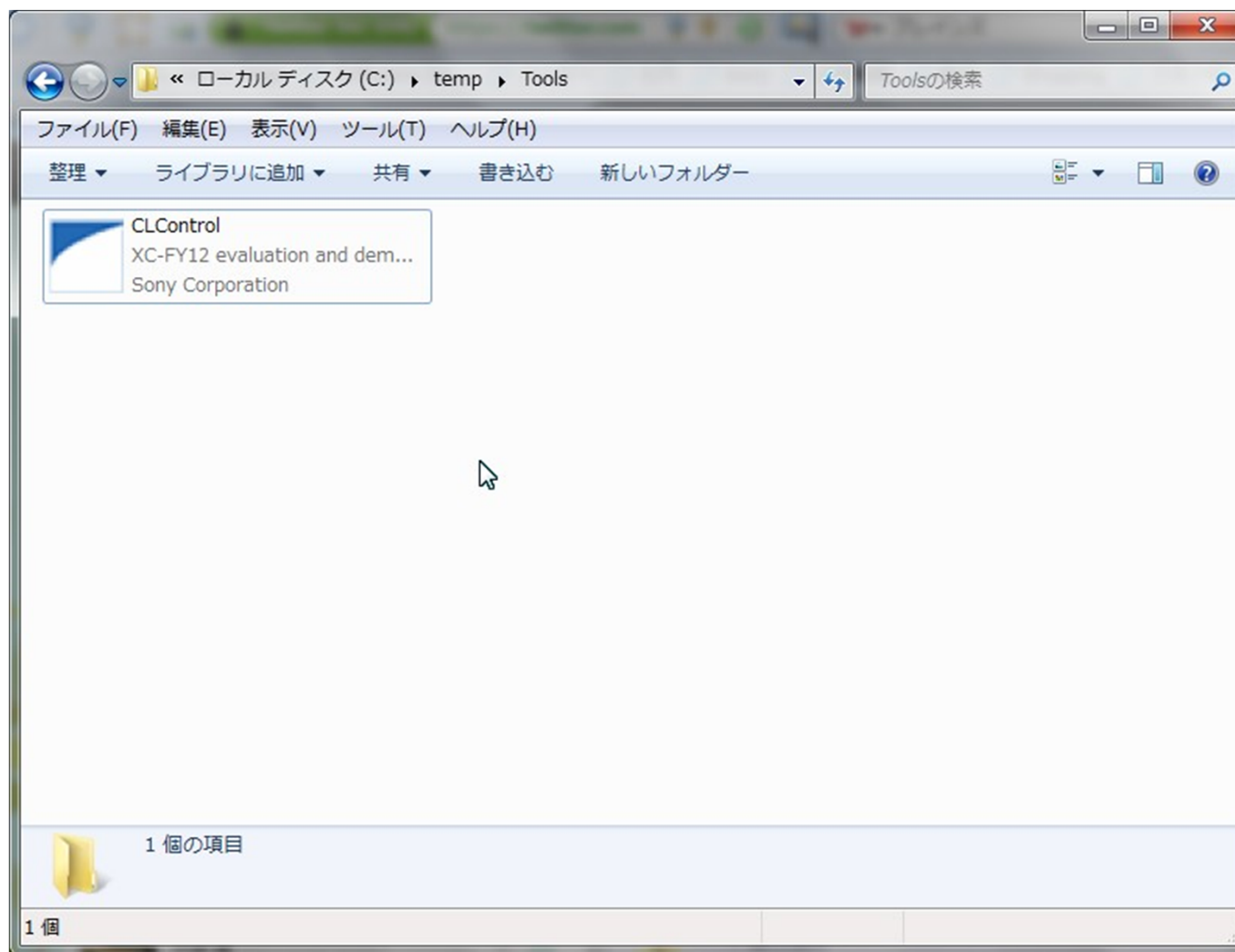


Application operation for XCL-C/-S series

Planning and Marketing Department
Visual Security Solution Business Division
Professional Solution Group
Sony

