [Flexible Spot], etc.)  Focus Settings  Configures settings for focusing using the front dial, rear dial or control wheel.  Focus Area Limit  Limits the types of available focus  Help	interval Shoot Func.		
Registers the desired modes and camera settings.  Select Media  Select Sthe memory card slot from which settings are recalled or to which settings are registered for M1 through M4.  Reg. Custom Shoot Set  Assign functions to the custom key to recall when shooting.  Focus Mode  Selects the focus mode. ([Single-shot AF] / [Continuous AF], etc.)  Priority Set in AF-S  Sets the timing of the shutter release when [Focus Mode] is set to [Single-shot AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a still subject.  Focus Area  Selects the area of focus. ([Wide] / [Flexible Spot], etc.)  Focus Settings  Configures settings for focusing using the front dial, rear dial or control wheel.  Focus Area Limit  Limits the types of available focus  Help	Pixel Shift Multi Shoot.	which allows you to create higher-	- 1
camera settings.  Guide  Select Media  Selects the memory card slot from which settings are recalled or to which settings are registered for M1 through M4.  Reg. Custom Shoot Set  Assign functions to the custom key to recall when shooting.  Focus Mode  Selects the focus mode. ([Single-shot AF] / [Continuous AF], etc.)  Priority Set in AF-S  Sets the timing of the shutter release when [Focus Mode] is set to [Single-shot AF], [DMF] or [Automatic AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a moving subject.  Focus Area  Selects the area of focus. ([Wide] / [Flexible Spot], etc.)  Focus Settings  Configures settings for focusing using the front dial, rear dial or control wheel.  Focus Area Limit  Limits the types of available focus  Help	MR 🗗 1/ 🗖 2 Recall	Calls up settings pre-registered to [MR 🗗 1/1 2 Memory].	
which settings are recalled or to which settings are registered for M1 through M4.  Reg. Custom Shoot Set  Assign functions to the custom key to recall when shooting.  Help Guide  Selects the focus mode. ([Single-shot AF] / [Continuous AF], etc.)  Priority Set in AF-S  Sets the timing of the shutter release when [Focus Mode] is set to [Single-shot AF], [DMF] or [Automatic AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a moving subject.  Focus Area  Selects the area of focus. ([Wide] / [Flexible Spot], etc.)  Focus Settings  Configures settings for focusing using the front dial, rear dial or control wheel.  Focus Area Limit  Limits the types of available focus  Help	MR ♠ 1/♠2 Memory		
recall when shooting.  Guide  AF  Focus Mode  Selects the focus mode. ([Single-shot AF] / [Continuous AF], etc.)  Priority Set in AF-S  Sets the timing of the shutter release when [Focus Mode] is set to [Single-shot AF], [DMF] or [Automatic AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a moving subject.  Focus Area  Selects the area of focus. ([Wide] / [Flexible Spot], etc.)  Focus Settings  Configures settings for focusing using the front dial, rear dial or control wheel.  Focus Area Limit  Limits the types of available focus  Help	MR Select Media	which settings are recalled or to which settings are registered for M1 through	- 1
Focus Mode    Selects the focus mode. ([Single-shot AF] / [Continuous AF], etc.)	Reg. Custom Shoot Set		
([Single-shot AF] / [Continuous AF], etc.)  Priority Set in AF-S  Sets the timing of the shutter release when [Focus Mode] is set to [Single-shot AF], [DMF] or [Automatic AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a moving subject.  Focus Area  Selects the area of focus. ([Wide] / [Flexible Spot], etc.)  Focus Settings  Configures settings for focusing using the front dial, rear dial or control wheel.  Focus Area Limit  Limits the types of available focus  Help	AF		
release when [Focus Mode] is set to [Single-shot AF], [DMF] or [Automatic AF] with a still subject.  Priority Set in AF-C  Sets the timing of the shutter release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a moving subject.  Focus Area  Selects the area of focus. ([Wide] / [Flexible Spot], etc.)  Focus Settings  Configures settings for focusing using the front dial, rear dial or control wheel.  Focus Area Limit  Limits the types of available focus  Help	Focus Mode	([Single-shot AF] / [Continuous AF],	36
release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with a moving subject.  Focus Area  Selects the area of focus. ([Wide] / [Flexible Spot], etc.)  Focus Settings  Configures settings for focusing using the front dial, rear dial or control wheel.  Focus Area Limit  Limits the types of available focus  Help	Priority Set in AF-S	release when [Focus Mode] is set to [Single-shot AF], [DMF] or	
Configures settings   Configures settings for focusing using the front dial, rear dial or control wheel.   Focus Area Limit   Limits the types of available focus   Help	Priority Set in AF-C	release when [Focus Mode] is set to [Continuous AF] or [Automatic AF] with	
the front dial, rear dial or control wheel.  Guide  Focus Area Limit  Limits the types of available focus  Help	Focus Area		38
	Focus Settings	the front dial, rear dial or control	
	Focus Area Limit		

