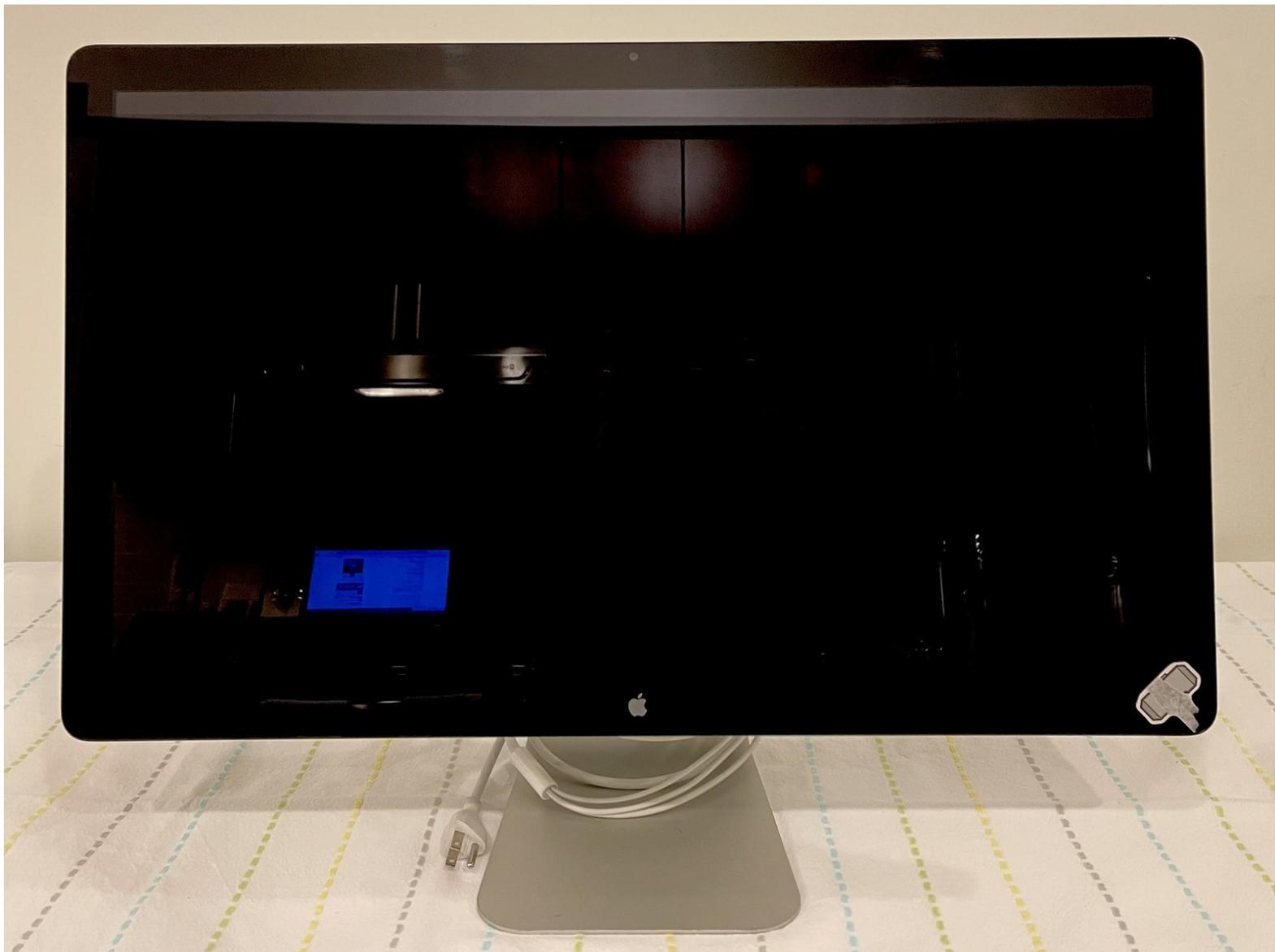




# Apple LED Cinema Display 27" LED Panel Replacement

In this guide we will show on how to replace an LED panel as well as the steps needed to safely remove necessary parts in order to access the LED Display.

