Figure 1: Commodore 1902A 14" CRT Monitor

1 Overview

The goal is to repair an old Commodore computer monitor. This particular monitor, the 1902A has two inputs. One for composite, and one for a mode which the C128 must run in, in order to produce video output for C64 compatibility mode or something. I'm not really sure. (todo). This means RGBI input must work.

Currently, the monitor has errors on both RGBI input, as well as composite input. This means that the errors are likely common to both signal paths.

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2   Work Log

I picked up an old HP TV service manual (6945A) for this project. I am
not knowledgable about televisions, but the more I read, the more I think I
can handle this. I have also the manual for the monitor, though it is quite
a bit sparse, comparably.

Quite a bit of the Commodore 1902A TV circuitry (H sync, V sync, etc) is
in a few ICs.

The waveforms in the Commodore manual were created with a (standard?)
NTSC test signal, the **10 bar gated rainbow pattern signal**. I am
currently researching how to generate that myself, without forking out the
cash for a video tester (Cheapest I saw the other day was $70. I wouldn't
pay more than $20.

From a brief search, most people have only setup rough test signals with
uCs that do either NTSC or PAL, but not necessarily the full 10 bar gated
test signal, instead only a passable working signal, to verify video output.