

Output V >	150mV rms		1V rms		2.5V rms	
	1kHz	10kHz	1kHz	10kHz	1kHz	10kHz
FET	.0009	.0026	.0005	.0025	.0007	.002
Op Amp	.0012	.0029	.00045	.0019	.00025	.0012

Table 1: Thd tests of OPA2134 stage, %THD v.s.Output Voltage for FET and Op Amp stage

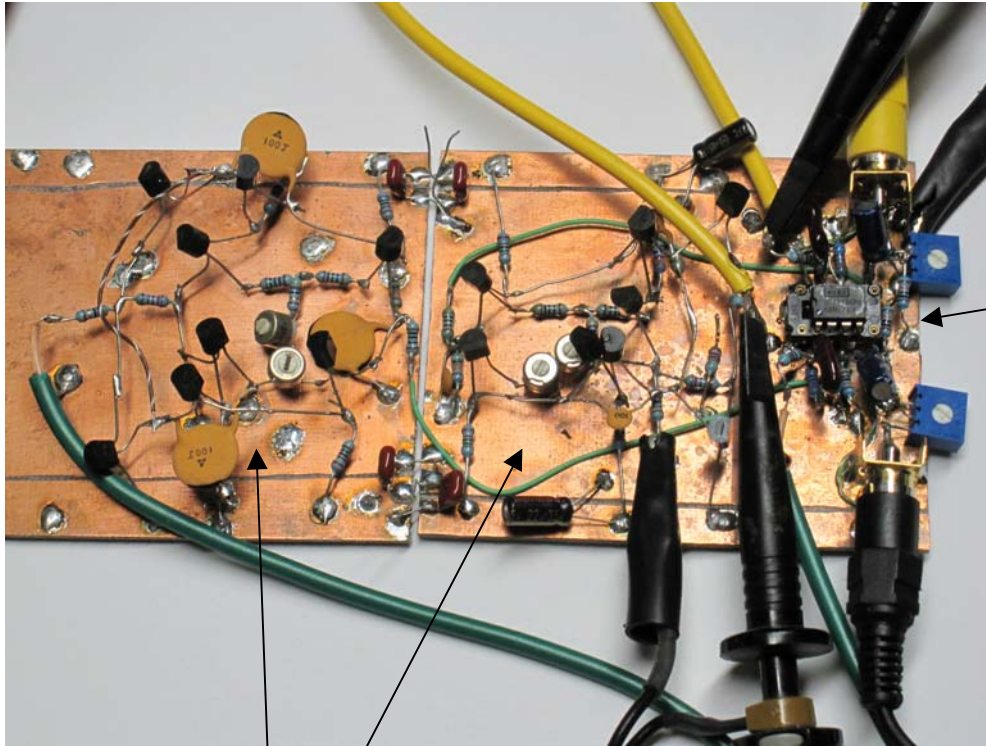
Output level ↓	Frequency	
	1kHz	10kHz
150mV	.0042 %	.012 %
1V	.0007 %	.0021 %
2.5V	.0005 %	.0016 %

%THD v.s. Output Voltage at 1kHz and 10kHz, with 50k Ohm to 350 Ohm load

Noise	Better than -96dB ref. 2V
Crosstalk, any line level input pair or left to right channels	-95dB @ 1kHz, -82dB @ 10kHz

