



How To Convert An iMac Into An External Monitor

Recycle the screen of an old iMac so that it can be plugged directly into the graphics card or video port of another computer and used as a monitor.

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INTRODUCTION

This guide is an evolution of an answer which I posted to [Can I Mod an early 2009 24" iMac to external monitor?](#): The question "Can I mod my older iMac to use it as a monitor?" has been asked on iFixit and many other internet forums for over a decade, and it is rarely answered correctly.

This guide is a serious hardware mod. *This is not target display mode. This is not a software fix.* When this guide is followed, the user will be able to string a video cable between another computer and the iMac and have the iMac behave just like an external monitor.

In summary:

- 1) Completely teardown the iMac, removing everything.
- 2) Install a video control board, new inverter, and new power supply for the screen.
- 3) install new video-in ports on the exterior case.
- 4) Re-install the screen, reassemble the iMac case.

Prerequisites

- Having followed the guide [How to Identify The Make & Model Of The iMac's Screen For The Purpose Of Buying The Correct Video Driver Board](#) and purchased the appropriate Video Driver Board and Power Supply for your iMac.
- Having completely disassembled your iMac. Following the guide for [iMac Intel 20" EMC 2105 and 2118 Logic Board Replacement](#) will allow you to teardown most of the iMac. The rest

[iMac Intel 20" EMC 2105 and 2118 Logic Board Replacement](#)

so that the case is empty.



TOOLS:

- T10 Torx Screwdriver (1)
- T8 Torx Screwdriver (1)
- T6 Torx Screwdriver (1)
- Phillips #2 Screwdriver (1)
- Phillips #00 Screwdriver (1)
- Plastic Credit Card (1)
- Electrical outlet tester (1)
- Soldering Iron (1)
- Small hand saw (1)
- Dremmel (1)
- Dremmel saw blade bit ##### (1)



PARTS:

- 20" iMac Intel - White (1)
- Outlet Adapter (1)
Must have holes in the electrical prongs, to aid in soldering to it.
- 1x 12V 5A generic power supply (1)
- Video Driver Board with CCFL Inverter (1)
varies
**** READ SCREEN IDENTIFICATION GUIDE BEFORE PURCHASING ****
- Female-female HDMI keystone jack (1)
- short HDMI cable (1)
Male-Male
should be 18" or less
- Optional VGA Decora Plate (1)
- Optional Short VGA Cable (1)
Male-Male
should be 18" or less
- Heat Shrink Tubing Assortment (1)
- Zip Ties (20)
assorted sizes
used for internal cable management and securing certain components. you should have several sizes on hand.

Step 1 — Identifying Your Screen Model



- Read and follow the [iMac Intel 20" EMC 2105 and 2118 Display Replacement](#) guide, and remove your screen completely.
- Flip the screen over, placing it on a towel to keep it safe. Locate the manufacturer's sticker on the back of the screen, which should contain the screen's Model Number
- The screen used in this particular iMac 20" A#### EMC#### is an LG-brand model-LM201W01, though yours may be different.

Step 2 — Sourcing A Video Control Board



- Search either AliExpress.com or Ebay.com using the search phrase “ *Your-Screen-Model-Number* Control Board”.
- If your iMac is a 20", they should be around \$30-\$40. If 24", \$60-\$80.
- Order the video driver board for your screen. It will probably ship from Asia, and take 2-3 weeks to get to you.
- It probably will not come with a power supply. This is normal. Most video control boards require 12v 5A power supplies. You may have one in your spare electronics bin, so check there before buying one: Old routers, PC laptops, etc may have compatible power supplies.

Step 3 — Placeholder for interim step



- placeholder

Step 4 — The Build



- Follow X guide for complete iMac disassembly.
- Placeholder for info about build

Step 5 — Tetris Time!



- conception phase.
- #show a pic of mine when it was done

Step 6 — Solder Outlet Adapter To Internal Power Cables



- Insert wisdom here.

To reassemble your device, follow these instructions in reverse order.