Sample Application

for Camera Remote SDK

Instruction Manual

version 1.04.00

SONY Sony Corporation.

Contents

0. Preparation

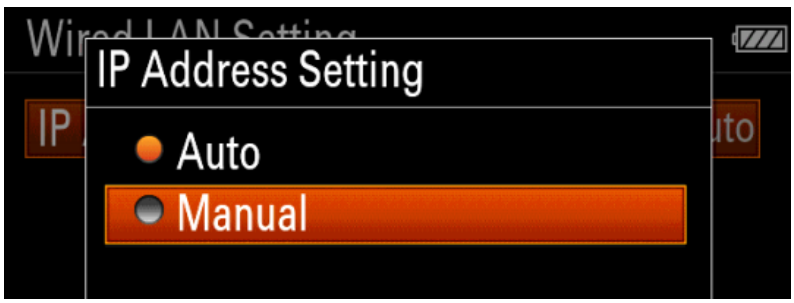
[OS common]

■Camera settings and connect to PC(/SBC). (1/4)

[Wired LAN (1/3)]

1. Please set “On” for “PC Remote” and “Wired LAN” for “PC Remote Cnct Method” in “PC Remote Function” Menu.
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".



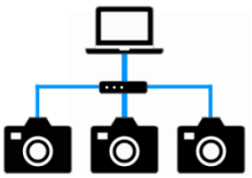
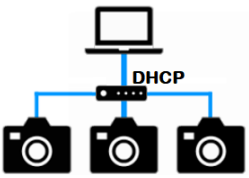
0. Preparation

[OS common]

■ Camera settings and connect to PC(/SBC). (2/4)

[Wired LAN (2/3)]

● 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)"

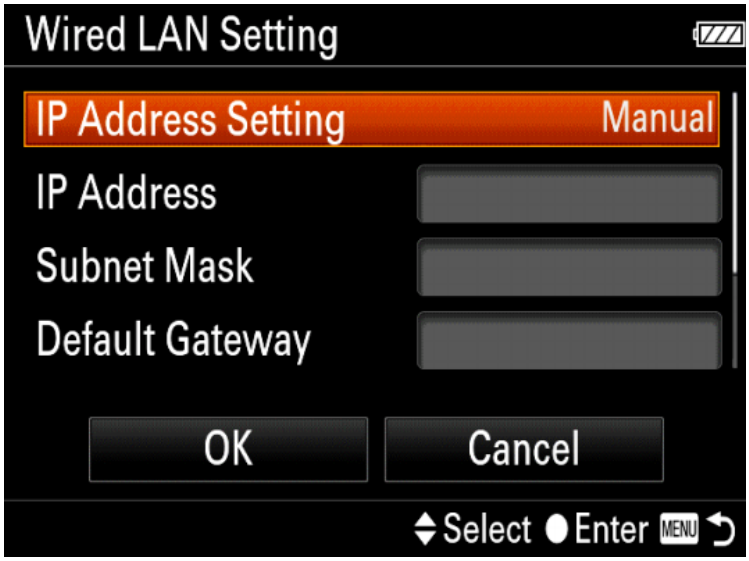
0. Preparation

[OS common]

■Camera settings and connect to PC(/SBC). (3/4)

[Wired LAN (3/3)]

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



5. After connecting the Ethernet cable and wait for about 30 seconds for the camera to recognize the network and be 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.13.

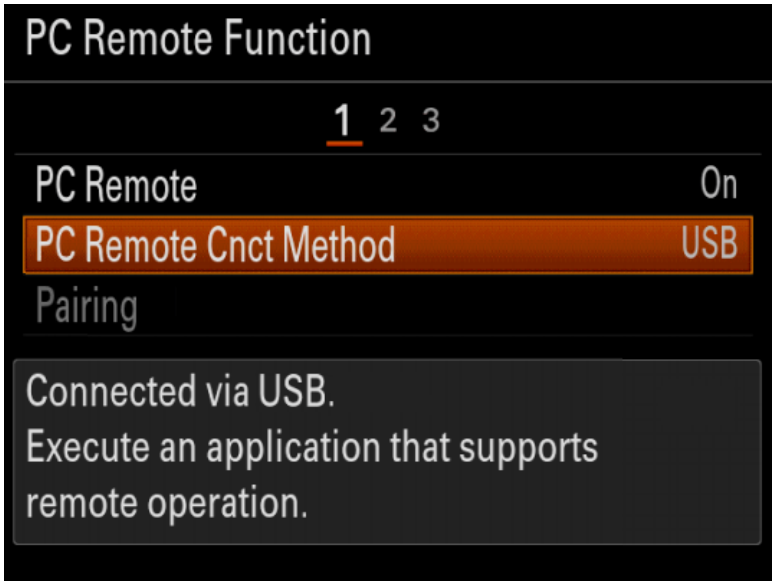
0. Preparation

[OS common]

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

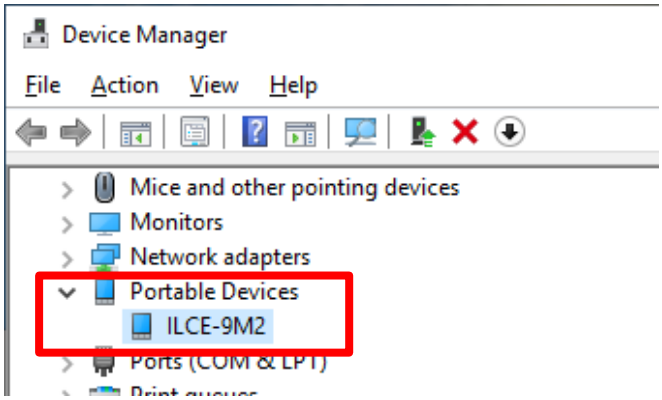
[USB]

1.Please set “On” for “PC Remote” and “USB” for “PC Remote Cnct Method” in “PC Remote Function” Menu.
2.Please connect the camera and your PC(/SBC) with a USB cable.



