

Preliminary manual Version 1.0 24-Feb-07 DHW/NESM

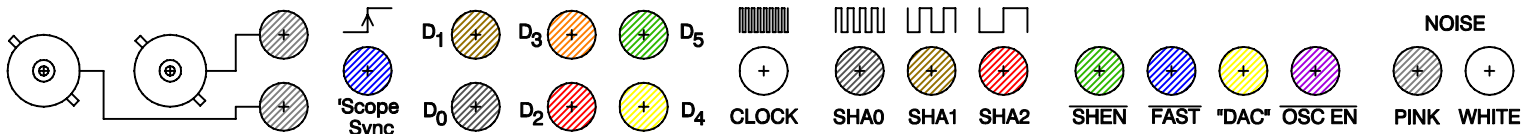
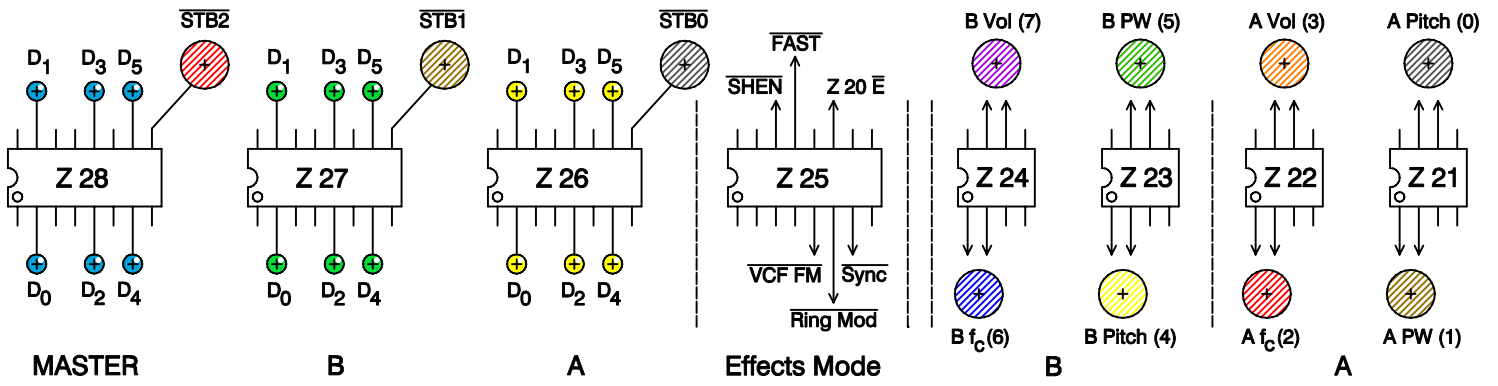
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This is a preliminary description of a Rhodes(tm) Chroma(tm) voice card test and repair fixture that I have built. It is a hand wired prototype; no circuit boards have been designed, and there are currently no plans for production, although that may change. Meanwhile, if you work on lots of Chromas, you can build your own from these schematics.

The schematics are designed to print on American "A" size or Euro "A4" size paper, as is this text. Unfortunately, when I was designing the front panel, I was thinking of the 8" box I built the thing in; Thus, part of the panel may not print on A4 paper (Oops!).

The cabinet is an LMB Heeger model MDDC885 enclosure, but the parts are cramed in so tight that I recomend using the next model up, which is an inch longer.

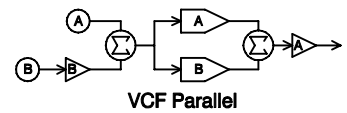
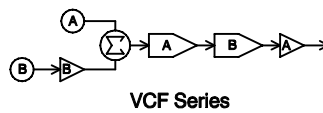
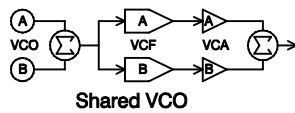
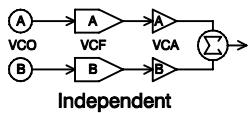
I will ultimately supply a full parts list and photos, but for now I want to get something up on the Web. Please send your feedback or comments to me, David Hillel Wilson, at: DWilSynth@aol.com



