



IDPM Compact Manual

Operation Manual

Part 1 - Introduction of Application

The IDPM Compact is an application that can be used on a Windows platform that provides a function to add and save meta information to hide sensitive privacy information when viewing an image without modifying or changing the original clip file (a video file with a built-in player)

Recommended Specifications and Minimum Specifications

	Recommended Specifications	Minimum Specifications
OS	Microsoft® Windows® 10 x86 (32/64 Bit) (Home, Professional)	Microsoft® Windows® 7 x86 (32/64 Bit) (Home Premium, Professional, Ultimate)
CPU	Intel Core™ i7-3770 3.40 GHz or faster	Intel Core™ i3-3220 3.30GHz
RAM	8 GB or more	4 GB
VGA	NVIDIA GTX750 or AMD Radeon™ R7 265 or higher (1920x1080, 32bpp)	NVIDIA GT730 or AMD Radeon™ HD HD7730 (1280x1024, 32bpp)
HDD	4 GB or more free space	1 GB

Limitations of Application

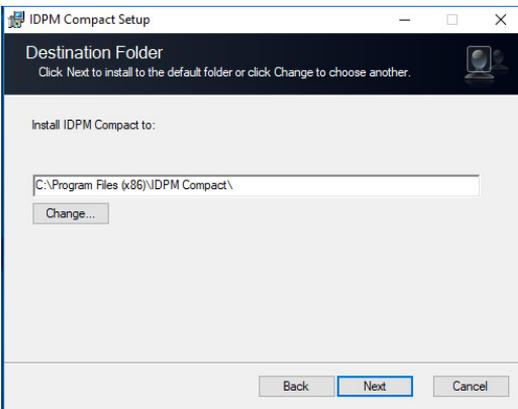
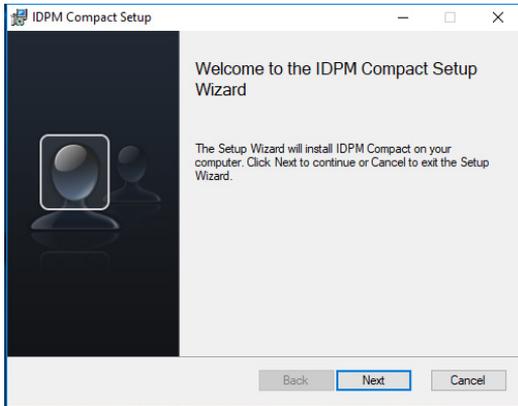
Based on the current version

- Does not support a server operating system.
- Can be used on a system that supports DirectX 9.0c or later.
- Does not provide a Fish-Eye Dewarp function.
 - Supports a privacy masking for Fish-Eye Original Video.
- Limitations on the original clip
 - Supports only a clip with Version 4.0.0 or later clip player.
- Limitations on the clip reproduction
 - Partial reproduction function will be added later on.
 - A clip file has 3GB limitations. The clip file is provided in a self-executable form. On Windows OS, a 4GB size file is not recognized as a normal executable file. It means that it is impossible to get it enabled. For this reason, a 3GB standard has been set for the size of a clip file, excluding the metadata that will be included to accommodate the increased size and the added size of the metadata.
- Limitations on CPU functions
 - It operates only on a system that uses a CPU supporting SSE2 or higher to perform operations such as object tracking.

Part 2 - Installation Instructions

Installing IDPM Compact

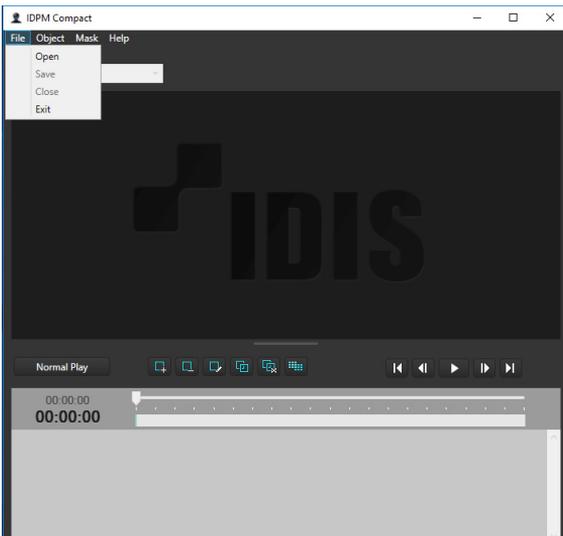
Run Setup.msi to install IDPM Compact. You can install a drive root other than a patch such as C:\ or D:\.



