HP and Compaq Flat Panel Displays - Display Quality Issues

This document addresses common display quality problems that can occur with flat panel LCD monitor. Use the information in the following sections to troubleshoot the monitor problem.

A small dot is too bright or black
Due to the nature of LCD technology, a certain number of dots (pixels) might not display correctly. If the monitor has too many pixel defects within a certain area, the viewer can become distracted. For more information about pixel defects, see HP Pixel Policy.

Figure 1: Pixel defects

Black or blank screen
The screen remains black or blank, and there are no error messages on the screen.

NOTE: If the screen is black or blank, but an error message such as No Signal displays on the screen, the problem might be related to the video signal. To troubleshoot, use the HP support document Flat Panel Monitor Displays Message About No Signal, Signal out of Range, Sleep, or Power Save.

Figure 2: Blank screen
To troubleshoot this problem, check the power to the monitor, test the video connection between the computer and the monitor to make sure it is connected correctly, and connect the monitor to a different computer. For specific steps, use the HP support document HP Flat Panel LCD Monitors - Monitor is Blank.

**Fuzzy text, blurry or stretched images**

Text is fuzzy, or objects are slightly blurry around the edges, stretched, and out of proportion.

When this happens, the display resolution on the computer might be set to something other than the native display resolution of the monitor. When the display hardware scales the image, the edges of the displayed objects can become slightly blurred as the entire image is enlarged or reduced to fit to the edges of the screen.
Figure 3: Blurry display

Figure 4: Correct display

Figure 5: Resolution too low - stretched image
NOTE: If blurriness occurs only when using a software program such as a game, make sure that the resolution recommended for the game matches the display resolution.

To fix resolution problems, complete the following steps:
1. Restart the computer. If this does not resolve the issue, continue to the next step.
2. Press the Auto button on the front of the monitor to run Auto Adjustment.
3. Use the buttons on the front of the monitor to open the on-screen menu, and select Factory Reset or Default. If the display is still incorrect, continue to the next step.
4. Find the native resolution of the display. You can find the native resolution in the following places:
   - In the specifications on the box.
   - In the printed material that came with the monitor.
   - In the product specifications on the HP Web site.

   **NOTE:** Some common native resolutions are 800 x 600, 1024 x 768, 1440 x 900, 1920 x 1200, and 1680 x 1050.
5. Change the display resolution to match the native resolution using the following steps:
   - In Windows 8 and 8.1, press the Windows key + X key. Click Control Panel, find the Appearance and Personalization area, and click Adjust Screen Resolution. Move the slider bar until the native resolution for the monitor is set, and then click OK.
   - In Windows 7 and Windows Vista, click Start, click Control Panel, find the Appearance and Personalization area, and click Adjust Screen Resolution. Move the slider bar until the native resolution for the monitor is set, and click OK.
   - In Windows XP, click Start, click Settings, and then click Control Panel. Double-click the Display icon, and select the Settings tab. Move the slider bar until the native resolution for the monitor is set, and click OK.
6. If you cannot select the native resolution, continue to the next step to update the drivers for the graphics adapter on the computer.
7. If you have an HP computer, update your video drivers from the HP Web site. Otherwise, you can get the latest updated video drivers from the video hardware manufacturer's Web site. The following list shows some of the video hardware websites:
   - Check for NVIDIA video driver updates at NVIDIA Home Page (in English).
   - Check for ATI video driver updates at ATI Home Page (in English).
   - Check for S3 video driver updates at S3 Graphics Home Page (in English).
   - Check for Intel video support and downloads, Intel Downloads (in English).
8. After updating the video drivers, go back to Step 1 and try to change the display resolution again.
NOTE: If you cannot select the native resolution after updating the video drivers, the graphics adapter in the computer might not support that resolution and might need to be upgraded.

If you updated the video drivers, set the correct display resolution, and the problem still occurs, continue to the next step.

