

Sample Program Guide

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Introduction

This guide explains how to use this sample program.

Usage

Supported camera

Z 7, Z 7_FU1(Z 7 firmup1) , Z 7_FU2(Z 7 firmup2) , Z 7_FU3(Z 7 firmup3)

Environment

The sample program is command prompt, runs on these environments.

For the operating environment and development environment of the sample program, refer to the following chapter of ReadMe_Eng.txt.

- Environment of operation
- Contents - [Windows] - Sample Program
- Contents - [Macintosh] - Sample Program

Files

The sample program needs following files. Copy these files on the appropriate folder and use it.

Windows

File Name	Folder
Type0023.md3	Same as this sample program
NkdPTP.dll	Same as Type0023.md3
dnssd.dll	Same as this sample program
NkRoyalmile.dll	Same as this sample program

- If you want to change the folder of Type0023.md3, you should modify Seach_Module() function of Function.cpp.

Macintosh

File Name	Folder
Type0023 Module.bundle	Same as this sample program
libNkPTPDriver2.dylib	SYSTEM/Library/Application Support/Nikon/Camera Control Modules/
Royalmile.framework	Same as libNkPTPDriver2.dylib

- If you want to change the folder of Type0023 Module.bundle, you should modify Search_Module() function of Function.cpp.
- The meaning of SYSTEM is the directory where OS is installed.

Main Menu

When you start the sample program, it loads module and opens module object. Then main menu is shown.

1) Select Device

If some devices are connected to PC, you can choose which device will be used. Then sub menu 1 is shown.

2) AsyncRate

Show a recommended interval of Command_Async.

(refer to 9.1 kNkMAIDCapability_AsyncRate in MAID3.PDF)

3) IsAlive

Show the status of Module object.

(refer to 9.6 kNkMAIDCapability_IsAlive in MAID3.PDF)

4) Name

Show the name of Module object.

(refer to 9.9 kNkMAIDCapability_Name in MAID3.PDF)

5) ModuleType

Show the type of Module object.

(refer to 9.53 kNkMAIDCapability_ModuleType in MAID3.PDF)

6) Version

Show version of MAID supported by the module.

(refer to 9.57 kNkMAIDCapability_Version in MAID3.PDF)

Sub Menu 1

You can read or write the settings of the source object.

1) Select Item Object

If some pictures are stored in camera, you can choose which item object will be used. Then sub menu 2 is shown. (When this menu returns the message "There is no item" though Capture command is succeeded, please retry this menu until new item object is detected.)

2) Camera settings(1)

You can change some camera settings. Sub menu 3 will be shown.

3) Camera settings(2)

You can change other camera settings. Sub menu 4 will be shown.

4) Movie Menu

You can change movie settings. Sub menu 5 will be shown.

5) Shooting Menu

You can change photography settings. Sub menu 6 will be shown.

6) Live View

You can change Live View settings. Sub menu 7 will be shown.

7) Custom Menu

You can change custom settings. Sub menu 8 will be shown.

8) SB Menu

You can change flash settings. Sub menu 9 will be shown.

9) Async

Send kNkMAIDCommand_Async to detect in camera condition.

(refer to 8.1 kNkMAIDCommand_Async in MAID3.PDF)

10) Capture

Take a picture. If you try to transfer images to PC, you must change 20)SaveMedia of Sub Menu 3 to SDRAM. When you set it to Card, the module does not notify of the addition of the item object.

(refer to 5.17 kNkMAIDCapability_Capture in MAID3Type0023.PDF)

11) TerminateCapture

Terminate bulb exposure shooting and record to SDRAM the image until stopped bulb.(refer to 3.165 kNkMAIDCapability_TerminateCapture in MAID3Type0023.PDF)

12) PreCapture

Take a picture for presetting white balance.

(refer to 3.270 kNkMAIDCapability_PreCapture in MAID3Type0023.PDF)

13) CaptureAsync

Take a picture. The result of this Capability is confirmed by 15) DeviceReady. If you try to transfer images to PC, you must change 20)SaveMedia of Sub Menu 3 to SDRAM. When you set it to Card, the module does not notify of the addition of the item object.