Part 3 - Application Interface

File Menu

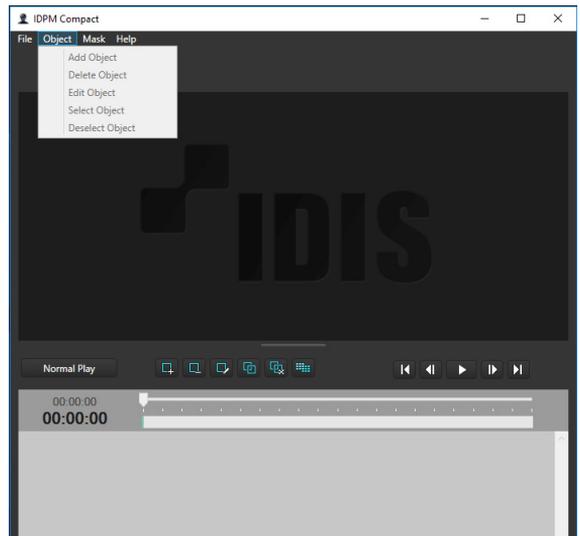
If you click the **File** in the menu at the top of the program, the related context will pop up.



- **Open Menu** : This is a menu for opening clips.
- **Save Menu** : This is a menu for saving new clips with privacy information.
- **Close Menu** : This is a menu for closing clips.
- **End Menu** : This is a menu for ending the program.

Object Menu

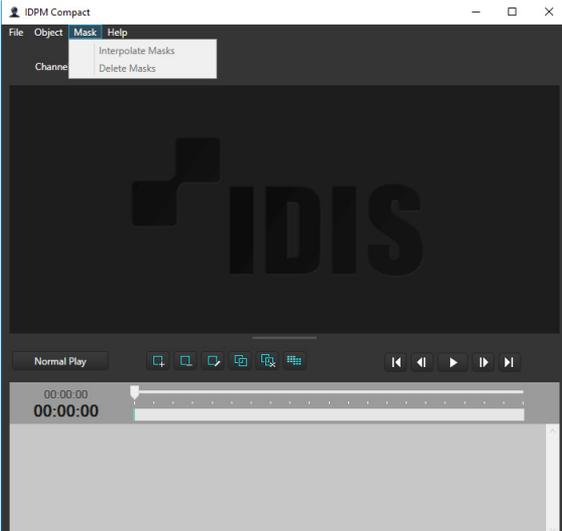
If you click the **Object** in the menu at the top of the program, the related context will pop up.



- **Add Object Menu** : This is a menu for adding objects
- **Delete Object Menu** : This is a menu for removing selected objects.
- **Edit Object Menu** : This is a menu for editing selected objects.
- **Select Object Menu** : This is a menu for selecting objects.
- **Release Object Selection Menu**: This is a menu for finding and releasing selected objects.

Mask Menu

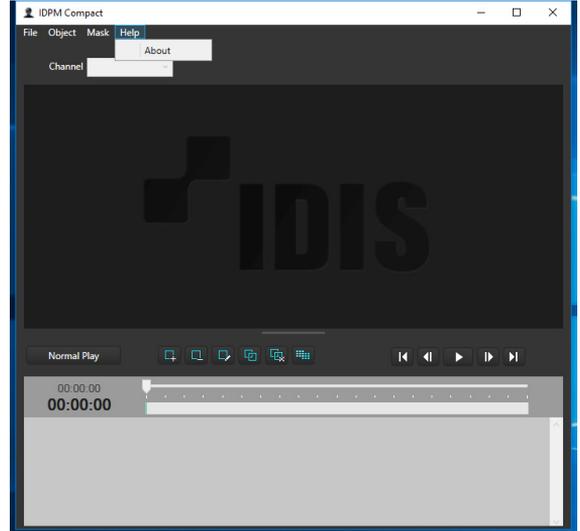
If you click the **Mask** in the menu at the top of the program, the related context will pop up.



- **Mask Interpolation Menu** : This is a menu for inserting a mask that interpolates the frames between the mask and the mask.
- **Mask Delete Menu** : This is a menu for deleting a series of consecutive masks.

Help Menu

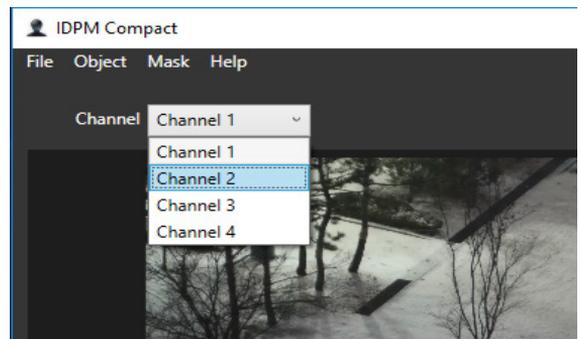
If you click the **Help** in the menu at the top of the program, the related context will pop up.