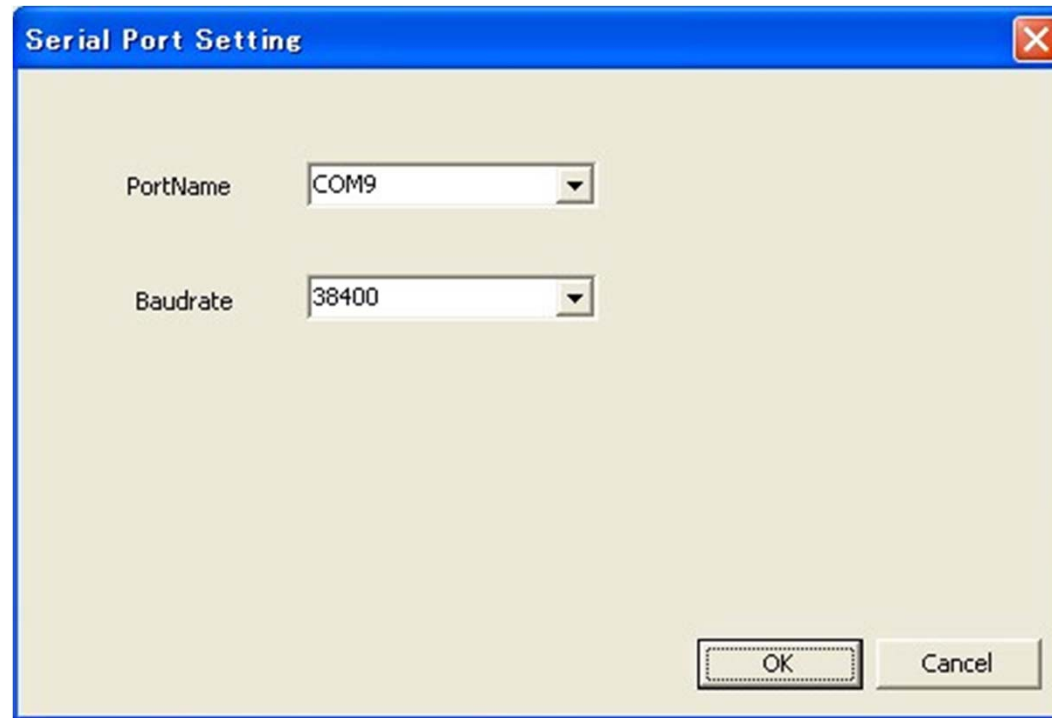
Start the application

Start the application

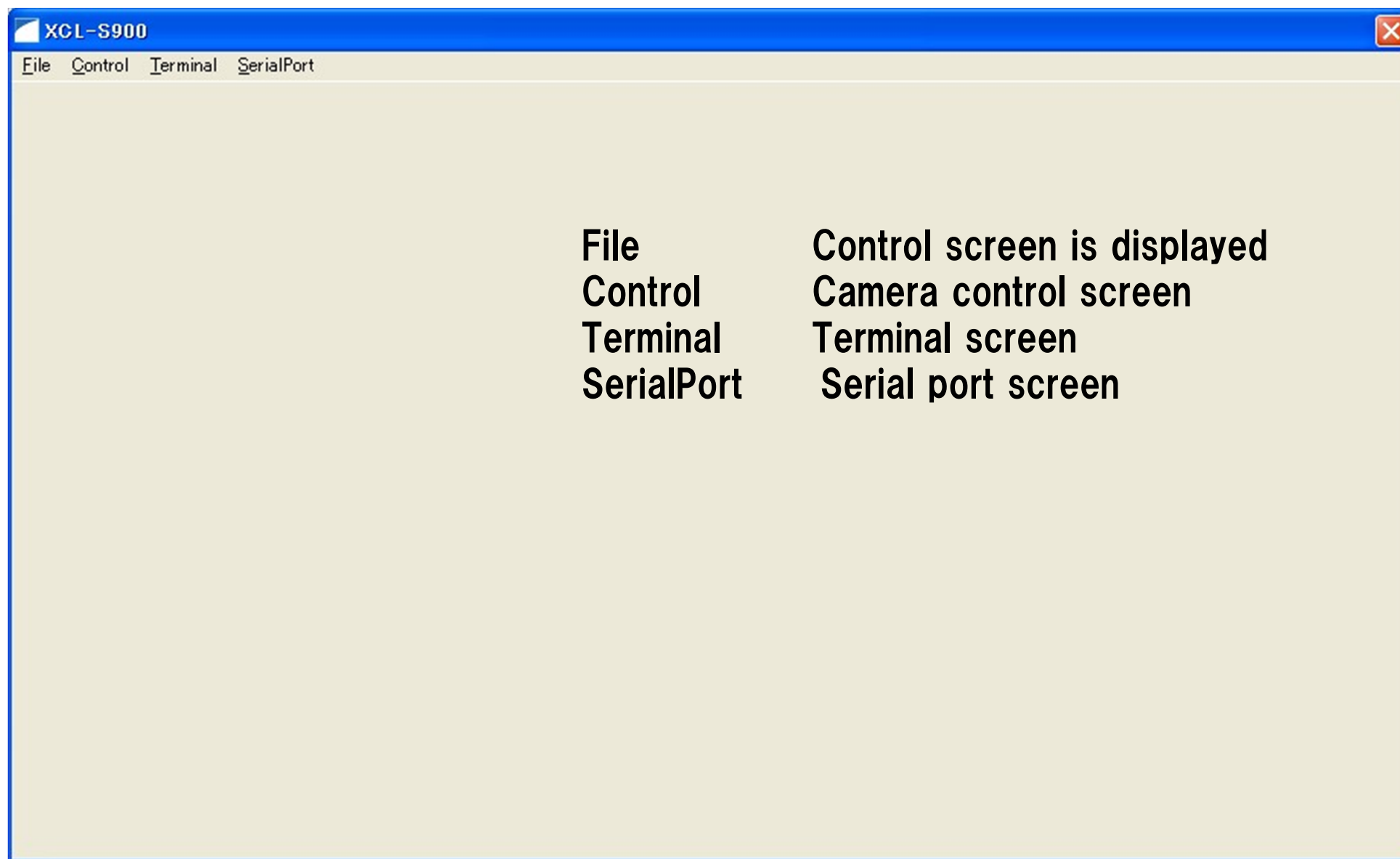


Open the serial port

Open the serial port



Explain for Main screen



Explain for camera control screen (B&W camera)

It does the camera feature of the basic with this screen.

