



User Manual

TiDVR IP

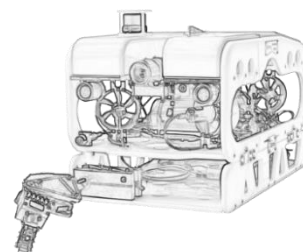
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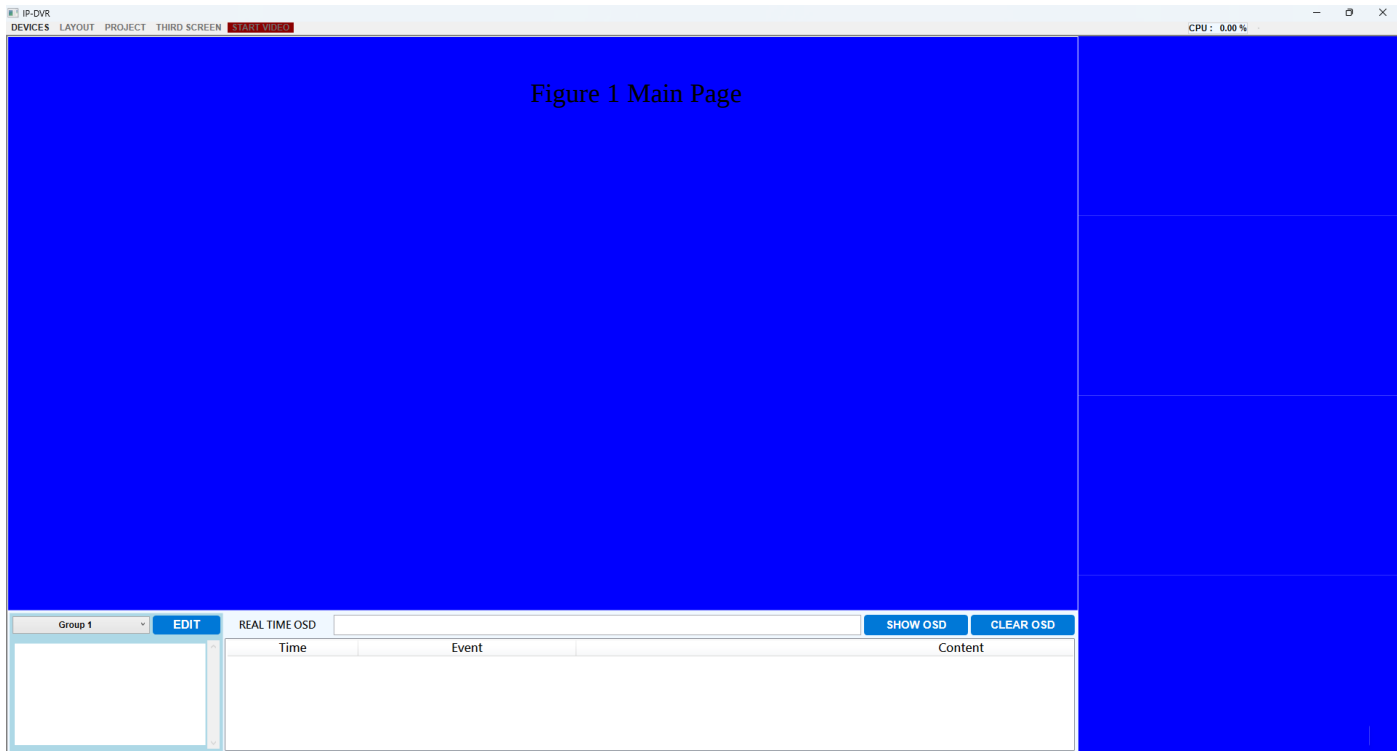
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I. System Introduction

A. TiDVR IP

1. Main Page



2. Menu on the top

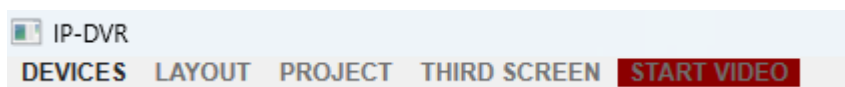


Figure 2 Menu (Before select project)