[For Windows]

3.Please check “Device Manager” if your camera “ILCE-xxx” is under “Portable Devices”.



0. Preparation

[For Windows]

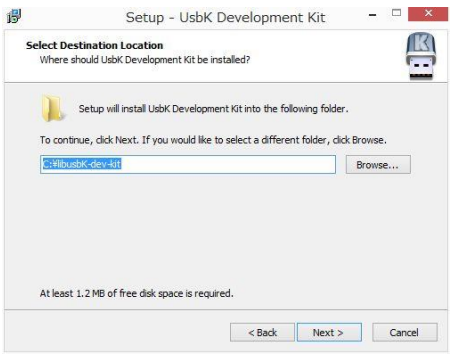
■Installation of libusbK

1.Please download “libusbK-3.0.7.0-setup.exe” and install like below.

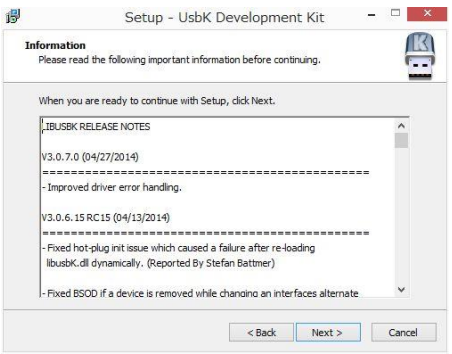
※ “libusbK-3.0.7.0” is the version verified for SDK.

Please select “Next”.

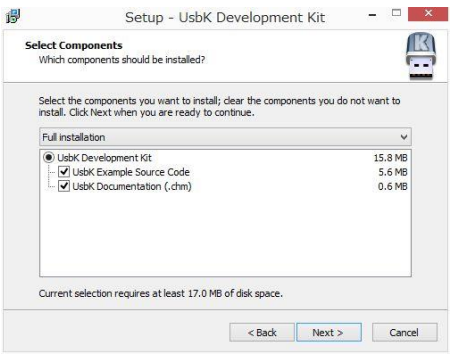
Please select “Next”.



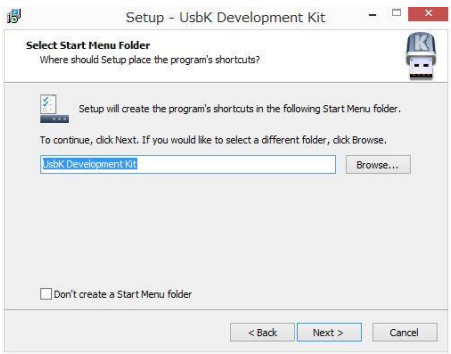
Please select “Next”.



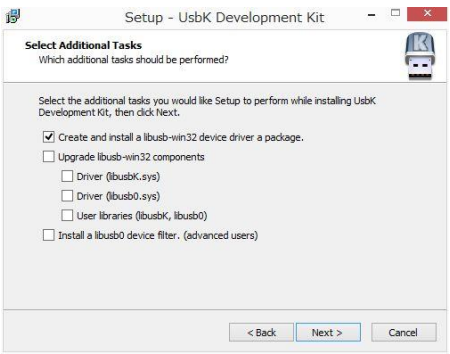
Please select “Next”.



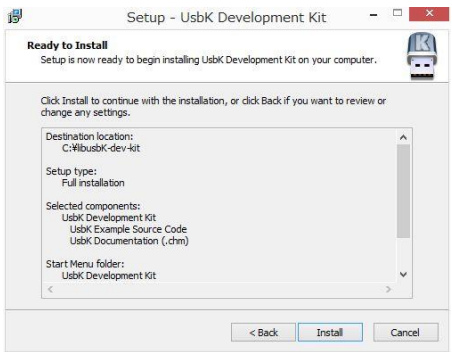
Please select “Next”.



Please select “Create and install...”



Please select “Next”.



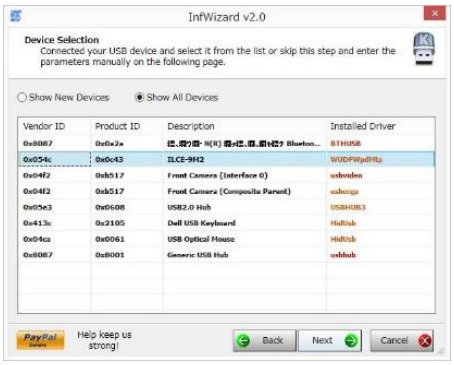
Please select “libusbK v3.0.7.0...”.

Please select “Show All Devices”.

0. Preparation

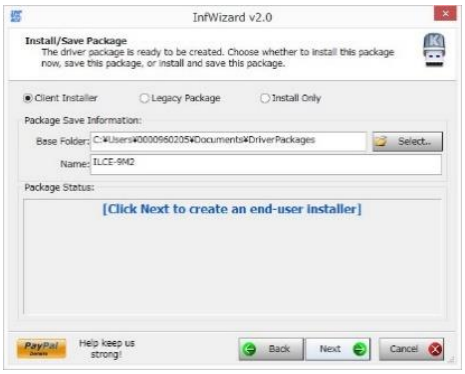
[For Windows]

Please select your camera “ILCE-xxx”.