(refer to 3.231 kNkMAIDCapability_CaptureAsync in MAID3Type0023.PDF)

14) AFCaptureAsync

This will take a picture after auto focus. The result of this Capability is confirmed by 15)

DeviceReady. If you try to transfer images to PC, you must change 20)SaveMedia of Sub Menu 3 to SDRAM. When you set it to Card, the module does not notify of the addition of the item object.

(refer to 3.232 kNkMAIDCapability_AFCaptureAsync in MAID3Type0023.PDF)

15) DeviceReady

This will check the operating status of 13) CaptureAsync, 14) AFCaptureAsync.

(refer to 3.233 kNkMAIDCapability_DeviceReady in MAID3Type0023.PDF)

Sub Menu 2

You can read or write the settings of the item object.

1) Select Data Object

You can choose data object.

If image object is selected, sub menu 10 will be shown. If movie object is selected, sub menu 11 will be shown. If thumbnail object is selected, sub menu 12 will be shown.

2) Delete

Delete the DRAM image of Item object.

(refer to 3.151 kNkMAIDCapability_DeleteDramImage in MAID3Type0023.PDF)

3) IsAlive

Show the status of this Item object.

(refer to 9.6 kNkMAIDCapability_IsAlive in MAID3.PDF)

4) Name

Show the name of this Item object.

(refer to 9.9 kNkMAIDCapability_Name in MAID3.PDF)

5) DataTypes

Show the data types supported by this Item object.

(refer to 9.12 kNkMAIDCapability_DataTypes in MAID3.PDF)

6) DateTime

Show the date and time when this Item was created.

(refer to 9.13 kNkMAIDCapability_DateTime in MAID3.PDF)

7) StoredBytes

Show the file size of this Item in bytes.

(refer to 9.14 kNkMAIDCapability_StoredBytes in MAID3.PDF)

Sub Menu 3

You can read and write the detailed settings (1) of the source object.

1) IsAlive

Show the status of this Source object.

(refer to 9.6 kNkMAIDCapability_IsAlive in MAID3.PDF)

2) Name

Show the name of this Source object.

(refer to 9.9 kNkMAIDCapability_Name in MAID3.PDF)

3) Interface

Show the physical interface of this Source object.

(refer to 9.11 kNkMAIDCapability_Interface in MAID3.PDF)

4) DataTypes

Show the data types supported by this Item object.

(refer to 9.12 kNkMAIDCapability_DataTypes in MAID3.PDF)

5) BatteryLevel

Show battery level.

(refer to 5.47 kNkMAIDCapability_BatteryLevel in MAID3Type0023.PDF)

6) FlashMode

Set the flash mode of this source.

(refer to 5.51 kNkMAIDCapability_FlashMode in MAID3Type0023.PDF)

7) LockFocus

Show the status of focus lock.

(refer to 3.133 kNkMAIDCapability_LockFocus in MAID3Type0023.PDF)

8) LockExposure

Show the status of exposure lock.

(refer to 3.132 kNkMAIDCapability_LockExposure in MAID3Type0023.PDF)

9) ExposureStatus

Show the exposure value measured by camera.

(refer to 3.135 kNkMAIDCapability_ExposureStatus in MAID3Type0023.PDF)

10) ExposureMode

Set the exposure mode of camera.

(refer to 3.116 kNkMAIDCapability_ExposureMode in MAID3Type0023.PDF)

11) ShutterSpeed

Set the exposure time of camera.

(refer to 3.112 kNkMAIDCapability_ShutterSpeed in MAID3Type0023.PDF)

12) Aperture

Set the aperture of camera.

(refer to 3.114 kNkMAIDCapability_Aperture in MAID3Type0023.PDF)

13) FlexibleProgram

Set the flexible program of camera.

(refer to 3.113 kNkMAIDCapability_FlexibleProgram in MAID3Type0023.PDF)

14) ExposureComp

Set the exposure compensation of camera.

(refer to 3.117 kNkMAIDCapability_ExposureComp in MAID3Type0023.PDF)

15) MeteringMode

Set the metering mode of camera.

(refer to 3.115 kNkMAIDCapability_MeteringMode in MAID3Type0023.PDF)

16) FocusMode

Show focus mode.

(refer to 3.138 kNkMAIDCapability_FocusMode in MAID3Type0023.PDF)

17) FocusAreaMode

Set focus area mode.

