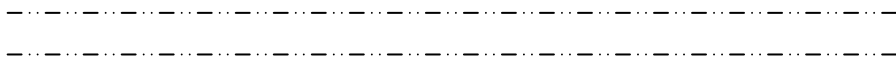


H M V 1 6 0

High Definition Multi-viewer
Display
Processor Manager



PRODUCT INFORMATION

Model: H MV160 HD Multi-viewer display processor Manager
Version: V010101
Release Date: 2010-12-28

COMPANY NAME

Beijing Osee Digital Technology Ltd.

CONTACT INFORMATION

Address: Room 702, Tower D, Jinyujiahua Building, No.9, 3rd Shangdi Street, Haidian District, Beijing, China
Post code: 100085
Tel: 8610-62968823
Fax: 8610-62977165
[Http://www.osee-dig.com](http://www.osee-dig.com)
E-mail: sales@osee-dig.com

Contents

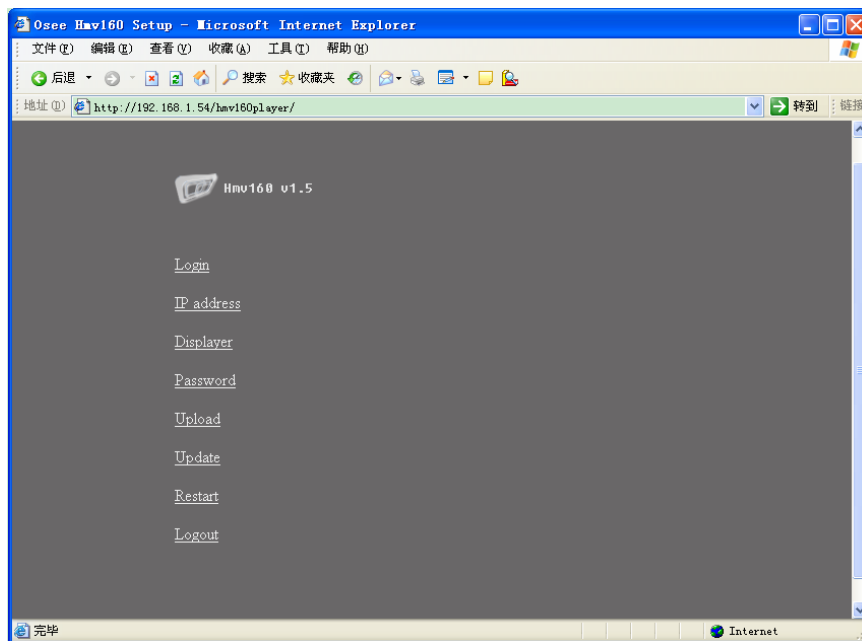
Chapter 1 HMV160 Player setting instruction.....	错误！未定义书签。
1.1 Accessing	1
1.2 Log in	1
1.3 Set IP and MASK address	2
1.4 Set output resolution	3
1.5 Change password	4
1.6 Upload the document for updating.....	4
1.7 Hardware updating.....	5
1.8 Software updating	5
1.9 Log out.....	6
Chapter 2 HMV160 Manager instruction	错误！未定义书签。
2.1 Installation	7
2.2 Add- Add displayer	7
2.3 Rename- Rename player	8
2.3 Delete-Delete player.....	8
2.4 Board-Board setting	8
2.5 Source-Source ports grouping	10
2.5.1 Left interface- input source management.....	10
2.5.1.1 Name modification of nodes and sub-nodes	11
2.5.1.2 Source property modification.....	11
2.5.2 Right interface-Video/Audio group setting	15
2.6 Setting- System clock setting	15
2.7 Image- Image management	16
2.7.1 Image browsing.....	17
2.7.2 Image delete	17
2.7.3 Image upload.....	18
2.8 Edit- Edit model	19
2.8.1 Edit interface introduction.....	21
2.8.2 Making model	21
2.8.2.1 Refresh information	21
2.8.2.2 Model uploading Background	21
2.8.2.3 Model Configuration.....	22
2.8.2.4 Element property bar for adjusting.....	23
2.8.2.5 Source Configuration	28
2.8.2.6 Volume adjustment of monitored audio	30
2.8.2.7 Delete element.....	31
2.8.2.8 Save model.....	31
2.8.2.9 Layout setting.....	33
2.8.3 Quick making model.....	34
2.8.4 Open default model of player screen.....	34
2.8.5 Model quick setting for player screen.....	35
2.9 Control- Monitoring control	35
Chapter 3 HMV160 Clock Server Manager instruction	错误！未定义书签。
3.1 Installation.....	40
3.2 Operation	40

Chapter 1 H MV160 Player setting instruction

H MV160 Player: H MV160 background drawing and hardware management software

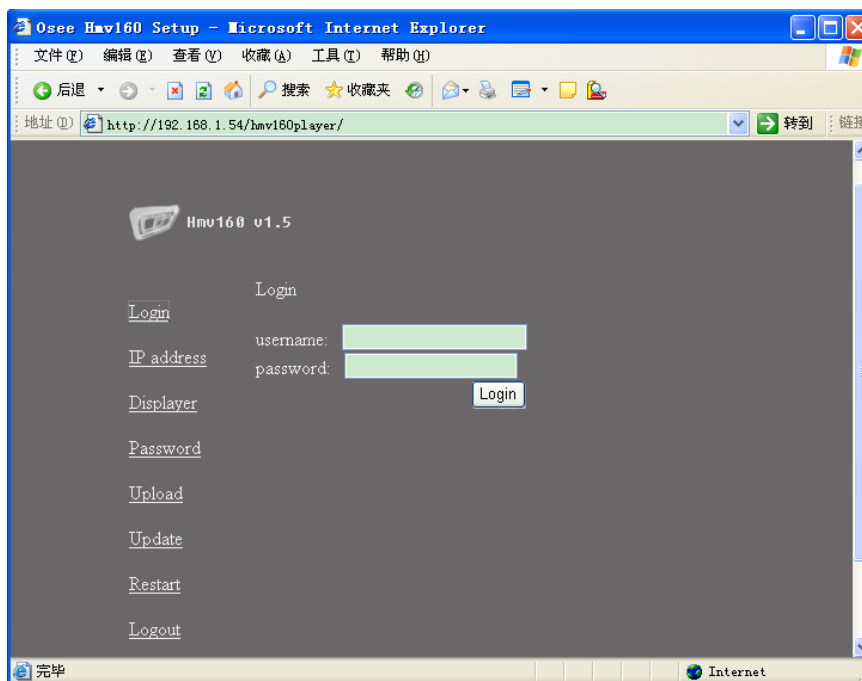
1.1 Accessing

Use web page browser. Input <http://ip address /hmv160Player/> in the address bar. If the address of H MV160 is 192.168.1.54. The browsing address is: <http://192.168.1.54/hmv160Player/>. Correct address will lead you to the web page below:



1.2 Log in

Click “**Login**” button in the “**Default interface**” , there will be a pop-up interface for login on the right side , as below:

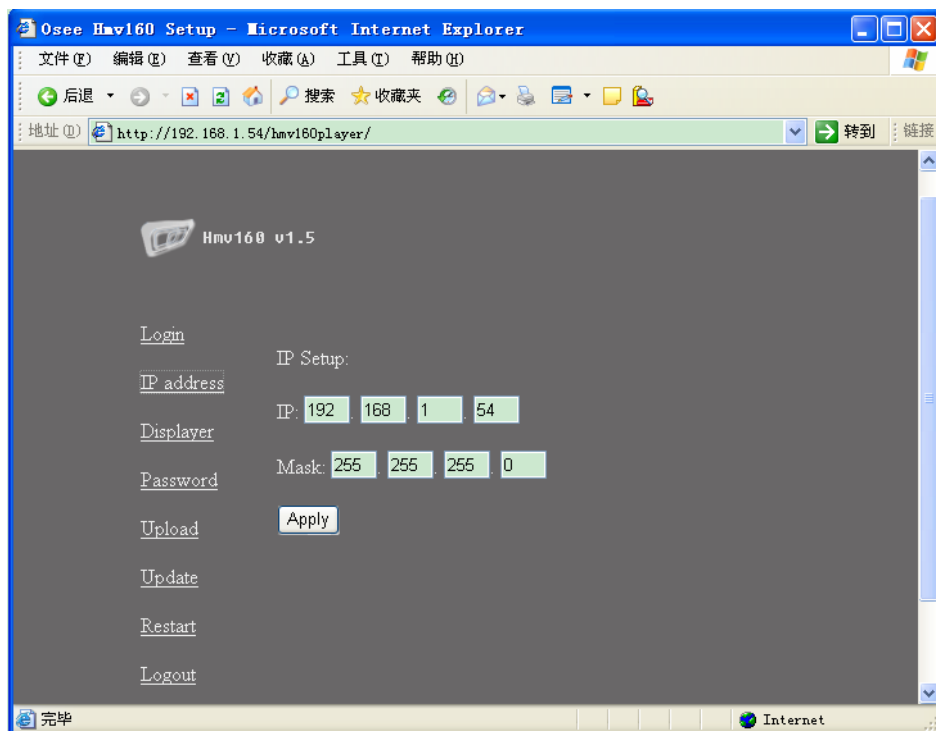


Input user name, password, click “Login”, the “Login success” indicates successful login.

Initial user name: admin, Password: osee

1.3 Set IP and MASK address

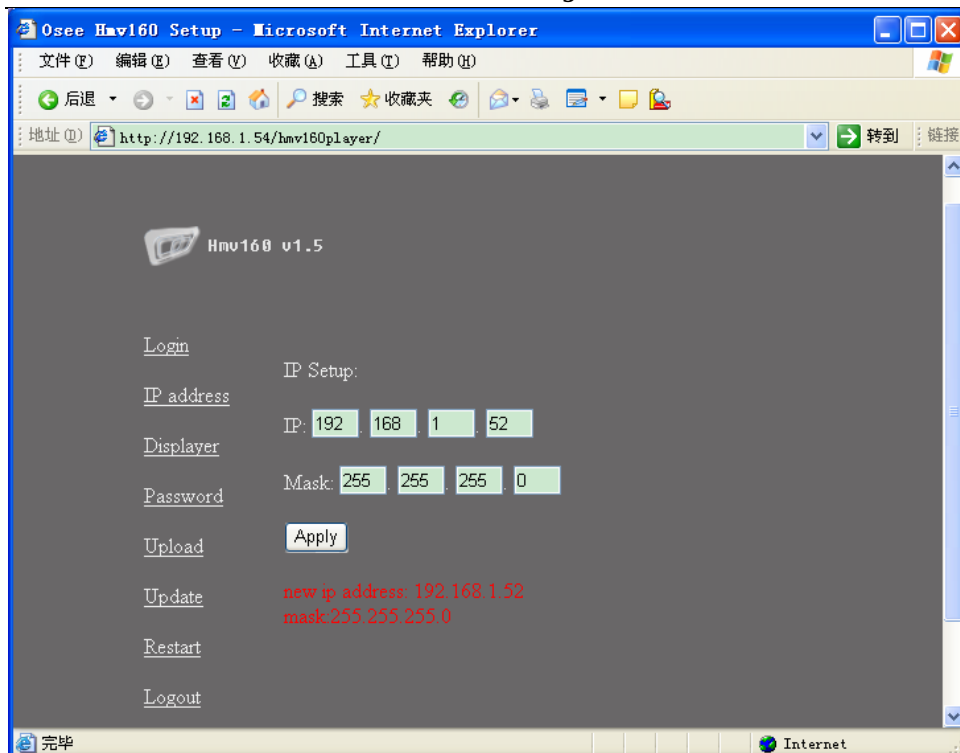
Click “IP address” button in the “default interface”, there will be a pop-up interface for setting IP and mask on the right side, as below:



This item is for setting IP and Mask of HMV160.

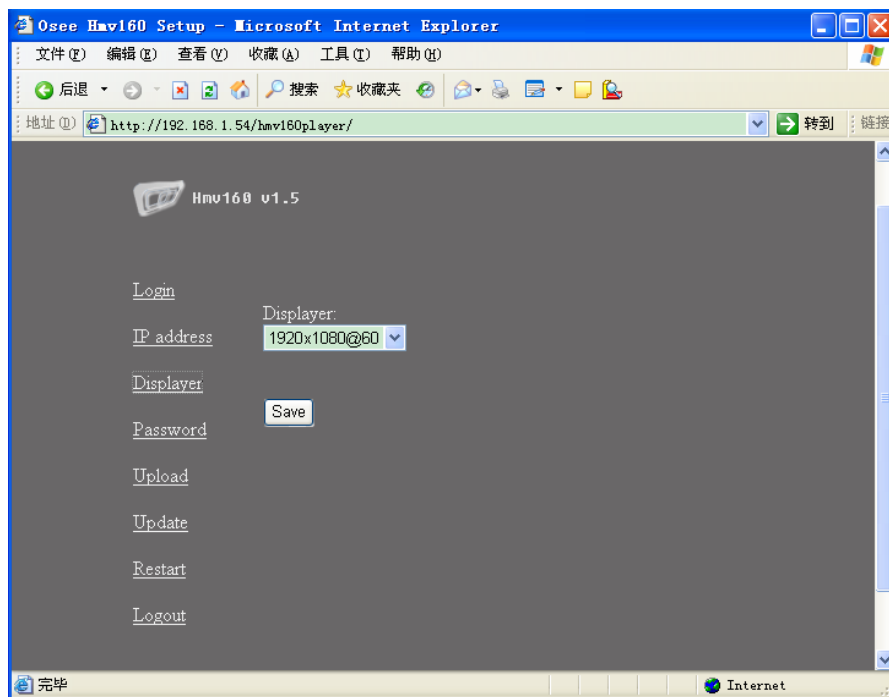
Input the valid IP and Mask, click “Apply” button to set.

After setting, the new IP and mask will be indicated underneath.



1.4 Set output resolution

Click “**Displayer**” button in the “**default interface**”, there will be a pop-up interface on the right side , as below:



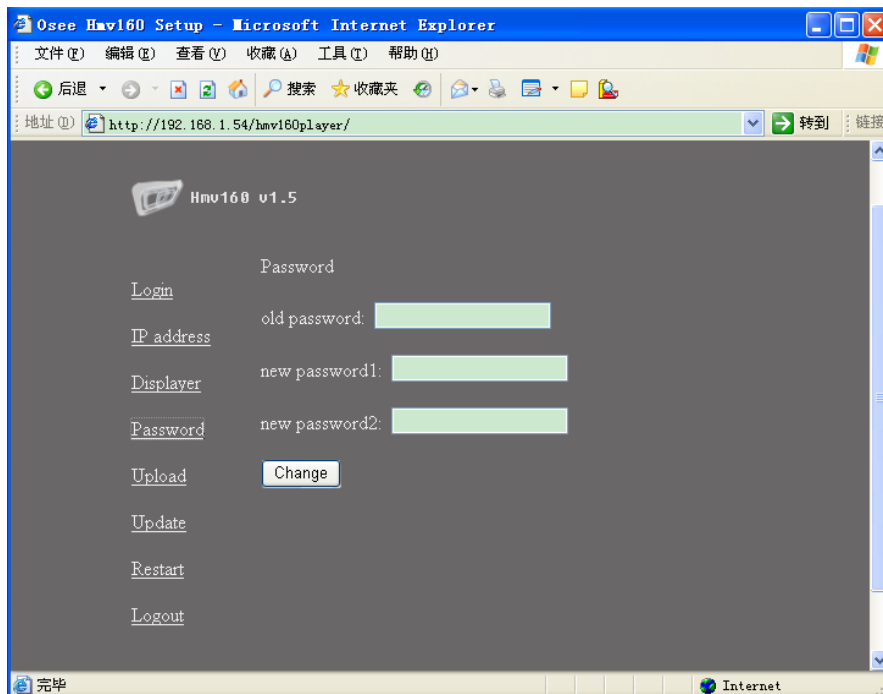
This item is for setting output resolution of HMV160, Option includes: 1920×1080@60 and 1920×1080@50.

Click “**Save**” to save the setting.

NOTE: In order to make the resolution setting come into force, the “**Restart**”button in chapter 1.8 must be clicked to restart HMV160.

1.5 Change password

Click “**Password**” button in the “**default interface**”, there will be a pop-up interface for Changing the password on the right side , as below:

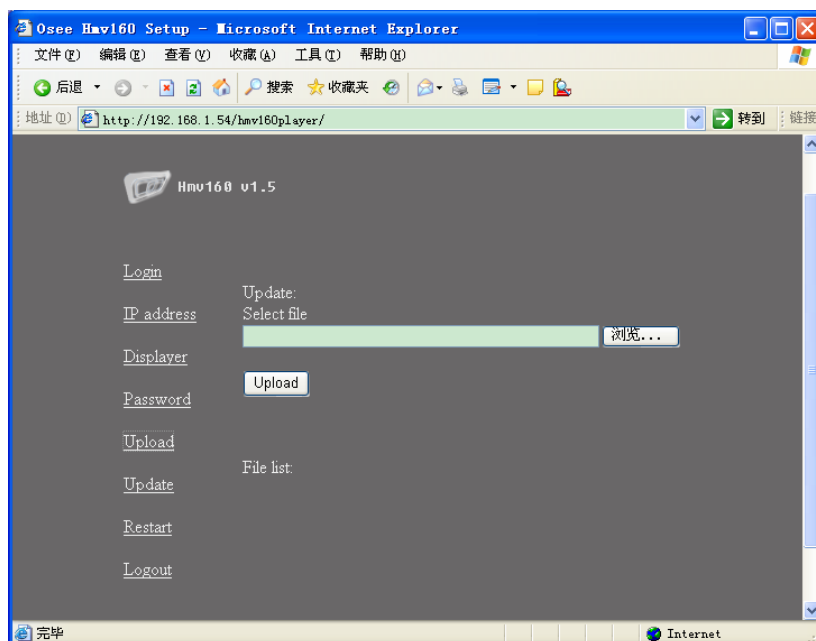


Input the current password and new password, click “**Change**” button to change the password.