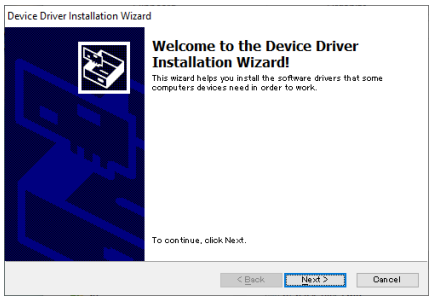
Please select “Next”.

Please select “Next”.

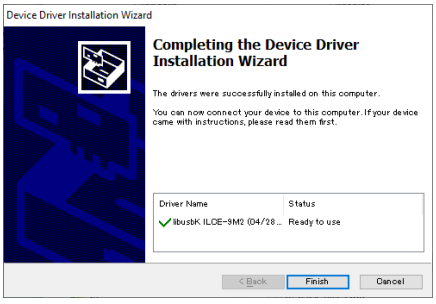


Please select “Finish & Install ...”.

Please select “Next”.

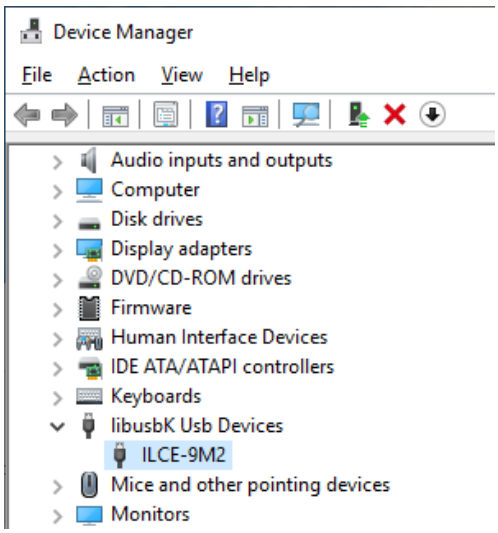


Please select “Finish”.



3. Please check “Device Manager” if your camera “ILCE-xxx” is under “libusbK Usb Devices”.

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



0. Preparation

[For Linux]

■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

[Raspberry Pi OS]

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
```

[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 [For Windows]

■Conditions

1. “Visual Studio 2019 / 2017” are available
2. Windows SDK version 10.0 (and above)
3. Both Debug build / Release build are available
4. CMake 3.17.3 (and above) is needed.

■Steps

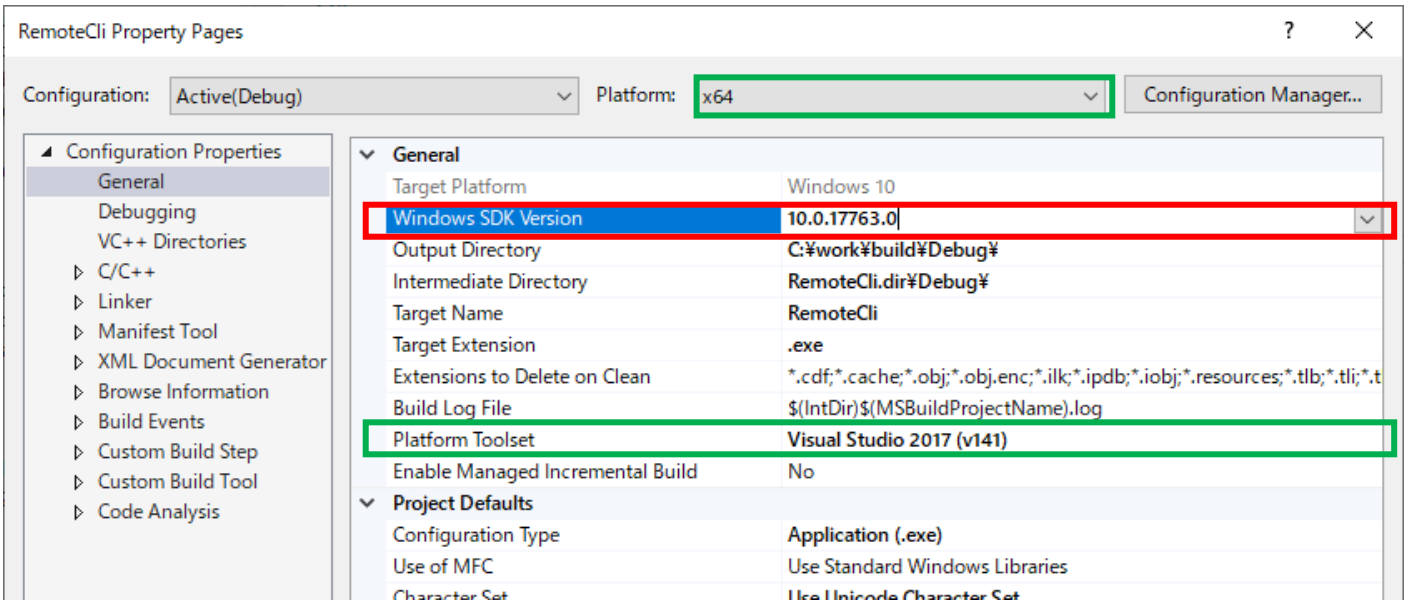
1.Unzip the package file downloaded.
2.Make build folder and execute cmake.

if Visual Studio 2017:
> mkdir build
> cd build
> cmake -A "x64" -T "v141,host=x64" ..

if Visual Studio 2019:
> mkdir build
> cd build
> 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 “10.0.10240.0” for Windows SDK version, please change the setting in the project property to the version you have in your environment.



1. Sample Application Build [For Linux]

■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. (Update the SDK related libraries to the latest version if necessary.)
   external/crsdk/libCr_Core.so
   external/crsdk/CrAdapter/libCr_PTP_IP.so
   external/crsdk/CrAdapter/libCr_PTP_USB.so
   external/crsdk/CrAdapter/libusb-1.0.so
4. 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 .
```