(refer to 3.120 kNkMAIDCapability_FocusAreaMode in MAID3Type0023.PDF)

18) FocalLength

Show focal length(unit: mm).

(refer to 3.137 kNkMAIDCapability_FocalLength in MAID3Type0023.PDF)

19) ClockDateTime

Adjust internal clock.

(refer to 3.105 kNkMAIDCapability_ClockDateTime in MAID3Type0023.PDF)

20) SaveMedia

This will set the recording media.

(refer to 3.164 kNkMAIDCapability_SaveMedia in MAID3Type0023.PDF)

21) InternalFlashComp

Set the flash compensation amount.

(refer to 3.245 kNkMAIDCapability_InternalFlashComp in MAID3Type0023.PDF)

Sub Menu 4

You can read and write the detailed settings (2) of the source object.

1) LockCamera

Keep the camera from direct operation(not through host computer).

(refer to 3.156 kNkMAIDCapability_LockCamera in MAID3Type0023.PDF)

2) LensType

Shows the lens type about CPU lens.

(refer to 3.158 kNkMAIDCapability_LensType in MAID3Type0023.PDF)

3) LensInfo

Show lens information(focal length and aperture).

(refer to 3.144 kNkMAIDCapability_LensInfo in MAID3Type0023.PDF)

4) UserComment

Set characters which will be written in a new picture file.

(refer to 3.103 kNkMAIDCapability_UserComment in MAID3Type0023.PDF)

5) EnableComment

Enable to add UserComment to an image file.

(refer to 3.104 kNkMAIDCapability_EnableComment in MAID3Type0023.PDF)

6) IsoControl

Set whether auto sensitivity control is used when you take a picture.

(refer to 3.39 kNkMAIDCapability_IsoControl in MAIDType0023.PDF)

7) NoiseReduction

Set whether noise reduction is used when you take a picture.

(refer to 3.40 kNkMAIDCapability_NoiseReduction in MAIDType0023.PDF)

8) FlashISOAutoHighLimit

Set the auto ISO sensitivity control with flash.

(refer to 3.64 kNkMAIDCapability_FlashISOAutoHighLimit in MAIDType0023.PDF)

9) FlickerReductionSetting

Set flicker reduction setting.

(refer to 3.236. kNkMAIDCapability_FlickerReductionSetting in MAIDType0023.PDF)

10) DiffractionCompensation

Set diffraction compensation.

(refer to 3.247. kNkMAIDCapability_DiffractionCompensation in MAIDType0023.PDF)

11) GetManualSettingLensData

Get lens information of manual setting.

(refer to 3.271. kNkMAIDCapability_GetManualSettingLensData in MAIDType0023.PDF)

12) ShootingMode

Set the shooting mode.

(refer to 3.118. kNkMAIDCapability_ShootingMode in MAIDType0023.PDF)

13) UserMode1

Shows the shooting mode of the U1 positions on the mode dial.

(refer to 3.57. kNkMAIDCapability_UserMode1 in MAIDType0023.PDF)

14) UserMode2

Show the shooting mode of the U2 positions on the mode dial.

(refer to 3.58. kNkMAIDCapability_UserMode2 in MAIDType0023.PDF)

15) UserMode3

Shows the shooting mode of the U3 positions on the mode dial.

(refer to 3.59. kNkMAIDCapability_UserMode3 in MAIDType0023.PDF)

16) VibrationReduction

Set the vibration reduction.

(refer to 3.248. kNkMAIDCapability_VibrationReduction in MAIDType0023.PDF)

17) CameraType

Get camera type.

(refer to 3.157. kNkMAIDCapability_CameraType in MAIDType0023.PDF)

18) HDMIOutputDataDepth

Set "HDMI-Output data depth".

(refer to 3.261. kNkMAIDCapability_HDMIOutputDataDepth in MAIDType0023.PDF)

19) HDRSaveIndividualImages

Set "HDR - Save individual images(NEF)".

(refer to 3.63. kNkMAIDCapability_HDRSaveIndividualImages in MAIDType0023.PDF)

20) SaveCameraSetting

You can save camera settings.

(refer to 3.243. kNkMAIDCapability_SaveCameraSetting in MAIDType0023.PDF)

21) ExternalRecordingControl

Set "HDMI- External recording control".

