IMP5212 Professional Video Wall Processor

User Manual





Product Information

Model:IMP5212 Professional Video Wall ProcessorVersion:V010000Release Date:January 9th, 2015

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About this manual

Important

The following symbols are used in this manual:



• The further information or know-how for described subjects above which helps user to understand them better.

A Warning

• The safety matters or operations that user must pay attention to when using this product.

Contents

The user manual applies to the following device types:

✤ IMP5212

The images of IMP5212 adopted in the following descriptions. Any of the different specifications between the device types are elaborated. Before reading the manual, please confirm the device type.



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Chapter 1 Product Overview

The professional Video Wall Processor, IMP5212, provides by OSEE, offers the ideal and practical 24/7 robustness, it provides perfect visual effects, high security, flexible operating environment and easy in configuration and maintenance.

The IMP5212 is a professional Video Wall Processor offering a multi-monitor display environment suited to your system by selecting and installing the required input and output modules in a 7U frame. Up to 13 input and 3 output cards can be installed on the frame, for a Video Wall Processor with a maximum of 26 inputs and 12 outputs. Supports mixed input of analog composite, VGA, SDI, HDMI, YPbPr and DVI.

It is widely used in the following fields: educational and research, public announcement, publication and information, administrative management, military command system, exhibition and presentation, security surveillance system, appliances sales etc.

The IMP5212 Video Wall Processor and its inner control software compose the Video Wall system, the device integrates an internal control software to connect to and configure the controller. You can configure multi-screen and multi-presets with the input video sources, and set them at any position and in arbitrary size in the operating interface of the software. Each video window has adequate resolution to show very high quality frame effects. The software is a WYSIWYG editor and easy to use.



Figure 1-1 The Illustration of IMP5212 Video Wall Processor



IMP5212 Video Wall Processor supports the following features: **Features**

- Supports up to 26 windows displayed through a single output channel, with image zoom, overlay, roaming, and cross-screen displayed.
- Supports up to 12 screens to be grouped together as the monitor wall. When there are 12 channels of video outputs, the layout of the screens could be up to the 3X4 format.
- Supports up to 26 channels of video input signals(adaptive), which supports several formats: DVI, VGA, HDMI, SDI, CVBS, S-Video and YPbPr, a wide range of graphics inputs with resolutions up to 1920 x 1200 and 2048 x 1080p at 60 Hz frame rate(using the specific DVI interface with the DVI-M technology owned by OSEE).
- Supports up to 12 channels of video outputs with DVI-D interface, the output resolution can be up to 1920X1200@60P and 2048X1080@60P, each output could be displayed across several display screens, in a single screen or in full screens.
- Image can be displayed anywhere, any size, within or cross screens. The window of a video source can be moved from one screen to another screen in real time
- Supports power distribution through GPO interface
- Provides character superimposition, it is available in any window
- Supports background, and 4 customized backgrounds.
- Supports EDID bypass management of non-standard signal sources
- Provides timing with system time.
- Using professional case for high reliability
- Supports plenty of inner scene models to realize the effects of roaming, overlapping, zooming and so on
- Using the advanced dynamic interlace analysis technology to achieve high-quality video.
- Input expansion can be achieved by adding an external matrix router.

Functionality

- Supports integrated luminance control with high reliability and excellent stability, using the new high speed parallel processing method to display high quality images without trailing or jag.
- Using professional frame for high reliability with redundant power supplies.
- Supports hot swap of input modules and output modules, to realize expansion online.



- The input transmission is real-time without delay
- Supports up to 50 customized scene models, including position, size and stacked relationship of the input video windows.
- Supports several control methods: RS232 control, color touch screen and remote control computer(TCP/IP)
- Provides a color touch screen in front panel for touch control

Application example



Figure 1-2 The example for IMP5212 Application



Chapter 2 Safety

FCC Caution:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.



Safety

Warnings:

Read, keep and follow all of these instructions for your safety. Heed all warnings.

A Warning

- Video Wall Processor
 - Upgrading of the device is subject to change without notice.
 - Contact your Customer Service representative if parts are missing or damaged.

A Warning

- Position
 - Do not block any ventilation openings.
 - Do not use this unit near water.
 - Do not expose the unit to rain or moisture.
 - Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that product heat.
 - A nameplate indicating operating voltage, etc., is located on the rear panel.
 - The socket-outlet shall be installed near the equipment and shall be easily accessible.