3. Event Log on the bottom

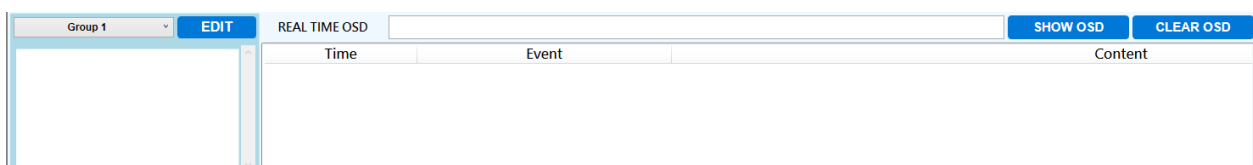
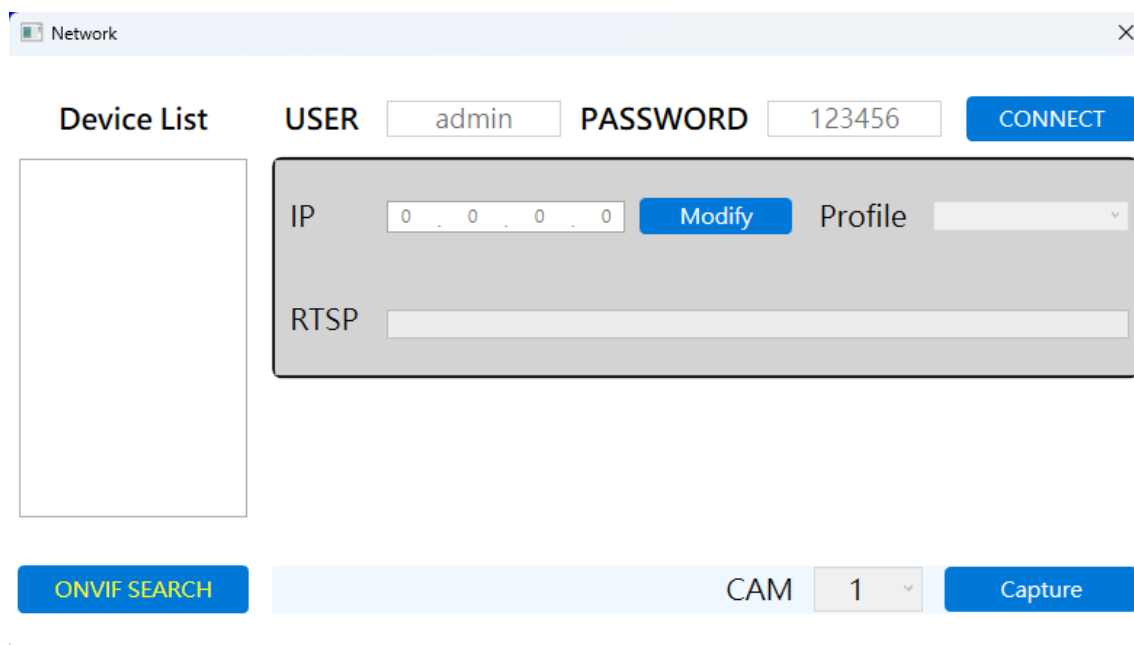


Figure 3 Event Log

4. Network



The screenshot shows a window titled "Network" with a close button (X) in the top right corner. On the left, there is a "Device List" section with an empty rectangular box. To the right of the Device List, there are input fields for "USER" (containing "admin") and "PASSWORD" (containing "123456"), followed by a blue "CONNECT" button. Below these, there is a grey-bordered box containing an "IP" field with a numeric input (0 . 0 . 0 . 0), a blue "Modify" button, a "Profile" dropdown menu, and an "RTSP" text input field. At the bottom of the window, there is a blue "ONVIF SEARCH" button, a light blue bar containing the text "CAM" and a dropdown menu showing "1", and a blue "Capture" button.

Figure 4 Search and connect IP camera

5. Project Manager

Figure 5 Build project and OSD edit

The screenshot displays the 'Project Manager' application window. The top navigation bar includes 'Admin' and 'Structure' links. The left sidebar shows a tree view with 'TEST_PROJECT'. The main workspace is divided into several sections:

- Top Right Controls:** Includes buttons for 'Project', 'Location', 'Mission', and 'Task', each with a corresponding icon and a dropdown menu. Below these is a large 'Start Project' button.
- Save Button:** A 'Save' button is located below the 'Start Project' button.
- OSD Setup Section:** This section contains tabs for 'CAM', 'OSD String Setup', 'Custom OSD', 'OSD Template', and 'Header'. The 'CAM' tab is currently selected, showing a 'CAM' button with a camera icon, a dropdown menu, a text input field, and a 'Rename' button.

