SONY

Sample Application

for Camera Remote SDK

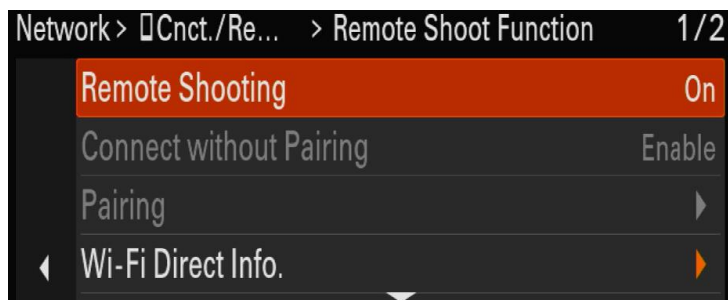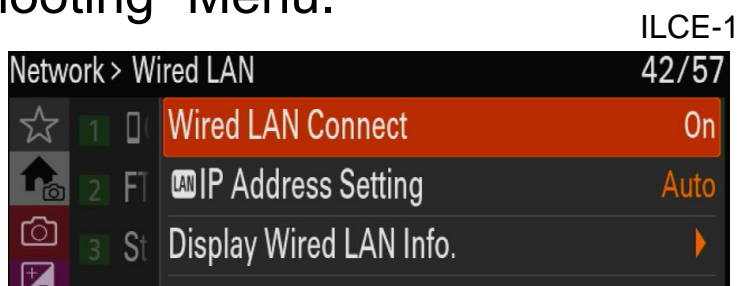# Instruction Manual

version 2.01.00

Contents

0. Preparation

■Camera settings and connect to PC(/SBC). (1/7)

[Wired LAN (1/4)]

WiredLAN uses ILCE-1 and ILME-FX6 as examples. For other models, refer to "PC Remote Function" in the help guide.

1.Please set "On" for "Network > Wired LAN > Wired LAN Connect" Menu and set "On" for "Network > Cnct./Remote Sht. > Remote Shoot Function > Remote Shooting" Menu.

ILCE-1

Network > Wired LAN	42/57
☆ 1 ▯ Wired LAN Connect	On
🏠 2 F LAN IP Address Setting	Auto
📷 3 St Display Wired LAN Info.	▶

Network > ▯Cnct./Re... > Remote Shoot Function	1/2
Remote Shooting	On
Connect without Pairing	Enable
Pairing	▶
◀ Wi-Fi Direct Info.	▶

2.Please connect the camera and your PC(/SBC) directly (or through LAN Hub / LAN Router) with an Ethernet cable.

3. If you want to connect the camera and host with a fixed IP address, set "Manual" for "IP Address setting" in "Wired LAN Setting".
If you want to use the DHCP service of the router to automatically assign an IP address, set "Auto" in "IP Address Settings".
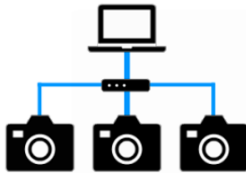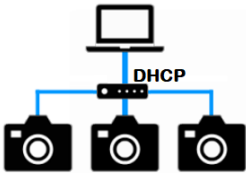
LAN	IP Address Setting	🔋
IP	● Auto	
	● Manual	

ILCE-1

0. Preparation
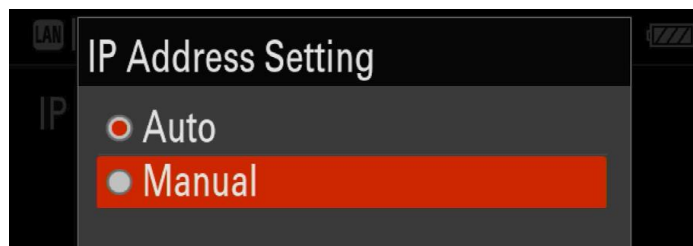
■Camera settings and connect to PC(/SBC). (2/7)

[Wired LAN (2/4)]

●Host setting requirement by the combination of connection type and "IP Address setting".

	Direct		Use HUB		Use Router	
IP Address Setting	Auto	Manual	Auto	Manual	Auto	Manual
Windows	*1	-	*1	-	*1	-
macOS	*2					
PC Linux	*3	-	*3	-	*4	-
Jetson Nano	*3	-	*3	-	*4	-
Raspberry Pi 2/4	-					

*1 Enable network discovery and file sharing when using a Windows account without administrative privileges
*2 When Firewall is ON, allow connections by applications in the following way:
Open Firewall Options (System Preferences > Security & Privacy > Firewall > Firewall Options...)
Set "Allow incoming connections" for the applications
*3 Set the network setting to "Link Local Only"
*4 Set the network setting to "Automatic (DHCP)"

0. Preparation

■Camera settings and connect to PC(/SBC). (3/7)

[Wired LAN (3/4)]

ILCE-1

4. Please enter IP address, Subnet Mask, Default Gateway, and DNS Settings for "IP address setting".

> **LAN** IP Address Setting
>
> IP Address Setting   Manual
> IP Address
> Subnet Mask
> Default Gateway
>
>   OK   Cancel

5. Wait for about 30 seconds to connect to the Ethernet cable and for the camera to recognize the network. Then you are ready to connect to the host PC(/SBC).

6. For a Wired LAN connection, you need to execute "Pairing" between the camera and the host PC(/SBC). To perform "Pairing", you need to send a Connect request from the application to the camera and operate the screen on the camera.

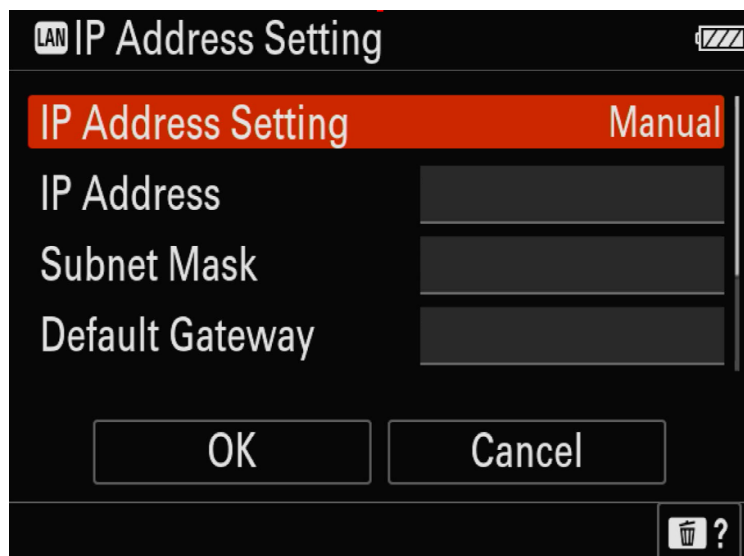   The pairing procedure is explained in "Sample Application Usage → ■ Steps" on p.18.

0. Preparation

■ Camera settings and connect to PC(/SBC). (4/7)

[Wired LAN (4/4)]

ILME-FX6

4. Please enter IP address, Subnet Mask, Gateway, and etc. for "Detail Settings".
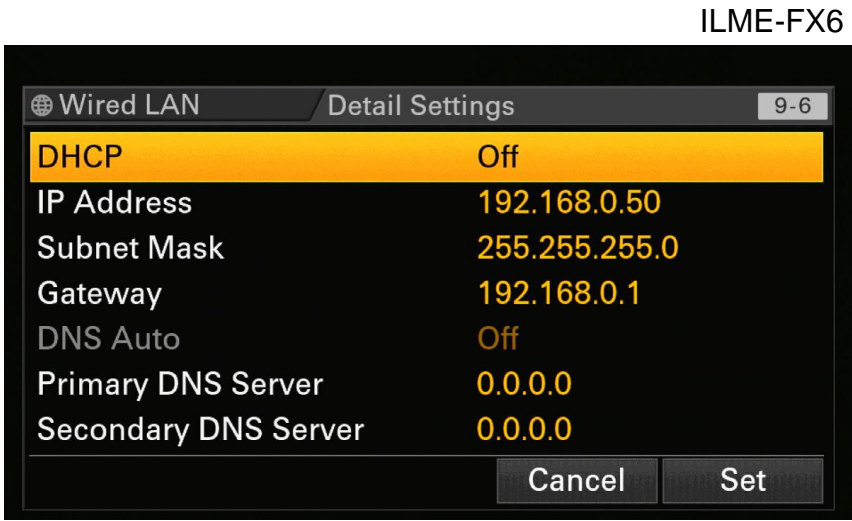
5. Wait for about 30 seconds to connect to the Ethernet cable and for the camera to recognize the network. Then you are ready to connect to the host PC(/SBC).

6. Please also set up User Name and Input Password for "Access Authentication".

ILME-FX6

SONY   Sony Corporation.

0. Preparation

■Camera settings and connect to PC(/SBC). (5/7)

[Wireless LAN (1/2)]

WirelessLAN uses ILCE-1 as examples. For other models, refer to "PC Remote Function" in the help guide.

- Use Wi-Fi Direct

   1. Please executes "Network > Cnct./Remote Sht. > Remote Shoot Function > Wi-Fi Direct Info" display the SSID and password required for the user to connect to the camera.

ILCE-1

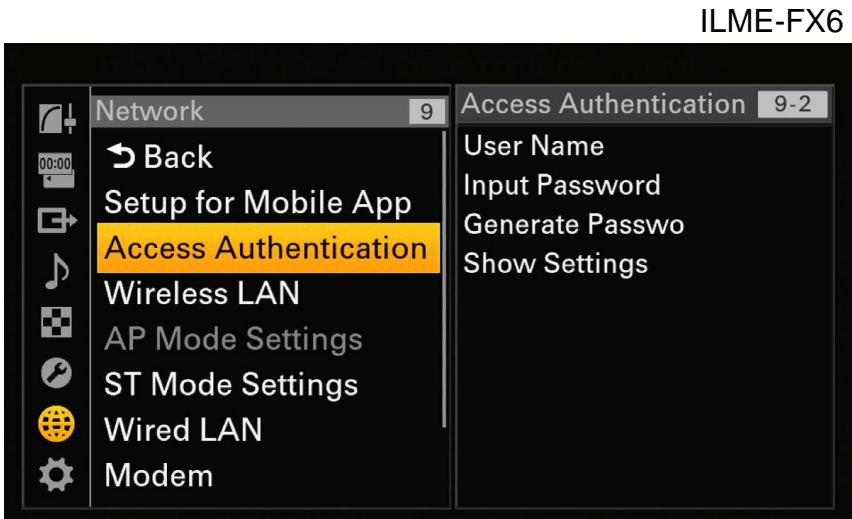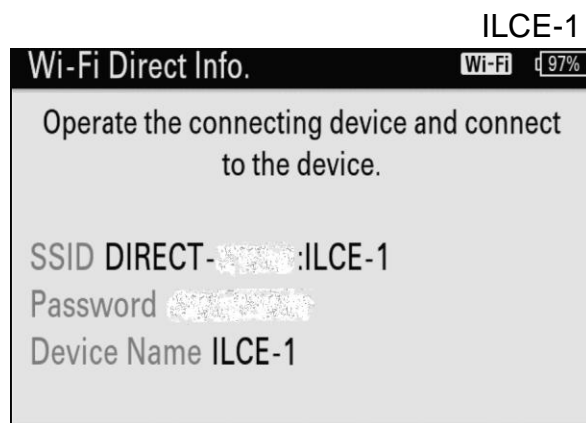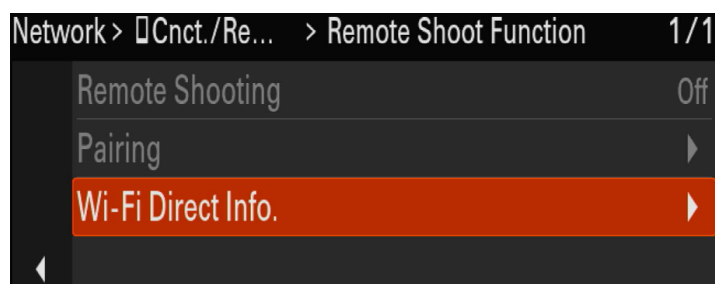If you leave the SSID and Password displayed on the camera and search for the SSID on the host PC, the SSID will be listed. You can also connect directly to the camera by manually entering the SSID and password above without searching for the SSID on the host PC.

   2. Once the connection to the camera's SSID is completed, "Remote Shooting" will change from "Off" to "On". When it changes to "On", you will be able to connect remotely.
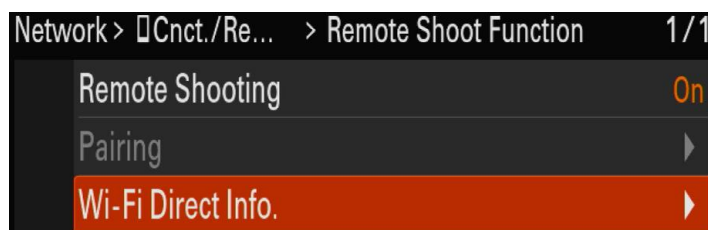
0. Preparation

■Camera settings and connect to PC(/SBC). (6/7)

[Wireless LAN (2/2)]

- Use router AP

1. Please executes "Network > Access Point Set." Menu.

Network > Wi-Fi		
☆ 1 🔲 Wi-Fi Connect		Off
🏠 2 F WPS Push		▶
📷 3 C Access Point Set.		▶
📷 4 W Wi-Fi Frequency Band		2.4GHz

ILCE-1

Access Point Set. 78%
Sets the access point to connect to.
Searching...