“**Change password success**” indicates changing successfully

1.6 Upload the document for updating

Click “**Upload**” button in the “**default interface**”, there will be a pop-up interface for uploading the document on the right side , as below:



Click “**Browse**” button, a dialog box will pop up, select the document to be uploaded, and click “**Upload**” button to upload the document.

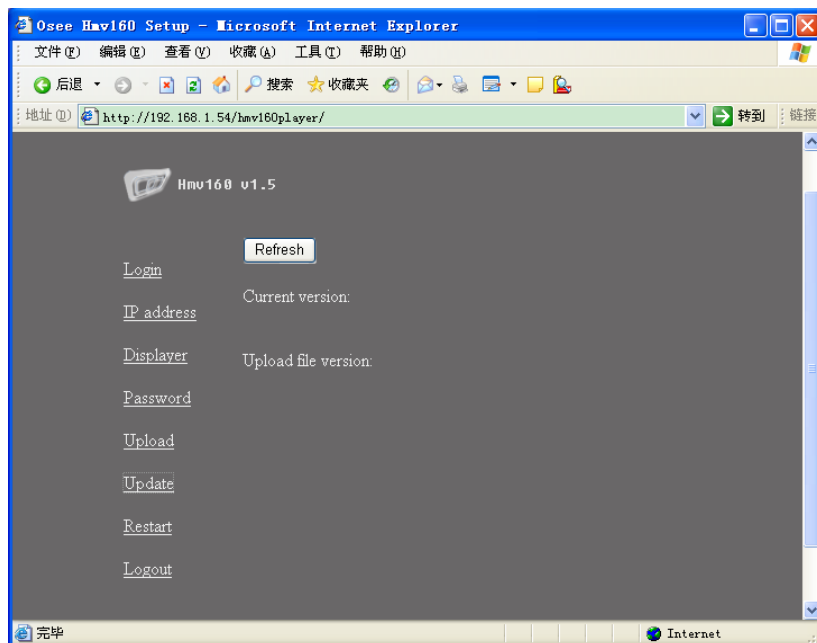
The upgrade documents information and document name will be indicated underneath.

NOTE: “File list” only indicates the name of upgrade documents of software part

1.7 Hardware updating

Please follow the procedure below when upgrading the hardware.

1. Upload the document to be upgraded according to the instruction of Chapter 1.6
2. Click “**Update**” button in the “**default interface**”, there will be a pop-up interface on the right side , as below:

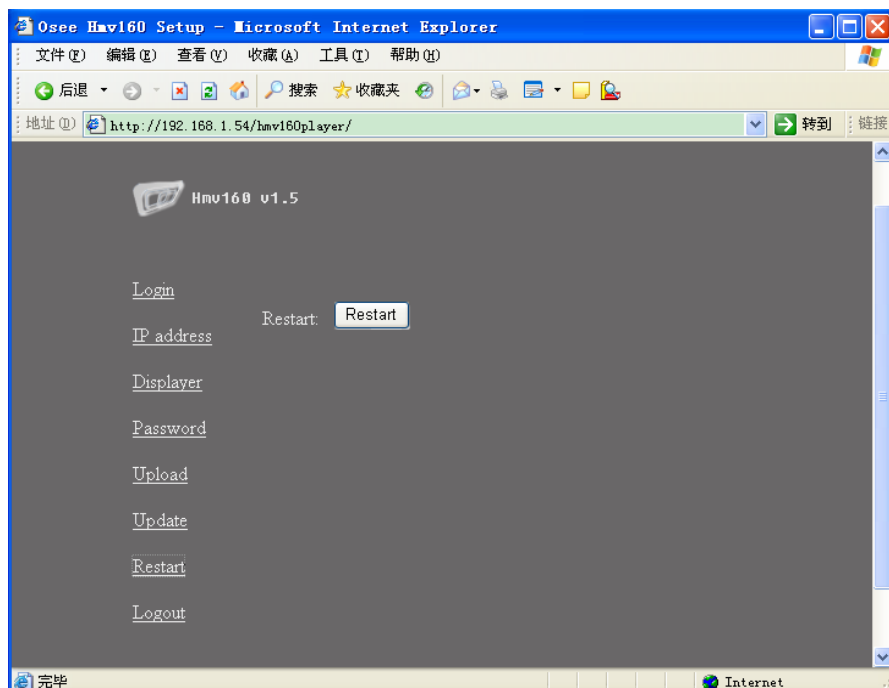


3. Click “**Refresh**” to refresh, the current version and upload document version will be indicated underneath.
4. Click “**Update**” button on the right side, finish the hardware upgrade.

1.8 Software updating

Please follow the procedure below when upgrade the software.

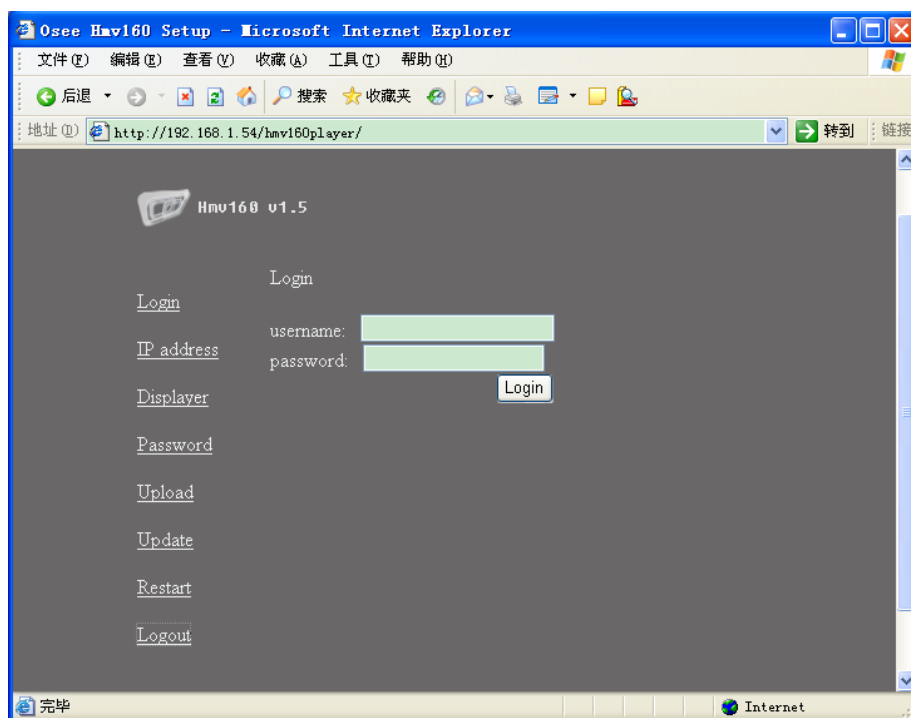
1. Upload the document to be upgraded according to the instruction of Chapter 1.6
2. Click “**Restart**” button in the “**default interface**”, there will be a pop-up interface on the right side , as below:



3. Click “**Restart**” to restart the unit.

1.9 Log out

Click“**Logout**”button in the “**default interface**”, there will be a pop-up interface for logout on the right side , as below:



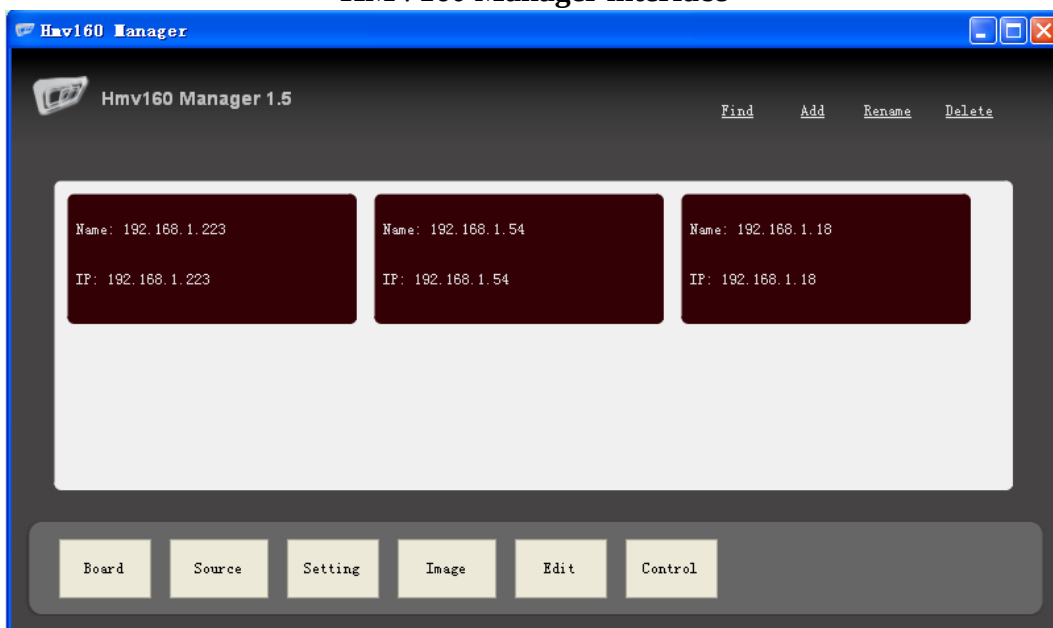
Chapter 2 HMV160 Manager instruction

HMV160 Manager: HMV160 HD Multi-viewer control software.

2.1 Installation

1. Install the 《dotnetfx.framework2.0.exe》 document;
2. copy the 《HMV160Manager》 file to PC for control, open  , execute 《HMV160Manager.exe》 document.

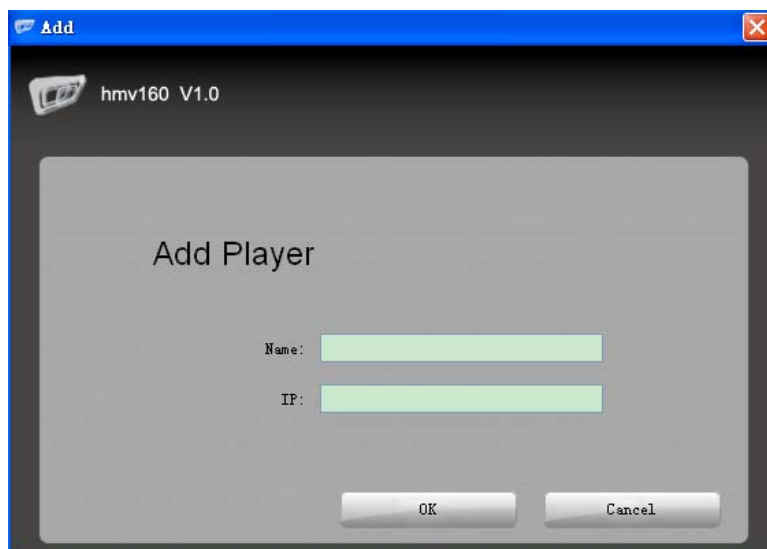
HMV160 Manager interface



Click “find” button on the right top in the main interface to automatically scan the HMV160 in the network.

2.2 Add- Add displayer

Click “Add” button on the right top in the main interface, there will be a pop-up interface for adding, as below:

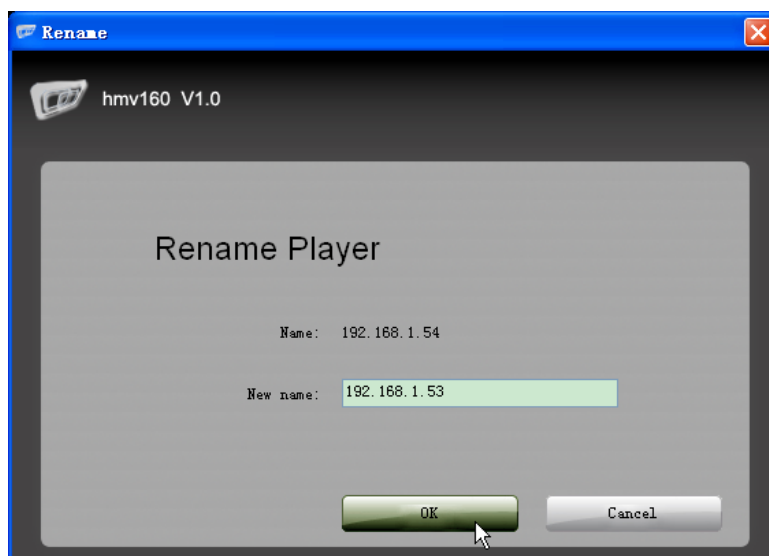


Input player name and IP address in the textbox, click “**OK**” button, save the information of add player, click “**Cancel**” button to cancel the save.

2.3 Rename- Rename player

Select the player to be set in the main interface, the selected player will be designated by the symbol of “✓”.

Click “**Rename**” button on the right top, the interface will pop up as below:



Input the new player IP in the textbox, click “**OK**” button to save the modified information; Click “**Cancel**” button to cancel.

2.3 Delete-Delete player

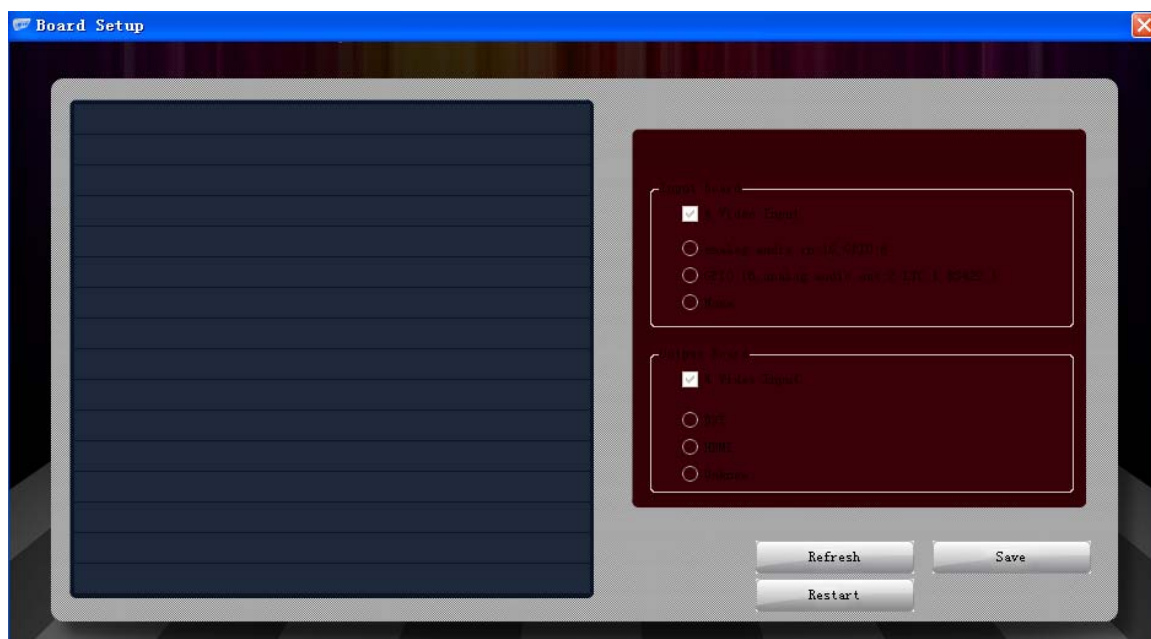
Select the player to be deleted in the main interface, the selected player will be designated by the symbol of “✓”.

Click “**Delete**” button on the right top to delete player.

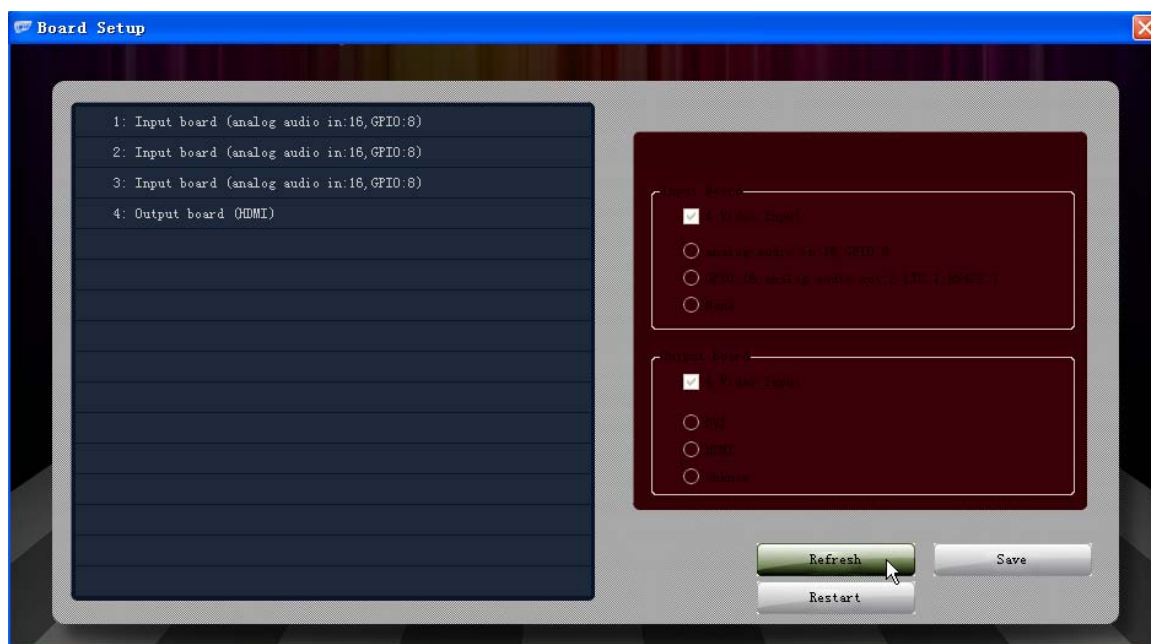
2.4 Board-Board setting

Select the player to be set in the main interface, the selected player will be designated by the symbol of “✓”.

