A+ Core 1 and Core 2 CertMaster Perform 15.0

4.3.7 Troubleshoot Video Quality Issues

Video quality issues, such as artifacts or glitches, can result from problems with the display or the input source (e.g., video card). Below are common issues and steps for troubleshooting:

- **Dim image**: Check the On-Screen Display (OSD) to adjust brightness and contrast. Power-saving modes or features like adaptive brightness or eye-saving mode may reduce brightness automatically, triggered by ambient light sensors or specific times of day. If the image is barely visible, the backlight may have failed, and the display may need repair or replacement.
- **Fuzzy image**: A fuzzy image is often due to a mismatch between the output resolution and the display's native resolution. For example, if a monitor's native resolution is 1920x1080 but the video card is set to 1024x768, the image will appear blurry. To resolve, adjust the resolution in the operating system or update the video driver.
- **Flashing screen**: Check the video cable and connectors to ensure they are securely attached. Flickering or flashing could also result from failing backlight components or internal circuitry. Other signs of failure include bands, lines, or bright spots. If so, the display may need repair.

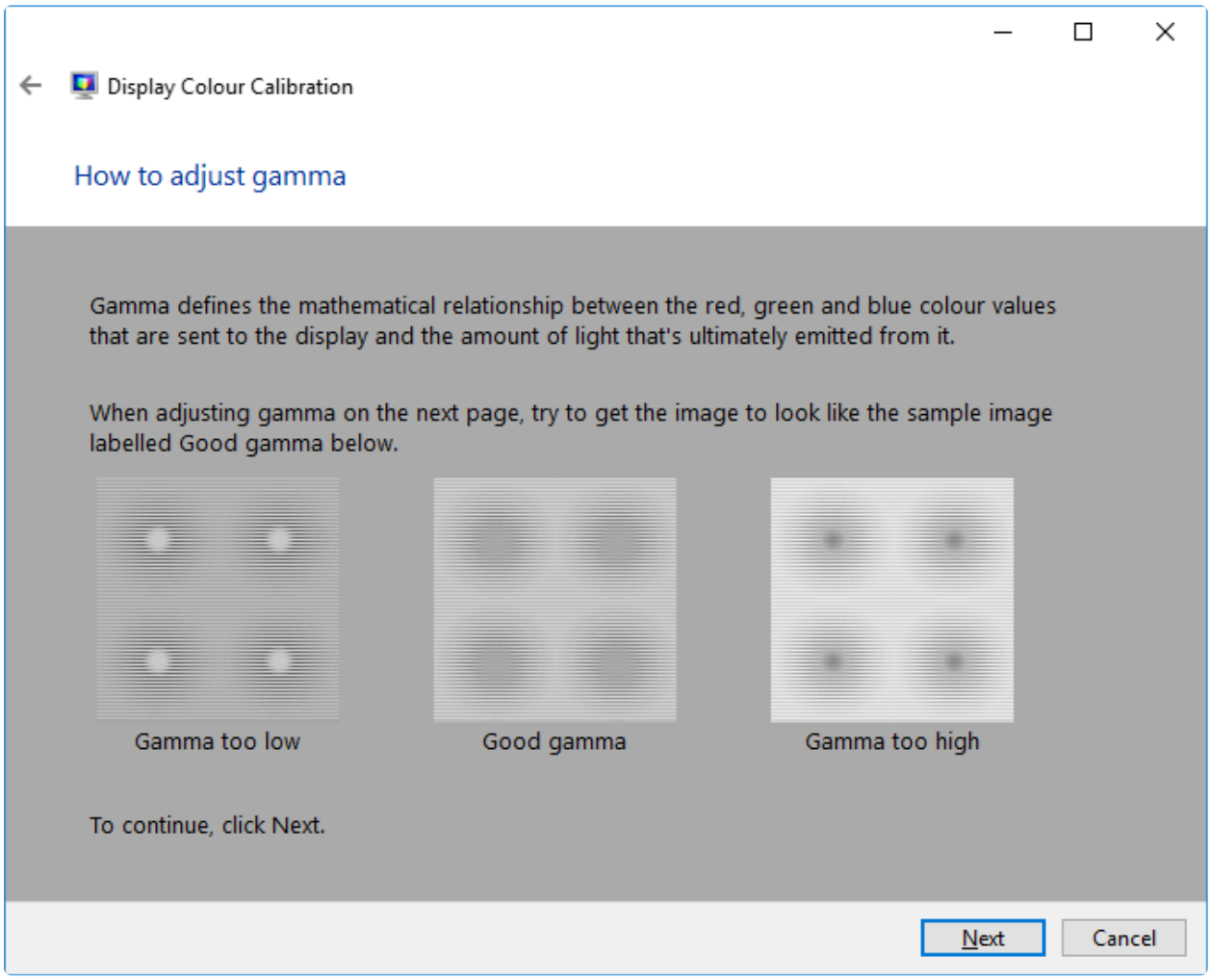
> A faulty or overheating video card can also cause flashing. Try connecting the monitor to another computer to isolate the issue.

- **Dead pixels**: Stuck (constantly bright) or dead (black) pixels can occur in flat-panel displays. Stuck pixels may be fixed using pixel cycling software or by gently tapping the screen with a soft object. Dead pixels usually cannot be repaired. Check your warranty for replacement options.
- **Display burn-in**: Burn-in happens when a static image is displayed for too long, leaving a ghost image on the screen. OLED and plasma displays are more prone to burn-in than TFT/LED screens. Prevent burn-in by using a screen saver or enabling the display's auto-off function during inactivity.

> A TFT/LED monitor uses an LED backlight to illuminate the image. In an OLED, each pixel provides its own illumination.

- **Incorrect color display**: For digital art production, it is crucial to calibrate the display to match scanning devices and print output. Color calibration involves adjusting screen and scanner settings to balance color input and output using a color profile. Utilize the Color Management applet in Control Panel, along with test card color patterns and spectrophotometers, to define and verify this profile.

Display Color Calibration utility in Windows 10



Screenshot courtesy of Microsoft.

▼ Description

The text reads, Gamma defines the relationship between red, green, and blue color values that are sent to the display and the amount of light that's ultimately emitted from it. When adjusting gamma on the next page, try to get the image to look like the sample image labelled Good gamma below. Three examples of gamma settings are shown: Gamma too low: The circles are faint with dark outer rings and visible shadows. Good gamma: The circles blend smoothly into the background with minimal visible shadows. Gamma too high: The circles are overly bright and fade

into the background. Next and Cancel buttons are at the bottom. Users are instructed to click next to continue.

Color glitches, such as purple or green horizontal lines or unexpected color changes, are often caused by a faulty or loose connector or low-quality cabling. Try replacing the cable. If the issue persists, there may be a hardware fault in the monitor or graphics adapter.

- **Audio issues**: HDMI and DisplayPort can transmit both video and audio, while DVI and VGA do not. If you're not getting audio from built-in speakers, check power, connections, and volume controls. Verify that the correct audio output is selected in the operating system and that volume settings are appropriate.
- **Sizing issues:** If the screen appears stretched, compressed, or has black bars around the edges, adjust the display settings on your computer to match the monitor's native resolution and use the monitor's on-screen display (OSD) menu to fit the image to the screen. Additionally, ensure that the correct video drivers are installed and updated.
- **Distorted image**: If the screen appears wavy or shows geometric warping, like pincushion effects, check for interference from nearby electronic devices, secure all cable connections, and ensure the display settings match the monitor's native resolution. For a CRT (Cathode Ray Tube), adjust the pincushion settings and consider replacing a potentially faulty cable.