Manual Setting
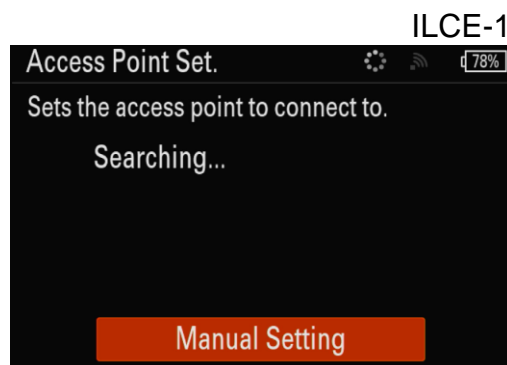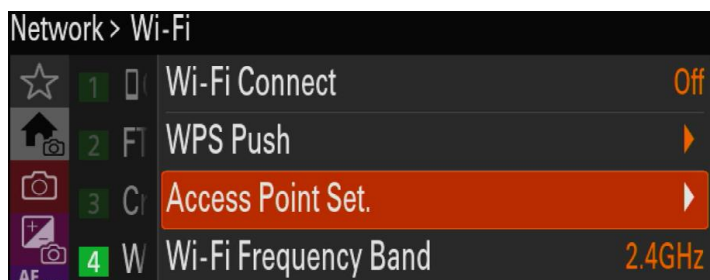
2. Once you have decided on the Access Point to connect to and entered the password etc., you are ready to connect.

Access Point Set. 78%
Sets the access point to connect to.
AAAAAAAAA ✓ 🔒 ▶
XXXXXXXXX 🔒 ▶
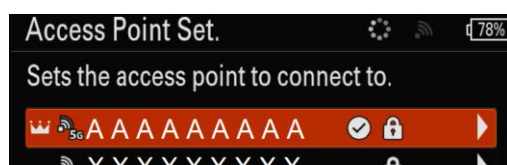
3. Change "Wi-Fi Connect" from "Off" to "On" to connect to the Access Point set in step 2.

Network > Wi-Fi		
☆ 1 🔲 Wi-Fi Connect		Off
🏠 2 F WPS Push		▶
📷 3 C Access Point Set.		▶

Wi-Fi Connect 73%
Searching...
Cancel
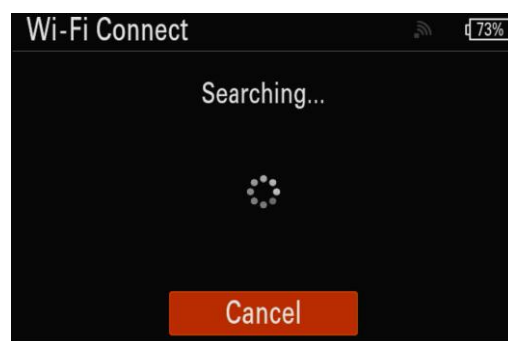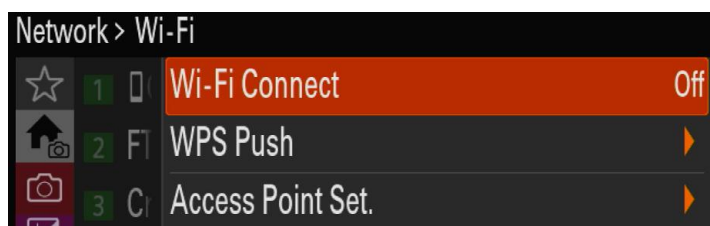
4. When a connection is establis-hed to the Access Point,
   "Wi-Fi Connect" changes to "On". When it changes to "On", you will be able to connect remotely.

#If you are having trouble connecting, please refer to "Camera body settings for wireless LAN connection" in the API specifications.

0. Preparation

■Camera settings and connect to PC(/SBC). (7/7)

[USB]

USB connection uses ILCE-1 as examples. For other models, refer to "PC Remote Function" in the help guide.

1. Please connect the camera and your PC(/SBC) with a USB cable. When the camera recognizes the USB cable, four options will be displayed on the "Select USB Connect Mode", so select "Remote Shoot(PC Remote)".

Select USB Connect Mode

Live Stream(USB Streaming)

Image Transfer (MSC)

Image Transfer (MTP)

Remote Shoot (PC Remote)
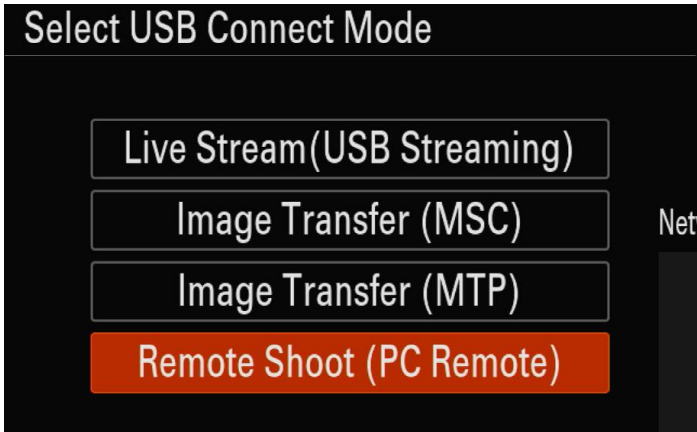
ILCE-1

Then "Network > Cnct./Remote Sht.
> Remote Shoot Function
> Remote Shooting" changes to "On"

Network > ☐Cnct./Re... > Remote Shoot Function 1/2

Remote Shooting	On
Connect without Pairing	Enable
Pairing	▶
Wi-Fi Direct Info.	▶
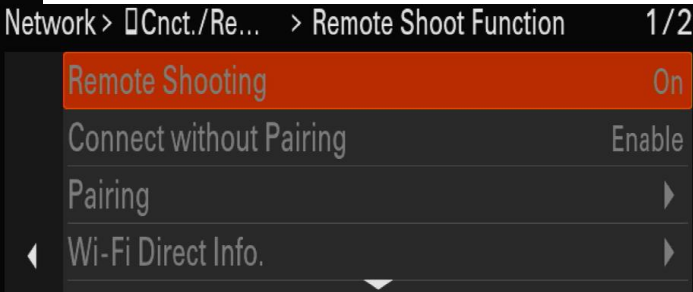
If you set the following menu, the confirmation screen will not be displayed next time. "Setup > USB > USB Connection Mode"

USB Connection Mode
- Sel. When Connect
- USB Streaming
- MassStorage(MSC)
- MTP
- Remote Shooting

[For Windows]

Device Manager

File   Action   View   Help

> Mice and other pointing devices
> Monitors
> Network adapters
  Portable Devices
    ILCE-xxx
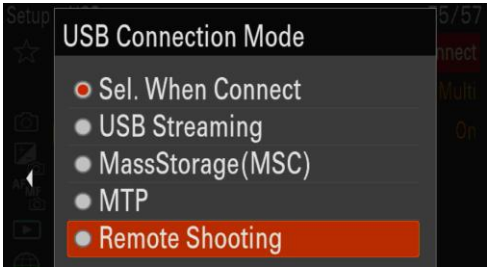
3. Please check "Device Manager" if your camera "ILCE-xxx" is under "Portable Devices".
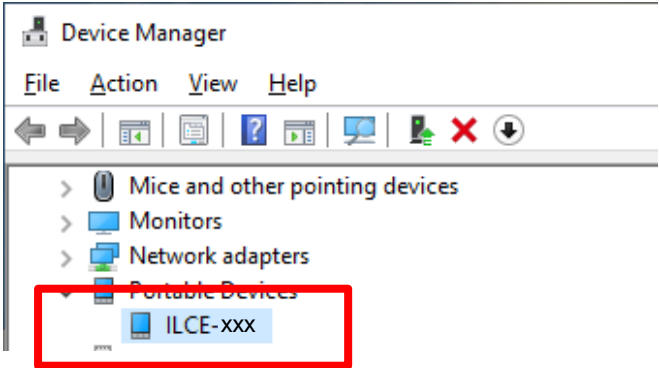
0. Preparation

■Installation of device driver. (1/2)

1. Open "Driver" folder.
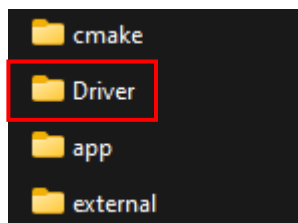
2. Select inf file and open menu at right click.
   srcameradriver_dscrx0m2.inf : Use DSC-RX0M2.
   srcameradriver.inf : Use other models.
3. Click "Install".
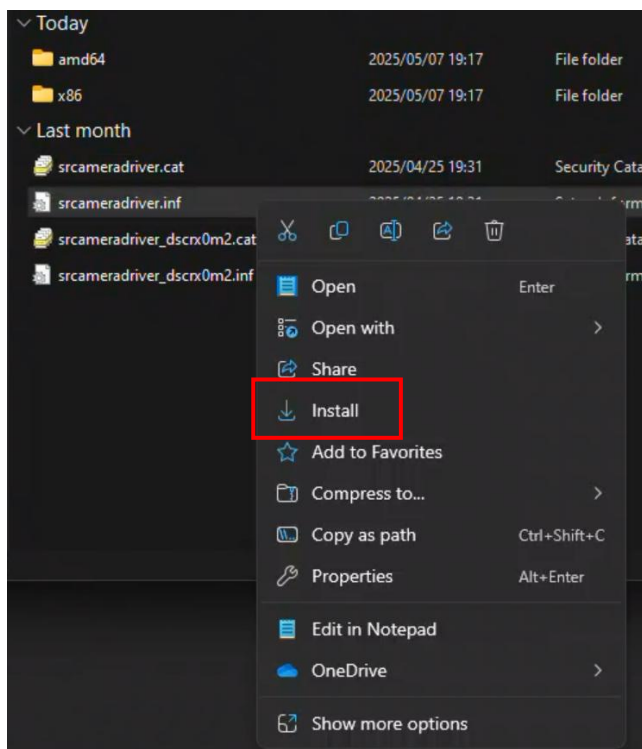
0. Preparation

■Installation of device driver. (2/2)

4. Click "Yes" if you ask below.
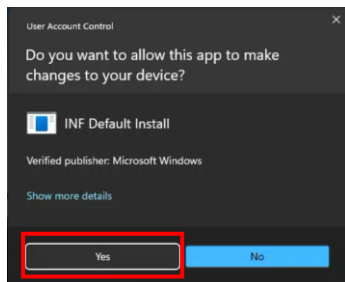
5. Click "Install".
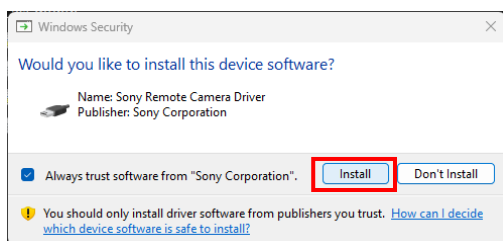
6. Click "OK".
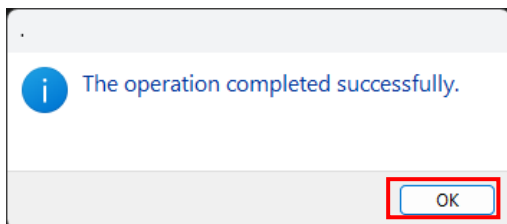
7. Please check "Device Manager" if "Sony Remote Control Camera" is under "libusbK Usb Devices".

8. If you come to this step, you are ready to develop your application by using Camera Remote SDK.

SONY   Sony Corporation.
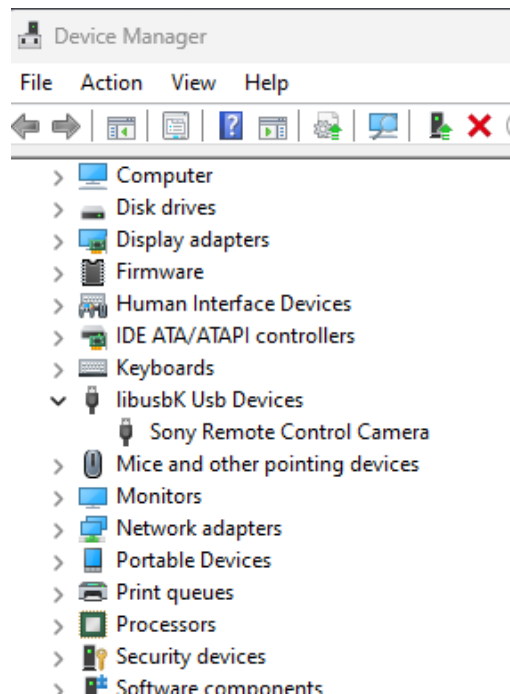
0. Preparation

■ Installation of some necessary packages.

1. Install some necessary packages below.

```
$ sudo apt install autoconf libtool libudev-dev gcc g++ make cmake unzip    libxml2-dev
```

■ USB setting

1. Change USB bulk setting(1/2)

[Raspberry Pi OS]
Open /boot/firmware/cmdline.txt.
If this file does not exist, open /boot/cmdline.txt instead.
Append the parameter at the end of the existing single line (do not create a new line):

Add this parameter:
usbcore.usbfs_memory_mb=150

[Raspberry Pi OS] (Legacy, Before Bullseye)
Add the command below at the end of the file "/etc/rc.local"
before "exit 0" to modify Bulk Transfer Rate configuration file.

Add this command:
sudo sh -c 'echo 150 > /sys/module/usbcore/parameters/usbfs_memory_mb'

[Ubuntu (for Embedded)]
Change "APPEND ${cbootargs} quiet" to the command
below in the file "/boot/extlinux/extlinux.conf".

