# **Dual Monitor**

Many customers are favor of dual monitor function for they can view clearer videos on the second monitor while operate on the main monitor without any barrier.

Now there are two work modes you can select to start dual monitor function: Stretch and Extend. We support multi-monitor in Extend mode actually.

# **Stretch Mode**

When there are more than one monitors connected to the PC with DVR installed on it and when all the settings are done, DVR will start dual monitor function automatically.

### **Setting Steps**

The display card should support the dual monitor. Take ATI HD 2400 series display card as an example. First of all, you should connect two monitors to the display card.

#### **Stretch Main onto Monitor**

The system can detect another monitor automatically when it is connected. Then, you should set the the desktop area of each monitor as "1024x768" and select "Stretch Main horizontally onto monitor".

Graphics Settings HydraVision	Displays Pro	perties
Color     Arivo***	1.ATI Radeon HD 2400 Series [ SyncMaster ] Desktop and Display Setup Main: Attached displays currently disabled: Extend Main onto monitor Clone Main with monitor Stretch Main horizontally onto monitor Stretch Main vertically onto monitor	2 Detect Displays
	SyncMaster [Single]       Desktop area:     Color quality:       1024 x 768     High (32-bit)       Rotation:       [Standard Landscape (0")	Refresh rate: 60 Hz 💌

When it's done, the following interface will be displayed.

Catalyst ** Control Center		
View	files • Preferences • O Help • Displays P Graphics Adapter : I.ATI Radeon HD 2400 Series [ SyncMaster + B Desktop and Display Setup Main: Rightmost	roperties enQ FP71G+u] 💌
<ul> <li>Color</li> <li>I wivo<sup>™</sup> Video</li> <li>I VPU Recover</li> <li>ATI 0 verdrive<sup>™</sup></li> </ul>	Attached displays currently disabled:	1 Detect Displays
I	Selected Display on: ATI Radeon HD 2400 Seri	ies
	SyncMaster + BenQ FP71G+u [Horizontal stre	tch]
	Desktop area: Color quality:	Refresh rate:
BEDEDN	2048 x 768 💌 High (32-bit)	▼ 60 Hz ▼
PREMIUM GRAPHICS	Rotation: Standard Landscape (0")	Force
Basic	OK Apply Digo	ard Defaults

# **Set Resolution**

The desktop area should be selected as 2048x768 while the original resolution of each monitor is 1024x768.

#### Note:

If the old ATI display card doesn't support" CATALYST Control Center", you should download ATI Catalyst and install it. Then you can enter the setting interface in ATI catalyst control center.

Now all the settings are done, you don't have to do other settings in the DVR. Once DVR runs, dual monitor function is effective.

## **Display and Operation**

#### Preview

#### Display

In preview mode, when the number of view windows you select is smaller than the total number of cameras, then the remaining cameras will be displayed on the second monitor automatically. The interface is as below:



Also, when you double click one window to zoom in it, other cameras will be displayed on the second monitor. When all the cameras are shown on the main monitor, no camera will be displayed on the second one.

#### Operation

You can single–right-click on both main monitor and second monitor to do full screen display, instant playback, OSD adjustment, send to TV monitor and read IP register information.



The operations are the same with single monitor. For details, please refer to our DVR user manual.

# **Enter Playback**

#### Display

When you are in the playback interface, all the cameras will be displayed on the second monitor automatically.



### Operation

You can also do the operations as in the preview mode. Please refer to *Preview* for details.

# **Enter Setup**

#### Display

When you are in the system setup interface, all the cameras will be displayed on the second monitor automatically too.



#### Operation

No operation is available. The setup interface will be always in front of all the other windows. So, every time you single-right-click on the second monitor to popup the menu, the setup interface will hide it again and again.

# **Extend Mode**

# **Setting Steps**

Also, take ATI HD 2400 series display card as an example. First of all, connect two monitors to the display card.

#### **Extend Main onto Monitor**

The system can detect another monitor automatically when it is connected. Then, you should set the the desktop area of each monitor as "1024x768" and select "Extend Main onto monitor".

Displays Prop	perties
Granking Adaptor	
Desktop and Display Setup	<u>.</u>
Main: Attached displays currently disabled: Extend Main onto monitor Clone Main with monitor Stretch Main horizontally onto monitor Stretch Main horizontally onto monitor	Detect Displays
Selector state in the dealy on to instruct in the second s	
Desktop area:     Color quality:       1024 x 768     High (32-bit)	Hefresh rate:
	Bisplays Prop         Graphics Adapter :         1.ATI Radeon HD 2400 Series [ SyncMaster ]         Desktop and Display Setup         Main:         Image: Stream of the stream o

When it's done, the following interface will be displayed.

