

DEC-0104(1U) Ossia VMS Decoder USER MANUAL

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1 Introduction

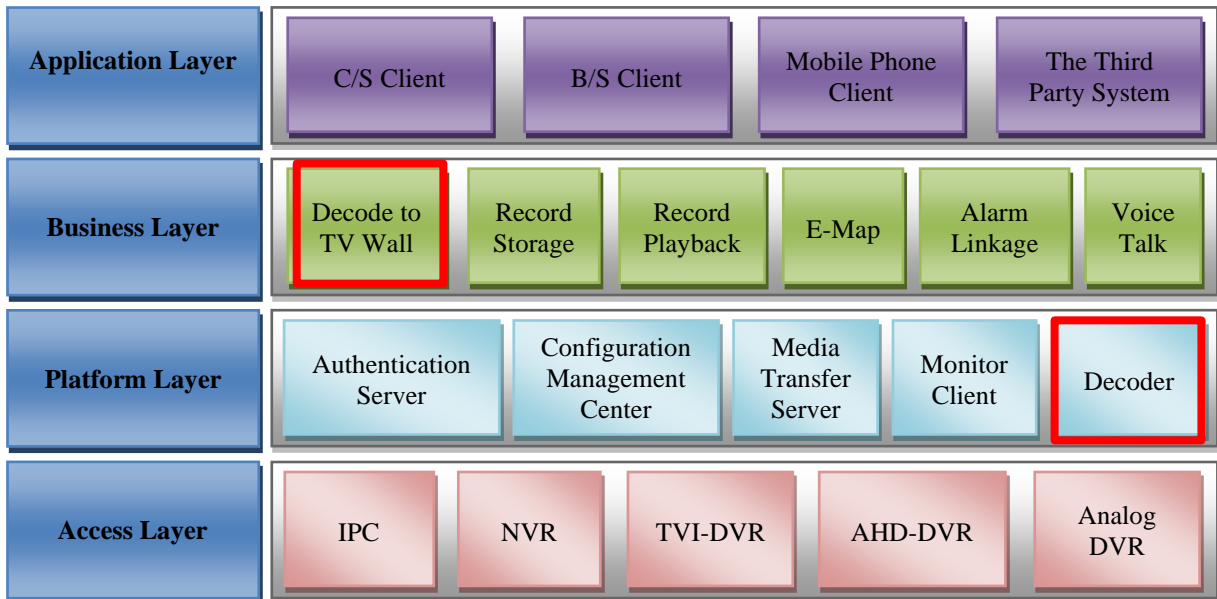
1.1 Summary

DEC-0104(1U) decoder is a part of the Ossia VMS system but can also work as a standalone decoder.

When connected to Ossia VMS server it can perform live view, playback and alarm pop up tasks.

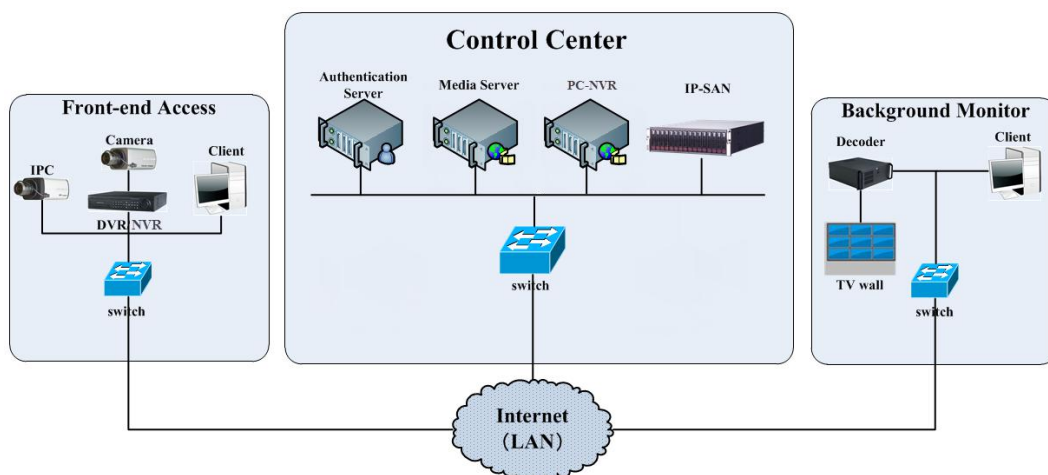
When working as standalone it can only perform live view tasks.

1.2 Software Architecture



1.3 System Components

1.3.1 System



1.3.2 System Role

The decoder role is quite simple: to decode and display video from the source device on the required screen and window.

When connected through the Ossia VMS platform, the control over the decoder is done via the Ossia VMS client.