Noise and crosstalk performance

Table 3: Preamp Performance Data



Dual FET Amp
Line stages

Dual Op Amp
Line stages

Photo 1: Comparison Test Circuit

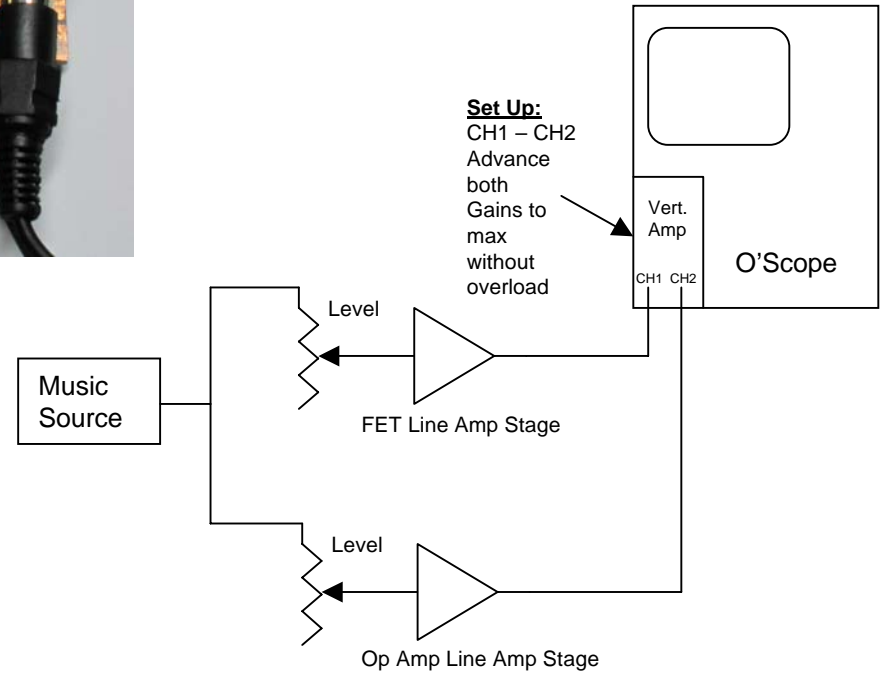


Figure 1: Comparison Test Block Diagram

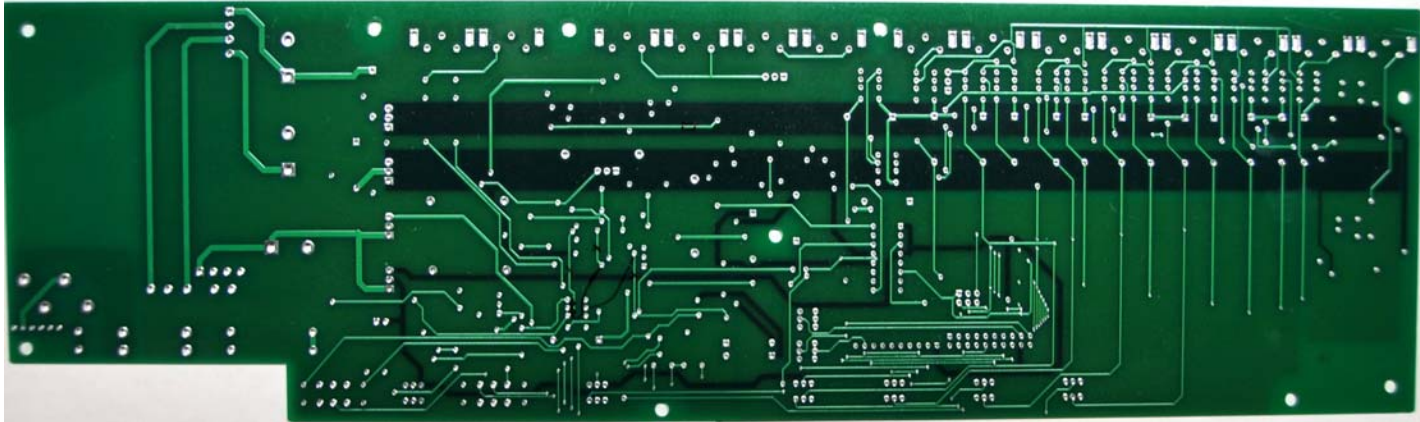
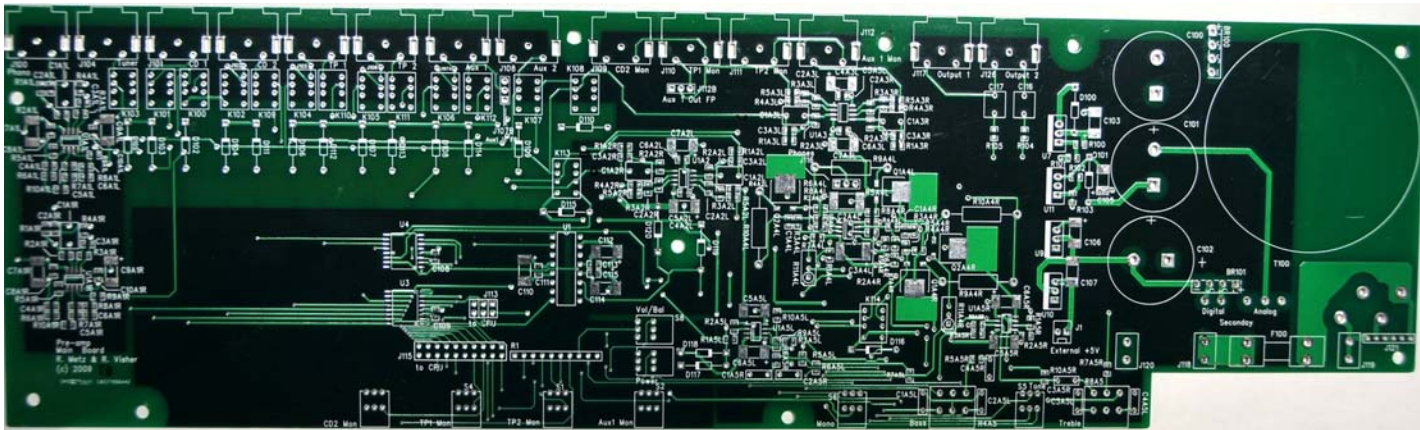