Before:
APPEND ${cbootargs} quiet
After:
APPEND ${cbootargs} usbcore.usbfs_memory_mb=150 usbcore.autosuspend=-1

0. Preparation

■ USB setting

1. Change USB bulk setting(2/2)

[Ubuntu (for x86)]
Change "quiet splash" to the command
below in the file "/etc/default/grub" and update grub.

```
Before:
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
After:
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash usbcore.usbfs_memory_mb=150"
```

```
sudo update-grub
```

2. Reboot and check the configuration

Save & Close the file and reboot.
Make sure that "150" is written in the configuration file.
"/sys/module/usbcore/parameters/usbfs_memory_mb".

```
$ cat /sys/module/usbcore/parameters/usbfs_memory_mb
150
```

1. Sample Application Build

■Conditions
1. "Visual Studio 2022 / 2019" are available
2. Windows SDK version 10.0 (and above) is needed → Fig. 5
3. CMake 3.21 (and above) is needed.

■Steps
1. Unzip the package file downloaded.
2. Make build folder and execute cmake.

if Visual Studio 2022:	if Visual Studio 2019:
> mkdir build	> mkdir build
> cd build	> cd build
> cmake -A "x64" -T "v143,host=x64" ..	> cmake -A "x64" -T "v142,host=x64" ..

Reflected in the green frame in the figure below.

3. Open the solution file "..¥build¥RemoteCli.sln"
4. Build.
5. If an error requires "10.0.22621.0"
   for Windows SDK version, please change
   the setting in the project property
   to the version you have in your environment.

Fig. 5

RemoteCli Property Pages	? ✕

Configuration: Active(Debug) Platform: Active(x64) Configuration Manager...

▲ Configuration Properties
  General
  Advanced
  Debugging
  VC++ Directories
  ▷ C/C++
  ▷ Linker
  ▷ Manifest Tool
  ▷ XML Document Generator
  ▷ Browse Information
  ▷ Build Events
  ▷ Custom Build Step
  ▷ Custom Build Tool
  ▷ Code Analysis

∨ General Properties

Output Directory	C:¥work¥build¥Debug¥
Intermediate Directory	RemoteCli.dir¥Debug¥
Target Name	RemoteCli
Configuration Type	Application (.exe)
Windows SDK Version	10.0.22621.0
Platform Toolset	Visual Studio 2022 (v143)
C++ Language Standard	ISO C++17 Standard (/std:c++17)
C Language Standard	Default (Legacy MSVC)

1. Sample Application Build

■ Conditions
  See "Installation of some necessary packages." on p.12

■ Steps
1. Copy the package file downloaded to a work directory.
     (such as "/home/user01/work/").
2. Unzip the file.

```
$ cd /home/user01/work
$ unzip [the package file]
```

3. Make a build directory and execute cmake build.

```
$ cd /home/user01/work/[Sample Application unzipped directory]
$ mkdir build
$ cd build
$ cmake -DCMAKE_BUILD_TYPE=Release ..
$ cmake --build .
```

4. Execute Sample Application.

```
$ ./RemoteCli
```

(If you use Sample Application without building in your environment, you may need "chmod".)

```
$ chmod +x RemoteCli
```

1. Sample Application Build

■ Conditions

1. Xcode 14.1 is available.
 # Xcode depends on the OS version, please follow the operating
   requirements.
2. CMake 3.24.1 is needed.

■ Steps (1/2)

1. Copy the package file downloaded to a work directory.
     (such as "/Users/user01/work/").
2. Unzip the file.

```
$ cd /Users/user01/work
$ unzip [the package file]
```

3. Make a build directory and execute cmake build.

```
$ cd /Users/user01/work/[Sample Application unzipped directory]
$ mkdir build
$ cd build
$ cmake –GXcode ..
```

4. Launch xcode with "RemoteCli.xcodeproj"

```
$ open RemoteCli.xcodeproj
```

1. Sample Application Build

■ Steps (2/2)

5. Select "Build Configuration" to "Release" from the menu "Product" – "Scheme" – "Edit Scheme ..." and close the menu.
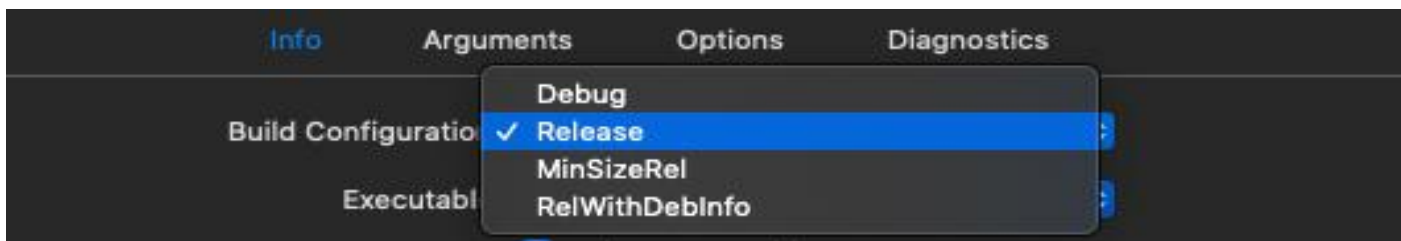
6. Build Sample Application from the menu "Product" – "Build".
7. Execute Sample Application.

```
$ cd Release
$ ./RemoteCli
```

2. Sample Application Usage

> The availability of each menu setting and execution depends on the status of the camera. For more information, please refer to the camera's menu status or help guide.

■ Steps(1/2)

1. Firstly, please connect the camera to your PC(/SBC). (As same settings in Page 3.)
2. Please find the RemoteCli Sample Application file under the folder "..¥build¥Release".
3. Please execute the file.
4. Console window will show up like below.

```
Initialize Remote SDK...
Working directory: "c:¥¥work"
Remote SDK successfully initialized.

Enumerate connected camera devices...
Camera enumeration successful. 2 detected.

[1] ILCE-7RM4 (0000000000DF)
[2] ILCE-7RM4 (00000000010D)
Connect to camera with input number...
input>
```

5. If you connect the camera via a wired LAN, "Pairing" is required for the first time.

Select "Pairing" in "PC Remote Function" to display the pairing standby screen.

Network > ▢Cnct./Re... > Remote Sho
Remote Shooting
Connect without Pairing
Pairing
Wi-Fi Direct Info.

Pairing   LAN

Perform pairing on the connected device.

Device Name ILCE-1
MAC Address XX:XX:XX:XX:XX:XX

Cancel

ILCE-1
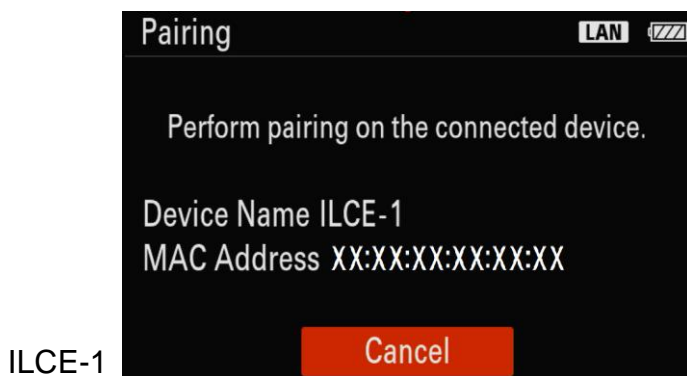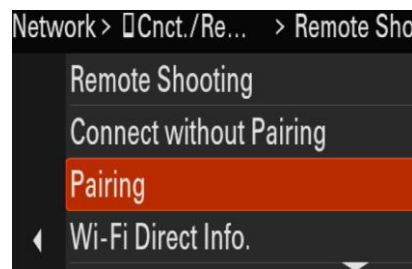
2. Sample Application Usage [OS common]

■Steps(2/2)

6. Please choose the number and enter.

If you connect the camera via a wired LAN and are waiting for "Pairing", the standby screen will change to the next confirmation. Press "OK" to complete the pairing.

After "Pairing" is complete, turn off the camera, wait about 20 seconds, and then turn it on.
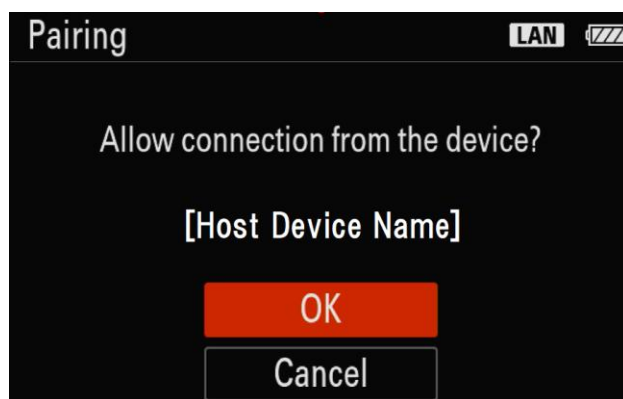
When you restart the camera, the pairing information will be saved in the camera.

Allow at least 10 seconds before turning the power on again. If you restart your camera before saving, you will need to perform "Pairing" again.

The pairing information saved in the camera will be discarded when the camera settings are reset. After resetting, perform "Pairing" again.

#You can also connect without "Pairing".

If you set "Connect without Pairing" to "Enable", unintended third parties may access the camera. Sony is not liable for any problems or damage caused by setting "Connect without Pairing" to "Enable".

ILCE-1
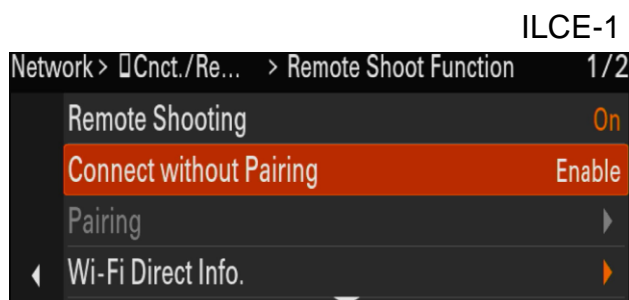
2. Sample Application Usage

■Top Menu

1.Console window shows menu like below.

2.Please choose a number/alphabet and enter.

#If you choose "x" and enter, the application closes.

#Not all models can connect in "Contents Transfer Mode". The corresponding model name can be found in the API specification.

```
<< TOP-MENU >>
What would you like to do? Enter the corresponding number.
(1) Connect (Remote Control Mode)
(2) Connect (Contents Transfer Mode)
(3) Connect (Remote Transfer Mode)
(x) Exit
input>
```

3. On success to connect,
    you will take the message like below.

```
input> Connected to ILCE-7RM4 (0000000000DF)
```

2. Sample Application Usage

- SSH authentication connection
1. If the camera supports SSH authentication, the
   fingerprint obtained from the camera is displayed.
   If the fingerprint is correct, "y" and enter.
#If you choose "n" and enter, to go back to the menu.

```
fingerprint :
███████████████████████████████
Are you sure you want to continue connecting ? (y/n) >
y
Please SSH password >
```

2. Next, enter the password
In the sample application, the User Name is fixed to
"admin". Modify the sample application as needed.

3. On success to connect,
   you will take the message like below.

```
input> Connected to ILME-FX6 (2███████████7)
```

2. Sample Application Usage

■ Remote Control / Remote Transfer Menu

1.When connected in "Remote Control Mode" or "Remote Transfer Mode", the following menu is displayed in the console window.

2.Please choose a number/alphabet and enter.

```
<< REMOTE-MENU >>
What would you like to do? Enter the corresponding number.
(s) Status display and camera switching
(0) Disconnect and return to the top menu
(1) Shutter/Rec Operation Menu
(2) Shooting Menu
(3) Exposure/Color Menu
(4) Focus Menu
(5) Setup Menu
(6) Contents Operation Menu
(7) Other Menu
```

2. Sample Application Usage

■Status display and new camera connection(1/3)
1.Please input "s" and enter.
2.Please input "0" and enter.
3.Please choose the number and enter.

```
input> s

Status display and camera switching.
number - connected - model - id
* 1     - true  - ILCE-7RM4  - 0000000000DF
    -----------------------------------------------      → see table(1)
  BodySerialNumber : 00000217
  LensModelName    : -
    -----------------------------------------------

Selected camera number = [1]

Choose a number:
[-1] Cancel input
[0]  Create new CameraDevice
[1]  Switch cameras for controls

input> 0
[-1] Cancel input
[1] ILCE-7RM4 (0000000000DF) *
[2] ILCE-7RM4 (00000000010D)              → see table(2)

idx input> 2
```

4.Please input "s" and enter,
    to check the connection status.
5.Please input "-1" and enter, to go back to the menu.

```
input> s

Status display and camera switching.
number - connected - model - id
  1     - true  - ILCE-7RM4  - 0000000000DF
    -----------------------------------------------
  BodySerialNumber : 00000217
  LensModelName    : -
    -----------------------------------------------      → see table(1)
* 2     - true  - ILCE-7RM4  - 00000000010D
    -----------------------------------------------
  BodySerialNumber : 00000384
  LensModelName    : -
    -----------------------------------------------
```

2. Sample Application Usage

■ Status display and new camera connection(2/3)

table(1) List of CameraDevice classes generated so far

Column	Explanation	Detail
number	Numbers automatically assigned by the app	1〜 Only one controllable camera is marked with an asterisk.
connected	Connection status	true : connected or reconnecting
		false : disconnected
model	Model name	string
id	MAC Address or USB serial number	string
---------------------------- other info ----------------------------		
BodySerial Number	Body serial number	string value of CrDeviceProperty_BodySerialNumber
LensModel Name	Lens model name	string : value of CrDeviceProperty_LensModelName
		- : Does not support CrDeviceProperty_LensModelName
ModelName e	Model name	string : value of CrDeviceProperty_ModelName

\# One CameraDevice class is generated for one camera.

\# The camera is Controlled through the generated CameraDevice class.

\#This app owns multiple CameraDevice classes and can control multiple cameras, but only one camera can be controlled at a time. If you want to switch from one camera to another to control, follow the steps on p.26.