9. If the computer connected to the monitor is using Windows 7 or Windows Vista, complete the following steps:
   a. Start the computer in Safe Mode. Restart the computer and press the F8 key repeatedly when the first screen displays. From the Windows Advanced Options Menu, select Safe Mode, and press Enter.
   b. If the computer connected to the monitor is using Windows 8 or 8.1, refer to the Windows 8 Safe Mode document.
   c. While the computer is in Safe Mode, press the Auto button on the front of the monitor to run Auto Adjustment again.
   d. If the display is sharper in Safe Mode, while still in Safe Mode, reinstall the monitor drivers from the CD that came with the monitor. If the display is still blurry, the monitor might need servicing.

Screen flickers, unstable image

If the screen flickers, make sure the display settings in Windows match the native resolution and refresh rate for the monitor. Find the native resolution of a flat panel display on the box, in the specifications, or in the printed material that came with the monitor. Some common native resolutions are 800 x 600, 1024 x 768, 1920 x 1200, and 1680 x 1050. The most common refresh rate for LCD monitors is 60 Hz. This normally cannot be changed for flat panel displays using Plug and Play settings. However, if you are using special video software to increase or decrease the refresh rate, change the refresh rate to match the default refresh rate specification of the monitor.

Figure 7: Flickering screen
1. To change the screen resolution and refresh rate settings in Windows, do the following:

- **In Windows 8 and 8.1**
  a. Press the Windows key + X key, and click **Control Panel**.
  b. Find the **Appearance and Personalization** area, and click **Adjust Screen Resolution**.
  c. Move the slider bar until the screen resolution matches the native resolution.
  d. Click **Advanced settings**, and then click the **Monitor** tab.
  e. If it is not already selected, select the **Screen refresh rate** that matches the default rate for your monitor.
  f. Click **OK**, and then click **OK** again.

- **In Windows 7 and Windows Vista**
  a. Click **Start**, and then click **Control Panel**.
  b. Find the **Appearance and Personalization** area, and click **Adjust Screen Resolution**.
  c. Move the slider bar until the screen resolution matches the native resolution.
  d. Click **Advanced settings**, and then click the **Monitor** tab.
  e. Select the **Screen refresh rate** that matches the default rate for your monitor (if it is not already selected).
  f. Click **OK**, and click **OK** again.

- **In Windows XP**
  a. Click **Start**, click **Settings**, and then click **Control Panel**.
  b. Double-click the **Display** icon, and select the **Settings** tab.
c. Move the slider bar until the screen resolution matches the native resolution.
d. Click Advanced, and select the Monitor tab.
e. Select the Refresh rate that matches the default rate for your monitor (if it is not already selected).
f. Click OK, and click OK again.

If you cannot select the native resolution, continue to the next step to update the drivers for the graphics adapter on the computer.

2. If you have an HP computer, update your video drivers from the HP Web site. Otherwise, you can get the latest updated video drivers from the video hardware manufacturer's Web site. The following list shows some of the video hardware websites:
   - Check for NVIDIA video driver updates at NVIDIA Home Page (in English).
   - Check for ATI video driver updates at ATI Home Page (in English).
   - Check for S3 video driver updates at S3 Graphics Home Page (in English).
   - Check for Intel video support and downloads, Intel Downloads (in English).

3. After updating the video drivers, go back to Step 1 and try to change the screen resolution again.

   **NOTE:** If you cannot select the native resolution after updating the video drivers, the graphics adapter in the computer might not support that resolution and might need to be upgraded.

   If the screen continues to flicker after setting the native display resolution and refresh rate, continue to the next step.

4. Download and install the latest video card drivers. Go back to Step 2 for instructions.
   If you already installed the latest video drivers in Step 2, continue to the next step.

5. Check the video cable connections. Unplug the cable and inspect the cable for damage. If the cable is damaged, replace it with a new cable. Try to use cables less than 3 meters (10 feet).

6. Check the environment around the monitor. Monitors are sensitive to magnetic fields. Speakers, florescent lights, fans, cell phones, radios, and any other electrical device can cause flickering. Temporarily move electrical items away from the monitor to see if they is producing a field that causes the flicker.

7. If the monitor has more than one type of connection available such as VGA, DVI, or HDMI, try a different type of connection.

8. To see if the video coming from the computer is causing the problem, temporarily connect the monitor to another computer, such as a notebook computer.
If the flicker is gone when the monitor is connected to another computer, the graphics adapter hardware on the first computer might need to be upgraded to use the monitor.