Switch V/H AF Area	Sets whether to adjust the [Focus Area] and the position of the focusing frame based on the camera's position (horizontal or vertical).	Help Guide
AF Illuminator	Sets the AF illuminator, which provides light to aid focusing in dark scenes.	Help Guide
Face/Eye AF Set.	Configures settings such as whether the camera focuses with priority on human faces or eyes.	Help Guide
AF Tracking Sens.	Sets the AF tracking sensitivity for the still image mode.	Help Guide
Aperture Drive in AF	Changes the aperture drive system to prioritize the auto-focusing tracking performance or to prioritize silence.	Help Guide
AF w/ shutter	Sets whether to perform auto focusing when the shutter button is pressed halfway down. This is useful when you want to adjust the focus and exposure separately.	Help Guide
Pre-AF	Sets whether or not to perform auto focus before the shutter button is half pressed.	Help Guide
Eye-Start AF	Sets whether to use auto focus when you look through the viewfinder if an LA-EA2/LA-EA4 Mount Adaptor (sold separately) is attached.	Help Guide
AF Area Registration	Sets whether to move the focusing frame to a preassigned position when shooting still images.	Help Guide
Del. Regist. AF Area	Deletes the focusing frame position information that was registered using [AF AF Area Registration].	Help Guide
Focus Frame Color	Sets the color of the frame indicating the focusing area.	Help Guide
AF Area Auto Clear	Sets whether the focus area is displayed all the time or disappears automatically shortly after focusing.	Help Guide

Disp. cont. AF area	Sets whether or not to display the focus area in [Continuous AF] mode.	Help Guide
Phase Detect. Area	Sets phase detection AF area.	Help Guide
Circ. of Focus Point	Sets whether to allow the focusing frame to jump from one end to the other when you move the focusing frame.	Help Guide
AF Micro Adj.	Finely adjusts the autofocused position, when using the LA-EA2 or LA-EA4 Mount Adaptor (sold separately).	Help Guide
Exposure		
Exposure Comp.	Compensates for the brightness of the entire image.	Help Guide
Reset EV Comp.	Sets whether to maintain the exposure value set using [Exposure Comp.] when you turn off the power when the exposure compensation dial position is set to "0."	Help Guide
ISO Setting	Sets functions related to ISO sensitivity. ([ISO] / [ISO AUTO Min. SS], etc.)	Help Guide
Metering Mode	Selects the method for measuring brightness. ([Multi] / [Spot], etc.)	Help Guide
Face Priority in Multi Metering	Sets whether the camera measures brightness based on detected faces when [Metering Mode] is set to [Multi].	Help Guide
Spot Metering Point	Sets whether to coordinate the spot metering point with the focus area when [Focus Area] is set to [Flexible Spot], etc.	Help Guide
Exposure step	Selects the size of the increment step for shutter speed, aperture, and exposure compensation values.	Help Guide

AEL w/ shutter	Sets whether to lock the exposure when the shutter button is pressed halfway down. This is useful when you want to adjust the focus and exposure separately.	Help Guide
Exposure Std. Adjust	Adjusts the standard for the correct exposure value for each metering modes.	Help Guide
Flash		
Flash Mode	Sets the flash settings.	Help Guide
Flash Comp.	Adjusts the intensity of flash output.	Help Guide
Exp.comp.set	Sets whether to reflect exposure compensation value to flash compensation.	Help Guide
Wireless Flash	Sets whether to shoot with the wireless flash.	Help Guide
Red Eye Reduction	Reduces the red-eye phenomenon when using flash.	Help Guide
External Flash Set.	Configures the settings of a flash (sold separately) attached to the camera using the monitor and control wheel of the camera.	Help Guide
Color/WB/Img. Processing		
White Balance	Corrects the tone effect of the ambient light to shoot whitish objects in a white tone.  ([Auto] / [Daylight], etc.)	Help Guide
Priority Set in AWB	Selects which tone to prioritize when shooting under lighting conditions such as incandescent light with [White Balance] set to [Auto].	Help Guide