(refer to 3.238. kNkMAIDCapability_ExternalRecordingControl in MAIDType0023.PDF)

22) MovieLogSetting

Show “HDMI- Advanced - N-Log setting”.

(refer to 3.260. kNkMAIDCapability_MovieLogSetting in MAIDType0023.PDF)

Sub Menu 5

You can read and write settings concerned with movie.

1) MoviePictureControl

Set and get current Picture Control for movie.

(refer to 3.215 kNkMAIDCapability_MoviePictureControl in MAIDType0023.PDF)

2) MoviePictureControlDataEx2

Set and get Picture Control data for movie.

When you set Picture Control data to camera, you have to name the file “MovPicCtrlData.dat” and put the file in this application folder in Windows, or put the file in home directory in Macintosh.

(refer to 3.179 kNkMAIDCapability_Movie PictureControlDataEx2 in MAIDType0023.PDF)

3) DeleteMovieCustomPictureControl

Delete Custom Picture Control for movie.

(refer to 3.181 kNkMAIDCapability_DeleteMovieCustomPictureControl in MAIDType0023.PDF)

4) MovieMeteringMode

Set the metering mode of camera for movie.

(refer to 3.217 kNkMAIDCapability_MovieMeteringMode in MAIDType0023.PDF)

5) MovieActive_D_Lighting

Set Active D-Lighting for movie.

(refer to 3.235 kNkMAIDCapability_MovieActive_D_Lighting in MAIDType0023.PDF)

6) MovieAttenuator

Set attenuator for movie.

(refer to 3.242. kNkMAIDCapability_MovieAttenuator in MAIDType0023.PDF)

7) MovieAutoDistortion

Set auto distortion control for movie.

(refer to 3.249. kNkMAIDCapability_MovieAutoDistortion in MAIDType0023.PDF)

8) MovieDiffractionCompensation

Set diffraction compensation for movie.

(refer to 3.254. kNkMAIDCapability_MovieDiffractionCompensation in MAIDType0023.PDF)

9) MovieFileType

Set the movie file type.

(refer to 3.244. kNkMAIDCapability_MovieFileType in MAIDType0023.PDF)

10) MovieFocusMode

Set focus mode for movie

(refer to 3.252. kNkMAIDCapability_MovieFocusMode in MAIDType0023.PDF)

11) MovieLogOutput

Show the status of N-Log control.

(refer to 3.259. kNkMAIDCapability_MovieLogOutput in MAIDType0023.PDF)

12) MovieScreenSize

Set frame size / frame rate for movie.

(refer to 3.52. kNkMAIDCapability_MovieScreenSize in MAIDType0023.PDF)

13) MovieVibrationReduction

Set vibration reduction for movie.

(refer to 3.251. kNkMAIDCapability_MovieVibrationReduction in MAIDType0023.PDF)

14) MovieVignetteControl

Set vignette control for movie.

(refer to 3.253. kNkMAIDCapability_MovieVignetteControl in MAIDType0023.PDF)

15) RecordTimeCodes

Set "Timecode - Record timecodes" on movie shooting menu.

(refer to 3.255. kNkMAIDCapability_RecordTimeCodes in MAIDType0023.PDF)

16) CountUpMethod

Set "Timecode - Count-up method" on movie shooting menu.

(refer to 3.256 kNkMAIDCapability_CountUpMethod in MAIDType0023.PDF)

17) DropFrame

Set "Timecode - Drop frame" on movie shooting menu.

(refer to 3.258. kNkMAIDCapability_DropFrame in MAIDType0023.PDF)

18) TimeCodeOrigin

Set "Timecode - Timecode origin" on movie shooting menu.

(refer to 3.257. kNkMAIDCapability_TimeCodeOrigin in MAIDType0023.PDF)

19) MovieAfAreaMode

Set AF-area mode for movie.

(refer to 3.250. kNkMAIDCapability_MovieAfAreaMode in MAIDType0023.PDF)

20) ElectronicVR

Select electric VR of Movie shooting menu.

(refer to 3.234 kNkMAIDCapability_ElectronicVR in MAID3Type0023.PDF)

Sub Menu 6

You can read and write settings concerned with photography.

1) CompressionLevel

Set compression level of the image file created by camera.

(refer to 3.3 kNkMAIDCapability_CompressionLevel in MAID3Type0023.PDF)

2) ImageSize

Set the image size for JPEG/ TIFF.