- **About** : A window pops up where you can see the program version information and open the source license status. You can see the open source status of the program if you click on the location of the open source license text display in that window. The window closes again if you click on the window.

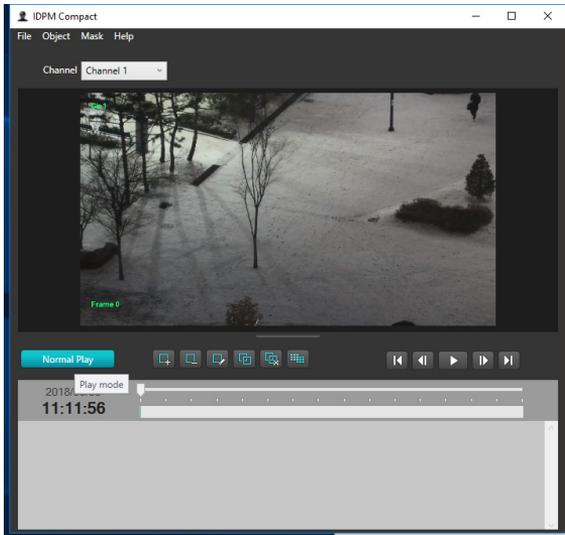
Channel Combo Box

Depending on the channels included in the clip, the combo box displays the channels that the user can see and mask. When selecting a channel in the combo box, the first frame of the channel is opened. If the object and masking data are already included, the corresponding information is updated in the object view.

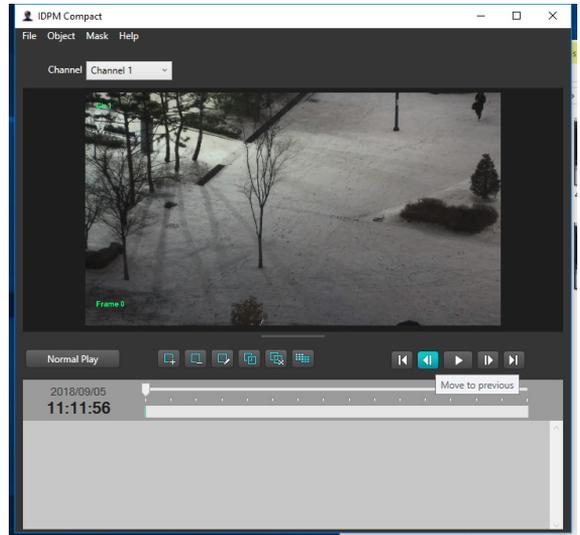


Collection of Playback Control

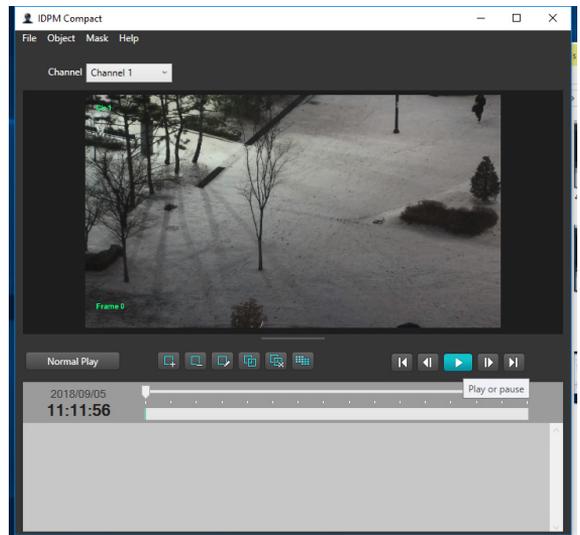
- **Playback/Track Playback Toggle Button** (Normal/Tracking Play Toggle Button) : Control for toggling between normal playback mode and tracking playback mode.



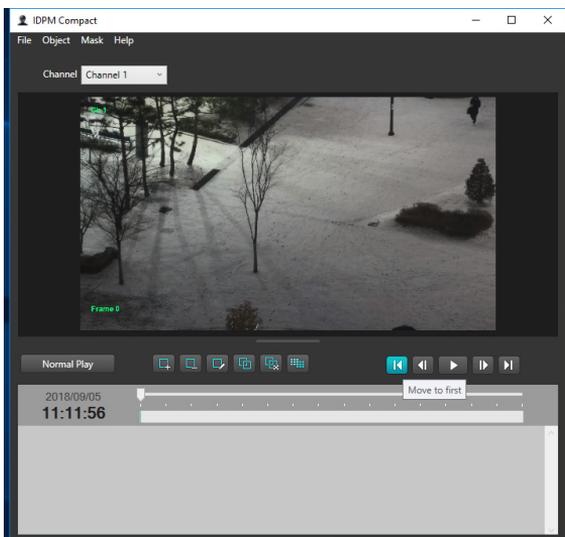
- **Previous Frame Button** (Previous Button) : Control for moving to the previous frame.