DIGITAL

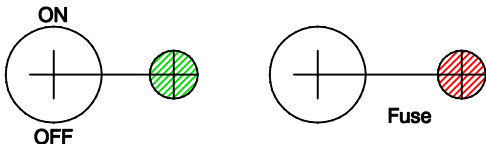
ANALOG

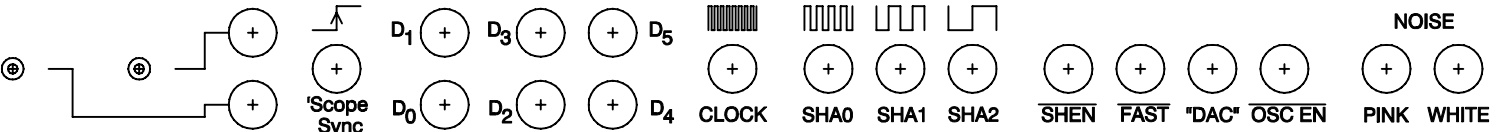
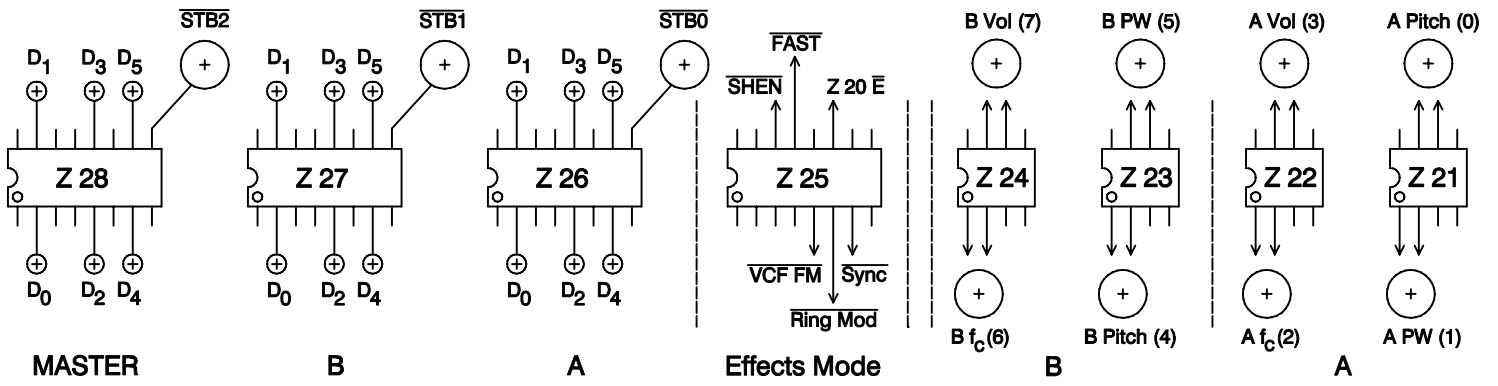
DIGITAL		ANALOG				
MASTER	B	A	B	A	A	
<p>VCF A FM from VCA B</p> <p>VCO A Ring Mod VCO B for VCO A</p> <p>OFF</p> <p>VCO B Sync'd to VCO A</p> <p>Effects (D₅, D₄)</p>	<p>Square/Pulse</p> <p>Sawtooth</p> <p>Pink</p> <p>White</p> <p>Noise</p> <p>B Wave (D₅, D₄)</p> <p>B VCO</p>	<p>Square/Pulse</p> <p>Sawtooth</p> <p>Pink</p> <p>White</p> <p>Noise</p> <p>A Wave (D₅, D₄)</p> <p>A VCO</p>	<p>B Volume (7)</p> <p>B VCA</p>	<p>B Pulse Wid (5)</p> <p>B VCO</p>	<p>A Volume (3)</p> <p>A VCA</p>	<p>A Pitch (0)</p> <p>A VCO</p>
<p>0</p> <p>1</p> <p>2</p> <p>3</p> <p>Output Select (D₃, D₂)</p>	<p>High Pass</p> <p>Low Pass</p> <p>B Mode (D₃)</p>	<p>High Pass</p> <p>Low Pass</p> <p>A Mode (D₃)</p>	<p>B f_c (6)</p> <p>B VCF</p>	<p>B Pitch (4)</p> <p>B VCO</p>	<p>A f_c (2)</p> <p>A VCF</p>	<p>A Pulse Wid (1)</p> <p>A VCO</p>
<p>Shared VCO Independent</p> <p>VCF Series</p> <p>VCF Parallel</p> <p>Patch Select (D₁, D₀)</p>	<p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>3</p> <p>2</p> <p>1</p> <p>0 self osc</p> <p>B Resonance (D₂, D₁, D₀)</p> <p>B VCF</p>	<p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>3</p> <p>2</p> <p>1</p> <p>0 self osc</p> <p>A Resonance (D₂, D₁, D₀)</p> <p>A VCF</p>	<p>Fast</p> <p>Off</p> <p>Slow</p> <p>Sample & Holds</p>	<p>Enable</p> <p>Disable</p> <p>Disable VCOs</p>	<p>Volume</p>	<p>OUT</p>
		<p>-18V -12VR</p> <p>0</p> <p>+5VR +12VR +18V</p>				