DRO  Creative Style	Analyzes the contrast of light and shadow between the subject and the background by dividing the image into small areas, and creates an image with the optimal brightness and gradation.	Help Guide
Creative Style	Selects the desired image processing. You can also adjust contrast, saturation, and sharpness. ([Vivid] / [Portrait], etc.)	Help Guide
Picture Effect	Shoots images with a texture unique to the selected effect. ([Toy Camera] / [High Contrast Mono.], etc.)	Help Guide
Picture Profile	Changes settings such as color and tone when recording images.  * This function is for skilled movie creators.	Help Guide
Shutter AWB Lock	Sets whether to lock the white balance while the shutter button is pressed in the auto white balance mode.	Help Guide
Focus Assist		
Focus Magnifier	Enlarges the image before shooting so that you can check the focus.	Help Guide
Focus Magnif. Time	Sets the length of time the image will be shown in an enlarged form.	Help Guide
Initial Focus Mag.	Sets the initial magnification scale when using [Focus Magnifier].	Help Guide
AF in Focus Mag.	Sets whether or not to autofocus when an enlarged image is being displayed. While the enlarged image is being displayed, you can focus within a smaller area than the flexible spot.	Help Guide
MF Assist	Displays an enlarged image when focusing manually.	Help Guide

Peaking Setting	Sets the peaking function, which enhances the outline of in-focus areas when focusing manually.	Help Guide
Shooting Assist		
Anti-flicker Shoot.	Detects flickering/blinking from artificial light sources such as fluorescent lighting and times the shooting of images to moments when flickering will have less of an impact.	Help Guide
Face Registration	Registers or changes the person to be given priority when focusing.	Help Guide
Regist. Faces Priority	Detects the registered face with higher priority using [Face Registration].	Help Guide

₾2 (Camera Settings 2) Purp		rple tab
Movie		
<b></b> Exposure Mode	Sets the exposure mode when shooting movies.	Help Guide
S80 Exposure Mode	Sets the exposure mode when shooting slow-motion/quick-motion movies.	Help Guide
<b>耳File Format</b>	Selects the movie file format. ([XAVC S 4K] / [AVCHD], etc.)	52
<b>間Record Setting</b>	Selects a frame-rate and bit-rate for the movie.	53
S&Q S&Q Settings	Changes the settings for slow-motion and quick-motion movie shooting.	Help Guide
Px Proxy Recording	Records low-bit-rate proxy files simultaneously when recording XAVC S movies.	Help Guide
<b>間AF</b> drive speed	Switches focusing speed when using autofocus in movie mode.	Help Guide
<b>間AF Tracking Sens.</b>	Sets the AF tracking sensitivity for the movie mode.	Help Guide

Sets the function that automatically	
adjusts the shutter speed following the brightness of the environment in movie mode.	Help Guide
Sets the initial magnification scale when using [Focus Magnifier] in movie mode.	Help Guide
Audio Recording  Sets whether to record audio when shooting a movie.	Help Guide
Audio Rec Level Adjusts the audio recording level during movie recording.	Help Guide
Audio Level Display Sets whether to display the audio level.	Help Guide
Audio Out Timing  Sets the timing of audio output during the movie recording.	Help Guide
Wind Noise Reduct. Reduces wind noise during movie recording.	Help Guide
Sets whether to display markers on the monitor when recording movies.	Help Guide
Sets which markers to display on the monitor when recording movies.	Help Guide
Video Light Mode  Sets the illumination setting for the HVL-LBPC LED light (sold separately).	Help Guide
Movie w/ shutter Records movies using the shutter button.	Help Guide
Shutter/SteadyShot	
Shoots images without the shutter sound.	Help Guide
e-Front Curtain Shutter  Sets whether to use the electronic front curtain shutter function.	Help Guide
Release w/o Lens Sets whether to release the shutter when the lens is not attached.	Help Guide
Release w/o Card  Sets whether to release the shutter when a memory card is not inserted.	Help Guide
SteadyShot Sets whether to activate SteadyShot for shooting.	Help Guide

SteadyShot Settings	Sets SteadyShot settings.	Help Guide
Zoom		
Zoom	Sets the zoom scale for zoom functions other than the optical zoom.	Help Guide
Zoom Setting	Sets whether to use the Clear Image Zoom and Digital Zoom when zooming.	Help Guide
Zoom Ring Rotate	Assigns the zoom in/out to the rotational direction of the zoom lens. This function is only available with a power zoom lens that is compatible with this function.	Help Guide
Display/Auto Review		
DISP Button	Sets the type of information to be displayed on the monitor or in the viewfinder when the DISP button is pressed.	Help Guide
FINDER/MONITOR	Sets the method for switching the display between the viewfinder and the monitor.	Help Guide
Finder Frame Rate	Sets the frame rate for the viewfinder when shooting still images.	Help Guide
Zebra Setting	Sets the stripes displayed to adjust brightness.	Help Guide
Grid Line	Displays grid lines for adjusting the image composition.	Help Guide
Exposure Set. Guide	Sets the guide displayed when exposure settings are changed in the shooting screen.	Help Guide
Live View Display	Sets whether to reflect settings such as exposure compensation in screen display.	Help Guide
Cont. Shoot. Length	Sets whether to display an indicator of the remaining time for which continuous shooting can be performed at the same shooting speed.	44