5. Execute Sample Application.

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

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

```
$ chmod +x RemoteCli
```

1. Sample Application Build

[For macOS]

■Conditions

1. “Xcode 11.3 / 11.3.1 / 11.5” are available.
   For “Big Sur”, you need to build with “Xcode 11.5”

■Steps

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]
```

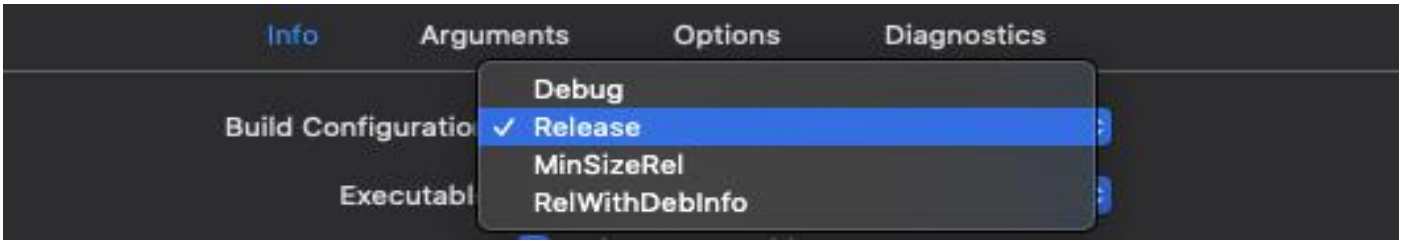
3. (Update the SDK related libraries in “external/crsdk” to the latest version if necessary.)
   libCr_Core.dylib
   CrAdapter/libCr_PTP_IP.dylib
   CrAdapter/libCr_PTP_USB.dylib
   CrAdapter/libusb-1.0.0.dylib
4. Make a build directory and execute cmake build.

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

5. Launch xcode with “RemoteCli.xcodeproj”

```
$ open RemoteCli.xcodeproj
```

6. Select “Build Configuration” to “Release” from the menu “Product” – “Scheme” – “Edit Scheme ...” and close the menu.



7. Build Sample Application from the menu “Product” – “Build”.
8. Execute Sample Application.

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

2. Sample Application Usage [OS common]

■Steps(1/2)

1.Firstly, please connect camera to your PC(/SBC).
(As same settings in Page 3.)

2.Please find the RemoteCli Sample Application file under the folder “..¥build¥Release”.

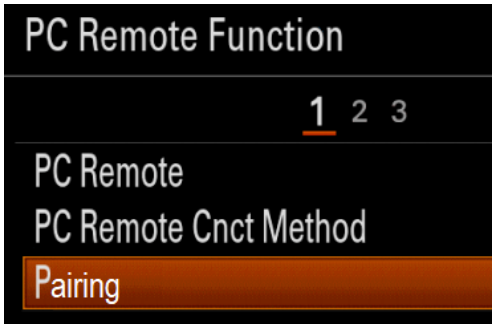
3.Please execute the file.

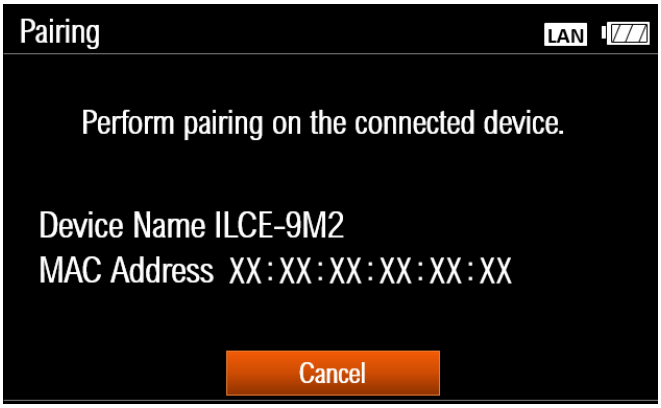
4.Console window will show up like below.

```
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.





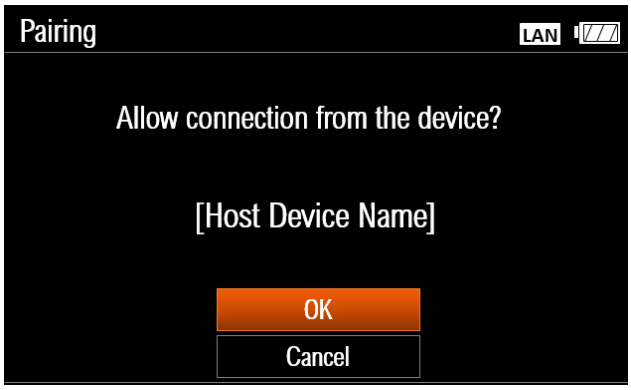
2. Sample Application Usage [OS common]

■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.