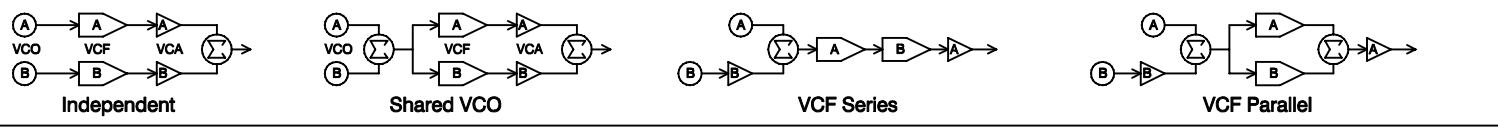
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Rhodes™ (ARP) Chroma Voice Card Test/Repair Fixture
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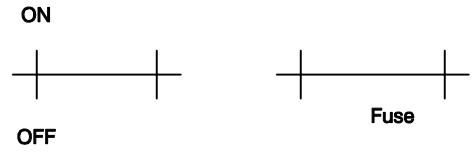


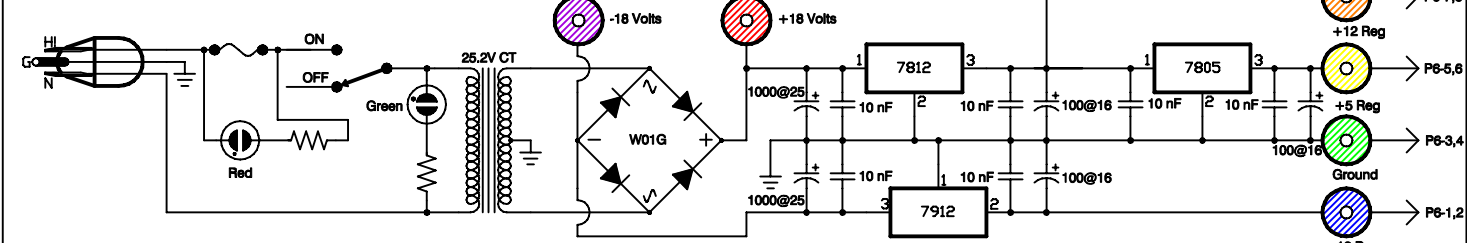
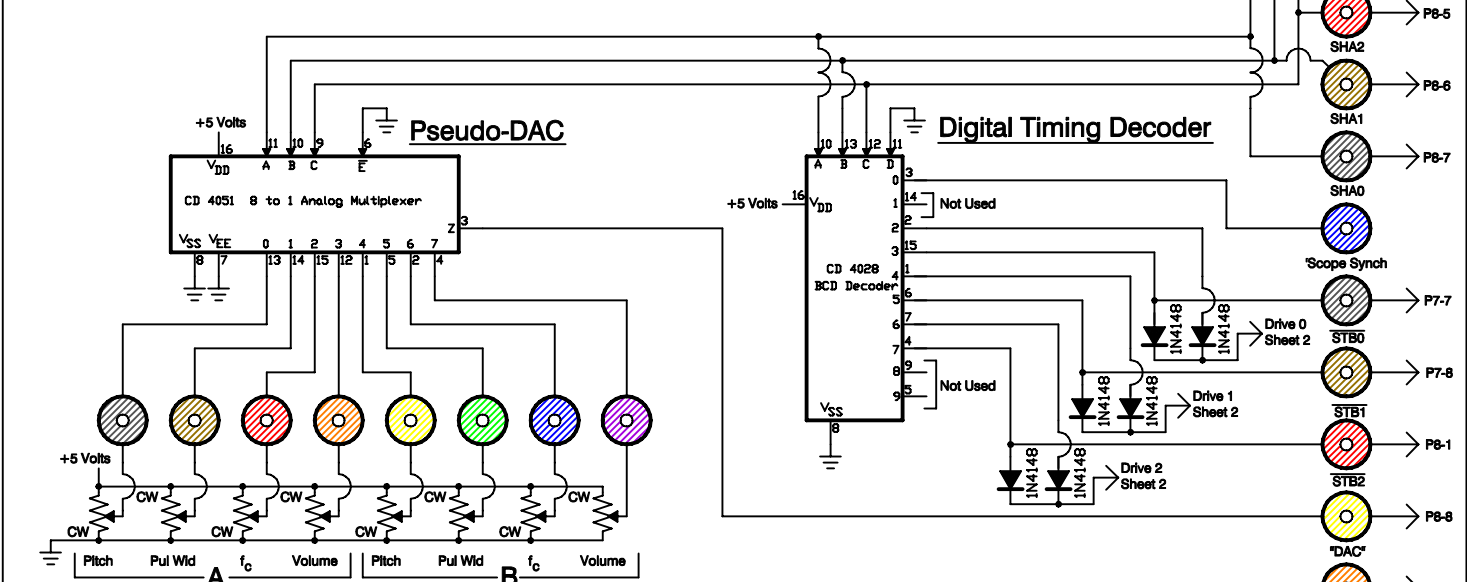
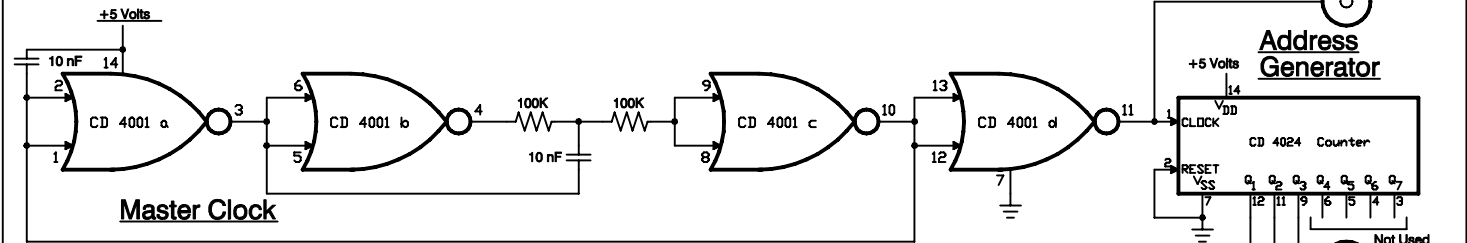
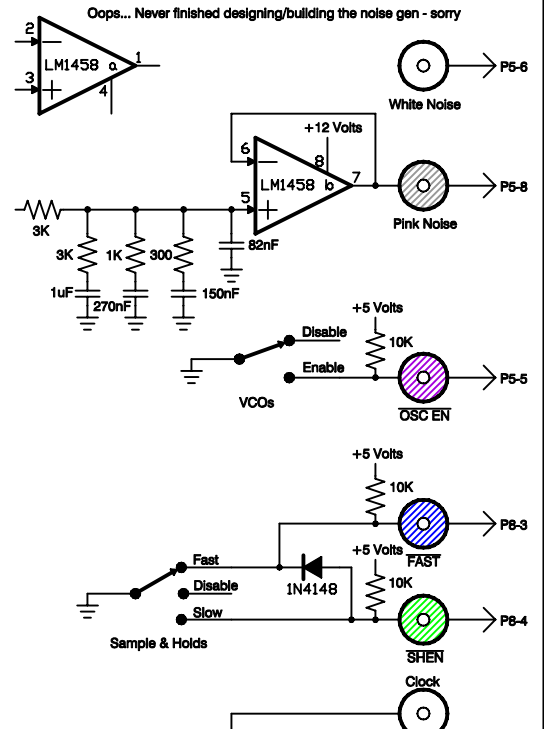
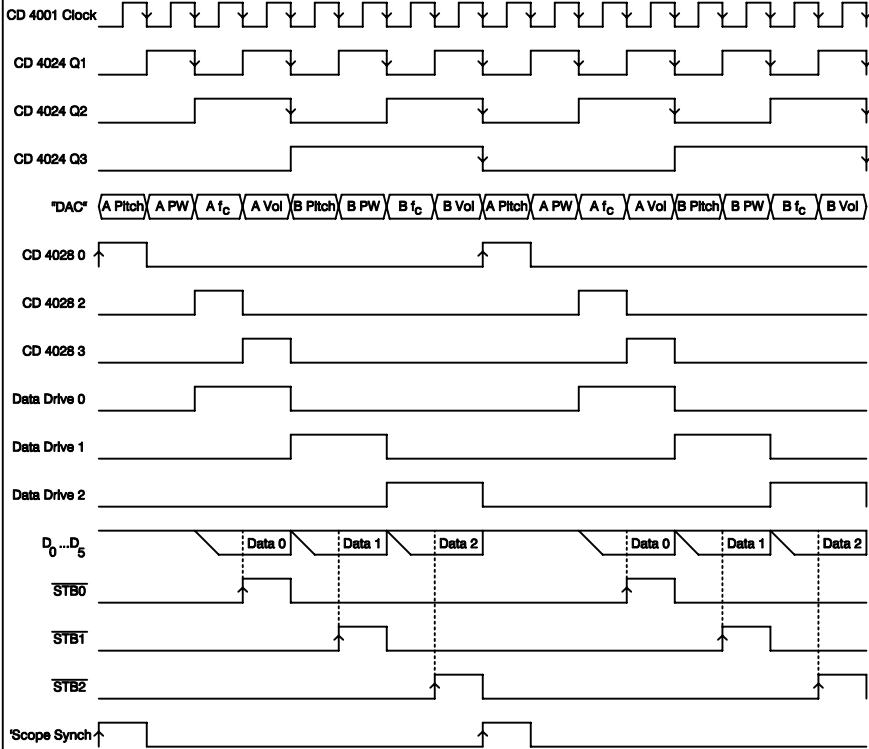