6. Event Editor

Event Editor ✕

● Add new event
● Modify Mode

Event Name	Event Content
Dive	Dive event

Group1

Group2

Group3

Event Name

Dive

Event Content

Dive event

☐ Attach OSD string

Dive event

Save and Update

Cancel

Figure 6 Build event



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B. System Requirement

Operation System	Windows 11
CPU	Intel Core i5 1135 or Higher
RAM	16GB DDR4 or Higher

II. DVR Introduction

a. Connect IP Camera

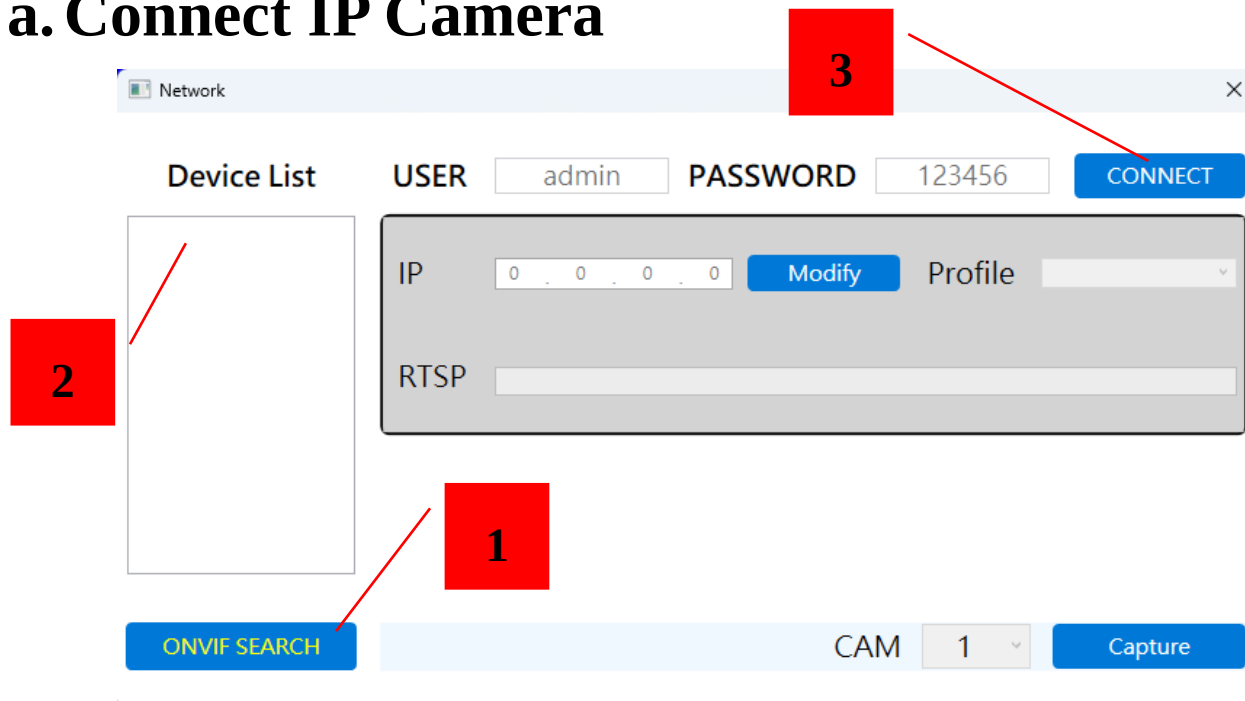
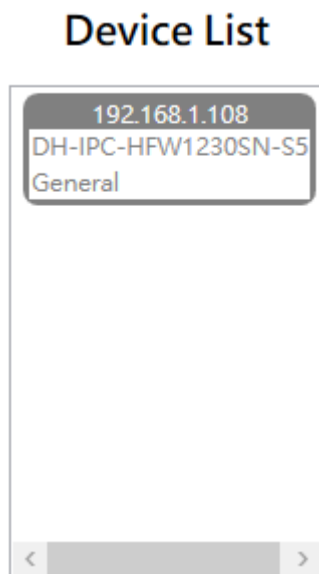


Figure 7 ONVIF SEARCH

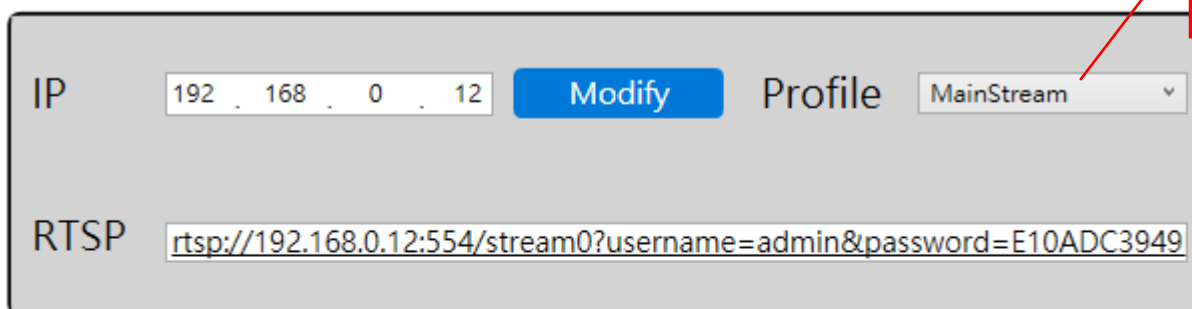
➤ Click ONVIF SEARCH to obtain IP cameras which could be reachable by ONVIF.



