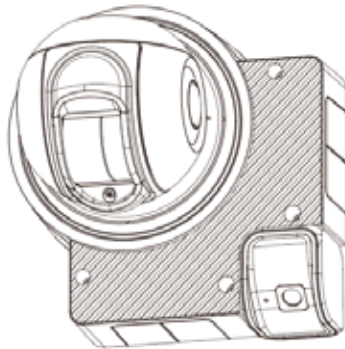


REDSAN mini-Pro

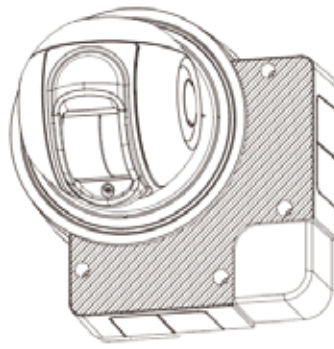
Laser Scan Detector

Setting guide (Ver. 1.0.x)

Support browser: Chrome
(running on Windows 10 or later, Mac, Android)



RLS-2020V



RLS-2020A

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1. Initial configuration

Configure root password

The password for the administrator “root” must be changed before the product can be used.

Password:

Confirm password:

The password must be 8 characters or more, and should be set with a combination of 2 or more types of numbers, uppercase letters, lowercase letters, and symbols.

Available symbols: ! " # \$ % & ' () * + , - . / : ; < = > ? @ [] ^ _ ` { | } ~ *space*

OK

1.x.x (xxxx/xx/xx)

1-1. Configure root password

Available:

Alphabets [A to Z.]

Numbers [0 to 9]

Symbols

[! " # \$ % & ' () * + , - . / : ; < = > ?

@ [] ^ _ ` { | } ~ *space*]

Root password

“Root password” is used for the authorization of the administrator.

It must be configured before starting the settings through this software.

Sign in

http://192.168.0.126

Your connection to this site is not private.

User name

root

Password

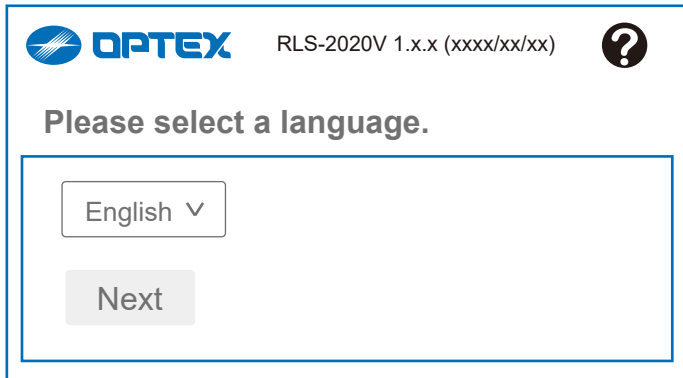
Sign in

Cancel

1-2. Sign in

User name: root

Password: As you created in the previous section



OPTEX RLS-2020V 1.x.x (xxxx/xx/xx) ?

Please select a language.

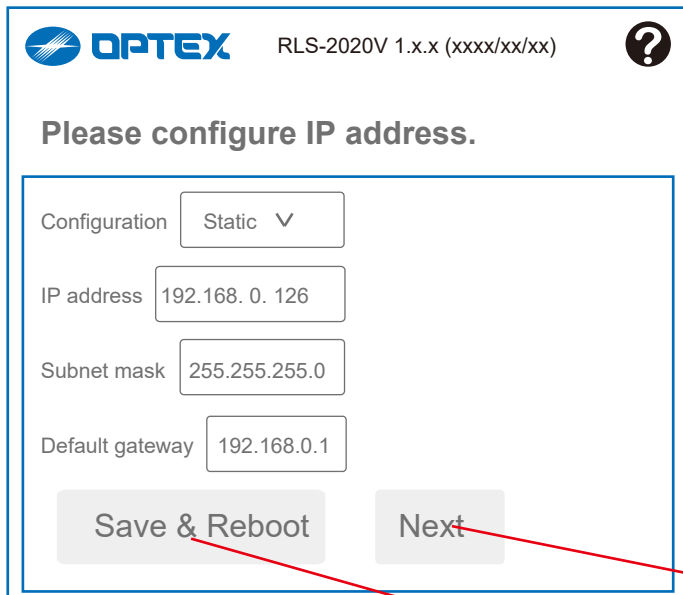
English ▾

Next

1-3. Select Language

Select language to be used in this software.

Default: English



OPTEX RLS-2020V 1.x.x (xxxx/xx/xx) ?

Please configure IP address.

Configuration Static ▾

IP address 192.168. 0. 126

Subnet mask 255.255.255.0

Default gateway 192.168.0.1

Save & Reboot Next

1-4. Configure IP address

Configure the IP address of the REDSCAN mini-Pro device.

Configuration: [static, DHCP]

IP address: **default 192.168.0.126**

Subnet mask: **default 255.255.255.0**

Default gateway: **default 192.168.0.1**

Next: Go to next item **without** any changes.

Save & Reboot: Save the changes, and reboot automatically.

The screenshot shows the OPTEX RLS-2020V configuration interface. The title bar includes the OPTEX logo, the model name 'RLS-2020V 1.x.x (xxxx/xx/xx)', and a help icon. The main heading is 'Please configure IP address.' Below this, there are input fields for 'Configuration' (set to 'Static'), 'IP address' (192.168.0.1), 'Subnet mask' (255.255.255.0), and 'Default gateway' (192.168.0.1). A 'Save & Reboot' button is visible. A modal dialog box is overlaid on the screen with the title 'Running' and the message 'Detector restarting...' accompanied by a progress bar.

Wait for detector to reboot

The screenshot shows the OPTEX RLS-2020V configuration interface. The title bar includes the OPTEX logo, the model name 'RLS-2020V 1.x.x (xxxx/xx/xx)', and a help icon. The main heading is 'Please select power line frequency.' Below this, there is a dropdown menu for 'Power line frequency' currently set to '50 Hz'. A 'Next' button is visible at the bottom.

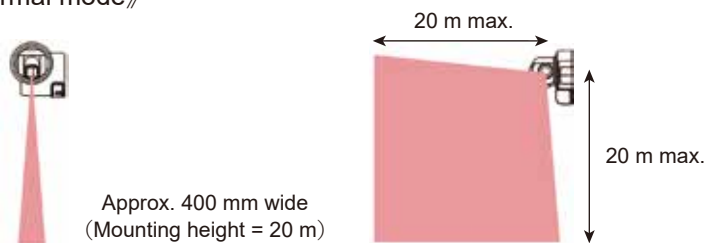
1-5. Select power line frequency

Select power line frequency [50 Hz, 60 Hz]

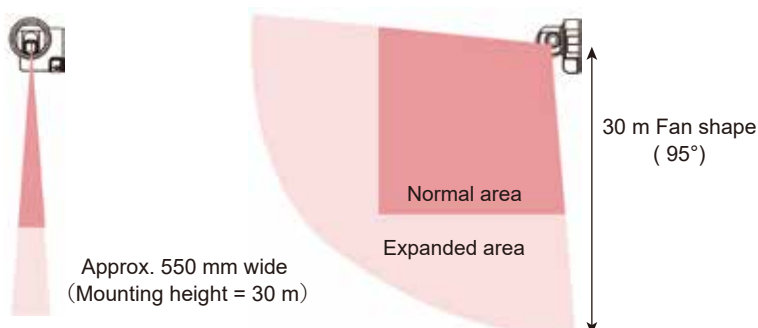
1-6. Adjust the detection area

Adjust the detection area, according to the installation instructions.

«Normal mode»



«Area expansion mode»

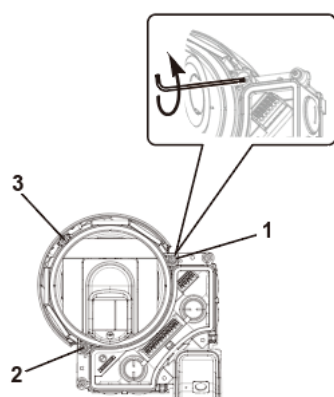
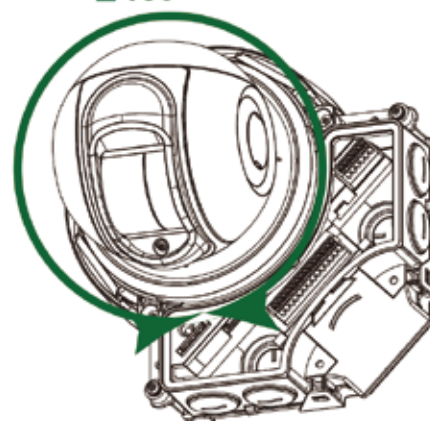


RLS-2020V

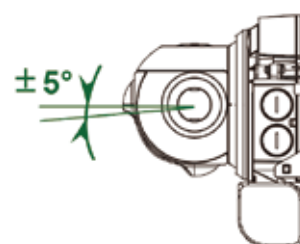
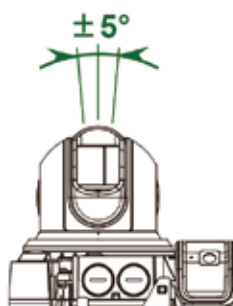


RLS-2020A

±180°



- ✓ Just loosen.
- ✗ Do not remove.



Angle Adjustment

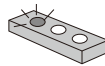
A fine angle adjustment with LAC-1

Adjust the position of laser path with LAC-1 which provides LED and sound when it receives infrared beams to secure required detection area.

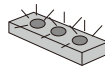


< HINTS >

3 LEDs indicate detection area sensitivity independently to locate high sensitive area precisely.

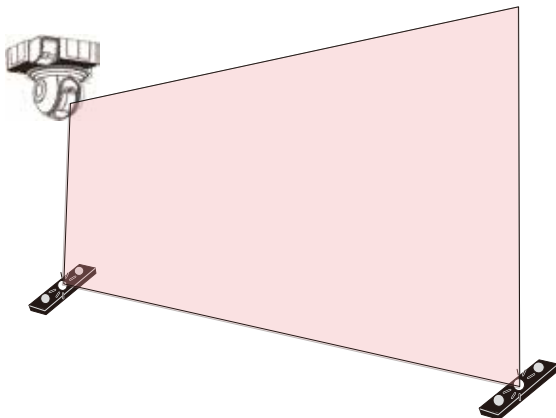


If one of 3 LEDs is blinking quickly, it is detecting the laser but the others are not detecting.

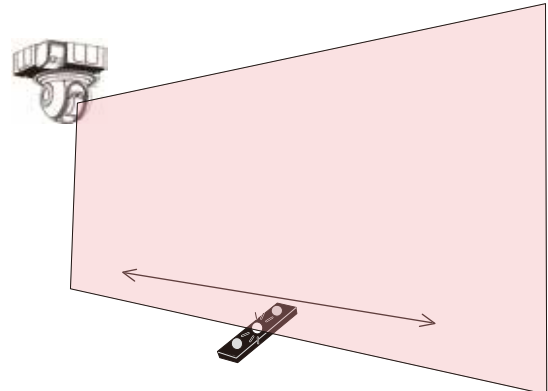


If all 3 LEDs are blinking quickly, all are detecting the laser.

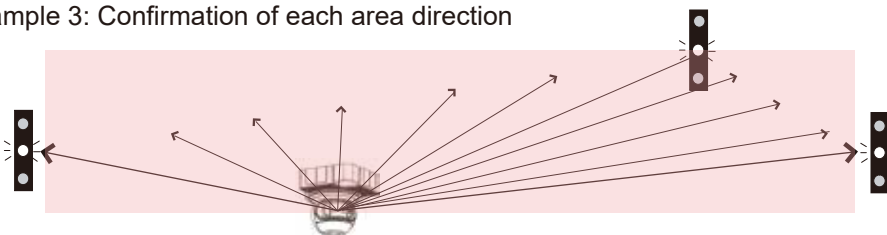
Example 1: Confirmation of both ends of the detection area



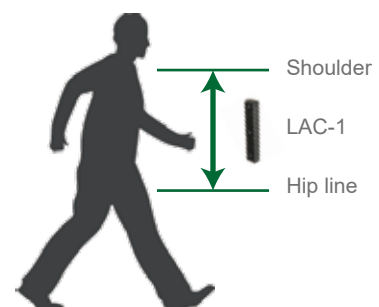
Example 2: Confirmation within the detection area



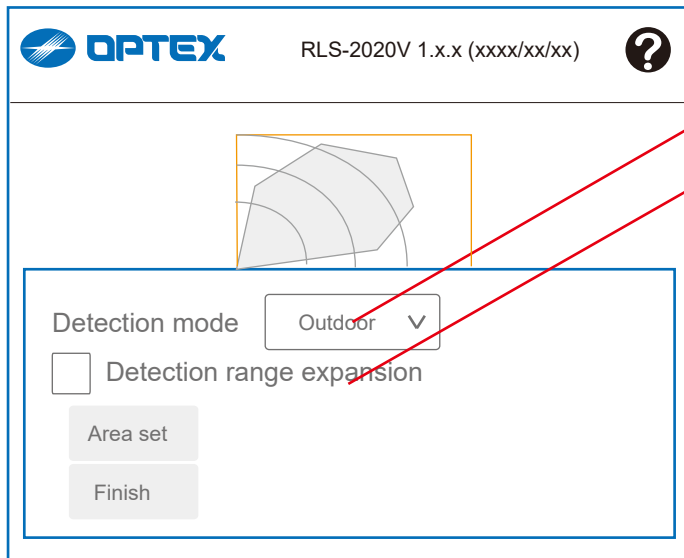
Example 3: Confirmation of each area direction



1. Instruct a person hold the LAC-1 and stand at either side edge of required protection area.
2. The person should hold LAC-1 in front of their body between shoulder and hip line.
3. Adjust the position of laser beams by moving the main unit slowly so that LAC-1 blinks.



1-7. Detection



Detection mode: [Outdoor, Indoor]

Detection range expansion:

-> See the column below for details

Area set

Finish

Detection mode

Outdoor Mode:

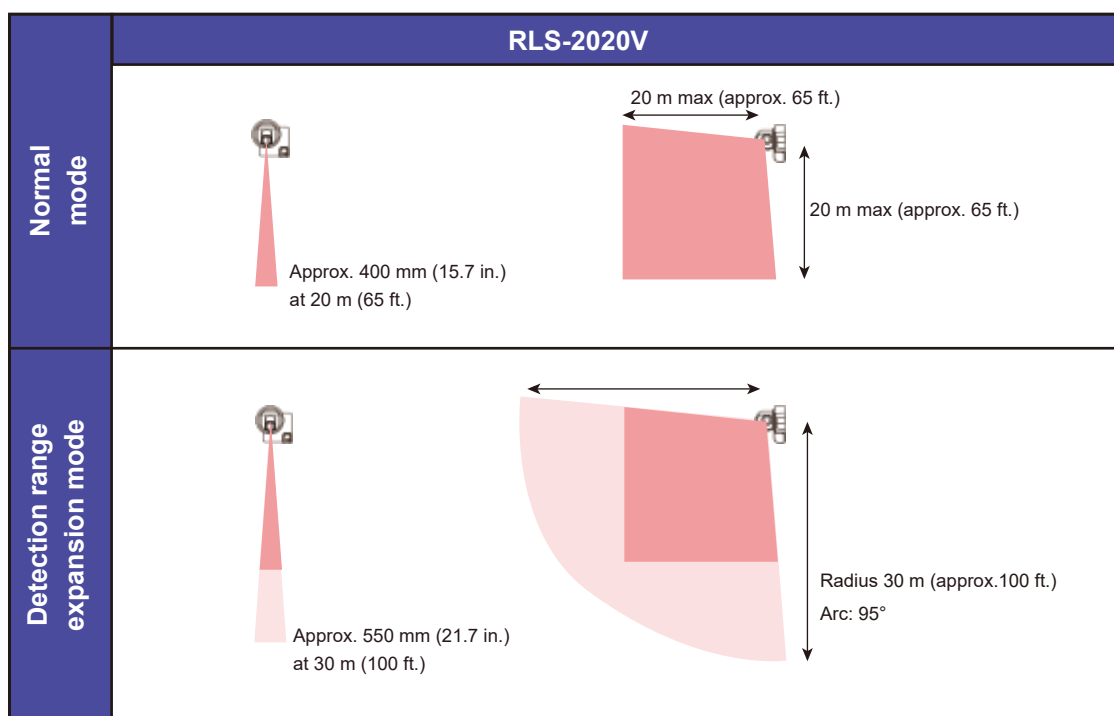
This option can be selected for general outdoor applications. In this mode, the special algorithm works to reduce false alarms caused by weather conditions (e.g. rain, snow or fog). In order to reduce false alarms under harsh environment, the Environmental Resistance function is available.