**Several colored vertical lines in the display**
Several vertical lines display on the monitor.

*Figure 8: Vertical lines in the display*

1. Use the buttons on the front of the monitor to open the on-screen menu, and select Factory Reset or Default.
   If you need help using the on-screen menu, see the HP support document for your monitor such as **HP and Compaq vp17, w1707, w1907, w2007, and w2207 Flat Panel Monitors - Using and Adjusting Your Monitor**.
2. Unplug the video cable between the computer and the monitor and check the ends for bent or broken pins. If any pins are damaged, replace the cable. Otherwise, securely connect the cable between the computer and the monitor.
3. If the monitor has more than one type of connection available such as VGA, DVI, or HDMI, try a different type of connection.
4. If possible, connect the monitor to another computer. If the lines appear when the monitor is connected to the second computer, the monitor might be damaged or defective.
   If the lines disappear when the monitor is connected to another computer, connect the monitor to the original computer and continue to the next step to update the video drivers.
5. If you have an HP computer, update your video drivers from the [HP Web site](http://www.hp.com). Otherwise, you can get the latest updated video drivers from the video hardware manufacturer's Web site. The following list shows some of the video hardware websites:
   - Check for NVIDIA video driver updates at [NVIDIA Home Page](http://www.nvidia.com) (in English).
   - Check for ATI video driver updates at [ATI Home Page](http://www.ati.com) (in English).
   - Check for S3 video driver updates at [S3 Graphics Home Page](http://www.s3.com) (in English).
   - Check for Intel video support and downloads, [Intel Downloads](http://www.intel.com) (in English).

6. If updating the drivers does not correct the problem, the graphics adapter might be damaged. Typically, video cards are damaged by too much heat caused by an accumulation of dust around fan areas. Cleaning the components inside the computer, especially the graphic card, might correct this problem.

**Solid horizontal or vertical red, green, or blue line**

The monitor displays a permanent solid red, green, or blue line on the screen - either horizontal or vertical.

**Figure 9: Solid horizontal green lines**

Try the following steps:
1. On the monitor, press Menu, and select Factory Reset.
2. If the monitor has more than one type of connection available such as VGA, DVI, or HDMI, try a different type of connection.
3. Connect the monitor to another computer. If the line appears when the monitor is connected to the second computer, the monitor might be damaged or defective. Otherwise, the video card and driver is causing the problem from the computer.

**Screen is discolored**
The entire screen is discolored.

*Figure 10: Incorrect colors*

*Figure 11: Correct colors*
To fix incorrect colors, complete the following steps:

1. Check the video cable connections and make sure the connection is not loose. Tighten the connection screws if the connector is loose.
2. Press the Auto or Autoselect button on the monitor.
3. Press Menu, and select Factory Reset. If the screen is still discolored, continue to the next step.
4. If the monitor has more than one type of connection available such as VGA, DVI, or HDMI, try a different type of connection.
5. If possible, connect the monitor to another computer. If the colors are incorrect when the monitor is connected to the second computer, the monitor might be damaged or defective.
6. Service the monitor.

A message displays about No signal or Signal out of range

Whenever these types of messages appear on the screen, the monitor cannot detect or set up the video signal.

To prevent the errors from occurring, make sure a compatible video signal is being sent from the computer (or other video player). Make sure the computer is not in a sleep mode, check the cable connections, restart the monitor, and make sure the computer is using a compatible display mode. For more information, see Flat Panel Monitor Displays Message About No Signal, Signal out of Range, Sleep, or Power Save.
A message displays about Power Save, Sleep, or Suspend

These messages indicate that the computer has sent a signal to the monitor sending it into low power mode. Power saving modes can also occur if the monitor has not received a video signal for a long time.

To waken the computer, move the mouse or press the Spacebar. If the computer does not wake, press the Suspend button on the keyboard. You might need to press the Suspend button on the keyboard two times. If the computer still does not wake, press the Power button on the computer case for one second and release. For more information about these messages, see Flat Panel Monitor Displays Message About No Signal, Signal out of Range, Sleep, or Power Save.