- If we got one or more cameras in list, we can press on the camera like Figure 8.
- Make sure **USER** and **PASSWORD** are correct (It depends on the setting of camera), then click Connect like Figure 7 step 3.

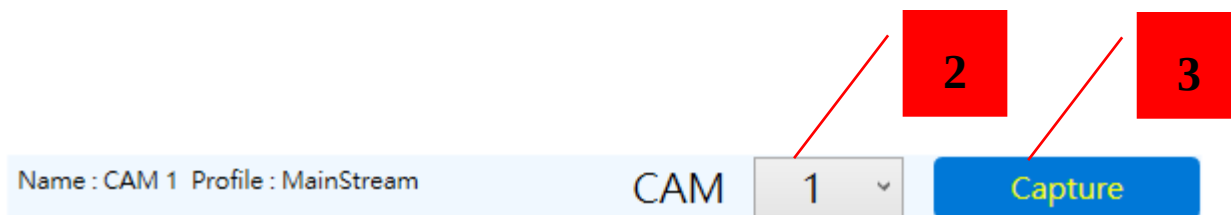
Figure 8 Device List

- If connection is success, IP 、*Profile and RTSP will show.
- Choose Profile and select a channel and click Capture to preview video.



IP: 192 . 168 . 0 . 12 Modify Profile: MainStream 1

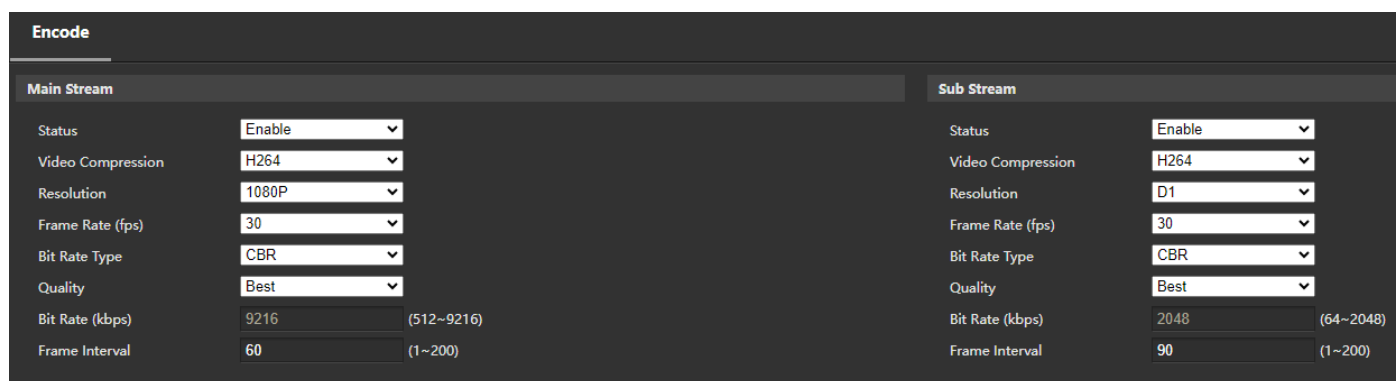
RTSP: rtsp://192.168.0.12:554/stream0?username=admin&password=E10ADC3949



Name : CAM 1 Profile : MainStream CAM: 1 2 3 Capture

Figure 9 Capture video

*Profile can be setting in IP camera



Main Stream		Sub Stream	
Status	Enable	Status	Enable
Video Compression	H264	Video Compression	H264
Resolution	1080P	Resolution	D1
Frame Rate (fps)	30	Frame Rate (fps)	30
Bit Rate Type	CBR	Bit Rate Type	CBR
Quality	Best	Quality	Best
Bit Rate (kbps)	9216 (512~9216)	Bit Rate (kbps)	2048 (64~2048)
Frame Interval	60 (1~200)	Frame Interval	90 (1~200)