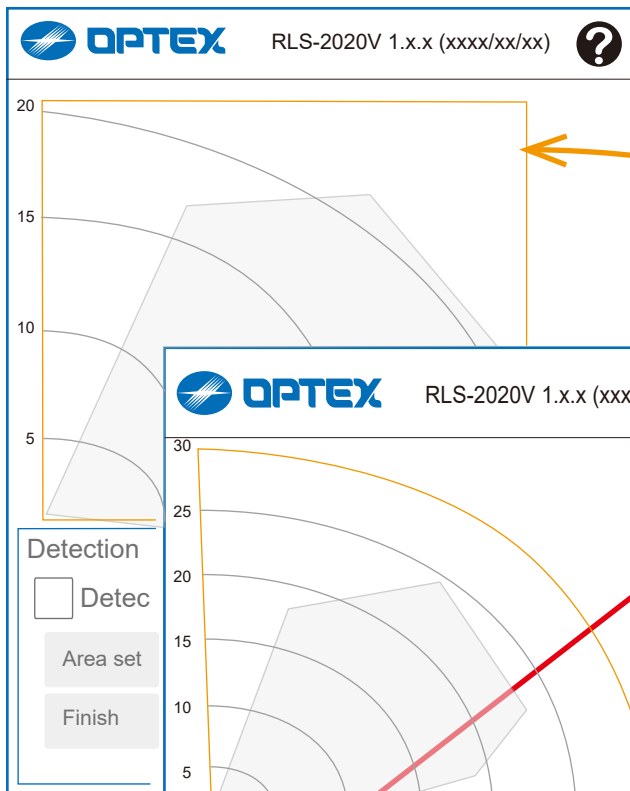
Indoor Mode:

For general indoor applications. In this mode, Environmental Resistance and DQ Output are disabled.

Detection Range Expansion Mode

The detection range of REDSCAN mini-Pro can be extended to 30 m and become a fan shape of arc 95°

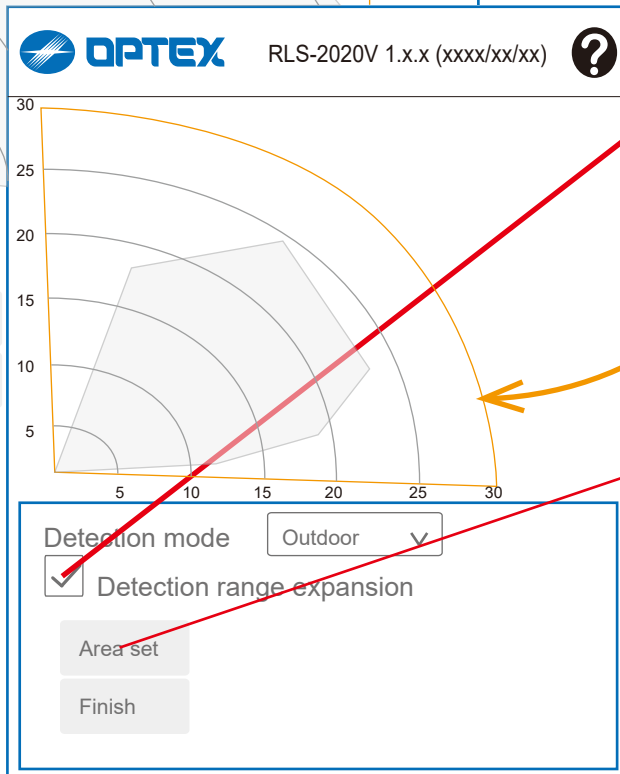



☐ Detection range expansion

☒ Detection range expansion

Area set

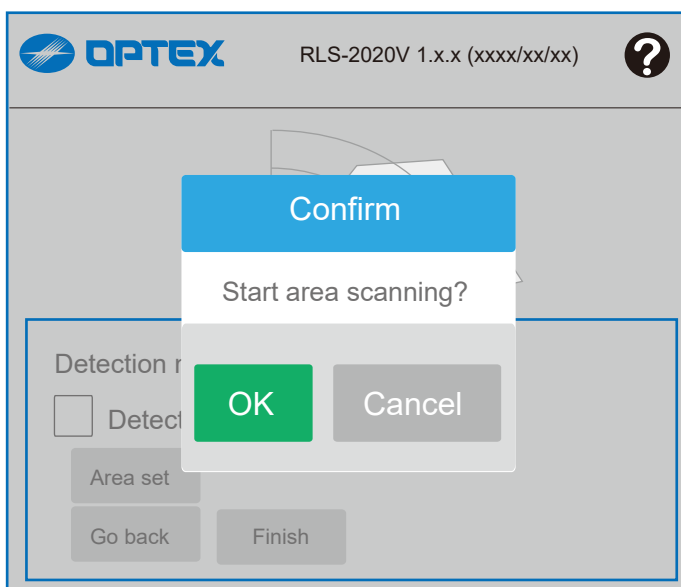
Start the area scanning and then setting.
A pop-up window opens to confirm Area Set.



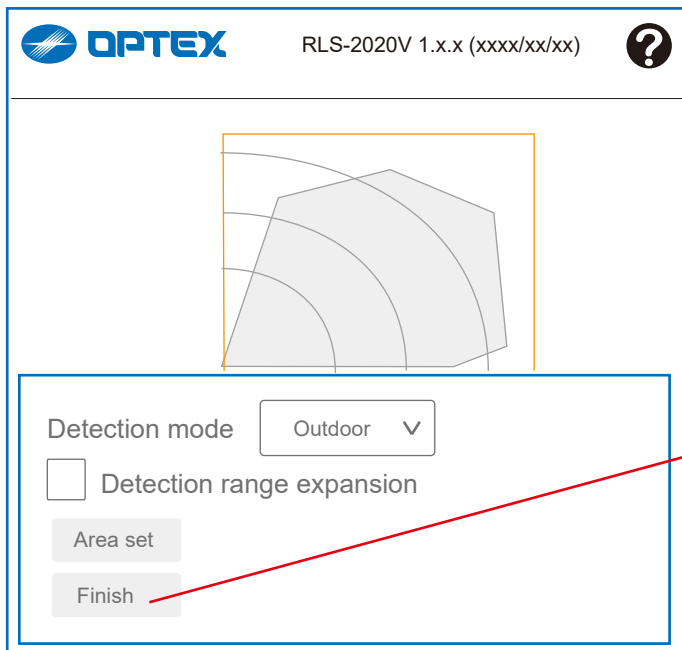
Area setting

"Area setting" enables learning of the limits of the detection area. The background information is base for decreasing false alarm.

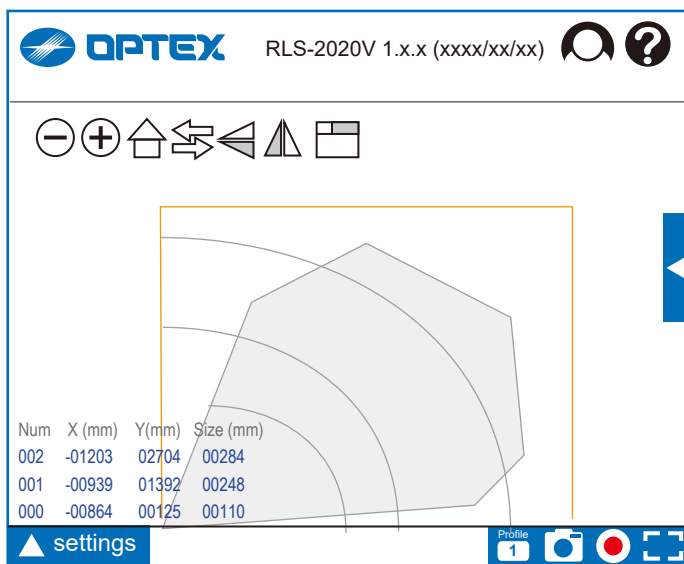
*** Ensure the detection area is free from obstructions during area set**



Area scanning start



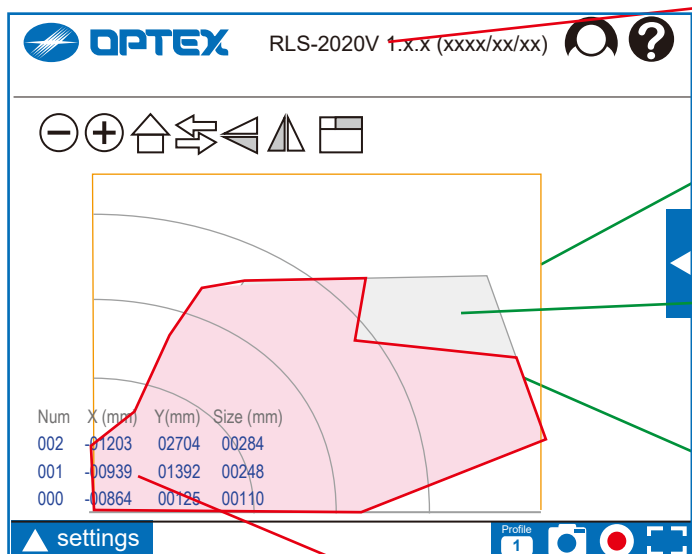
The last screen of the "1. Initial configuration" .
Click on "Finish" to complete procedure.



The "Home view" screen appears after the
"1. Initial configuration" process has been completed.

2. Display

2-1. Home view



RLS-2020V 1.x.x (xxxx/xx/xx)

Location of the software version and the date of the last update.

Detection range

Limits of the detection area.

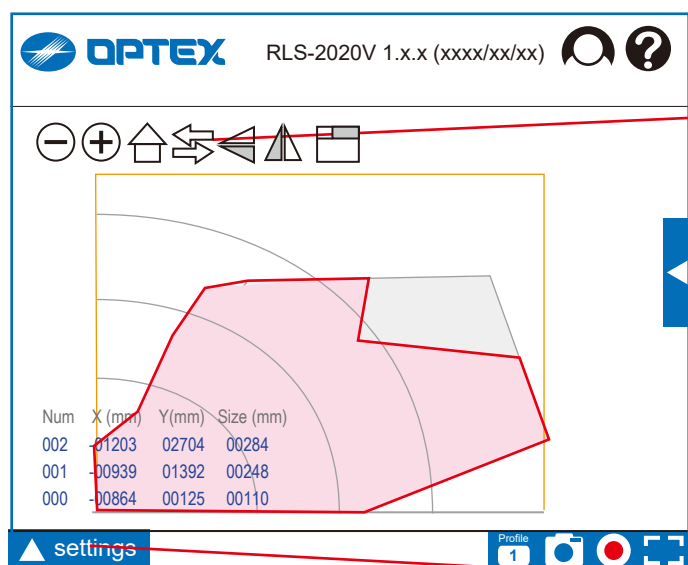
Sensing area

The location displayed in gray is the area actually detected by the laser sensor.

Detection area

You can create the detection area by adjusting the sensing area, such as cutting, masking or allocating so on, within the detection range.

Indicator of the intrusion number, location and size

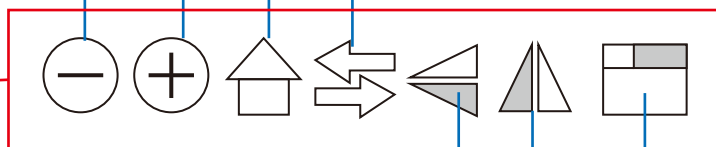


Zoom out

Zoom in

Back to the home position

Switching between the home view and camera view



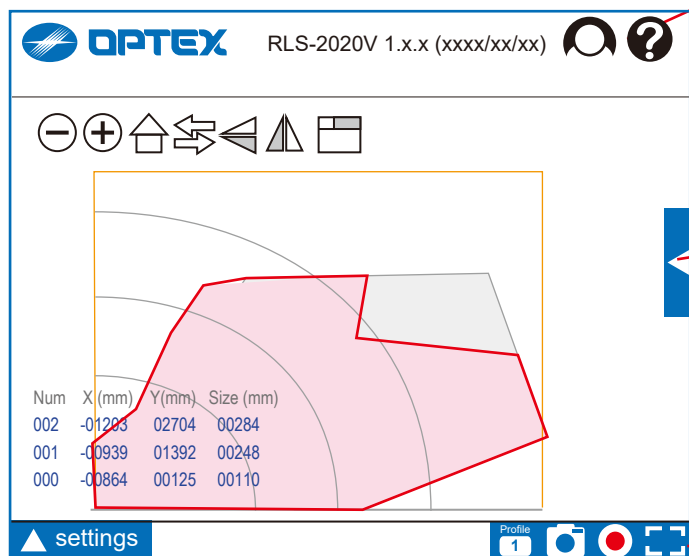
Flip vertical

Flip horizontal

Open additional window for either the Home view or the camera image

Open the setting window

Click to open the windows for the settings.



Personal figure; who is logged in.

Guide; Click to open the separate window.

Status display

Click to display the status.

Switch the profile displayed

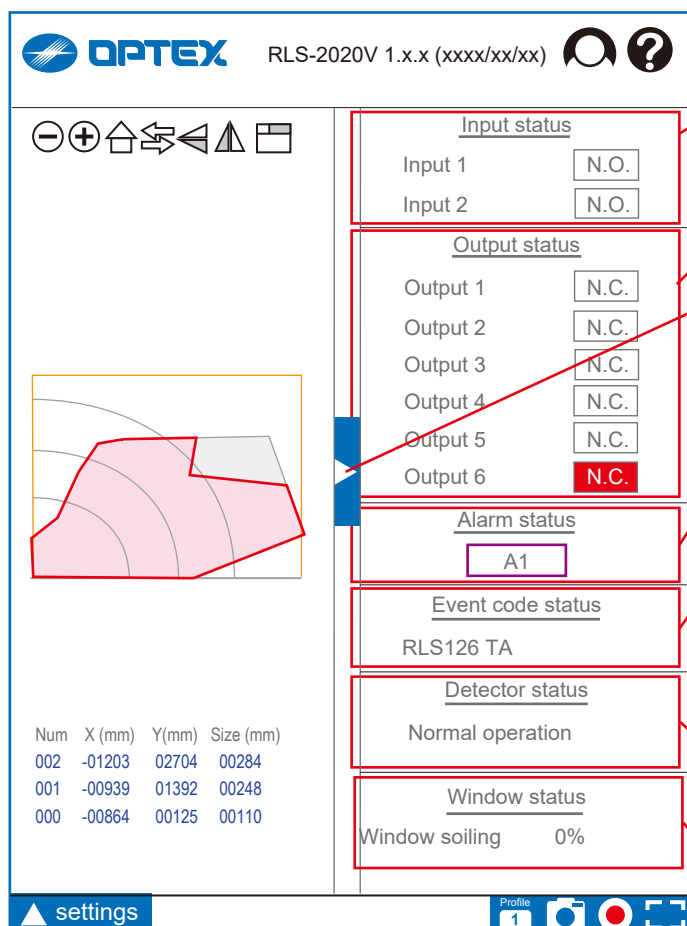
Snap shot

Recording Start/Stop

Full screen



2-2. Status display



Input status [N.C., N.O.]

Current input is shown in red.

Output status [N.C., N.O.]

Current output is shown in red.

Status display

Click to slide open/close.

Alarm status

Current alarm status is shown in red.

Event code status

All the codes (**R.E.C. = REDSCAN Event Code**) that currently output are listed.