A message displays on an HP f2105 LCD Monitor: Recommended Settings: 1680 x1050 at 60 Hz

The best resolution for this display is 1680 x 1050 at 60 Hz. This message occurs because the f2105 is receiving a video signal that is not 1680 x 1050 at 60 Hz. Change the display resolution to match 1680 x 1050.

1. To change the display resolution, do the following:
   - In Windows 8 and 8.1, press the Windows key + X key, click Control Panel, find the Appearance and Personalization area, and then click Adjust Screen Resolution. Move the slider bar until the native resolution for the monitor is set, and click OK.
   - In Windows 7 and Windows Vista, click Start, click Control Panel, find the Appearance and Personalization area, and click Adjust Screen Resolution. Move the slider bar until the screen resolution is set to 1680 x 1050, and click OK.
   - In Windows XP, click Start, click Settings, and then click Control Panel. Double-click the Display icon, and select the Settings tab. Move the slider bar until the screen resolution is set to 1680 x 1050, and click OK.

2. If you cannot select 1680 x 1050 as the screen resolution, continue to the next step to update the drivers for the graphics adapter on the computer.

3. If you have an HP computer, update your video drivers from the HP Web site. Otherwise, you can get the latest updated video drivers from the video hardware manufacturer's website. The following list shows some of the video hardware websites:
   - Check for NVIDIA video driver updates at NVIDIA Home Page (in English).
   - Check for ATI video driver updates at ATI Home Page (in English).
• Check for S3 video driver updates at [S3 Graphics Home Page](#) (in English).
• Check for Intel video support and downloads, [Intel Downloads](#) (in English).

4. After updating the video drivers, go back to Step 1 and follow the steps to change the screen resolution to 1680 x 1050.

**General troubleshooting tips for display quality issues**

Black borders next to the edge of the picture, blurry picture, shadows, stretched image, video playback problems, and many other symptoms can often be resolved by completing the following steps:

1. Press the **Auto** or **Autoselect** button on the monitor.
2. Press **Menu**, and select **Factory Reset**.
3. If the monitor has more than one type of connection available such as VGA, DVI, or HDMI, try a different type of connection.
4. Set the video resolution on the computer to match the native display resolution of the monitor. Find the native display resolution for your monitor from the box the monitor came in, the Monitor User Guide, or product specifications. To change the display resolution, use the following steps:
   a. In Windows 8 and 8.1, press the Windows key + X key, click **Control Panel**, find the **Appearance and Personalization** area, and then click **Adjust Screen Resolution**.
   b. Move the slider bar until the native resolution for the monitor is set, and click **OK**.
   If the native display resolution is not one of the settings that you can select or the problem continues, continue to the next step.
5. Make sure the computer is using the latest video display drivers. Download and install the latest video drivers for the graphics adapter installed in the computer. Updating the video drivers to resolve many types of picture quality issues, especially in games. Updating video drivers can provide more display resolutions that might be a better match for your monitor. If you have an HP computer, update your video drivers from the [HP Web site](#). Otherwise you can get the latest updated video drivers from the video hardware manufacturers Web sites. The following list shows some of the video hardware Web sites:
   • Check for NVIDIA video driver updates at [NVIDIA Home Page](#) (in English).
   • Check for ATI video driver updates at [ATI Home Page](#) (in English).
• Check for S3 video driver updates at S3 Graphics Home Page (in English).
• Check for Intel video support and downloads, Intel Downloads (in English).

Fine tune brightness, colors, image position, and contrast using the on-screen display buttons on the monitor. You can find image adjustment information in the monitor User Guide or in the online support document "Using and Adjusting your Monitor."

If you cannot adjust the image to fix the problem, swap the video cable for a shorter video cable to see if the problem is related to the video signal strength. If the picture is better when the cable is replaced, use a better cable.

If the image quality problem persists, the monitor might be defective. Some display quality symptoms that indicate hardware failure are:
• Permanent solid red, green, or blue lines that run across the screen. This indicates that a ground trace has broken: replace the monitor.
• The monitor cannot display red, green, or blue, even from the monitor's on-screen display menu. This indicates a main board failure: replace the monitor or graphics adapter.
• Permanent gray swaths or bands across the screen. This defect is more visible when an all white background is displayed. This symptom indicates that the polarizing filter is damaged or not aligned correctly.