(refer to 3.1 kNkMAIDCapability_ImageSize in MAID3Type0023.PDF)

3) RawImageSize

Set the image size of RAW.

(refer to 3.2 kNkMAIDCapability_RawImageSize in MAID3Type0023.PDF)

4) WBMode

Set white balance mode(auto/Incandescent/...).

(refer to 3.4 kNkMAIDCapability_WBMode in MAIDType0023.PDF)

5) Sensitivity

Set sensitivity of camera.

(refer to 3.5 kNkMAIDCapability_Sensitivity in MAIDType0023.PDF)

6) WB TuneAuto

Adjust white balance in Auto mode.

(refer to 3.8 kNkMAIDCapability_WBTuneAuto in MAIDType0023.PDF)

7) WB TuneIncandescent

Adjust white balance in Incandescent mode.

(refer to 3.10 kNkMAIDCapability_WBTuneIncandescent in MAIDType0023.PDF)

8) WBFluorescentType

Set the fluorescent type when the white balance is “Fluorescent”.

(refer to 3.11 kNkMAIDCapability_WBFluorescentType in MAIDType0023.PDF)

9) WB TuneFluorescent

Adjust white balance in Fluorescent mode.

(refer to 3.12 kNkMAIDCapability_WBTuneFluorescent in MAIDType0023.PDF)

10) WB TuneSunny

Adjust white balance in Sunny mode.

(refer to 3.13 kNkMAIDCapability_WBTuneSunny in MAIDType0023.PDF)

11) WB TuneFlash

Adjust white balance in Flash mode.

(refer to 3.14 kNkMAIDCapability_WBTuneFlash in MAIDType0023.PDF)

12) WB TuneShade

Adjust white balance in Shade mode.

(refer to 3.15 kNkMAIDCapability_WBTuneShade in MAIDType0023.PDF)

13) WB TuneCloudy

Adjust white balance in Cloudy mode.

(refer to 3.16 kNkMAIDCapability_WBTuneCloudy in MAIDType0023.PDF)

14) WBPresetData

Set white balance preset data to camera.

When you set preset data to camera, you have to name the file “PresetData.jpg” and put the file in this application folder in Windows, or put the file in home directory in Macintosh.

(refer to 3.34 kNkMAIDCapability_WBPresetData in MAIDType0023.PDF)

15) PictureControl

Set and get current Picture Control.

(refer to 3.43 kNkMAIDCapability_PictureControl in MAIDType0023.PDF)

16) PictureControlDataEx2

Set and get Picture Control data.

When you set Picture Control data to camera, you have to name the file “PicCtrlData.dat” and put the file in this application folder in Windows, or put the file in home directory in Macintosh.

(refer to 3.44 kNkMAIDCapability_PictureControlDataEx2 in MAIDType0023.PDF)

17) DeleteCustomPictureControl

Delete Custom Picture Control on Photo shooting menu.

(refer to 3.46 kNkMAIDCapability_DeleteCustomPictureControl in MAIDType0023.PDF)

18) WBAutoType

Set white balance Auto type in Auto mode.

(refer to 3.9 kNkMAIDCapability_WBAutoType in MAIDType0023.PDF)

19) WB TuneNatural

Adjust white balance in Natural mode.

(refer to 3.19 kNkMAIDCapability_WBTuneNatural in MAIDType0023.PDF)

Sub Menu 7

You can read and write settings concerned with Live View.

1) LiveViewProhibit

Get the Live view prohibition condition.

(refer to 3.128 kNkMAIDCapability_LiveViewProhibit in MAIDType0023.PDF)

2) LiveViewStatus

Start or stop Live view, and get current status of Live view.

(refer to 3.127 kNkMAIDCapability_LiveViewStatus in MAIDType0023.PDF)

3) LiveViewImageSize

This will set the size of “Live View image”.

(refer to 3.218 kNkMAIDCapability_LiveViewImageSize in MAIDType0023.PDF)

4) GetLiveViewImage

Live view data will be got. Display information will be saved as like “LiveView001_H.dat” and Live view image will be saved as like “LiveView001.jpg” in application folder in Windows, or in home directory in Macintosh.