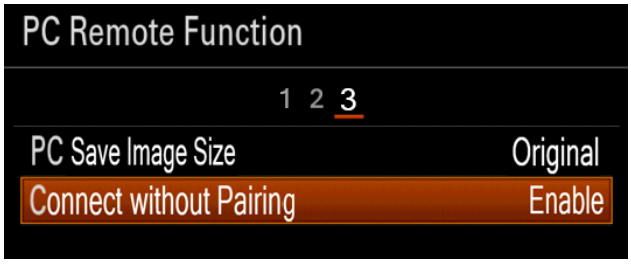
When you restart the camera, the pairing information will be saved in the camera.

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".



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

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

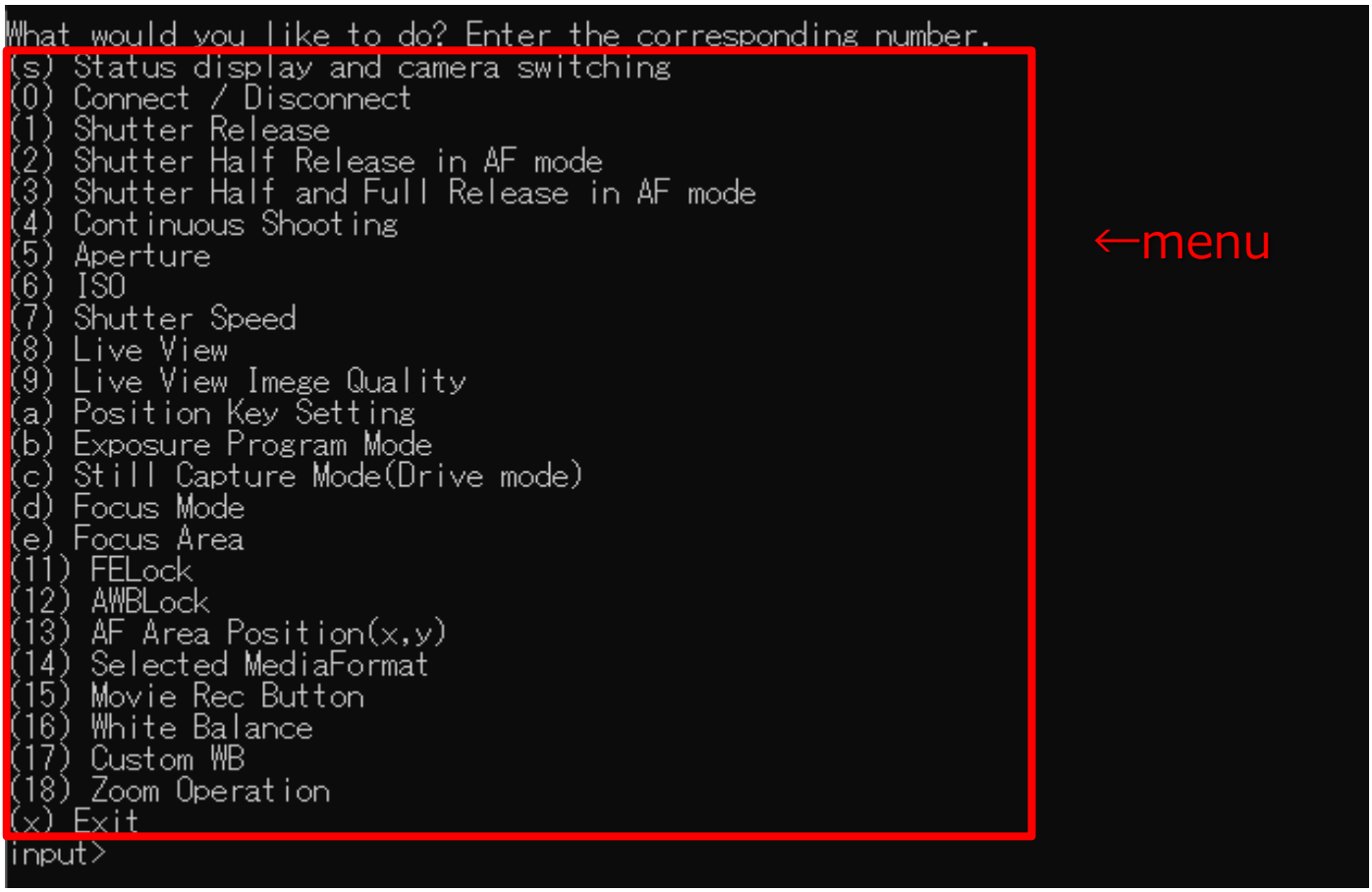
2. Sample Application Usage [OS common]

■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.



2. Sample Application Usage [OS common]

■Status display and new camera connection(1/2)

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

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)

idx input> 2
```

→ see table(1)

→ see table(2)

4.Please input “s” and enter,
to check the connection status.
5. Please input “-1” and enter,
for back to the menu.

```
input> s

Status display and camera switching.
number - connected - model - id
  1    - true  - ILCE-7RM4 - 0000000000DF
* 2    - true  - ILCE-7RM4 - 00000000010D

Selected camera number = [2]

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

input>
```

→ see table(1)

2. Sample Application Usage [OS common]

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

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

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 the next page.

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 [OS common]

■Status display and camera switching

1.Please input “s” and enter.

2.Please input “1” 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
* 2    - true  - ILCE-7RM4 - 00000000010D

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,
for back to the menu.