Chapter 3 Unpack and Installation

Unpack

When unpacking the components of this switcher, please verify that none of the components listed in Table 3-1 are damaged or lack. If there is any missing, contact your distributors or Beijing Osee Digital Technology Ltd. for it.

No.	Item	Quantity	Comments
1	Video Wall Processor	1	IMP5212
2	Disk	1	User manuals
3	Certificate Card	1	
4	Warranty Card	1	
5	Power Cord	1	

 Table 3-1
 Packing List

🚹 Tips_

About Unpacking and Shipping

- This product was carefully inspected, tested, and calibrated before shipment to ensure years of stable and trouble-free service. Before you install this unit, do the followings:
 - □ Check the equipment for any visible damage that may have occurred during transit.
 - □ Confirm receipt of all items on the packing list.
 - □ Contact your dealer if any item on the packing list is missing.
 - □ Contact the carrier if any item is damaged.
 - □ Remove all packaging material from the product before you install the unit.



- □ Retain at least one set of the original packaging materials, in the event that you need to return a product for servicing.
- If the original package is not available, you can supply your own packaging as long as it meets the following criteria:
 - □ The packaging must be able to withstand the product's weight.
 - □ The product must be held rigid within the packaging
 - □ There must be at least 5 cm of space between the product and the container.
 - □ The corners of the product must be protected.
- Ship products back to us for servicing prepaid and, if possible, in the original packaging material. If the product is still within the warranty period, we will return the product prepaid after servicing.

Installation

The IMP5212 video wall processor has already been assembled according to the customer's requirements. You can follow the instructions below to replace the corresponding module when need to replace or expand your processor.

1. Preparations

Make sure you have prepared the followings before replace the modules:

- Inspect for any apparent physical damage that may have occurred in transit.
- Make sure you have received all the components listed in packing list.
- if there are any anti-static package or other packages, please take off them.
- Keep the package in case of future usage.

AWarning

- The safety matters or operations that user must pay attention to when using this product.
- Check out the consumption of module and the maximum power of frame before installation.



 Ensure that all handling precautions are taken to avoid electrostatic discharge or other damage to sensitive electronic components. Wear an earth strap and perform all PCB assembly at an appropriate anti-static work station. Follow the instructions carefully to fit the modules.

2. Replace the module

Follow the following steps to replace a module:

At first, check the frame. Check the rear panel of the frame, as shown in Figure 3-1.



Figure 3-1 Rear Panel-Insert the Rear Connector

Then, turn round to the rear part of the frame, as shown in Figure 3-2, you can see the power module and the bus board have been installed.



Figure 3-2 Rear Panel

You can see the swivel handle of the power module labeled in red circle, as shown in Figure 3-3, you can press it down to pull the power module out of the frame.





Figure 3-3 The Swivel Handle of the Power Module

Step 1 Remove the old module

Take an input module for example, loosen the screws, as shown in Figure 3-4, and then pull out the module along the slot of the frame, as shown in Figure 3-5.



Figure 3-4 Loose the Module



Figure 3-5 Pull Out the Old Module



Step 2 Replace a new module

Then, push the new module slightly along the slot, press module again to confirm that the module is installed firmly and then fasten the screws.

Please make sure the module type and the slot position must be matched with each other. Install the other modules as the same steps.



Chapter 4 IMP5212 Features

This chapter describes the features of IMP5212.

4.1 Front Panel Features

There are four indicators in the center of the front panel, as shown in Figure 4.1-1



Figure 4.1-1 the Buttons in Front Panel

1. Link

Communication indicator. It indicates the communication status between the video wall processor and the control computer. The indicator is lighting when the communication has been set up and been normal, or it will flash when the communication has not been set up or some communication faults happens.

2. Alarm

Case Temperature alarm indicator. It lights up to indicate the temperature of case is higher than the limitation, and it is off when temperature is normal.



Tips

There are two groups of fans positioned at the top and bottom of the frame.
 Please check the fans' status when the case temperature alarm happens.
 The fans support hot swap.

3. PS1 Indicator

It is used to indicate the PS1 power on or off. If the light is green, the device is powered on, and if the light is off, the device is powered off.

4. PS2 Indicator

It is used to indicate the PS2 power on or off. If the light is green, the device is powered on, and if the light is off, the device is powered off.

4.1.1 Touch Screen

There is a touch screen at the top right corner of the front panel, and you can do the following operations through this touch screen.