Auto Review	Sets auto review to display the	Help
Auto neview	captured image after shooting.	Guide
Custom Operation	captarea image arter shooting.	Guide
	T	
Custom Key	Assigns functions to the various keys so that you can perform operations more quickly by pressing the keys when shooting still images.	Help Guide
<b>耳Custom Key</b>	Assigns functions to the various keys so that you can perform operations more quickly by pressing the keys when shooting movies.	Help Guide
Custom Key	Assigns functions to the keys so that you can perform operations more quickly by pressing the keys when playing back images.	Help Guide
Function Menu Set.	Customizes the functions displayed when the Fn (Function) button is pressed.	23
My Dial Settings	Assigns the desired functions to the dials and the control wheel, and register up to three combinations of settings.	Help Guide
Dial Setup	Sets the functions of the front and rear dials when the exposure mode is set to M. Dials can be used for adjusting shutter speed and aperture value.	Help Guide
Av/Tv Rotate	Sets the direction of turning the front or rear dial or the control wheel to adjust the aperture value or shutter speed.	Help Guide
Dial Ev Comp	Sets whether to compensate the exposure with the front or rear dial.	Help Guide
Function Ring (Lens)	Assigns a function to the function ring on the lens.	Help Guide
Func. of Touch Operation	Sets which function is activated by touch operations on the monitor.	46, 47

MOVIE Button	Enables or disables for the MOVIE button.	Help Guide
Lock Operation Parts	Sets whether to disable the multi- selector, control wheel, or front and rear dials temporarily when the Fn button is pressed and held down.	Help Guide
Audio signals	Selects whether the camera beeps during auto focus and self-timer operations.	Help Guide

### ⊕ (Network) Green tab

Send to Smartphone Func.	Sets movies to be transferred to a smartphone, or transfers images to a smartphone.	Help Guide
Send to Computer (Wi-Fi)	Backs up images by transferring them to a computer connected to a network.	Help Guide
FTP Transfer Func.	Sets image transfer using FTP and executes it.  * Basic knowledge of FTP server is required.	57
View on TV	Allows you to view images on a network-enabled TV.	Help Guide
Ctrl w/ Smartphone	Sets the condition for connecting the camera to a smartphone.	Help Guide
PC Remote Function	Configures settings for PC remote shooting.	Help Guide
Airplane Mode	Disables wireless communications from the device such as Wi-Fi, NFC, and Bluetooth function.	Help Guide
Wi-Fi Settings	Allows you to register your access point and check or change the Wi-Fi connection information.	Help Guide

Bluetooth Settings	Configures settings for connecting the camera to a smartphone or a Bluetooth remote commander via a Bluetooth connection.	Help Guide
Location Info. Link Set.	Obtains location information from the paired smartphone and records it to captured images.	Help Guide
Bluetooth Rmt Ctrl	Sets whether or not to use a Bluetooth remote commander.	Help Guide
Edit Device Name	Changes the device name under Wi-Fi Direct, etc.	Help Guide
Import Root Certificate	Imports a root certificate to the camera.	Help Guide
Security (IPsec)	Sets whether or not to encrypt communications between the camera and a computer while they are connected via Wi-Fi.	Help Guide
Reset Network Set.	Resets all the network settings.	Help Guide

► (Playback)		Blue tab
_	T	I
Protect	Protects recorded images against accidental erasure.	Help Guide
Rotate	Rotates the image.	Help Guide
Delete	Deletes images.	Help Guide
Rating	Assigns rating to recorded images on a scale from $\bigstar$ to $\star\star$ .	Help Guide
Rating Set (Custom Key)	Sets the rating (number of ★) that can be selected using the custom key to which [Rating] has been assigned with [▶ Custom Key].	Help Guide

DI . . . . .

[ /Dlavback)

Specify Printing	Specifies in advance on the memory card which still images to print out later.	Help Guide
Сору	Copies images from the memory card in the memory card slot designated in [Select Playback Media] to the memory card in the other slot.	Help Guide
Photo Capture	Captures a chosen scene in a movie to save as a still image.	Help Guide
⊕ Enlarge Image	Enlarges the playback images.	Help Guide
⊕ Enlarge Initial Mag.	Sets the initial magnification scale when playing back enlarged images.	Help Guide
et Enlarge Initial Position	Sets the initial magnification area when playing back enlarged images.	Help Guide
Cont. PB for 🗘 Interval	Continuously plays back images shot using interval shooting.	Help Guide
PB Speed for 🗘 Interval	Sets the playback speed when continuously playing back images with [Cont. PB for !!] Interval].	Help Guide
Slide Show	Plays a slide show.	Help Guide
Select Playback Media	Selects the memory card slot of the memory card to be played back.	Help Guide
View Mode	Plays back images from a specified date or specified folder of still images and movies.	Help Guide
Image Index	Displays multiple images at the same time.	Help Guide
Display as Group	Sets whether or not to display images shot continuously or shot using interval shooting as a group.	Help Guide
Display Rotation	Sets the playback orientation for images shot vertically.	Help Guide
Image Jump Setting	Sets which dial and method to use for jumping between images during playback.	Help Guide