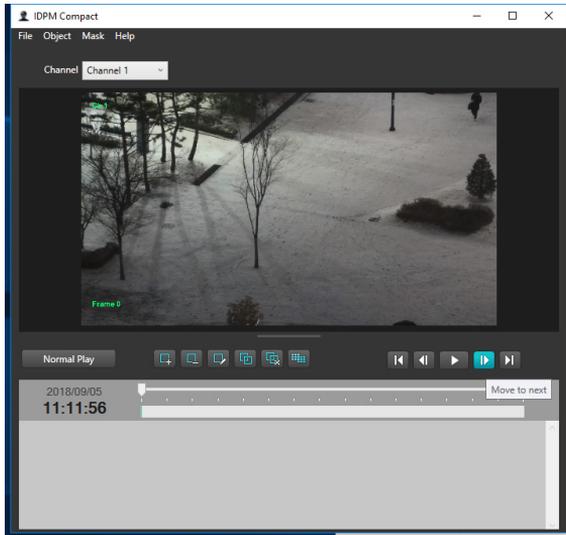
- **Playback/Pause Toggle Button** (Play/Pause Toggle Button) : Control for toggling between playback and pause.



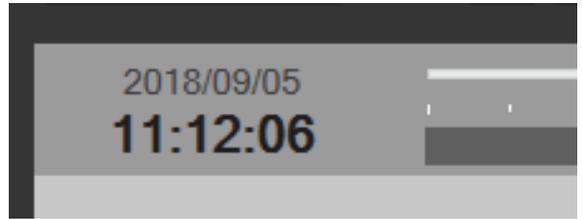
- **First Frame Button** (First Button) : Control for moving to the first frame.



- **Next Frame Button (Next Button)** : Control for moving to the next frame.



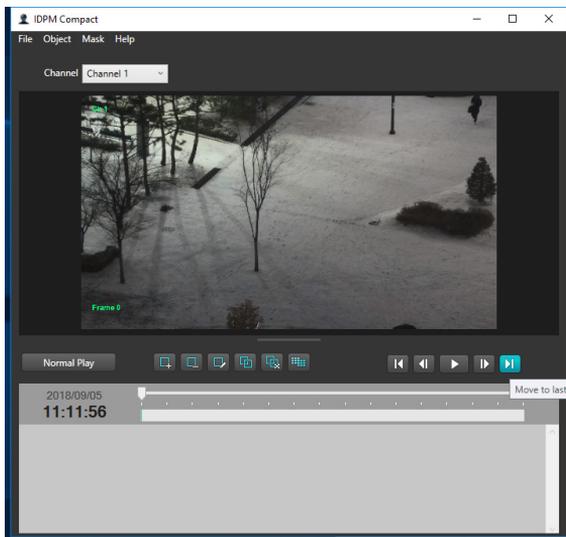
- **Current Frame Time Information Control (Current Time Control)** : Control for displaying the current frame time information.



- **Keyframe Slider**: Slider control for moving between keyframes.



- **Last Frame Button (Last Button)** : Control for moving to the last frame.

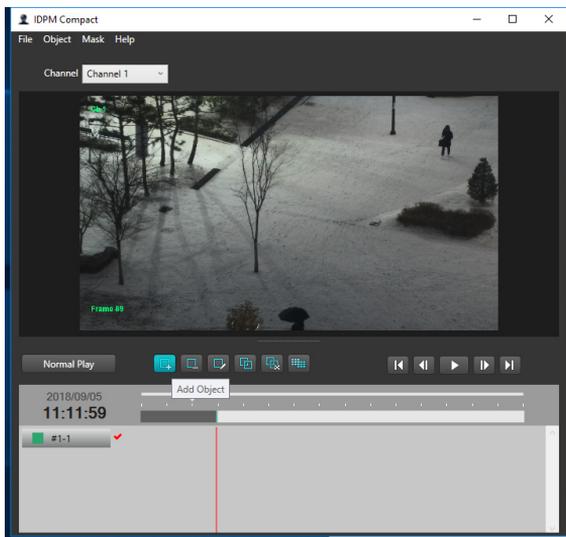


- **Time Bar**: Control for moving to any frame among all frames. During playback, the time position of the currently playing frame is displayed.