- Preset Call
- GPO Control
- Language Selection
- Running Time
- 1. Preset Call

Preset Call is used to switch to and apply one of the former 20 presets. They are distributed in two pages, each page contains 10 buttons and each button is a preset, then turn pages using the previous page and the next page button to check the contents.



Figure 4.1-2 Preset Call



Operation: click the **Preset Call** button, and it will display the preset call interface at the center of the touch screen. Click a numbered preset button to switch to the corresponding preset, and the button color turn purple from yellow. For example, as shown in Figure 4.1-3, the twentieth preset displays.



Figure 4.1-3 Selecting a Preset

🖪 Tips

 Up to 50 presets can be preview, and the touch screen provides the former 20 presets for fast switching operation. Refer to the manual for OSEE Video Wall System control software for the details about the preset definition.

2. GPO Control

GPO Control is used to set to turn on or off the display screens through automatic control method or manual control method, the operation interface is shown in Figure 4.1-4:



Figure 4.1-4 GPO Control



Select from automatic control mode or manual control mode to control the turn on or off the display screens in GPO Control interface, and the indicator of the screen will turn green when it is turned on.

🖪 Tips

- In IMP5212, GPO control is realized through the GPO interface of its control module. The GPO interface connect the video wall processor and the display screens with its four groups of inner low voltage relays, thus to control open or close of the connected devices. Each group of inner low voltage relays controls one device, and one to one correspondence with one of the four accesses.
- The GPO interface will apply to the devices conformed to its contact rating.
 - Automatic control mode

The automatic control mode contains two control buttons: Startup button and Stop button, and they direct to the starting logic and the stopping logic separately, the instructions are as follows:

□ Startup

Click Startup button (启动), IMP5212 will start up the open logic, the

No.1~No.4 access should be set a delay time for the open sequence. The delay time is accumulative by the GPO sequence.

The delay time for No.1~No.4 access should be set separately to GPO1(s) ~GPO4 (s), in Settings window, as shown in Figure 4.1-5:

Setting		×
General Configuration	_ GPO	
Screen GPO	GPO1 Time Delay: 0	
Usual Video Source	GPO2 Time Delay: 0	
Presets Loop	GPO3 Time Delay: 0	
Device Information Device Management	GPO4 Time Delay: 0	
Background Management	Apply	

Figure 4.1-5 GPO Control Settings



For example: as shown in Figure 4.1-6, set the delay time for each screen controlled through the GPO interface.

Click Startup button, it will turn blue

启 动 and the automatic control

mode is started up. IMP5212 will open the No.1~No.4 screen according to these GPO delay time.

Setting	
General Configuration	GP0
Screen	GP01 Time Delay: 0
GPO	
Usual Video Source	GP02 Time Delay: 2
Usual Presets	
Presets Loop	GPO3 Time Delay: 2
Device Information	GP04 Time Delay:
Device Management	
Background Management	Apply

Figure 4.1-6 Set the Delay Time for GPO Control

The No.1 screen will open at once for its GPO1 is 0 second, and The No.2 screen will open at 2 second, then is the No.3 screen, opens at 4 second, and the No.4 screen at 7 second, the timing sequence logic is as shown in Figure 4.1-7:



Figure 4.1-7 GPO Control Logic-Turn On

Click Stop button 停止), it will turn off all of the No.1~No.4 screens at

[□] Stop





the same time without delay.

For example: take up the example, all of the No.1~No.4 screens turn off at 9 second the time you clicked the stop button. The timing sequence logic is as shown in Figure 4.1-8:



Figure 4.1-8 GPO Control Logic-Turn Off

Manual control mode

The manual control mode contains 4 control buttons: No.1 access to No.4 access, and they direct to the starting logic and the stopping logic separately for each corresponding access.

For example: click No.1 access button, it will make contact of the first group of relay, so the connected No.1 screen will be turned on; then click this button again, it will break up the contact, and the No.1 screen will be turned off. The other buttons are as the same, and you can check the status of the corresponding screen by the device indicator at this interface.

Warning

• If you have started up a controlled device by clicking the Startup button of

automatic control mode, you can't use the access button in manual control mode, it is invalid.

3. Language Selection

Language Selection is used to selecting the display language of the touch screen: Chinese or English. The interface is shown in Figure 4.1-9, click the language button to set the corresponding language.