2. Sample Application Usage

■ Status display and new camera connection(3/3)

table(2) Return value of the EnumCameraObjects() function
Format : [idx] + model + (id) + mark

Item	Explanation	Detail
idx	Camera list number	The order of the camera list obtained by the EnumCameraObjects () function
model	Model name	string
id	MAC Address or USB serial number	string
mark	CameraDevice class generation status	* : Already Generated
		Nothing : Not generated yet

2. Sample Application Usage

■Status display and camera switching
1.Please input "s" and enter.
2.Please input "1" and enter.
3.Please choose the number and enter.

```
Status display and camera switching.
number - connected - model - id
   1     - true  - ILCE-7RM4  - 0000000000DF
   --------------------------------------------------
   BodySerialNumber : 00000217
   LensModelName    : -
   --------------------------------------------------
* 2     - true  - ILCE-7RM4  - 00000000010D
   --------------------------------------------------
   BodySerialNumber : 00000384
   LensModelName    : -
   --------------------------------------------------

Selected camera number = [2]

Choose a number:
[-1] Cancel input
[0]  Create new CameraDevice
[1]  Switch cameras for controls

input> 1

number input> 1
```

4.Please input "s" and enter,
    to check the connection status.
5.Please input "-1" and enter, to go back to the menu.

```
Status display and camera switching.
number - connected - model - id
* 1     - true  - ILCE-7RM4  - 0000000000DF
   --------------------------------------------------
   BodySerialNumber : 00000217
   LensModelName    : -
   --------------------------------------------------
   2     - true  - ILCE-7RM4  - 00000000010D
   --------------------------------------------------
   BodySerialNumber : 00000384
   LensModelName    : -
   --------------------------------------------------

Selected camera number = [1]
```

2. Sample Application Usage　　

■ Shutter/Rec Operation Menu
This menu is for still image shooting and movie recording.

```
<< Shutter/Rec Operation Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to REMOTE-MENU
(1) Shutter Release
(2) Shutter Half Release in AF mode
(3) Shutter Half and Full Release in AF mode
(4) Continuous Shooting
(5) Focus Bracket Shot
(6) Movie Rec Button
(7) Movie Rec Button(Toggle)
```

2. Sample Application Usage

■Shutter Release
1.Please input "1" and enter.
2.Camera takes a photo and stores in the folder
   set by "set_save_info()" in the source code.

```
input> 1

Capture image...
Shutter down
Shutter up
```

\# On success to take a photo,
      you will take the message like below.

```
input> Complete download. File: C:¥work¥DSC03339.JPG
```

\#If you cannot take a photo,
      please try again after changing
      mode dial to "M" and focus mode dial to "MF".

focus mode dial "MF"   mode dial "M"

2. Sample Application Usage

■ Shutter Half Release in AF mode
1. Please input "2" and enter.
2. Please input "y" and enter.
3. Camera only makes AF control with half release.

```
input> 2

Is the focus mode set to AF? (y/n): y
S1 shooting...
Shutter Half Press down
Shutter Half Press up
```

■ Shutter Half and Full Release in AF mode
1. Please input "3" and enter.
2. Please input "y" and enter.
3. Camera makes AF control with half release
   and Camera z takes photo and stores in the folder
   set by "set_save_info()" in the source code.
#If you cannot take a photo, please try again after
changing mode dial to "M" and focus mode dial to "AF-S".

```
input> 3

Is the focus mode set to AF? (y/n): y
S1 shooting...
Shutter Half Press down
Shutter down
Shutter up
Complete download. File: C:¥work¥DSC03340.JPG
Shutter Half Press up
```

■Continuous Shooting

1. Please input "4" and enter.
2. Camera takes several photos and stores in the folder set by "set_save_info()" in the source code.

#If you cannot take a photo, please try again after changing mode dial to "M" and focus mode dial to "MF".

```
input> 4

Capture image...
Continuous Shooting
Position Key Setting: PC Remote Setting
Still Capture Mode: CrDrive_Continuous_Hi
Still Capture Mode setting SUCCESS
Shutter down
Shutter up

<< Shutter/Rec Operation Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to REMOTE-MENU
(1) Shutter Release
(2) Shutter Half Release in AF mode
(3) Shutter Half and Full Release in AF mode
(4) Continuous Shooting
(5) Focus Bracket Shot
(6) Movie Rec Button
(7) Movie Rec Button(Toggle)
input> Complete download. File: C:¥work¥DSC03342.JPG
Complete download. File: C:¥work¥DSC03343.JPG
Complete download. File: C:¥work¥DSC03344.JPG
Complete download. File: C:¥work¥DSC03345.JPG
```

2. Sample Application Usage

■Display and change Focus Bracket Shot
1.Please input "5" and enter,
Change Still Capture Mode(Drive Mode) to FocusBracket
and shoot.
2.Camera takes several photos and stores in the
folder set by "set_save_info()" in the source code.

```
input> 5

Execute Focus Bracket shooting
Priority Key setting SUCCESS

Still Capture Mode setting SUCCESS
Capture image...
Shutter down
Shutter up

<< Shutter/Rec Operation Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to REMOTE-MENU
(1) Shutter Release
(2) Shutter Half Release in AF mode
(3) Shutter Half and Full Release in AF mode
(4) Continuous Shooting
(5) Focus Bracket Shot
(6) Movie Rec Button
(7) Movie Rec Button(Toggle)
input> Complete download. File: C:\work\DSC03423.JPG
Complete download. File: C:\work\DSC03424.JPG
Complete download. File: C:\work\DSC03425.JPG
Complete download. File: C:\work\DSC03426.JPG
```

■ Movie Rec Button
1. Please input "6" and enter.
2. Then if you choose "y",
   console window shows candidate values.
3. Please choose "[2] Down"
   to start movie rec(make movie rec button down).

```
input> 6


Operate the movie recording button ? (y/n): y
Choose a number:
[-1] Cancel input
[1] Up
[2] Down
[-1] Cancel input
Choose a number:

input> _
```

2. Sample Application Usage

■Movie Rec Button(Toggle)
1.Please input "7" and enter.
2.Then if you choose "y",
   console window shows candidate values.
3.Please choose "[2] Down"
   to start movie rec(make movie rec button down).
4. To stop movie rec, enter "[1] Up" (make movie rec
button up) and "[2] Down" (make movie rec button down).

```
input> 7

Movie Rec Button(Toggle) Enable Status: Enable

Operate the movie recording button toggle? (y/n): y
Choose a number:
[-1] Cancel input
[1] Up
[2] Down
[-1] Cancel input
Choose a number:

input> _
```

After sending "Down", "Up" must always be sent.

2. Sample Application Usage

■ Shooting Menu
This menu is for still image shooting and movie recording.

```
<< Shooting Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to REMOTE-MENU
(1) Still Capture Mode(Drive mode)
(2) Zoom Operation
(3) Zoom Speed Type
(4) Preset Focus and Zoom
(5) APS-C/FULL setting
(6) Set Focus Bracket Shot Num
(7) Set Focus Bracket Focus Range
(8) Recording Setting
(9)  Image Stabilization Steady Shot(Still)
(10) Image Stabilization Steady Shot(Movie)
(11) Silent Mode
(12) Silent Mode Aperture Drive in AF
(13) Silent Mode Shutter When Power OFF
(14) Silent Mode Auto Pixel Mapping
(15) Shutter Type
(16) Movie Shooting Mode
(17) TimeShift Shooting
(18) Recording Setting File Name
```

2. Sample Application Usage

■Display and change Still Capture Mode(Drive Mode)

0.Please change "Position Key Setting" to
  "PC Remote Setting" beforehand.

1.Please input "1" and enter.

2.Console window shows
  current Still Capture Mode value.

3.Then if you choose "y",
  console window shows candidate values.

4.Please choose the number and enter.

```
Still Capture Mode: CrDrive_Continuous_Hi
Would you like to set a new Still Capture Mode value? (y/n): y
Choose a number set a new Still Capture Mode value:
[-1] Cancel input
[0] CrDrive_Single
[1] CrDrive_Continuous_Lo
```

∫

```
[48] CrDrive_DRO_Bracket_Hi
[49] CrDrive_DRO_Bracket_Lo
[-1] Cancel input
Choose a number set a new Still Capture Mode value:
input> _
```

■Zoom Operation(1/2)

Please note that Power Zoom Lens is needed to be attached to the camera body for this operation.

1.Please input "2" and enter.

2.Console window shows current Zoom related values.

3.Then if you choose "y",
   console window shows candidate values.

```
Zoom Operation Status: Enable
Zoom Setting Type    : DigitalZoom
Zoom Type Status     : OpticalZoom
Zoom Speed Range     : -1 to 1
Zoom Speed Type      : Invalid
Zoom Bar Information : 0x2,000,000
Zoom Distance is not supported.
Lens Model Name is not supported.

Operate the zoom ? (y/n): y

Choose a number:
[-1] Cancel input
[0] Stop
[1] Wide
[2] Tele
[-1] Cancel input
Choose a number:

input>
```

4.Please choose a number for zoom operation
   or input zoom range value.

■ Zoom Operation(2/2)

For models that can change the zoom type,
the following menu is displayed.

```
Zoom Operation Status: Enable
Zoom Setting Type    : OpticalZoom
Zoom Type Status     : OpticalZoom
Zoom Speed Range     : -8 to 8
Zoom Speed Type      : Variable
Zoom Bar Information : 0x1,000,000
Zoom Distance Current Value : 16,000
Zoom Distance min    : 16,000
Zoom Distance max    : 50,000
Zoom Distance step   : 100

Lens Model Name : E PZ 16-50mm F3.5-5.6 OSS

Operate the zoom ? (y/n): y

Set the value of zoom speed (Out-of-range value to Cancel):

input>
```

4.Please choose a number for zoom operation
   or input zoom range value.

↩

2. Sample Application Usage

■Zoom Speed Type
Please note that Power Zoom Lens is needed to be attached to the camera body for this operation.
1.Please input "3" and enter.
2.Console window shows
   current Zoom Speed Type setting.
3.Then if you choose "y",
   console window shows candidate values.
4.Please choose a number and enter.

```
Zoom Speed Type: Variable
Would you like to set a new zoom speed type value? (y/n): y
Choose a number set a new zoom speed type value:
[-1] Cancel input
[0] Variable
[1] Fixed
[-1] Cancel input
Choose a number set a new zoom speed type value:

input>
```

2. Sample Application Usage

■Preset Focus and Zoom

Please note that Power Zoom Lens is needed to be attached to the camera body for this operation.

1.Please input "4" and enter.

2.Console window shows
   slot numbers and operation(DeviceProperty)
   names that can be selected.

3. Please choose the operation number and enter.

```
Save Zoom and Focus Position Enable Preset number:
 0
 1
 2
 3
 4

Load Zoom and Focus Position Enable Preset number:
 0
 1
 2
 3
 4

Set the value of operation:
[-1] Cancel input
[1] Save Zoom and Focus Position
[2] Load Zoom and Focus Position
[-1] Cancel input
Choose a number:

input>
```

4.Then choose the slot number and enter.
   # Above example: numbers from 0 to 4

```
Set the value of Preset number:

input>
```

↩

2. Sample Application Usage

■ Display and change APS-C/FULL setting
1. Please input "5" and enter.
2. Console window shows
   current APS-C/FULL setting value.
3. Enter "y" to switch to APS-C if the current value is Full,
   or to Full if the current value is APS-C.

```
APS-C/FULL Switching Enable Status: Enable
APS-C/FULL Switching Setting: APS-C

Execute APS-C or FULL switching control of the camera ? (y/n): y

Executed the switch between APS-C or Full.
```

↰

2. Sample Application Usage

■Display and change Focus Bracket Shot Num
1.Please input "6" and enter.
2.Console window shows
current Focus Bracket Shot Num value and
settable range.
3.Then if you choose "y",
please enter the number of Focus Bracket Shots.

```
Focus Bracket Shot Number: 3
                Range : 2 to 299

Would you like to set a new Focus Bracket Shot Number value? (y/n): y

input Number>
```

■Display and change Focus Bracket Focus Range
1.Please input "7" and enter.
2.Console window shows
current Focus Bracket Focus Range value and
settable range.
3.Then if you choose "y",
please enter the number of Focus Bracket Focus Range.

```
Focus Bracket Focus Range CurrentValue: 4
                        Range: 1 to 10

Would you like to set a new Focus Bracket Range value? (y/n): y

input Number>
```

■Display and change Recording Setting
1.Please input "8" and enter.
2.Console window shows current Recording Setting value.
3.Then if you choose "y",
   console window shows candidate values.
4.Please choose the number and enter.

```
Recording Setting: 50M 420 8bit
Would you like to set a new Recording Setting is value? (y/n): y
Choose a number set a new Recording Setting is value:
[-1] Cancel input
[0] 50M 422 10bit
[1] 50M 420 8bit
[2] 25M 420 8bit
[-1] Cancel input
Choose a number set Recording Setting is value:
input>
```

2. Sample Application Usage

■Display and change Image Stabilization Steady Shot (Still)
1. Please input "9" and enter.
2. Console window shows
   current Image Stabilization Steady Shot (Still) value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
Image Stabilization Steady Shot(Still): ON
Would you like to set a new Image Stabilization Steady Shot(Still) value? (y/n): y
Choose a number set a new Image Stabilization Steady Shot(Still) value:
[-1] Cancel input
[0] ON
[1] OFF
[-1] Cancel input
Choose a number set a new Image Stabilization Steady Shot(Still) value:
input>
```

■Display and change Image Stabilization Steady Shot (Movie)
1. Please input "10" and enter.
2. Console window shows
   current Image Stabilization Steady Shot (Movie) value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
Image Stabilization Steady Shot(Movie): Active
Would you like to set a new Image Stabilization Steady Shot(Movie) value? (y/n): y
Choose a number set a new Image Stabilization Steady Shot(Movie) value:

[-1] Cancel input
[0] Dynamic active
[1] Active
[2] Standard
[3] OFF
[-1] Cancel input
input>
```