(refer to 3.154 kNkMAIDCapability_GetLiveViewImage in MAIDType0023.PDF)

5) LiveViewImageStatus

Get the state of the live view image to be acquired with kNkMAIDCapability_GetLiveViewImage.

(refer to 3.264 kNkMAIDCapability_LiveViewImageStatus in MAIDType0023.PDF)

6) MovRecInCardProhibit

Get the Movie record prohibition condition.

(refer to 3.160 kNkMAIDCapability_MovRecInCardProhibit in MAIDType0023.PDF)

7) MovRecInCardStatus

Start or stop Movie record, and get current status of Movie record.

(refer to 3.159 kNkMAIDCapability_MovRecInCardStatus in MAIDType0023.PDF)

8) LiveViewZoomArea

Set the zoom area of live view image.

(refer to 3.265 kNkMAIDCapability_LiveViewZoomArea in MAIDType0023.PDF)

9) TrackingAFArea

The tracking operation is started at Auto-area AF. Also change the selected face.

(refer to 3.266. kNkMAIDCapability_TrackingAFArea in MAIDType0023.PDF)

Sub Menu 8

You can read and write a custom setting of source object.

1) EVInterval

Select an interval of exposure value.

(refer to 3.72 kMAIDCapability_EVInterval in MAIDType0023.PDF)

2) BracketingVary

Select a Bracketing variation.

(refer to 3.86 kMAIDCapability_BracketingVary in MAIDType0023.PDF)

3) AFLockOnAcross

Set focus tracking with lock-on - across.

(refer to 3.68 kNkMAIDCapability_AFLockOnAcross in MAIDType0023.PDF)

4) FaceDetection

Set face detection on 3D tracking.

(refer to 3.69 kNkMAIDCapability_FaceDetection in MAIDType0023.PDF)

5) ExposureCompFlashUsed

Set exposure comp. for flash.

(refer to 3.85 kNkMAIDCapability_ExposureCompFlashUsed in MAIDType0023.PDF)

6) ExpBaseHighlight

Set the exposure base when the metering mode is highlight-weighted metering.

(refer to 3.77 kNkMAIDCapability_ExpBaseHighlight in MAID3Type0023.PDF)

7) ElectronicFrontCurtainShutter / ElectronicFrontCurtainShutterEx

Set Electronic front-curtain shutter.

When the camera is "Z 7" or "Z 7_FU1", it is "ElectronicFrontCurtainShutter", and when it is "Z 7_FU2" or "Z 7_FU3", it is "ElectronicFrontCurtainShutterEx".

(refer to 3.230 kNkMAIDCapability_ElectronicFrontCurtainShutter in MAID3Type0023.PDF)

(refer to 3.273 kNkMAIDCapability_ElectronicFrontCurtainShutterEx in MAID3Type0023.PDF)

8) AFcPriority

Set AF-C priority selection.

(refer to 3.66 kNkMAIDCapability_AFcPriority in MAID3Type0023.PDF)

9) ApplyLiveViewSetting

Set the setting of "Shooting/display - Apply settings to live view".

(refer to 3.263 kNkMAIDCapability_ApplyLiveViewSetting in MAID3Type0023.PDF)

10) DetectionPeaking

Set detection of peaking.

(refer to 3.240 kNkMAIDCapability_DetectionPeaking in MAID3Type0023.PDF)

11) HighlightBrightness

Set Highlight brightness.

(refer to 3.241 kNkMAIDCapability_HighlightBrightness in MAID3Type0023.PDF)

12) LowLightAF

Set the setting of "Autofocus - Low-light AF".

(refer to 3.262 kNkMAIDCapability_LowLightAF in MAID3Type0023.PDF)

13) MovieAfSpeed

Set "Movie - AF speed".

(refer to refer to 3.267 kNkMAIDCapability_MovieAfSpeed)

14) MovieAfSpeedWhenToApply

Set "Movie - AF speed - When to apply".

(refer to 3.268 kNkMAIDCapability_MovieAfSpeedWhenToApply)

15) MovieAfTrackingSensitivity

Set "Movie - AF tracking sensitivity".

(refer to 3.269 kNkMAIDCapability_MovieAfTrackingSensitivity in MAIDType0023.PDF)

Sub Menu 9

You can change flash settings.