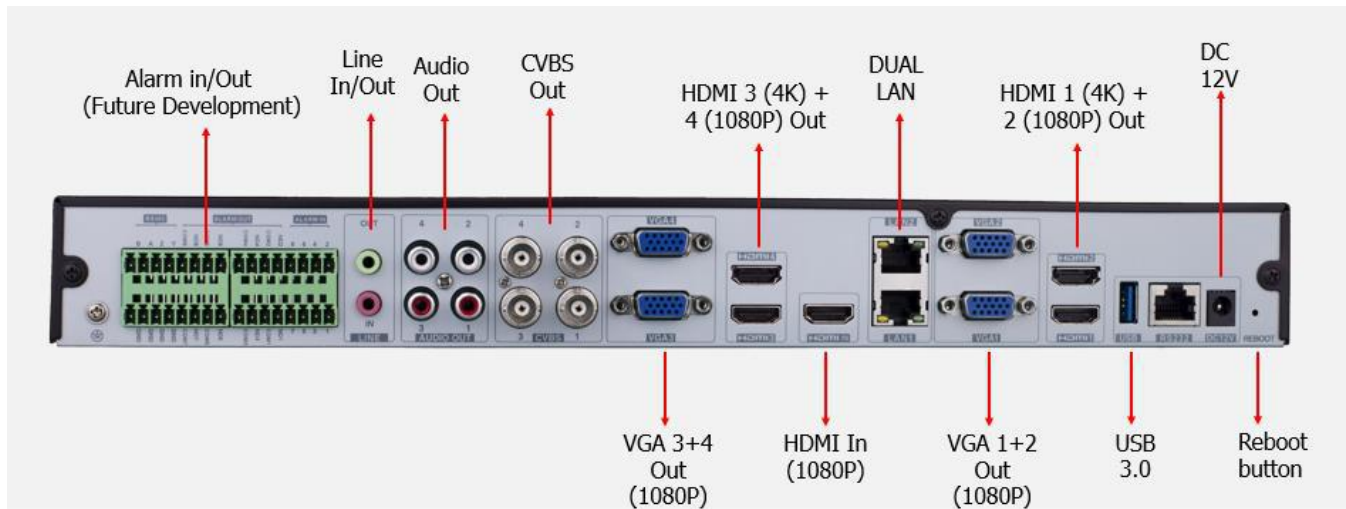
When connected as a standalone device, the control over the decoder is done via its web-client

2 Hardware installation:

The Ossia VMS HW servers are extremely simple to install. As easy as plug and play. If you are still not sure how to install it properly, please follow the quick guide below:

2.1 DEC-0104(1U) HW Installation:

The DEC-0104(1U) is designed to be installed inside a network rack. Install it properly before connecting the required cables and connectors as illustrated below.



- 1) Connect the device to and AC power outlet.
- 2) Connect 1-2 network cables as required
- 3) Connect video cables (HDMI Out/HDMI In/VGA/CVBS)
- 4) Turn on the device

Please note:

1. The DEC-0104(1U) decoder doesn't have a local UI. Nothing will appear on the monitors after installation and bootup
2. HDMI 1+3 support 4K/1080P/1280x1024. HDMI 2+4 support 1080P/1280x1024

3 Web-Client Connection

Configuring and controlling the decoder (under standalone mode) is done via the web-client. It supports IE9/IE10/IE11. In order to install firmware updates, Please make sure that your browser supports the downloading and use of the Web Client. (Only Latest IE, and old versions of Firefox and Chrome).

❖ Login

By default, the decoder will get an IP address by DHCP and port will be 80. It can be found by Provision-ISR's IP manager tool. (Device type will show "Decoder"). For example, <http://192.168.50.3/>. Then input the user name and password (default is: admin/123456), select the language and then click "Login" to log in to the IE client.

Decoder HD Network Video Decoder



User Login

Username

Password

Remember Password

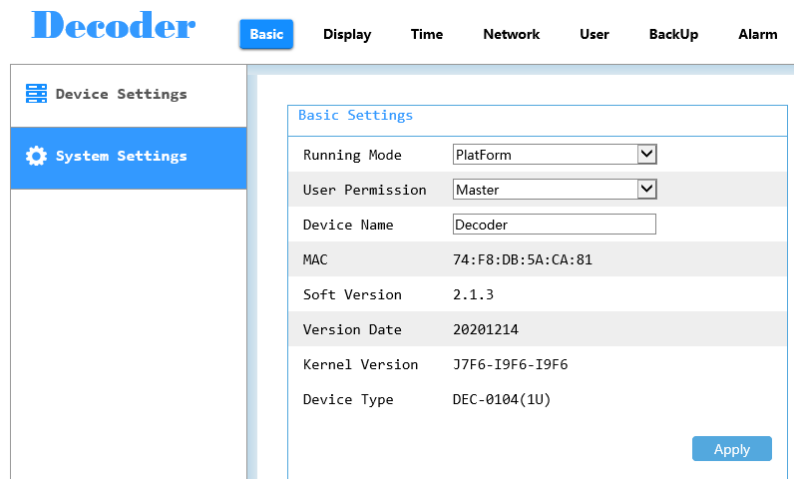
3.1 System Settings:

3.1.1 Basic Settings

Running Mode: The main configuration is the “Running mode” which will actually set if the decoder is working as part of a VMS system or it is a standalone device controlled by the web-client. By default, the “Running Mode” is set to “Platform” which is the Ossia VMS platform. If you need to change it, you can change to “Device” which is standalone operation. The features will be slightly different based on each choice.