Figure 10 IP camera's setting in web page

b. Build Projects

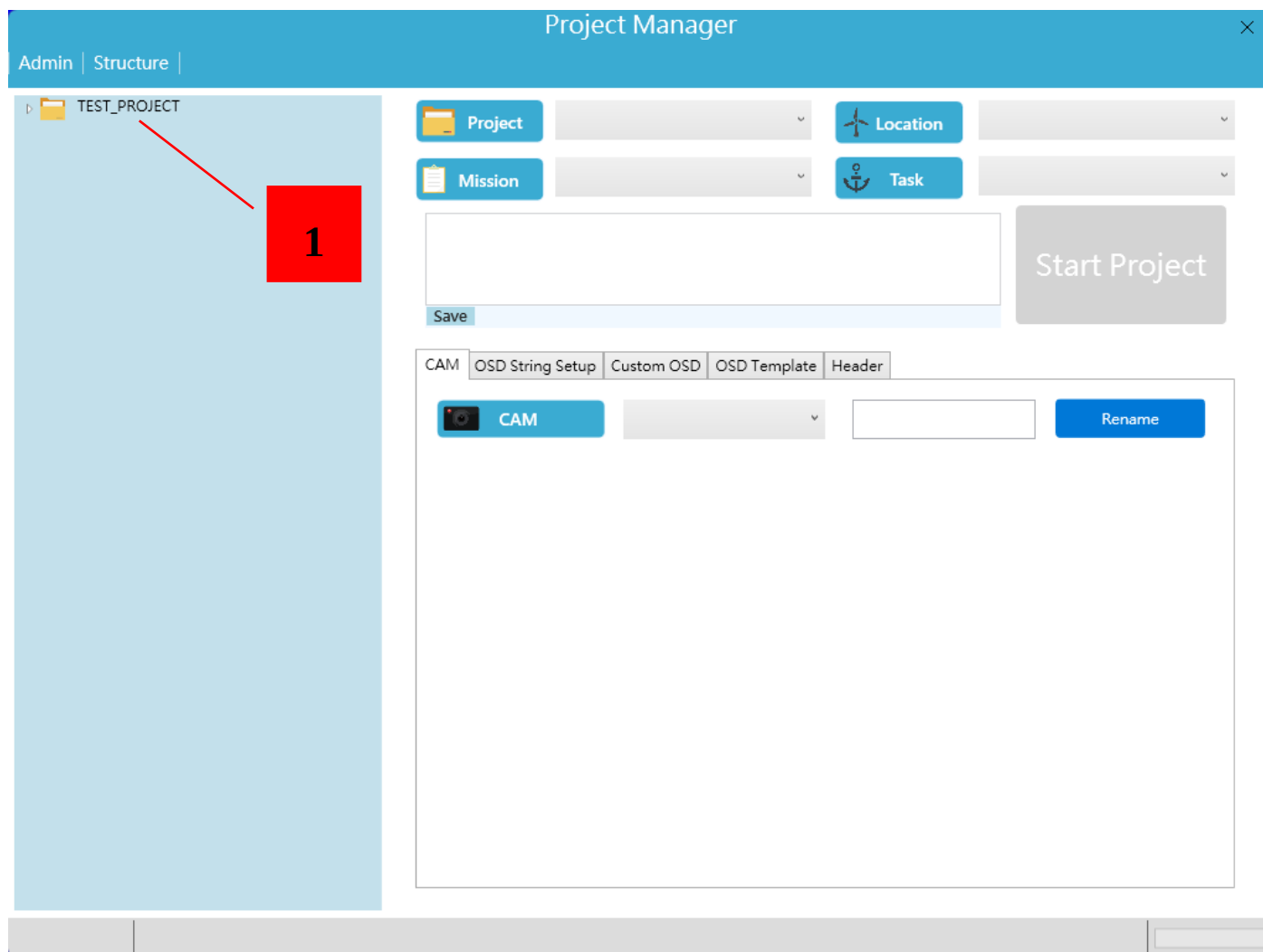


Figure 11 Start from a project

- Select a exist **Project** 、 **Location** 、 **Mission** 、 **Task** or build a structure for a project



Figure 12 Functions in different level

- New Project : Build a new **Project** with empty structure
- Add Location : Add a **Location** under this project
- Copy Project : Create a whole new project structure which is similar structure with this project, with a new name
- Complete : Make this level with green color
- Build Report : Create a excel report for the project
- Add Mission : Add a **Mission** under the location
- Add Task : Add a **Task** under the Mission