2. Sample Application Usage

■Display and change Silent Mode
1.Please input "11" and enter.
2.Console window shows current Silent Mode value.
3.Then if you choose "y",
   console window shows candidate values.
4.Please choose the number and enter.

```
Silent Mode: OFF

Would you like to set a new Silent Mode value? (y/n): y
Choose a number set a new Silent Mode value:
[-1] Cancel input
[0] ON
[1] OFF
[-1] Cancel input
Choose a number set a new Silent Mode value:
input>
```

■Display and change Silent Mode Aperture Drive in AF
1.Please input "12" and enter.
2.Console window shows
   current Silent Mode Aperture Drive in AF value.
3.Then if you choose "y",
   console window shows candidate values.
4.Please choose the number and enter.

```
Aperture Drive in AF: Standard

Would you like to set an Aperture Drive in AF value? (y/n): y
Choose a number set a new Aperture Drive in AF value:
[-1] Cancel input
[0] Not Target
[1] Standard
[2] Silent Priority
[-1] Cancel input
Choose a number set a new Aperture Drive in AF value:
input>
```

■Display and change Silent Mode Shutter When Power OFF
1.Please input "13" and enter.
2.Console window shows
　current Silent Mode Shutter When Power OFF value.
3.Then if you choose "y",
　console window shows candidate values.
4.Please choose the number and enter.

```
Shutter When Power OFF: Not Target
Would you like to set a new Shutter When Power OFF value? (y/n): y
Choose a number set a new Shutter When Power OFF value:
[-1] Cancel input
[0] Not Target
[1] OFF
[-1] Cancel input
Choose a number set a new Shutter When Power OFF value:
input>
```

■Display and change Silent Mode Auto Pixel Mapping
1.Please input "14" and enter.
2.Console window shows
　current Silent Mode Auto Pixel Mapping value.
3.Then if you choose "y",
　console window shows candidate values.
4.Please choose the number and enter.

```
Auto Pixel Mapping: Not Target
Would you like to set a new Auto Pixel Mapping value? (y/n): y
Choose a number set a new Auto Pixel Mapping value:
[-1] Cancel input
[0] Not Target
[1] OFF
[-1] Cancel input
Choose a number set a new Auto Pixel Mapping value:
input>
```

2. Sample Application Usage

■Display and change Shutter Type
1. Please input "15" and enter.
2. Console window shows current Shutter Type value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
Shutter Type: Auto
Would you like to set a new Shutter Type value? (y/n): y
Choose a number set a new Shutter Type value:
[-1] Cancel input
[0] Auto
[1] Mechanical Shutter
[2] Electronic Shutter
[-1] Cancel input
Choose a number set a new Shutter Type value:
input>
```

■Display and change Movie Shooting Mode
1. Please input "16" and enter.
2. Console window shows
    current Movie Shooting Mode value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
Movie Shooting Mode: OFF
Would you like to set a new Movie Shooting Mode? (y/n): y
Choose a number set a new Movie Shooting Mode:
[-1] Cancel input
[0] OFF
[1] Flexible ISO
[2] Cine EI Quick
[3] Cine EI
[-1] Cancel input
Choose a number set a new Movie Shooting Mode:
input>
```

2. Sample Application Usage

■Display and change TimeShift Shooting
1. Please input "17" and enter.
2. Console window shows current TimeShift shooting value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
TimeShift Shooting: ON

Would you like to set a new TimeShift Shooting value? (y/n): y

Choose a number set a new TimeShift Shooting value:
[-1] Cancel input
[0] OFF
[1] ON
[-1] Cancel input

Choose a number set a new TimeShift Shooting value:

input>
```

Enable when Still Capture Mode(Drive Mode) is continuous
   shooting

■Display and change Recording Setting File Name
1. Please input "18" and enter.
2. Console window shows
   current Recording Setting File Name value.
3. Please enter the new name after "Recording Setting File
   File Name >"

```
Recording Setting File Name : DSC
Please Enter the name of the Recording Setting File Name.

[-1] Cancel input

Recording Setting File Name >
```

2. Sample Application Usage

■ Exposure/Color Menu
This menu is for Shutter, Exposure and Color.

```
<< Exposure/Color Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to REMOTE-MENU
(1) Aperture
(2) Shutter Speed
(3) Shutter Speed Value
(4) Exposure Program Mode
(5) FEL Lock
(6) AWB Lock
(7) White Balance
(8) White Balance Tint
(9) Custom WB
(10) ISO
(11) ISO Current Sensitivity
(12) Gain Control Setting
(13) Gain Base ISO Sensitivity
(14) Gain Base Sensitivity
(15) Gain dB Value
(16) Exposure Index
(17) BaseLook Value
(18) Exposure Control Type
(19) Iris Mode Setting
(20) Shutter Mode Setting
(21) Custom WB Size Setting
(22) Extended Shutter Speed
```

2. Sample Application Usage

■Display and change Aperture
1.Please input "1" and enter.
2.Console window shows current F number value.
3.Then if you choose "y",
    console window shows candidate values.
4.Please choose the number and enter.

```
F4
Would you like to set a new Aperture value? (y/n): y
Choose a number set a new Aperture value:
[-1] Cancel input
[0] F3.5
[1] F4
[2] F4.5
 �ళ
[16] F22
[-1] Cancel input
Choose a number set a new Aperture value:
input>
```

■Display and change Shutter Speed
1.Please input "2" and enter.
2.Console window shows current Shutter Speed value.
3.Then if you choose "y",
    console window shows candidate values.
4.Please choose the number and enter.

```
Shutter speed: 1/125
Would you like to set a new Shutter Speed value? (y/n): y
Choose a number set a new Shutter Speed value:
[-1] Cancel input
[0] 30″
[1] 25″
 〲
[54] 1/8,000
[-1] Cancel input
Choose a number set a new Shutter Speed value:
input>
```

SONY   Sony Corporation.

2. Sample Application Usage

■Display and change Shutter Speed Value
1.Please input "3" and enter.
2.Console window shows
  current Shutter Speed Value value.
3.Then if you choose "y",
  console window shows candidate values.
4.Please choose the number and enter.

```
Shutter speed value: 1/60
Would you like to set a new Shutter Speed value? (y/n): y
Choose a number set a new Shutter Speed value:
[-1] Cancel input
[0] 1/50
[1] 1/60
[2] 1/100
[3] 1/120
[4] 1/125
[5] 1/250
[6] 1/500
[7] 1/1,000
[8] 1/2,000
[9] 1/4,000
[10] 1/8,000
[-1] Cancel input
Choose a number set a new Shutter Speed value:
input>
```

2. Sample Application Usage

■Display and change Exposure Program Mode

0.Please change "Position Key Setting" to
"PC Remote Setting" beforehand.

1.Please input "4" and enter.

2.Console window shows
current Exposure Program Mode value.

3.Then if you choose "y",
console window shows candidate values.

4.Please choose the number and enter.

```
Exposure Program Mode: M_Manual
Would you like to set a new Exposure Program Mode value? (y/n): y
Choose a number set a new Exposure Program Mode value:
[-1] Cancel input
[0] P_Auto
[1] A_AperturePriority
[2] S_ShutterSpeedPriority
[3] M_Manual
[4] Movie_P
[5] Movie_A
[6] Movie_S
[7] Movie_M
[8] Movie_SQMotion_P
[9] Movie_SQMotion_A
[10] Movie_SQMotion_S
[11] Movie_SQMotion_M
[12] Auto
[-1] Cancel input
Choose a number set a new Exposure Program Mode value:
input>
```

2. Sample Application Usage

■FEL Lock

1.Please input "5" and enter.

2.Please check if you attached a flash device on your camera.

3.Then if you choose "y", console window shows candidate values.

4.Please choose the number and enter.

```
Flash device required.
Would you like to execute Unlock or Lock? (y/n): y

Choose a number:
[-1] Cancel input
[1] Unlock
[2] Lock
[-1] Cancel input
Choose a number:

input>
```

■AWB Lock

1.Please input "6" and enter.

2.Then if you choose "y", console window shows candidate values.

3.Please choose the number and enter.

```
Would you like to execute Unlock or Lock? (y/n): y

Choose a number:
[-1] Cancel input
[1] Unlock
[2] Lock
[-1] Cancel input
Choose a number:

input>
```

2. Sample Application Usage

■White Balance
1. Please input "7" and enter.
2. Console window shows
   current White Balance setting.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose a number and enter.

```
White Balance: Custom_1

Would you like to set a new White Balance value? (y/n): y

Choose a number set a new White Balance value:
[-1] Cancel input
[0] AWB
[1] Daylight
[2] Shadow
[3] Cloudy
[4] Tungsten
[5] Fluorescent_WarmWhite
[6] Fluorescent_CoolWhite
[7] Fluorescent_DayWhite
[8] Fluorescent_Daylight
[9] Flush
[10] Underwater_Auto
[11] ColorTemp
[12] Custom_1
[13] Custom_2
[14] Custom_3
[-1] Cancel input

Choose a number set a new White Balance value:

input>
```

2. Sample Application Usage

■Display and change White Balance Tint
1. Please input "8" and enter.
2. Console window shows current White Balance Tint and White Balance Tint Step value.
3. Then if you choose "y", please input the number and enter.

```
White Balance Tint CurrentValue: 0
White Balance Tint        Range: -99 to 99
White Balance Tint Step   Range: -198 to 198

Would you like to set a White Balance Tint Step ? (y/n): y

Set a value within the White Balance Tint Range
input> _
```

■ Custom WB (1/2)
1. Please input "9" and enter.
2. Console window shows
   current Custom WB related values
   and set up some settings for Custom WB.
3. Then if you choose "y",
   console window shows candidate values.

```
CustomWB Capture Standby Operation: Enable
CustomWB Capture Standby CancelOperation: Disable
CustomWB Capture Operation: Disable
CustomWB Capture Execution State: Invalid

Set camera to PC remote Position Key Setting: PC Remote Setting

Set the Exposure Program mode to P mode
Exposure Program Mode: P_Auto
Exposure Program mode SUCCESS.

Set the White Balance to Custom1
White Balance: Custom_1

Set custom WB capture standby

CustomWB Capture Standby Operation: Enable
CustomWB Capture Standby CancelOperation: Disable
CustomWB Capture Operation: Disable
CustomWB Capture Execution State: Invalid

CustomWB Capture Standby Operation: Disable
CustomWB Capture Standby CancelOperation: Enable
CustomWB Capture Operation: Enabled
CustomWB Capture Execution State: Standby

Set custom WB capture
Change position ? (y/n):
```

■ Custom WB (2/2)

4. Please input values.

   (It is recommended to input values at the center of
   camera view, such as 300, 200, for trial purpose.)

```
Set the value of X (decimal)
Regarding details of usage, please check API doc.

input X> 300
input X = 300

Set the value of Y (decimal)

input Y> 200
input Y = 200

input X_Y = 0x1,2c0,0c8

Custom WB capture successful.

Set custom WB capture standby cancel. Please enter something.
```

2. Sample Application Usage

■Display and change ISO
1.Please input "10" and enter.
2.Then if you choose "y",
console window shows candidate values.
3.Please choose the number and enter.

```
ISO: ISO AUTO
Would you like to set a new ISO value? (y/n): y
Choose a number set a new ISO value:
[-1] Cancel input
[0] ISO AUTO
[1] ISO 50
```
〉
```
[28] ISO 25,600
[-1] Cancel input
Choose a number set a new ISO value:
input>
```

■Display ISO Current Sensitivity

1.Please input "11" and enter.
2.Console window shows
current ISO Current Sensitivity value.

```
ISO Current Sensitivity: ISO 125
```

2. Sample Application Usage

■ Display and change Gain Control Setting
1. Please input "12" and enter.
2. Console window shows current Gain Control Setting value.
3. Then if you choose "y", console window shows candidate values.
4. Please choose the number and enter.

```
Gain Control Setting: Manual
Would you like to set a new Gain Control Setting value? (y/n): y
Choose a number set a new Gain Control Setting value:
[-1] Cancel input
[1] Automatic
[2] Manual
[-1] Cancel input
Choose a number set a new Gain Control Setting value:

input>
```

■ Display and change Gain Base ISO Sensitivity
1. Please input "13" and enter.
2. Console window shows current Gain Base ISO Sensitivity value.
3. Then if you choose "y", console window shows candidate values.
4. Please choose the number and enter.

```
Gain Base ISO: Low Level
Would you like to set a new Gain Base ISO Sensitivity value? (y/n): y
Choose a number set a new Gain Base ISO Sensitivity Setting value:
[-1] Cancel input
[1] High Level
[2] Low Level
[-1] Cancel input
Choose a number set a new Gain Base ISO Sensitivity Setting value:

input>
```

■Display and change Gain Base Sensitivity
1.Please input "14" and enter.
2.Console window shows
   current Gain Base Sensitivity value.
3.Then if you choose "y",
   console window shows candidate values.
4.Please choose the number and enter.

```
Gain Base: Low Level
Would you like to set a new Gain Base Sensitivity value? (y/n): y
Choose a number set a new Gain Base Sensitivity Setting value:
[-1] Cancel input
[1] High Level
[2] Low Level
[-1] Cancel input
Choose a number set a new Gain Base Sensitivity Setting value:

input>
```

■Display and change Gain dB Value
1.Please input "15" and enter.
2.Console window shows current Gain dB Value value.
3.Then if you choose "y",
   console window shows settable range.
4.Please input the number and enter.