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# INTRODUCTION

## Identifying Features

The Apple LED Cinema Display (27-inch) 2010 has a built in liquid crystal display with LED backlight that includes an iSight Camera with microphone and 2.1mm speaker system. It can support resolution up to 2560 x 1440 pixels. The all-in-one cable creates a station for portable computers, which also includes a universal MagSafe up to 85W, Mini Display port with audio support, and three self-powered USB 2.0 ports.

## System Requirements

The LED Cinema Display (27-inch) works with Mac computers running Mac OS X 10.6.4 up to Mac OS 11.2 that have a Mini DisplayPort connector.

## About this Guide

In this guide we will performing an LED panel replacement for the Apple Cinema Display (27-inch) in order to show the user on how to change the LED panel can be accomplished.

This guide is useful in cases of the LED panel malfunctioning; a few examples would be distorted video output or no video output from the panel, dead pixels, and/or physical damage.

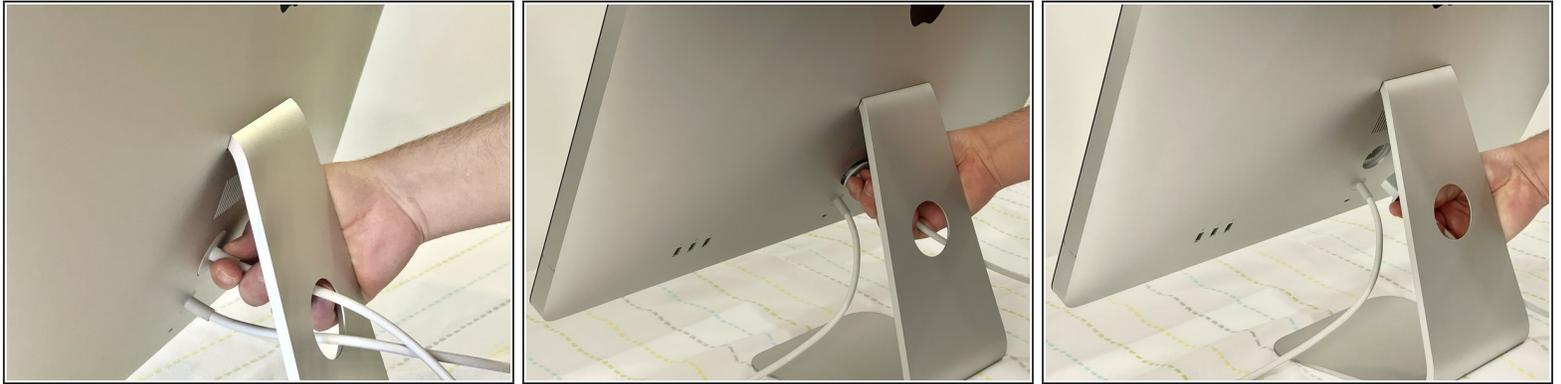
### TOOLS:

- [Anti-Static Wrist Strap](#) (1)
- [T10 Torx Screwdriver](#) (1)
- [Heavy-Duty Suction Cups \(Pair\)](#) (1)

### PARTS:

- [Apple LED Cinema Display panel](#) (1)