DIGITAL			ANALOG				
MASTER	B	A	B		A		
VCF A FM from VCA B OFF VCO A Ring Mod VCO B for VCO A VCO B Sync'd to VCO A Effects (D ₅ , D ₄) 0 1 2 3 Output Select (D ₃ , D ₂) Shared VCO Independent VCF Series VCF Parallel Patch Select (D ₁ , D ₀)	Square/Pulse Sawtooth Pink White Noise 'Scope Sync B Wave (D ₅ , D ₄) B VCO High Pass Low Pass B Mode (D ₃) 4 3 2 1 5 6 7 self osc B Resonance (D ₂ , D ₁ , D ₀) B VCF	Square/Pulse Sawtooth Pink White Noise A Wave (D ₅ , D ₄) A VCO High Pass Low Pass A Mode (D ₃) 4 3 2 1 5 6 7 self osc A Resonance (D ₂ , D ₁ , D ₀) A VCF	+ B Volume (7) B VCA	+ B Pulse Wid (5) B VCO	+ A Volume (3) A VCA	+ A Pitch (0) A VCO	
			+ B f _c (6) B VCF	+ B Pitch (4) B VCO	+ A f _c (2) A VCF	+ A Pulse Wid (1) A VCO	
			Off Slow Sample & Holds	Enable Disable VCOs	+ Volume	+ OUT	
			+ -18V	+ -12VR	+ +5VR	+ +12VR	+ +18V