Click “**Board**” button in the main interface, the interface for setting will pop up as below:



Click “**Refresh**” button to refresh the existing board in the HMV160 chassis, the slot information and board type of current input /output boards will be indicated on the left side as below:



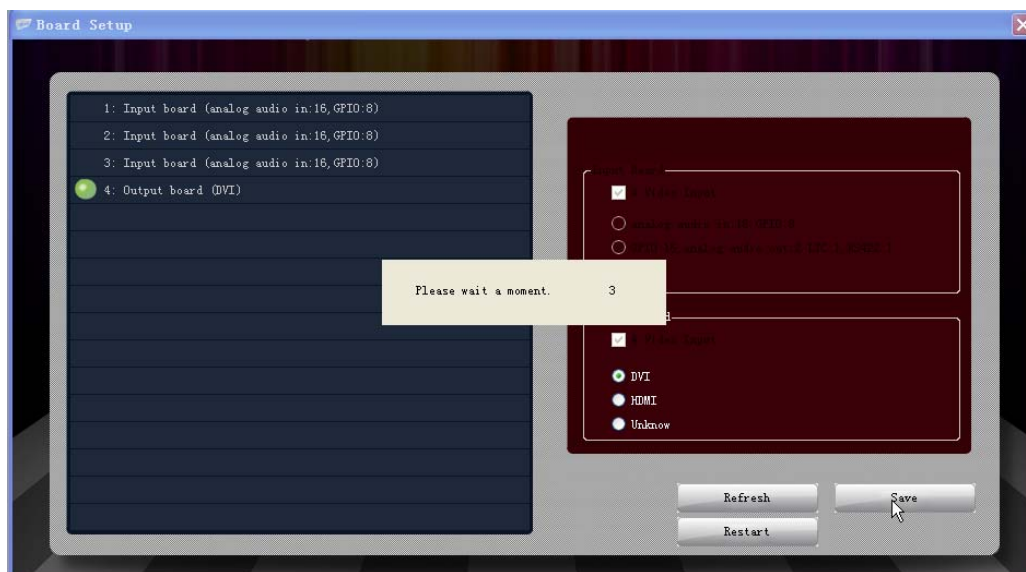
NOTE:

- In this item, the software scans the information of current input board, the setting of input board cannot be set, only the setting of output board can be set.
- The boards serial number on the left side correspond to slot number of boards of hardware in HMV160 respectively

Procedure of setting output board:

- ☞ Select the board to be set in the left list, the selected board is designated by the symbol of “●”;
- ☞ select the board information in the right list;

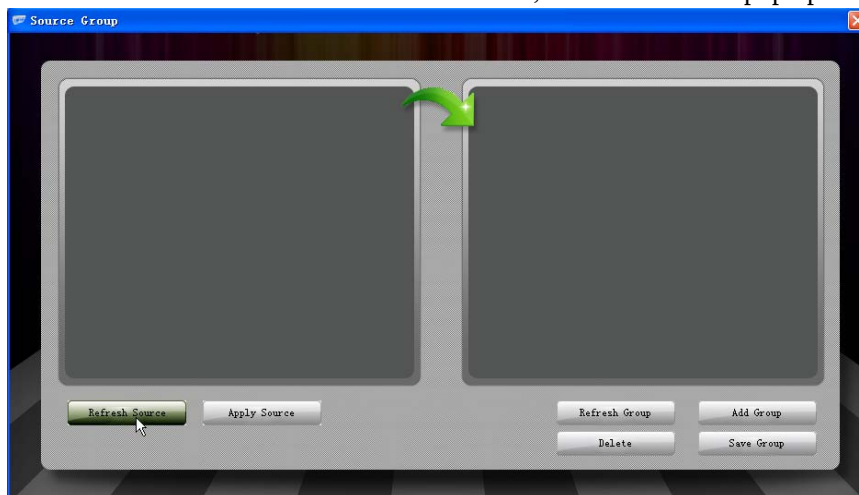
- Click “Save” button, wait 3 seconds, save board information, as below:



- After setting, click “Restart” button to restart HMV160.

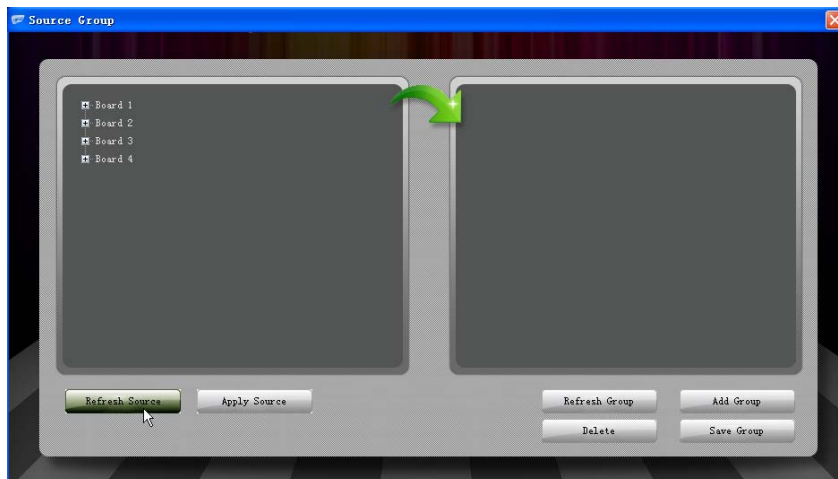
2.5 Source-Source ports grouping

Select the player to be set in the main interface, selected player is designated by symbol of “✓” click the “Source” button in the main interface, the interface will pop up as below:

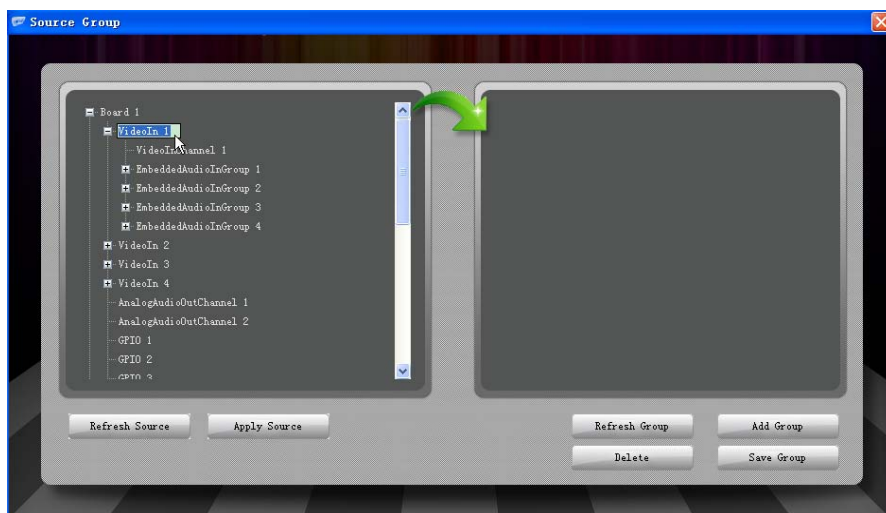


2.5.1 Left interface- input source management

Click “Refresh Source” button, the audio and video port information of uploaded boards will be indicated on the left side of interface as below:

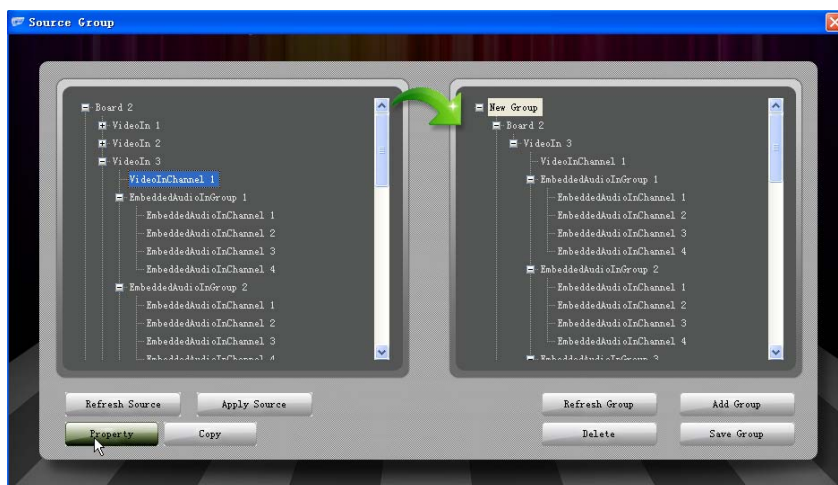


2.5.1.1 Name modification of nodes and sub-nodes

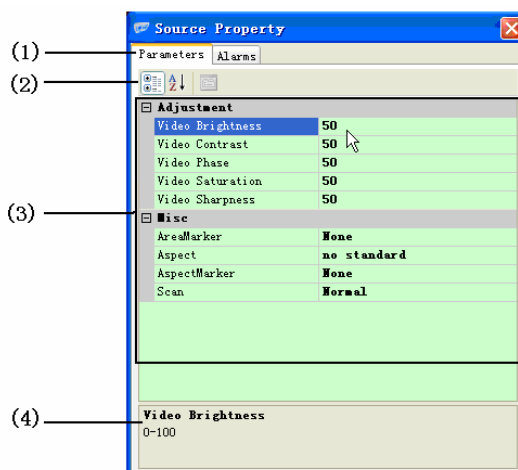


As the picture above, click the node and sub-node with the left button of mouse to modify the name.
click **“Apply Source”** to save the modified setting.

2.5.1.2 Source property modification



☞ Click **“Property”** button, open the property window, set the current property of parameter



(1) Menu bar: “Parameters”Parameter setting and “Alarms”Alarms information setting.

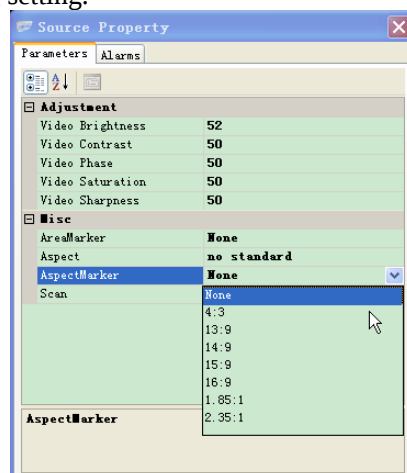
(2) Array sequence setting:



click , parameter will be arrayed according to classify sequence; click , parameter will be arrayed according to alphabetic sequence.

(3) Parameter setting

Click each items, modify the corresponding setting. If there is sub-menu, select sub-menu to modify the corresponding setting.



(4) Parameter information bar: describe the selected parameter information.

Property window parameter description list

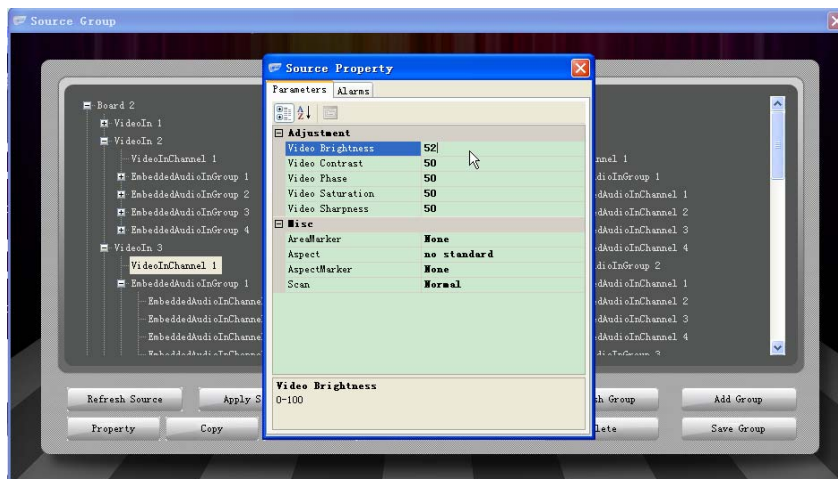
Parameter	Description	Range
“Parameters” setting window		
Video Adjustment	Adjustment of the input video parameter	
Video Brightness	Brightness	0 ~ 100 (default value: 50)
Video Contrast	Contrast	0 ~ 100 (default value: 50)
Video Saturation	Saturation	0 ~ 100 (default value: 50)
Video Phase	Phase	0 ~ 100 (default value: 50)
Video Sharpness	Sharpness	0 ~ 100 (default value: 50)
Video Marker	Adjustment of the input video marker	
Safety Marker	Safety Marker	none,80%,85%,88%,90%,93% default value: none)

Aspect	Aspect	16:9; 4:3; no standard (no standard, user-defined adjustmet) (default: no standard)
Area Marker	Area Marker	none,4:3, 13:9, 14:9, 15:9, 16:9, 1.85:1,2.35:1 (default value: none)
Scan	Scan	Normal (normal scan, 100% image) , Over (over scan, 95% image) (default value: Normal)
Audio Adjustment	Audio adjustment (external connected analog audio)	
Audio Gain	Audio Gain	0dB,6dB,12dB,18dB,24dB (default value: 0dB)
GPIO	GPIO adjustment	
GPIO Control	GPIO input/output control	In, Out (default value: In)
GPO Status	GPIO status setting	Low, High (default value: Low)
“Alarms” alarm information setting window		
Video Alarm	Input video alarm setting	
Video Black Duration	Video Black Duration	0~ 255 (default value: 30)
Video Black Threshold	Video Black Threshold	0~ 65535 (default value: 125)
Video Freeze Duration	Video Freeze Duration	0~ 255 (default value: 30)
Video Freeze Threshold	Video Freeze Threshold	0~ 65535 (default value: 125)
Video Luma Duration	Video Luma Duration	0~ 255 (default value: 30)
Video Luma Threshold	Video Luma Threshold	0~ 65535 (default value: 125)
Audio Alarm	Input audio alarm setting (including embedded audio and external connected analog audio)	
Audio Overload Duration	Audio Overload Duration	0~ 255 (default value: 5)
Audio Overload Threshold	Audio Overload Threshold	0~ 65535 (default value: 10)
Audio Silence Duration	Audio Silence Duration	0~ 255 (default value: 5)
Audio Silence Threshold	Audio Silence Threshold	0~ 65535 (default value: 48)

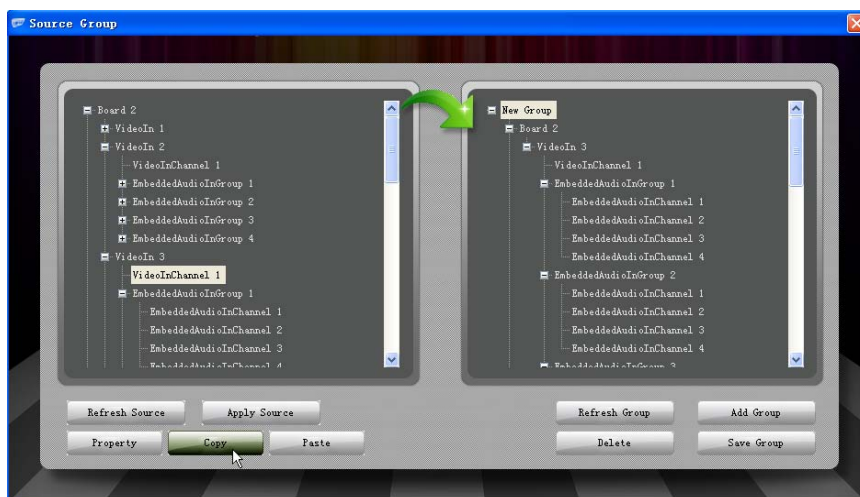
☞ **“Copy” button , copy parameter information.**

Operating procedure as below:

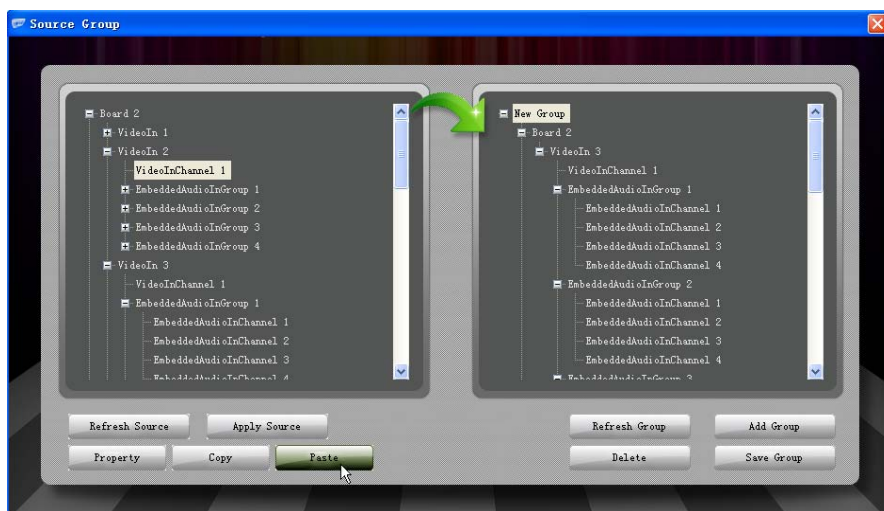
(1) select copy parameter item, select “Board 2-VideoIn 3-VideoInChannel 1” as below, click “Property” button to check the parameter information.