预案调用	GPO控制	语言选择	运行时间			
语言设置模板						
简体中文						
English						

Figure 4.1-9 Language Selection

4. Running Time

Running Time is used to check the total times of starting up and the total time of device running, the interface is shown in Figure 4.1-10.

预案调用	GPO控制	语言	选择	运行时间	
	—————运行	时间			
	累计开机次数:	: 2 · 4	次 8小时		

Figure 4.1-10 Running Time

4.2 Rear Panel Features

It will introduce the arrangement and the operations of the interfaces in rear of the panel in the following.

As shown in Figure 4.2-1, IMP5212 provides the various connectors for power supply, input, output and control, the details are as below:





Figure 4.2-1 The Rear Connector of IMP5212

The video wall processor performs the power supply, input, output and control functions through the corresponding modules, and you should make sure the module has been inserted to the correct slot in the frame. Facing at the direction of the front panel, the arrangement sequence of the modules from left to right is power supply module, input module, output module and control module. Each slot has an attribute, you can see the slots are different on bus board.

Power Module

It is used to supply AC power. There are two power input interfaces, and the specification is 100-240V, 50/60Hz, 300W. They are labeled as PS1, PS2 separately. The corresponding indicators are at the front panel. If the light is green, the device is powered on, and if the light is off, the device is powered off.

Warning

 Only use the adapter and the power cord specified by the manufacture for your safety !



4.2.1 Bus Board

IMP5212 uses the bus board to integrate input module, output module and control module, and the modules should be positioned into slots differently according to the module types, then the transmission between them will be normal.

The bus board provides the transmission paths, the power modules provide the power supply, and the fans provide the cool running inner environment.



Figure 4.2-2 The Bus Board of IMP5212

The inserted sequence and amount of the modules from right to left are as follows:

- Control module: 1
- Output module: 4 (the most)
- Input module: 13(the most)

4.2.2 Input module

IMP5212 provides an input module. Each input module supports two DVI inputs. The input module is cooperated with its matched input module panel, as shown in Figure 4.2-3.

Input Module





Figure 4.2-3 Input Module (Side View)



Figure 4.2-4 Panel for Input Module (Front View)

After insert the input module into the corresponding slot, and put the panel onto the interfaces of the input module, fasten the screws to fix the module and its panel, the combination of them are shown in Figure 4.2-5:





Figure 4.2-5 Installation of an Input Module into the Frame

The input module provides 2 channels of DVI-M input interfaces (the input signal is adaptive), the physical diagram is shown in Figure 4.2-6:



Figure 4.2-6 Image for Input Module

DVI-M Interface

The relationship of the pins of DVI-M connector and its channel value is shown in Figure 4.2-7:



Figure 4.2-7 DVI-M Interface



Pin No.	Channel V	Value			Pin No.	Channel Value	
Pin1	TMDS DA	TA 2-				Pin13	NOT USED
Pin2	TMDS DA	TA 2+				Pin14	+5V POWER
Pin3	TMDS 2/4	SHIE	ELD			Pin15	GND
Pin4	NOT USE	D				Pin16	HOT PLUG DETECT
Pin5	NOT USE	D				Pin17	TMDS DATA 0-
Pin6	DDC CLO	CK				Pin18	TMDS DATA 0+
Pin7	DDC DATA					Pin19	TMDS 0/5 SHIELD
Pin8	ANALOG VERT.SYNC					Pin20	NOT USED
Pin9	TMDS DATA 1-					Pin21	NOT USED
Pin10	TMDS DATA 1+					Pin22	TMDS CLOCK SHIELD
Pin11	TMDS 1/3	SHIE	ELD			Pin23	TMDS CLOCK+
Pin12	NOT USED					Pin24	TMDS CLOCK-
C1	ANALOG	R	Y	1	Pr	C4	ANALOG HORZ SYNC
C2	ANALOG	G	/	CVBS	Y	C5	ANALOG GROUND
C3	ANALOG	В	С	/	Pb		

 Table 4.2-1
 The Relationship of DVI-M Pins and Channel Values

The DVI IN input supports the following resolutions, as shown in Table 4-2:

 Table 4-2
 The Resolutions of the DVI Interfaces

Name	Resolutions				
Input formats	640X480, 800X600, 1024X768, 1280X720, 1280X768, 1280X800, 1280X1024, 1360X768, 1366X768, 1400X1050, 1440X900, 1600X1200, 1680X1050, 1920X1080,				
🖪 Tips					

• It supports up to 13 input modules in one IMP5212 frame.

