

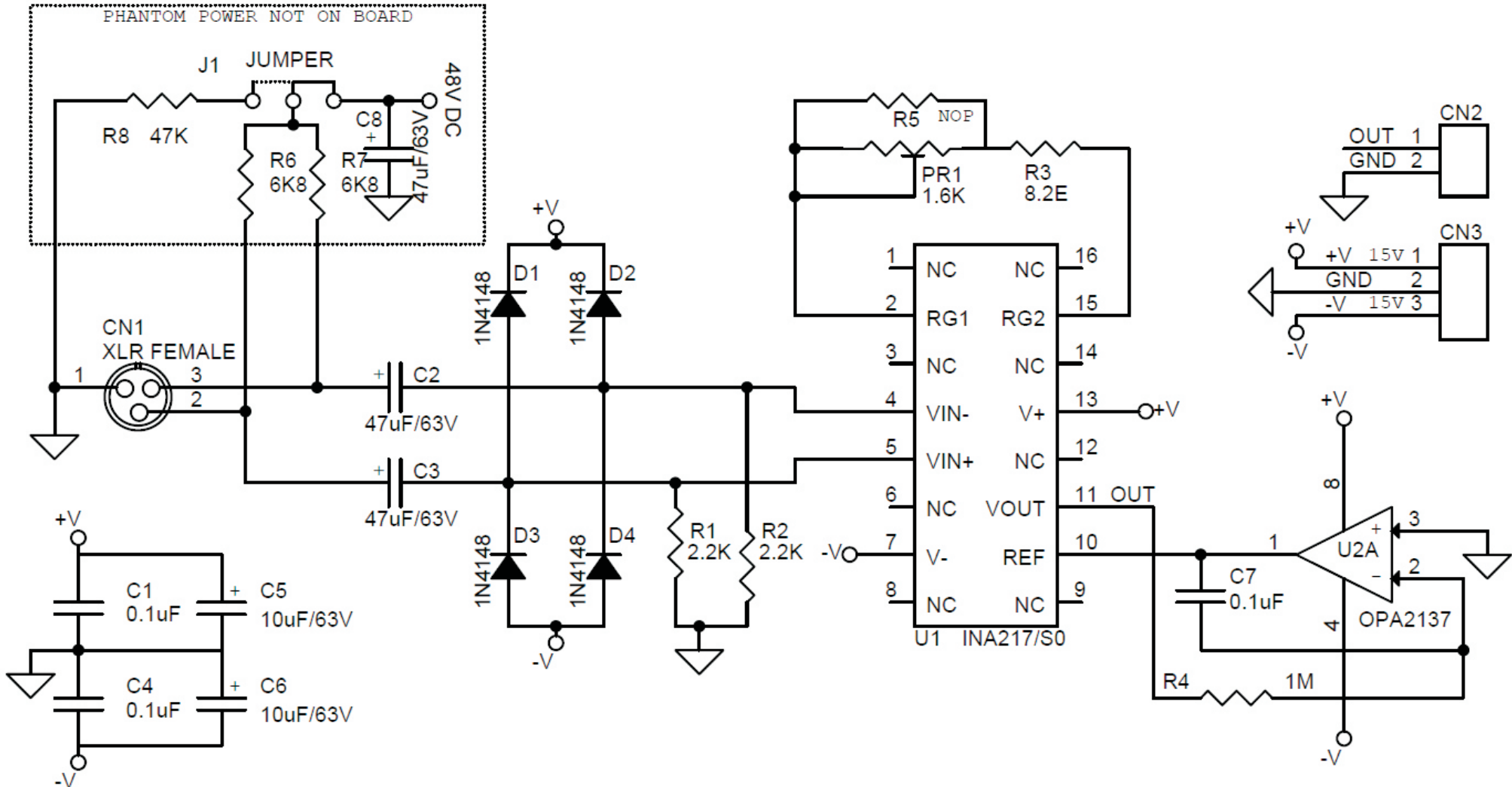
## TINY PROFESSIONAL MICROPHONE PREAMPLIFIER

The board has been design around INA217 low distortion, low noise instrumentation amplifier. The INA217 is ideal for low-level audio signals such as balanced low-impedance microphones. Many industrial, instrumentation, and medical applications also benefit from its low noise and wide bandwidth. Unique distortion cancellation circuitry reduces distortion to extremely low levels, even in high gain. The INA217 provides near-theoretical noise performance for  $200\Omega$  source impedance. The INA217 features differential input, low noise, and low distortion that provides superior performance in professional microphone amplifier applications. An OPA2137 op-amp used as a feedback to eliminate the offset voltage. Phantom power is not part of the circuit its just for reference.

### Features

- Supply Dual +/-15V DC
- Output Unbalance Single Ended
- PR1 Gain Adjust  $G=1+10000/R_g$  PR1





BOM			
SR.	QNTY.	REF.	DESC.
1	1	CN1	XLR FEMALE
2	1	CN2	2 PIN HEADER CONNECTOR
3	1	CN3	3 PIN HEADER CONNECTOR
4	3	C1,C4,C7	0.1uF SMD 1206
5	2	C2,C3	47uF/63V
6	2	C5,C6	10uF/63V
7	4	D1,D2,D3,D4	1N4148 SMD
8	1	J1	JUMPER
9	1	PR1	1.6K PRESET
10	2	R1,R2	2.2K SMD 1206
11	1	R3	8.2E SMD 1206
12	1	R4	1M SMD 1206
13	1	R5	OMIT SMD 1206
14	2	R6,R7	OMIT ONLY FOR REF.
15	1	R8	47K OMIT ONLY FOR REF.
16	1	U1	INA217
17	1	U2	OPA2137 SO8
18	1	C8	NOT PART OF THE CIRCUIT