# Yellow tab

Monitor Brightness	Adjusts the brightness of the screen.	Help Guide
Viewfinder Bright.	Sets the brightness of the viewfinder.	Help Guide
Finder Color Temp.	Sets the color temperature of the viewfinder.	Help Guide
Gamma Disp. Assist	Adjusts the screen to make monitoring easier when displaying an S-Log or HLG movie.	Help Guide
Volume Settings	Sets the volume for movie playback.	Help Guide
Delete confirm.	Sets whether [Delete] or [Cancel] is preselected in the delete confirmation screen.	Help Guide
Display Quality	Sets the display quality.  * When [High] is selected, the battery is consumed more quickly.  * When the temperature of the camera is high, [Display Quality] may be locked to [Standard].	Help Guide
Power Save Start Time	Sets the time intervals to automatically switch to power save mode.	Help Guide
Auto Power OFF Temp.	Sets the camera temperature at which the camera turns off automatically during shooting. When shooting in hand-held mode, set to [Standard].	Help Guide
NTSC/PAL Selector*1	Changes the TV format of the device so that you can shoot in a different movie format.	Help Guide
Cleaning Mode	Starts the cleaning mode to clean the image sensor.	Help Guide
Touch Operation	Sets whether or not to activate the touch operation of the monitor.	45

Touch Panel/Pad	Selects whether to activate touch panel operation when shooting with the monitor, or touch pad operation when shooting with the viewfinder.	45
Touch Pad Settings	Adjusts settings related to touch pad operation.	Help Guide
Demo Mode	Sets demonstration playback of movies to on or off.	Help Guide
TC/UB Settings	Sets the time code (TC) and user bit (UB).  * This function is for skilled movie creators.	Help Guide
IR Remote Ctrl	Sets whether to use the infrared remote control.	Help Guide
HDMI Settings	Sets the HDMI settings.  * Images will not appear on the monitor of the camera if you record movies while the camera is connected to an HDMI device with [且于File Format] set to [XAVC S 4K].	Help Guide
<b>耳4K Output Select</b>	Sets how to record and output 4K movies via HDMI when the camera is connected to an external recorder/ player that supports 4K.	Help Guide
USB Connection	Sets the USB connection method.	Help Guide
USB LUN Setting	Enhances compatibility by limiting the functions of USB connection. Set to [Multi] in normal conditions and to [Single] only when the connection cannot be established.	Help Guide
USB Power Supply	Sets whether to supply power via USB connection when the camera is connected to a computer or USB device.	Help Guide
<b>▲</b> Language	Selects the language.	33
Date/Time Setup	Sets the date, time, and daylight savings.	33

	T	
Area Setting	Sets the location of use.	Help Guide
IPTC Information	Writes IPTC information when recording still images.	Help Guide
Copyright Info	Sets copyright information for still images.	Help Guide
Write Serial Number	Writes the camera's serial number to the Exif data when recording still images.	Help Guide
Format	Formats the memory card.	Help Guide
Rec. Media Settings	Sets the method for recording images to two memory card slots.	Help Guide
File/Folder Settings	Sets file names for still images to be shot, and specifies folders for storing the shot still images.	Help Guide
<b>即File Settings</b>	Sets file numbers and file names for movies to be recorded.	Help Guide
Recover Image DB	Recovers the image database file and enables recording and playback.	Help Guide
Display Media Info.	Displays the remaining recording time of movies and the recordable number of still images on the memory card.	Help Guide
Version	Displays the camera software version.	Help Guide
Save/Load Settings	Saves the camera settings to a memory card, or reads saved settings from the memory card.	Help Guide
Setting Reset	Restores settings to their defaults. Select [Initialize] to restore all settings to their default values.	Help Guide

# ★ (My Menu) Gray tab

Add Item	Adds desired MENU items to	Help
	★ (My Menu).	Guide
Sort Item	Sorts the MENU items added to	Help
	★ (My Menu).	Guide
Delete Item	Deletes MENU items added to	Help
	★ (My Menu).	Guide
Delete Page	Deletes all the MENU items on a page	Help
	in ★ (My Menu).	Guide
Delete All	Deletes all the MENU items added to	Help
	★ (My Menu).	Guide
Display From My Menu	Sets whether or not to display the My Menu first when the MENU button	Help Guide
	is pressed.	