```
Gain dB current value: 12dB

Would you like to set a Gain dB Value? (y/n): y
Gain dB Value: -3 to 30

input Number>
```

2. Sample Application Usage

■ Display and change Exposure Index
1. Please input "16" and enter.
2. Console window shows current Exposure Index value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
Exposure Index: 1,250
Would you like to set a new Exposure Index value? (y/n): y
Choose a number set a new Exposure Index:
[-1] Cancel input
[0] 200
[1] 250
```
�)
```
[11] 2,500
[12] 3,200
[-1] Cancel input
Choose a number set a new Exposure Index:

input>
```

2. Sample Application Usage

[OS common]

■ Display and change BaseLook Value

1. Please input "17" and enter.
2. Console window shows current BaseLook Value value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
BaseLook Value: Index1 (Preset)
Would you like to set a new BaseLook value? (y/n): y
Choose a number set a new BaseLook value:
[-1] Cancel input
[0] Index1 (Preset)
[1] Index2 (Preset)
[2] Index3 (Preset)
[3] Index1 (User)
[4] Index2 (User)
[5] Index3 (User)
[6] Index4 (User)
[7] Index5 (User)
[8] Index6 (User)
[9] Index7 (User)
[10] Index8 (User)
[11] Index9 (User)
[12] Index10 (User)
[13] Index11 (User)
[14] Index12 (User)
[15] Index13 (User)
[16] Index14 (User)
[17] Index15 (User)
[18] Index16 (User)
[-1] Cancel input
Choose a number set a new BaseLook value:

input>
```

2. Sample Application Usage [OS common]

■Display and change Exposure Control Type
1. Please input "18" and enter.
2. Console window shows
    current Exposure Control Type value.
3. Then if you choose "y",
    console window shows candidate values.
4. Please choose the number and enter.

```
Exposure Control Type: Flexible Exposure Mode
Would you like to set a new Exposure Control Type is value? (y/n): y
Choose a number set a new Exposure Control Type is value:
[-1] Cancel input
[1] P/A/S/M Mode
[2] Flexible Exposure Mode
[-1] Cancel input
Choose a number set a new Exposure Control Type is:

input>
```

2. Sample Application Usage

■ Display and change Iris Mode Setting

1. Please input "19" and enter.
2. Console window shows current Iris Mode Setting value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
Iris Mode Setting: Manual
Would you like to set a new Iris Mode Setting value? (y/n): y
Choose a number set a new Iris Mode Setting value:
[-1] Cancel input
[1] Automatic
[2] Manual
[-1] Cancel input
Choose a number set a new Iris Mode Setting value:

input>
```

■ Display and change Shutter Mode Setting

1. Please input "20" and enter.
2. Console window shows current Shutter Mode Setting
   value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
Shutter Mode Setting: Manual
Would you like to set a new Shutter Mode Setting value? (y/n): y
Choose a number set a new Shutter Mode Setting value:
[-1] Cancel input
[1] Automatic
[2] Manual
[-1] Cancel input
Choose a number set a new Shutter Mode Setting value:

input>
```

↰

■Display and change Custom WB Size Setting

1.Please input "21" and enter.

2.Console window shows current Custom WB Size Setting value.

3.Then if you choose "y", console window shows candidate values.

4.Please choose the number and enter.

```
Custom WB Size Setting: L
Would you like to set a new Custom WB Size Setting value? (y/n): y
Choose a number set a new Custom WB Size Setting value:
[-1] Cancel input
[0] S
[1] M
[2] L
[-1] Cancel input
Choose a number set a new Custom WB Size Setting value:
input>
```

■Display and change Extended Shutter Speed

1.Please input "22" and enter.

2.Console window shows current Extended Shutter Speed value.

3.Then if you choose "y", console window shows candidate values.

4.Please choose the number and enter.

```
Extended Shutter Speed: 1/100
Would you like to set a new Extended Shutter Speed value? (y/n): y
Choose a number set a new Extended Shutter Speed value:
[-1] Cancel input
[0] 30"
[1] 25"

[64] 1/80,000
[-1] Cancel input
Choose a number set a new Extended Shutter Speed value:
input>
```

■ Focus Menu
This menu is for Focus.

```
<< Focus Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to REMOTE-MENU
(1) Focus Mode
(2) Focus Area
(3) AF Area Position(x,y)
(4) Focus Position Setting
(5) Zoom Position Setting
```

■ Display and change Focus Mode

1. Please input "1" and enter.
2. Console window shows current Focus Mode value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
Focus Mode: MF
Would you like to set a new Focus Mode value? (y/n): y
Choose a number set a new Focus Mode value:
[-1] Cancel input
[0] AF_S
[1] AF_A
[2] AF_C
[3] DMF
[4] MF
[-1] Cancel input
Choose a number set a new Focus Mode value:
input>
```

■ Display and change Focus Area

1. Please input "2" and enter.
2. Console window shows current Focus Area value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
Focus Area: Flexible Spot S
Would you like to set a new Focus Area value? (y/n): y
Choose a number set a new Focus Area value:
[-1] Cancel input
[0] Wide
[1] Zone
[2] Center
[3] Flexible Spot S
[4] Flexible Spot M
[5] Flexible Spot L
[6] Expand Flexible Spot
[-1] Cancel input
Choose a number set a new Focus Area value:
input>
```

2. Sample Application Usage

■ AF Area Position(x,y)

1. Please input "3" and enter.
2. Sample Application will change focus area setting to "Flexible Spot S" automatically.
3. Then if you choose "y",
   console window asks you to input x, y position
   for the center of the focus frame.
4. Please input values.
   (It is recommended to input values at the center of
   camera view, such as 320, 240, for trial purpose.)

```
Set FocusArea to Flexible_Spot_S
FocusArea SUCCESS
  FocusFrameInfo no[1] pri[2] w[38] h[38] Deno[640-480] Nume[270-170]

Change position ? (y/n): y

Set the value of X (decimal)
Regarding details of usage, please check API doc.

input X> 300
input X = 300

Set the value of Y (decimal)

input Y> 200
input Y = 200

input X_Y = 0x1,2c0,0c8
```

2. Sample Application Usage

■Display and change Focus Position Setting
1.Please input "4" and enter.
2.Console window shows
    current Focus Position value and settable range.
3.Then if you choose "y",
    please enter the hex number and enter.

```
Focus Position Current Value : 0x0011
Focus Position Setting min    : 0x0000
Focus Position Setting max    : 0xFFFF
Focus Position Setting Step   : 0x0001
Focus Driving Status: Not Driving

Would you like to set a Focus Position Setting ? (y/n): y

Set a value within the Focus Position Setting (hex)
[-1] Cancel input

input>
```

2. Sample Application Usage [OS common]

■Display and change Zoom Position Setting
1.Please input "5" and enter.
2.Console window shows
   current Zoom Position value and settable range.
3.Then if you choose "y",
   please enter the integer number and enter.

```
Zoom Position Current Value : 0
Zoom Position Setting min    : 0
Zoom Position Setting max    : 16,384
Zoom Position Setting Step   : 1
Zoom Driving Status: Not Driving

Would you like to set a Zoom Position Setting ? (y/n): y

Set a value within the Zoom Position Setting (Out-of-range value to Cancel)
input>
```

SONY Sony Corporation.

2. Sample Application Usage

■ Setup Menu

This menu is for various settings.

```
<< Setup Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to REMOTE-MENU
(1) DISP(Screen Disp) Setting
(2) Monitor LUT Setting
(3) Download the camera setting file to PC
(4) Upload the camera setting file to Camera
(5) Camera Setting Reset
(6) RemoteFirmwareUpdate Menu
```

2. Sample Application Usage　　[OS common]

■Display and change DISP(Screen Disp) Setting
1. Please input "1" and enter.
2. Console window shows current DISP(Screen Disp)
　 Setting value.
3. Entering "y" switches to "Display All Information" mode if
　 the current value is not "Display All Information" mode,
　 otherwise switches to "Histogram" mode.

```
DISP Mode: Display All Information
When set, it will switch to the next Disp Mode: Histogram

Would you like to set a new DISP Mode Setting is value? (y/n): _
```

■Display and change Monitor LUT Setting
1. Please input "2" and enter.
2. Console window shows
　 current Monitor LUT Setting value.
3. Then if you choose "y",
　 console window shows candidate values.
4. Please choose the number and enter.

```
Monitor LUT Setting: ON
Would you like to set a new Monitor LUT Setting? (y/n): y
Choose a number set a new Monitor LUT Setting value:
[-1] Cancel input
[1] OFF
[2] ON
[-1] Cancel input
Choose a number set a new Monitor LUT Setting value:

input>
```

↩

2. Sample Application Usage

■ Download the camera setting file to PC
1.Please input "3" and enter.
2.To save the downloaded data with the specified file
　name, enter your file name after "file name >"

If you do not enter a file name, the data is to be
automatically saved as "Model name + CUMSET.DAT".

```
Camera-Setting Save/Read State: Idle
Camera-Setting Save Operation: Enable

Please Enter the name of the file you want to save.
(ex. CUMSET.DAT)
If you do not specify a file name, the file will be saved with the default save name.

[-1] Cancel input

file name >
```

\# If the download fails, you will be notified of the
　OnWarning callback.
\# If the download is successful,
　the OnCompleteDownload callback will inform you of
　the saved file name.

The following is an example of a successful download
without specifying a name.

```
input> Complete download. Camera Setting File: C:¥work¥ILCE-9M2_CUMSET.DAT
```

2. Sample Application Usage

■ Upload the camera setting file to Camera
1. Please input "4" and enter.
2. A list of files in the current path that can be uploaded will be displayed. Enter the number of the file you wish to upload.

```
Camera-Setting Save/Read State: Idle
Camera-Setting Read Operation: Enable
Have the camera load the configuration file on the PC.

Choose a number:
[-1] Cancel input
[0]ILCE-9M2_CUMSET.DAT
[1]Test.DAT
[-1] Cancel input

input>
```

\# The result of the upload is notified in the OnWarning callback.

If the upload is successful, the camera will reboot itself. After the reboot, "disconnected" and "connected" will appear on the console.

```
Configuration file read successfully.

Device Disconnected. Reconnecting... ILCE-1 (D057A04EF7B5)
Connected to ILCE-1 (D057A04EF7B5)
```

2. Sample Application Usage

■ Camera Setting Reset
1.Please input "5" and enter.
2.Enter "y" if you are willing to reset the settings.
Entering "y" will restart the camera. Please be careful.

```
Camera Setting Reset Enable Status: Enable

The camera settings will be initialized! Are you sure you want to do this ? (y/n):
```

↰

2. Sample Application Usage

■ Remote Firmware Update (1/2)

1. Please input "6" and enter,
   console window shows list Remote Firmware Update menu.

```
<< RemoteFirmwareUpdate Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to Setup menu
(1) Get Firmware Version
(2) Check Firmware Update Status
(3) Upload Firmware
(4) Get Upload Rate for Firmware File
(5) Cancel Upload Firmware
(6) Execute Firmware Update
(7) Get Firmware Updater Info
(8) Set Debug Mode
```

2. Please input "1" and enter,
   console window shows current camera firmware version.

```
Firmware Version:2.00
```

3. Please input "2" and enter,
   then asked to enter target firmware path.

```
Please Enter the path of the Firmware File Name.

[-1] Cancel input

Firmware File Path > C:¥work¥BODYDATA.DAT
```

4. Please input the path and enter,
   the following is the output when the precheck is OK.

```
Request success.
Precheck OK
```

■ Remote Firmware Update (2/2)

5. Please input "3" and enter,
   then asked to enter target firmware path.

```
Please Enter the path of the Firmware File Name.

[-1] Cancel input

Firmware File Path > C:¥work¥BODYDATA.DAT
```

5. Please input the path and enter,
   the following is the output when the upload complete.

```
Firmware Upload OK
```

6. Please input "4" and enter,
   console window shows current upload progress of
firmware.

```
Firmware Upload Rate:100%
```

6. When you want to cancel firmware upload,
   please input "5" and enter .
7. Then if you choose "y", cancel firmware update.

```
Are you sure you want to cancel upload firmware ? (y/n) > y
Cancel Request success.
```

8. Please input "6" and enter.
9. Then if you choose "y", start firmware update.

```
Are you sure you want to execute firmware update? (y/n) > y
Execute Request success.
```

10. Reconnect the camera after firmware update complete.

```
input> Firmware Update Request passed to Camera.
Device Disconnected. Reconnecting... ILX-LR1 (0000000008DD)
Connected to ILX-LR1 (0000000008DD)
Device Disconnected. Reconnecting... ILX-LR1 (0000000008DD)
Connected to ILX-LR1 (0000000008DD)
```

↩

2. Sample Application Usage

■ Check Firmware file info

1. Please input "7" and enter,
   console window shows firmware version about
uploaded firmware file.
   Always firmware version is 9.99 if debug mode is
"Pseudo_update_with_Fake_Firmware"

```
Are you sure you want to request firmware updater info? (y/n) > y
Request success.
Get Firmware Updater Info OK
Firmware Version:9.99
```

■ Debug Mode of firmware update

1. Please input "8" and enter,
   console window shows current Debug Mode status.
2. Then if you choose "y",
    console window shows candidate values.
3. Please choose the number and enter.

```
Debug Mode:Pseudo_update_with_Fake_Firmware

Are you sure you want to set debug mode? (y/n) > y
Choose a number set a new DebugMode value:
[-1] Cancel input
[0] OFF
[1] Pseudo_update_with_Fake_Firmware
[-1] Cancel input
Choose a number set a new DebugMode value:
input>
```

For details of setting values, please refer to the API
   specification.

2. Sample Application Usage

■ Contents Operation Menu

※ This menu only Support when connection mode is "Remote Transfer Mode".

This menu is for various settings.