## Step 1 — LED panel

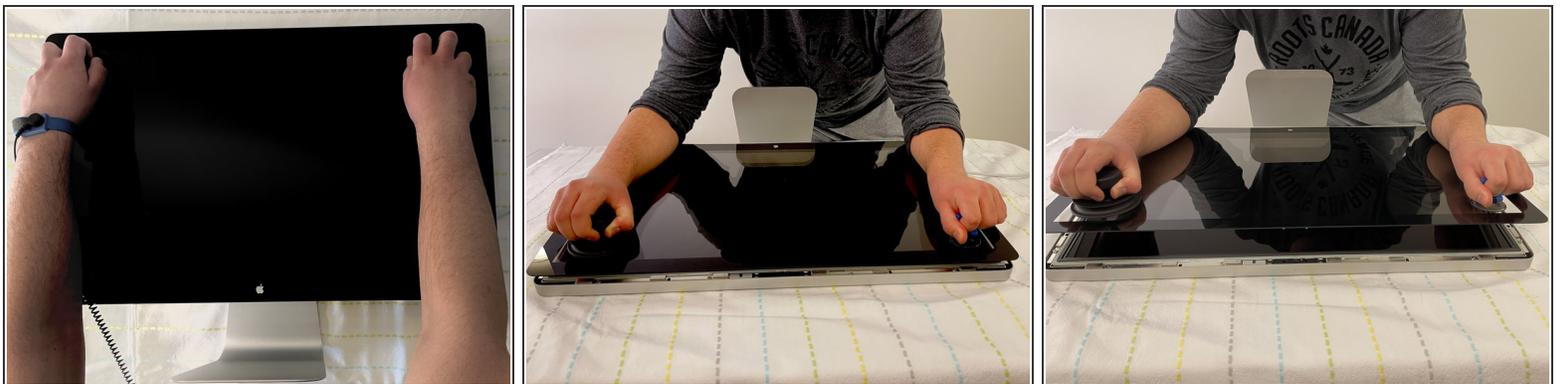


- **Before beginning any work on your Mac:** Unplug the computer and wait for 2 minutes in order for the power supply's capacitors to discharge.

**⚠ Be very careful** not to touch the capacitor leads or any exposed solder joints on the back of the power supply.

**i** The all-in-one cable located underneath the power cable can **NOT** get disconnected from the rest of the enclosure.

## Step 2



**i** **Glass panel can be removed in various ways:**

- Lay the unit on its back and press clean suction cups in opposite corners on the glass panel, or...
- Lay the unit on its back and press clean suction cups on top.
- Lift the glass panel up and off.

### Step 3



**i First Steps** Remove the glass panel as shown on step 2.

- Upon disassembly, handle the LED panel only from the metal railings on either side and avoid touching the panel as much as possible.
- ⚠ Do not press on the front surface of the LED panel when handling, as this could cause the pixels from the panel to malfunction and/or stop working.

### Step 4



- Remove the twelve, 10 mm Torx T10 screws around the border of the display frame.
- ☑ Be sure not to overtighten the LED screws during reassembly, as it could cause light leakage after the unit is reassembled.

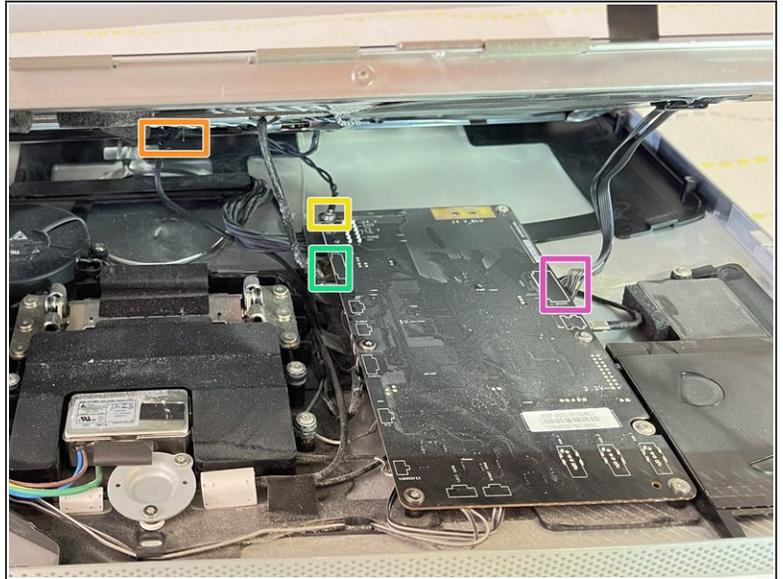
## Step 5



- Use the black tabs to raise the bottom edge of the LCD a few inches to access the cables inside.

 Tilt the display up no more than 4 inches (10 cm). Pulling the display too far could damage the cables or connectors.

## Step 6



 Avoid coming in close contact or touching any components of the Power Supply.