Feature Control Cubic

General | Gain | Exposure | DSP | GPIO | AutoArea | Shading | Close

Information

Vendor=SONY Model=XCL-S900 Version=1.0.05 ID=9200005 User-ID Clear

ManufacturerInfo= HB:75 FB:80 FS:694 Temperature 39 degC Refresh

ROI

Width 3384 Height 2704 OffsetX 4 OffsetY 4

Pixel Format

PixelDepth= 8 ☐ H Binning ☐ V Binning

Framerate

☒ FRATE-AUTO Frame Rate 18.000000 fps

Actual Frame rate 18.088906 fps

Taps

Sensor-Tap ☐ 1 ☐ 2 ☒ 4 CameraLinkr-Tap ☐ 1 ☒ 2

Defect Pixel Check

☐ Change Exposure/Gain ☐ White Defect Check

Userset

Userset selector Default Load Save

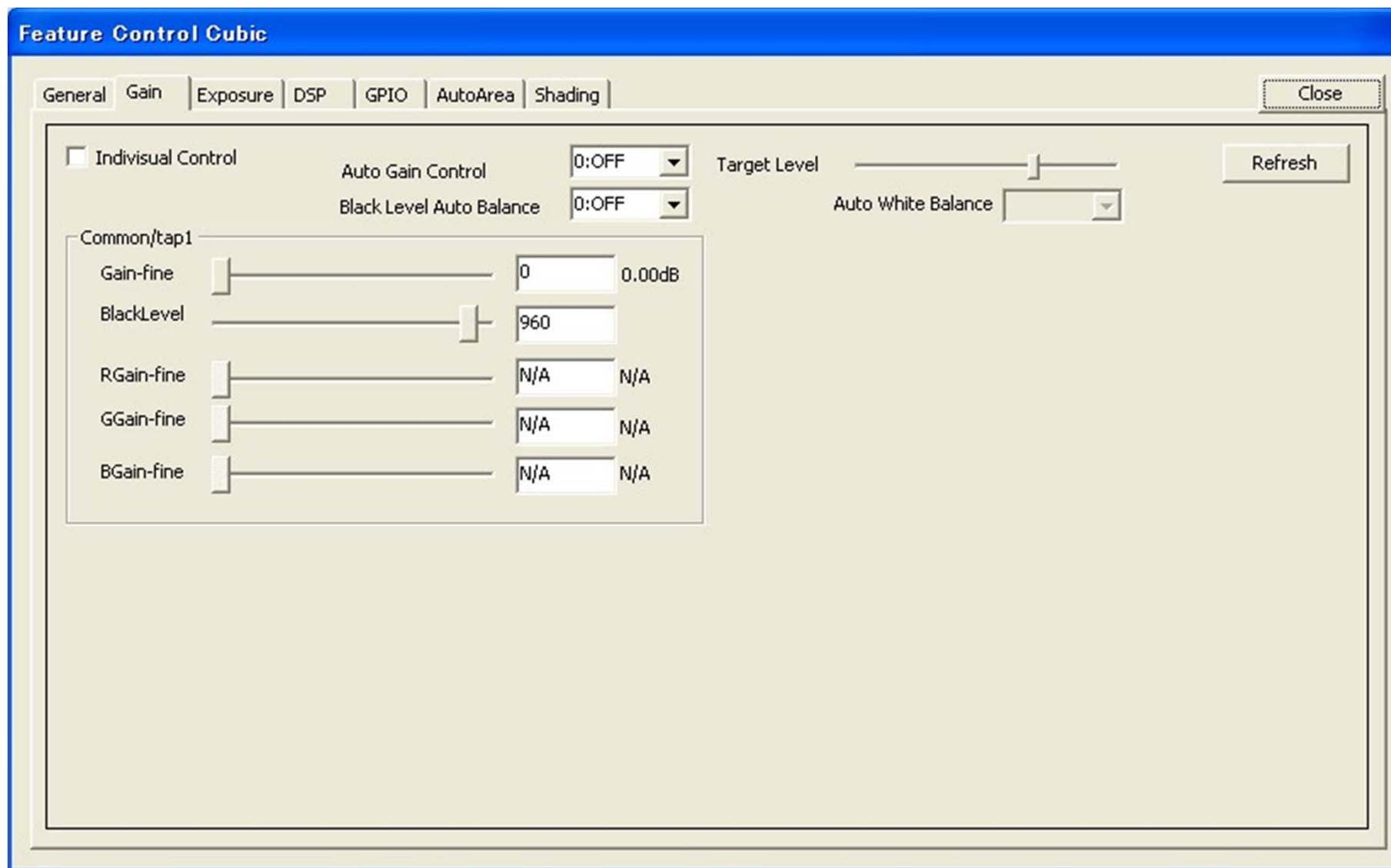
Userset Default 1

☐ VSUB Adjust 80

Baudrate 38400 LED-MODE 1:ON FactoryDefault Reset Test Chart ☒ OFF ☐ Gray ☐ Color

Explain for camera control screen (Gain setting)

It does the Gain setting with this screen.



Explain for camera control screen (Exposure)

It does the Exposure setting with this screen.

Feature Control Cubic

General | Gain | **Exposure** | DSP | GPIO | AutoArea | Shading

Close

Refresh

Exposure

ExposureTime 15000

Auto Exposure 0:OFF

Trigger

☐ TriggerMode

Source

Fire SoftTrigger 100 ms

Trigger Delay 0

☐ TriggerPolarity

☒ TriggerControl

EXP-MODE 0:Edge

☐ Trigger Inhibit

☒ TriggerShift

☐ TriggerRange

Lower 10 Upper 2000000

Special Trigger Mode

Special Trigger Mode 0:OFF

Number of frames 2

Trigger source

☐ Trigger Polarity

Explain for camera control screen (DSP setting)

It does LUT and Filter feature with this screen.

The screenshot shows the 'Feature Control Cubic' window with the 'DSP' tab selected. The window has a blue title bar and a light beige background. At the top, there are tabs for 'General', 'Gain', 'Exposure', 'DSP', 'GPIO', 'AutoArea', and 'Shading'. A 'Close' button is in the top right corner.