```
input> s

Status display and camera switching.
number - connected - model - id
* 1    - true  - ILCE-7RM4 - 0000000000DF
  2    - true  - ILCE-7RM4 - 00000000010D

Selected camera number = [1]

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

input>
```

2. Sample Application Usage [OS common]

■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¥DSC00003.JPG
```

#If you can not take photo,
please try again after changing
mode dial “M” and focus mode dial “MF”.

focus mode dial “MF”

mode dial “M”

2. Sample Application Usage [OS common]

■Shutter Half Release in AF mode

1.Please input “2” and enter.
2.Please input “y” and enter.
3.Camera makes AF control only with half release.

```
input> 2

Is the focus mode set to AF? (y/n): y
S1 shooting...
Shutter Halfpress down
Shutter Halfpress 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 takes photo and stores in the folder
  set by “set_save_info()” in the source code.

#If you can not take photo,
#please try again after changing
#mode dial “M” and focus mode dial “AF-S”.

```
input> 3

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

Shutter Halfpress up

What would you like to do? Enter the corresponding number.
(s) Status display and camera switching
(0) Connect / Disconnect
```

⟆

```
(17) Custom WB
(18) Zoom Operation
(x) Exit
input> Complete download. File: c:¥work¥DSC01569.JPG
```

2. Sample Application Usage [OS common]

■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 can not take photos,
#please try again after changing
#mode dial “M” and focus mode dial “MF”.

```
input> 4

Capture image...
Continuous Shooting
Priority Key setting SUCCESS
Still Capture Mode setting SUCCESS
Shutter down
Shutter up

What would you like to do? Enter the corresponding number.
(s) Status display and camera switching
(0) Connect / Disconnect
```

```
(17) Custom WB
(18) Zoom Operation
(x) Exit
input>
Complete download. File: c:¥work¥DSC01570.JPG
Complete download. File: c:¥work¥DSC01571.JPG
Complete download. File: c:¥work¥DSC01572.JPG
Complete download. File: c:¥work¥DSC01573.JPG
```

2. Sample Application Usage [OS common]

■Display and change Aperture

1.Please input “5” 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.

```
input> 5

F5.6
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
[3] F5
[4] F5.6
[5] F6.3
[6] F7.1
[7] F8
[8] F9
[9] F10
[10] F11
[11] F13
[12] F14
[13] F16
[14] F18
[15] F20
[16] F22
[-1] Cancel input
Choose a number set a new Aperture value:
input>
```

2. Sample Application Usage [OS common]

- Display and change ISO
- Display and change Shutter Speed
- Display and change Position Key Setting

Basically same steps with the Aperture case.

```
input> 6

ISO Mode: Normal
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
```

⋮

```
[33] ISO 80,000
[34] ISO 102,400
[-1] Cancel input
Choose a number set a new ISO value:
input>
```

```
input> 7

Shutter speed: 1/250
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"
```

⋮

```
[53] 1/6,400
[54] 1/8,000
[-1] Cancel input
Choose a number set a new Shutter Speed value:
input>
```

```
input> a

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 [OS common]

■Receive Live View image

1.Please input “8” 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.

```
input> 8

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

■Live View Image Quality

1.Please input “9” 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.

```
input> 9

Live View Imege 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>
```

2. Sample Application Usage [OS common]

■Display and change Exposure Program Mode

0.Please change “Position Key Setting” to “PC Remote Setting” beforehand.

1.Please input “b” 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.

```
input> b

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 [OS common]

■Display and change Still Capture Mode(Drive Mode)

0. Please change “Position Key Setting” to “PC Remote Setting” beforehand.
1. Please input “c” 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.

```
input> c

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
```

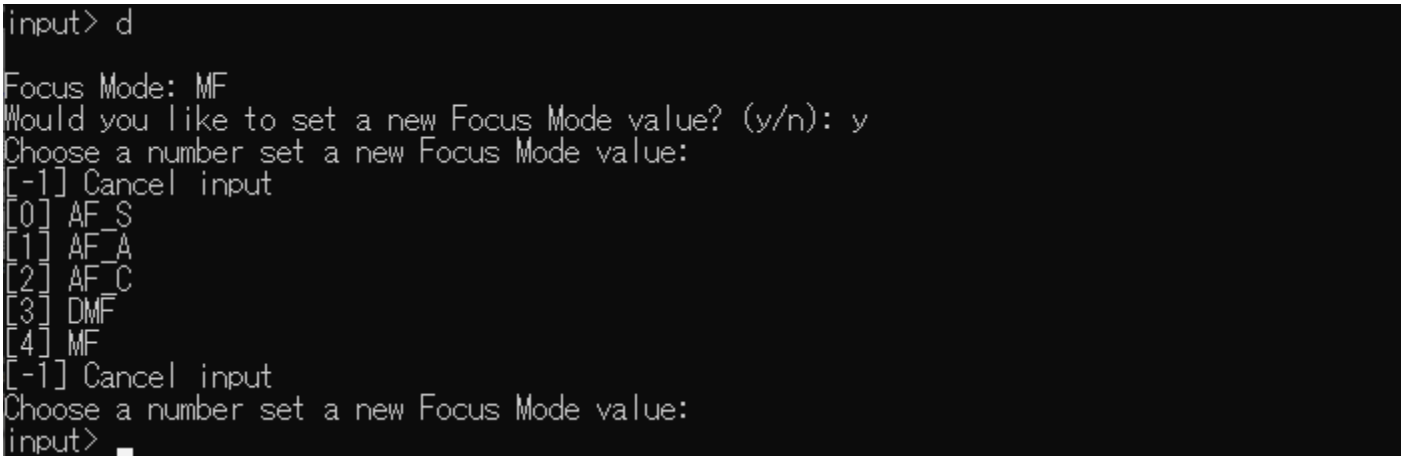
〜

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

2. Sample Application Usage [OS common]

■ Display and change Focus Mode

1.Please input “d” 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.