User Permission: By default, the permission is “Master” meaning that all settings are open. It can be changed to “General” which will lock some of the sensitive features as an extra layer of protection against user mistakes.

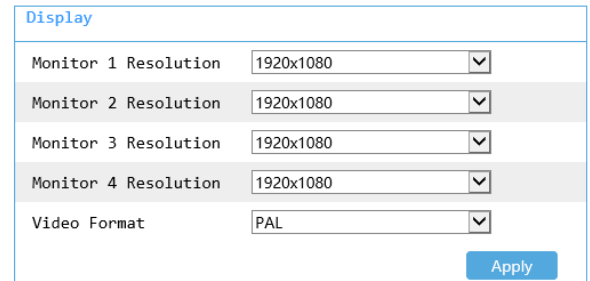
Device Name: Free text to set the device name:



The rest of the fields are general information regarding the HW/FW.

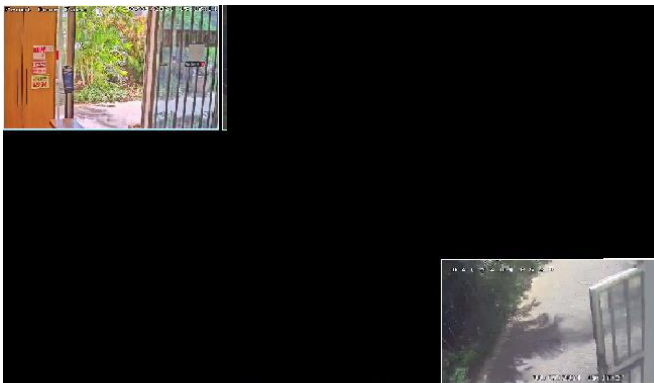
3.1.2 Display

“Display” settings: This will allow you to set the display settings for the different outputs. Note that HDMI 1+3 support 4K/1080P/1280x1024. HDMI 2+4 support 1080P/1280x1024

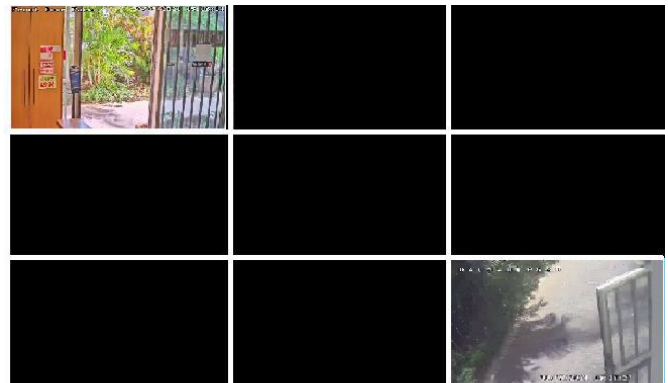


“Window Settings”: This allows you to customize the appearance of the display windows. It has 2 options:

1. Draw Border: This will display a border between the video windows as seen below:

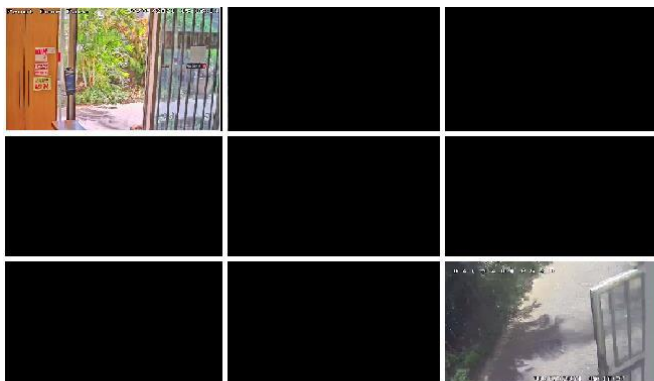


Without Borders



With Borders

2. Show Window ID. This will display the video window number for easy orientation (especially when using IP-Key02 keyboard).



Without Window ID



With Window ID

3.1.3 Time

Through the “Time” interface you set the decoder time and date. If the decoder is in “Platform” mode (Connected to the Ossia VMS management server), the VMS management server will set its time/date automatically. If the decoder is on “Device” mode (Standalone), you will have to set the time/date manually.

| Date And Time | |
|--------------------------------------|---|
| Time Zone | GMT+02 Israel <input type="button" value="v"/> |
| System Time | 2021-05-30 14:24:27 <input type="button" value="calendar"/> |
| <input type="button" value="Apply"/> | |

3.1.4 Network Config

IPv4

In order for the decoder to work properly, it requires an active and valid network connectivity. You must set a static IP within your LAN for all the components to work as required.