R.E.C. (REDSCAN Event Code)

A1, A11, A12: Zone alarm

AM: Anti-Masking

DQ: Environmental Disqualification

MO: Master Alarm

TA: Tamper Output

AR: Anti-Rotation

DM: Device Monitoring

SO: Soiling

TR: Device Trouble

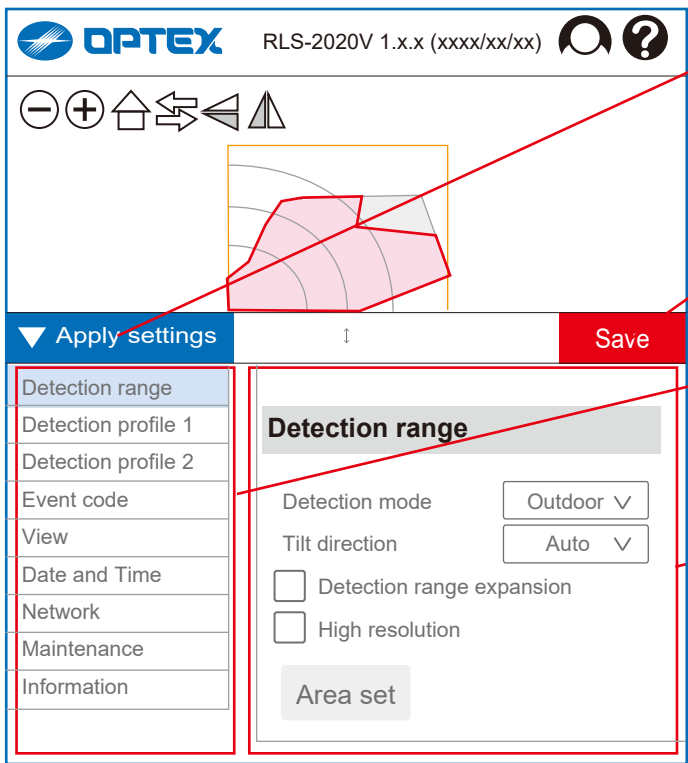
Detector status

[Normal operation, Hardware error, Over heat
Camera error, Others error]

Window status

The dirt rate of the window is displayed in %.

2-3. Setting display



Apply settings
Click to apply changes, to close the settings window and to restart the process.

Save the settings
Click to save the set parameters.

Menu window
List the setting menu
Selected item is indicated in blue.

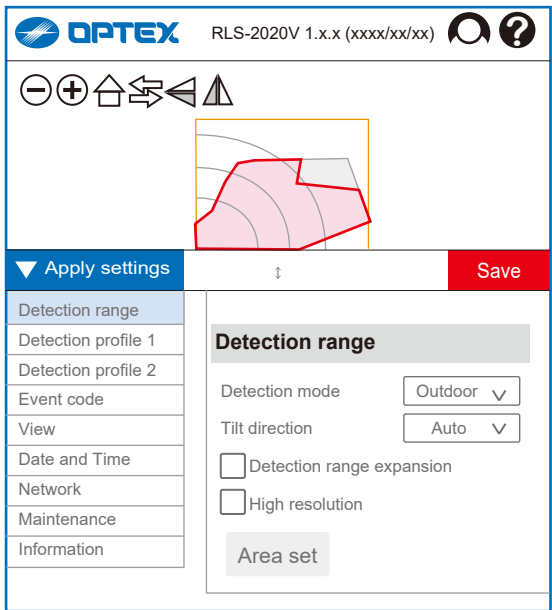
Setting window
Display the setting item.

Setting display for a Smart Phone

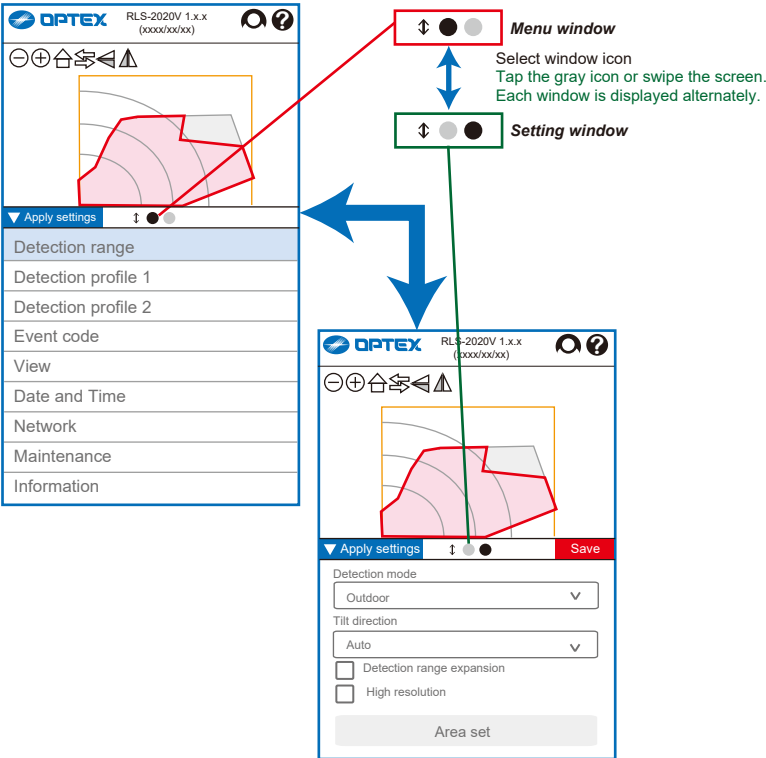
On the setting screen for PC, menus and settings are displayed on one screen, while for smartphones, both are manually switched and displayed.

If the screen for smartphones is displayed on the PC screen, change the browser to full screen and reload.

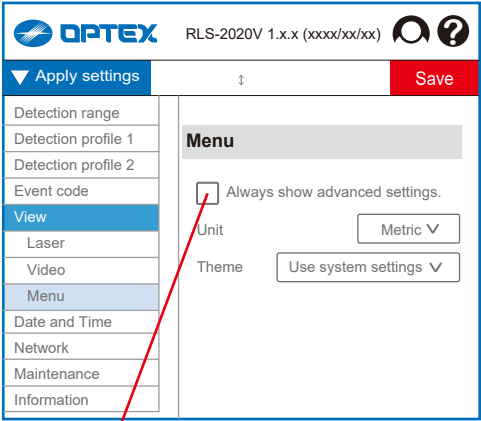
Settings for a **PC** display



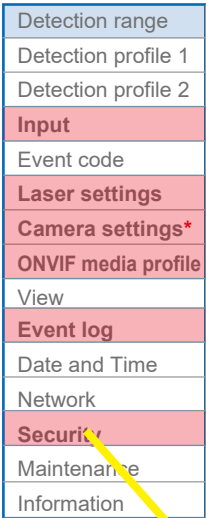
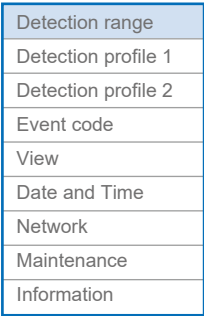
Settings for a **Smart Phone**



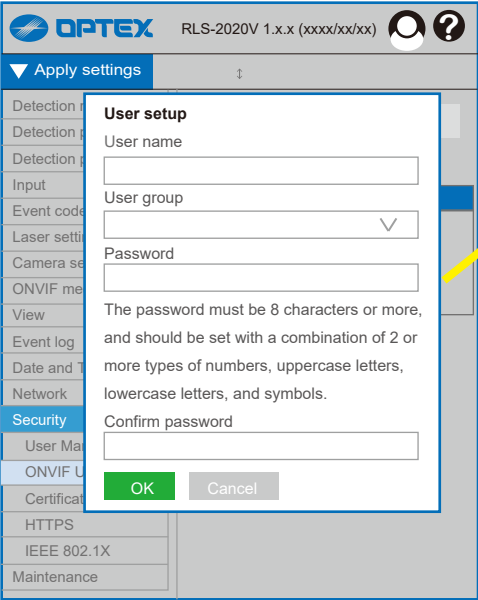
3. ONVIF settings



Always show advanced settings



= Advanced settings
* = RLS-2020V only
-> See section 5.



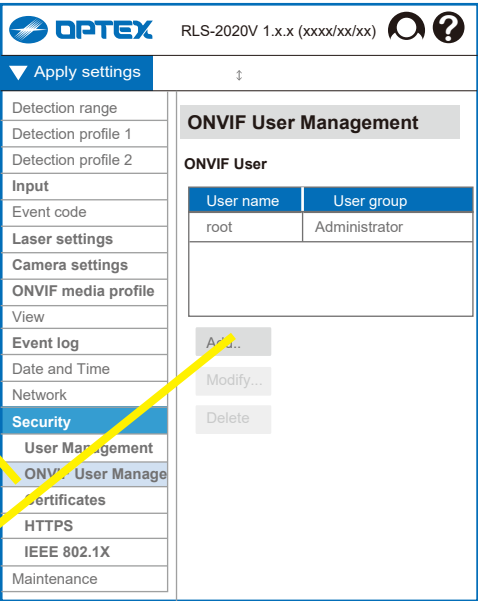
User setup
User name
User group
Select user group that is defined by ONVIF.
Password
The password must be 8 characters or more,
and should be set with a combination of 2 or
more types of numbers, uppercase letters,
lowercase letters, and symbols.
Confirm password
OK
Cancel

REDSCAN mini-Pro series supports ONVIF and RTSP.
Client application can get video stream of embedded camera in REDSCAN mini-Pro series.
Username and password are common to ONVIF and RTSP.
Even if ONVIF is not used, create ONVIF account by the sequence below to use RTSP authentication.

ONVIF
ONVIF is an open industry forum that provides and promotes standardized interfaces for effective interoperability of IP-based physical security products. See the site below for details. Specifications are downloadable.
<https://www.onvif.org/>
ONVIF Device manager is popular tool in the industry. It enables accessing and testing ONVIF device. See the site below for details.
<https://sourceforge.net/projects/onvifdm/>

3-1. To use ONVIF

- [1] Select "View" then "Menu".
- [2] Click "Always show advanced settings".
- [3] Select "Security" then "ONVIF User Management"
- [4] Following items are set by default.
User name: root
User group: Administrator
Password: As you set it as the initial value -> Secc 1-1. Configure root password
Add or modify them, if you need.



3-2. ONVIF menu on Profile 1 and 2

When "Always show advanced settings" is enabled,
2 ONVIF menu items appear on each Profile 1 and 2.

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings Save

Detection range

Detection profile 1

Detection area

Area Masking/Allocating

Detection

Detection advanced

Dynamic event filtering

Output terminal

ONVIF digital input

ONVIF motion alarm

HTTP notice

Detection profile copy

Detection profile 2

ONVIF digital inputs

DI#1	DI#2	DI#3	DI#4
1	2	3	4

☒ Interlock with Outputs

☐ A1

☐ AM ☐ AR ☐ SO ☐ DQ

☐ TR ☐ TA ☐ DM

(Bold letters = advanced settings)

4-2-6. ONVIF digital inputs

You can set each terminal individually according to the ONVIF format.

Select the terminal for settings

[DI#1, 2, 3, 4, 5, 6]

Interlock with Outputs

Select events

[A1, A11, A12, A21, A22, B11, B12, B21, B22, AM, AR, SO, DQ, TR, TA, DM]

Respond when the selected event occurs.

The choices appear only when "Interlock with Outputs" is not selected.

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings Save

Detection range

Detection profile 1

Detection area

Area Masking/Allocating

Detection

Detection advanced

Dynamic event filtering

Output terminal

ONVIF digital input

ONVIF motion alarm

HTTP notice

Detection profile copy

Detection profile 2

ONVIF motion alarm

☐ A1

☐ AM ☐ AR ☐ SO ☐ DQ

☐ TR ☐ TA ☐ DM

(Bold letters = advanced settings)

4-2-7. ONVIF motion alarm

You can set the ONVIF motion alarm responding to the select events.

Select events

[A1, A11, A12, A21, A22, B11, B12, B21, B22, AM, AR, SO, DQ, TR, TA, DM]

Respond when the selected event occurs.

R.E.C. (REDS CAN Event Code)

A1, A11, A12 B11, B12: Zone alarm

AM: Anti-Masking

AR: Anti-Rotation

DQ: Environmental Disqualification

DM: Device Monitoring

MO: Master Alarm

SO: Soiling

TA: Tamper Output

TR: Device Trouble

3-3. ONVIF menu on Advanced settings

When "Always show advanced settings" is enabled,

2 ONVIF menu items also appear on ONVIF media profile.

These settings apply to video streaming over ONVIF (RTSP/RTP).

They do not apply to camera images on web browsers and camera images in event logs.

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings Save

Detection range

Detection profile 1

Detection profile 2

Input

Event code

Laser settings

Camera settings*

ONVIF media profile

H.264 Encoding

JPEG Encoding

View

Event log

Date and Time

Network

Security

Maintenance

Information

H.264 Encoding

Resolution 1080 p (FHD) ▼

Bitrate (kbit/s) 1000 ▲▼

Frame rate (fps) 6 ▲▼

GOP length 12 ▲▼

(Bold letters = advanced settings)

* = RLS-2020V only

5-5. ONVIF media profile

5-5-1. H.264 Encoding

Resolution

[1080 p (FHD), 720 p (HD), 360 p, 1080 p (FHD Portrait), 720 p (HD Portrait), 360 p (Portrait)]

Bitrate (kbit/s)

[200 to 4,000]

Frame rate (fps)

[1 to 10]

GOP length

[5 to 50]

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings Save

Detection range

Detection profile 1

Detection profile 2

Input

Event code

Laser settings

Camera settings*

ONVIF media profile

H.264 Encoding

JPEG Encoding

View

Event log

Date and Time

Network

Security

Maintenance

Information

JPEG Encoding

Resolution 720 p (HD) ▼

Image quality Highest ▼

Frame rate (fps) 6 ▲▼

(Bold letters = advanced settings)

* = RLS-2020V only

5-5-2. JPEG Encoding

Resolution

[720 p (HD), 360 p, 720 p (HD Portrait), 360 p (Portrait)]

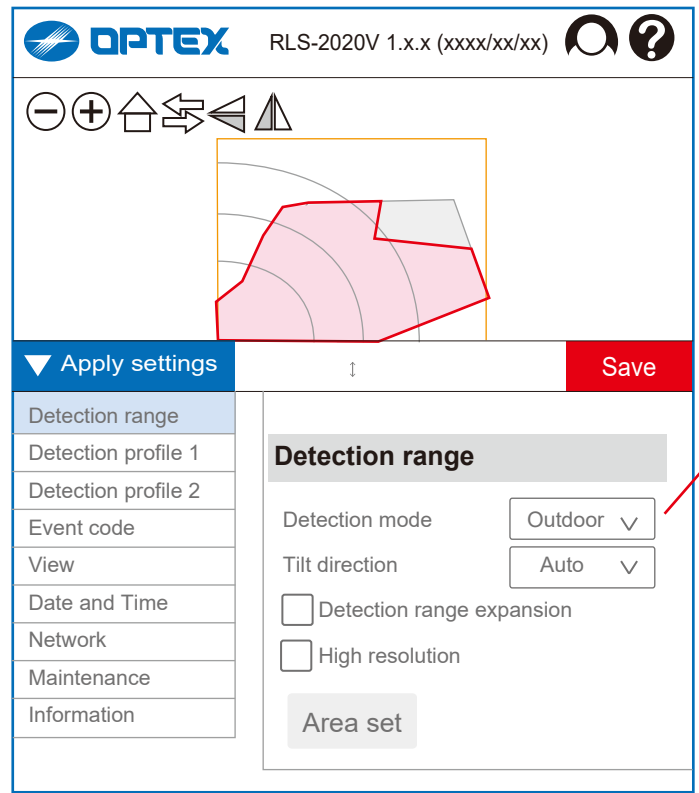
Image quality

[Highest, High, Normal, Low, Lowest]

Frame rate (fps)

[1 to 10]

4. Settings



4-1. Detection range

These items are already set in "Initial settings", in normal process, so there is no need to set these items again. Modify the parameters only when you need to change them.

Detection mode [Outdoor, Indoor]

Tilt direction [Vertical, Horizontal, Auto]

“Auto” setting allows automatic detection of the orientation in the "Area Setting".