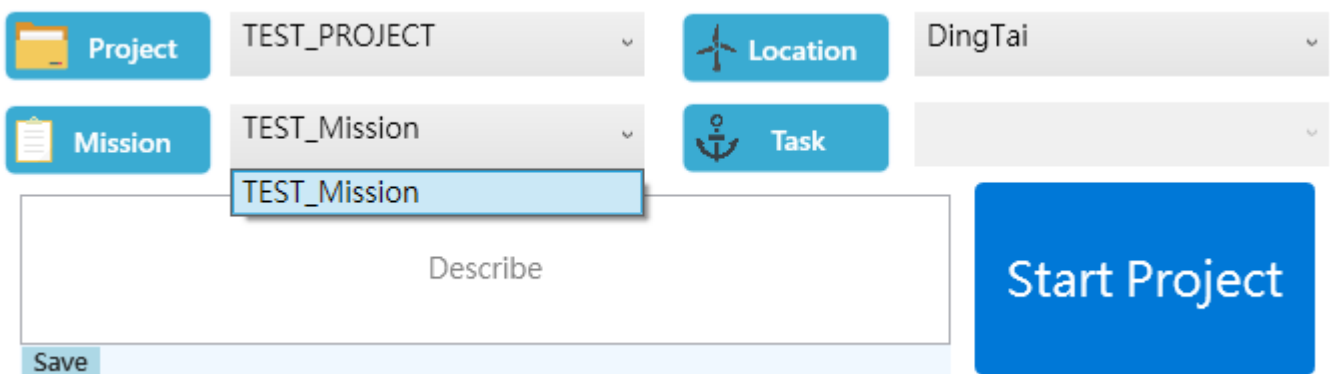
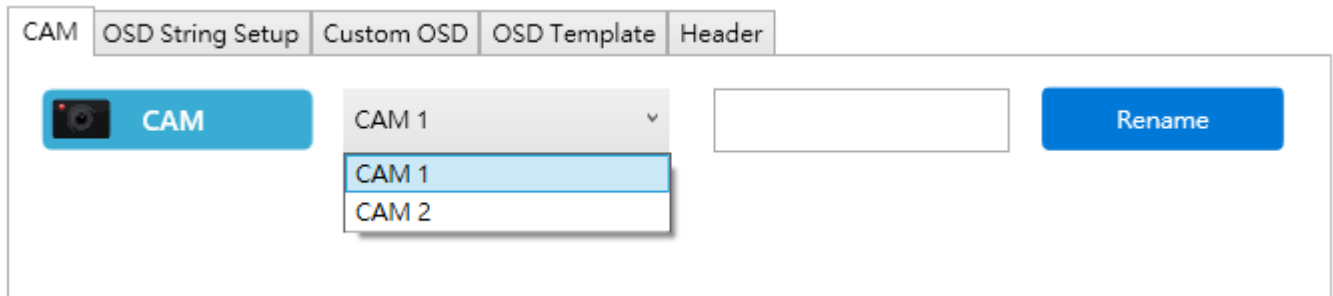


Figure 13 Start a Project

- If project is exist, user can select **Project** to **Task** step by step.
- At least, select a Mission. Start Project will enable. **Start Project** means the project is ready for record.

c. Option

◆ CAM



The screenshot shows a software interface for configuring a camera. At the top, there are five tabs: "CAM", "OSD String Setup", "Custom OSD", "OSD Template", and "Header". The "CAM" tab is currently selected. Below the tabs, on the left, is a blue button with a camera icon and the text "CAM". To its right is a dropdown menu that currently displays "CAM 1". The dropdown menu is open, showing two options: "CAM 1" (highlighted in blue) and "CAM 2". To the right of the dropdown menu is an empty text input field. Further to the right is a blue button labeled "Rename".

Figure 14 Rename CAM

- Rename : Pick a name and alias a new name

◆ OSD String Setup



Figure 15 Open COM to get serial data

- Setting COM 、 Baud Rate 、 Data Bits 、 Stop Bits 、 Parity, then open
- NMEA 0183 is best match with our system.

- NMEA format :

The first character that immediately follows the last data field character is an asterisk, but it is only included if a checksum is supplied.

- The asterisk is immediately followed by a [checksum](#) represented as a two-digit [hexadecimal](#) number. The checksum is the [bitwise exclusive OR](#) of [ASCII](#) codes of all characters between the \$ and *, not inclusive. According to the official specification, the checksum is optional for most data sentences, but is compulsory for RMA, RMB, and RMC (among others).
- `<CR><LF>` ends the message.

Reference From https://en.wikipedia.org/wiki/NMEA_0183

[illegible]

Figure 16 Add Talker to system for OSD

- Add a Talker identifier in the Textbox named Filter
- Press Add to talker

The screenshot shows the 'Add New Field' dialog in the 'Data' tab. The dialog is divided into three main sections:

- Field:** A dropdown menu is open, showing options '1', '2', and '3'. A red box labeled '1' points to this dropdown.
- Rename Field Name:** A text input field contains the text 'MCC_Value_0'. A red box labeled '2' points to this input field.
- SAVE:** A blue button labeled 'SAVE'. A red box labeled '3' points to this button.

