



Note 1: Based on detailed schematic as presented in Texas Instrument datasheet. Component reference numbers are the same (except their version uses Q15 twice. The NPN device in the output stage they label Q15 is here labeled Q16).

Note 2: Single-pin connectors/pads ("J#") are numbered according to the IC version. Ex.: J2 for the inverting input, J3 for the non-inverting input, etc.

Note 3: All NPN transistors are 2N3904. All PNP are 2N3906.

Note 4: D1 and D2 are not used in the IC version of the 741. They are used here to compensate for the low V_{be} of the discrete transistors. This compensation is needed to emulate the LM741's differential-input range.

741 Op-Amp / Discrete Components



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Drawn by T.F. Carney

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