2. Sample Application Usage [OS common]

■ Display and change Focus Area

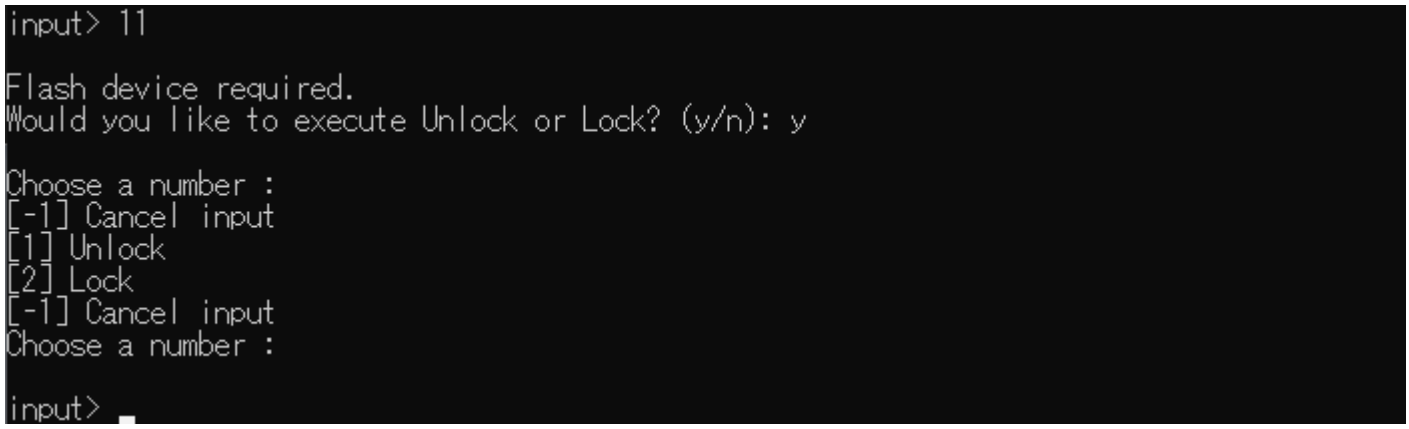
1.Please input “e” and enter.
2.Console window shows current Focus Area value.
3.Then if you choose “y”,
  console window shows candidate values.
4.Please choose the number and enter.

```
input> e

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 [OS common]

■FEL lock

1.Please input “11” 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.



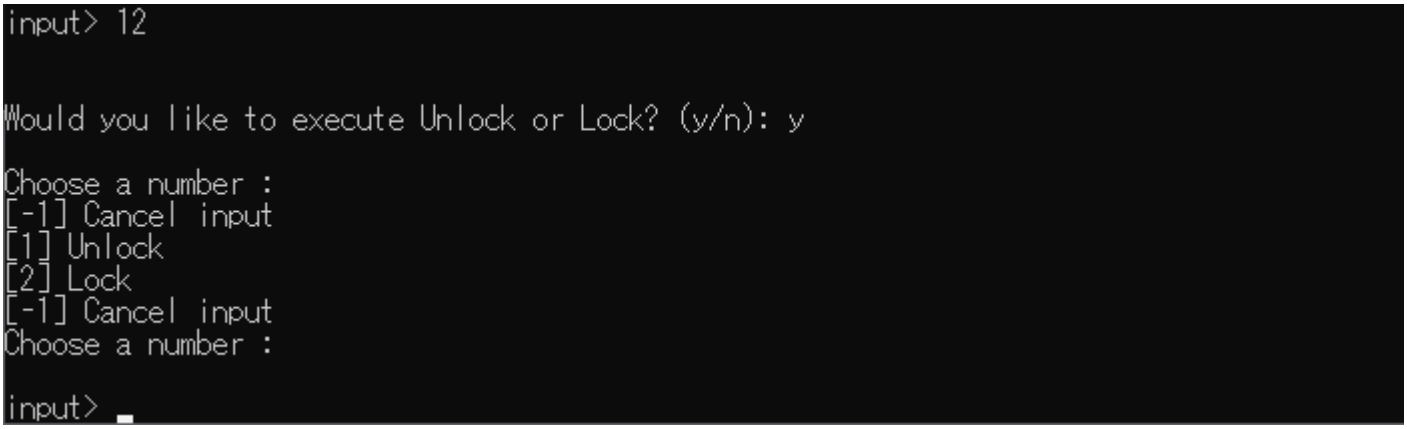
2. Sample Application Usage [OS common]

■AWB lock

1.Please input “12” and enter.

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

3.Please choose the number and enter.



2. Sample Application Usage [OS common]

■AF Area Position(x,y)

1.Please input “13” and enter.

2.Sample Application will change focus area setting to “Flexible Spot S” automatically.

3. Then if you choose “y”, console window ask 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.)

```
input> 13

Set FocusArea to Flexible_Spot_S
FocusArea SUCCESS

FocusFrameInfo no[1] pri[2] w[38] h[38] Deno[640-480] Nume[320-240]

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 [OS common]

■Selected Media Format

1.Please input “14” 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 ask you to select a format type.