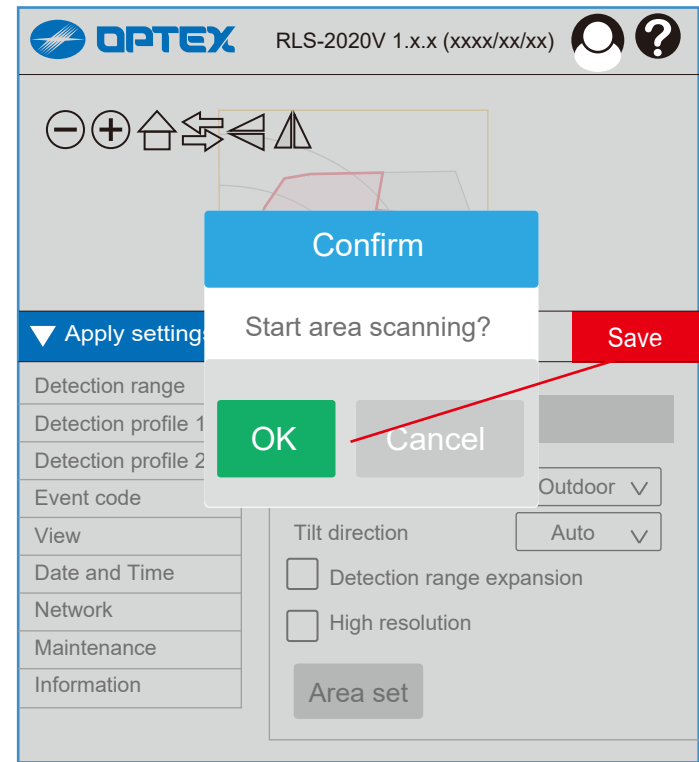
Detection range expansion

Normal mode (20 m x 20 m Square)

Expansion mode (30 m x 95° Fan-shaped)

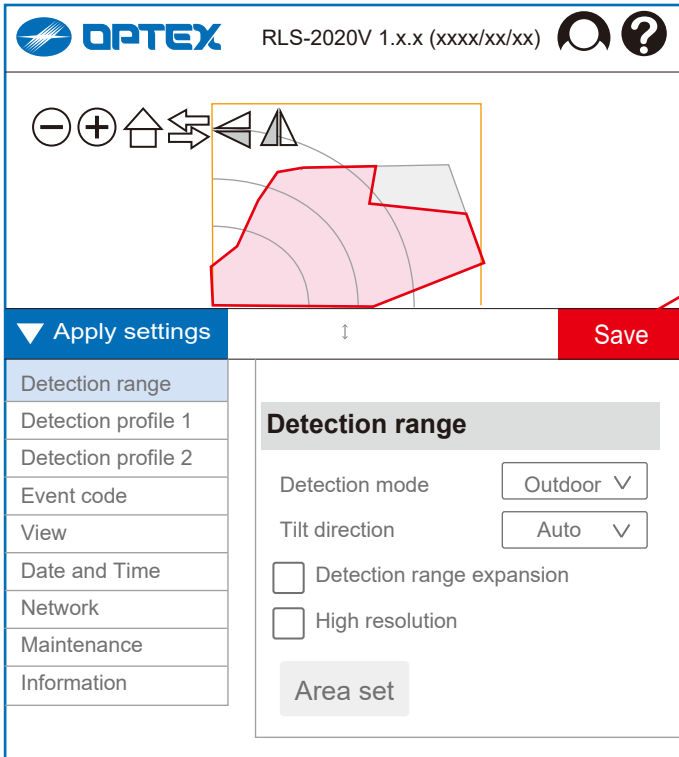
High resolution [ON, OFF]

Area set



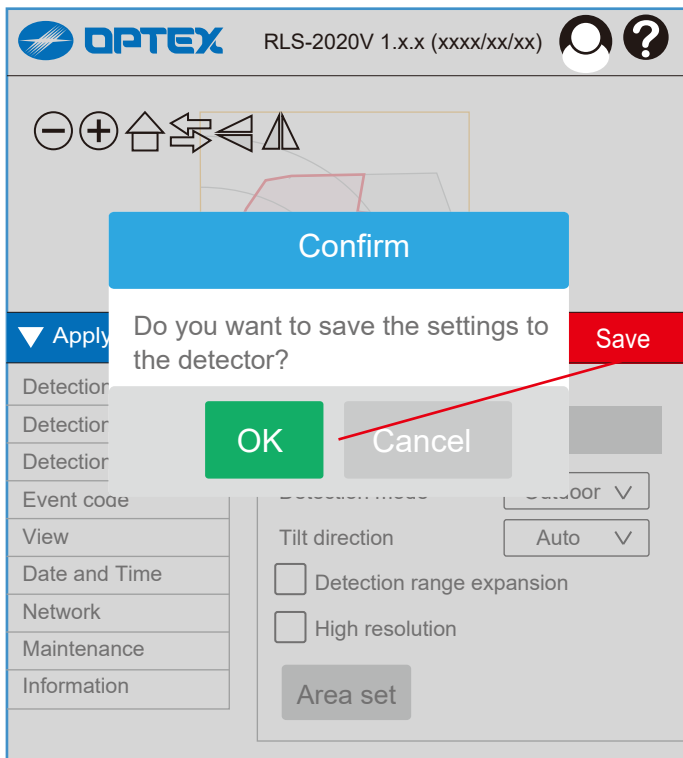
Confirmation 1

Click “OK” to start the area setting, or “cancel” it.



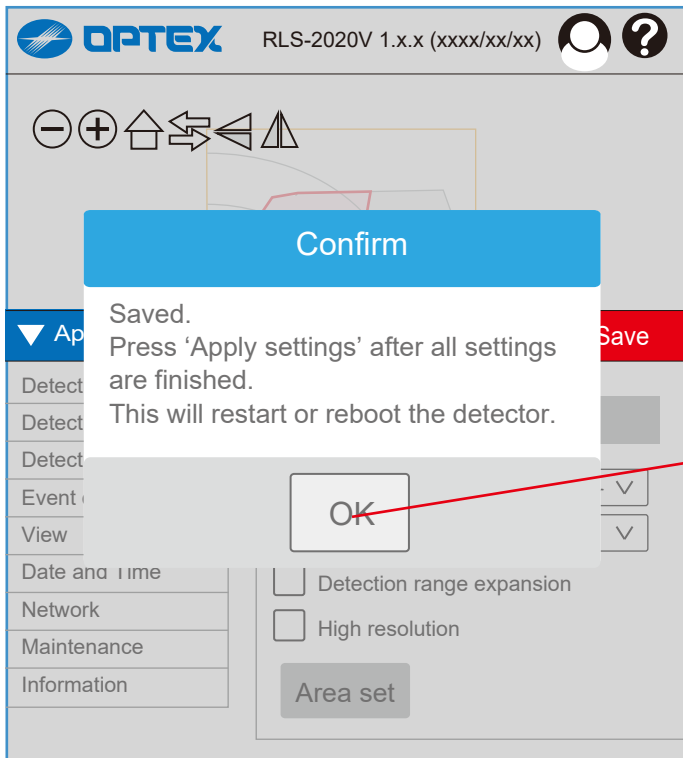
Save the settings

Click to save the detection range settings.



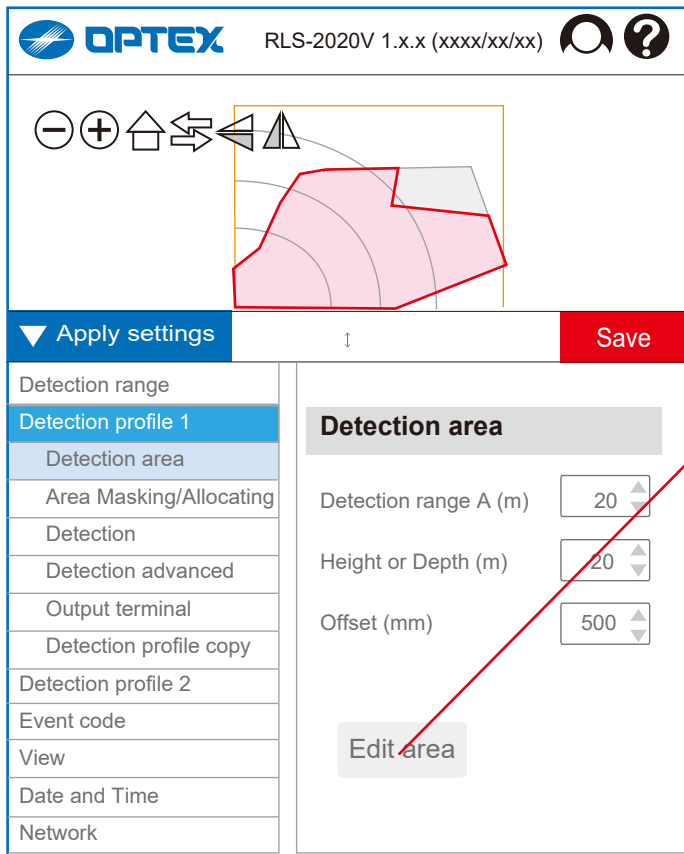
Confirmation 2

Next click the "Save" icon, second confrimation window opens.



Confirmation 3

Final confirmation of the detection range settings, after saving them.



4-2. Detection profile 1

4-2-1. Detection area

	Normal	Expansion
Detection range A (m)	[0 to 20]	[0 to 30]
Height or Depth (m)	[0 to 20]	[0 to 30]
Offset (mm)	[0 to 1,000 (= 1 m)]	

Edit area

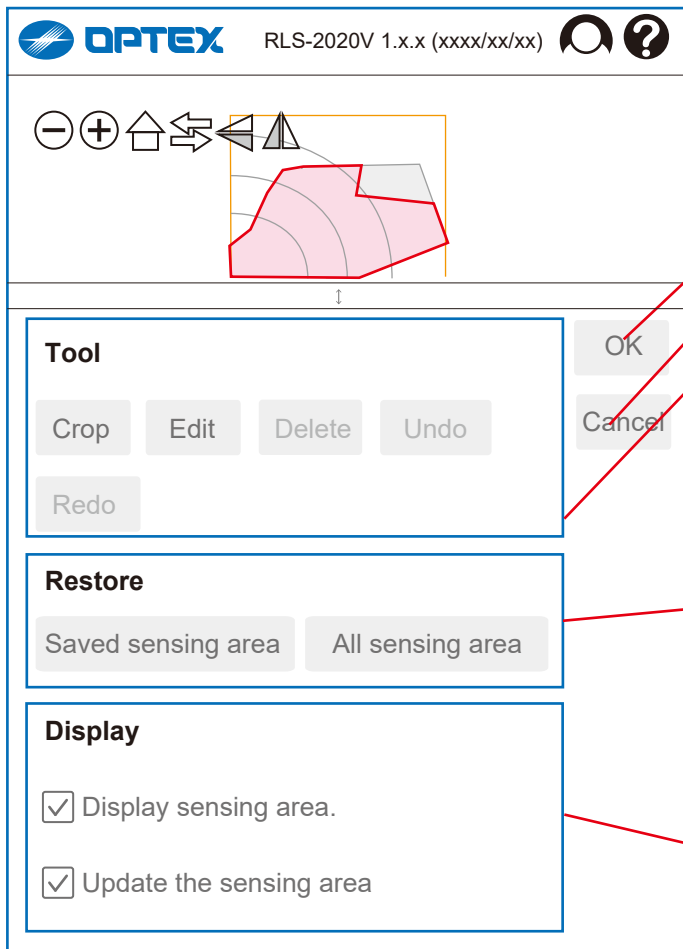
Open the separate window to edit the detection area.

Detection Range

Detection area can be limited by "range A", "range B" and "Height or Depth". Yellow line will indicate the effective detection range after settings are completed.

Offset

Perimeter of detection area near background can be excluded by the Offset distance. In vertical mode, obstacles on the ground or floor can generate false alarm. Also, plants and small animals can cause false alarm.



*** View window can be moved by dragging, when any "tool" is not selected.**

OK: save the edited results.

Cancel: undo the edited results.

Tool

Crop: cutting the detection area partially.

Edit: adjust the shape of the cutting area.

Delete: cancel the cutting of the detection area.

Undo: return to the previous shape of the detection area.

Redo: cancel "undo" .

--> See the Example below for details.

Restore

Saved sensing area:

revert the sensing area to the saved one.

All sensing area:

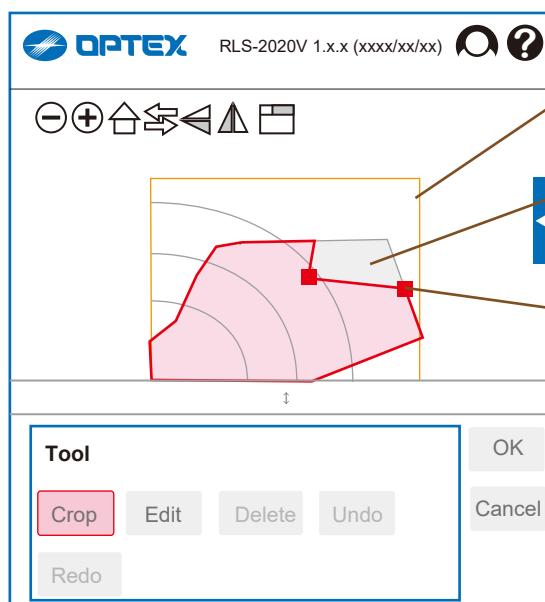
setting the detection area so as to cover all sensing areas.

Display

Display the sensing area.

Update the sensing area.

Example



Initial scan area

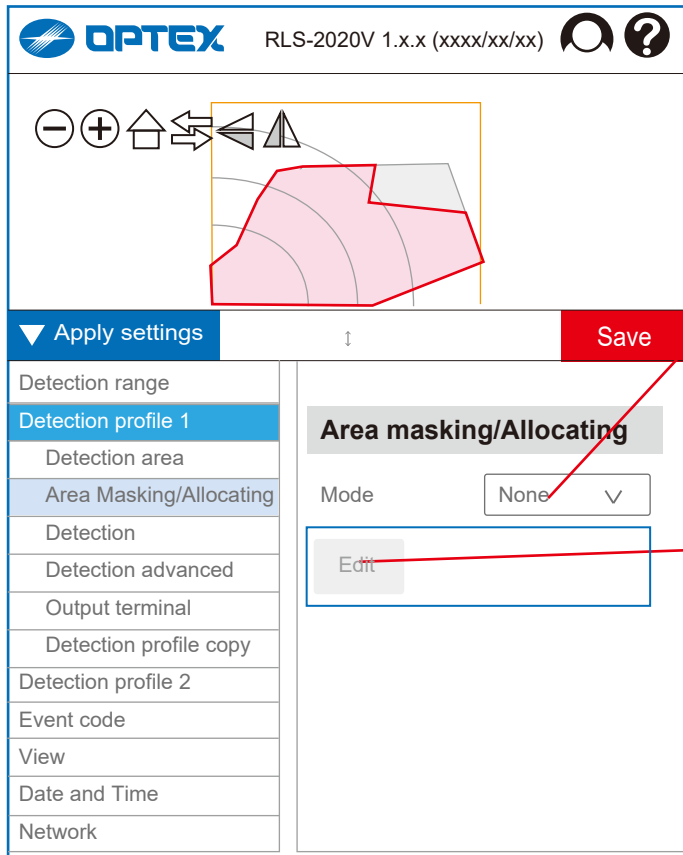
The shape at the time of area setting is displayed in grey line.

Cutting by "Crop"

Anything outside of the cut area (in red) is excluded.

Adjusting by "Edit"

The shape of the cutting area can be adjusted.



4-2-2. Masking/ Allocating

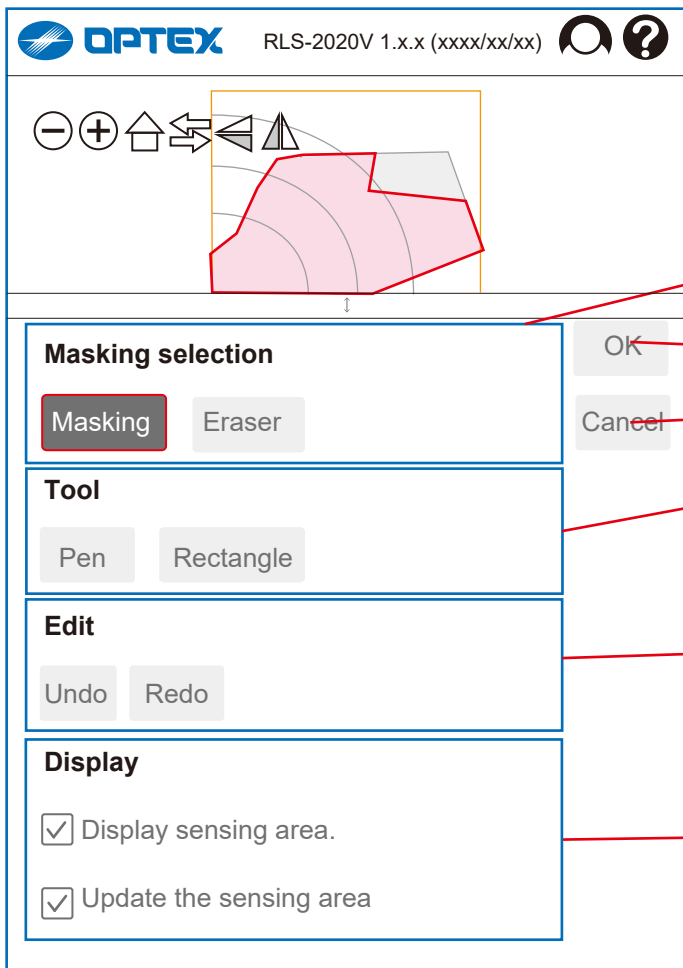
Mode [None, Mask, Allocating]

Mask: masking area is available to ignore some areas and reduce false alarm.