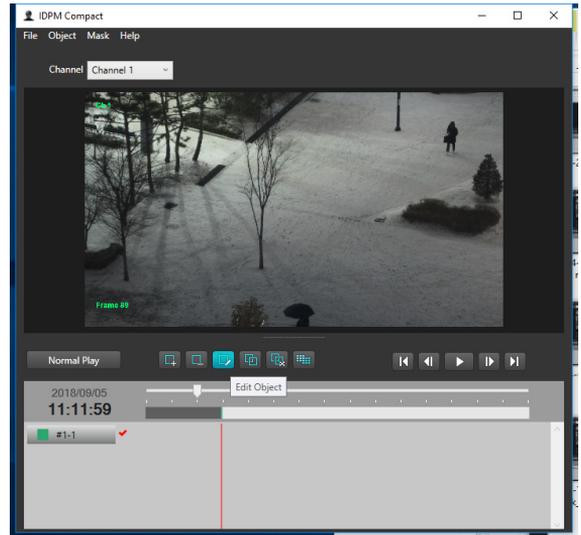


Collection of Object and Mask Controls

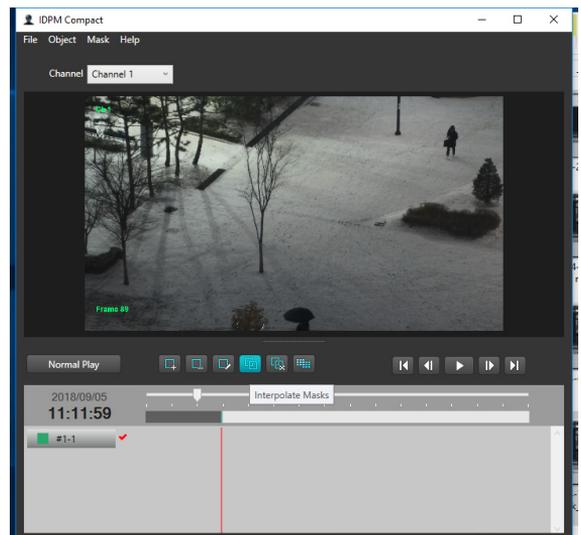
- **Add Object Button:** Control for adding objects



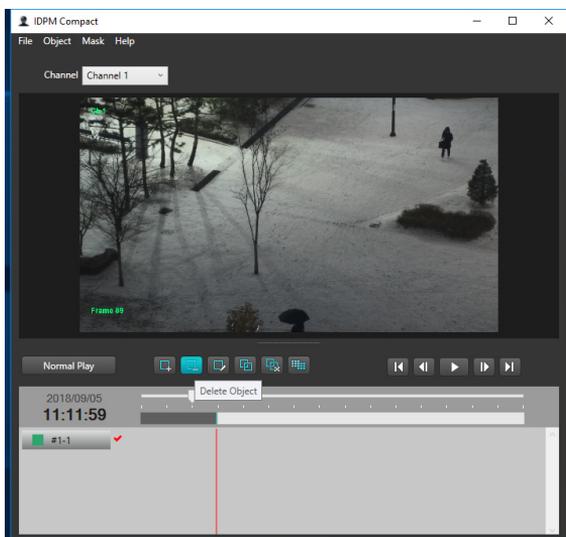
- **Edit Object Button:** Control for editing objects.



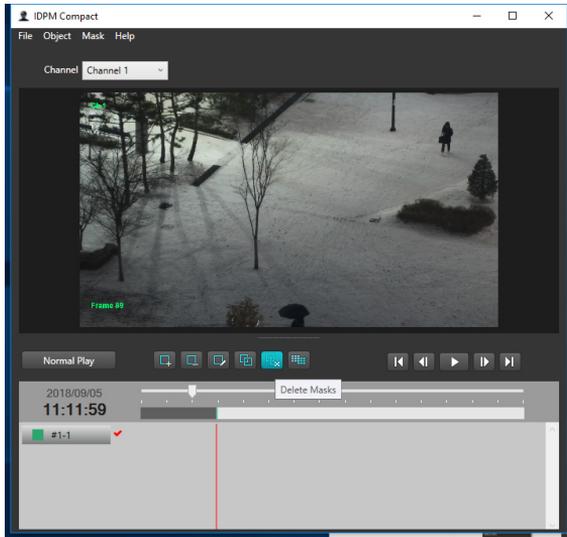
- **Interpolate-Masks Button:** Control for interpolation between masks.



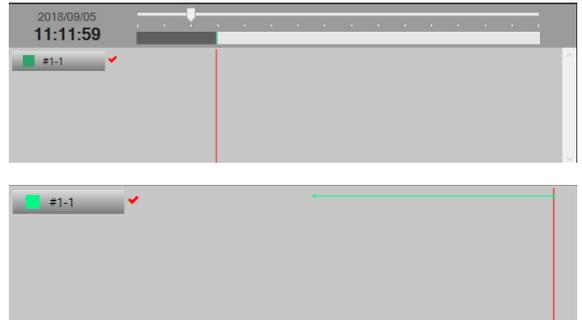
- **Delete Object Button:** Control for deleting objects.