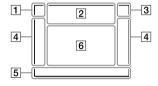
<sup>\*1</sup> If you change this item, you will need to format the memory card for compatibility with the PAL or NTSC system. Also, note that it may not be possible to play back movies recorded for the NTSC system on PAL system TVs.

# List of icons on the monitor

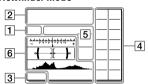
The displayed contents and their positions in the illustrations are just guidelines, and may differ from the actual displays.

# Icons on the shooting screen

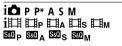
#### Monitor mode



### Viewfinder mode



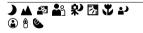
1 Shooting mode/ Scene recognition



Shooting mode (34)



Register number (64)



Scene Recognition icons

# 2 Camera settings



Memory card status (28, 86)

### 100 / 1 h 30 m

Remaining number of recordable images / recordable times

### 11113

Writing data / Number of images left to write

# 3:2 4:3 16:9 1:1

Aspect ratio of still images (63)

# 60M 54M 51M 40M 26M 23M 22M 17M 15M 13M 10M 6.5M 5.8M 5.5M 4.3M

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### RAW RAW

RAW recording (compressed/ uncompressed) (49)

### X.FINE FINE STD

JPEG Quality (49)

### XAVCS4K XAVCSHD AVCHD

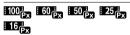
File format of movies (52)

100 | 60 | 50 | 25 | 16 | FX | FH |

Record setting of movies (53)

120p 60p 60i 30p 24p 100p 50p 50i 25p

Frame rate of movies (53)



Proxy Recording (69)

120fps 60fps 30fps 15fps 8fps 4fps 100fps 50fps 25fps 12fps 6fps 3fps 2fps 1fps

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### VIEW

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### E<sub>ON</sub>

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#### Flicker

Flickering detected (69)

### (₩%; (₩∰ (₩∰ II

SteadyShot off/on, Camera shake warning (70)

#### ((♣))**©** □ (♣)) **H** 8mm 8mm

SteadyS. Focal Len./ Camera shake warning (71)

# s**⊕**, c⊕, ₀⊕,

Smart Zoom / Clear Image Zoom / Digital Zoom (71)

#### -PC-

PC remote (73)

# ٠;٠

**Bright Monitoring** 

### ď

Silent Shooting (70)

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### **P**OFF

No audio recording of movies (70)

### Ø

Wind Noise Reduct. (70)

**(**C)

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### IPTC

IPTC information writing on (78)

Assist Assist Assist Assist S-Log2 S-Log3 HLG 709 HLG 2020

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### **Spot Focus**

Performing [Spot Focus] (47)

 $\mathbb{N}$ 

NFC active (56)

(\*)

Bluetooth connection available / Bluetooth connection unavailable (74)

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Connected to smartphone / Not connected to smartphone

<u>\* \*\*</u>

Obtaining location information/ Location information cannot be obtained (74)

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Airplane Mode (73)

ΠĀ

Overheating warning

FULL ERROR

Database file full/Database file error

3 Battery

**EZZZ** 100%

Remaining battery (26)

Remaining battery warning

**©** 

USB power supply (77)

4 Shooting settings

☐ ☐ Hi ☐ ☐ ☐ ☐ ☐ O S10 S3

EBIAC BERIS SHEWS (SHEWS BERISHON)
0.3EV3 0.3EV3 0.3EV3 HI LO

SHEWS (SHEWS BERISHON)

SHEWS (SHEWS BERISHON)

Drive Mode (43)

Flash Mode (67) / Wireless Flash (67) / Red Eye Reduction (67)

22±0.0

Flash Comp. (67)

AF-S AF-A AF-C DMF MF

Focus Mode (36)

© □ □ • ∰ © , □ , □ , • ∰ , • ⊕ ,

Focus Area (38)

# JPEG RAW RAW RAW+J RAW+J

File Format (49)



Metering Mode (66)

AWB AWB魚 AWB魚 ☀ ♠ ♣ ♪ 祟-1 祟0 祟+1 祟+2 搫 ఊ ▶

#### 7500K A5 G5

White Balance (Auto, Preset, Underwater Auto, Custom, Color temperature, Color filter) (67)

# OFF AUTO

D-Range Optimizer (68)

Std. Vivid Ntrl Clear Deep Light Port.