Allocating: allocated areas are available to distinguish where objects are detected.

Edit the masking/ allocating

Open the separate window to edit masking/allocating.



4-2-2-1. Masking

*** View window can be moved by dragging, when any "tool" is not selected.**

Masking selection

Select masking or erasing.

Save the edited results.

Cancel the edited results.

Tool

Select Pen or Rectangle.

--> See the explanation on the next page for details.

Edit

Undo: return to the previous settings.

Redo: cancel "undo" .

Display

Display the sensing area.

Update the sensing area.

Allocating selection

A11 A12 B11 B12

A21 A22 B21 B22

Eraser

Tool

Pen Rectangle

Edit

Undo Redo

Display

☒ Display sensing area.

☒ Update the sensing area

OK

Cancel

4-2-2-2. Allocating

Allocation selection

Select one to allocate.

Tool

Select Pen or Rectangle.

--> See the explanation below for details.

Edit

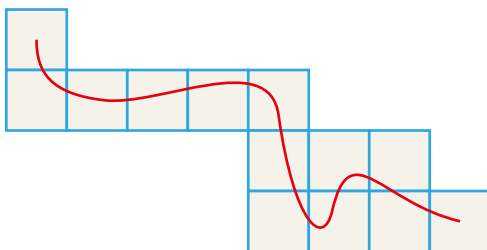
Undo: return to the previous settings.

Redo: cancel "undo" .

Display

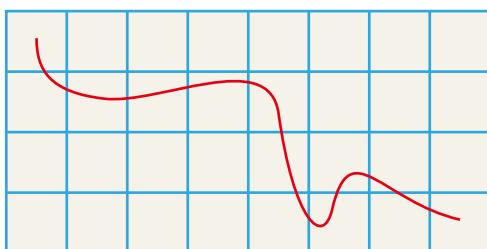
Display the sensing area.

Update the sensing area.



Selecting sections by "Pen" tool

Sections through which the pen passed are selected.



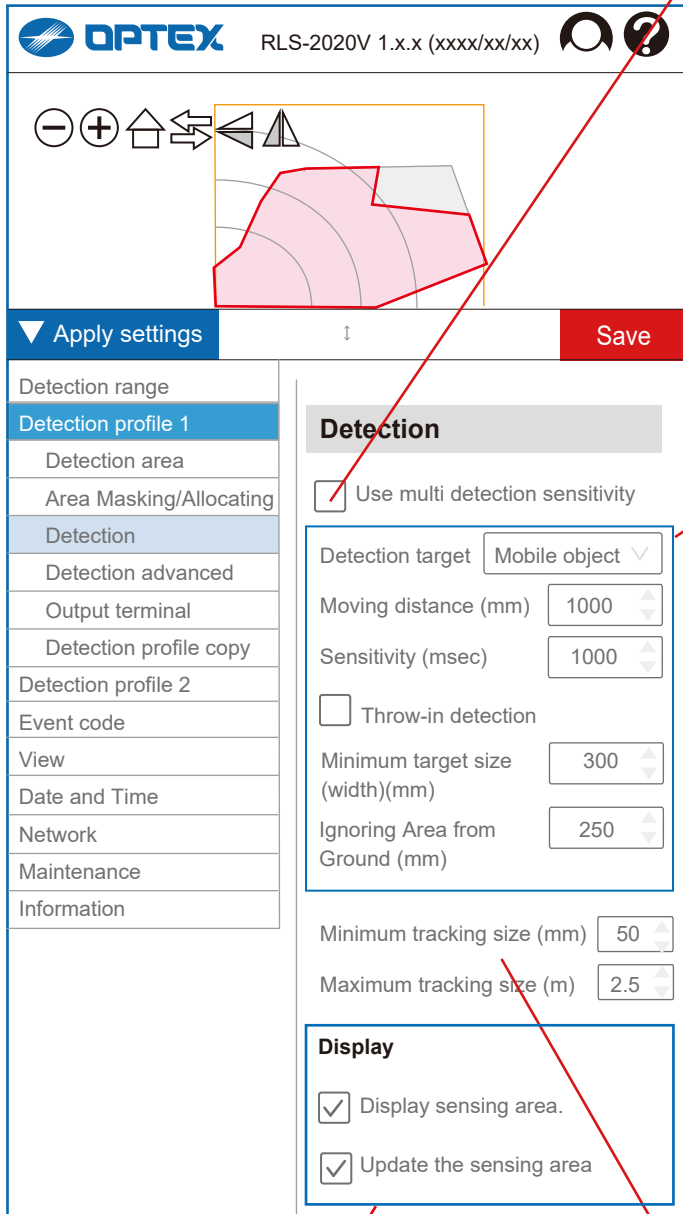
Selecting sections by "Rectangle" tool

Quadrilateral sections between the start and end points are selected.

4-2-3. Detection

Multi settings

If "Use multi detection sensitivity" is selected, each detection area can be configured independently.

**Detection**
☒ Use multi detection sensitivity

A11 A12 B11 B12 A21 A22 B21

Detection target Mobile object ▾

Moving distance (mm) 1000

Detection target [Mobile object, Presence]

Moving distance (mm) *Mobile object only*
[500 to 10,000 (= 0.5 to 10 m)]

The Moving distance is to avoid false alarm caused by static obstacles. If an object is detected longer than the moving distance, alarm is risen.

Sensitivity (msec.) *Presence only*
[50 to 900,000 (= 15 min.)]

The Sensitivity is to avoid false alarm caused by instantaneous event. If an object is detected longer than the Sensitivity time, alarm is raised.

Throw-in detection **2.1 (Ver.2.1 or later) Presence only*

Detects objects that pass quickly through the detection area, such as thrown objects. Since it detects instantly, the risk of false alarm increases depending on the environment.

Minimum target size (width) (mm)
[10 to 1,000 (= 1 m)]

The Size is to avoid false alarm caused by small object. If an object is smaller than Minimum Target Size, the object is ignored.

Ignoring Area from Ground (mm) *Vertical mode only*
[1 to 5,000 (= 5 m)]

Objects near to ground are ignored. Enter the height of the ignoring area.

Minimum tracking size (mm) [10 to 1,000 (= 1 m)]

If an object is smaller than Minimum Tracking Size, the object is ignored. After an object is detected, the object is tracked while the size is larger than Minimum Tracking Size.

Maximum tracking size (m) [1 to 50]

If an object is bigger than Maximum Tracking Size, the object is ignored. After an object is detected, the object is tracked while the size is smaller than Maximum Tracking Size.

Display

Display the sensing area.

Update the sensing area.

4-2-4. Detection advanced

1. Common items for Horizontal/Vertical mode

Environmental resistance *Outdoor mode only*
[Disable, Enable, Enhanced]

Disable: Response time of alarm is minimum but false alarm can increase in harsh environment such as fog or snow.

Enable: False alarm can be reduced by balanced detection ability.

Enhanced: False alarm due to fog or snow is reduced, but response time is longer and some objects may not be detected.

Auto area adjustment

RESCAN mini-Pro continues to learn background area and update background information gradually. By checking Adjust Detection Area, the detection area is adjusted proportionally to the background. (i.e. False alarm by snow can be reduced.)

Adjust detection area

When enabled, adjusts the detection area. To adjust the detection area, Adjust boundary area must be enabled.

Adjust boundary area

When enabled, adjusts the boundary area.

Boundary Recognition Accuracy [Low, Normal, High]

By changing this parameter that defines the accuracy for the recognition of the boundary (e.g. wall, floor, ground), the unit may easily detect the target which is located near the boundary.

Default value is Normal. "High" can be selected.

Higher accuracy condition, the unit can detect the target near the boundary, on the other hand, there is a possibility that it makes false alarms by noise from the surface.

Therefore it is advised to carry out a test to check its affect carefully at the actual site before operation .

Anti-masking enable

Judgement time (sec.) [1 to 600 (= 10 min.)]

Area ratio (%) [10 to 100]

Sensitivity [Low, Middle, High]

Anti-rotating enable

Judgement time (sec.) [1 to 600 (= 10 min.)]

Sensitivity [Low, Middle, High]

Soiling of laser window enable

Judgement time (sec.) [1 to 600 (= 10 min.)]

Area ratio (%) [10 to 100]

DQ (Disqualify) output enable

Off-delay timer (sec.) [1 to 600 (= 10 min.)]

Anti-Masking

Detects obstacles which mask the detector.

Anti-Rotation

Detects if the unit is rotated.

Soiling of the Window

Detects dirt is soiling detector window.

DQ (Environmental Disqualification) output

Detects harsh environment, fog, rain, or snow for example.

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings Save

Detection range

Detection profile 1

Detection area

Area Masking/Allocating

Detection

Detection advanced

Output terminal

Detection profile copy

Detection profile 2

Event code

View

Date and Time

Network

Maintenance

Information

Detection advanced

Environmental resistance Enable ▾

Auto area adjustment

☐ Adjust detection area

☒ Adjust boundary area

Excluded distance from the detector (m) 5

Alarm duration

Mode Continuous ▾

Specified time (sec.) 0

2. Horizontal mode

Excluded distance from the detector (m)

[0 to 20 rectangle, 0 to 30 fanshape]

In horizontal mode, it follows background changes excluding closer area to the detector than the parameter value, and updates the detection area appropriately.

Alarm duration *Mobile object only*

Mode [Continuous, Preset]

Continuous:

As long as an object remains in the detection area after detection, it keeps the alarm condition.

Preset:

Even though an object remains in the detection area after detection, the alarm will be restored after the preset time.

Specified time (sec.) [1 to 30,000 (= 500 min.)]

Setting for alarm duration after detection.

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings Save

Detection range

Detection profile 1

Detection area

Area Masking/Allocating

Detection

Detection advanced

Output terminal

Detection profile copy

Detection profile 2

Event code

View

Date and Time

Network

Maintenance

Information

Detection advanced

Non-detection zone (m) 1.5

Environmental resistance Enable ▾

Auto area adjustment

☐ Adjust detection area

☒ Adjust boundary area

Maximum adjusting height (m) 1

☒ Small animal tolerance

3. Vertical mode

Non-detection zone (m)

[0 to 20 rectangle, 0 to 30 fanshape]

Objects near to ceiling are ignored.

In vertical detection area, protruding objects on the ceiling can cause false alarm. Enter the height of the ignoring area.

Maximum adjusting height (m)

[0 to 20 rectangle, 0 to 30 fanshape]

In vertical mode, the auto area adjustment can be limited using this setting. Changes under the height are learned as background.

Small animal tolerance

In vertical mode, small animals on the ground are ignored by this function.

Additional menu on Profile 1 and 2

When set the "Always show advanced settings" is enabled, following menu items appear on each Profile 1 and 2.

--> Refer to Section "4-5-4. Menu" or "5-1. Menu view".

[1] 4-2-5. Dynamic event filtering

[2] 4-2-7. ONVIF digital input

[3] 4-2-8. ONVIF motion alarm

[4] 4-2-9. HTTP notice

(Bold letters = advanced settings)

* = RLS-2020V only

4-2-5. Dynamic event filtering

Use dynamic event filtering

When this function is enabled, detection area A is assigned as an "Alert zone" and detection area B is assigned as a "judgement zone", and the output is judged by the AND or NAND logic of each area. In addition, all detection areas B never create an alarm by itself alone.

Alert zone

The detection area A that can be used as an "Alert zone" is displayed. When the area filter is available, "A11", "A12" ... so on are displayed, and each area can be configured independently.

Action [None, Advance, Suppress]

None: Dynamic event filtering can not be used for this area.

Advance: Only conditions under detections in the "Judgement area", the detection in the "Alert zone" creates alarm condition. (AND logic)

Suppress: Only conditions without detection in the "Judgement area", the detection in the "Alert zone" creates alarm condition. (NAND logic)

Judgement processing [Once, Always]

Once: Judgement is executed only during the "Alert hold-off period". After the "Alert hold-off period" ends, the alarm will be output based on the judgement result.

Always: Judgement is always executed after the "Alert hold-off period" ends, the alarm will be output based on the judgement result. (Delay timer)

judgement condition

The detection area B that can be used as an "Judgement zone" is displayed. When the area filter is available, "B11", "B12" ... so on are displayed, and can be set also the input terminal as the judgement condition.

Alert hold-off period (sec.) [0 to 900 (= 15 min.)]

Set the period from the detection in the "Alert zone" to the alarm output. (Delay timer)

judgement extension time (sec.) [0 to 900 (= 15 min.)]

Set the extension time for the "judgement condition" . (OFF-delay timer)

Display

Display the sensing area.

Update the sensing area.

4-2-6. Output terminals

Each output can be individually configured.

Select the terminal for settings
[Output 1, 2, 3, 4, 5, 6]

Select events

[A1, A11, A12, A21, A22, B11, B12, B21, B22, AM, AR, SO, DQ, TR, TA, DM]

Output when the selected event occurs.

R.E.C. (REDSAN Event Code)

A1, A11, A12 B11, B12: Zone alarm
AM: Anti-Masking AR: Anti-Rotation
DQ: Environmental Disqualification DM: Device Monitoring
MO: Master Alarm SO: Soiling
TA: Tamper Output TR: Device Trouble

Select output mode [N.O., N.C.]

Activation time (sec.)

[1 to 1,800 (= 30 min.)]

Set the time to activate the test output.
Press the "Activate" icon for the test.

ONVIF menu on Profile 1 and 2

When "Always show advanced settings" is enabled, 2 ONVIF menu items appear on each Profile 1 and 2. --> Refer to Section "3. ONVIF settings"

(Bold letters = advanced settings)

4-2-7. ONVIF digital inputs

Each output can be individually configured according to the ONVIF format.

Select the terminal for settings
[DI#1, 2, 3, 4, 5, 6]

Interlock with Output 1 to 6

Select events

[A1, A11, A12, A21, A22, B11, B12, B21, B22, AM, AR, SO, DQ, TR, TA, DM]

Respond when the selected event occurs.
The choices appear only when "Interlock with Outputs" is not selected.

--> See "4-2-6. Output terminals"
for R.E.C (REDSAN event code)

(Bold letters = advanced settings)

4-2-8. ONVIF motion alarm

Can set the ONVIF motion alarm responding to the select events.

Select events

[A1, A11, A12, A21, A22, B11, B12, B21, B22, AM, AR, SO, DQ, TR, TA, DM]

Respond when the selected event occurs.

-> See "4-2-6. Output terminals" for R.E.C (REDSCAN event code)

4-2-9. HTTP notice

A function to control external devices using HTTP based on R.E.C (REDSCAN event code).

AXIS devices controlled by Virtual Inputs and Generic devices controlled by HTTP commands can be used.

Device [None, AXIS device, Generic device]

Scheme [HTTP, HTTPS]

IP address

HTTP/HTTPS port

User name

Password

Transmission interval (msec.)

[500 to 10,000 (= 10 sec.)]

Communication timeout (sec.) [2 to 10]

Event setting

Can be set for each selected event.

Use HTTP notice

Virtual input number [1 to 32] *1

Activation URI *2

Inactivate *2

Activate: Test output.

Inactivate: Stops test output.

Inactivate all: Stops all test outputs. *1

*1 = AXIS device only.

*2 = Generic device only.

(Bold letters = advanced settings)

* = RLS-2020V only

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings

Detection range

Detection profile 1

Detection area

Area Masking/Allocating

Detection

Detection advanced

Output terminal

Detection profile copy

Detection profile 2

Event code

View

Detection profile copy

☐ Detection area

☐ Area masking/Allocating

☐ Detection

☐ Detection advanced

☐ Output terminal

Copy settings to detection profile 2

4-2-10. Detection profile copy

Copy the settings to the profile 2.

It can be adjusted individually after copying.