 Looking into the gap under the LCD, disconnect four (4) cables:

-  DisplayPort
-  Function
-  Ground pin
-  LED backlight driver

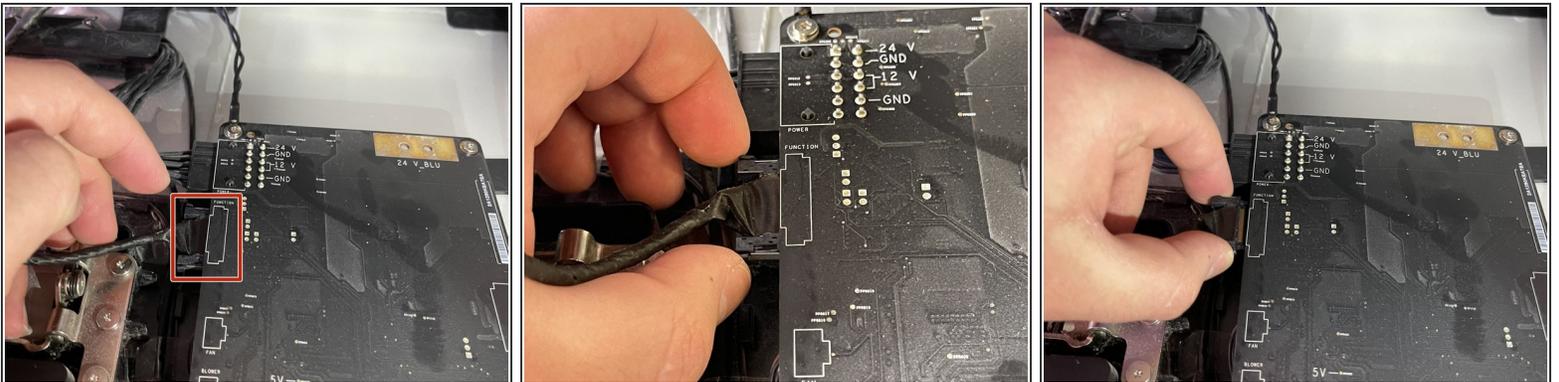
 Verify that all cables are firmly seated into connectors during reassembly. An insecure cable connection can cause image flicker.

## Step 7



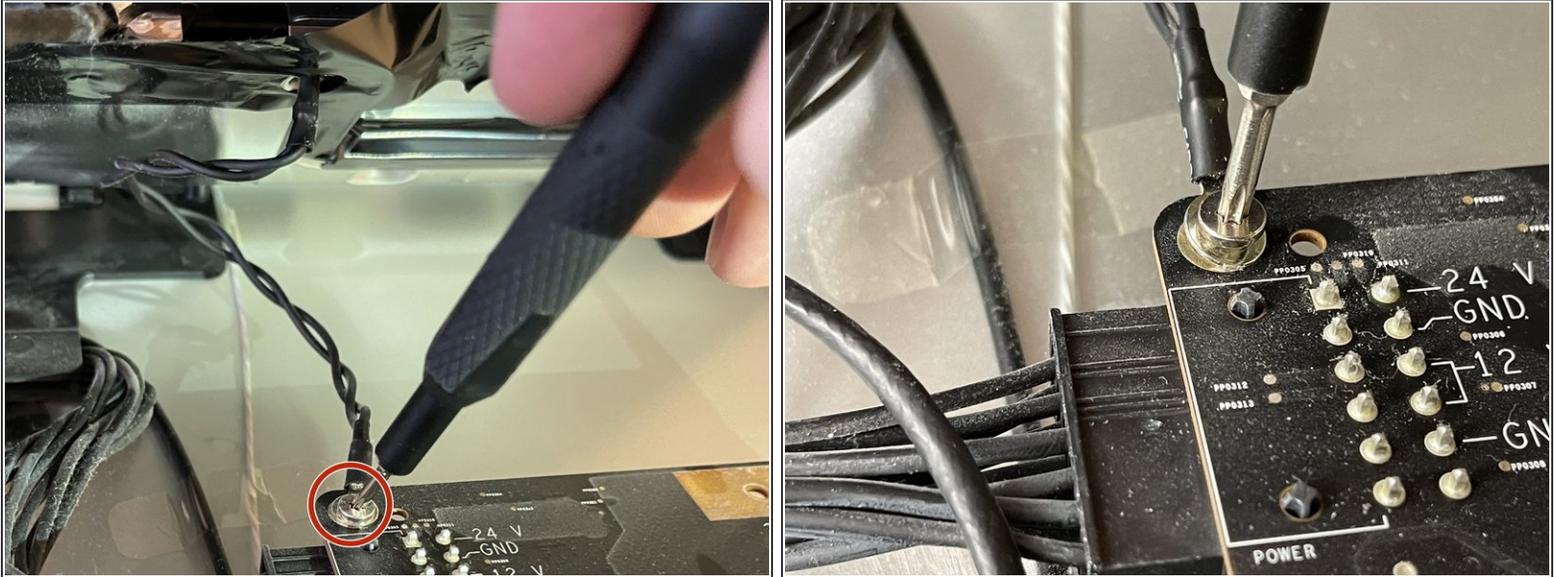
- Peel back the mylar and foil tape on the DisplayPort cable on the back of the LED panel.
- Squeeze the sides of connector and pull it out.
- ☑ Make sure the 24 pin cable is correctly aligned with the LED panel upon reassembly.