1) SBWirelessMode

Set wireless flash options

(refer to 3.92 kNkMAIDCapability_SBWirelessMode in MAID3Type0023.PDF)

2) SBWirelessMultipleFlashMode

Set the flash mode of the external multiple flash.

(refer to 3.93 kNkMAIDCapability_SBWirelessMultipleFlashMode in MAID3Type0023.PDF)

3) SBUsableGroup

Set the available group of the external flash.

(refer to 3.94 kNkMAIDCapability_SBUUsableGroup in MAID3Type0023.PDF)

4) WirelessCLSEntryMode

Set the setting of “Remote (WR) setting - Link mode” in the setup menu.

(refer to 3.95 kNkMAIDCapability_WirelessCLSEntryMode in MAID3Type0023.PDF)

5) SBPINCode

Set the PIN code of “Remote (WR) setting - Link mode” in the setup menu.

(refer to 3.96 kNkMAIDCapability_SBPINCode in MAID3Type0023.PDF)

6) RadioMultipleFlashChannel

Get the communication channel of the wireless remote controller.

(refer to 3.97 kNkMAIDCapability_RadioMultipleFlashChannel in MAID3Type0023.PDF)

7) OpticalMultipleFlashChannel

Set the channel of the optical communication to the external flash.

(refer to 3.98 kNkMAIDCapability_OpticalMultipleFlashChannel in MAID3Type0023.PDF)

8) FlashRangeDisplay

Get the unit of distance for the setting of the external flash.

(refer to 3.99 kNkMAIDCapability_FlashRangeDisplay in MAID3Type0023.PDF)

9) AllTestFiringDisable

Get the disabled state for the test firing of the external flash.

(refer to 3.100 kNkMAIDCapability_AllTestFiringDisable in MAID3Type0023.PDF)

10) SBSettingMemberLock

Set the lock state of the dials and the buttons on the external flash.

(refer to 3.101 kNkMAIDCapability_SBSettingMemberLock in MAID3Type0023.PDF)

11) SBIntegrationFlashReady

Get the information about the ready state of the external flash displayed in the flash info of the INFO display.

(refer to 3.237 kNkMAIDCapability_SBIntegrationFlashReady in MAID3Type0023.PDF)

12) GetSBHandles

Get the handle of the flash attached with the camera.

SB handle list will be saved as like “SBHandles.dat” in application folder in Windows, or in home directory in Macintosh.

(refer to 3.224 kNkMAIDCapability_GetSBHandles in MAID3Type0023.PDF)

13) GetSBAttrDesc

Get the descriptor of the attribute for the flash.

SB attribute descriptor will be saved as like “SBAttrDesc.dat” in application folder in Windows, or in home directory in Macintosh.

(refer to 3.225 kNkMAIDCapability_GetSBAttrDesc in MAID3Type0023.PDF)

14) SBAttrValue

Updates the current attribute value for the specified flash.

When you set SB attribute value to camera, you have to name the file “SBAttrValue.dat” and put

the file in this application folder in Windows, or put the file in home directory in Macintosh.

(refer to 3.226 kNkMAIDCapability_SBAttrValue in MAID3Type0023.PDF)

15) GetSBGroupAttrDesc

Get the attribute descriptor for the flash group.

SB group attribute descriptor will be saved as like “SBGroupAttrDesc.dat” in application folder in Windows, or in home directory in Macintosh.

(refer to 3.227 kNkMAIDCapability_GetSBGroupAttrDesc in MAID3Type0023.PDF)

16) SBGroupAttrValue

Updates the current attribute value for the specified flash group.

When you set SB group attribute value to camera, you have to name the file “SBGroupAttrValue.dat” and put the file in this application folder in Windows, or put the file in home directory in Macintosh.

(refer to 3.228 kNkMAIDCapability_SBGroupAttrValue in MAID3Type0023.PDF)

17) TestFlash

This makes the flash fire for testing.

(refer to 3.229 kNkMAIDCapability_TestFlash in MAID3Type0023.PDF)

Sub Menu 10

You can read and write a setting of image object.

1) IsAlive

Show the status of this image object.

(refer to 9.6 kNkMAIDCapability_IsAlive in MAID3.PDF)

2) Name

Show the name of this image object.

(refer to 9.9 kNkMAIDCapability_Name in MAID3.PDF)

3) StoredBytes

Show the file size of this image file in bytes.