Input Adaptor

There are three kinds of input adaptor for the various input signals:

□ DVI-M-3 Adaptor (YPbPr、S-Video、CVBS): the image for this adaptor is as shown in Figure 4.2-8. Make sure the composited Video interface is corresponding to the input signal type, the relationship is as shown in the table below:

Interface Color\Signal Type	RGB	Y/C	CVBS	YPbPr
Red	R	Y	/	Pr
Green	G	/	CVBS	Y
Blue	В	С	/	Pb

- □ DVI-M-V Adaptor (VGA): the image for this adaptor is as shown in Figure 4.2-9.
- DVI-M-H Adaptor (HDMI): the image for this adaptor is as shown in Figure 4.2-10.



Figure 4.2-8 DVI-M-3 Adaptor



Figure 4.2-9 DVI-M-V Adaptor



Figure 4.2-10 DVI-M-H Adaptor



4.2.3 Output Module

IMP5212 provides an output module. Each output module supports three DVI outputs. The output module is cooperated with its matched output module panel, as shown in Figure 4.2-11:

Output Module



Figure 4.2-11 Output Module (Side View)

Panel for Output Module



Figure 4.2-12 Panel for Output Module (Front View)

After insert the output module into the corresponding slot, and put the panel onto the interfaces of the output module, fasten the screws to fix the



module and its panel.

The output module provides 3 channels of DVI OUT outputs, with DVI-D interface, the physical diagram is shown in Figure 4.2-13:



Figure 4.2-13 Image for Output Module

Table 4-3	The Resolutions of the DVI Interfaces

Name	Resolutions				
Output formats	640X480, 800X600, 1024X768, 1280X720, 1280X768, 1280X1024, 1920X1080				

4.2.4 Control Module

The control module is also a combination of a control module (board) and its panel, as shown in Figure 4.2-14 and Figure 4.2-15:

Control Module



Figure 4.2-14 Control Module (Side View)





Figure 4.2-15 Panel for Control Module (Front View)

The physical diagram for the Control Module is as shown in Figure 4.2-16:



Figure 4.2-16 Image for Control Module

1. Connectors in Control Module

The labels of the interfaces on the control module are as shown in Table 4.2-4:

Name	Number	Connector	Description
GPO Control	1	8pin	GPO Control Interface
USB	1	USB	USB Interface
RS232	1	DB9	RS232 communication Interface, to connect the external device
RS232/422	1	DB9	RS232/422 communication Interface, to connect the control computer
ETHERNET	1	RJ45	10/100 Base-T Interface

Table 4.2-4	The Interfaces	of control	Module



2. Interfaces Introduction

(1) GPO(8PIN)

It provides one GPO interface, and the connector is an 8 pins element. The pins are numbered from left to right, as shown in Figure 4.2-17. They are corresponding to four pairs of relay witches for remote control.



Figure 4.2-17 The Pins Sequence of GPO Connector

The relationship of the pins of GPO connector and its channel value is shown in Table 4.2-5:

Table 4.2-5 The Relationship of GPO Pins(8Pin) and Channel Values

Pin No.	Channel Value
Pin1	OUT3_A
Pin2	OUT3_B
Pin3	OUT2_A
Pin4	OUT2_B
Pin5	OUT1_A
Pin6	OUT1_B
Pin7	OUT0_A
Pin8	OUT0_B

(2) USB

It provides one USB interface to update the program of this device.

(3) RS232 (DB9)

It provides one RS232-422 interface, the connector is DB9 female. Use this interface to connect with other video devices to implement router control, and you should set the communication parameters in the OSEE Video Wall System software, click set button "Device Management" \rightarrow "Serial Port", the window is as shown in Figure



4.2-18:

Figure 4.2-18 Setting Values for RS232 Parameters

The relationship of the pins of RS232 connector and its channel value is shown in Table 4.2-6.



Figure 4.2-19 The Pins Sequence of RS232 Connector

Table 4.2-6 The Relationship of RS232 and Channel Valu
--

Pin No.	Channel Value
Pin2	Rx
Pin3	Тх
Pin5	GND

(4) RS232-422 (DB9)

It provides one RS232-422 interface, the connector is DB9 male. This interface is used to connect and communicate with the remote control computer.

The relationship of the pins of RS232-422 connector and its channel value is shown in Table 4.2-7.







