

How to make a video driver suitable for a 2600 or 7800

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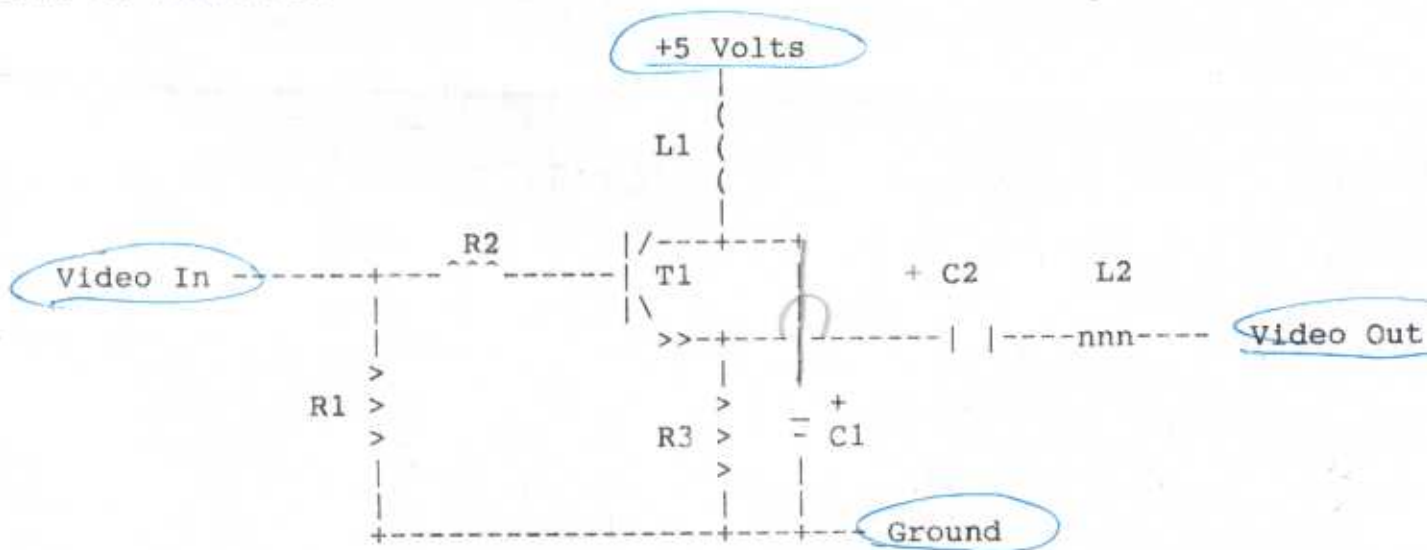
Parts list:

- T1 2SC1815
- R1 2.7K
- R2 150
- R3 68
- ~~L1 180 uH~~
- ~~L2 2.7 uH~~
- C1, C2 100 uF 6.3 V

371-013
271-010

wire list:

- R1:1 to Ground
- R1:2 to Video In
- R2:1 to Video In
- R2:2 to T1 base
- R3:1 to Ground
- R3:2 to T1 emitter
- L1:1 to +5V
- L1:2 to T1 collector
- C1:1 to Ground
- C1:2 to T1 collector (positive lead of C1)
- C2:1 to L2:1
- C2:2 to T1 emitter (positive lead of C2)
- L2:1 to C1:1
- L2:2 to Video Out



This is a simple common emitter amplifier. It is a non-inverting current amplifier and serves here to allow the video signal from the game to drive a standard composite monitor with 75 ohm impedance.

In order to prevent the audio from interfering with the video signal, the mixing oscillator must be disabled on the main circuit board. Disconnect the base lead of Q1 (a 2N3563 located near the RF modulator)

The audio doesn't need any extra buffering.

Places to get signals:

1. from RF modulator

Video: Pin 3

Ground: Pin 1

do not use pin 2 for the +5 volts

2. from Expansion Interface on 7800

Audio: Pin 17

Video: Pin 3

+5: Pin 2

Ground: Pin 1, 9, 18

3. from video mixer on main circuit board

Video: point where R10 thru R15, R3, C7, and C8 meet

Audio: point where R4 thru R6, C4, C5, and C9 meet

Ground: other end of R4, C7, or R14

+5: other end of C4

This is required for the 7800 and the Sears Video Arcade II.