The 'LUT' section on the left contains four radio buttons: 'Normal' (selected), 'Reverse', 'Binarize', and 'LinearInterpolation'. The 'Binarize' option has a 'Threshold' field set to '2047'. Below these are five pairs of input fields for 'LinearInterpolation': (256, 256), (512, 512), (1024, 1024), (2048, 2048), and (3072, 3072). A 'Build' button is at the bottom right of this section. A 'UserSetting' radio button is at the bottom left.

The 'Color Matrix' section on the right has a 'Refresh' button at the top right. It contains a checkbox for 'Color Linear Matrix' with the note '(Available when Pixel-Depth is 24)'. Below this is a 3x3 grid of input fields. To the right of the grid are 'Set' and 'Reset' buttons. Below the grid are 'Hue' and 'Saturation' sliders.

The 'Spatial Filter' section at the bottom right has a checkbox for 'Spatial Filter'. Below it is a 3x3 grid of input fields. The middle-right field contains '256', while the others are '0'. To the right of the grid are 'Set' and 'Reset' buttons.

Explain for camera control screen (GPIO setting)

It does the GPIO setting with this screen.

Feature Control Cubic

General | Gain | Exposure | DSP | **GPIO** | AutoArea | Shading

Close

Refresh

GPO

UserOutput

☐ UserOutput 1

☐ UserOutput 2

☐ UserOutput 3

Pulse Generator

Cycle: 1000000 us

Duty: 500000 us

Strobe

	Time	Delay	
(4)	256	100 us	
(6)	256	100 us	
(9)	256	100 us	
(7)	256	100 us	

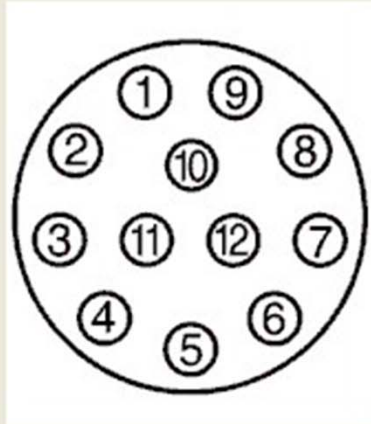
GPO-SOURCE

— User1 — ☒ Inverter(4)

— User1 — ☒ Inverter(6)

— User1 — ☒ Inverter(9)

— User1 — ☒ Inverter(7)



GPI

Read

GPI-Pin (7) = 0 GPI-Pin (10) = 0 GPI-Pin (11) = 1

GPI-Pin (4) = 0

In/Out direction

Pin 7: IN

Pin 4: IN

Explain for camera control screen (AutoArea setting)

It does the window for auto function with this screen.