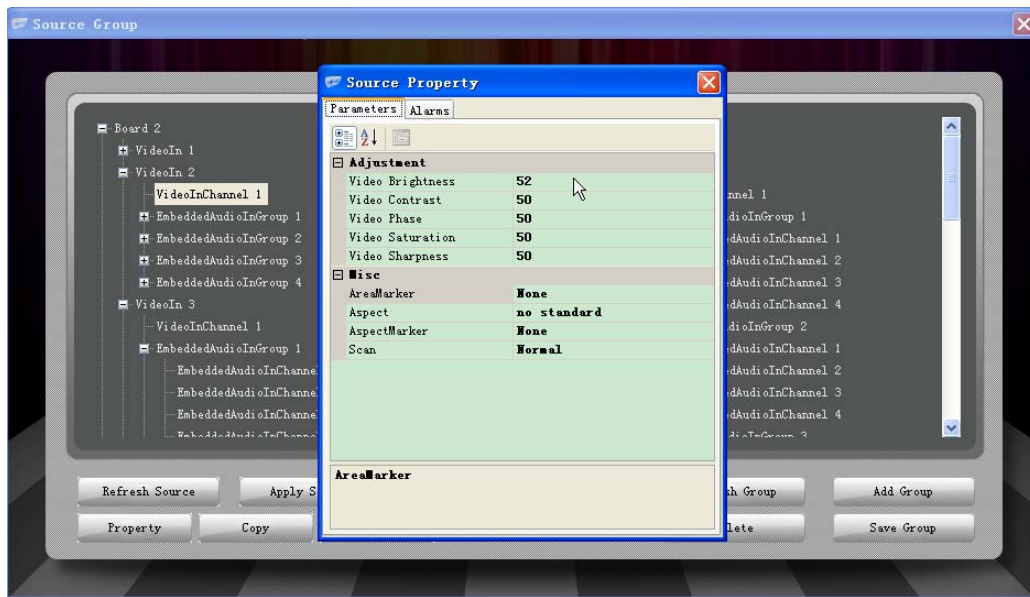
(2) Click“Copy”button to copy “Board 2-VideoIn 3-VideoInChannel 1”property information as below:



(3)select objective item, select“Board 2-VideoIn 2-VideoInChannel 1” as below, click “Paste”button to paste it to objective item as below:

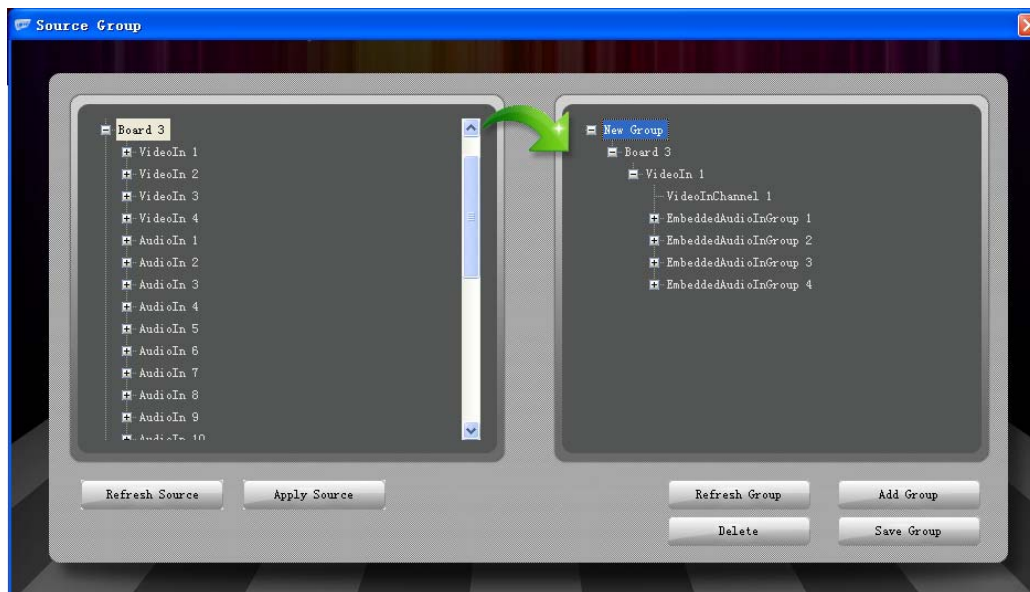


(4) Click “Property”button to check the current parameter information



2.5.2 Right interface-Video/Audio group setting

Click “Refresh Group” button, loaded information of video and audio will be displayed on the right side of interface as below:



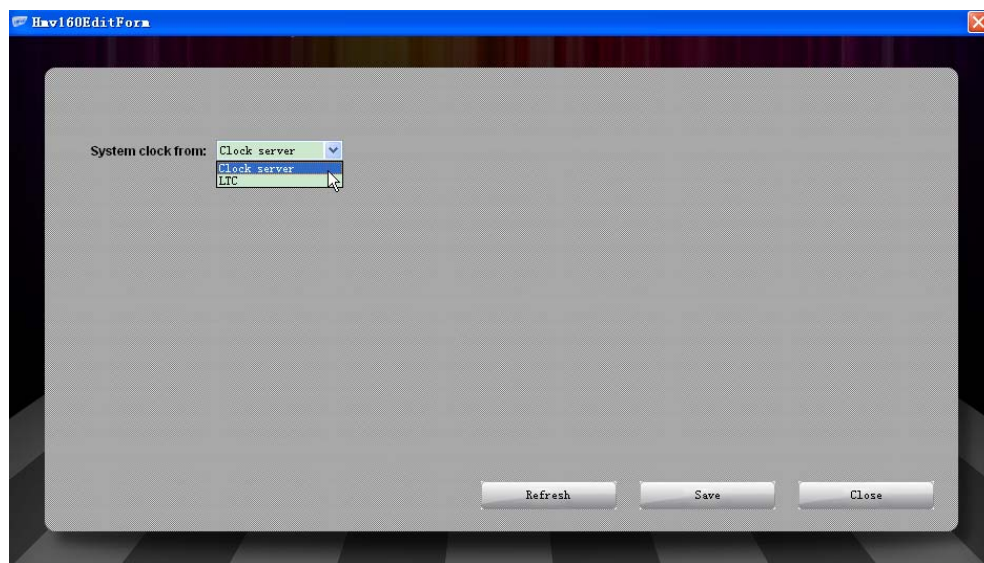
- ☞ Click “Add Group” button, add group
- ☞ Click node of group to modify group name
- ☞ Click node of board on left side, drag video/audio ports to letters of the group on the right side
- ☞ Click “Delete” button, delete group or sub-node in the group
- ☞ Click “Save Group” button, save the node setting on the right side

2.6 Setting- System clock setting

Select the player to be set in the main interface, the selected player will be designated by symbol of



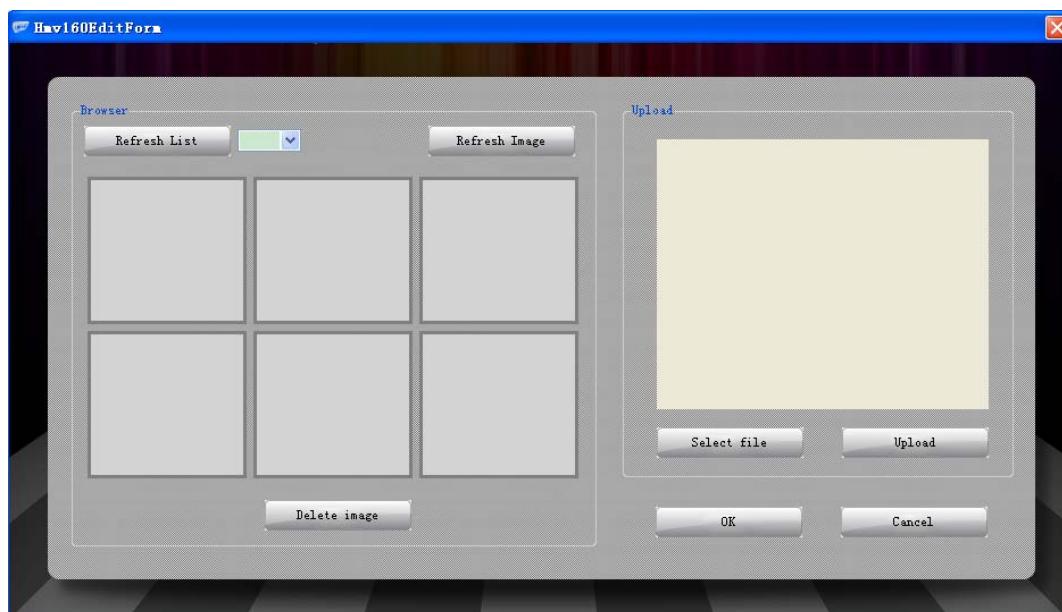
Click “Setting” button in the main interface, the interface below will pop up



- 1) Click “Refresh”to refresh current system clock source information
- 2) System clock source, there are two options:
 1. Clock server: when select network clock, this option works along with software of 《Clock Server》 .
Please refer to chapter 3.
 2. LTC: When select input LTC time code.
Select corresponding setting, click“Save” to save setting
- 3) Click“Close”to close interface

2.7 Image- Image management

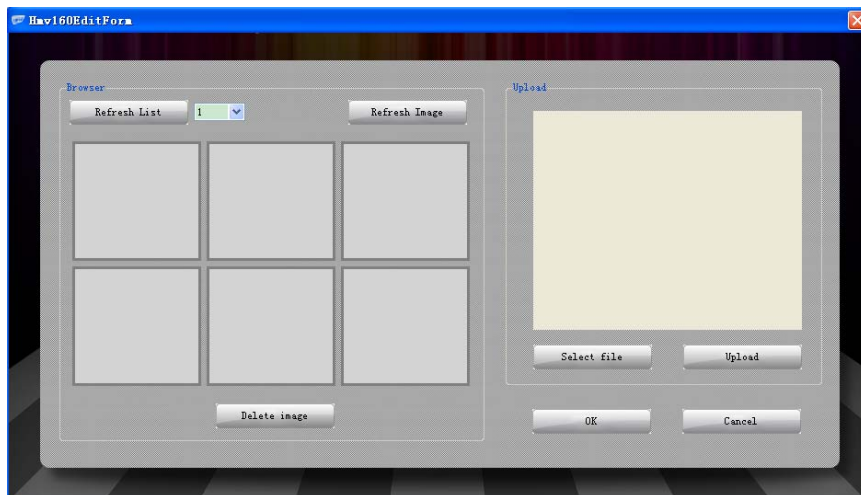
Select the player to be set in the main interface, the selected player is designated by symbol of “✓”
Click “Image”button in the main interface, the interface below will pop up



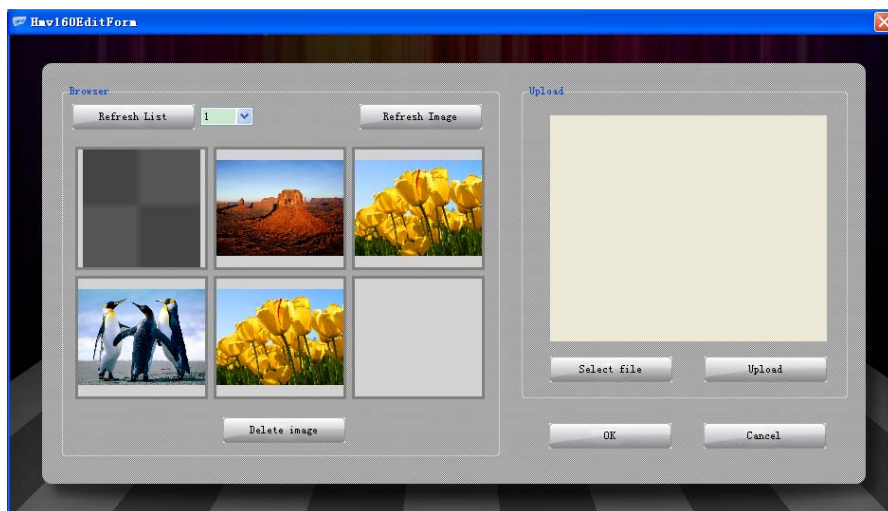
Click “OK”and“Cancel” button to close the current interface

2.7.1 Image browsing

Click “**Refresh List**” button in the “**Browser**” interface, the image browse interface will pop up as below:

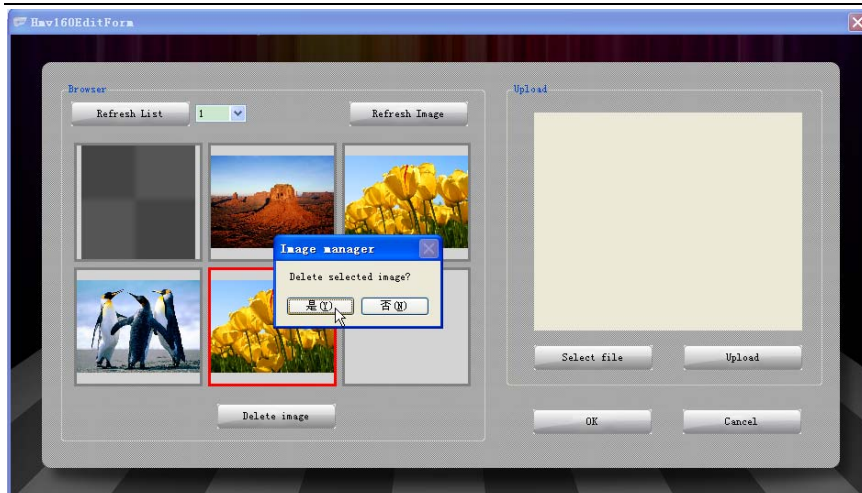


Select the page number of the image to be browsed in the drop down list, click “**Refresh Image**” button, the current selected image will be loaded in the blank area underneath, as below:



2.7.2 Image delete

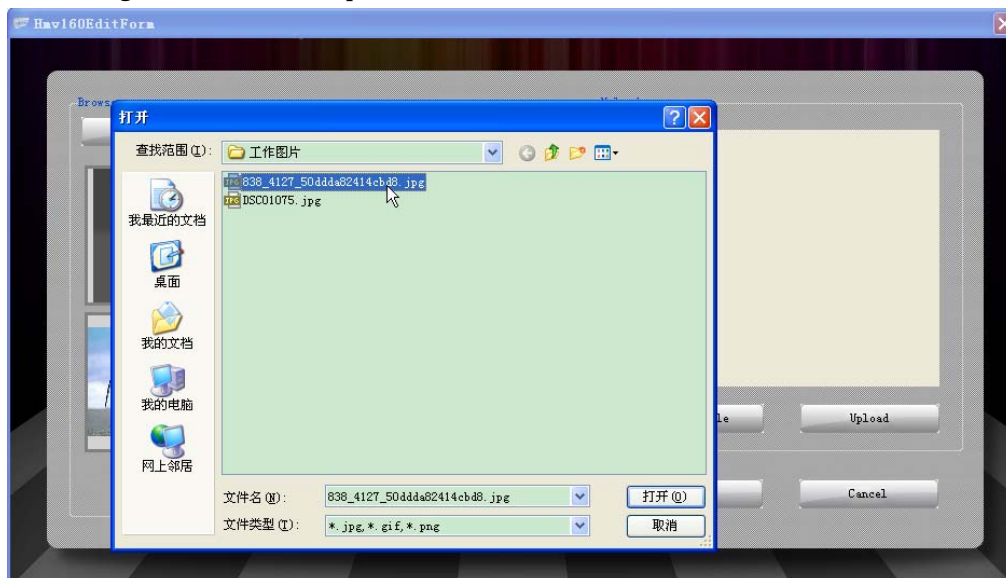
In order to delete image, select the image to be deleted, the selected image will be designated by color frame, click “**Delete image**” button. The textbox ask if it is to be deleted or not.



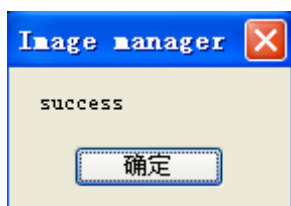
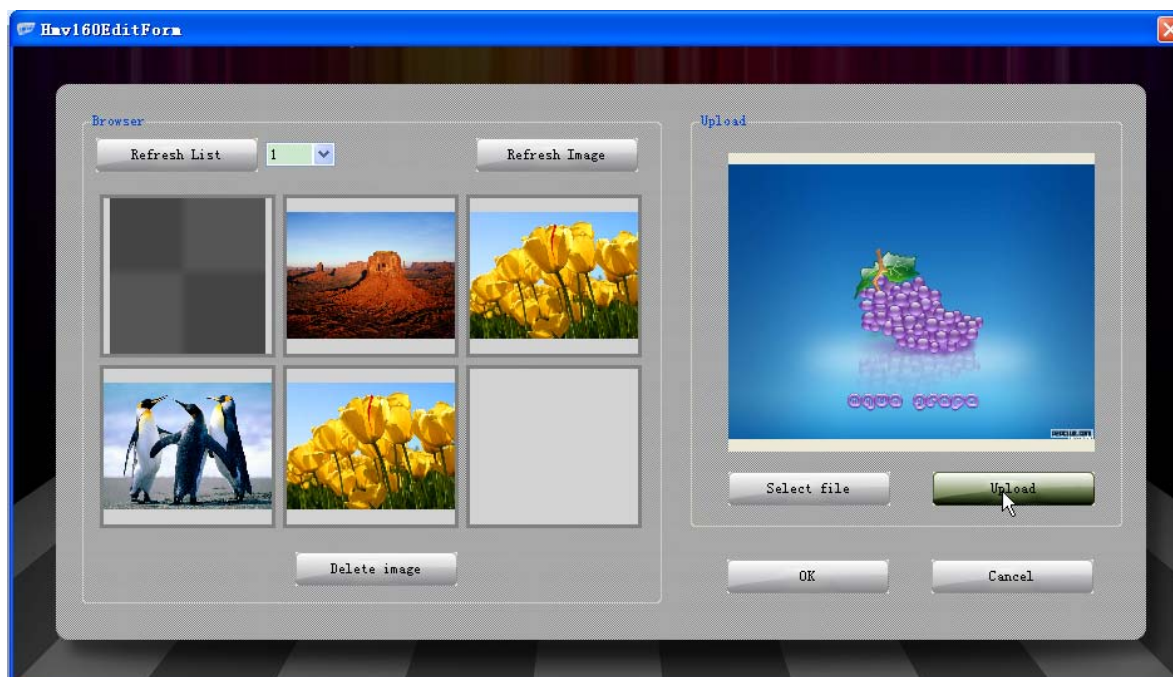
Select “yes” to delete and “no” to cancel.