Photo 2: Main Board Layout

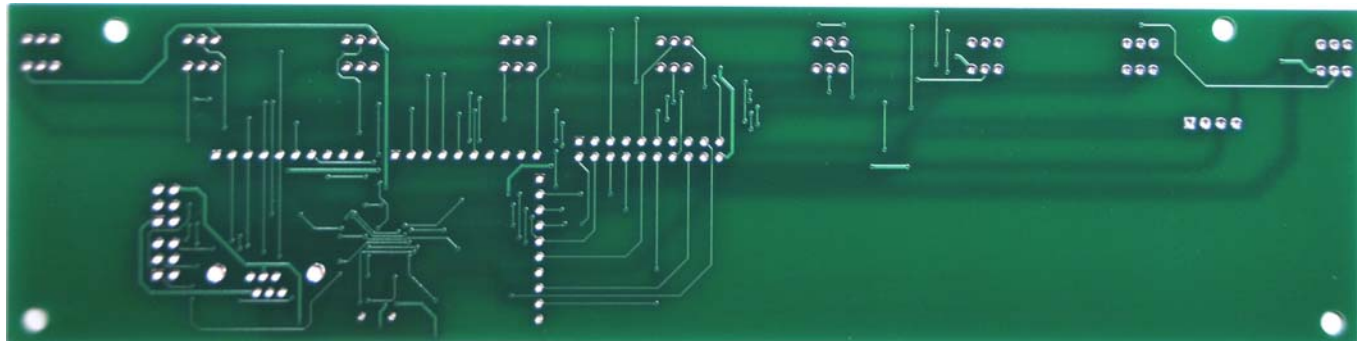
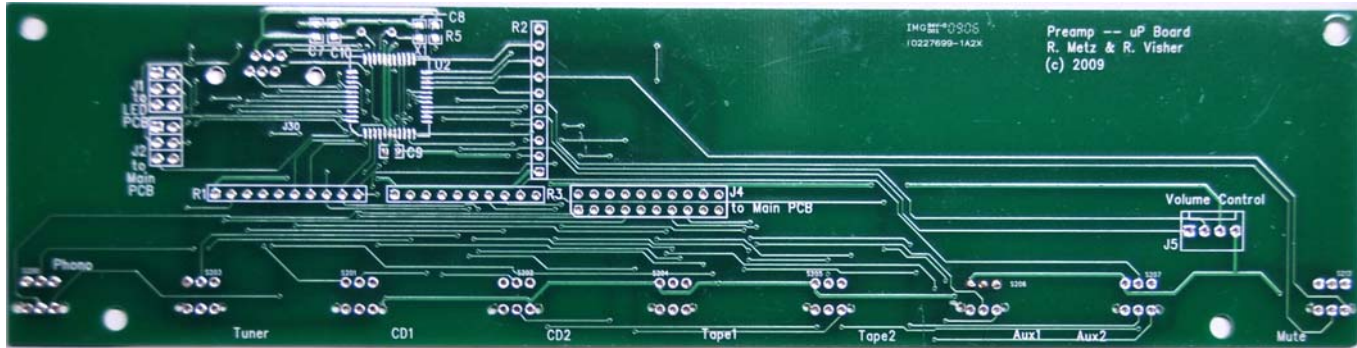