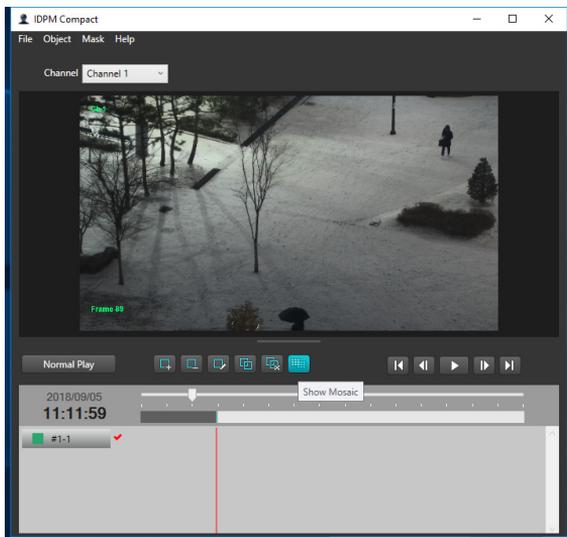
- **Delete Mask Button:** Control for deleting masks between masks.



- **Object View:** When adding an object, a widget is displayed on the left side of the view to show the color of the object, the name of the object, and the selection status for working with the object. Then, a mask timeline is drawn on the right side, depending on the existence or non-existence of the mask that is masked by selecting the object. The timeline is the same as the time point corresponding to the horizontal axis position of the time bar.

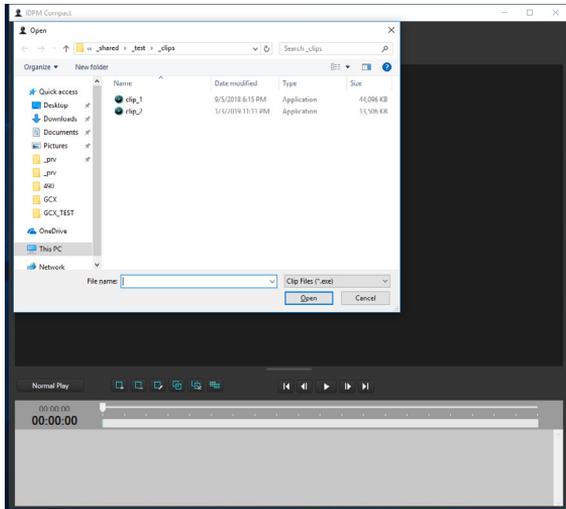


- **Mosaic Toggle Button:** Control for toggling the mask area between normal display and mosaic display.

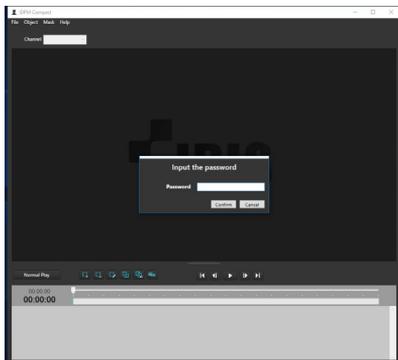


Part 4 - Application Function Specifications

Open and Close Clips



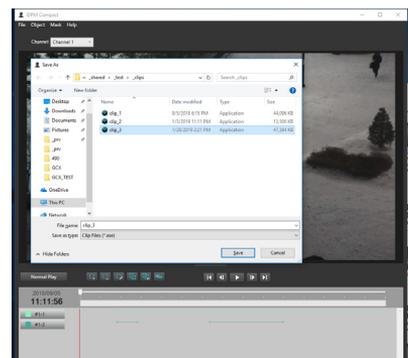
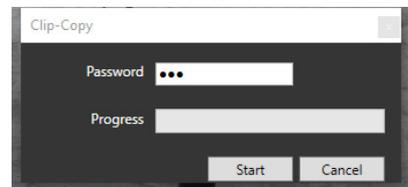
- **Open:** This is a function to open a clip. If the clip is password-protected, the password input window will pop up. If you enter the password at this time, the clip will open.



- **Close:** This is a function to close a clip. The clip you are working on will be closed.
- **Playback:** This is a function to play a clip. Playback functions are available through the collection of playback controls.
 - Play : Press the Play button. When playing, the frame will be played back at the time interval between each frame. In the case of keyframe playback, the time interval may differ from the actual frame time.
 - Pause : Press the Play button to toggle the Play button

from the Play state to the Pause button. When this button is pressed, the Play state changes to the Pause state, and the frame playback stops.