## Step 8



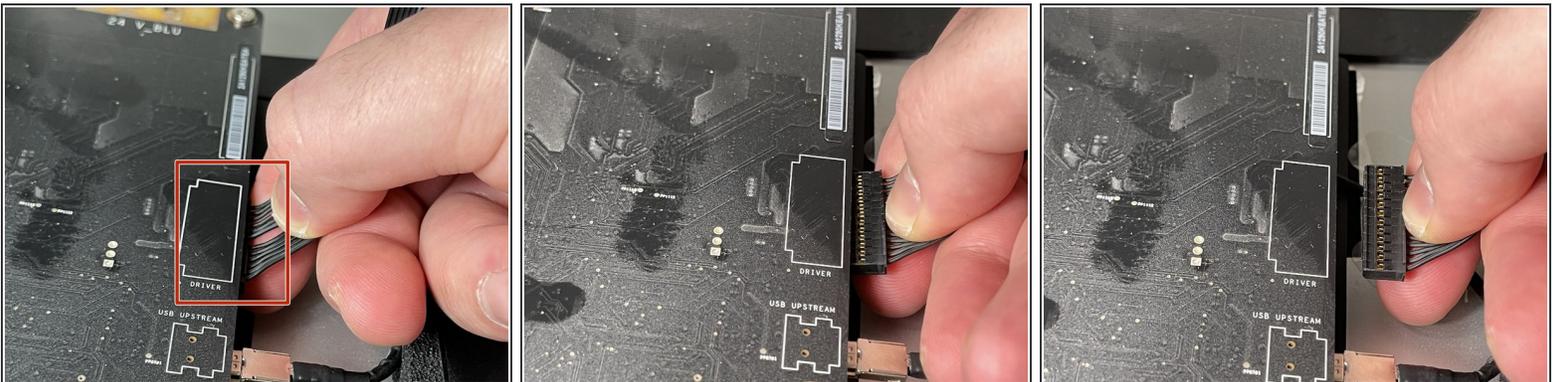
- Squeeze the sides of the function cable connector on the top left edge of the logic board and pull it straight out.
- ☑ Make sure to align the function cable correctly with the logic board during reassembly.

## Step 9



- Close-up of the ground cable at top left of logic board. Remove the 10 mm Torx T10 screw from top left corner of logic board.
- Disconnect the ground cable.
- ⚠️ Avoid touching the double pins on the top left corner of the logic board with a screwdriver.

## Step 10



- Pinch the LED backlight driver cable on the underside of the center right edge of the logic board and pull straight out.
- ⚠️ Avoid putting force on the logic board to bend as deformation of a logic board can cause issues.

## Step 11



- Handle the LCD panel by the edges and lift it upwards until it separates from the rest of the enclosure.
- ☞ This guide can be followed in reverse in order to perform an installation and reassembly of the LED panel to the rest of the enclosure.

In order to put everything back to its original place, we will need the new LCD panel and to follow the above steps in reverse.