Photo 3: Control and Switch Board

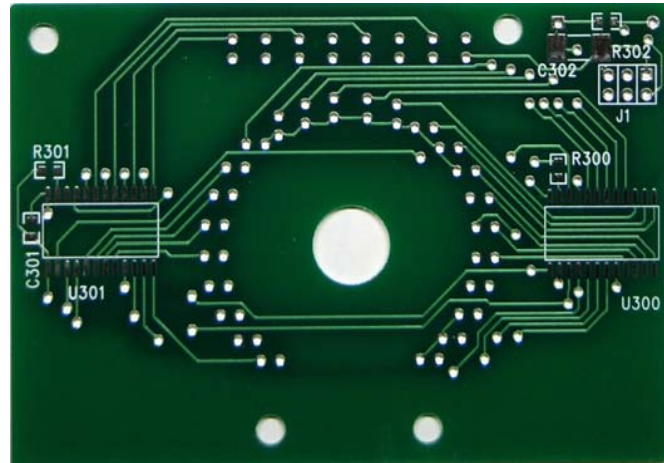
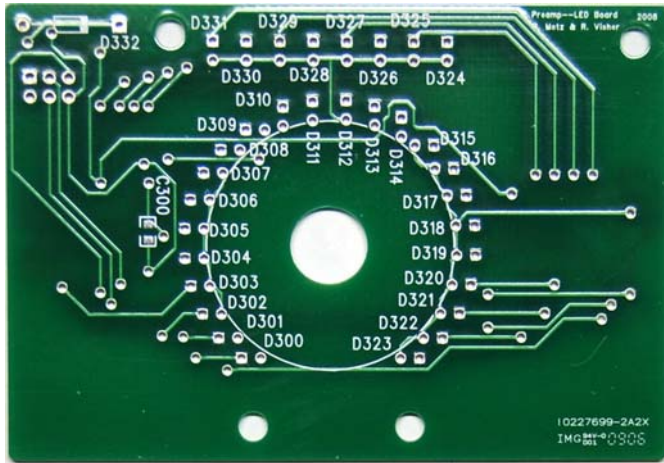


