AMD Custom Timing Tool

When testing new hardware, such as a display panel, you might find that the default display timings do not suit your needs. The AMD Custom Timing tool enables you to create additional non-standard video timing profiles.

Prerequisites

The AMD Custom Timing tool supports the following operating systems:

- Windows[®] XP (32-bit and 64-bit)
- Windows[®] Vista (32-bit and 64-bit)
- Windows 7[®] (32-bit and 64-bit)

The AMD Custom Timing tool is designed to work with the following hardware:

• All AMD FirePro[™] Graphics

The AMD Custom Timing tool is designed to work with the following drivers:

• 8.634 or higher

Please note that this tool does not support Eyefinity Group modes.

Before you start

Note: Custom timing profiles are applied directly to your system configuration. There is no check against the EDID information of the monitor that you are using. Make sure that you create a timing profile that your connected monitor can handle.

Before you can create a custom timing profile, you must ensure that Windows[®] will allow your nonstandard timing profile. In Windows[®] XP, click on the **Display** icon, then go to the **Advanced Settings** dialog, and click the **Monitor** tab. Make sure that the "Hide modes that this monitor cannot display" check box is clear.

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General	Adapter	Monitor	Troubleshoo
Monitor type			
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			Properties
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Figure 1: Windows[®] XP Settings

Creating new custom timing profiles

When the AMD Custom Timing tool launches, it displays information about your active displays (see Figure 2). The Information tab displays details about your active displays. If your display configuration changes while the tool is running, you can view the latest display information by clicking **Refresh**.

AMD Custom Timi	ng Tool v 1.01		?
AMD Cust	om Timing	j Tool	
Information	Video Mode		
Active Displays			
DISPLAY1 ATI FirePro V7800 DELL 2709W 1920x1200@60 DISPLAY2 ATI FirePro V7800 DELL U2410 1920x1200@60			
Refresh		[Show Timing Information

Figure 2: The Information tab

To create custom timing profiles, complete the following steps:

 To see which custom timing profiles already exist, click the Video Mode tab. Only custom timing profiles appear in this tab. Standard timing profiles are not shown. The AMD Custom Timing tool adds custom timing profiles to all active displays. Because you might activate a display after you add a custom timing profile it is possible that not all displays can use the same custom timing settings.

AMD Custom Timi	ng Tool v 1.01	? ×
AMD Cus	tom Timing Tool	
Information	Video Mode	
Video Modes		
1920x12 DISPLAY2 1280x10	24@50 Hz 00@50 Hz 24@50 Hz 80@50 Hz	
Add	Remove	Apply
		Quit

Figure 3: The Video Mode tab

- 2. To add a new custom timing profile, click **Add**. When you add new custom timing profiles, you can add either a basic timing profile or a detailed timing profile:
 - Basic timing profiles can be defined by specifying only the resolution, the refresh rate, and the Timing Standard as shown in Figure 4.

Basic Timing Detailed Timir	<u>.</u>	
Global		
Horizontal Resolution	1920	
Vertical Resolution	1200	
Refresh rate in Hz	50 🜲	
Timing Standard		
I GTF	CVT 🔘 DMT	

Figure 4: The Basic Timing tab

• Detailed timing profiles can be defined by specifying the detailed video timings as shown in Figure 5.

Horizontal Tim	ing			
Total	944	Total	626	A
Display	768	Display	576	
Sync Start	784	Sync Start	581	A V
Sync Width	96	Sync Width	5	×
Global				
Pixel Clock in K	GHz 14774	Refresh Rate in Hz	25	A V
🚺 Interlaced	Ĩ			

Figure 5: The Detailed Timing tab

Note: Adding a new mode does not change your current resolution and refresh rate settings.

3. Apply your new custom timing profile. Select the profile below the display that you want to apply it to, and click **Apply**. After you add a profile, it is also added to the AMD Catalyst Control Center[™] settings.

Remember: The AMD Custom Timing tool does not perform any check on your hardware. **You must** ensure that correct timing information is applied.

After you apply a new profile a dialog appears. Click **No** to apply the previous video timing profile. If the monitor cannot display the applied video mode, this dialog will not be visible. Press **Esc** to switch back to the previous mode.

Sample data for detailed custom timing profiles

1920 x 1080p 50Hz

	Total	Display	Sync Start	Sync Width
Horizontal Timing	2640	1920	2448	48
Vertical Timing	1125	1080	1084	5

Pixel Clock: 148500 KHz

1366 x 768 60Hz

	Total	Display	Sync Start	Sync Width
Horizontal Timing	1792	1366	1436	143
Vertical Timing	798	768	771	3

Pixel Clock: 85693 KHz

768 x 576i 25Hz

	Total	Display	Sync Start	Sync Width
Horizontal Timing	944	768	784	96
Vertical Timing	626	576	581	5

Pixel Clock: 14774 KHz

Interlaced

640 x 480i 30Hz

	Total	Display	Sync Start	Sync Width
Horizontal Timing	784	640	656	64
Vertical Timing	526	480	489	6

Pixel Clock: 12372 KHz

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