Feature Control Cubic

General | Gain | Exposure | DSP | GPIO | **AutoArea** | Shading

Close

Refresh

AE/AGC Detection Area

25 50

25

50

☐ Highlight

AWB Detection Area

N/A N/A

N/A

N/A

☐ Highlight

AGC Lower Limit 0 AGC Upper Limit 18

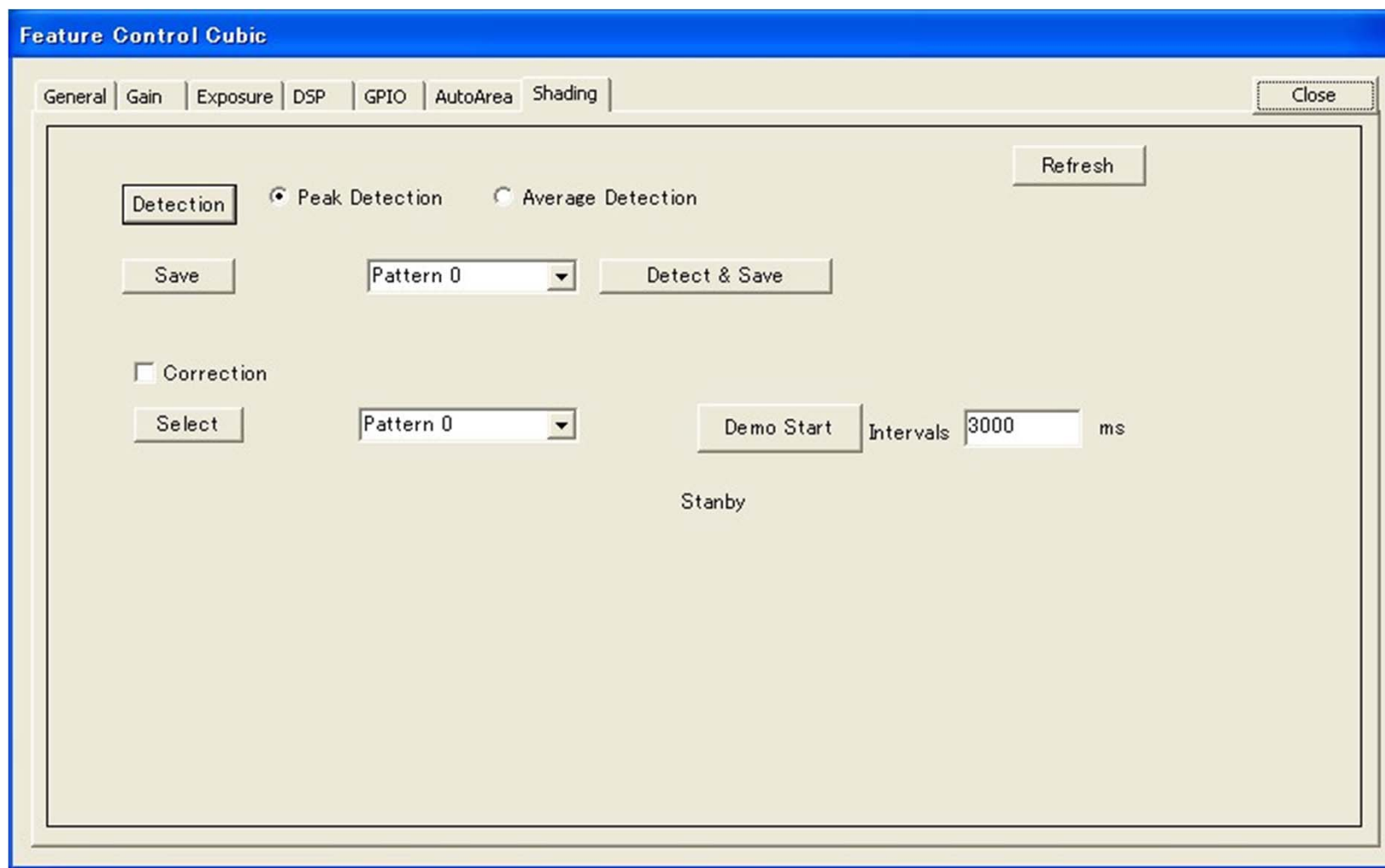
AGC Speed

AE Lower Limit 10 AE Upper Limit 55000

AE Speed

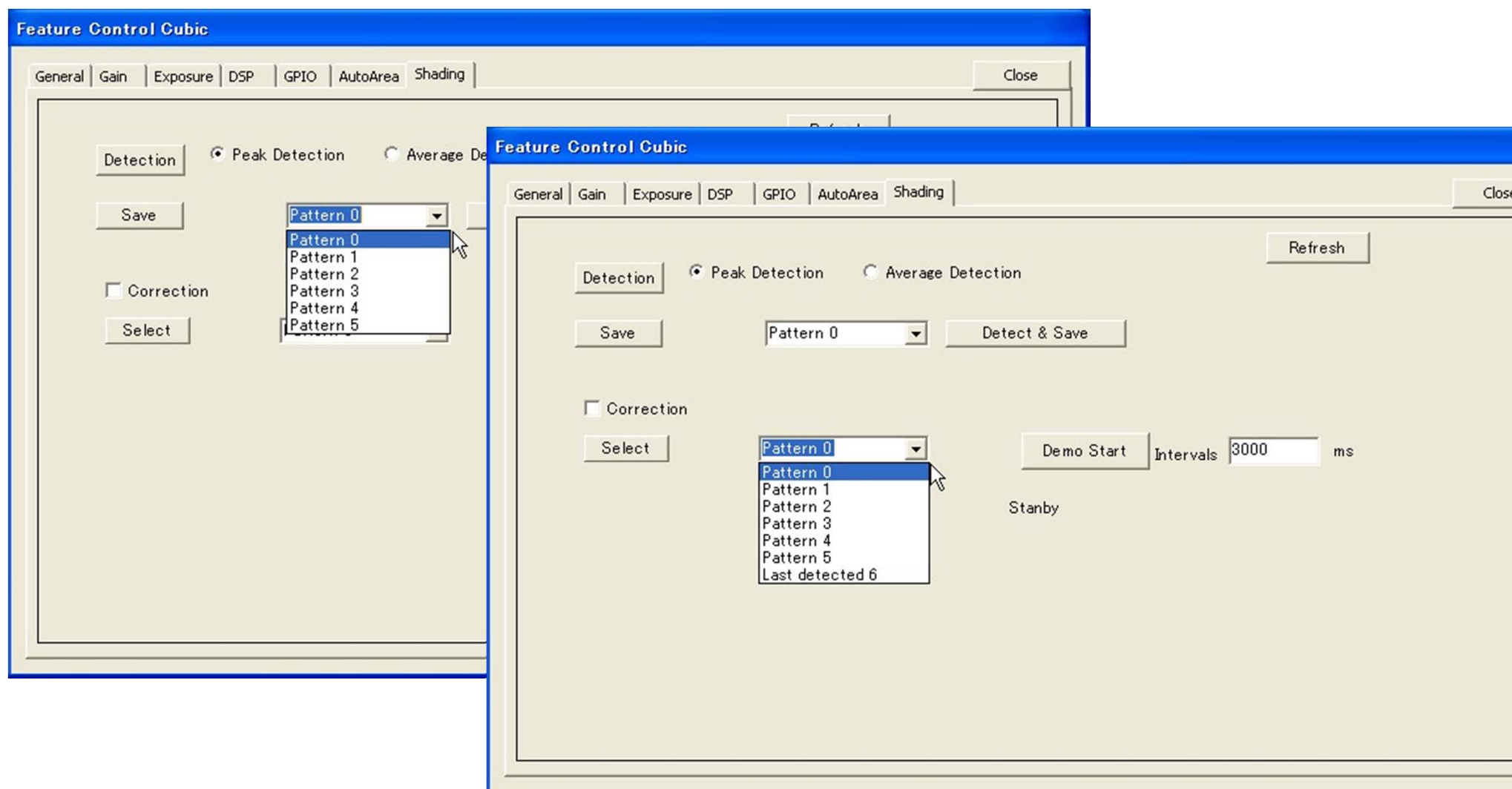
Explain for Shading function

This is the setting screen for the Shading function.