Land Susset Night Auth B/W Sepia

### +3 +3 +3

Creative Style (68)/Contrast, saturation, and sharpness



∰ ∰ ∰ **%** 

Picture Effect (68)

# PAF PAF

Face/Eve Priority in AF (65)

# PP1 ~ PP10 PP

Picture Profile (68)

# 112

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# 5 Focus indicator/exposure settings

# ()()

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#### 1/250

Shutter speed

### F3.5

Aperture value

### **7** III

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### ISO400 ISO AUTO DISO400

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# ¥ \$L AWB

AE lock/FEL lock/AWB lock

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Guide display for tracking (47)

### Focus Cancel

Guide display for canceling focusing (46)

### **(iso**

Control wheel function

# ♣Av ➡Tv (ISO

Guide display for My Dial

\*\*\* -61151141 G12111118111121 G14+

Bracket indicator



Spot metering area (66)



Exposure Setting Guide (71)

↑ 1° 1000 1050 1/8000 %

Shutter speed indicator

da F1.4 2.8 | 5.6 | 11 | 22 | 4a

Aperture indicator





Digital level gauge

### STBY REC

Movie recording standby/Movie recording in progress

#### 1:00:12

Actual movie recording time (hours: minutes: seconds)

# 

Audio Level Display (70)



REC Control (77)

### 00:00:00:00

Time code (hours: minutes: seconds: frames) (77)

### 00 00 00 00

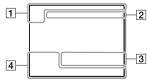
User Bit (77)



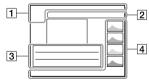
Pixel Shift Multi Shoot.

# Icons on the playback screen

# Single-image playback display



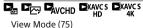
# Histogram display



# 1 Basic information



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Rating (74)

 $\circ$ 

Protect (74)

### **DPOF**

DPOF set (75)

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File number/Number of images in the view mode

# N

NFC active (56)

### 

Remaining battery (26)



Display as Group (75)

# Px

Proxy movie included (69)

# **000000 2/4**

Pixel Shift Multi Shoot.

### 2 Camera settings

Refer to "Icons on the shooting screen" (page 80).

# 3 Shooting settings

### 35mm

Lens focal length

### HLG

HDR recording (Hybrid Log-Gamma)

Refer to "Icons on the shooting screen" (page 80) for other icons displayed in this area.

# 4 Image information



Latitude/longitude information (57)

0

Copyright information included

### 2019-1-1 10:37PM

Date of recording (33)

# **100-0003**

Folder number — File number (78)

### C0003

Movie file number (78)



Histogram (Luminance/R/G/B)

# **About this product**

# Specifications

# Memory cards that can be used

This camera only supports SD memory cards (UHS-II compatible). When using microSD memory cards with this camera, be sure to use the appropriate adaptor.

	Recording format	Supported memory card
Still image	e	SD/SDHC/SDXC card
AVCHD		SD/SDHC/SDXC card (Class 4 or faster, or U1 or faster)
XAVC S	4K 60 Mbps* HD 50 Mbps or lower* HD 60 Mbps	SDHC/SDXC card (Class 10, or U1 or faster)
	4K 100 Mbps* HD 100 Mbps	SDHC/SDXC card (U3)

<sup>\*</sup> Including when recording proxy movies at the same time

### Note

- When an SDHC memory card is used to record an XAVC S movie over extended periods of time, the recorded movies will be divided into files 4 GB in size. The divided files can be handled as a single file by importing them to a computer using PlayMemories Home.
- When recording a movie on memory cards in both the slot 1 and the slot 2 with following camera settings, insert two memory cards with the same file system. XAVC S movies cannot be recorded simultaneously when using a combination of the exFAT file system and FAT32 file system.
  - -[ File Format] is set to [XAVC S 4K] or [XAVC S HD]
  - [Recording Mode] under [Rec. Media Settings] is set to [Simult. (**口**)] or [Simult. (**四**/**山**)]

Memory card	File system
SDXC memory card	exFAT
SDHC memory card	FAT32

Charge the battery pack sufficiently before attempting to recover the database files on the memory card.

# **Specifications**

### Camera

# [System]

Camera Type:

Interchangeable Lens Digital Camera Lens: Sony E-mount Iens

#### [Image sensor]

Image format: 35 mm full frame (35.7 mm × 23.8 mm), CMOS image sensor

Effective pixel number of camera: Approx. 61 000 000 pixels Total pixel number of camera: Approx. 62 500 000 pixels

### [SteadyShot]

In-camera sensor shift image stabilization system

### [Auto focus system]

Detection system: Phase detection system/Contrast detection system Sensitivity Range: –3 EV to +20 EV (at ISO 100 equivalent, F2.0)

### [Electronic viewfinder]

Type: 1.3 cm (0.5 type) Electronic Viewfinder

Total number of dots: 5 760 000 dots Magnification: Approx. 0.78× with 50 mm lens at infinity, –1 m<sup>-1</sup>