2.7.3 Image upload

Click “**Select file**” button in “Upload”the interface, the textbox for image selecting will pop up, select the image document to be uploaded as below:

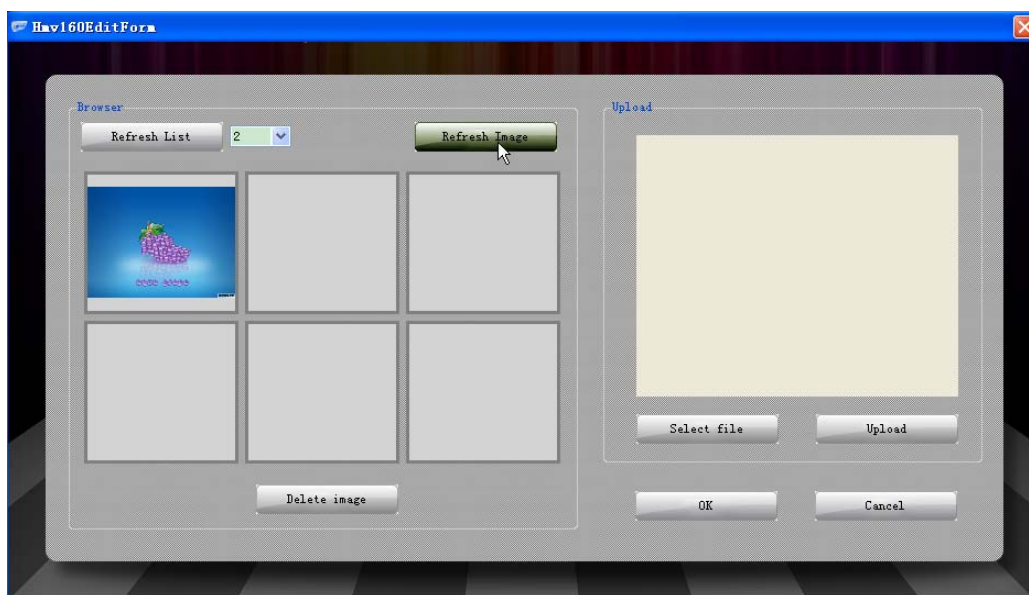


The selected image will be displayed in the blank area. Click“**Upload**” button to upload image



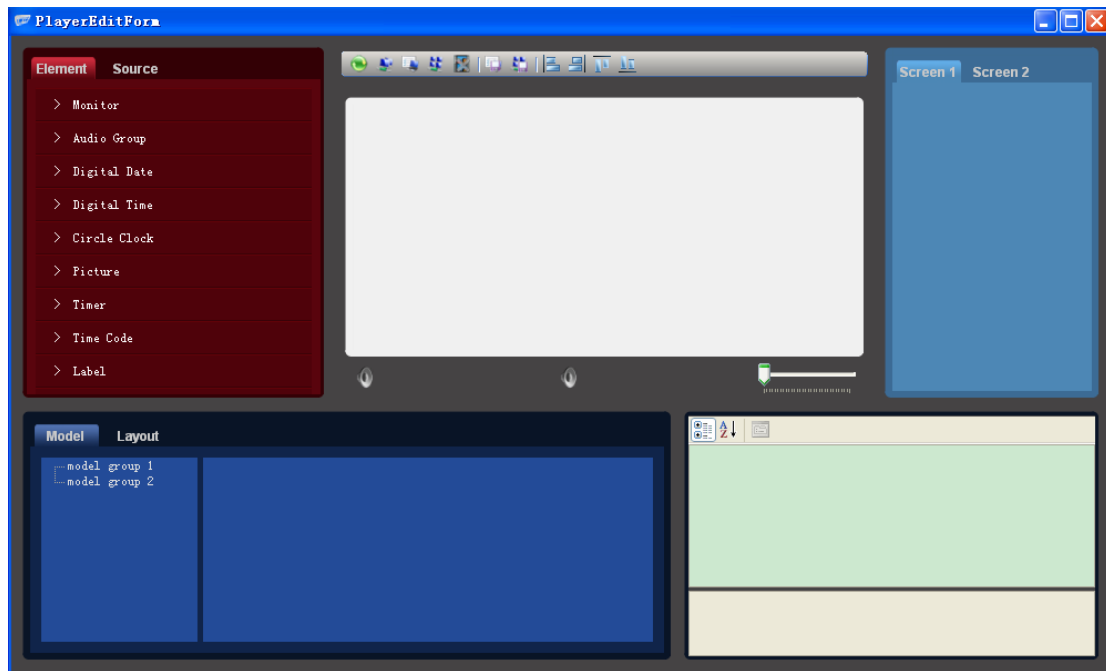
indicates upload successfully

Follow the instruction of “2.7.1”, click “Refresh List” and “Refresh Image” button, the new uploaded image will be displayed under side as below. The new uploaded image will be the last one in the list. If all the 6 positions are full with images, the new uploaded image will be displayed in the list 2 which is generated automatically.

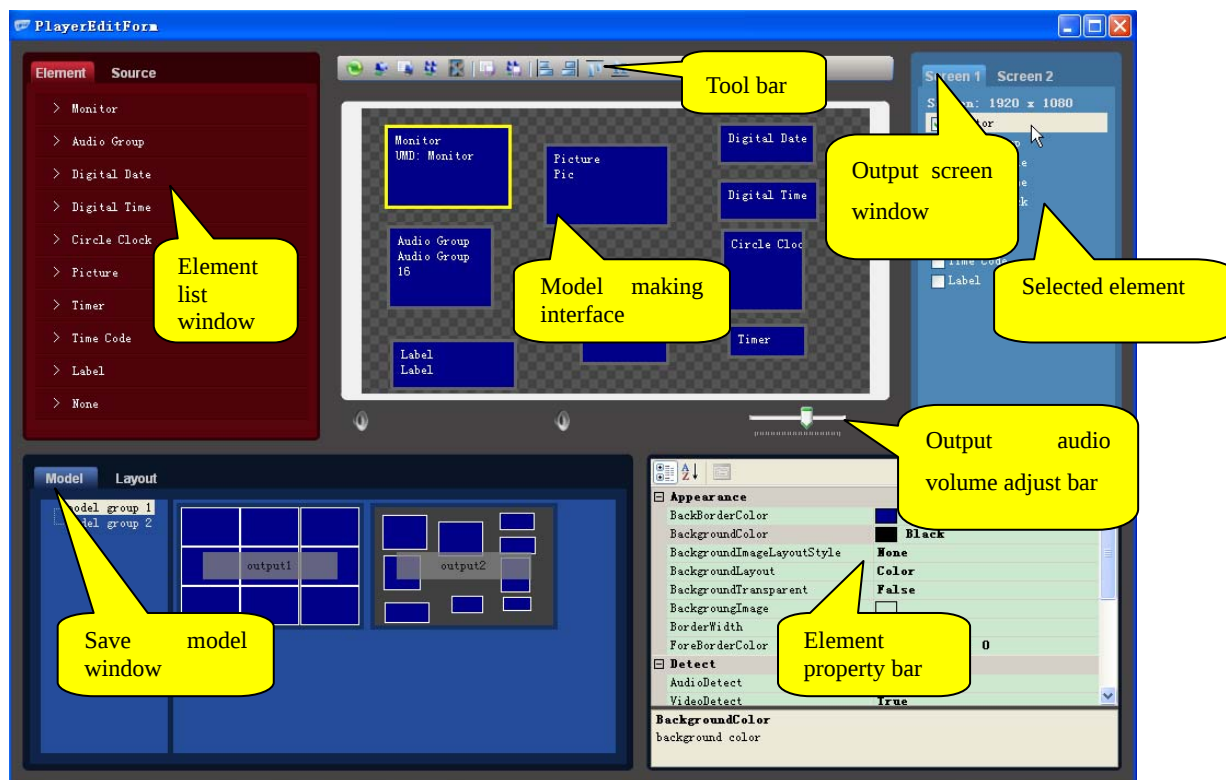


2.8 Edit- Edit model

Select the player to be set in the main interface, the selected player is designated by symbol of “✓”
Click “Edit” button in the main interface, the interface for editing below will pop up



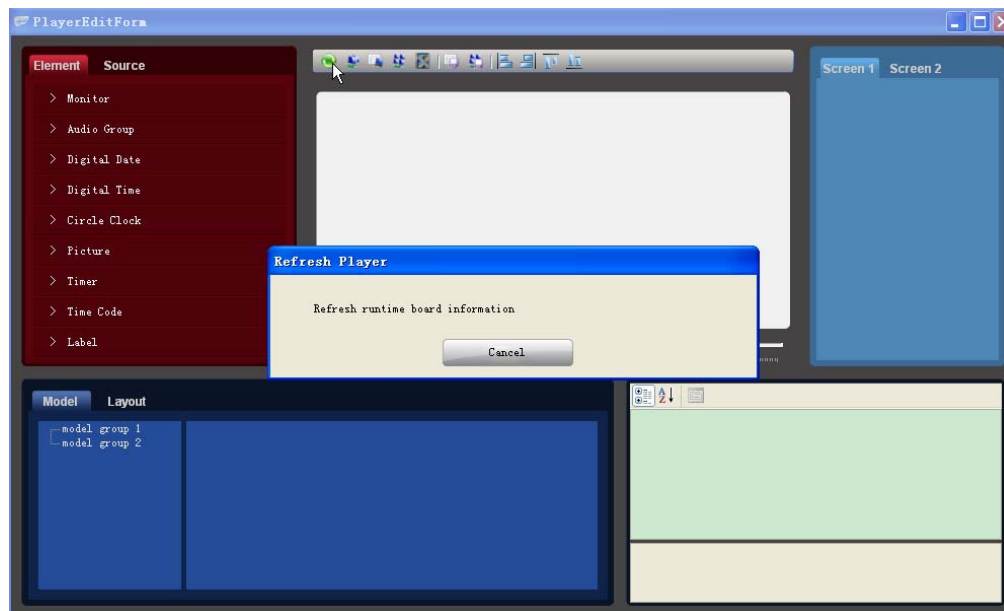
2.8.1 Edit interface introduction



2.8.2 Making model

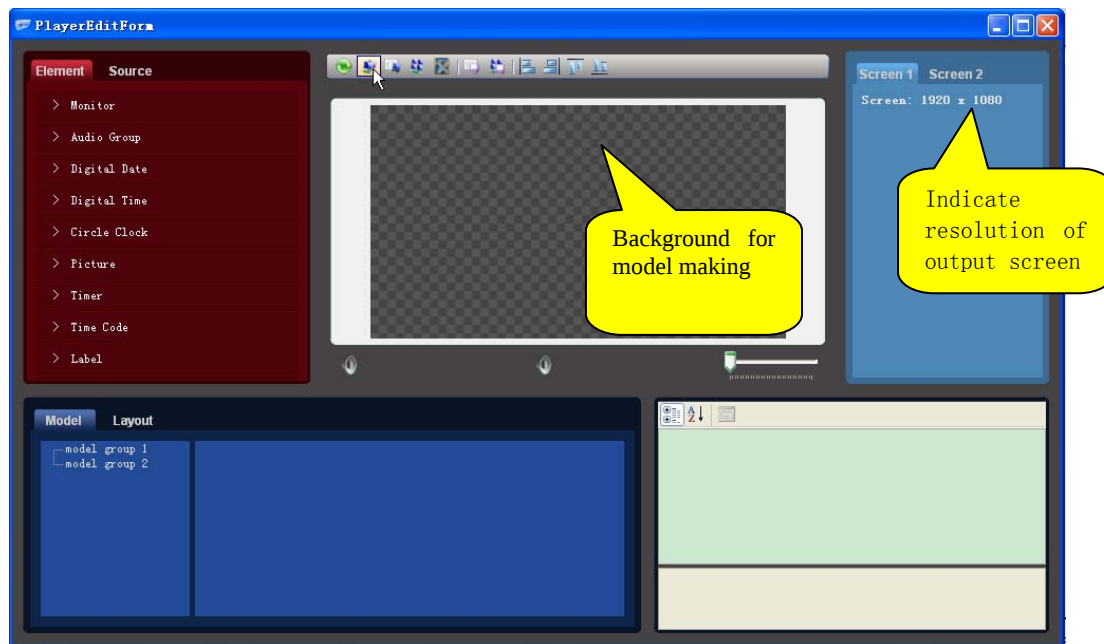
2.8.2.1 Refresh information

In the Toolbar, click  button, refresh all the information of current board, including board type, slot information, signal source group information etc.



2.8.2.2 Model uploading Background making

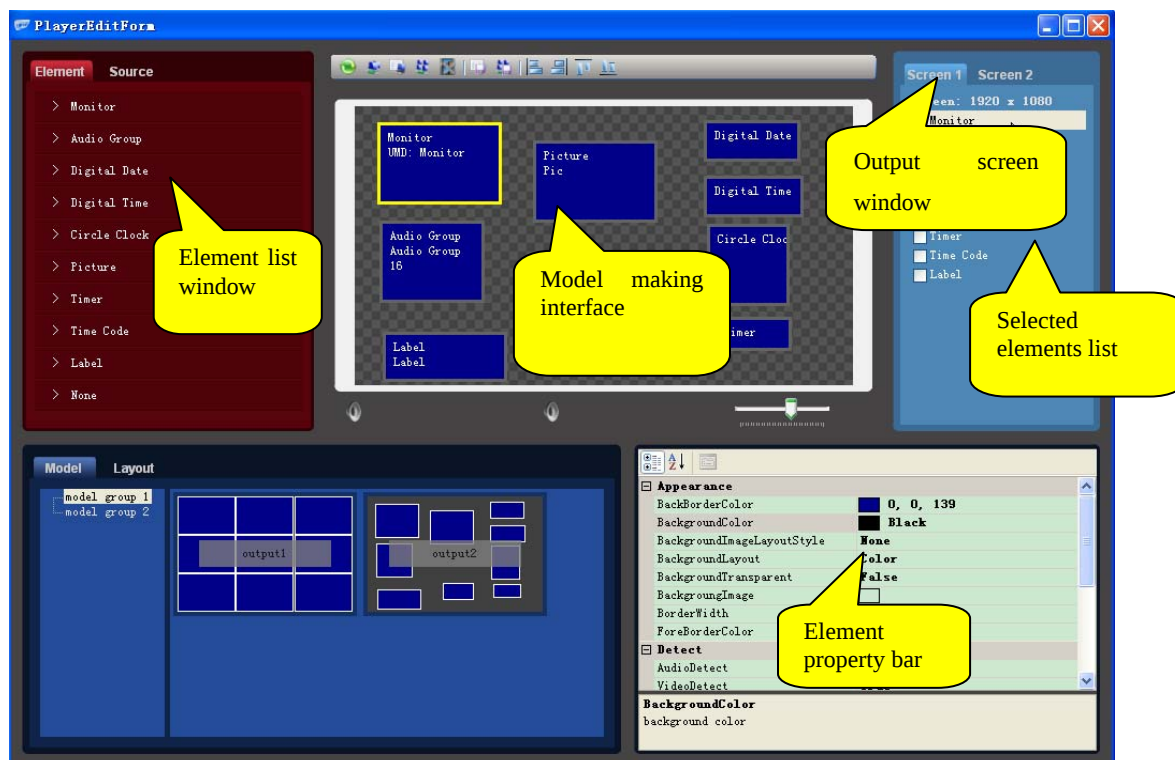
click “ Get Displayer” button, the interface indicates the output resolution, the grey background for model making will be loaded in the white area, as below:



2.8.2.3 Model Configuration

As the picture shows below, select elements in the “**Element**”list (such as : Monitor) and drag it to the grey background.

The selected element list will be displayed in the “**output screen window**”



NOTE: 1.For the selected elements, the“**interface for model making**”, “**Output screen window**”

(displayed as reverse white and designated bythe symbol of ), “**element property list**”are corresponding respectively to each other.