- Move Frames : There are functions such as the movement of the First Frame, movement of the Last Frame, movement of the Previous Frame, and movement of the Next Frame.
 - Movement of the First Frame is possible by pressing the First Frame button. It is activated so that you can press in the Stop mode.
 - Movement of the Last Frame is possible by pressing the Last Frame button. It is activated so that you can press in the Stop mode.
 - Movement of the Previous Frame is possible by pressing the Previous Frame button. It is activated so that you can press in the Stop mode.
 - Movement of the Next Frame is possible by pressing the Last Frame button. It is activated so that you can press in the Stop mode.
- **Save:** Clips with privacy information added can be saved as new self-executing clips. You can save it by selecting the Save menu in the File menu.



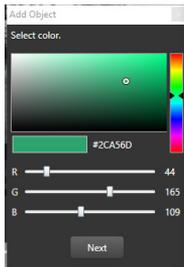
Add, Edit, Delete, and Select Objects

It is an object to draw the mask. The object includes the information about how to mask the object. The current masking method is provided to select the color of the rectangular area and its four sides. An object can be named by its string.

At present, the number of objects that can be added per channel is 64.

Addition

An object is created by specifying the color of the mask to mask the objects and the name of the object. Select **Object>Add Object** from the top menu of the window, and the **Add Object** window will pop up.



Select a color in this window and press the **Next** button. The window switches to the window to input the name of the object. In this window, enter the object name and click OK.

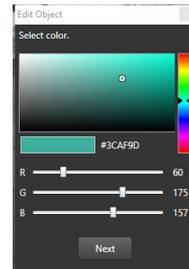


Note that you must use an object name that does not already exist.

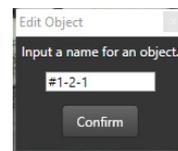
You can also use this function by pressing the Add Object button in the control bar just below the screen. When an object is added, a control will be added to the object view that represents the object.

Edit

Edit the selected object. You can change the color and name of the object. If you select **Object>Edit Object**, the **Edit Object** window will pop up.



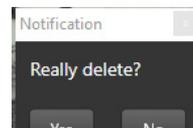
You can edit the objects the same way you add colors or names.



You can also use this function by pressing the Edit Object button in the control bar just below the screen.

Delete

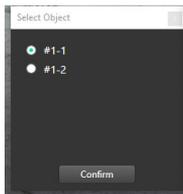
Delete the selected object. When you delete an object, the masks drawn for the object will also be deleted. If you select **Object>Delete Object**, a query window asking you if you would delete the object is displayed again



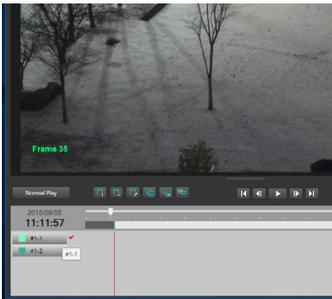
Select **Yes** in the window to delete the object.

Selection

Selects an object. You can select an object by selecting **Object>Select Object** menu, or by clicking on the space on the right side of the object control in the object view. When the **object selection** menu is clicked, the **object selection** window will be displayed. At this time, you can select the object by selecting the Radio button with the object name.



A red check will be displayed on the right side of the object view for the selected object.



Draw Masks and Mask Interpolation, Delete All Masks

DrawMasks

You can draw a mask on the screen while playback is stopped and an object is selected.

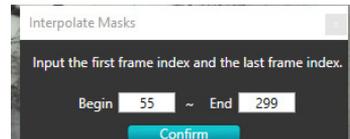
Or you can reduce or enlarge the area by dragging the mouse to one of the four vertex areas of one of the masks displayed on the screen, even if an object is not selected. Place the mouse in the center of the unselected mask area and drag it with the left mouse button. You can move the mask from the screen.

If you press and hold the left mouse button on the center of the mask and click the right button, you can delete the mask from the frame.

Mask Interpolation

You can insert the mask with linear interpolation between two spaced frames.

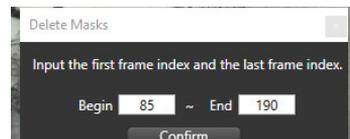
For example, to use the interpolation between Frame 1 and Frame 100, you have to draw a mask in Frame 1 and Frame 100. If you press the **interpolation** button or select **Mask>Interpolation**, the **mask interpolation** window will be displayed.



Enter the number of the first frame and the number of the last frame, and press the **OK** button. Based on the position and the size of the mask in the first frame and the mask in the last frame, the position and size are increased or decreased linearly, and the masks are drawn on every frame in between.

Delete All Mask

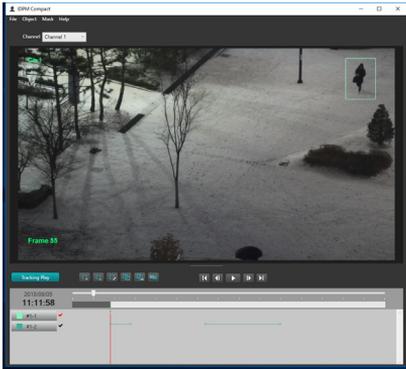
Delete all masks within the specified sector, specifying a sector of the mask drawn for the selected object. Available via **Mask>Delete**. Or press the **Delete Mask** button.