```
<< Contents Operation Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to REMOTE-MENU
(1) Get Contents Data
(2) Movie Playback
```

2. Sample Application Usage

■ Display content list and get content at "Remote Transfer Mode" (1/2)

1. Please input "1" and enter.
2. Console window shows Media slot number.
3. Please choose the number and enter.

```
Select Get SlotNumber.
[1] SLOT1
[2] SLOT2
[-1] Cancel input
input>
```

4. Console window shows Capture Date List in selected media.
5. Please choose the number and enter.

```
Select CapturedDateList
[0] 2021/01/05
[1] 2022/01/01
[-1] Cancel input
input>
```

6. Console window shows Contents Info List in selected date.
7. Please choose the number and enter.

```
Select ContentsInfoList
[0] 2022/01/01 00:00:20, FileId:5, FileName:C0001.MP4
[1] 2022/01/01 02:15:12, FileId:1, FileName:DSC00001.JPG
[2] 2022/01/01 02:15:41, FileId:1, FileName:DSC00002.JPG
[3] 2022/01/01 02:17:02, FileId:1, FileName:DSC00003.JPG
[-1] Cancel input
input>
```

2. Sample Application Usage

■ Display content list and get content at "Remote Transfer Mode" (2/2)

8. Console window shows action list to selected content.

9.Please choose the number and enter.

```
Choose a number:
[1] Get Contents Data
[2] Get Thumbnail Data
[3] Get Screennail Data
[4] Show Detail Info
[5] Delete
[-1] Cancel input
input>
```

■ Get Content of each type

1.Please input "1", "2" or "3" if you want to get content and enter.

   1: Original content data.

   2: Thumbnail data

   3: Screennail data (Only support image contents)

2.Console window shows "Get Contents Data OK".

3.You can find the file in the shown path.

```
Start Get Contents Data...

Get Contents Data OK
File =C:¥work¥DSC00001.JPG
```

2. Sample Application Usage

■ Show Detail Info
1. Please input "4" and enter.
2. Console window shows

```
[ContentsInfo]
contentType = DCF
contentId = 131079
```

```
imagePixHeight = 4120
isVideoParamExsist = 0
isAudioParamExsist = 0
```

■ Delete content
1. Please input "5" and enter.
2. The result will be notified at OnWarningExt.

```
input> OnWarningExt:DeleteContentResult(DeleteContent_OK,ContentsId:131073,
SlotNumber:1,)
```

2. Sample Application Usage

■ Movie Playback

1. Please input "2" and enter,
   console window shows list Movie Playback menu.
2. Please choose the number and enter.

```
<< Movie Playback Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to Contents Operation Menu.
(1) Set Movie Playback Setting
(2) Get Movie Playback Setting
(3) Control Movie Playback
(4) Request Movie Playback Status
(5) Get Movie Playback Status
```

■ Movie Playback Setting (1/3)

1. Please input "1" and enter,
   console window shows Media slot number.
2. Please choose the number and enter.

```
Select the target SlotNumber.
[1] SLOT1
[2] SLOT2
[-1] Cancel input
input>
```

3. Console window shows Capture Date List in selected media.
4. Please choose the number and enter.

```
Select CapturedDateList
[0] 2021/01/05
[1] 2022/01/01
[-1] Cancel input
input>
```

↩

■ Movie Playback Setting (2/3)

5. Console window shows Contents Info List of movie in selected date.

　Only shown Movie contents.

6. Please choose the content number of you want to playback and enter.

```
Select ContentsInfoList
[0] 2022/01/01 00:00:20, FileId:5, FileName:C0001.MP4
[-1] Cancel input
input>
```

7.Then asked to enter Monitoring conditions.

8.The only required field is the IP address of the hostPC.
　Please enter and proceed.

```
Please enter the Host IP address.
  ex) 192.168.0.1
input > 192.168.0.1

Please enter the Downtime(ms)
set default if input 0.
input > 0

Please enter the Video Port Number
set default if input 0.
input > 0

Please enter the Audio Port Number
set default if input 0.
input > 0

Please enter the Meta Port Number
set default if input 0.
input > 0
```

　# For details of setting values, please refer to the API specification.

2. Sample Application Usage

■ Movie Playback Setting (3/3)

9. The following is the output when the set is successful.

```
Successfully SetMoviePlaybackSetting
```

10. Please input "2" and enter if you want to confirm set parameter.

11. Console window shows set parameter.

```
Successfully GetMoviePlaybackSetting

contentsId : 131,073
slotId : 1
fileId : 5
ipAddress : 192.168.0.1
downTime : 0
videoPort : 55,001
audioPort : 55,003
metaPort : 55,005
```

■ Control Movie Playback

1. Please input "3" and enter,
   console window shows list Control Movie Playback menu.
   1.Start: Need execute first.
             Start Movie Playback operation.
   2.Stop: Need execute finally.
             Finish Movie Playback operation.
   3.Play: Start play movie playback.
   4.Pause: Stop movie playback temporary.
   5.Seek: Move playback position.

```
<< Control Movie Playback Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to Movie Playback Menu
(1) Start
(2) Stop
(3) Play
(4) Pause
(5) Seek
```

The following is the output when the set is successful.

```
Success
```

This application is not support about show playback
   image.
   Please refer to the API specification.

2. Sample Application Usage

■ Confirm Movie Playback Status

1. Please input "4" and enter,
   the following is the output when the request is successful.
   The request is failed when movie playback operation is not started.

```
Successfully RequestMoviePlaybackInfo
```

2. Please input "5" and enter,
   Console window shows current movie playback status.

```
MoviePlaybackStatus : Pause
```

↩

2. Sample Application Usage

■ Other Menu

This menu is for Live View, Media, etc.

```
<< Other Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to REMOTE-MENU
(lv) LiveView Enable
(1) Live View
(2) Live View Image Quality
(3) Position Key Setting
(4) Get Media Profile
(5) Playback Media
(6) Selected Media Format
(7) Request Display String List
(8) Get Display String Type
(9) Get Display String List
(10) Monitoring
(11) Request Zoom And Focus Preset
(12) Get Zoom And Focus Preset
(13) Get OSD Image Enable Setting
(14) Get OSD Image
(15) Remote Key Control
(16) TimeZone Setting
(17) Live View Protocol
(18) Control PTZF
```

2. Sample Application Usage

■Display and change Live View Enable Status
1.Please input "lv" and enter,
　console window shows Live View enable status.
2.Enter "y" if you are switch Live View Enable Status.

```
EnableLiveView Current Setting Value:1
Are you sure you want to reverse EnableLiveView? (y/n) >
```

■Receive Live View image
1.Please input "1" and enter.
2.Console window shows "SUCCESS"
3.You can find the file "LiveView000000.JPG" in the
　folder set by "set_save_info()" in the source code.

```
GetLiveView...
"c:¥¥work¥¥LiveView000000.JPG"
GetLiveView SUCCESS
```

2. Sample Application Usage

■Display and change Live View Image Quality
1. Please input "2" and enter.
2. Console window shows current Live View Image Quality value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
Live View Image Quality: High
Would you like to set a new Live View Image Quality value? (y/n): y
Choose a number set a new Live View Image Quality value:
[-1] Cancel input
[0] Low
[1] High
[-1] Cancel input
Choose a number set a new Live View Image Quality value:
input>
```

■Display and change Position Key Setting
1. Please input "3" and enter.
2. Console window shows current value.
3. Then if you choose "y",
   console window shows candidate values.
4. Please choose the number and enter.

```
Position Key Setting: PC Remote Setting
Would you like to set a new Position Key Setting value? (y/n): y
Choose a number set a new Position Key Setting value:
[-1] Cancel input
[0] Camera Position
[1] PC Remote Setting
[-1] Cancel input
Choose a number set a new Position Key Setting value:
input> _
```

2. Sample Application Usage

■Display MediaProfile

1. Please input "4" and enter.
2. Console window shows Media slot status and Media slot number.
3. Please choose the number and enter.

```
Media SLOT1 Status               : OK
Media SLOT1 Recording Available Type: Main and Proxy
Media SLOT2 Status               : OK
Media SLOT2 Recording Available Type: Main and Proxy

Select Get Media profile SLOT.
[1] SLOT1
[2] SLOT2
[-1] Cancel input
input>
```

4. Lists the MediaProfile information.

```
1: 000_0001
    Clip URL       : http://localhost:58081/A/Clip/000_0001.MXF
    Thumbnail URL : http://localhost:58081/A/Thmbnl/000_0001T01.JPG
    Proxy URL      : -

2: 000_0002
    Clip URL       : http://localhost:58081/A/Clip/000_0002.MXF
    Thumbnail URL : http://localhost:58081/A/Thmbnl/000_0002T01.JPG
    Proxy URL      : http://localhost:58081/A/Sub/000_0002S03.MP4

3: 000_0003
    Clip URL       : http://localhost:58081/A/Clip/000_0003.MXF
    Thumbnail URL : http://localhost:58081/A/Thmbnl/000_0003T01.JPG
    Proxy URL      : http://localhost:58081/A/Sub/000_0003S03.MP4
```

2. Sample Application Usage

■Display and change Playback Media
1. Please input "5" and enter.
2. Console window shows current Playback Media value.
3. Then if you choose "y",
    console window shows candidate values.
4. Please choose the number and enter.

```
Playback Media: Slot1
Would you like to set a new Playback Media value? (y/n): y
Choose a number set a new Playback Media value:
[-1] Cancel input
[1] Slot1
[2] Slot2
[-1] Cancel input
Choose a number set a new Playback Media value:

input>
```

2. Sample Application Usage

■Selected Media Format
1. Please input "6" and enter.
2. Please check if "Full Format Enable Status" and/or
   "Quick Format Enable Status" is Enabled.
   # "Quick Format Enable Status" may not be
      displayed for some models. In that case,
      the format type selection is not displayed.
3. Then if you choose "y",
   console window asks you to select a format type.
4. Please choose a number and enter.

```
Media SLOT1 Full Format Enable Status: Enabled
Media SLOT2 Full Format Enable Status: Enabled
Media SLOT1 Quick Format Enable Status: Enabled
Media SLOT2 Quick Format Enable Status: Enabled

Would you like to format the media? (y/n): y
Choose a format type number:
[-1] Cancel input
[1] Full Format
[2] Quick Format

input>
```

5. Next, console window asks you to select a slot.
   please choose a number and enter.
6. Select "y" and enter, then format will start.

```
Choose a number Which media do you want to format ?
[-1] Cancel input
[1] SLOT1
[2] SLOT2

input> 1

All data will be deleted.Is it OK ? (y/n)
y

Formatting .....
FormatProgressRate:67
Format completed
```

2. Sample Application Usage

■Display the character string of the camera body menu

(1/2)

#Please note that the camera must support the GetDisplayStringList API in order to perform this operation.

1. Please input "7" and enter.
2. Console window shows candidate values.
3. Please choose the number and enter. For example, if you want to request all information, input "0".

```
Select Display String List Type.
[-1] Cancel input
[0] All Display List
[1] [BaseLook] AELevelOffset ExposureValue
[2] [BaseLook] Input Display
[3] [BaseLook] Name Display
[4] [BaseLook] Output Display
```
        ∫
```
[14] [FTP] Job Status Display
[15] [Creative Look] Name Display
[16] [IPTC] Metadata Display
[17] [Subject Recognition AF] Display
[-1] Cancel input
input>
```

\# The result of the request is notified in the OnWarning callback.
\# Since the list is different for each model, it is not always possible to get the information.

The following is the output when the request is successful.

```
Request for DisplayStringList  successfully
```

When OnWarning notifies a success, enter "8" in Other-Menu to confirm the list name that can be displayed.

↩

■ Display the character string of the camera body menu
(2/2)

4. Please input "8" and enter,
   console window shows list names you can get.

```
Successfully retrieved DisplayStringTypes.

----- ListType to be retrieved -----
[BaseLook] Name Display
[Camera Gain BaseISO] Display
----- ListType to be retrieved -----
```

5. Then if you input "9" and enter,
   console window shows candidate values.

6. Please choose the number and enter.

```
Select Display String List Type.
[-1] Cancel input
[0] All Display List
[1] [BaseLook] Name Display
[2] [Camera Gain BaseISO] Display
[-1] Cancel input
input>
```

The following is an example of Camera Gain BaseISO output.

```
----- [Camera Gain BaseISO] Display -----
1 : ISO 2500
2 : ISO 800
```

2. Sample Application Usage

■ Monitoring (1/2)

1. Please input "10" and enter,
   console window shows list Monitoring menu.
2. Then if you input "1" and enter,
   asked to enter Monitoring conditions.
3. The only required field is the IP address of the hostPC.
   Please enter and proceed.

```
<< Monitoring Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to Other menu.
(1) Set Monitoring Delivery Setting
(2) Start Monitoring
(3) Stop Monitoring
intput> 1

Please enter the Host IP address
  ex) 192.168.0.2

input > 192.168.0.20
Please enter the Downtime(ms)
set defalut if input 0.
input > 5000
Please enter the Port Number
set defalut if input 0.
intput > 55200
```

  # For details of setting values, please refer to the API
    specification.

The following is the output when the set is successful.

```
Set OK
```

If "Set NG" is displayed, change the value and try again.

After setting the conditions, use the (2) menu to start
monitoring.   ↰

SONY   Sony Corporation.

2. Sample Application Usage

[OS common]

■Monitoring (2/2)

4.Please input "2" and enter,
   console window shows delivery status.
5.If the status is "False", select "y". Then start is executed.

```
Monitoring Is Delivering : False

Do you want to start? (y/n): y
Request OK
```

If the request is accepted, "Request OK" is displayed.