At the top of the dialog, there is a 'Talker Identifier' dropdown set to 'MCC_P' and a 'Filter' input field with the placeholder text 'Add a Talker'. To the right of these is a button labeled 'Add to talker'. Below the 'Talker Identifier' dropdown, there is a list of five entries, each showing 'MCC_P [1] 0 [2] 0 [3] 0'.

2

Figure 17 Rename Field Name

- Rename a field's name to a meaningful name

3

4

◆ Custom OSD

The screenshot shows the 'Custom OSD' configuration window. At the top, there are tabs for 'CAM', 'OSD String Setup', 'Custom OSD' (selected), 'OSD Template', and 'Header'. Below the tabs, there's a 'Custom OSD' button with a text icon, a dropdown menu, and a 'Delete' button. The main area displays 'MCC : 0'. On the left, there's a list of fields: 'MCC_Value_0', '2', and '3'. On the right, the 'Format creator' section shows a text input field containing 'MCC: &MCC_Value_0'. Below this, there are buttons for 'Add Text' and 'Add Value', and a 'Clear' button. At the bottom, there's a text input field containing 'MCC_OSD' and an 'Add OSD' button.

Figure 18 Custom OSD with data

- Choose the Talker which are created in OSD String Setup
- Choose the field of value which we want
- Type a text and add to the format creator or add field of value
- Make a new OSD name for this format of OSD

◆ OSD Template

The screenshot shows the 'OSD Template' configuration window. The top navigation bar includes tabs for 'CAM', 'OSD String Setup', 'Custom OSD', 'OSD Template' (which is the active tab), and 'Header'. Below this is a 'Demo Display' area. On the left side, there is a 'CAM' section with a list containing 'CAM 1'. A red box with the number '1' is placed over the 'CAM' tab. On the right side, there is a 'Default TEXT' section with a list of checkboxes: 'DateTime' (checked), 'CamName' (checked), 'Project' (checked), 'Location' (unchecked), 'Mission' (unchecked), and 'Task' (unchecked). A red box with the number '2' is placed over the 'Default TEXT' section. A red line points from the 'CAM 1' list item to the 'Default TEXT' section.

Figure 19 Choose OSD on video

- Choose CAM which we want to arrange OSD on it
- Check OSD we want show on the CAM

◆ Header

CAM OSD String Setup Custom OSD OSD Template Header

☒ Show on all CAMs ☐ Show on CAM 1 Interval (Sec.) OFF

☒ Date Time 2023/10/02 16:18:17

☒ Project Name ☒ Mission Name

☒ Location ☒ Task Name

☒ Operator ☒ System

☒ Client ☒ Contractor

Change Interval to Enable
Preview

Figure 20 Choose header we want to show

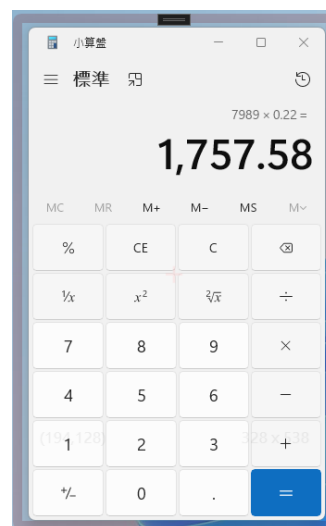
- Choose CAM which we want to show header on video
- Interval :header display mode with OFF 、 5 、 10 、 15 、 20 and 25 seconds.
- Check the header which we want, they will display after start video.

◆ Third-Screen Record

- Before start video, a tool to record third party software with our system.

DEVICES LAYOUT PROJECT THIRD SCREEN **START VIDEO**

- Click THIRD SCREEN on main page
- Transparent window frame will show, and drag it to cover on a zone of monitor .Ex. A calculator.
- It will auto record after start video
- Click THIRD SCREEN to close the function