| Network Settings | |
|--------------------------------------|---------------|
| IP Address | 192.168.0.149 |
| Subnet Mask | 255.255.255.0 |
| Gateway | 192.168.0.1 |
| <input type="button" value="Apply"/> | |

Ports

The decoder has 2 ports:

- 1) Data port: This port (default 8888) is used for communication with the Ossia VMS server. Use this port when configuring the decoder on the VMS server.
- 2) HTTP Port: This port (default 80) is used for the web-client connection. Use this port when accessing the decoder from remote browser.

| Port Settings | |
|--------------------------------------|------|
| Data Port | 8888 |
| HTTP Port | 80 |
| <input type="button" value="Apply"/> | |

3.1.5 User

From here you can change the default password of the decoder. Input your current password and the new password you wish to set. If the decoder is already configured on a management server, you will need to edit the credentials on the management server as well. Otherwise, the decoder will be offline.

| User Settings | |
|--------------------------------------|----------------------|
| Username | admin |
| Current Password | <input type="text"/> |
| New Password | <input type="text"/> |
| Confirm New Password | <input type="text"/> |
| <input type="button" value="Apply"/> | |

3.1.6 Backup

From here you can backup/restore the system settings. Click on “Browse” to set the path, then click on “Backup” to back the decoder settings up to a file or “Recover” to load the configuration from the selected file to the decoder.

| BackUp | |
|--------|---|
| Path | <input type="text"/> <input type="button" value="Browse"/> <input type="button" value="Recover"/> |
| Path | <input type="text"/> <input type="button" value="Browse"/> <input type="button" value="Backup"/> |

Please note: You must run the IE as administrator in order for this process to succeed.

3.1.7 Alarm

The alarm section is no in use at the moment. Future versions of the Ossia VMS will offer full compatibility with the DEC-0104(1U) alarm inputs/outputs.

3.2 System Settings:

3.2.1 Upgrade

From this interface you can upgrade the decoder if needed. Click on “Browse” to set the path, then click on “Upgrade” to commence the update process.

The screenshot shows a window titled "Upgrade". It contains a text input field for a file path, a blue "Browse" button, and a grey "Upgrade" button.

Please note: You must run the IE as administrator in order for this process to succeed. The process takes 7-20 minutes. Do not power off / reboot the device during the upgrade process.

3.2.2 Reboot

Click on “Reboot” to reboot the system. The reboot takes 1-3 minutes.

3.2.3 Reset

Click on “Reset” to reset all the decoder’s settings back to factory default. The system will reboot at the end of the process. The whole reset process takes 2-4 minutes.

3.2.4 Affiliation (Device mode only)

Affiliation allows you to build a system out of numerous decoders and operate all of them from the main decoder (The one you are configuring). Under “Searched recorders” you will see all the decoders that was detected in the LAN. You can mark the some of the marked recorders and click on “Add” or add all recorders by clicking on “Add all”.

If no decoders are found, you can click on “Add” in order to add a decoder manually. After clicking on “Add” the following window will open:

The screenshot shows a window titled "Searched Decoders" with a "Refresh" button. Below is a table with columns: No., IP Address, Port, Subnet Mask, Gateway, Version. Below the table are "Add", "Add All", and "Delete All" buttons.

The screenshot shows a dialog box titled "Add Slave Decoder" with fields for IP Address (0. 0. 0. 0), Port (8888), Username (admin), and Password (masked with dots). It has "OK" and "Cancel" buttons.

Fill in the Decoder IP, data port, user name and password in order to connect to the decoder

Under “Added Decoders” you will see the decoders you have added to the main decoders. You can select an added decoder and click on “Delete” to remove it.

The screenshot shows a window titled "Added Decoders" with "Add", "Add All", and "Delete All" buttons. Below is a table with columns: No., IP Address, Port, Device ID, Status, Edit, Delete.

4 Standalone Mode

4.1 Video Settings

4.1.1 Video

Under the video section you will be able to add the devices (DVRs/NVRs/IPC) that will be later stream video to the decoder. By default, there is the “local_input” device which is actually the HDMI input of the decoder. This device cannot be deleted.

| No. | <input type="checkbox"/> | Name | IP Address | Port | Type | Channel Number | Edit | Delete |
|-----|--------------------------|-------------|-------------|------|-------------|----------------|------|--------|
| 1 | <input type="checkbox"/> | local_input | local_input | | LOCAL_INPUT | 1 | | |

In order to add devices to the decoder, click on the icon (on the top right). The following window will open:

Add Video
✕

Quickly Add
Manually Add

Refresh

| No. | <input type="checkbox"/> | IP Address | Port | Type |
|-----|--------------------------|---------------|-------|-------|
| 1 | <input type="checkbox"/> | 192.168.0.103 | 80 | ONVIF |
| 2 | <input type="checkbox"/> | 192.168.0.160 | 80 | ONVIF |
| 3 | <input type="checkbox"/> | 192.168.0.189 | 9008 | IPC |
| 4 | <input type="checkbox"/> | 192.168.0.161 | 8006 | IPC |
| 5 | <input type="checkbox"/> | 192.168.0.250 | 6000 | DVR |
| 6 | <input type="checkbox"/> | 192.168.0.162 | 6036 | DVR |
| 7 | <input type="checkbox"/> | 192.168.0.121 | 9008 | IPC |
| 8 | <input type="checkbox"/> | 192.168.0.99 | 62030 | IPC |

Username
 Password
 Channel Number

OK
Cancel

The default adding mode is “Quickly Add” which will show all the devices on the LAN. Mark the devices you wish to add, set the username and password and click on OK to add the devices.