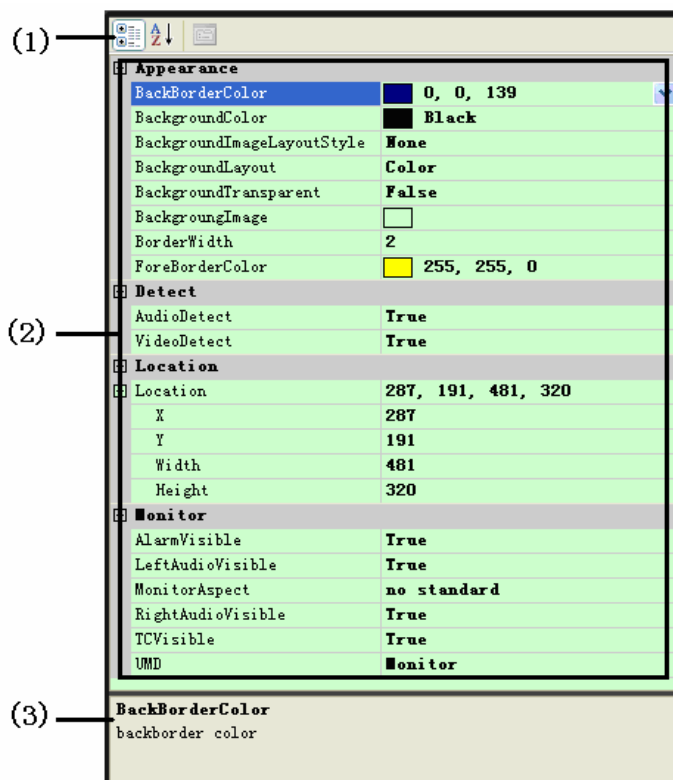
2.the output relationship between “output screen window”and HMV160 hardware system, as below:

HMV160 hardware system	output screen window
------------------------	----------------------

(rear panel type)	Screen 1	Screen 2
HMV160-I4O1E	DVI output	VGA output
HMV160-I4O2E	HDMI 1 output	HDMI 2 output

2.8.2.4 Element property bar for adjusting

Select a certain element in the grey background. Set the corresponding element property value via “element property bar”, as below:



(1) Array sequence setting:

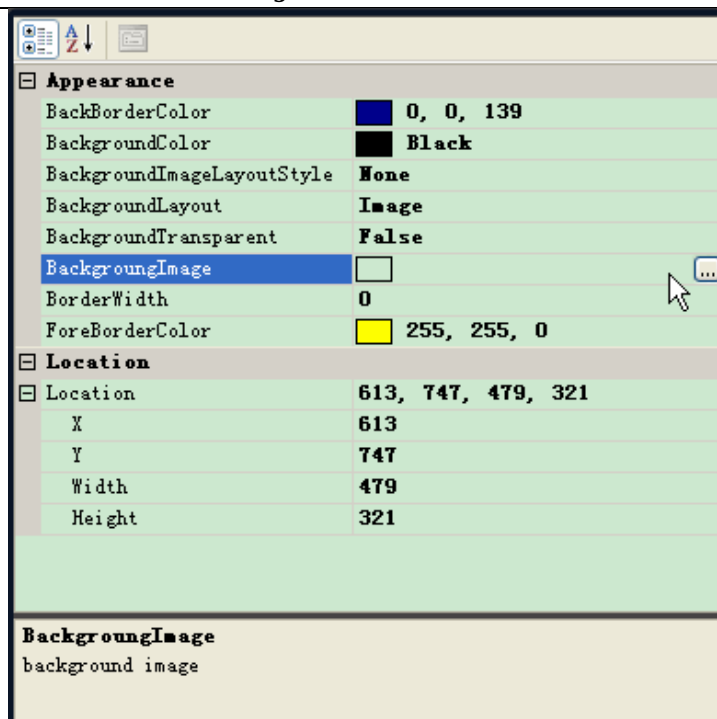
click , parameter will be arrayed according to classify sequence; click , parameter will be arrayed according to alphabetic sequence.

(2) Parameter setting

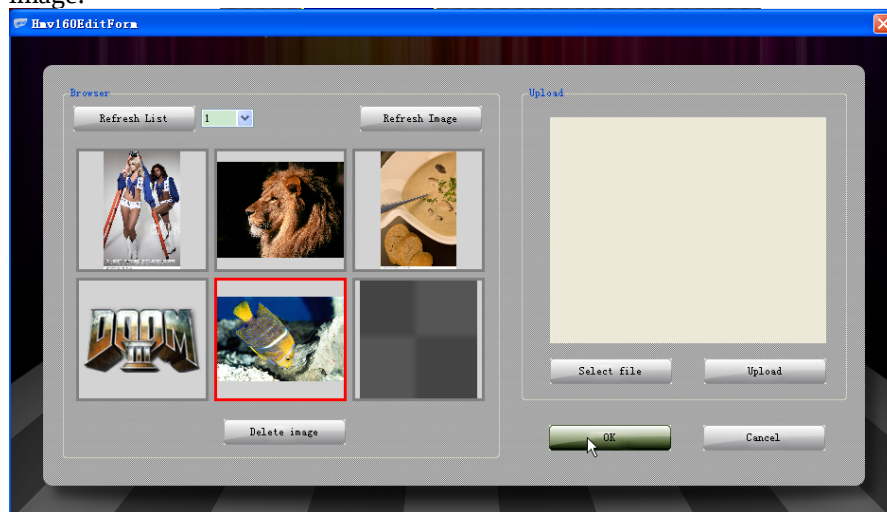
Click each items, modify the corresponding setting.

Such as, select background picture for Picture element via setting the property of the “Image ”

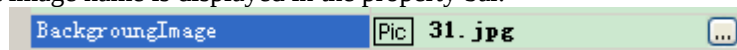
1. As picture shows below, click and select “Background Image”parameter



2. click  browse button, open upload picture window, refer to "2.7.1" instruction to open image.



3. The current image name is displayed in the property bar.



4. The current image can be deleted by deleting the image name directly.

☞ If there is drop down list, select the drop down list to make the corresponding setting

(3) Parameter information bar:

Describe the information of selected parameter

Property window parameter description list

Parameter item	Description	Range
Monitor	Monitor window	
Appearance	Appearance	
Back Border Color	Back Border Color	
Background Color	Background Color	

BackgroundImageLayoutStyle	Background Image Layout Style	None,Tile, center, stretch, scale
BackgroundLayout	Background Layout	- Color: take the color setting in the “BackgroundColor” as background; - Image: take the image setting in the “BackgroundImage” background
BackgroundTransparent	Background Transparent or not	False (non-transparent background) ; True (transparent background)
BackgroundImage	Background Image	
BorderWidth	Border Width	0~10
ForeBorderColor	Fore Border Color	
Detect		
AudioDetect	set audio alarm or not	False (no display) , True (display)
VideoDetect	set video alarm or not	False (no display) , True (display)
Location	set element position information	X(lateral axis),Y(vertical axis), Width,Height
Monitor		
LeftAudioVisible	set audio meter displayed on the left side or not	False (no display) , True (display)
MonitorAspect	adjust the monitor window aspect ratio	16:9,4:3,no standard
RightAudioVisible	set audio meter display on the right side or not	False (no display) , True (display)
TCVisible	set display TC code or not	False (no display) , True (display)
UMD	UMD	20 character in Maximum
AudioGroup	audio group	
Appearance	Appearance	
Back Border Color	Back Border Color	
Background Color	Background Color	
BackgroundImageLayoutStyle	Background Image Layout Style	None,Tile, center, stretch, scale
BackgroundLayout	Background Layout	- Color: take the color setting in the “BackgroundColor” as background; - Image: take the image setting in the “BackgroundImage” background
BackgroundTransparent	Background Transparent or not	False (non-transparent background) ; True (transparent background)
BackgroundImage	Background Image	
BorderWidth	Border Width	0~10
ForeBorderColor	Fore Border Color	

Audio		
AudioCount	Set audio group quantity	Default value2; Maximum50
Title	Display Title character	default:Audio Group, 20 character in Maximum
Detect		
AudioDetect	set audio alarm or not	False (no display) , True (display)
Location	set element position information	X(lateral axis),Y(vertical axis), Width,Height
Picture; Digital Date; Digital Time	Picture; Digital Date; Digital Time	
Appearance	Appearance	
Back Border Color	Back Border Color	
Background Color	Background Color	
BackgroundImageLayoutStyle	Background Image Layout Style	None,Tile, center, stretch, scale
BackgroundLayout	Background Layout	- Color: take the color setting in the "BackgroundColor" as background; - Image: take the image setting in the "BackgroundImage" background
BackgroundTransparent	Background Transparent or not	False (non-transparent background) ; True (transparent background)
BackgroundImage	Background Image	
BorderWidth	Border Width	0~10
ForeBorderColor	Fore Border Color	
Location	set element position information	X(lateral axis),Y(vertical axis), Width,Height
Circle Clock	Circle Clock	
Appearance	Appearance	
Back Border Color	Back Border Color	
Background Color	Background Color	
BackgroundImageLayoutStyle	Background Image Layout Style	None,Tile, center, stretch, scale
BackgroundLayout	Background Layout	- Color: take the color setting in the "BackgroundColor" as background; - Image: take the image setting in the "BackgroundImage" background
BackgroundTransparent	Background Transparent or not	False (non-transparent background) ; True (transparent background)
BackgroundImage	Background Image	
BorderWidth	Border Width	0~10

ForeBorderColor	Fore Border Color	
Location	set element position information	X(lateral axis),Y(vertical axis), Width,Height
Timer	Timer	
Appearance	Appearance	
Back Border Color	Back Border Color	
Background Color	Background Color	
BackgroundImageLayoutStyle	Background Image Layout Style	None,Tile, center, stretch, scale
BackgroundLayout	Background Layout	• Color: take the color setting in the “BackgroundColor” as background; • Image: take the image setting in the “BackgroundImage” background
BackgroundTransparent	Background Transparent or not	False (non-transparent background) ; True (transparent background)
BackgroundImage	Background Image	
BorderWidth	Border Width	0~10
ForeBorderColor	Fore Border Color	
Location	set element position information	X(lateral axis),Y(vertical axis), Width,Height
Time Code	Time Code	
Appearance	Appearance	
Background Color	Background Color	
BackgroundImageLayoutStyle	Background Image Layout Style	None,Tile, center, stretch, scale
BackgroundLayout	Background Layout	• Color: take the color setting in the “BackgroundColor” as background; • Image: take the image setting in the “BackgroundImage” background
BackgroundTransparent	Background Transparent or not	False (non-transparent background) ; True (transparent background)
BackgroundImage	Background Image	
Location	set element position information	X(lateral axis),Y(vertical axis), Width,Height
LTC		
LTCSource	LTC Source	LTC,SystemClock
Label	Label	
Appearance	Appearance	
Back Border Color	Back Border Color	
Background Color	Background Color	

BackgroundImageLayoutStyle	Background Image Layout Style	None,Tile, center, stretch, scale
BackgroundLayout	Background Layout	• Color: take the color setting in the “BackgroundColor” as background; • Image: take the image setting in the “BackgroundImage” background
BackgroundTransparent	Background Transparent or not	False (non-transparent background) ; True (transparent background)
BackgroundImage	Background Image	
BorderWidth	Border Width	0~10
ForeBorderColor	Fore Border Color	
Label	Label	
Fontname	Set Font name	Arial, 黑体, 宋体
FontSize	Set Font Size	Default 20; Range: 5~200
Label	Display title character	50 character in Maximum
TextColor	Set Text Color	
Location	set element position information	X(lateral axis),Y(vertical axis), Width,Height

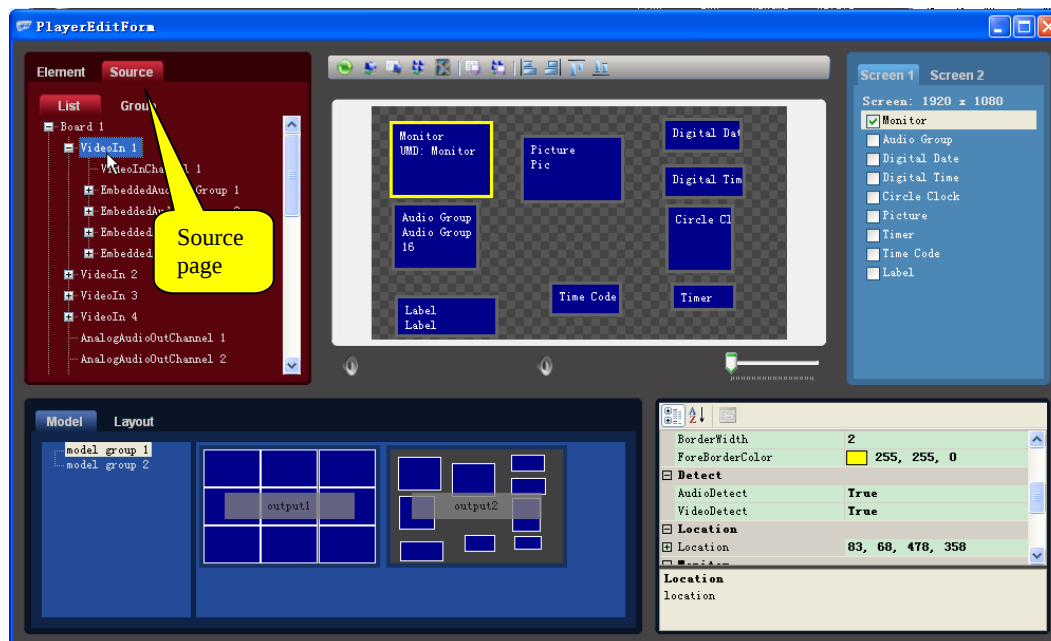
NOTE:

All text in the property bar support Chinese/English input.

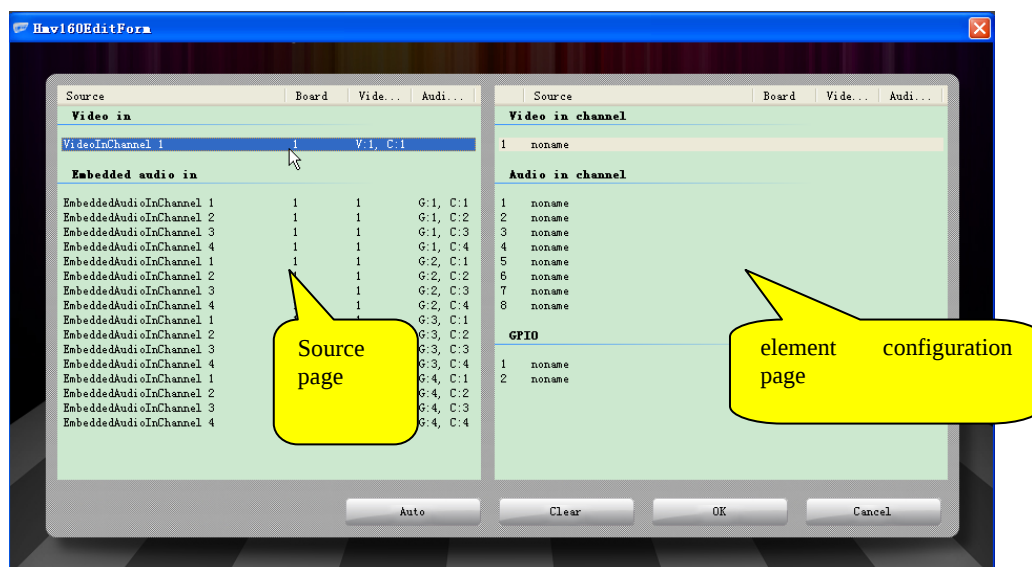
2.8.2.5 Source Configuration

Take the setting of video and audio port of monitor element as an example, other setting methods are the same.Operating instruction as below:

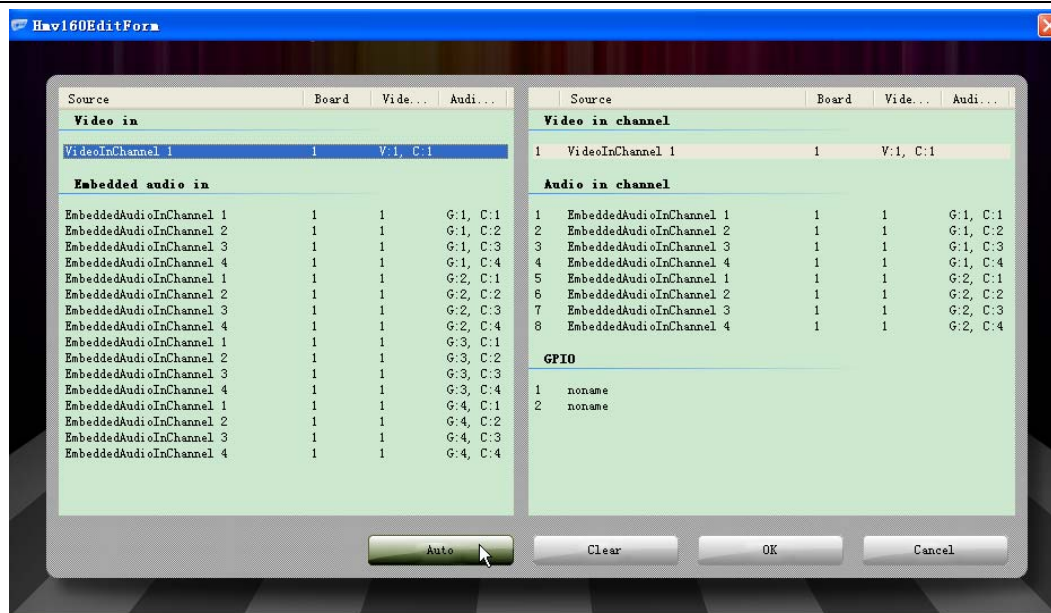
- 1) Select the monitor element to be set in the grey background, the selected element will be designated by color frame;
- 2) Click “**Source**”page as below:



- 3) “Source” page includes 2 interface options
 - “List”: Display input source information according to input source board;
 - “Group”: Display the input source grouping information in Chapter “2.5”.
- 4) Select the video/audio source to be configured (such as: VideoIn1 or EmbeddedAudioInChannel1), drag it to the selected monitor elements, the interface will pop up as below:



- 5) Specific source configuration :
 - Click video/audio or GPIO items in the “Source page”, drag it to the corresponding (Video in channel) or (Audio in channel) area in the “Element configuration page” or GPIO, click “OK” button, save the setting of monitor element input.
 - Click “Auto” button. According to the top to bottom sequence of every items in “Source page”, the video, audio or GPIO input setting items will be arrayed automatically and correspondingly in the “Element configuration list” as below:



- Click "Cancel" to exit this interface and back to Edit interface.