Eye Point: Approx. 23 mm from the eyepiece and approx. 18.5 mm from the eyepiece frame at –1 m<sup>-1</sup> Diopter Adjustment: –4.0 m<sup>-1</sup> to +3.0 m<sup>-1</sup>

# [Monitor]

7.5 cm (3.0 type) TFT drive, touch

Total number of dots: 2 359 296 dots

### [Exposure control]

Metering method: 1 200-zone evaluative metering

Metering Range: -3 EV to +20 EV (at ISO 100 equivalent with F2.0 lens)

ISO sensitivity (Recommended exposure index):

Still images: ISO 100 to ISO 32 000 (Extended ISO: Minimum ISO 50, maximum ISO 102 400) Movies: ISO 100 to ISO 32 000 equivalent

### [Shutter]

Type: Electronically-controlled, vertical-traverse, focal-plane type Speed range:

Still images: 1/8 000 second to 30 seconds, BULB

Movies: 1/8 000 second to 1/4 second

1080 60i-compatible devices (1080 50i-compatible devices): up to 1/60 (1/50) second in AUTO mode (up to 1/30 (1/25) second in Auto slow shutter mode)

Flash sync speed: 1/250 second (when using a flash manufactured by Sony)

### [Recording format]

File format: JPEG (DCF Ver. 2.0, Exif Ver. 2.31, MPF Baseline) compliant, RAW (Sony ARW 2.3 format) Movie (XAVC S format):

MPEG-4 AVC/H.264 XAVC S ver.1.0 format compliant

Video: MPEG-4 AVC/H.264 Audio: LPCM 2ch (48 kHz 16 bit)

Movie (AVCHD format):

AVCHD format Ver. 2.0 compatible Video: MPEG-4 AVC/H.264 Audio: Dolby Digital 2ch, equipped with Dolby Digital Stereo Creator

 Manufactured under license from Dolby Laboratories.

### [Recording media]

SLOT 1/SLOT 2: Slot for SD cards (UHS-I and UHS-II compatible)

# [Input/output terminals]

USB Type-C terminal:

SuperSpeed USB 5Gbps (USB 3.2) Multi/Micro USB Terminal\*:

Hi-Speed USB (USB 2.0)

\* Supports Micro USB compatible devices.

HDMI: HDMI type D micro jack

Microphone) terminal:
Ø 3.5 mm Stereo mini jack
☼ (Headphones) terminal:
Ø 3.5 mm Stereo mini jack

🗲 (Flash sync) terminal

### [General]

Rated input: 7.2 V ===, 3.7 W
Operating temperature:
0 to 40°C (32 to 104°F)
Storage temperature:
-20 to 55°C (-4 to 131°F)
Dimensions (W/H/D) (Approx.):
128.9 × 96.4 × 77.5 mm

 $128.9 \times 96.4 \times 67.3$  mm (from grip to monitor)  $5.1/8 \times 3.7/8 \times 3.1/8$  in.  $5.1/8 \times 3.7/8 \times 2.3/4$  in. (from grip to monitor)

Mass (Approx.): 665 g (1 lb 7.5 oz) (including battery pack, SD card)

### [Wireless LAN]

WW447485 (see name plate on the bottom of camera)

Supported format: IEEE 802.11 a/b/g/n/ac Frequency band: 2.4 GHz/5 GHz

Security: WEP/WPA-PSK/WPA2-PSK Connection method: Wi-Fi Protected Setup™ (WPS)/

Manual
Access method: Infrastructure mode

WW778752 (see name plate on the bottom of camera)
Supported format:

IEEE 802.11 b/g/n Frequency band: 2.4 GHz

Security: WEP/WPA-PSK/WPA2-PSK
Connection method:

Wi-Fi Protected Setup™ (WPS)/ Manual

Access method: Infrastructure mode

### [NFC]

Tag type: NFC Forum Type 3 Tag compliant

# [Bluetooth communications]

Frequency band: 2.4 GHz

# Battery charger BC-QZ1

Rated input:

100 - 240 V • , 50/60 Hz, 0.38 A Rated output: 8.4 V ===, 1.6 A

# Rechargeable battery pack NP-FZ100

Rated voltage: 7.2 V

Design and specifications are subject to change without notice.

# On image data compatibility

- This camera conforms with DCF (Design rule for Camera File system) universal standard established by JEITA (Japan Electronics and Information Technology Industries Association).
- Playback of images recorded with your camera on other equipment and playback of images recorded or edited with other equipment on your camera are not guaranteed.

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Additional information on this product and answers to frequently asked questions can be found at our Customer Support Website.

https://www.sony.net/

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