If you wish to add a device manually, click on the “Manually Add” tab. The following window will open:

Add Video
✕

Quickly Add
Manually Add

| Name | Type | Channel | Username | Password | Delete | | |
|--|---|---|--|---|--|---|--|
| <input style="width: 100px;" type="text"/> | <div style="border: 1px solid #007bff; padding: 2px; display: inline-block;"> IPC NVR DVR ONVIF RTSP </div> | <input style="width: 80px;" type="text" value="0.0.0.0"/> | <input style="width: 60px;" type="text" value="9008"/> | <input style="width: 60px;" type="text" value="1"/> | <input style="width: 100px;" type="text" value="admin"/> | <input style="width: 100px;" type="password" value="••••••"/> | |

Set the name (Free text), choose the device type (IPC/NVR/DVR/ONVIF/RTSP) and set the IP, port, channel number, username and password and click on “OK” to confirm. After adding devices, they will appear on the Video device list

| No. | <input type="checkbox"/> | Name | IP Address | Port | Type | Channel Number | Edit | Delete |
|-----|--------------------------|-------------|--------------|------|-------------|----------------|------|--------|
| 1 | <input type="checkbox"/> | local_input | local_input | | LOCAL_INPUT | 1 | | |
| 2 | <input type="checkbox"/> | | 192.168.0.64 | 6036 | NVR | 1 | | |

Click on the icon to edit the device configuration. Click on the icon to delete the device

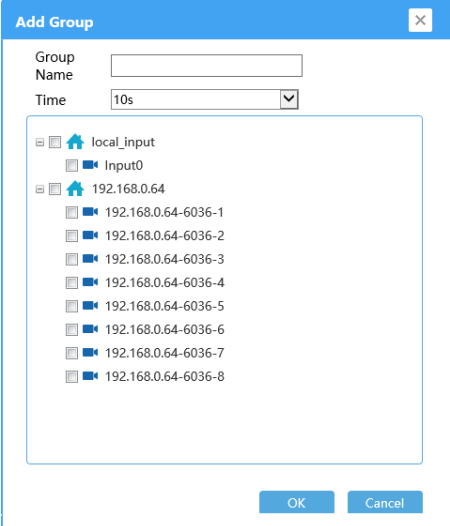
4.1.1 Video Group

Under the video group you can create groups of channels that can be used later on for video sequences.

In order to create groups, click on the  icon (on the top right). The window on the right will open.



Set the group name and the sequence dwell time.

Choose all the video channels that will be included under the video group.



The created video group will be shown as below:

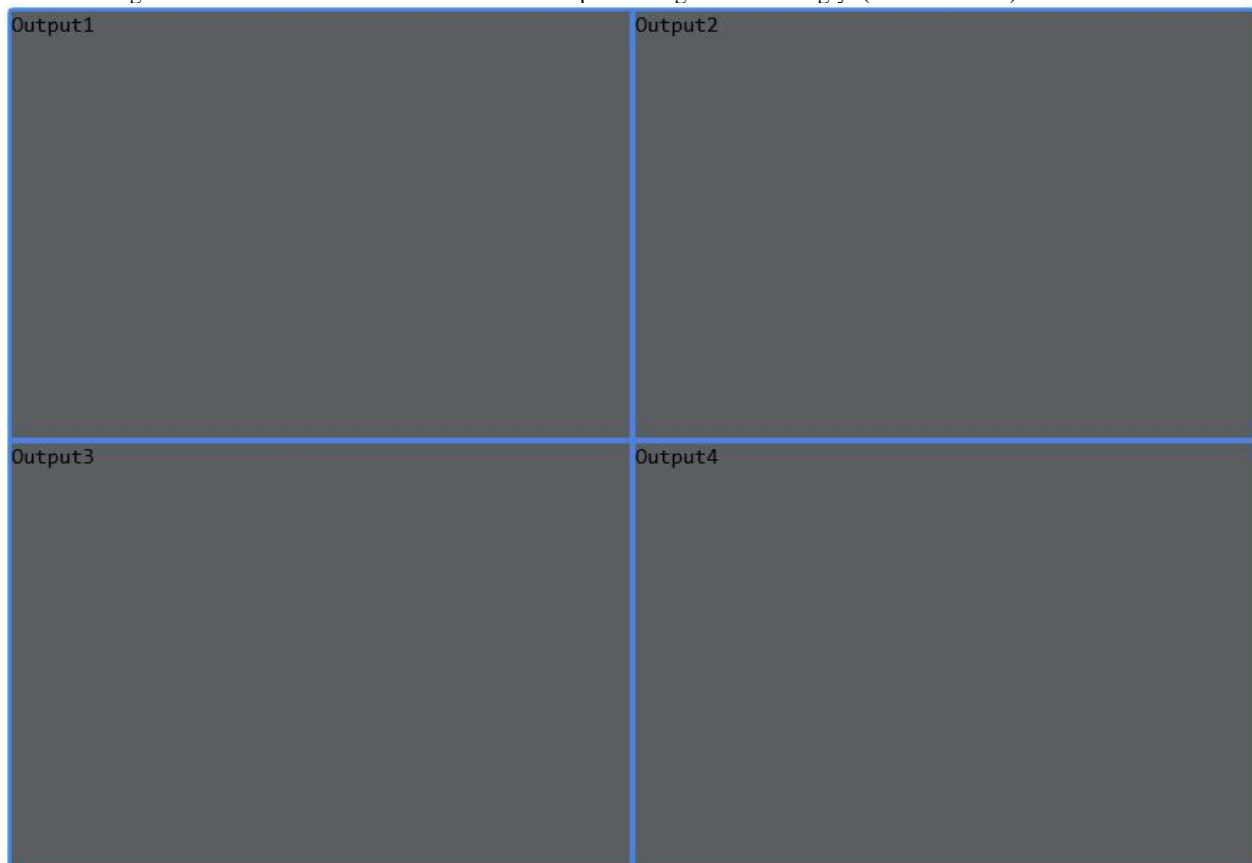
| Name | Time | Channel Number | Edit | Delete |
|------|------|----------------|---|---|
| Test | 10 | 4 |  |  |

Click on the  icon to edit the device configuration. Click on the  icon to delete the device

4.2 Decoding Settings

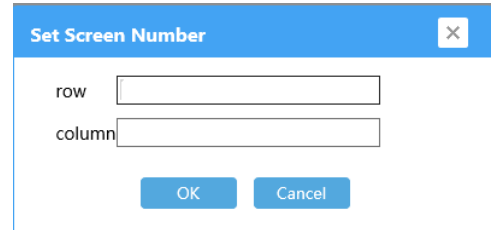
4.2.1 Output

The default configuration of the devcoder is 2x2 with all the outputs configured accordingly. (As seen below).



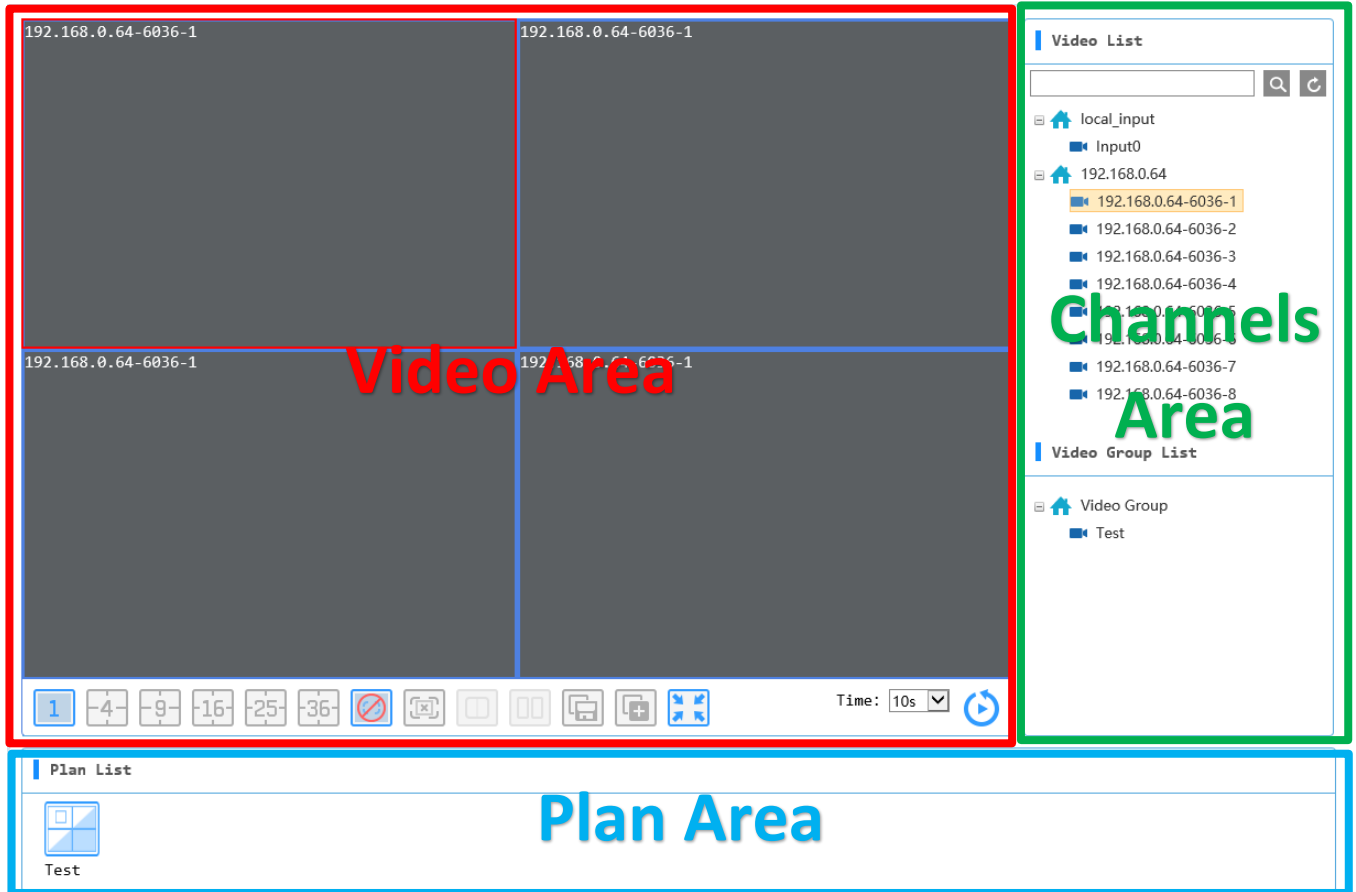
The output settings allow you to assign the monitors to the decoders. Not always you will have 4 screens connected to the decoder, so here you can set it up.