Select items

The selected items will be copied to the profile 2.

Copy icon

It can be pushed at least one item is selected.

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings

Save

Detection range

Detection profile 1

Detection profile 2

Detection area

Area Masking/Allocating

Detection

Detection advanced

Output terminal

Detection profile copy

Event code

View

Date and times

Network

Detection area

Detection range A (m) 20

Height or Depth (m) 20

Offset (mm) 500

Edit area

4-3. Detection profile 2

Set each item step by step just the same as detection profile 1.

Each item of profile 1 can be also copied to profile 2.

4-4. Event code

Event code

☐ Use event code

Protocol UDP

UDP (IPv4)

Scope Broadcast

IP address 192.168.0.1

Port number 1234

Number of transmission 10

Primary TCP (IPv4/v6)

IP address 192.168.0.1

Port number 1234

Secondary TCP (IPv4/v6)

IP address 192.168.0.1

Port number 1234

ID

☐ Arbitrary detector ID

Detector ID 0

Transmission

Event code transmission interval (sec.) 1

Clear code timing (sec.) 10

☐ Enable heartbeat

☒ Send event code immediately when an alarm occurs

Use event code

If unchecked, the event code will not be sent.

Select the type of the communication protocol
 [UDP, Primary TCP, UDP + Primary TCP,
 Primary/Secondary TCP,
 UDP + Primary/Secondary TCP]

UDP (IPv4) settings

Scope [Broadcast, Unicast]

IP address

Port number

Number of transmission [1 to 20]

Primary/ Secondary TCP (IPv4/v6) settings

IP address

Port number

ID settings

arbitrary detector ID enable

Detector ID [0 to 999]

Transmission

Event code transmission interval (sec.)

[1 to 3,600 (= 60 min.)]

Clear code timing (sec.) [2 to 60 (= 1 min.)]

Enable heartbeat

Heartbeat for Device Monitoring:

If it is checked, DM code is stored in R.E.C. and
 sent by Transmission Interval.

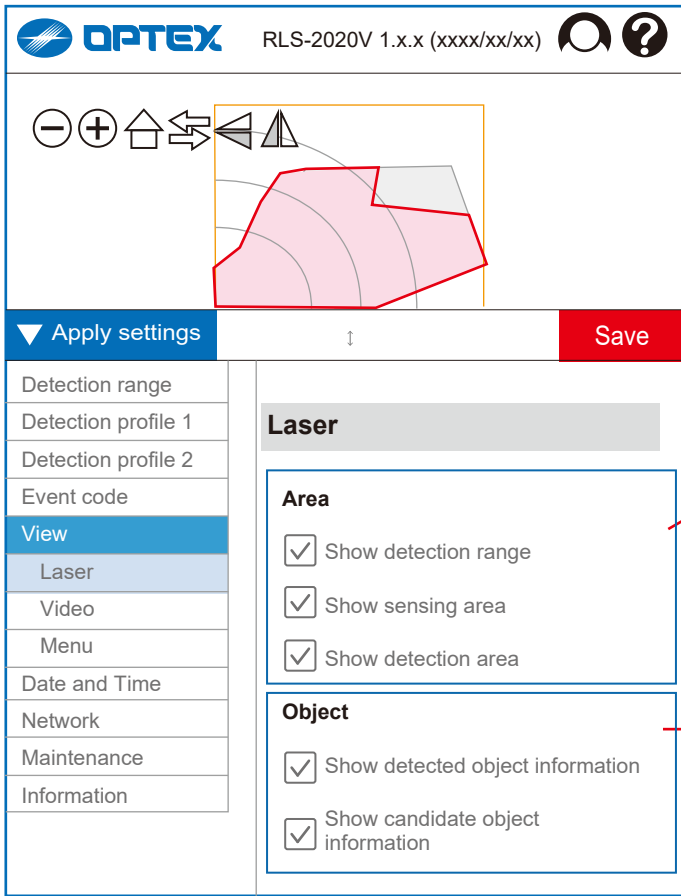
Send event code immediately when an alarm occurs

Remove the check mark, if you want to reduce
 the traffic of the event code.

-> See "4-2-6. Output terminals"
 for R.E.C (REDS CAN event code)

4-5. View

4-5-1. Laser



Detection/sensing area

Show detection range *1

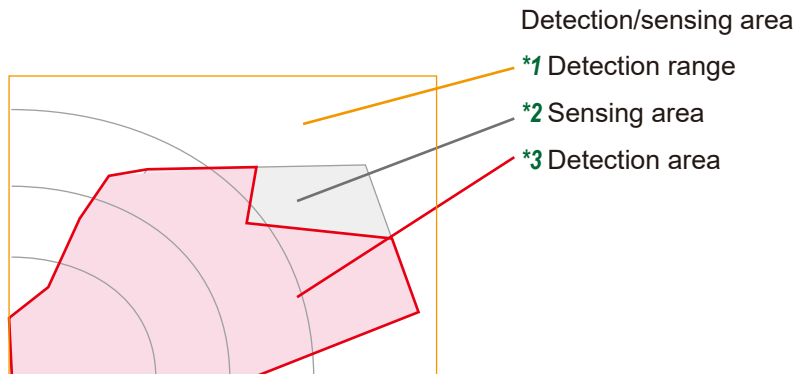
Show sensing area *2

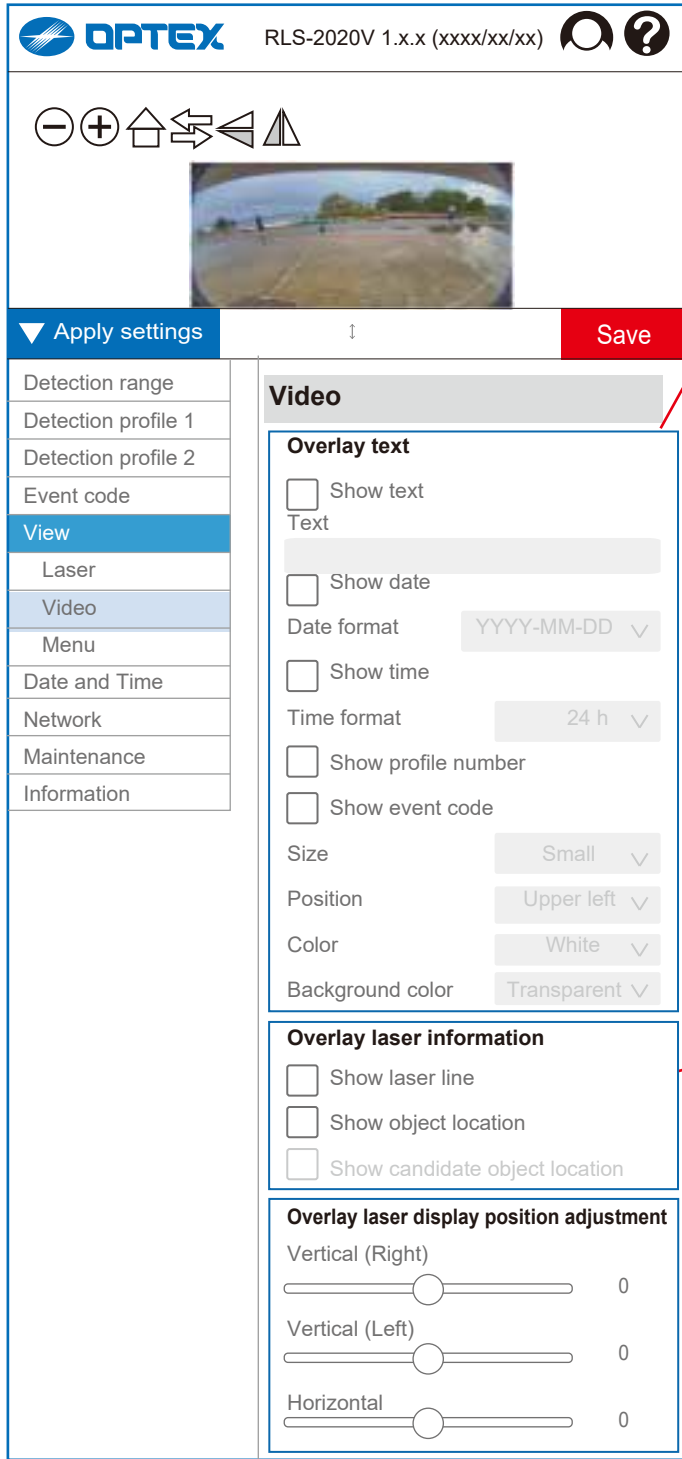
Show detection area *3

Object settings

Show detected object information

Show candidate object information





4-5-2. Video

Overlay text

They do not appear in the images on the browser.
Only for RTSP streaming.

Show text

Text [A to Z, a to z] [0 to 9] [! " # \$ % & ' () *
+ , - . / : ; < = > ? @ [] ^ _ ` { | } ~ space]

Show date

Date format [YYYY-MM-DD, MM/DD/YYYY]

Show time

Time format [12h, 24h]

Show profile number

Show event code

Size [Small, Middle, Large]

Position [Upper right, Upper left, Lower right,
Lower left]

Color [White, Black]

Background color [White, Black, Transparent,
Semi-transparent]

Overlay laser information

Show laser line *1

Show object location *2

Show candidate object location *3

Overlay laser display position adjustment

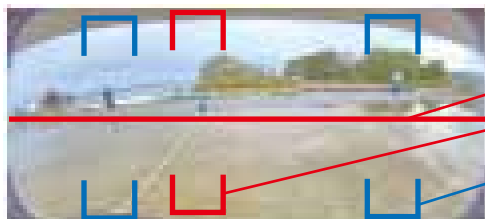
Vertical (Right) [-539 to +539]

Vertical (Left) [-539 to +539]

Used to check the laser irradiation position with LAC-1
and adjust the position of the laser line in the vertical
direction.

Horizontal [-15 to +15]

If the object captured by the camera and the object
position are misaligned, adjust in the horizontal
direction.



Overlay laser information

*1 Laser line

*2 Object location

*3 Candidate object location

4-5-3. Map

Map image

Image display settings for the ONVIF distribution video. JPEG files of prepared background images or bird's-eye view images are displayed instead of the real time camera images, enabling both detection area/intruding object position display and privacy protection.

Enlarge image

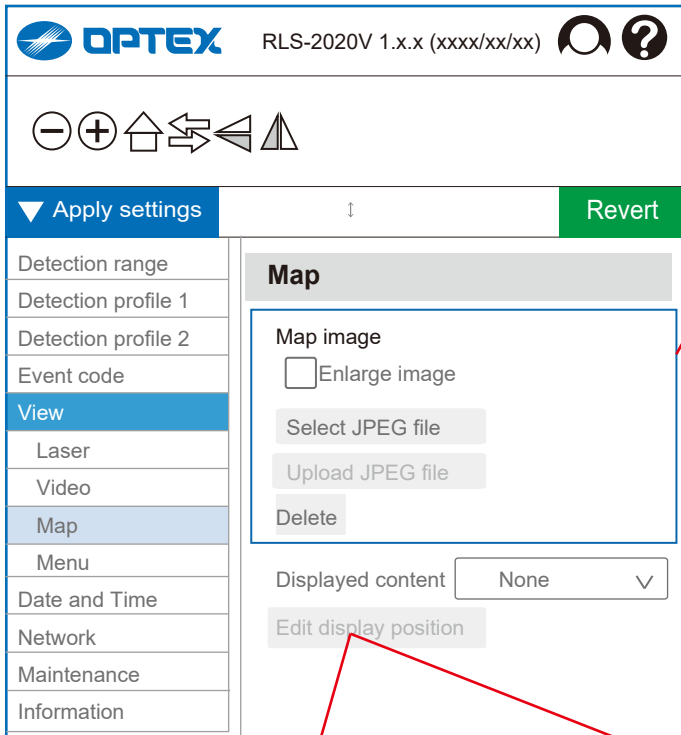
Select JPEG file

Upload JPEG file

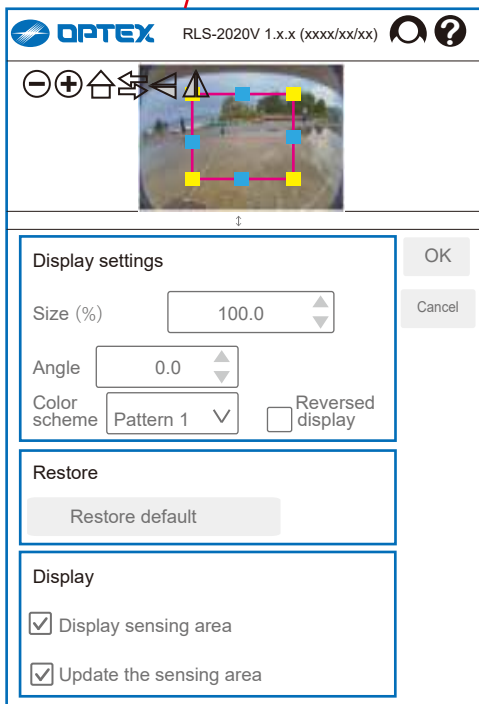
Delete

Displayed contents [None, Scan area, Object position]

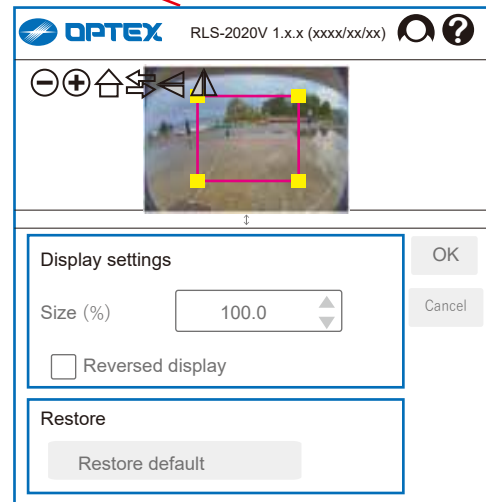
Edit display position



Scan area



Object position



Edit display position

Role of nodes

Yellow : Resize

Light blue : Rotation

(Displayed only when the "scan area" is selected.)



4-5-3. Menu

Unit [Metric, Feet]

Theme

[Use system settings, Light, Dark]

Use system settings: Works with the theme settings for PCs and smartphones.**Light:** Displayed on the screen in light mode.**Dark:** Displayed on the screen in dark mode.

Always show advanced settings

☐ Always show advanced settings.

+

Save

Detection range
Detection profile 1
Detection profile 2
Event code
View
Date and Time
Network
Maintenance
Information

Detection profile 1
Detection area
Area Masking/Allocating
Detection
Detection advanced
Output terminal
Detection profile copy

☒ Always show advanced settings.

+

Save

Detection range
Detection profile 1
Detection profile 2
Input
Event code
Laser settings
Camera settings*
ONVIF media profile
View
Event log
Date and Time
Network
Security
Maintenance
Information

Detection profile 1
Detection area
Area Masking/Allocating
Detection
Detection advanced
Dynamic event filtering
Output terminal
ONVIF digital input
ONVIF motion alarm
HTTP notice *2.1
Detection profile copy

 = Advanced settings in "Detection profile1/2"

-> See section 4, each item = Advanced settings -> **See section 5.**

* = RLS-2020V only

4-6. Date and times

Current time

Date

Time

Time settings

Time zone [GMT-12 to +14]

Mode [Synchronize with PC, Synchronize with NTP, Manual setup]

Date

Time

NTP

Configuration [Static, DHCP] *1.1

Network address

*1.1 = Ver.1.1 or later

4-7. Network

4-7-1. TCP/IP Basic

IPv4

Configuration [Static, DHCP]

IP address

Subnet mask

Default gateway

MTU [1000 to 1500]

IPv6

Enable DHCPv6

Current IP Address

IPv4 address

IPv6 Link local address

IPv6 Global address

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx) [Icons]

▼ Apply settings [Save]

Detection range
Detection profile 1
Detection profile 2
Event code
View
Date and Time
Network
TCP/IP Basic
TCP/IP advanced
SNMP
RS-485
Maintenance
Information

TCP/IP Advanced

DNS

Configuration Static ▾
Domain name
Primary DNS
Secondary DNS

HTTP

HTTP Port 80 ▴ ▾

HTTPS

HTTPS Port 443 ▴ ▾

RTSP

☒ Enable RTSP server
RTSP port 554 ▴ ▾
☒ RTSP authentication

WS-Discovery

☒ Enable WS-Discovery

4-7-2. TCP/IP Advanced

DNS settings

Configuration [[Static](#), [DHCP](#)]

Domain name

Primary DNS

Secondary DNS

HTTP setting

HTTP Port

HTTPS setting

HTTPS Port

RTSP settings

Enable RTSP server

RTSP Port

Enable RTSP authentication

Authentication of RTSP server and ONVIF server is common.