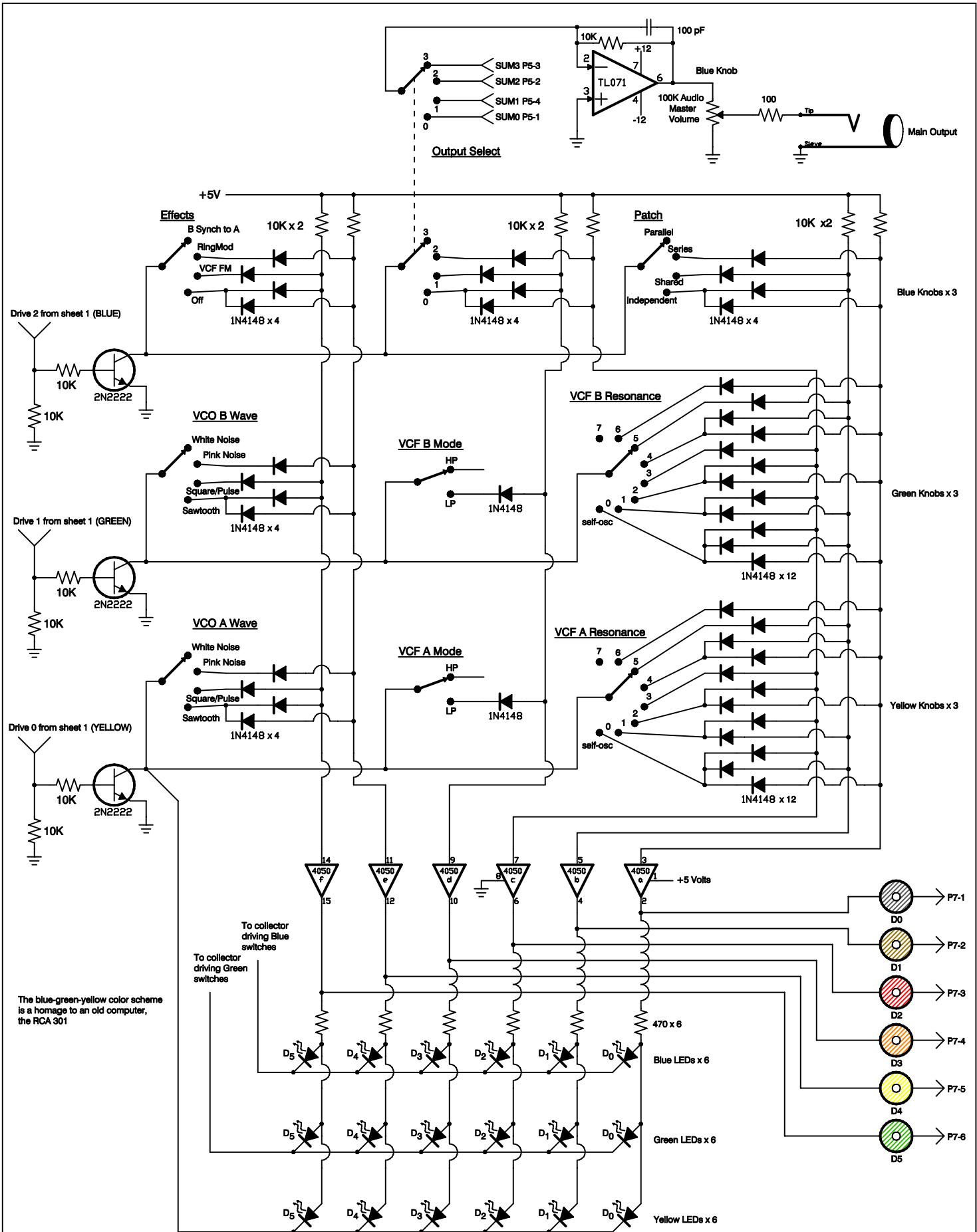


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Rhodes™ (ARP) Chroma Voice Card Test/Repair Fixture
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Drive 2 from sheet 1 (BLUE)

Drive 1 from sheet 1 (GREEN)

Drive 0 from sheet 1 (YELLOW)

The blue-green-yellow color scheme is a homage to an old computer, the RCA 301

Output Select

Blue Knob

100K Audio Master Volume

Main Output

Effects

VCO B Wave

VCO A Wave

VCF B Mode

VCF A Mode

Patch

VCF B Resonance

VCF A Resonance

Blue Knobs x 3

Green Knobs x 3

Yellow Knobs x 3

To collector driving Blue switches

To collector driving Green switches

Blue LEDs x 6

Green LEDs x 6

Yellow LEDs x 6

- P7-1 D0
- P7-2 D1
- P7-3 D2
- P7-4 D3
- P7-5 D4
- P7-6 D5