6.To get the Live View image, enter "0" to return to
   << Other Menu >> and execute (1) Live View.

If status is "True" and "y" is selected, the request is
   rejected and "Request NG" is displayed.

If the camera fails to start, the OnWarning callback
   notifies the camera of the failure.

7.Please input "3" and enter,
   console window shows delivery status.
8.If the status is "True", select "y". Then stop is executed.

```
Monitoring Is Delivering : True

Do you want to stop? (y/n): y
Request OK
```

If the request is accepted, "Request OK" is displayed.

If status is "True" and "y" is selected, the request is
   rejected and "Request NG" is displayed.

↰

2. Sample Application Usage

■ Display the Zoom&Focus Preset information

1.Please input "11" and enter. Then entry "y".

```
Would you like to request ZoomAndFocusPreset ? (y/n): y
```

\# The result of the request is notified in the OnWarning callback.
\# Since the list is different for each model, it is not always
  possible to get the information.

The following is the output when the request is successful.

```
Request Zoom And Focus Preset Result successfully.
```

When OnWarning notifies a success, enter "12" in Other-Menu to confirm the list name that can be displayed.

2. Please input "12" and enter,
   console window shows Zoom&Focus Preset information
   you can get.

```
0: isExists               : 2
   Lens Model Name        : E PZ 16-50mm F3.5-5.6 OSS
   Zoom Distance          : 16mm
   Focal Distance         : 0.3m
   ZoomOnly Enable Status : 1
   ZoomOnly Value         : 1

1: isExists               : 1
   Lens Model Name        :
   Zoom Distance          : 0mm
   Focal Distance         : 0.0m
   ZoomOnly Enable Status : 1
   ZoomOnly Value         : 1

2: isExists               : 1
   Lens Model Name        :
   Zoom Distance          : 0mm
   Focal Distance         : 0.0m
```

2. Sample Application Usage

■ Get OSD(On-Screen Display) Image
1. Please input "13" and enter.
 console window shows OSD Image Mode status.
2. Then if you choose "y",
   console window shows candidate values.
3. Please choose the number and enter.
   If you want to get OSD image, you need set OSD Image Mode to ON.

```
OSD Image Mode Status: OFF
Would you like to set OSD Image Mode? (y/n): y
[0] OFF
[1] ON
[-1] Cancel input
Choose a number to set OSD Image Mode:
input>
```

4. Please input "14" and enter.
5. Console window shows "SUCCESS"
6. You can find the file "OSDImage000000.PNG" in the
   folder set by "set_save_info()" in the source code.

```
Get OSD Image...
"C:¥¥work¥¥OSDImage000000.PNG"
GetOSDImage SUCCESS
```

2. Sample Application Usage

■ Remote Key Control Menu (1/4)

1. Please input "15" and enter.
   console window shows sub menu item.
2. Please choose the number and enter.

```
<< Remote Key Control Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to Other menu.
(1) Button Function
(2) Button Function Multi
(3) Dial Function
(4) Lever Function
intput>
```

3. Please input "1" and enter.
   console window shows Camera Button Function Status.
4. Then if you choose "y",
   console window shows candidate values for upper 16bit.
5. Please choose the number and enter.

```
Camera Button Function Status: Idle

Would you like to set a Camera Button Function value? (y/n): y
Choose a number set a new value upper 16 bits:
[-1] Cancel input
[0] Up button
[1] Down button
```
　　　　〜
```
[23] AF-ON button
[-1] Cancel input
Choose a number set a new value upper 16 bits:
input> _
```

6. Next, console window shows candidate values for
   lower 16bit . please choose the number and enter.

```
Choose a number set a new value lower 16 bits:
[-1] Cancel input
[1] Up
[2] Down
[3] DownUp
[-1] Cancel input
Choose a number set a new value lower 16 bits:
input>
```
↩

■ Remote Key Control Menu (2/4)

1. Please input "2" and enter.
   console window shows Camera Button Function Status.
2. Then if you choose "y",
   console window shows candidate values for upper 16bit.
3. Please choose the number and enter.

```
Camera Button Function Status: Idle

Would you like to set a Camera Button Function Multi value? (y/n): y
Choose a number set a new value upper 16 bits:
[-1] Cancel input
[0] ENTER button
[1] Multi-selector Enter
[2] C1 button
[3] C2 button
[4] C3 button
[5] C4 button
[6] MOVIE button
[7] AEL button
[8] AF-ON button
[-1] Cancel input
Choose a number set a new value upper 16 bits:
input>
```

4. Next, console window shows candidate values for
   lower 16bit . please choose the number and enter.

```
Choose a number set a new value lower 16 bits:
[-1] Cancel input
[1] Up
[2] Down
[3] DownUp
[-1] Cancel input
Choose a number set a new value lower 16 bits:
input>
```

Use "Camera Button Function Multi" when you want to
   press multiple buttons at the same time. If you want to
   press only one button, use "Camera Button Function".

■ Remote Key Control Menu (3/4)

1.Please input "3" and enter.

2.Then if you choose "y",
　console window shows candidate values for upper 16bit.

3.Please choose the number and enter.

```
Would you like to set a Camera Dial Function value? (y/n): y
Choose a number set a new value upper 16 bits:
[-1] Cancel input
[0] Control wheel
[1] Front dial
[2] Rear dial L
[-1] Cancel input
Choose a number set a new value upper 16 bits:
input>
```

4. Next, console window shows candidate values for
　　lower 16bit . please input the value and enter.

```
Set a new value lower 16 bits (SHORT_MIN to SHORT_MAX. Out-of-range value to Cancel):
input>
```

Plus rotates clockwise, minus rotates counter clockwise.

2. Sample Application Usage

■ Remote Key Control Menu (4/4)
1. Please input "4" and enter.
2. Then if you choose "y",
   console window shows candidate values for upper 16bit.
3. Please choose the number and enter.

```
Would you like to set a Camera Lever Function value? (y/n): y
Choose a number set a new value upper 16 bits:

Request for DisplayStringList  successfully

[-1] Cancel input
[0] Tele/Wide Lever
[-1] Cancel input
Choose a number set a new value upper 16 bits:
input>
```

4. Next, console window shows candidate values for
   lower 16bit . please input the value and enter.

```
Set a new value lower 16 bits in following range. (Out-of-range value to Cancel):
Lever Value min   : -2
Lever Value max   : 2
Lever Value Step  : 1
Set a new value lower 16 bits in following range. (Out-of-range value to Cancel):
input>
```

Set Zoom Lever Speed. Plus direction is Tele, minus
direction is Wide.

↩

2. Sample Application Usage

■ TimeZone Setting Menu
1. Please input "16" and enter.
   console window shows sub menu item.
2. Please choose the number and enter.

```
<< TimeZone Setting Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to Other menu.
(1) Set TimeZone Setting
(2) Request TimeZone Setting
(3) Get TimeZone Setting
```

■ Set TimeZone Setting (1/2)
1. Please Input "1" and enter.
2. If you want to set DateTime, Please Input "y".
3. Then input date at you want to set and enter.

```
Are you sure you want to set DateTime? (y/n) > y
Please Enter the DateTime.

DateTime(YYYYMMDDThhmmss.s) >
```

4. If you want to set Area, Please Input "y".
5. Then input time difference at you want to set and enter.

```
Are you sure you want to set Area? (y/n) > y
Please Enter the Area.

Area((+ or -)hhmm) >
```

■ Set TimeZone Setting (2/2)

6. If you want to set Daylight savings, Please Input "y".
7. Then input Daylight saving status and enter.
    If you want to set OFF, please input 0.
    If you want to set ON, please input 1.

```
Are you sure you want to set Daylight Savings? (y/n) > y
Please Enter the Daylight.

Daylight >
```

8. The following is the output when the set request is successful.

```
Set the timezone setting is success.
```

    Then the following is the output after set is successful.

```
input> OnWarningExt:SetTimeZoneSetting(None,,)
```

2. Sample Application Usage [OS common]

■ Get TimeZone Setting

1. Please intput "2".
   You need request TimeZone Setting before get it.
2. The following is the output when the request is successful.

```
Request the timezone setting is success.
```

3. When you're ready to obtain the settings, the following notification will appear.

```
input> OnWarningExt:RequestTimeZoneSetting(None,,)
```

4. Please input "3" and enter.
   Console window shows result and current time zone setting.

```
Get the timezone settings is success.
DateTime: 20250508T112226.2
Area: +0900
Daylight: off
```

2. Sample Application Usage

■ Live View Protocol Menu
1. Please input "17" and enter.
    Console window shows current LiveViewProtocol setting and candidate values.
2. Please choose the number and enter.

```
LiveViewProtocol Current Setting Value:Main
Choose a number set a new LiveViewProtocol value:
[-1] Cancel input
[0]Main
[1]Alt(HTTP-LV)
[-1] Cancel input
Choose a number set a new LiveViewProtocol value:
input>
```

3. If you select Alt, you will be notified as follows after the LiveView is ready.

```
input> OnWarning:LiveView_Alt_Ready
```

2. Sample Application Usage

■ Control PTZF Menu

1. Please input "18" and enter.
   Console window shows sub menu item.
2. Please choose the number and enter.

```
<< PTZF Control Menu >>
What would you like to do? Enter the corresponding number.
(0) Return to Other menu.
(1) Control to Home/Reset/Cancel
(2) Control to Other type
(3) Clear Preset
(4) Set Preset
intput>
```

■ Control to Home/Reset/Cancel

1. Please input "1" and enter.
   Console window shows sub menu item.
2. Please choose the number and enter.

```
Choose a number of control type:
[-1] Cancel input
[0]Home
[1]Reset
[2]Cancel
[-1] Cancel input
Choose a number of control type:
input>
```

3. Once you input, the process will be executed.
   Upon completion, the results will be notified with the following.

```
intput> OnWarningExt:ControlPTZFResult(None,OK,HomePosition)
```

↰

2. Sample Application Usage

■ Control to Other type
1. Please input "2" and enter.
   Console window shows sub menu item.
2. Please choose the number and enter.

```
Choose a number of control type:
[-1] Cancel input
[0]Absolute
[1]Relative
[2]Direction
[-1] Cancel input
Choose a number of control type:
input>
```

3. Please input "y" if you want to set pan position.
   Then input value and enter that position and speed.

```
Are you sure you want to set Pan Settings? (y/n) > y
Please Enter the Position.

Position > 100000000
Please Enter the Speed.

Speed > 50
```

4. Please input "y" if you want to set tilt position.
   Then input value and enter that position and speed.

```
Are you sure you want to set Tilt Settings? (y/n) > y
Please Enter the Position.

Position > 100000000
Please Enter the Speed.

Speed > 50
```

5. The results will be notified via the following
OnWarningExt.

```
intput> OnWarningExt:ControlPTZFResult(None,OK,Absolute)
```

↩

2. Sample Application Usage

■ Clear Preset

1. Please input "3" and enter.
2. Please input the number of preset that you want to clear and enter.

```
Please Enter the Number of Preset.

Number >
```

3. The results will be notified via the following OnWarningExt.

```
intput> OnWarningExt:PresetPTZFClear(None,,)
```

■ Set Preset

1. Please input "4" and enter.
2. Please input the number of preset that you want to set current position and enter.

```
Please Enter the Number of Preset.

Number >
```

3. Please input "y" if you want to set the thumbnail.

```
Are you sure you want to set thumbnail? (y/n) >
```

4. The results will be notified via the following OnWarningExt.

```
intput> OnWarningExt:PresetPTZFSet(None,,)
```

2. Sample Application Usage

■ Contents Transfer Menu

1. When "Contents Transfer Mode" is selected in the connection selection of TOP-MENU, The following menu is displayed in the console window.

2. Please choose a number and enter.

```
Contents Transfer Mode
<< CONTENTS-MENU >>
What would you like to do? Enter the corresponding number.
(0) Disconnect and return to the top menu
(1) Get contents list
```

■ Display content list and get content (1/2)

1. Please input "1" and enter.

2. Console window shows contents list.

#If the content list is not displayed, it may take a long time to get the content information. If you have a lot of content on your media, Please wait for it to be displayed.

#If you are notified that an error has occurred, try the connection again.

```
NumOfFolder [3]
(1/3) NumOfContents [4]
(2/3) NumOfContents [1]
(3/3) NumOfContents [8]
=====    1: 2021-01-04 (0x40000010) , contents[4] =====
    1: (0x40000029), C0030.MP4
    2: (0x40000031), DSC03589.JPG
    3: (0x40000041), DSC03590.JPG
    4: (0x40000051), DSC03591.JPG
=====    2: 2021-01-05 (0x40000060) , contents[1] =====
    5: (0x40000079), C0029.MP4
=====    3: 2022-10-04 (0x40000080) , contents[8] =====
    6: (0x40000091), BSC03556.JPG
    7: (0x400000A9), C0008.MP4
    8: (0x400000B1), BSC03557.JPG
    9: (0x400000C9), C0009.MP4
   10: (0x400000D1), BSC03558.JPG
   11: (0x400000E1), BSC03559.JPG
   12: (0x400000F9), C0010.MP4
   13: (0x40000109), C0011.MP4

Select the number of the contents you want to download:
(Returns to the previous menu for invalid numbers)


input>
```

2. Sample Application Usage

■ Display content list and get content (2/2)

3.Then if you choose content number,
  console window shows candidate content size.

4.Please choose a number and enter.

```
input> 2
Selected(0x 40000031) ...

Select the number of the content size you want to download:
[-1] Cancel input
[1] Original
[2] Thumbnail
[3] 2M

input>
```

3. Note

■ Character code

There is a rare issue that no output will be displayed in the sample application command window when you use the different character code for your path name from your pc character code setting.