(refer to 9.14 kNkMAIDCapability_StoredBytes in MAID3.PDF)

4) Pixels

Show the image size of this image in pixels.

(refer to 9.40 kNkMAIDCapability_Pixels in MAID3.PDF)

5) RawJpegImageStatus

Show whether this image has raw and jpeg or not.

(refer to 3.152 kNkMAIDCapability_RawJpegImageStatus in MAIDType0023.PDF)

6) Acquire

Get an image file. The image is saved as like “Image001.jpg” in application folder in Windows, or saved in home directory in Macintosh.

(refer to 9.19 kNkMAIDCapability_Acquire in MAID3.PDF)

Sub Menu 11

You can read and write a setting of movie object.

1) IsAlive

Show the status of this image object.

(refer to 9.6 kNkMAIDCapability_IsAlive in MAID3.PDF)

2) Name

Show the name of this image object.

(refer to 9.9 kNkMAIDCapability_Name in MAID3.PDF)

3) StoredBytes

Show the file size of this image file in bytes.

(refer to 9.14 kNkMAIDCapability_StoredBytes in MAID3.PDF)

4) Pixels

Show the image size of this image in pixels.

(refer to 9.40 kNkMAIDCapability_Pixels in MAID3.PDF)

5) GetVideoImageEx

Get a movie file. The movie is saved as like "Movie001.jpg" in application folder in Windows, or saved in home directory in Macintosh.

(refer to 3.155 kNkMAIDCapability_GetVideoImageEx in MAIDType0023.PDF)

6) GetRecordingInfo

Get movie record information.

(refer to 3. 246 kNkMAIDCapability_GetRecordingInfo in MAID3Type0023.PDF)

Sub Menu 12

You can read and write a setting of thumbnail object.

1) IsAlive

Show the status of this thumbnail object.

(refer to 9.6 kNkMAIDCapability_IsAlive in MAID3.PDF)

2) Name

Show the name of this thumbnail object.

(refer to 9.9 kNkMAIDCapability_Name in MAID3.PDF)

3) StoredBytes

Show the size of this thumbnail data in bytes.

(refer to 9.14 kNkMAIDCapability_StoredBytes in MAID3.PDF)

4) Pixels

Show the image size of this thumbnail image in pixels.

(refer to 9.40 kNkMAIDCapability_Pixels in MAID3.PDF)

5) Acquire

Get a thumbnail image data. The thumbnail is saved as like “Thumb001.raw” in application folder in Windows, or saved in home directory in Macintosh.

(refer to 9.19 kNkMAIDCapability_Acquire in MAID3.PDF)

Appendix

About sample program(Macintosh)

- When you switch between release and debug binaries, you change "Build Configuration" of "Edit Scheme" menu from Type0023CtrlSample.xcodeproj.

Restriction

- This sample program doesn't provide all of the capability Type0023 module support. About usage of the other capability, please refer the document "MAID3Type0023(E).pdf".
- This sample program doesn't care of changes in camera condition. If you want to check the camera status, you should send kNkMAIDCommand_Async to module object periodically. If this command is carried out, change of the state of a camera will be notified by MAIDEventProc.

History

- Rev.1.6 November 14, 2022
 - Files [Windows]...Added “dnssd.dll” and “NkRoyalmile.dll”.
- Rev.1.5 October 29, 2021
 - Environment...Update the environment.
- Rev.1.4 February 26, 2020
 - Supported camera...Added Z 7_FU3(Z 7 firmup3).
 - Environment...Update the environment of Windows and Macintosh.
 - Sub Menu 8 ElectronicFrontCurtainShutterEx...Added Z 7_FU3(Z 7 firmup3).
- Rev.1.3 November 1, 2019
 - Supported camera...Added Z 7_FU2(Z 7 firmup2).
 - Environment...Update the environment of Macintosh.
 - Environment...Update Windows restrictions.
 - Environment...Update Macintosh restrictions.
 - Sub Menu 8...Added “ElectronicFrontCurtainShutterEx”.
- Rev.1.2 April 25, 2019
 - Supported camera...Added Z 7_FU1(Z 7 firmup1).
 - Environment...Update the environment of Macintosh.
- Rev.1.1 November 16, 2018
 - Environment...Update the environment of Macintosh.
- Rev.1.0 September 28, 2018 First version