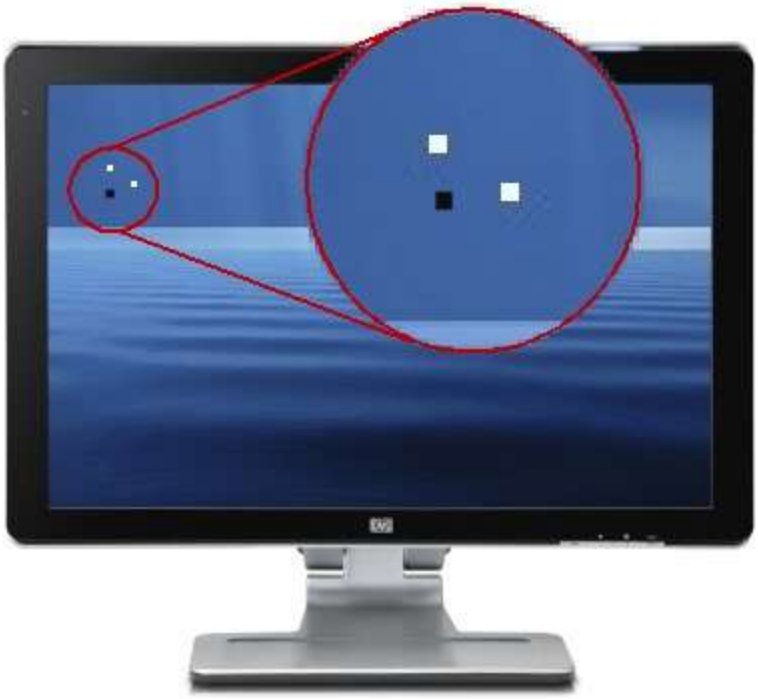
Troubleshooting Steps

This document addresses common display quality problems that can occur with flat panel LCD display. Use the information in the following sections to troubleshoot the display 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 display 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 : 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 Flat Panel Monitor Displays Message About No Signal, Signal out of Range, Sleep, or Power Save.

Figure : Blank screen

To troubleshoot this problem, check the power to the display, test the video connection between the computer and the display to make sure it is connected correctly, and connect the display to a different computer. For specific steps, use the 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 display. 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 : Blurry display

Figure : Correct display

Figure : Resolution too low - stretched image

Figure : Correct resolution

note:

If blurriness occurs only when using a software program such as a game, make sure that the resolution set in 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 display to run Auto Adjustment.
3. Use the buttons on the front of the display 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 web display.
   - In the product specifications on the HP website.

   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 10, search for and open **display settings**. Click Advanced display settings and then select the desired resolution.
   - In Windows 8, 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 display is set, and then click OK.

   - In Windows 7, 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 display 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 website.

   Otherwise, you can get the latest updated video drivers from the video hardware manufacturer's website. site. The following list shows some of the video hardware websites:

   - Check for NVIDIA video driver updates at NVIDIA (in English).
   - Check for AMD video driver updates at AMD (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 display is using Windows 7, complete the following steps:
    1. 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.
    2. If the computer connected to the display is using Windows 8, refer to the Windows 8 Safe Mode document.
    3. While the computer is in Safe Mode, press the Auto button on the front of the display to run Auto Adjustment again.
    4. If the display is sharper in Safe Mode, while still in Safe Mode, reinstall the display drivers from the CD that came with the display.
10. If the display is still blurry, it 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 display. Find the native resolution of a flat panel display on the box, in the specifications, or in the printed material that came with the display. 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 displays 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 display.

note:

If your screen flickers in Windows 10, it is usually caused by incompatible apps or display drivers. To find out whether an app or driver is causing the problem, check to see if Task Manager flickers. Then, based on that information, you'll need to either uninstall the app or update the display driver.