URI of RTSP of REDSCAN mini-Pro is

[rtsp://\(IP address\)/stream/0](rtsp://(IP address)/stream/0)

URI of HTTP tunneling of REDSCAN mini-Pro is

[http://\(IP address\)/stream/0](http://(IP address)/stream/0)

WS-Discovery setting

Enable WS-Discovery

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx) [Icons]

▼ Apply settings [Save]

Detection range
Detection profile 1
Detection profile 2
Event code
View
Date and Time
Network
TCP/IP Basic
TCP/IP advanced
SNMP
RS-485
Maintenance
Information

SNMP

SNMP v1

☐ Enable SNMP v1

SNMP v2c

☐ Enable SNMP v2c

SNMP v3

☐ Enable SNMP v3
User name
Security level noAuthNoPriv ▾
Authentication algorithm MD5 ▾
Authentication password
Confirm authentication password
Private key algorithm DES ▾
Private key password
Confirm private key password

4-7-3. SNMP

SNMP v1

Enable SNMP v1

SNMP v2c

Enable SNMP v2c

SNMP v3

Enable SNMP v3

User name

Security level [[noAuthNoPriv](#), [authNoPriv](#), [authPriv](#)]Authentication algorithm [[MD5](#), [SHA](#)]

Authentication password

Confirm authentication password

Private key algorithm [[DES](#), [AES](#)]

Private key password

Confirm private key password

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings Save

Detection range

Detection profile 1

Detection profile 2

Event code

View

Date and Time

Network

TCP/IP Basic

TCP/IP advanced

SNMP

RS-485

Maintenance

Information

RS-485

Baud rate (bps) 115200 ▼

Data 8 bits ▼

Parity None ▲▼

Stop bit 1 bit ▼

☒ Terminating resistor

4-7-4. RS-485

Baud rate (bps)

[9600, 19200, 38400, 57600, 115200, 230400]

Data (bits) [7, 8]

Parity [None, Even, Odd]

Stop bit (bits) [1, 2]

Terminator [OFF, ON]

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings

Detection range

Detection profile 1

Detection profile 2

Event code

View

Date and Time

Network

Maintenance

System

Logs

Import/Export

Information

System

Reboot

Reboot

Factory reset

Keep network settings

Clear network settings

Firmware update

Select firmware file...

Update firmware

Language

Select language English ▼

Apply

4-8. Maintenance

4-8-1. System

Reboot

Perform a reboot

Factory reset

Keep network settings:

restore to the default settings except network settings

Clear network settings:

restore to the factory default with all settings

Firmware update

Select firmware file:

open the separate window to select the file

Update firmware:

start update using the selected file

Language

Select language

[English (Default), Français, Deutsche, Italiano, Español, Português Brasil, 中文, 日本語]

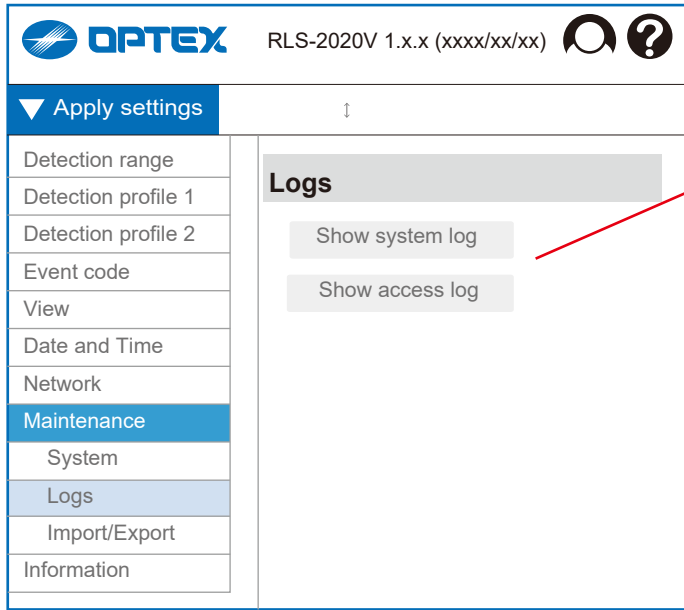
Apply

Firmware update:

Version up; The set parameters will be inherited even after the update.

Version down; The set parameters will **not** be inherited after the update.

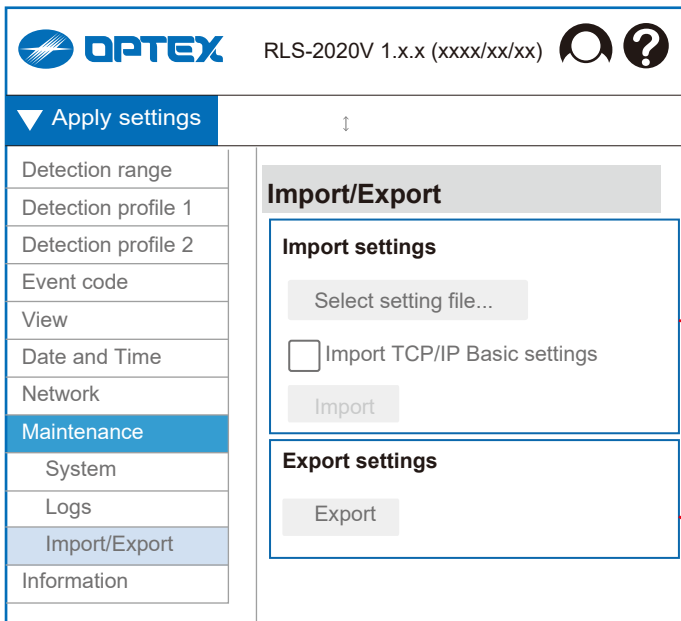
All settings will **return** to factory defaults.



4-8-2. Logs

Show system log

Show access log



4-8-3. Import/Export

This function allows you to copy the set parameters to other devices.

For example, it is effective in the following cases.

[1] Make the same settings for multiple devices at the same site.

[2] Reflect all or part of past settings on different sites.

[3] Back up the settings.

Import settings

Select setting file

Import TCP/IP Basic settings Enable

-> Refer to "4-7-1. TCP/IP Basic" about setting items.

Import starts

Export settings

Export starts

 RLS-2020V 1.x.x (xxxx/xx/xx)  

▼ Apply settings

↑

Detection range

Detection profile 1

Detection profile 2

Event code

View

Date and Time

Network

Maintenance

Information

Product information

Installation information

Product information

Model

RLS-2020V

Serial number

xxxxxxxxxxxxxx

Firmware version

x.x.x (xxx/xx/xx)

MAC address

Ethernet port xx:xx:xx:xx:xx:xx

Maintenance port xx:xx:xx:xx:xx:xx

License

Show license

4-9. Information

4-9-1. Product information

Model name

Serial number

Firmware version

MAC address

License

Show the license information by selecting the icon.

 RLS-2020V 1.x.x (xxxx/xx/xx)  

▼ Apply settings

↑

Save

Detection range

Detection profile 1

Detection profile 2

Event code

View

Date and Time

Network

Maintenance

Information

Product information

Installation information

Installation information

Device

Short name

Description

Mounting

Latitude (DEG)

Longitude (DEG)

Height (m)

Direction (°)

Tilt angle (°)

4-9-2. Installation information

The information described here can be read by an external connection.

Show the device information

Short name

Description

Use this area freely as a memo.

Show the mounting information

Latitude (DEG)

Longitude (DEG)

Height (m)

Direction (°) [0° to 359°]

North = 0° East = 90° South = 180° West = 270°

Tilt angle (°) [-180° to +180°]

5. Advanced Settings

RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings

Save

Detection range

Detection profile 1

Detection profile 2

Event code

View

Laser

Video

Menu

Date and Time

Network

Maintenance

Information

Menu

☐ Always show advanced settings.

Unit

Metric ▼

Theme

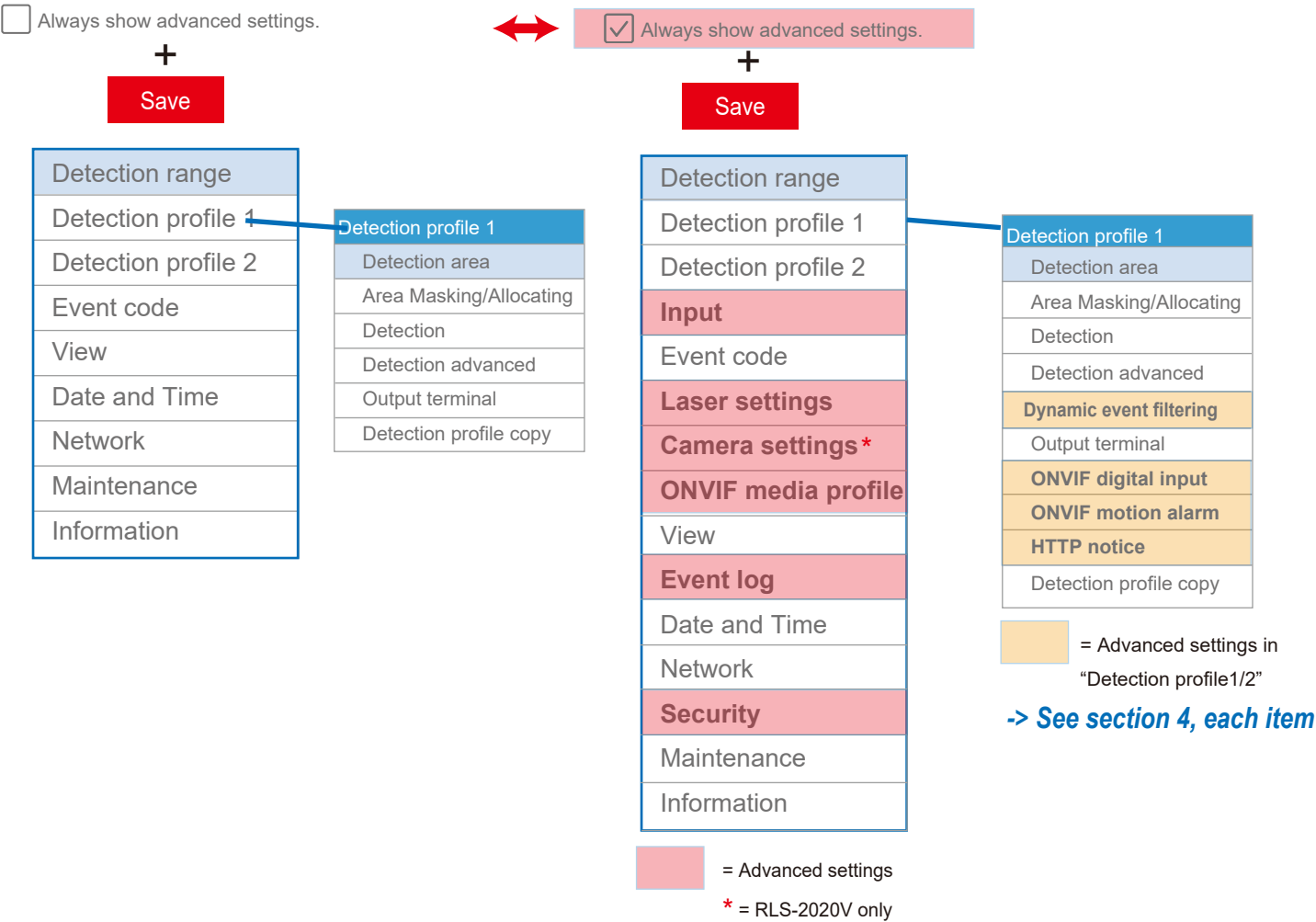
Use system settings ▼

5. Advanced settings

5-1. Menu view

If “Always show advanced settings” is checked, several additional items will be displayed as shown.

Always show advanced settings



☒ Always show advanced settings.

+

Save

Detection range

Detection profile 1

Detection profile 2

Input

Event code

Laser settings

Camera settings *

ONVIF media profile

View

Event log

Date and Time

Network

Security

Maintenance

Information

Detection profile 1

Detection area

Area Masking/Allocating

Detection

Detection advanced

Dynamic event filtering

Output terminal

ONVIF digital input

ONVIF motion alarm

HTTP notice

Detection profile copy

= Advanced settings

* = RLS-2020V only

= Advanced settings in “Detection profile1/2”

-> See section 4, each item

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings Save

Detection range

Detection profile 1

Detection profile 2

Input

Input terminal

ONVIF relay output

Event code

Laser settings

Camera settings *

ONVIF media profile

View

Event log

Date and Time

Network

Security

Input terminal

Input 1 Input 2

Action None ▾

Response output No response ▾

Judgement time (sec.) 1

Mode N.O. ▾

(Bold letters = advanced settings)

* = RLS-2020V only

5-2. Input

5-2-1. Input terminal

Select the terminal for settings.
[Input 1, 2]

Action

[None, Detection profile switching, Area set,
LEDs turn on, Detector check]

(1) Duplicate settings cannot be made for input 1/2 of the input terminal
and RO#1/2 of the ONVIF relay output.

(2) No response is returned during trouble output (AM/AR/SO/TR) or
Disqualified environment output (DQ) with "Detector check" setting.

Response output [No response, Output 1, 2, 3, 4, 5, 6]

Judgement time [0 to 10]

Mode [N.O., N.C.]

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings Save

Detection range

Detection profile 1

Detection profile 2

Input

Input terminal

ONVIF relay output

Event code

Laser settings

Camera settings *

ONVIF media profile

View

Event log

Date and Time

Network

Security

ONVIF relay output

RO#1 RO#2

Action None ▾

Response output No response ▾

(Bold letters = advanced settings)

* = RLS-2020V only

5-2-2. ONVIF relay output

Select the relay output for settings.
[RO#1, 2]

Action

[None, Detection profile switching, Area set,
LED output, Detector check]

(1) Duplicate settings cannot be made for input 1/2 of the input terminal
and RO#1/2 of the ONVIF relay output.

(2) No response is returned during trouble output (AM/AR/SO/TR) or
Disqualified environment output (DQ) with "Detector check" setting.

Response output

[No response, ONVIF digital input 1, 2, 3, 4, 5, 6]

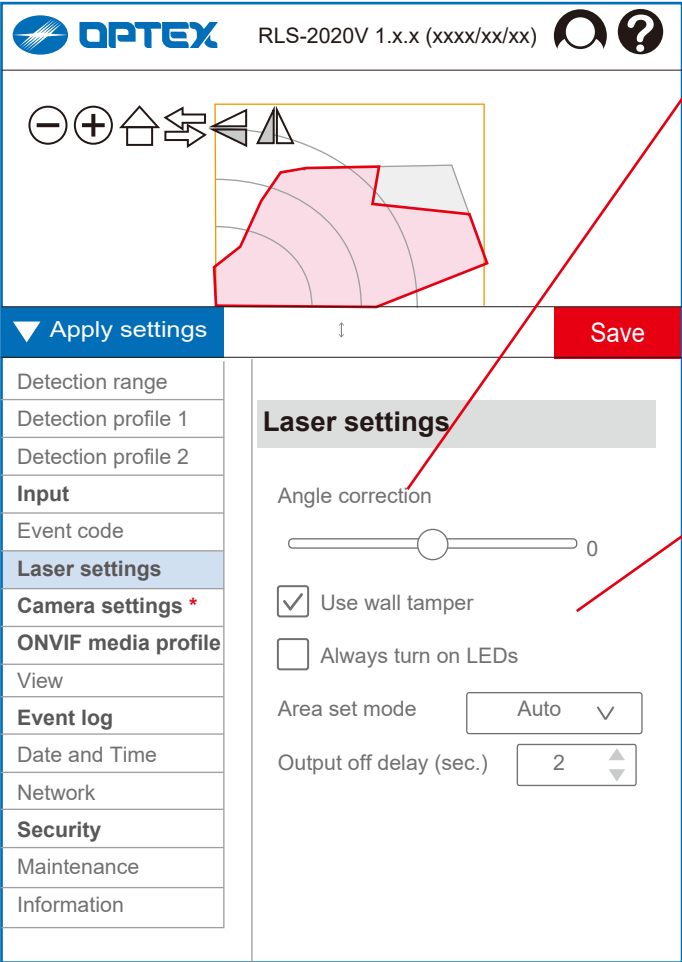
5-3. Laser settings

Angle correction

Normal resolution [-2.25° to +2.5°]

High resolution [-2.375° to +2.5°]

The angle of the detection area is corrected in the software using this setting.