Explain for Shading function

The setting screen for Shading function, in case of S900



Explain for Shading function

In progress of calculateing the Shading function

Feature Control Cubic

General | Gain | Exposure | DSP | GPIO | AutoArea | Shading | Close

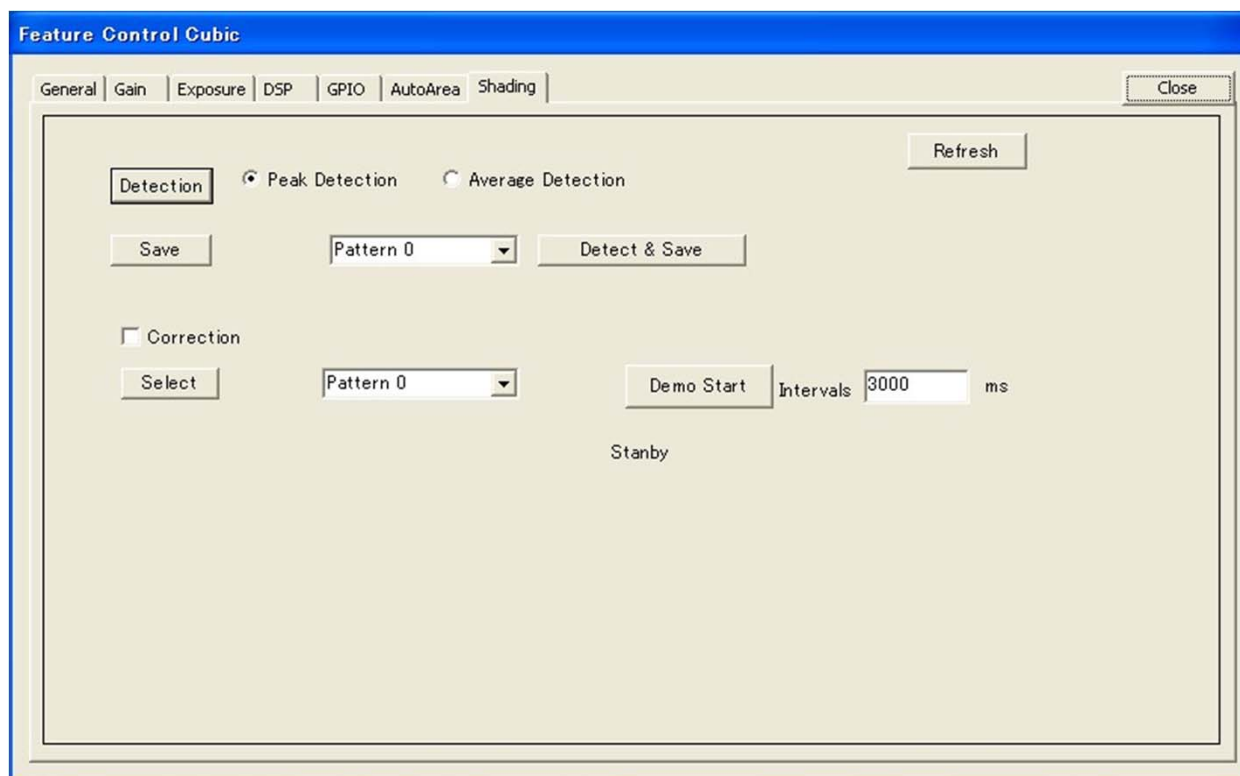
Detection ☒ Peak Detection ☐ Average Detection Refresh

Save Pattern 0 Detect & Save

☒ Correction Select Pattern 0 Demo Start Intervals 3000 ms

Stanby

Operation of the Shading function



Shading Pattern

0 to 5 (9) : Number of Shading Saving Area

6 (10) : Shading Data on RAM

The value without () is for S900 series.

The value with () is for S600 series.

① Ready Shading function

- Set off to Correction
- Adjust the lighting and set 50% to the level of image

② Calculate Shading

- Push Detection button

While detection, the button is invalid state.

After finish detection, the button return to be valid state

③ Confirm the result

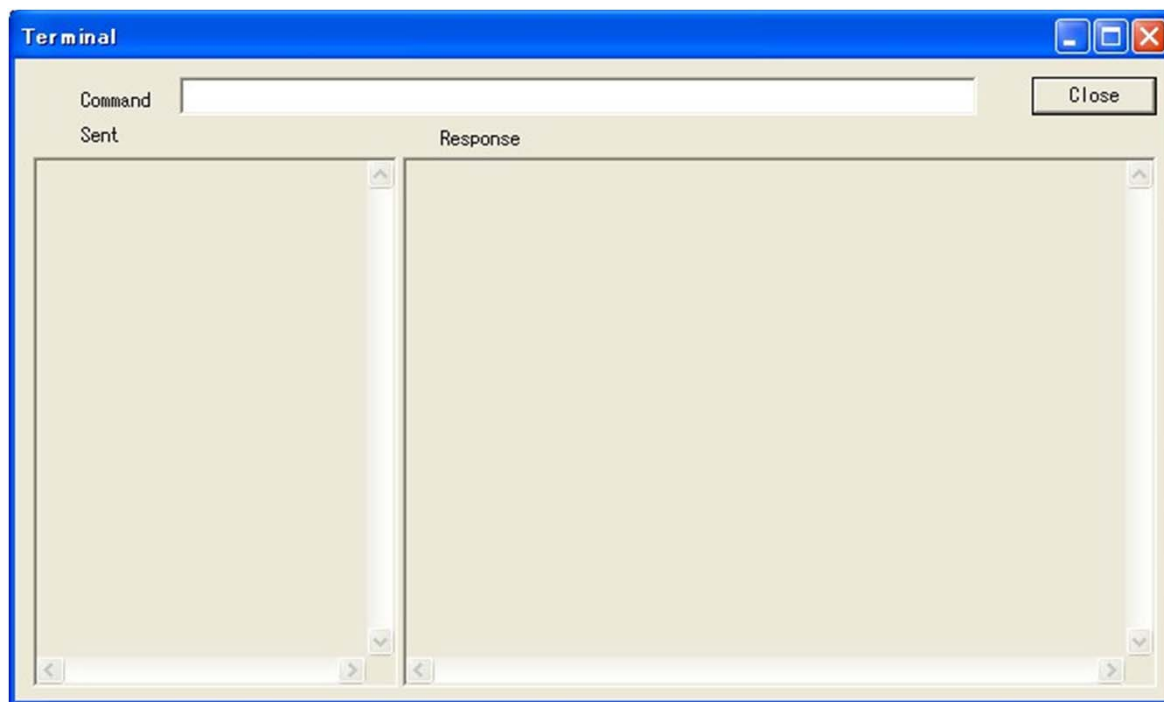
- Select the pattern of the list ., and push Select button.