NOTE: Tally display mode is as below

1	Either GPIO1 or GPIO2 is triggered, the UMD background turn red
2	Both GPIO1 and GPIO2 are triggered simultaneously, the background turn red on the left side and green on the right side

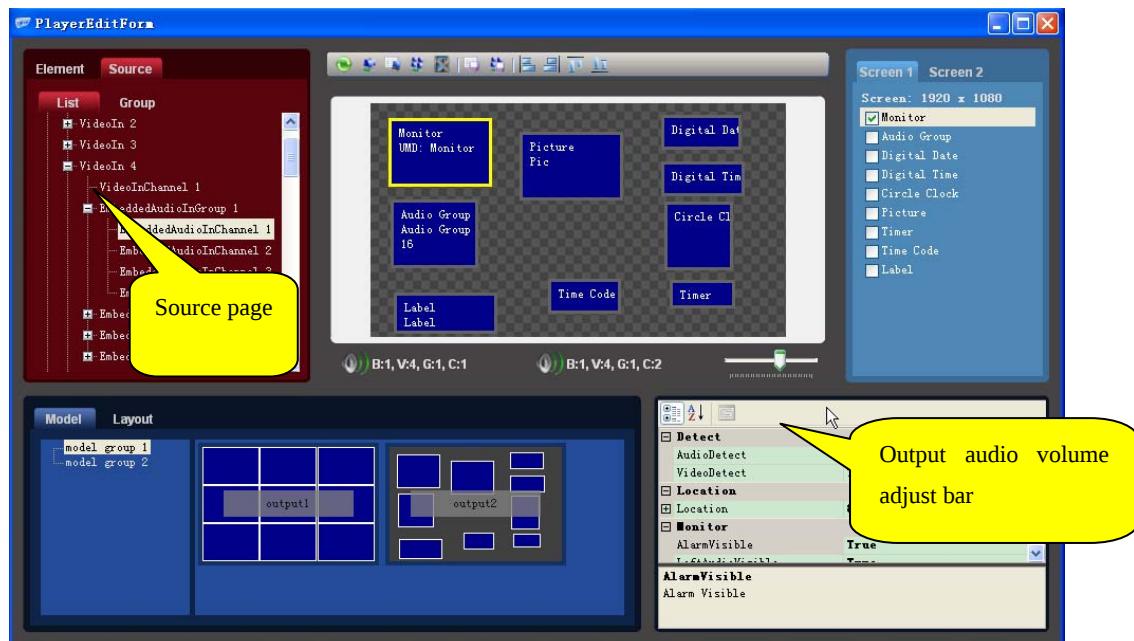
2.8.2.6 Volume adjustment of monitored audio

Select the audio source to be monitored, click audio in the "source page", drag it to the corresponding

audio speaker  area in the "Output audio volume adjust bar" to display corresponding audio

source information. The left and right  corresponds to the left and right track of speaker.

Drag  to adjust volume. As the picture shows below, "B: 1, V:4,G:1,C:1" indicate: the current monitored left track is "Board 1-VideoIn 4-EmbeddedAudioInChannel 1".

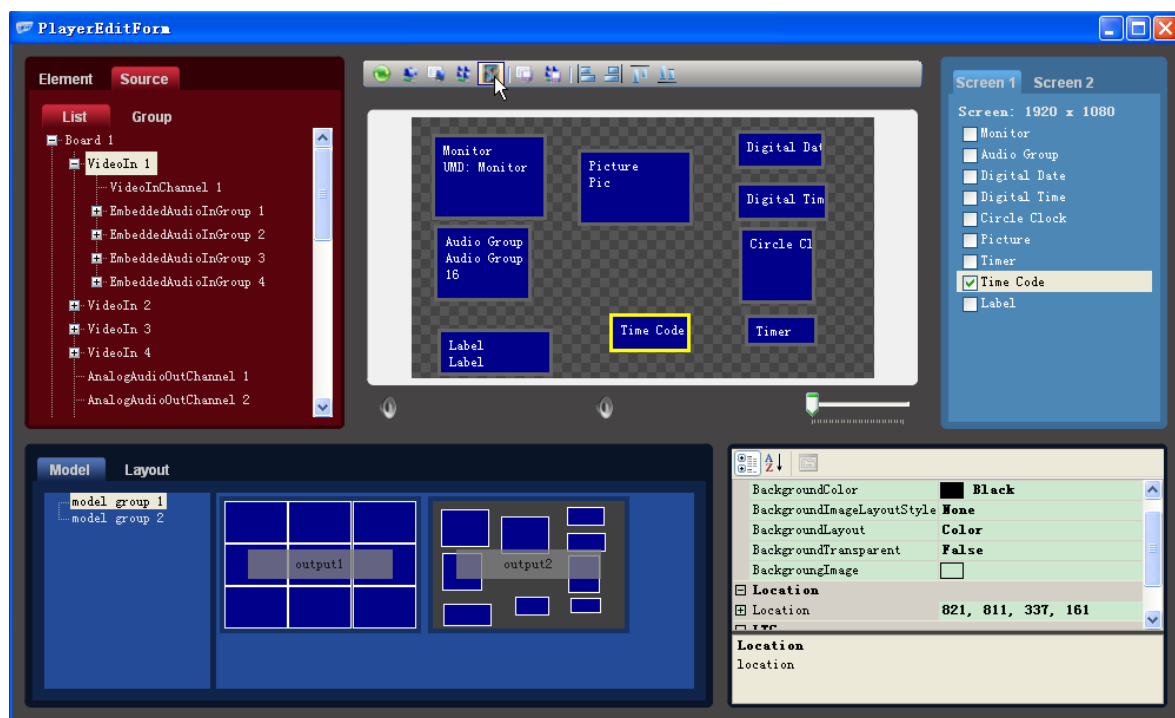


NOTE:

Assign monitored audio to the left and right track of speaker, it can only monitor the embedded audio in the input video from the same input board, or the analog audio from the same input board.

2.8.2.7 Delete element

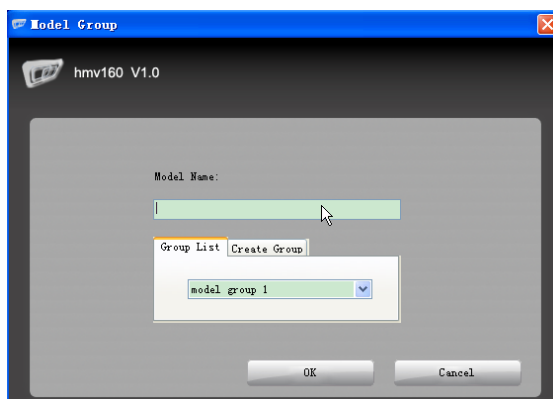
Click “ Delete Element” button, delete one or more elements in the grey background (in order to delete more elements, press and hold “Ctrl” button, then select the elements to be deleted), as below:



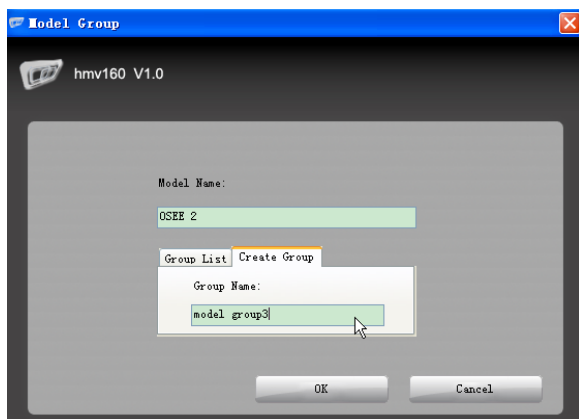
2.8.2.8 Save model

When the model editing is done, click “ Save as model” or “ Save as layout” button to save the model.

- Click “ Save as model”button, the interface will pop up as below:

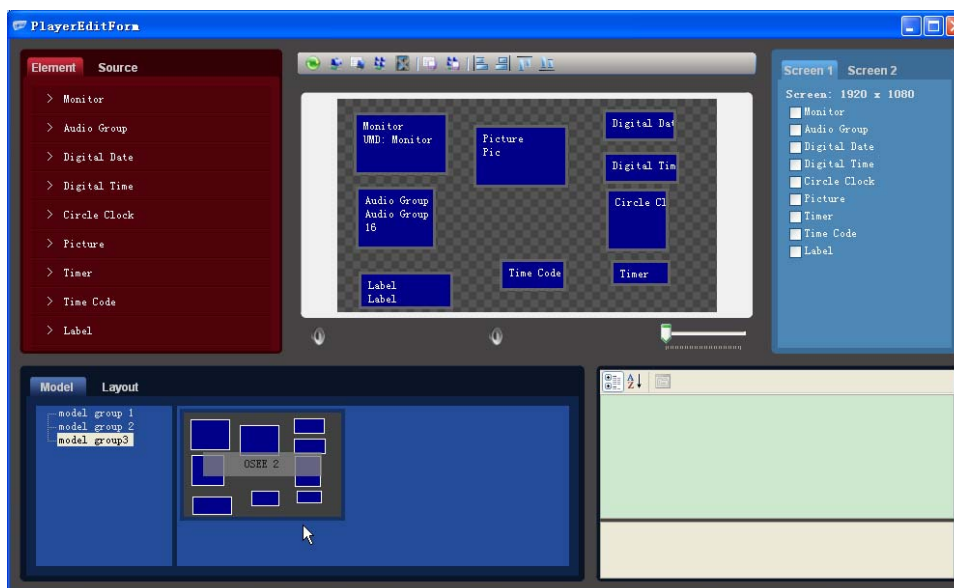


Input the model name in the “**Model Name**” textbox, then group the model. Select group in the drop-down box of “**Group List**”, or input group name in the “**Create Group**”, to add new group, as below:

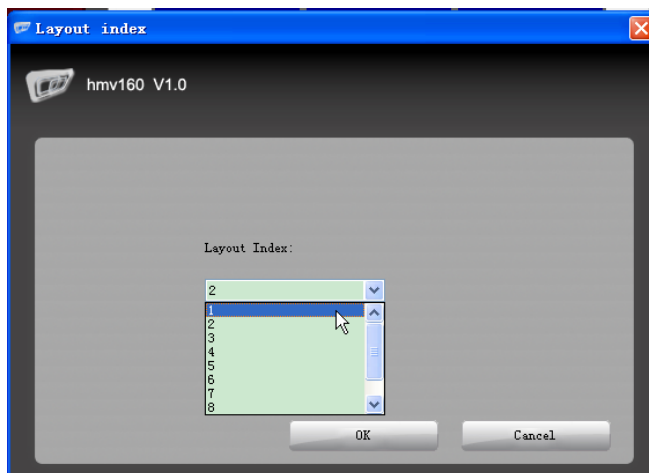


Click “**OK**” to save the finished model

The new added models group and models will be displayed in “**Model**” list after successful save, as below :



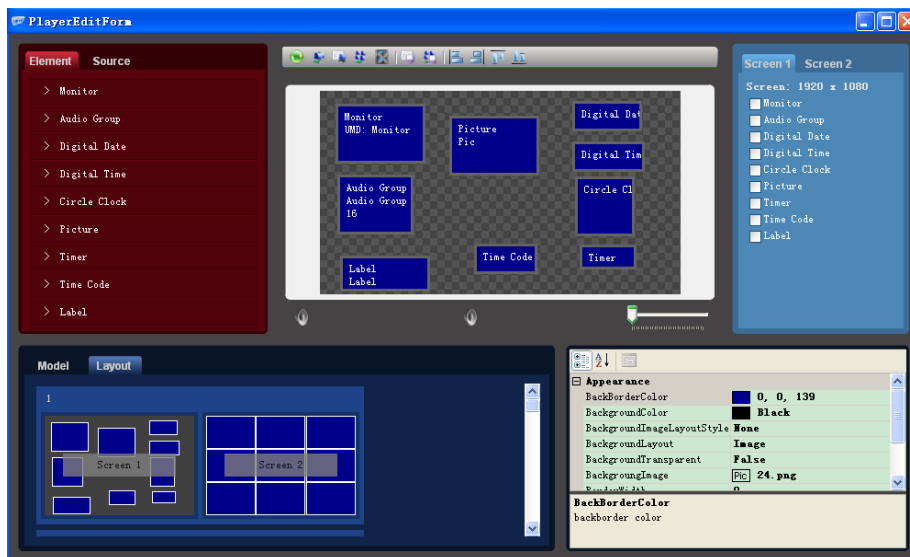
- Click “ Save as layout”button, interface below will pop up as:



Select the number in the drop down list, click“OK” button to set model group .

(NOTE: This information will be saved in the HMV160 board, 10 group layout information can be saved in the board)

As the picture shows above, the model will be displayed as the “**first 1**” picture in “**Layout**” interface after save.



2.8.2.9 Layout setting

- ☞ In the model making page, select the elements to be arrayed;
- ☞ click corresponding array button

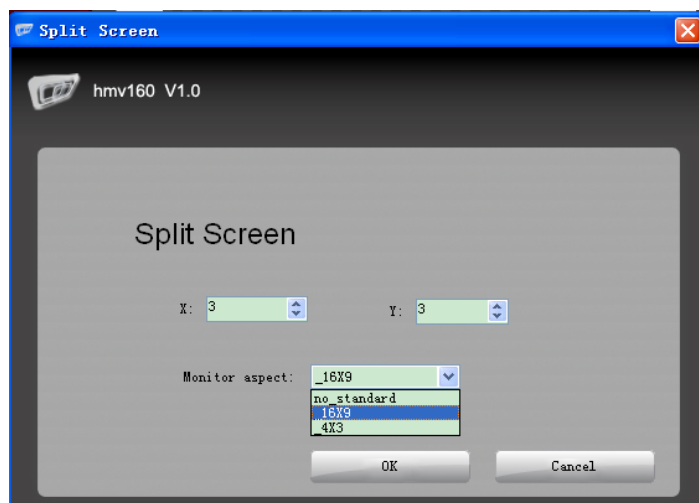


Toolbar

- Align left : take the far left element as benchmark, all the other elements align left;
- Align right: take the far right element as benchmark, all the other elements align right;
- Align top : take the far top element as benchmark, all the other elements align left;
- Align bottom : take the far bottom element as benchmark, all the other elements align left.

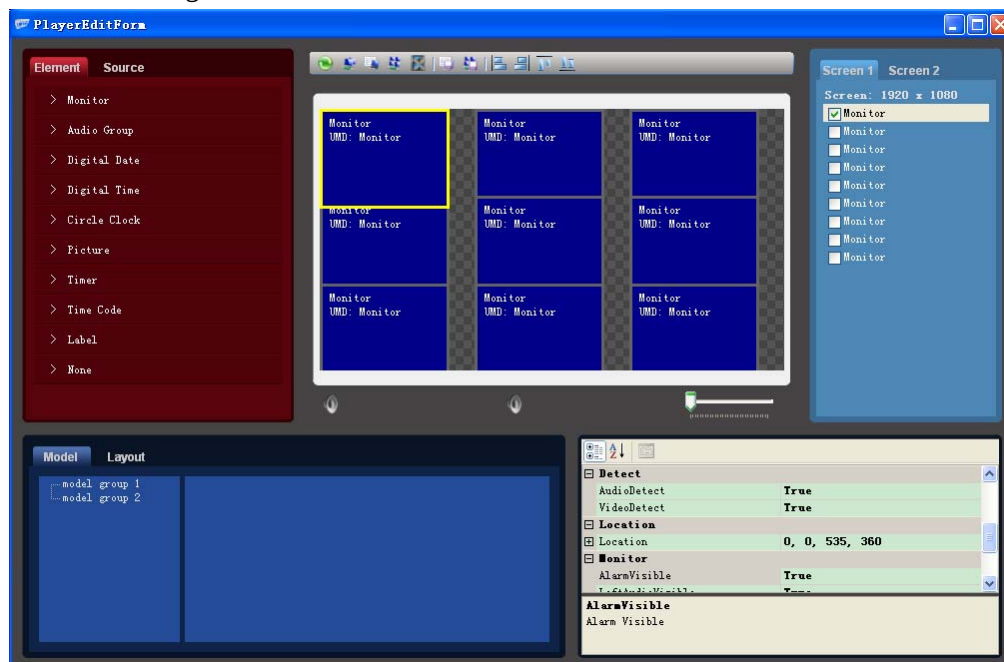
2.8.3 Quick making model

In the toolbar,click“ Split Screen”button, open the configuration window as below:



- X: Horizontal monitor number
- Y: Vertical monitor number
- Monitor Aspect: Adjust aspect ratio of monitor window.
Range: 16:9,4:3,no standard.

When the setting is done, it shows as below :

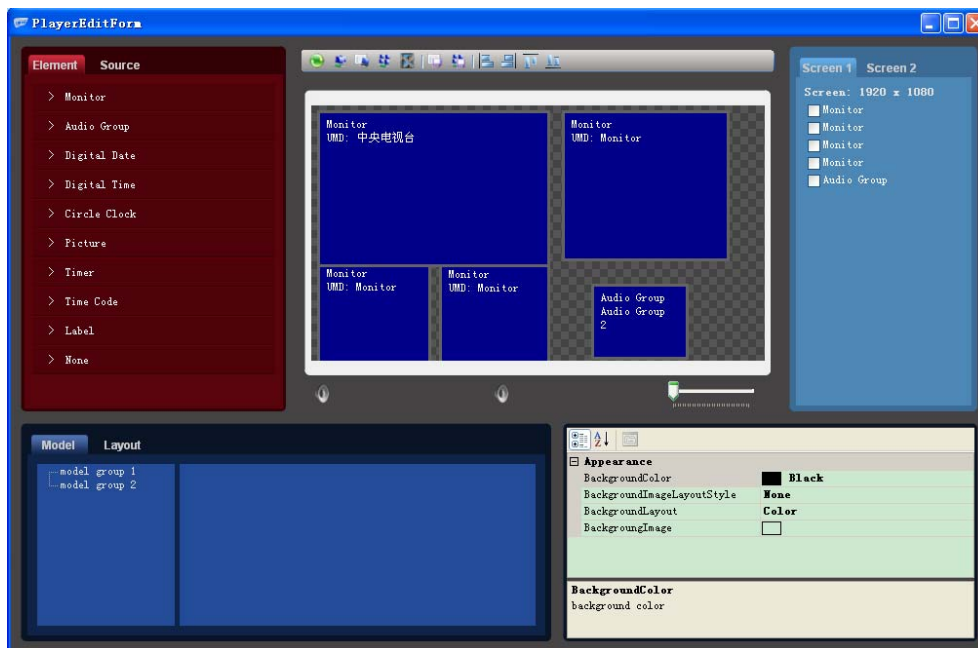


Edit current model, the procedure is as the same as 2.8.2.