To change the monitor layout/setting, click on the “Set” button.
 Input the row and column numbers and the new setting will appear.
 Drag the corresponding outputs from the output list on the right to the window you wish to link the output to.



4.2.1 Plan (Main Interface)

This is the main working interface when the decoder is working in device mode.



Video Area:

This is where we manage the video streaming. Notice that each window is actually a screen that can be manipulated individually.
 Please see the icons explanation below:


| Icon | Task | Icon | Task |
|------|--|------|---|
| | Set the screen to 1ch view | | Clear all channels on the screens |
| | Set the screen to 4ch view | | Merge 2 screens together. To activate it, select monitors in a square/rectangle shape and click on “Merge”. |
| | Set the screen to 9ch view | | Split merged monitors back to single monitors |
| | Set the screen to 16ch view | | Save (Update) the current view over the selected plan |
| | Set the screen to 25ch view | | Add a new plan (The current layout will be saved on the new plan) |
| | Set the screen to 36ch view | | Close all full screens |
| | Enable/Disable PIP (Picture in Picture). Once enabled, you can drag a new window within an y screen that will perform as PIP window. | | Start/Stop sequences |

When video is playing on the decoder you can right click on it to open the video menu. It has 3 options: Stop decoding, Main Stream and Sub-Stream.


Channels Area:

- **Video list:**
On the top channels area, you will see all the channels that were configured under the “Video Settings” as well as the HDMI video input channel. You can drag any channel to its required location on the monitors.
- **Video Group list:**
On the bottom of the channels area, you will see all the video groups that were created under the video settings. You can drag any channel group to its required location on the monitors Once dragged to a video window the sequence will start as configured.

Plans Area:

In the plans area you will find a list of all the video plans that were saved. You can edit a plan by updating its content using the “Save Plan” button ().



You can delete a plan by clicking on the red “X” icon while hovering on it and confirming the deletion process ()

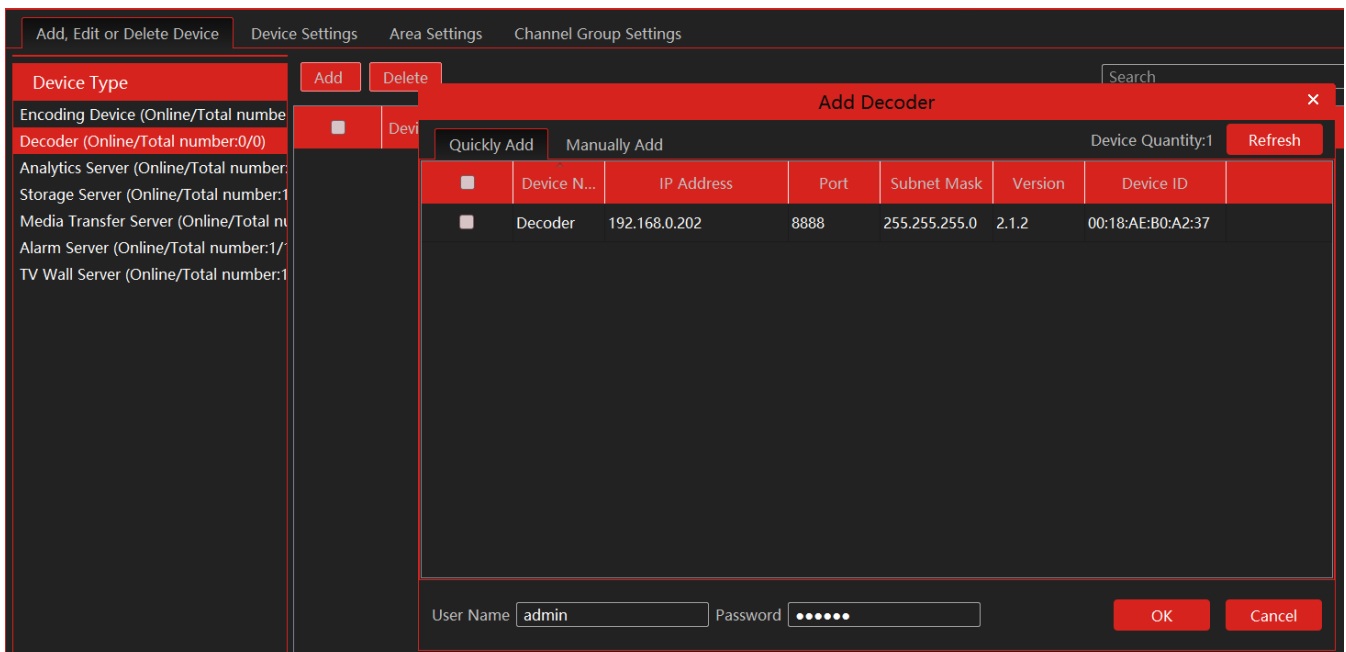
5 Configuring a Decoder on the Management Server