Photo 4: LED Board



Photo 5: Enclosure Front View

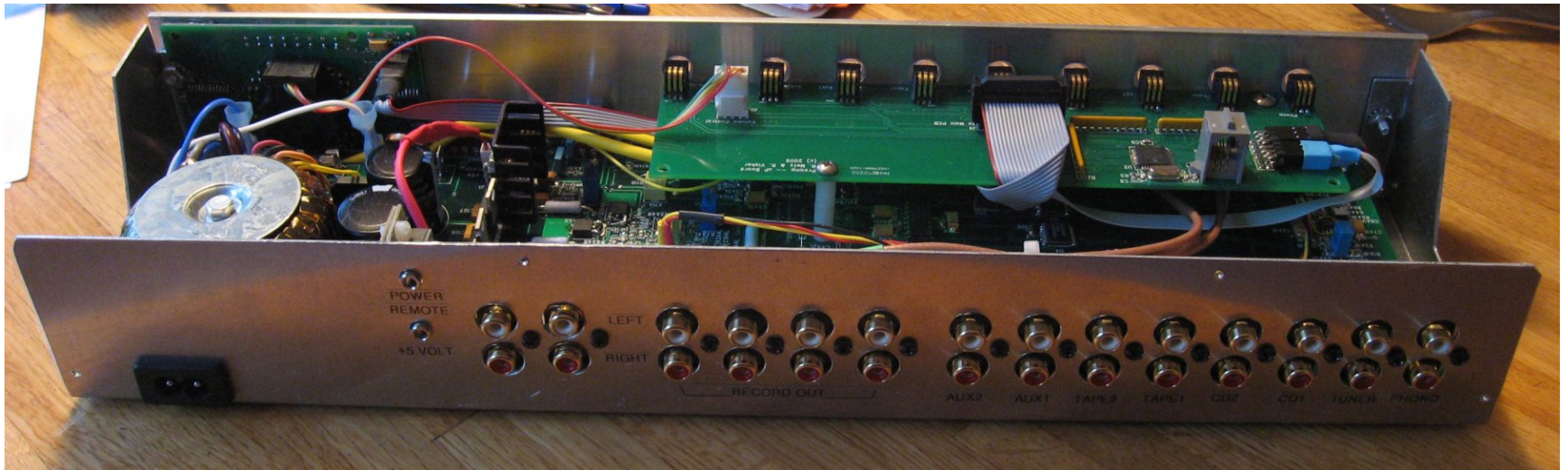


Photo 6: Enclosure Rear View

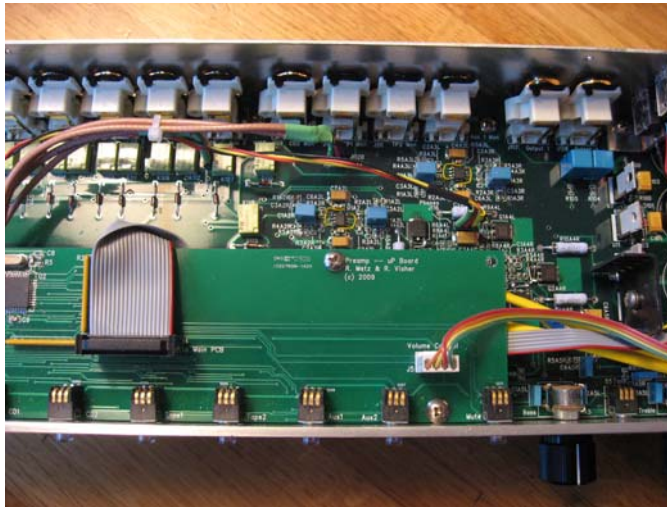