Figure : Flickering screen

1. To change the screen resolution and refresh rate settings in Windows, do the following:
    - **In Windows 10**
        1. Right-click the **desktop** and click Display settings.
        2. Under **Customize your display**, at the bottom, click Advanced display settings.
        3. Under **Related settings**, click Display adapter properties.
        4. Select the **Monitor** tab.
        5. Under **Screen refresh rate**, select another refresh rate if available.
        6. Click OK to save the changes.
    - **In Windows 8**
        1. Press the Windows key + X key, and click Control Panel.
        2. Find the Appearance and Personalization area, and click Adjust Screen Resolution.
        3. Move the slider bar until the screen resolution matches the native resolution.
        4. Click Advanced settings, and then click the Monitor tab.
        5. If it is not already selected, select the Screen refresh rate that matches the default rate for your display.
        6. Click OK, and then click OK again.
    - **In Windows 7**
        1. Click Start, and then click Control Panel.
        2. Find the Appearance and Personalization area, and click Adjust Screen Resolution.
        3. Move the slider bar until the screen resolution matches the native resolution.
        4. Click Advanced settings, and then click the Monitor tab.
        5. Select the Screen refresh rate that matches the default rate for your display (if it is not already selected).
        6. 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 website.

   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 (in English).
   - Check for ATI video driver updates at AMD (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 display. Displays 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 display to see if they is producing a field that causes the flicker.
7. If the display 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 display to another computer, such as a notebook computer.

   If the flicker is gone when the display is connected to another computer, the graphics adapter hardware on the first computer might need to be upgraded to use the display.

Several colored horizontal or vertical lines in the display

Several vertical lines are shown on the display.

Figure : Vertical lines in the display

1. Use the buttons on the front of the display to open the on-screen menu, and select Factory Reset or Default.

   If you need help using the on-screen menu, see the manual for your display.

2. Unplug the video cable between the computer and the display 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 display.
3. If the display 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 display to another computer. If the lines appear when the display is connected to the second computer, the display might be damaged or defective.

   If the lines disappear when the display is connected to another computer, connect the display 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 website.

   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 (in English).
   - Check for AMD video driver updates at AMD (in English).
   - Check for S3 video driver updates at S3 Graphics (in English).
   - Check for Intel video support and downloads, Intel Downloads (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.

Screen is discolored

The entire screen is discolored.

Figure : Incorrect colors

Figure : 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 display.
3. Press Menu, and select Factory Reset. If the screen is still discolored, continue to the next step.
4. If the display 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 display to another computer. If the colors are incorrect when the display is connected to the second computer, the display might be damaged or defective.
6. Service the display.

A message displays about No signal or Signal out of range

Whenever these types of messages appear on the screen, the display 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 display, and make sure the computer is using a compatible display mode. For more information, see HP support document 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 display sending it into low power mode. Power saving modes can also occur if the display 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 HP support document Flat Panel Monitor Displays Message About No Signal, Signal out of Range, Sleep, or Power Save.

General troubleshooting tips for display quality issues

The following are some general troubleshooting steps of poor display quality.

note:

If your screen flickers in Windows 10, it is usually caused by incompatible apps or display drivers. To find out whether an app or driver is causing the problem, check to see if Task Manager flickers. Then, based on that information, you'll need to either uninstall the app or update the display driver.

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 display.
2. Press Menu, and select Factory Reset.
3. If the display 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 resolution of the display. Find the native resolution for your display from the box the display came in, the Monitor User Guide, or product specifications. To change the display resolution, use the following steps:
    1. In Windows 8, press the Windows key + X key, click Control Panel, find the Appearance and Personalization area, and then click Adjust Screen Resolution.

       In Windows 7, click Start, click Control Panel, and click Adjust Screen Resolution in Appearance and Personalization.

    2. Move the slider bar until the native resolution for the display 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 display.

   If you have an HP computer, update your video drivers from the HP website. Otherwise you can get the latest updated video drivers from the video hardware manufacturers websites. The following list shows some of the video hardware websites:

    - Check for NVIDIA video driver updates at NVIDIA (in English).

    - Check for AMD video driver updates at AMD (in English).
    - Check for S3 video driver updates at S3 Graphics (in English).
    - Check for Intel video support and downloads, Intel Downloads (in English).
6. Fine tune brightness, colors, image position, and contrast using the on-screen buttons on the display. You can find image adjustment information in the display User Guide or in the online support document "Using and Adjusting your Monitor."
7. 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.
8. If the image quality problem persists, the display 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 display.
    - The display cannot show red, green, or blue, even from the display's on-screen menu. This indicates a main board failure: replace the display 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.