Table 4.2-7	The Relationshi	p of RS232-422 and	Channel Values

Pin No.	Channel Value
Pin1	NC
Pin 2	RS422Tx-
Pin 3	RS422Rx+
Pin4	NC
Pin5	GND
Pin6	NC
Pin7	RS422Tx+
Pin8	RS422Rx-
Pin9	NC

The function of the RS232-422 interface is determined by a dip switch on the control module, as shown in Figure 4.2-21:



Figure 4.2-21 The Position of the Dip Switch for RS232-422

The interface is used as RS232 when the dip switch is set as this: the former three bits are set to ON and the latter five bits are set to OFF, as shown in Figure 4.2-22.





Figure 4.2-22 The Dip Switch Sequence of RS232

The interface is used as RS422 when the dip switch is set as this: the former three bits are set to OFF and the latter five bits are set to ON, as shown in Figure 4.2-23.



Figure 4.2-23 The Dip Switch Sequence of RS422

(5) ETHERNET (RJ-45)

It provides one 10/100M Ethernet interface which is used to connect with a computer to access the network control page or run the device control tool to modify the network settings.



• The default IP address of IMP5212 is 192.168.1.10.



Figure 4.2-24 The Ethernet Interface

4.3 Device Connection

Connect the signal sources with the input interfaces of IMP5212 using cables, and connect the display screens with the output interfaces of IMP5212 using cables. The arrangement of the input modules and the output modules fully loaded are as shown in Figure 4.3-1:





Figure 4.3-1 The Arrangement of Input Modules and Output Modules

The rules of the connection sequence between the output interfaces and display screens:

For the slots of input module and output module in IMP5212 are changeless, so the priority of the slots must be from the smaller numbered slot to the bigger slot one by one, and without skip. The arrangement sequence instruction is: display screens are numbered right to left, top to bottom corresponding with the number of the output interface.

Example: there are 12 pieces of screens, the output interfaces and the screens are shown as in Figure 4.3-2.

1	4	7	10
2	5	8	11
3	6	9	12

Figure 4.3-2 The Arrangement of Display Screens

4.4 Control Access

The IMP5212 is connected to its remote control computer through the Ethernet interface using the twisted-pair cable. Start up the computer and run the OSEE Video Wall System software, and the software will load the information of the video wall processor after setting up the connection.

🚹 Tips

• The Video Wall processor and the remote control computer must be at the same network segment.



Double click the program ¹⁰ OseeView.exein the installation folder of the OSEE video wall system software, the software interface is shown in Figure 4.4-1:

OSEE VIDEOVALL SYSIEM [Demo Kode] SO 🗴						
0800 拼接控制系统	Device Connection Connect Disconnect	Auto Screen On	Screen On/Off © 1 On © 2 On © 3 Of	n ©40n Pause	Presets Loop Stop Forward Backward	Setting Setting
Usual Video Source	1 2 3 4 Current Preset 1:Window H	5 Presets Add Window	Save Preset Clean Preset	▼ Show Usual Presets	✔ Show Screen On/Off	
		1		2		
Input Card 1:DVI-I INPUT 2:DVI-I INPUT 3:DVI-I INPUT 4:DVI-I INPUT	<					
Vindow Presets 2: Vindow Presets 3: Vindow Presets 4: Vindow Presets 5: Vindow Preset 5: Vindow Presets 5: Vindow Preset 5: Vindow Preset 5: Vindow Preset 5: Vindow Preset 5: Vindow						
6-Window Prests 7-Window Prests 9-Window Prests 9-Window Prests 10-Window Prests 11-Window Prests 12-Window Prests 13-Window Prests 13-Window Prests						

Figure 4.4-1 The Interface of OSEE Video Wall System Software

Refer to "The Manual for the OSEE Video Wall System" for details.

4.5 Control Instruction Set

1. Set the Screen ON/OFF Instructions

Set the manual/automatic GPO* ON/OFF instructions.