Graphics Settings HydraVisio	n	
Velcome Information Center Displays Manager Display Droperties Monitor Properties 0 Color Warkow Video VPU Recover VPU Recover ATI Overdrive'''	Graphics Adapter : 1.ATI Radeon HD 2400 Series [ SyncMaster ] Desktop and Display Setup Desktop 1: Desktop 2: Attached displays currently disabled:	operties
	To make changes, drag or right-click the display icons.	Detect Displays
	SvincMaster [Extended]	*
		Refresh rate:
	Desktop area: Color quality: 1024 x 768 V High (32-bit) Botation:	<ul> <li>✓ 60 Hz</li> </ul>

You don't have to set **Desktop area** again.

# Settings in DVR

When all the settings are done, run DVR and then single-right-click on the main screen to enter **Dual Monitor Setup**. If the second monitor is not connected or set correctly, the option will not be displayed.



The interface is shown as below:

-		PC Decoder Se	etup		
	TV Client List		Monitor List		
System Para. Set	<b>± 5</b> 192.168.0.103		Monitor Name	TV Client IP	TV NO. in Client
Listen Port 5001		Delete Client	■ 192.168.0.103-TV:1	192.168.0.103	TV:1
		Add			
		Remove			
		Remove All			
		Setup			
Save					
Exit					

It is named as *PC Decoder Setup* because when there is a TV client on line and the DVR IP is filled as the sever IP, the DVR can detect it automatically and display the TV client IP in the *TV Client List*. Here the IP "192.168.0.238" is the TV client IP.

		PC Decoder Se	etup		
System Para. Set	TV Client List		Monitor List Monitor Name	TV Client IP	TV NO. in Client
	■ ▼ TY:2 ■ 192.168.0.103 ■ ▼ TY:1	Delete Client Add Remove	■ 192.168.0.103-TV:1 ■ 192.168.0.238-TV:2	192.168.0.103 192.168.0.238	TV:1 TV:2
		Remove All			
Save					

Double click the monitor name in the *Active Monitor List* or single click *Setup* button while a monitor is selected to enter *Monitor Setup* interface.

📾 Local D¥R	Devic Came Strea	Devic Came Strea	Devic Came Strea	Devic Camera Strea
ଟ୍ଟି Camera01 ଟ୍ରେ Camera02 ଟ୍ରେ Camera03 ଟ୍ରେ Camera04	Local unreg Main	Local unreg Main	Local unreg Main	Local unreg Main
-& Camera06 -& Camera07 -& Camera08	Interval Disable 💽 1	Interval Disable 💌 2	Interval Disable 3	Interval Disable
명 CameraU9 명 Camera10 명 Camera11 명 Camera12 명 Camera13 명 Camera14	Devic Came Strea Local Came Main	Devic Came Strea Local Came Main	Devic Came Strea Local Came Main	Devic Camera Strea Local Came Main
Camera15 Camera16 Camera17	Interval Disable 🔻 5	Interval Disable 🔹 6	Interval Disable 🔽 7	Interval Disable 🔹
Camera18 Camera19 Camera20 Camera21 Camera22	Devic Came Strea	Devic Came Strea Local Came Main	Devic Came Strea Local Came Main	Devic Camera Strea Local Came Main
Camera23 Camera24 Camera 01	Interval Disable 🔽 9	Interval Disable 🗾 10	Interval Disable 💌 11	Interval Disable 🔽
t Stream Type Stream 🔽	Devic Came Strea Local Came Main	Devic Came Strea Local Came Main	Devic Came Strea Local Came Main	Devic Camera Strea Local Came Main

The operations are nearly the same with the operations in PC-Decoder. The only difference is you can't set more than one groups here. For more details about the operations, please refer to PC-Decoder manual.

# **Display and Operation**

When all the settings are done, save and exit the setup. Then, you can see the interface as below:



#### Note:

The same with TV client of PC-Decoder, the number of partitions can be displayed on the second monitor is 16. Also, you can loop several cameras in one window. In other word, you can view as many as 16 cameras at the same time on the second monitor.

You can't do any operations on the second monitor or any monitors of the TV clients. They are only used to view.