④ Execute Shading function

- Check in the Correction

Explain for the terminal screen

It uses when sending the feature which is not in before mentioned camera control screen to the camera.

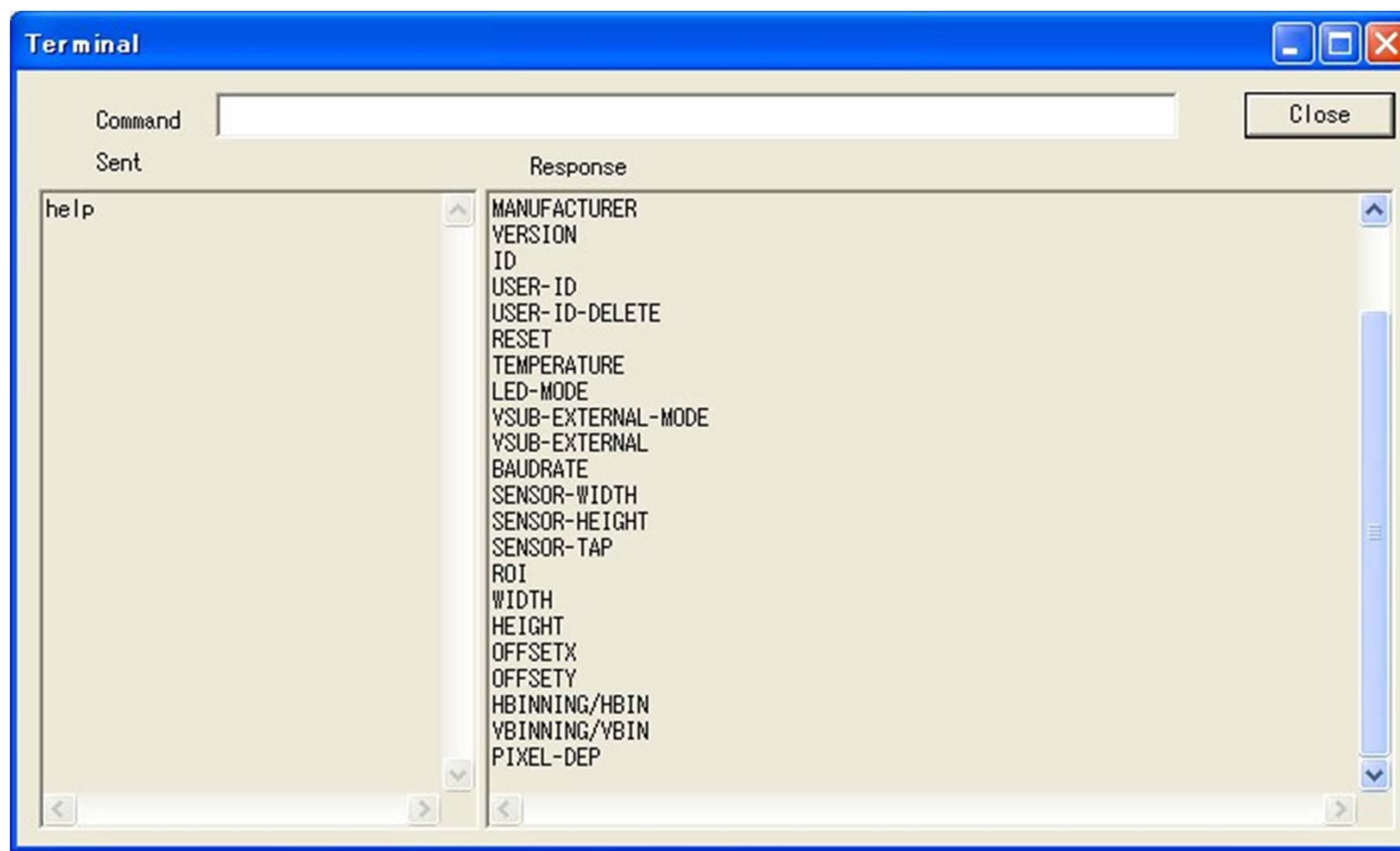


Confir CameraLink TAP
 Enter Cameralink-TAP
 =1 : 1TAP
 =2 : 2TAP

Alter CameraLink TAP
 Enter Cameralink-TAP n
 (n= 1 or 2)

Explain for terminal screen

When sending HELP command to the camera, the list of the camera command is displayed.



EOF