Command	Instruction
Manual-GPO1 ON	EB-A5-04-00-98-03-01-01-A5-EB
Manual-GPO1 OFF	EB-A5-04-00-98-03-00-01-A5-EB
Manual-GPO2 ON	EB-A5-04-00-98-05-02-01-A5-EB
Manual-GPO2 OFF	EB-A5-04-00-98-05-00-01-A5-EB
Manual-GPO3 ON	EB-A5-04-00-98-09-04-01-A5-EB
Manual-GPO3 OFF	EB-A5-04-00-98-09-00-01-A5-EB
Manual-GPO4 ON	EB-A5-04-00-98-11-08-01-A5-EB
Manual-GPO4 OFF	EB-A5-04-00-98-11-00-01-A5-EB
Automatic-GPO1~GPO4 ON	EB-A5-04-00-98-1F-0F-00-A5-EB
Automatic-GPO1~GPO4 OFF	EB-A5-04-00-98-1F-00-00-A5-EB

The strike through line in the instructions above is just used to split the data bits to be easy distinguished, clean it when you input the instructions.



2. Switch Preset Instructions

Use the following instruction to switch to the corresponding preset n.

Command	Instruction
Switch to No.1 Preset	EB-A5-12-00-A4-00-00-00-00-00-00-00-00-00-00-00-00-00
Switch to No.2 Preset	EB-A5-12-00-A4-00-01-00-00-00-00-00-00-00-0 0-00-00-00-00-00
Switch to No.3 Preset	EB-A5-12-00-A4-00-02-00-00-00-00-00-00-00-0 0-00-00-00-00-00
Switch to No.4 Preset	EB-A5-12-00-A4-00-03-00-00-00-00-00-00-00-0 0-00-00-00-00-00
Switch to No.5 Preset	EB-A5-12-00-A4-00-04-00-00-00-00-00-00-00-0 0-00-00-00-00-00
Switch to No.6 Preset	EB-A5-12-00-A4-00-05-00-00-00-00-00-00-00-0 0-00-00-00-00-00
Switch to No.7 Preset	EB-A5-12-00-A4-00-06-00-00-00-00-00-00-00-0 0-00-00-00-00-00
Switch to No.8 Preset	EB-A5-12-00-A4-00-07-00-00-00-00-00-00-00-0 0-00-00-00-00-00
Switch to No.9 Preset	EB-A5-12-00-A4-00-08-00-00-00-00-00-00-00-00-00-00-00-
Switch to No.10 Preset	EB-A5-12-00-A4-00-09-00-00-00-00-00-00-00-0 0-00-00-00-00-00

The data bits of the target preset to be switched to is labeled in red rectangle as the figure below, for example, 00 represents No.1 preset, and 01 represents No.2 preset, and so on. Make sure you input the right data for your target preset, and the data should be in hexadecimal format.



Chapter 5 Specifications

1. Product detailed information

Index	Specification				
Input Signals	Up to 26 channels of video input, 2-26 DVI interface(DVI-M)			1-13 module(each has 2 input channels)	
	Formats	CVBS, VGA, DVI,	Pr, S-Video		
Input Module	Resolutions	640X480, 800X 1280X768, 1280 1366X768, 1400 1680X1050, 1920	600, 1024) X800, 1280) X1050, 1440 X1080	X768, 1280X720, X1024, 1360X768, X900, 1600X1200,	
	Impedance	75Ω(CVBS/VGA/YPbPr/S-Video), 50Ω(DVI/HDMI)			
	Connector	DVI-M	DVI-M		
Output Signals	3-12 channo signal	nannels of DVI-D signal or HDMI 1-4 module(each has 3 output channels)			
	Formats	DVI			
Output Module	Resolutions	640X480, 800X600, 1024X768, 1280X720, 1280X768, 1280X1024, 1920X1080			
	Impedance	50Ω			
	Connector	DVI-D			
	GPO	Contact Rating	1A 30VDC\0.3A 125VAC		
		Delay time	0~40s		
Module	Ethernet	Speed	10/100Base-T		
	Luichici	Protocol	TCP/IP		
	Serial Port Types RS232, RS		RS232, RS2	232-422	
Operation Interface	RS422 / remote control through RJ-45 port				
Display Units	Up to 12 displays				
Control Software	OSEE Video Wall System				
Environment	Temperature: 0~70 ℃ Humidity: 10%~90% No condensation				



Specifications

Index	Specification		
Weight(fully loaded)	7U, 30kg	442(L)×315(W)×310(H)mm	18 slots
Power Consumption	300W		
Electrical Characteristics	100-240VAC, 50-60Hz, two redundant power modules		

2. Product Outline

The outline of IMP5212 is shown as in the following figures:



Figure 5-1 Front View



Figure 5-2 Back View





Figure 5-3 Side View

Tips

• Specifications are subject to change without notice.

-----No Text Below------



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