Before configuring the decoder, a TV Wall setting must be present. Please follow the Ossia VMS user manual. The decoder which needs to be connected to the platform must be the master decoder and in platform mode.

Go to Basic Settings→ System Settings to check the user permission and running mode of the decoder and make sure its user permission is master and its running mode is the platform. Then apply the settings and restart the decoder if required.


5.1 Add a DEC-0104(1U) Decoder

Go to Home→Add, Edit or Delete Device→Decoder interface.



The setting steps of adding decoders are the same as adding encoding device setup (see Add Encoding Device for details).

Please note: The decoder status will be “Offline” until properly bound to the TV Wall. Please continue to the next steps of the installation.


After that, go to Home→TV Wall Management→TV Wall System Setting→Decoder Bind Configuration. Then click  to bind decoder and TV wall.

5.2 Bind a DEC-0104(1U) Decoder to a TV Wall

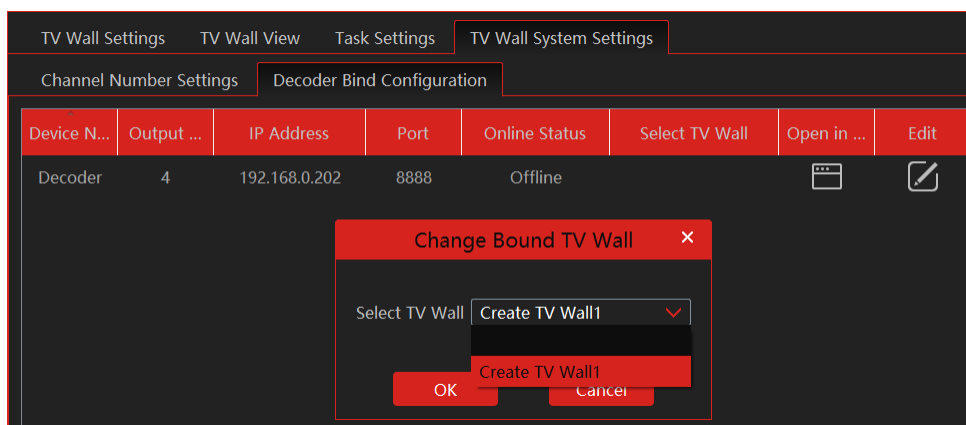
Go to Home→TV Wall Management→TV Wall System Setting interface as shown below. In this interface, the decoder bind can be set up. Any

Decoder bind configuration: modify the binding state between decoder and TV wall. All decoder configured in step 9.2.2 should appear here.

| Device N... | Output ... | IP Address | Port | Online Status | Select TV Wall | Open in ... | Edit |
|-------------|------------|---------------|------|---------------|----------------|-------------|------|
| Decoder | 4 | 192.168.0.202 | 8888 | Offline | | | |

Click  to change bound TV Wall.

Before binding, the decoder will be offline and selected TV wall column will be empty.



Once properly bound, the decoder will become online.

| Device N... | Output ... | IP Address | Port | Online Status | Select TV Wall | Open in ... | Edit |
|-------------|------------|---------------|------|---------------|-----------------|-------------|------|
| Decoder | 4 | 192.168.0.202 | 8888 | Online | Create TV Wall1 | | |

Return to the decoder management interface as shown above. The online status of the decoder indicates that the decoder is successfully bound with a TV wall. Go to the TV Wall Setting interface as shown below. Drag the outputs of the decoder to the window on the right and save them to complete the output bind.