◆ Event Editor

Group1	EDIT	REAL TIME OSD		SHOW OSD	CLEAR OSD
		Time	Event	Content	

Figure 21 Event Log window

➤ Press EDIT

Event Editor ✕

● Add new event ● Modify Mode

Event Name	Event Content
Dive	Dive event
NEW EVENT	Event Descrip

Rename

Group1

Rename

Group2

Rename

Group3

Event Name

☐ Attach OSD string

Event Content

Save and Update

Cancel

Figure 22 Event editor window

Event Editor ✕

● Add new event ● Modify Mode

Event Name	Event Content
Dive	Dive event

Rename

Group1

Rename

Group2

Rename

Group3

Event Name

☒ Attach OSD string

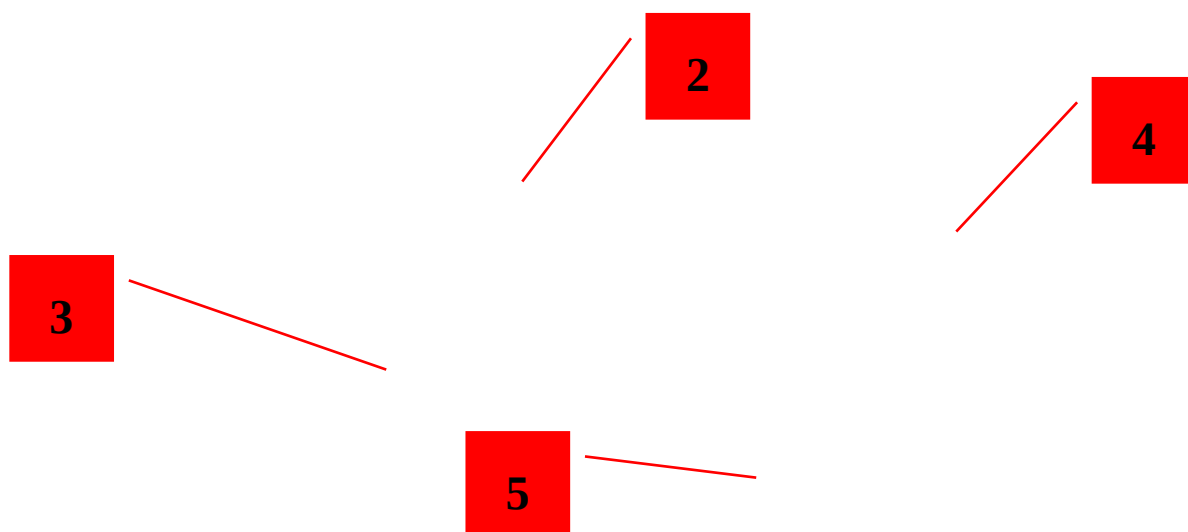


Figure 23 Add new event

- Add new event mode
- Add event name and description with the event in Event Content
- Check Attach OSD string
- Choose a OSD and add to content
- @MCC_OSD@ means MCC_OSD
- Save and Update

Figure 24 Modify Mode

- Modify Mode
- Choose a event which had exist
- Change event name or event content
- Save and Update

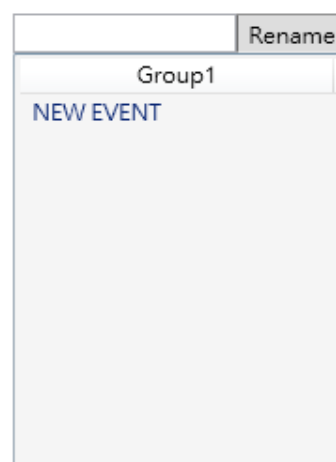
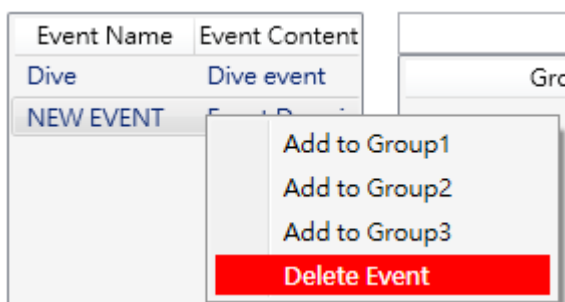
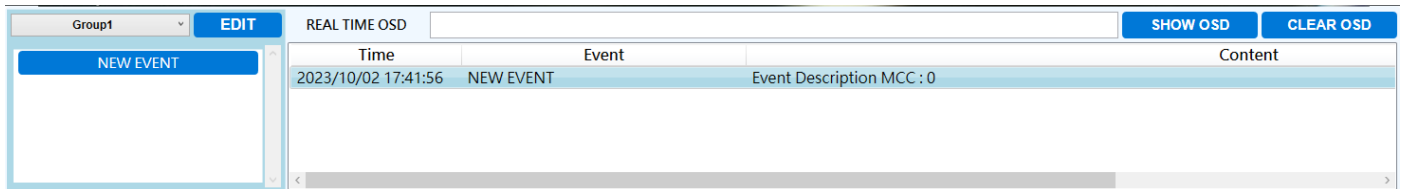


Figure 25 Add event to group



Time	Event	Content
2023/10/02 17:41:56	NEW EVENT	Event Description MCC : 0

Figure 26 Trigger event to log

- Click event
- Event will save to log



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