4.Please choose a number and enter.

```
input>14

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 ask 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
```

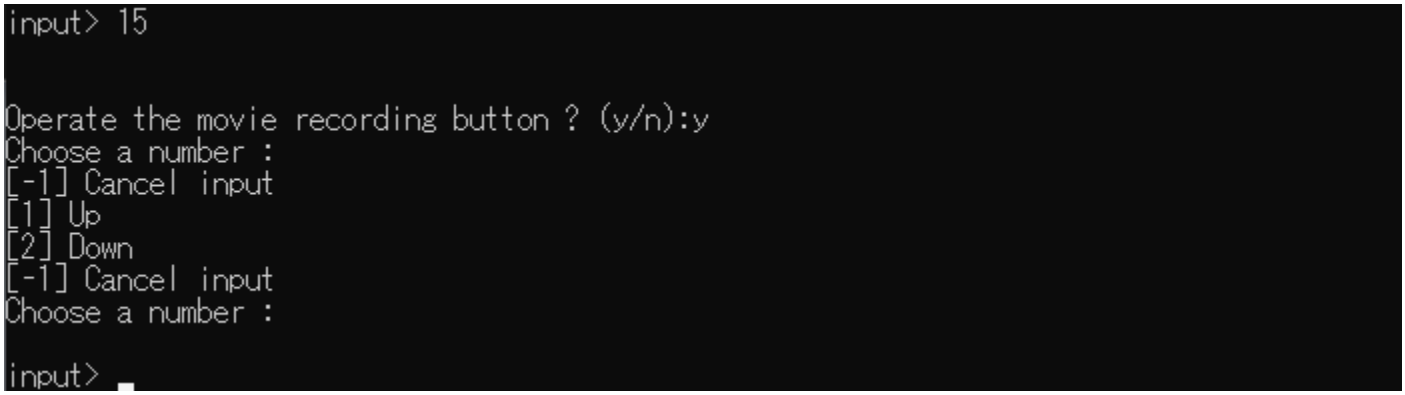
2. Sample Application Usage [OS common]

■Movie Rec Button

1.Please input “15” and enter.

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

4. Please choose “[2] Down”
to start movie rec(make movie rec button down).



2. Sample Application Usage [OS common]

■ White Balance

1. Please input “16” 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.

```
input> 16

White Balance: AWB

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 [OS common]

■Custom WB (1/2)

1.Please input “17” and enter.

2.Console window shows
current Custom WB related values
and set up some settings for Custom WB.

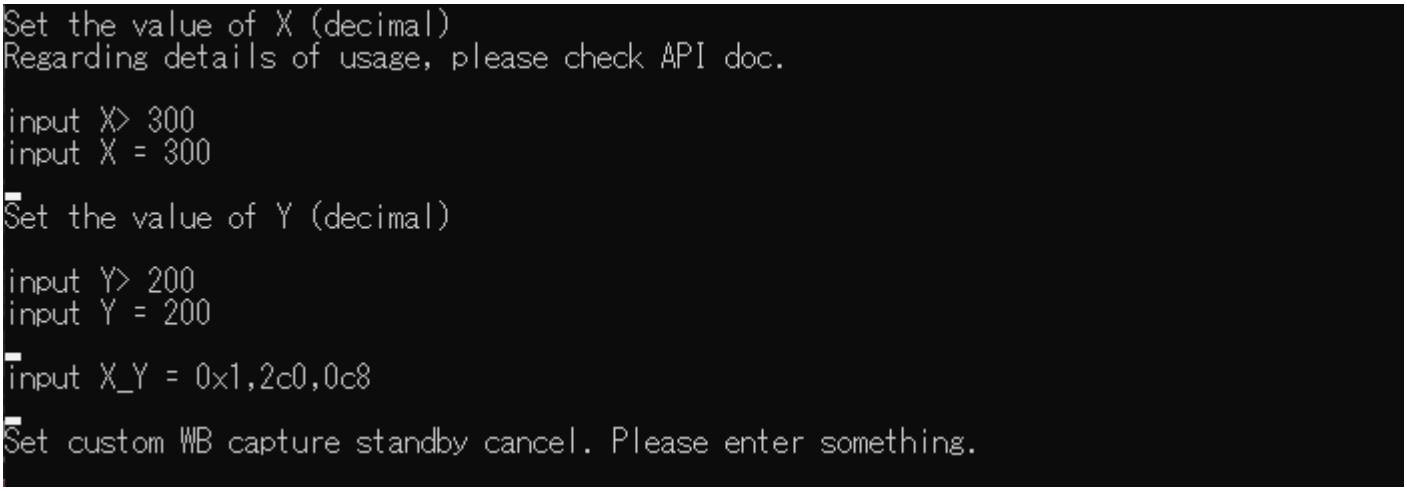
3.Then if you choose “y”,
console window shows candidate values.

```
input> 17

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

Set camera to PC remotePriority Key setting SUCCESS
Position Key Setting: PC Remote Setting

Set the Exposure Program mode to P modeExposure Program mode SUCCESS
Exposure Program Mode: M_Manual

Set the White Balance to Custom1
White Balance SUCCESS
White Balance: Custom_1

Set custom WB capture standby

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):y
```

2. Sample Application Usage [OS common]

■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.)



2. Sample Application Usage [OS common]

■Zoom Operation

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

1. Please input “18” and enter.
2. Console window shows current Zoom related values.
3. Then if you choose “y”, console window shows candidate values.
4. Please choose a number for zoom operation.

3. Note

[OS common]

■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.