(Bold letters = advanced settings)

* = RLS-2020V only

Use wall tamper

Turn it off when the wall tamper switch may not be pressed properly, for example mounting on a pole.

Always turn on LEDs

Area set mode

[Auto, Indoor option, Outdoor option]

In most situations leave as default "Auto", because the area set is optimized according to the Indoor/Outdoor mode. Select 2 type of options, only if "Auto" can not work properly.

Output off delay (sec.)

[0.1 to 60 (= 1 min.)]

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

Apply settings Revert

Image adjustment

Image

Brightness 50

Contrast 128

Sharpness 64

Saturation 128

Wide dynamic range

☐ Use wide dynamic range

Flicker correction

Power line frequency 50 Hz

(Bold letters = advanced settings)

* = RLS-2020V only

5-4. Camera settings (RLS-2020V only)

5-4-1. Image adjustment

Image

Brightness [0 to 100]

Contrast [0 to 255]

Sharpness [0 to 255]

Saturation [0 to 255]

Wide dynamic range

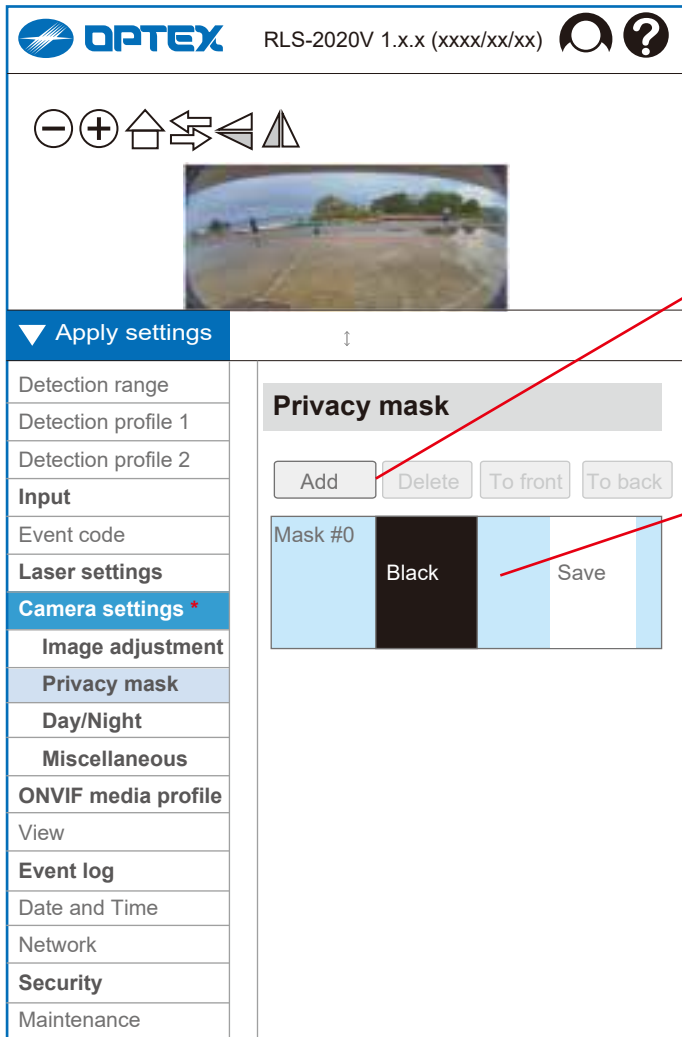
Dynamic range is the difference in brightness between the darkest and brightest parts of an image.

When it is turned on, it is corrected so that the difference in brightness is reduced, and overexposure and underexposure are less likely to occur.

It is recommended to turn it on under conditions where there is a large difference in brightness.

Flicker correction [50 Hz, 60 Hz]

It should be same as the power frequency.



(Bold letters = advanced settings)

* = RLS-2020V only

5-4-2. Privacy mask

If you need to maintain privacy such as nearby facilities or people, you can use the privacy mask function to mask the specified area of the image.

Masking configuration

Add: to add a masking area for the camera images

Delete: to delete a masking area of the camera images

To front: Move the selected privacy mask forward.

To back: Move the selected privacy mask back.

Mask # [0 to 7]

Color [Black, White, Gray, Red, Blue, Green,



Cyan, Yellow, Mosaic]



Save:

To save the masking configuration. Moving to other menu item without pressing "Save", the masking settings will be restored.

Revert:

After confirming the settings by pressing "Save", the "Revert" icon will appear, allowing you to return to the settings before editing.

5-4-3. Day/Night

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

Day/Night switch [Auto, Night, Day]

Auto: Switching automatically according to the ambient illuminance.

Night: It is fixed to a monochrome image so that it can record even in low light.

Day: It is fixed to a color image regardless of the ambient illuminance.

IR illumination

Enable IR illumination

Enable power saving

Reduces power consumption by reducing IR LED output when no object is detected.

Right side/middle/front, Left side/middle/front

[Auto, OFF, Level 1 to 5]

Auto: Adjust automatically according to the size of the scan area.

OFF: IR illumination is not activated.

Level 1 to 5: IR illumination is activated with each level.

(Bold letters = advanced settings)

* = RLS-2020V only

5-4-4. Miscellaneous

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

Video output [Camera/Map, All black, Mosaic]

Camera/Map: Camera/Map images without any processing

All black: Black images. Settings on “Camera - Privacy mask” and “View - Video” are ignored.

Mosaic: Images with mosaic. Settings on “Camera - Privacy mask” are ignored.

Notify internal error of camera module

If you set it to **enable**, the TR signal is output when an internal error occurs.

If you do **not** want to report a camera error as the TR signal, **uncheck** it.

(Bold letters = advanced settings)

* = RLS-2020V only

ONVIF menu on Advanced settings

--> Refer to Section "3. ONVIF settings"

The screenshot shows the ONVIF media profile settings for H.264 Encoding. The interface includes a top bar with the OPTeX logo, version RLS-2020V 1.x.x (xxxx/xx/xx), and icons for help and settings. A left sidebar contains a list of settings categories: Detection range, Detection profile 1, Detection profile 2, Input, Event code, Laser settings, Camera settings *, ONVIF media profile (selected), H.264 Encoding (selected), JPEG Encoding, View, Event log, Date and Time, Network, Security, Maintenance, and Information. The main content area is titled 'H.264 Encoding' and contains four settings: Resolution (1080 p (FHD) v), Bitrate (kbit/s) (1000), Frame rate (fps) (6), and GOP length (12). At the top of the main area are buttons for 'Apply settings' and 'Save'.

(Bold letters = advanced settings)

* = RLS-2020V only

5-5. ONVIF media profile

5-5-1. H.264 Encoding

Resolution

[1080 p (FHD), 720 p (HD), 360 p, 1080 p (FHD Portait), 720 p (HD Portait), 360 p (Portait)]

Bitrate (kbit/s) [200 to 4,000]

Frame rate (fps) [1 to 10]

GOP length [5 to 50]

The screenshot shows the ONVIF media profile settings for JPEG Encoding. The interface is identical to the previous one, but the 'ONVIF media profile' category is selected, and the 'JPEG Encoding' sub-category is highlighted in the sidebar. The main content area is titled 'JPEG Encoding' and contains three settings: Resolution (720 p (HD) v), Image quality (Highest v), and Frame rate (fps) (6). The 'Apply settings' and 'Save' buttons are still present at the top.

(Bold letters = advanced settings)

* = RLS-2020V only

5-5-2. JPEG Encoding

Resolution

[720 p (HD), 360 p, 720 p (HD Portait), 360 p (Portait)]

Image quality [Highest, High, Normal, Low, Lowest]

Frame rate (fps) [1 to 10]

5-6. Event log

5-6-1. Record

You can save the camera image by using the set R.E.C. (**REDSCAN Event Code**. See list below) as a trigger.

You can set the Pre/Post recording time and the trigger to start recording.

You can save up to 500 logs.

Recording time

Pre-alarm record time (sec.) [2 to 5]

Post-alarm record time (sec.) [1 to 10]

Trigger

[MO, A1, A11, A12, A21, A22, B11, B12, B21, B22, DQ, AR, AM, TR, SO, TA]

(Bold letters = advanced settings)

* = RLS-2020V only

R.E.C. (REDSCAN Event Code)

A1, A11, A12, B11, B12: Zone alarm

AM: Anti-Masking

AR: Anti-Rotation

DQ: Environmental Disqualification

DM: Device Monitoring

MO: Master Alarm

SO: Soiling

TA: Tamper Output

TR: Device Trouble

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings

Detection range

Detection profile 1

Detection profile 2

Input

Event code

Laser settings

Camera settings *

ONVIF media profile

View

Event log

Record

Play

Date and Time

Network

Security

Maintenance

Information

Play

☐ Date

From [] to []

☐ Time

From [] to []

☐ Trigger

AreaSet ▼

Refresh Delete

Date and time	Trigger

< Play >

50

Playing:

Export log

Prepare

Export

Import log

Select log file ...

Import

Delete all

5-6-2. Play

Play the recorded images.

Play search

Date

Date from [YYYY/MM/DD] to [YYYY/MM/DD]

Time

Time from [HH:MM:SS] to [HH:MM:SS]

Trigger

[Area set, Manual,
MO, A1, A11, A12, A21, A22, B11, B12,
B21, B22, DQ, AR, AM, TR, SO, TA]

Area set; Log when area set is performed

Manual; Log when recording starts

-> See "5-6-1. Record"
for R.E.C (REDSCAN event code)

Refresh

Delete

Result list view

<

Play

>

Playing status

Export log

Up to 5 files can be exported at the same time.

If the quantity is exceeded, an alert will be displayed
when pressing the export icon.

Prepare

While preparing the event log, HTTP tunneling video
distribution and WebApi acceptance will be temporarily
suspended.

Export

Import log

When logs are imported, only the imported logs are
displayed in the list.

(Indicated as "Displaying imported logs")

If all the imported logs are deleted, logs in the sensor
are displayed.

Select log file

Import

Delete all

(Bold letters = advanced settings)

* = RLS-2020V only

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings

Detection range

Detection profile 1

Detection profile 2

Input

Event code

Laser settings

Camera settings *

ONVIF media profile

View

Event log

Date and Time

Network

Security

User Management

ONVIF User Manage

Certificates

HTTPS

IEEE 802.1X

Maintenance

Information

User management

User

User name	User group
root	Administrator

Add...

Modify...

Delete

(Bold letters = advanced settings)

* = RLS-2020V only

5-7. Security

5-7-1. User Management

You can edit the user information to log in the system.

User list

Add a new user

Modify the selected user

Delete the selected user

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings

Detection range

Detection profile 1

Detection profile 2

Input

Event code

Laser settings

Camera settings *

ONVIF media profile

View

Event log

Date and Time

Network

Security

User Management

ONVIF User Manage

Certificates

HTTPS

IEEE 802.1X

Maintenance

User setup

User name

User group

Password

The password must be 8 characters or more, and should be set with a combination of 2 or more types of numbers, uppercase letters, lowercase letters, and symbols.

Confirm password

OK Cancel

User setup

User name

User group [Administrator, Operator, Viewer]

Administrator can change *all* parameter settings.**Operator** can change parameters for *display only*.**Viewer** is *not permitted* to change any parameter.

Password

The password must be 8 characters or more, and should be set with a combination of 2 or more types of numbers, uppercase letters, lowercase letters, and symbols.

Confirm password

OK

Cancel

The screenshot shows the 'ONVIF User Management' section of the OPTeX settings. On the left is a sidebar menu with categories: Detection range, Input, Laser settings, Camera settings *, ONVIF media profile, Event log, Date and Time, Network, Security, and Information. Under 'Security', 'User Management' is expanded, showing 'ONVIF User Management' as the selected option. The main area is titled 'ONVIF User Management' and contains a table with two columns: 'User name' and 'User group'. The table has one row with 'root' and 'Administrator'. Below the table are three buttons: 'Add...', 'Modify...', and 'Delete'. A red arrow points from the 'Add...' button to the 'User setup' dialog box shown in the next image.

User name	User group
root	Administrator

(Bold letters = advanced settings)

* = RLS-2020V only

5-7-2. ONVIF User Management

User list

Add a new user

Modify the selected user

Delete the selected user

This is the first item that needs to be set when using ONVIF. See **Chapter 3** for details.

The 'User setup' dialog box is shown, which is a modal window for adding a new user. It contains the following fields: 'User name', 'User group', 'Password', and 'Confirm password'. Below the 'Password' field, there is a text instruction: 'The password must be 8 characters or more, and should be set with a combination of 2 or more types of numbers, uppercase letters, lowercase letters, and symbols.' At the bottom of the dialog are 'OK' and 'Cancel' buttons. A red arrow from the 'Add...' button in the previous screenshot points to this dialog.

User setup

User name

User group

Select user group that is defined by ONVIF.

Password

The password must be 8 characters or more, and should be set with a combination of 2 or more types of numbers, uppercase letters, lowercase letters, and symbols.

Confirm password

OK

Cancel

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings

Detection range

Detection profile 1

Detection profile 2

Input

Event code

Laser settings

Camera settings *

ONVIF media profile

View

Event log

Date and Time

Network

Security

User Management

ONVIF User Manage

Certificates

HTTPS

IEEE 802.1X

Maintenance

Information

Certificates

Certificate ID	Issued on	Expires on
default-self-signed	2021/03/11	2037/12/31

Install certificate..

Properties...

Delete

Create self-signed certificate...

Create Certificates Signing Request...

(Bold letters = advanced settings)

* = RLS-2020V only

5-7-3. Certificates

Create/install a certificate required for server communication in HTTPS and IEEE 802.1X.

Certificate ID list

Install a certificate ID

Properties

Delete the current ID

Create self-signed certificate ID

Create Certificate Signing Request

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings

Detection range

Detection profile 1

Detection profile 2

Input

Event code

Laser settings

Camera settings *

ONVIF media profile

View

Event log

Date and Time

Network

Security

User Management

ONVIF User Manage

Certificates

HTTPS

IEEE 802.1X

Maintenance

Information

Install certificate

Certificate ID

Certificate type

CA certificate

Select certificate file

Secret key

Use separate key

Select private key file

Password

Install

Cancel

Install certificate

Certificate ID

Certificate type

[CA certificate, Certificate from signing request, Certificate and private key]

Select certificate file

Secret key

[Use separate key, PKCS#12]

Select private key file

Password

Install

Cancel

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings Save

Detection range

Detection profile 1

Detection profile 2

Input

Event code

Laser settings

Camera settings *

ONVIF media profile

View

Event log

Date and Time

Network

Security

User Management

ONVIF User Manage

Certificates

HTTPS

IEEE 802.1X

Maintenance

Information

HTTPS

Connection method HTTP&HTTPS ▾

Server certificate default-self-signed (▾

TLS support 1.0 or higher ▾

(Bold letters = advanced settings)

* = RLS-2020V only

5-7-4. HTTPS

Connection method [HTTP, HTTPS, HTTP & HTTPS]

Server certificate [None, default-self-signed (- 20xx/xx/xx)]

Choices are added when the certificate is created.

TLS support

[1.0 or higher, 1.1 or higher, 1.2 or higher, 1.3 only]

OPTEX RLS-2020V 1.x.x (xxxx/xx/xx)

▼ Apply settings Save

Detection range

Detection profile 1

Detection profile 2

Input

Event code

Laser settings

Camera settings *

ONVIF media profile

View

Event log

Date and Time

Network

Security

User Management

ONVIF User Manage

Certificates

HTTPS

IEEE 802.1X

Maintenance

Information

IEEE 802.1X

☐ Enable IEEE 802.1X

EAP type EAP-TLS ▾

User name

Password

CA Certificate None ▾

Client Certificate None ▾

(Bold letters = advanced settings)

* = RLS-2020V only

5-7-5. IEEE 802.1X

Enable IEEE 802.1X

EAP type [EAP-TLS, PEAP-MSCHAPv2]

User name

Password

CA certificate

Add the certificate to be used in "5-7-3. Certificates".

Client certificate

Add the certificate to be used in "5-7-3. Certificates".



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