When the Delete Mask window is displayed, specify the frame sector as a number and click **OK**.

Object Tracking

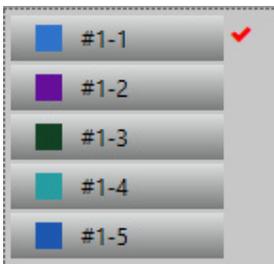
You can toggle between the normal playback mode and the tracking playback mode via the tracking button. This toggle is enabled in the Pause state. The object is present and the object to be tracked in the frame at the time of playback must have a mask drawn on it. And the object must be checked as the object to be tracked.



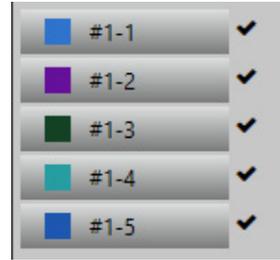
To select an object as the object to be tracked, click on the right space of the object control in the object view.

The selected mask is also included in the tracking target, and at present it supports up to five objects to be tracked. Track playback is played more slowly than normal playback. When these conditions are met, press the Play button to start track playback.

- The selected object is displayed in red on the right side of the widget in the object view.



- The object to be tracked is displayed in black on the right side of the widget in the object view.



There is no guarantee about the probability of tracking.

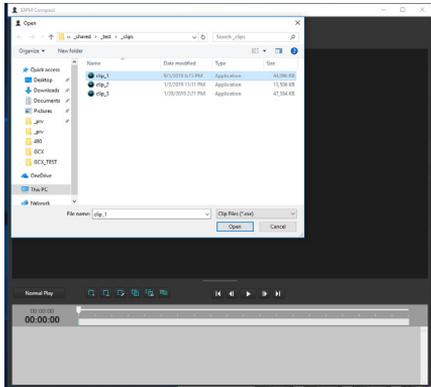
Tracking is likely to fail in the following cases:

- When objects to be tracked cross and overlap each other.
- When objects to be tracked move fast

Part 5 - User Usage Scenario

An example of use sequence for adding simple privacy information

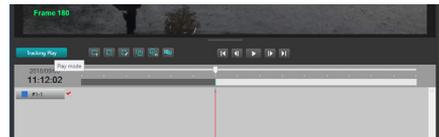
1 Open the clip file.



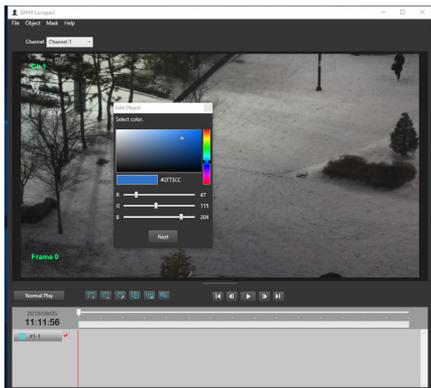
4 Draw a mask on the screen, using the object.



5 Toggle the Tracking Play Mode and start playback.

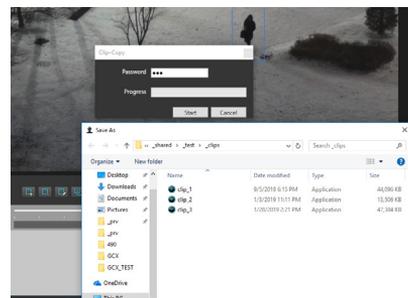


2 Create an object.

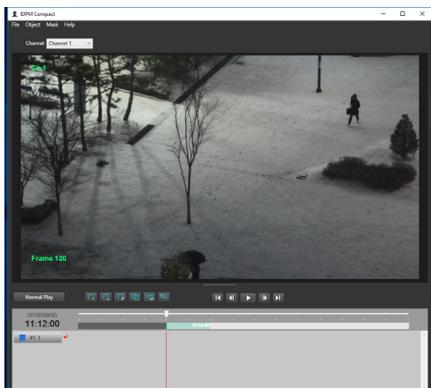


6 In the middle of tracking after stopping the playback, move to the desired frame to compensate the mask and adjust the mask.

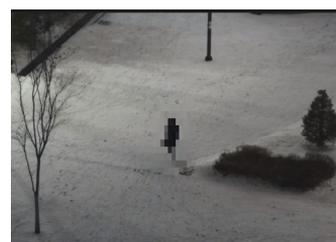
7 Save the clip.



3 Move to the desired frame position.



8 Open the saved clip and check the addition of privacy information. Press the mosaic toggle button to check the mosaic state.





IDIS Co., Ltd.

For more information, please visit at
www.idisglobal.com