

Lab 6 Part 2 (Rev. 1) Op-Amp Parameters

Common Mode Rejection Ratio:

AC Operation:

1. Assemble the circuit in Fig. 1:

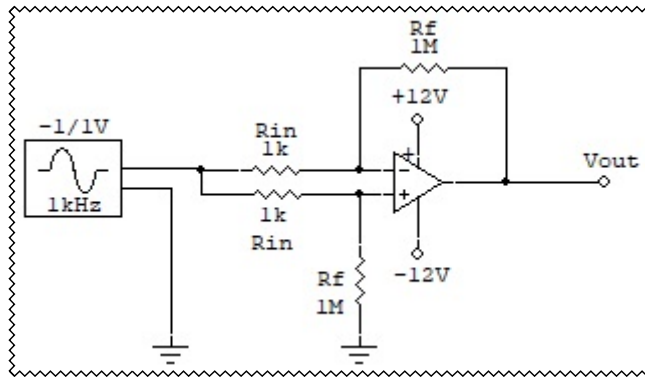


Fig. 1

2. Let V_{in} = 2 V_{pp} at 1kHz

3. Measure V_{out}: V_{out} = _____

4. Calculate Common Mode Rejection Ratio: $CMRR = \frac{R_F V_{IN}}{R_{IN} V_{OUT}} =$

5. Express CMMR in Decibels: $CMRR' = 20 \text{Log} CMRR =$

6. Has the noise been reduced?

DC Operation

7. Assemble the circuit in Fig. 2

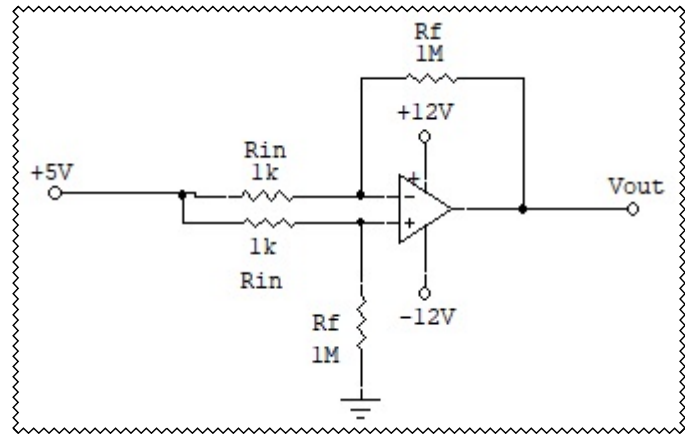


Fig. 2

8. Let $V_{in} = 5VDC$

9. Using a voltmeter, measure V_{out} : $V_{out} = \underline{\hspace{2cm}}$

10. Once again calculate $CMRR$ and $CMRR'$:

$$CMRR = \frac{R_F V_{IN}}{R_{IN} V_{OUT}} =$$

$$CMRR' = 20 \text{Log} CMRR =$$

12. Has DC noise been reduced?

Slew Rate

13. Assemble the circuit in Fig. 3

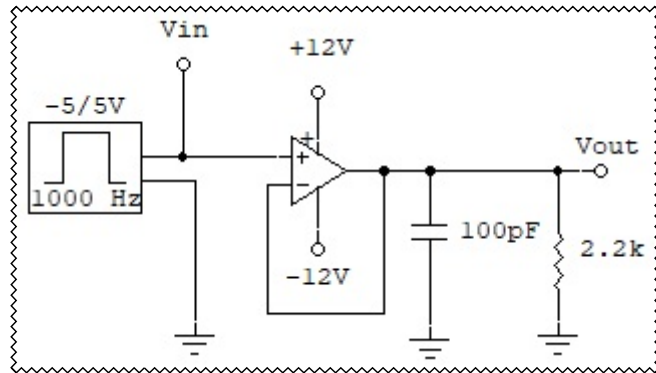


Fig. 3

14. Let $V_{in} = 10V_{pp}$ at 1kHz

15. Measure the slew rate: $S.R. = \frac{\Delta V_{out}}{\Delta T}$

16. Convert the slew rate to the convention in V per microseconds.