

## HEXADECIMAL DISPLAY UNIT

**T**HIS circuit decodes a 4-bit binary number and displays the appropriate hexadecimal character (0-F) on a 7-segment display.

The diode matrix would normally use 78 diodes in a conventional system but this has been reduced to 34 by using diodes in the matrix to stop segments lighting. All segments light otherwise.

Two 7442s are used to produce a 1 to 16 output from the binary input because the 74154 could not pull the segment driver inputs low enough through the diode matrix.

The use of 7400s to drive the display allowed the unused input to be used for display blanking.

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