Photo 7: Assembled Interior

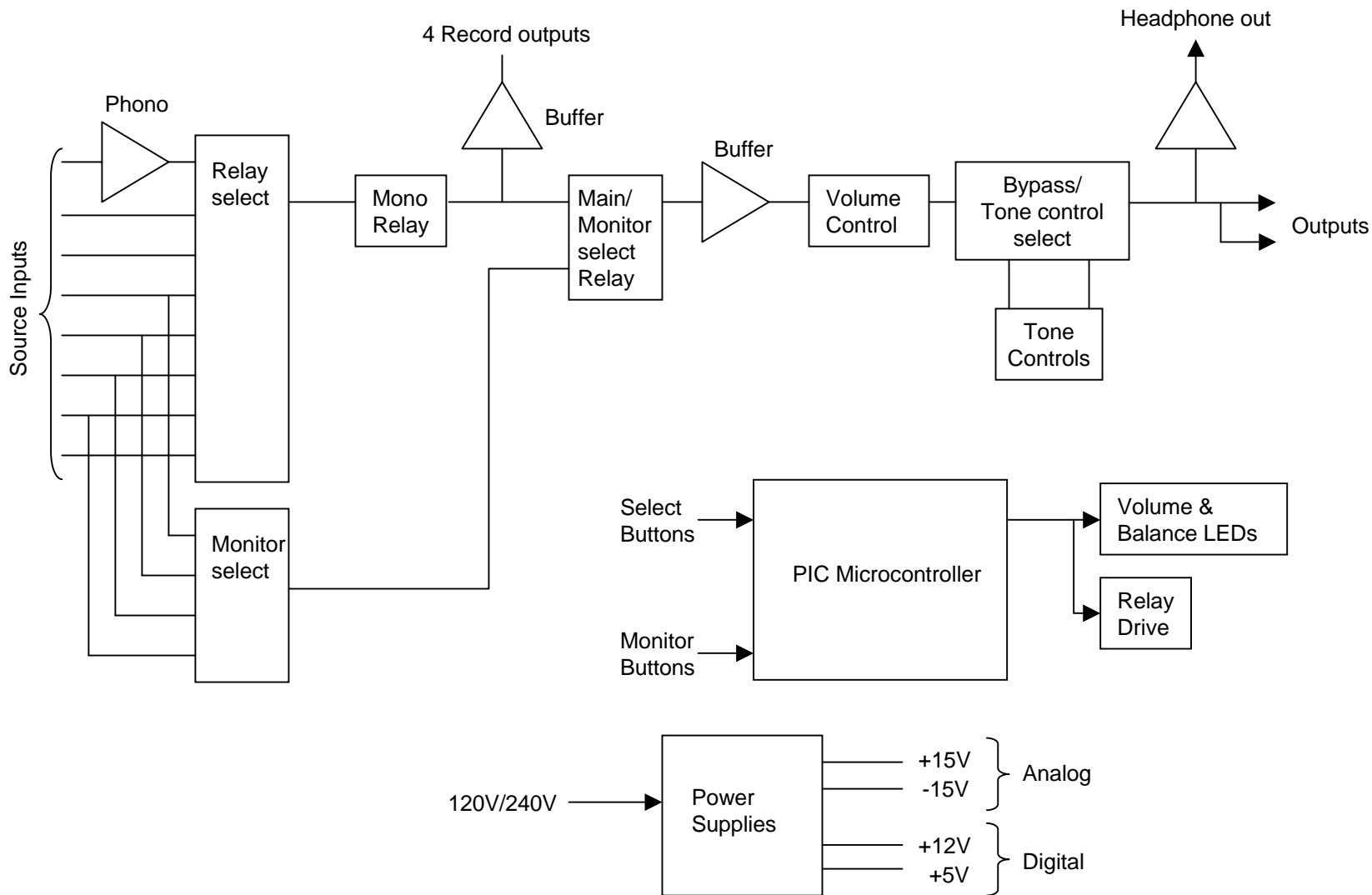


Figure 2: Preamp Block Diagram

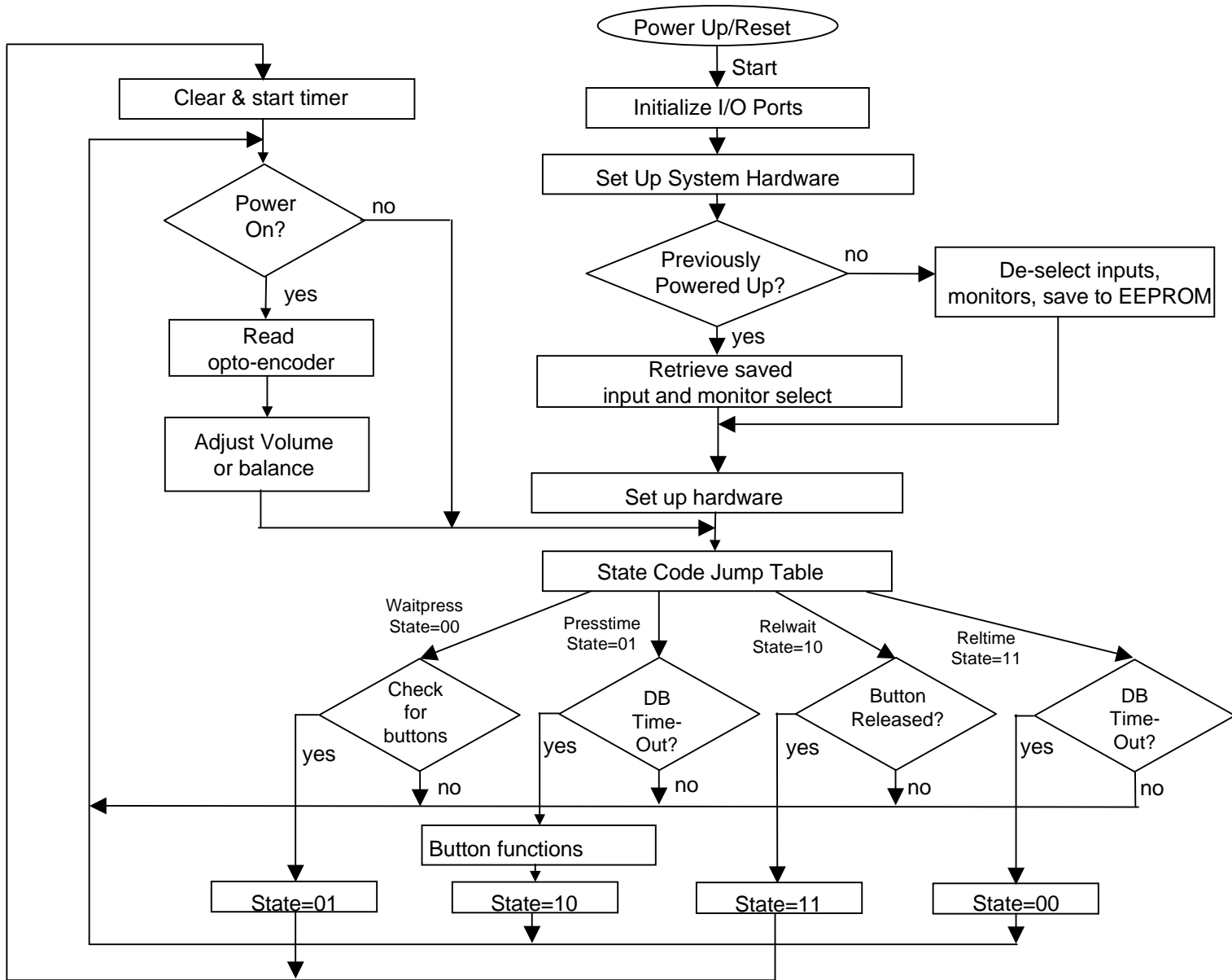


Figure 11: Preamp Firmware High Level Flow Chart