2.8.4 Open default model of player screen

1.Select screen on the right side of the edit interface (such as,“Screen1”);

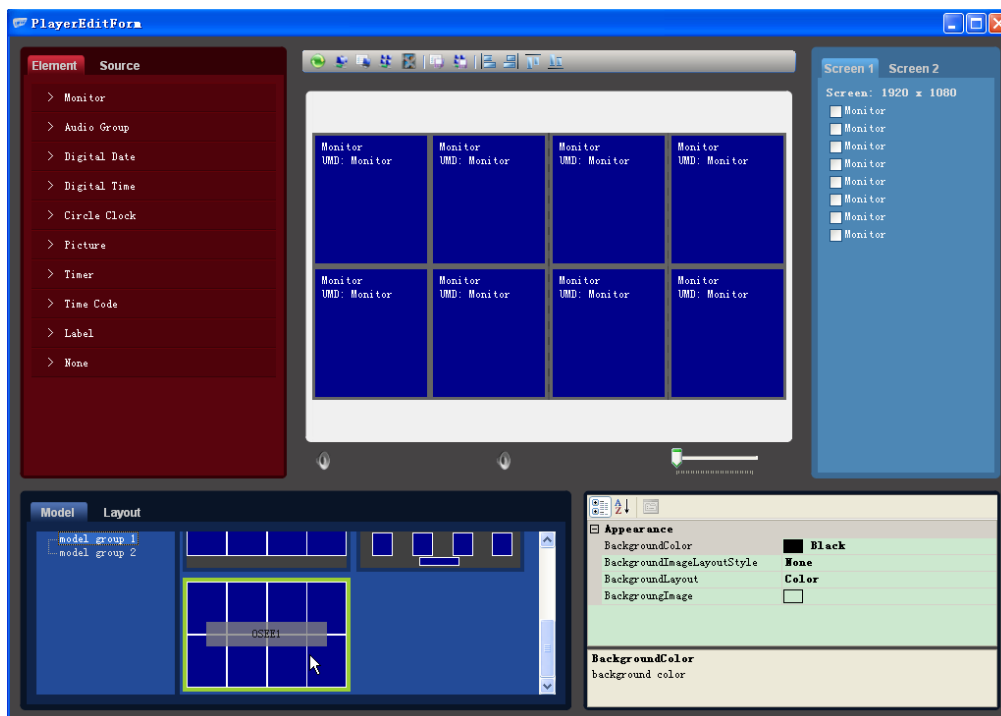
2.In the toolbar, click “ Get default layout”button, get the current model from the player screen, as below:



Edit current model, the procedure is as the same as 2.8.2.

2.8.5 Model quick setting for player screen

In the save model window, drag the model in the “Model” or “Layout” list on the left bottom (such as: “model group1-OSEE1”) to the area underneath the “Screen1” or “Screen2” in “**Output screen window**”, the current model will be displayed in grey area, as below:



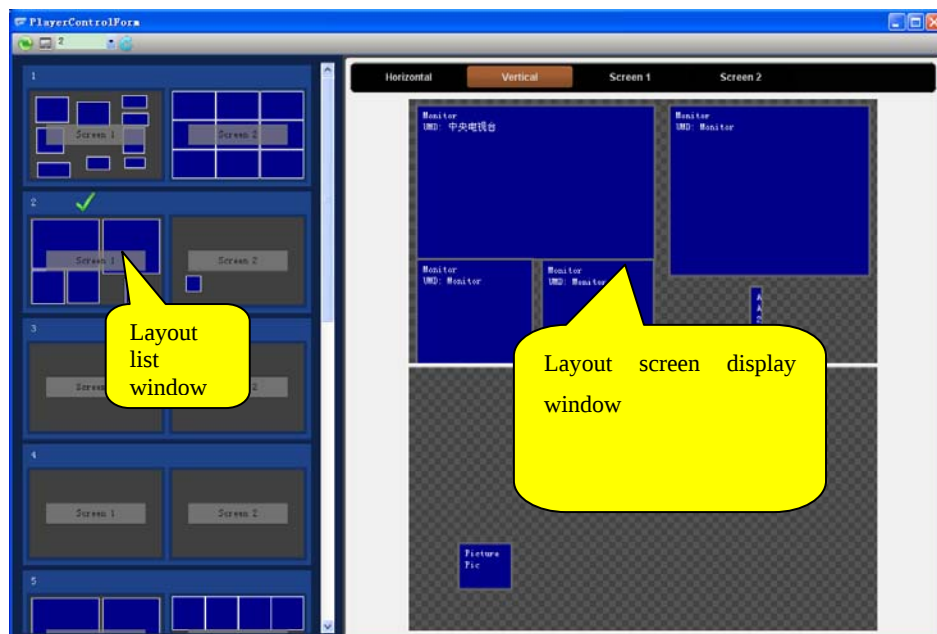
Edit current model, the method is as the same as 2.8.2.

2.9 Control- Morning control

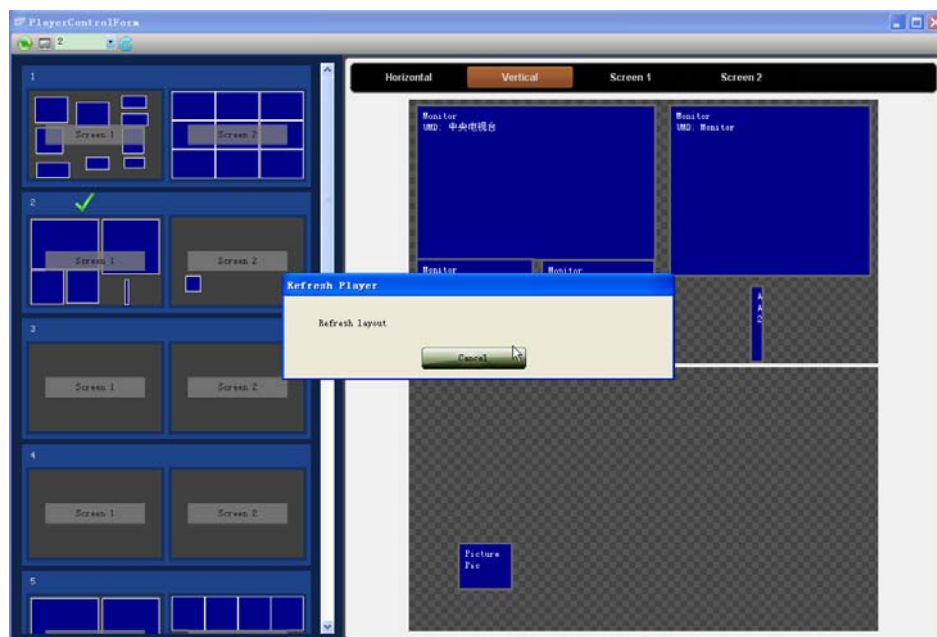
Select the player to be set in the main interface, the selected player will be designated by the symbol

of “✓”.

Click the “**Control**” button, the interface will pop up as below:



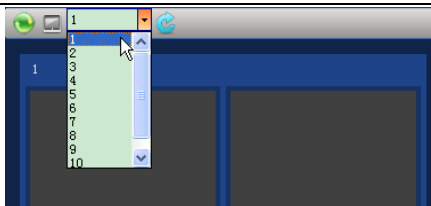
- 1) click  “Refresh” button, refresh the current monitor screen information.



- 2) click  button, conceal or open “Layout” list.

- 3) 10 layout screens can be real-time switchover

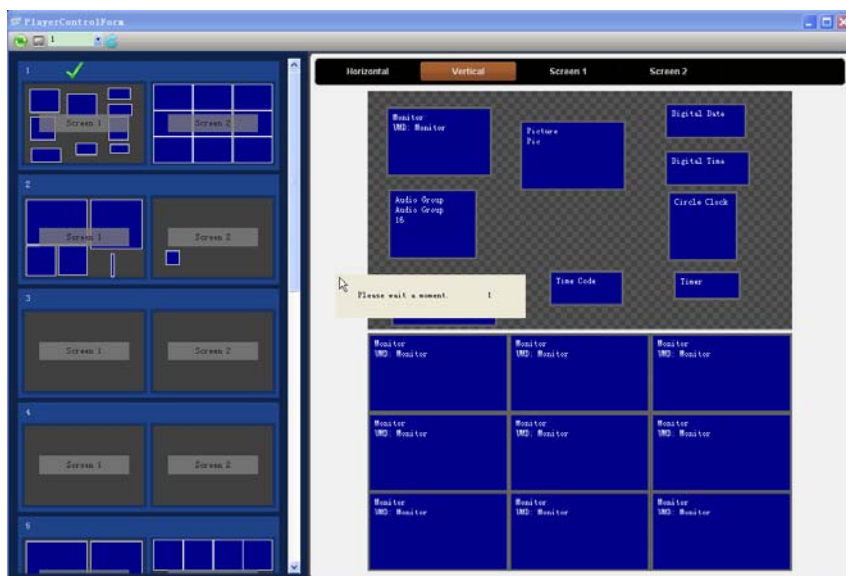
Select the sequence number of “layout” in the drop down list, 10 layout screen can be real-time switchover.



Click , in the player which is connected with hardware, adopt the setting of this layout, as below:

The current layout displayed on player is designated by the symbol of “✓” in the Layout list

NOTE: in the player which is connected with hardware, the adopted layout setting must follow the above instruction.



4) Layout screen display window

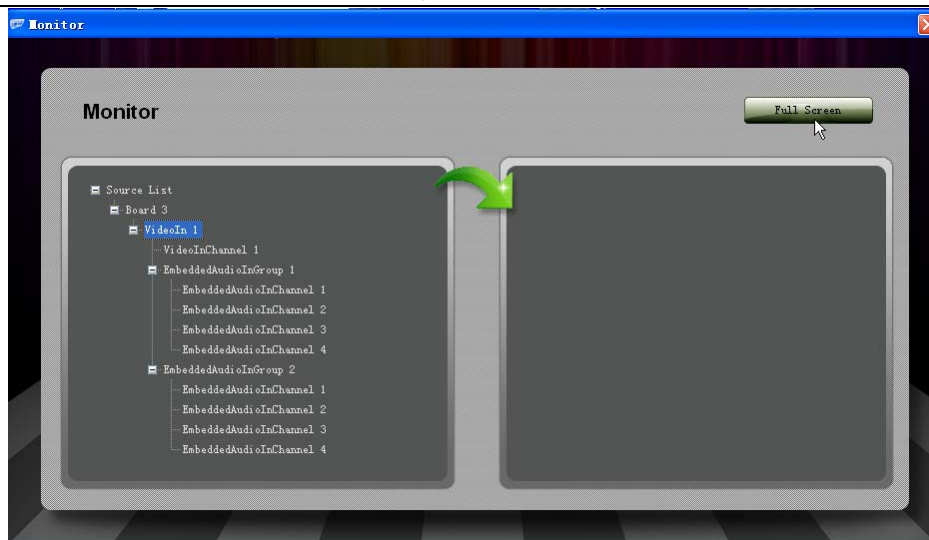
This window indicates the current layout setting adopted by the player

- ☞ Horizontal: Display layout setting horizontally
- ☞ Vertical: Display layout setting vertically
- ☞ Screen 1: only display layout setting of Screen 1
- ☞ Screen 2: only display layout setting of Screen 2

5) Full screen display for monitored screen

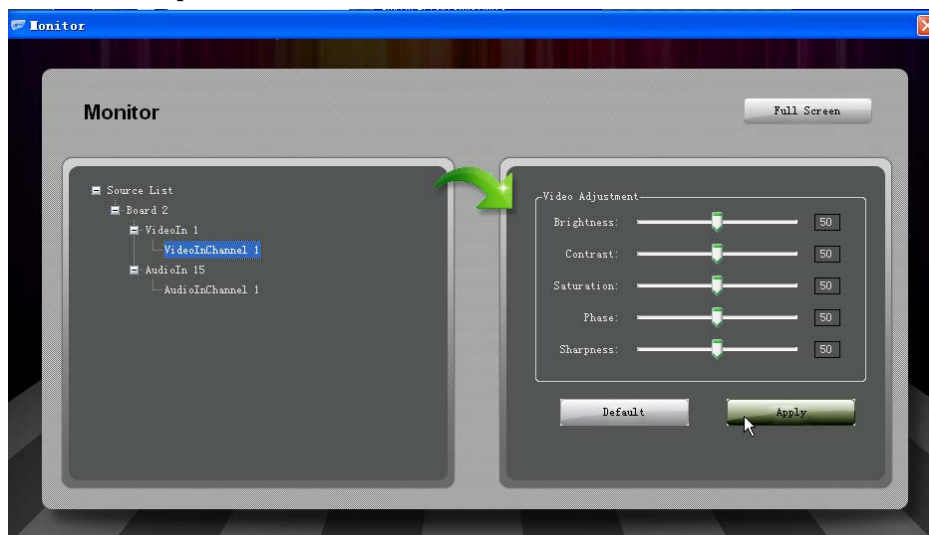
In layout display window, open a certain monitored window, as below:

Click “Full Screen” button, the monitored window information will be full screen displayed.



6) Adjust the audio and video parameter on real time

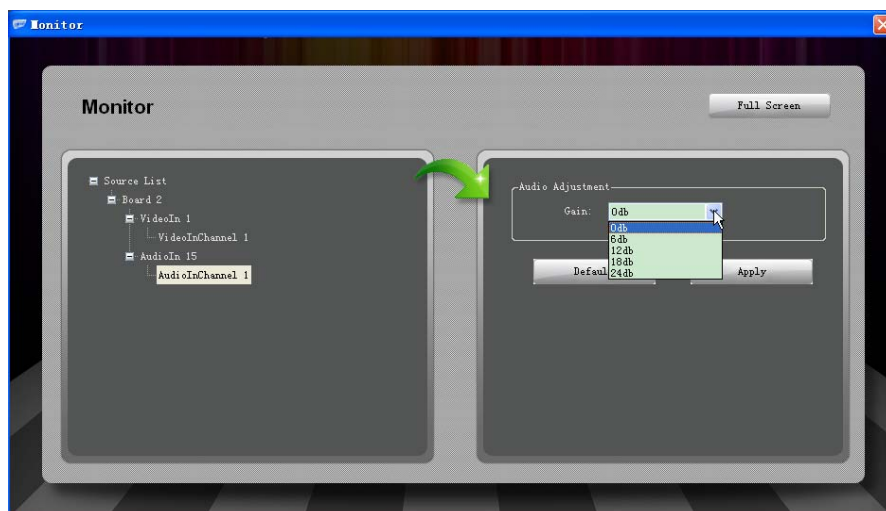
☞ Select the video parameter on the left list as below:



Drag  bar , adjust each parameter, click“Apply”button to save the setting. Click “Default”button, set all the parameter as default value.

☞ Select audio parameter on the left side list, as below:。

Adjust the range of audio gain: 0dB,6 dB,12 dB dB,18 dB,24 dB.



NOTE:

If the hardware information of boards has been changed inside the chassis (such as changing the board slots or the sub-board etc.), the software must be restarted, the procedure is as below:

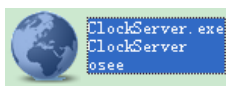
1. Power off and restart the chassis
 2. Or click "Restart" button in Chapter "1.8"
 3. Or click "Restart" button in Chapter "2.4"
- After that, other operation can be continued.

Chapter 3 HMV160 Clock Server Manager instruction

HMV160 Clock Server Manager: HMV160 HD multiviewer network clock collation software

3.1 Installation

- 1) Copy 《ClockServer》 file to the control PC;

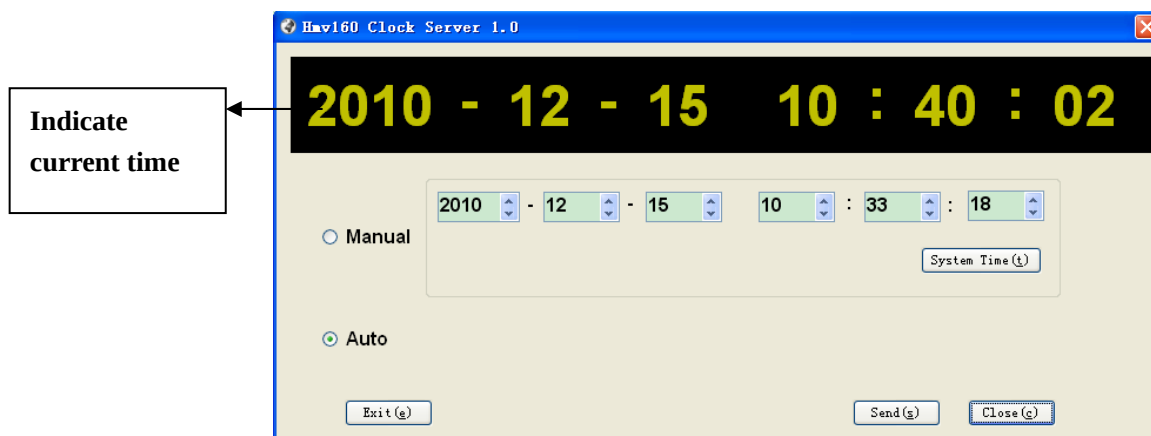


- 2) Open , execute《ClockServer.exe》document. The software will be minimized

to the bottom right of the desktop, and displayed as the icon .

- 3) double click the icon , open the Clock Server control software.

HMV160 Clock Server Manager interface



3.2 Operating method

☞ **Manual: collate system clock manually**

Click Manual item, select system clock manual collation

From left to right, indicating the current date (year-month-date), time (hour-minute-second).

Click  in every frame , modify the setting respectively.

Click “System Time” button, display the current system clock which is coincident with the time of the control PC.

Must click “Send” button to send the system clock to the HVM160 HD multiviewer, to effect the collation.

☞ **Auto: collate system clock automatically**

Click Auto item, select the system clock automatical collation

The current system clock information will be sent to HVM160 automatically every other minute for collation .

☞ **Close: control software will be minimized to the bottom right of the desktop, displayed**

as icon 。

☞ **Exit:** exit the control software.

NOTE: The specifications are subject to modification without notice