

60Hz CRYSTAL CONTROLLED TIME BASE



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Old clock chip like MM5387 or LM8361 requires 60Hz or 50 Hz external crystal controlled oscillator for counting but nowadays MM5369 IC which gives 60Hz input for MM5387 are very expensive may be Rs. 200/- If available in market. 50Hz / 60Hz crystal oscillator circuit may be designed in many ways.

A simple design presented here which gives exactly 60Hz output frequency. This circuit uses programmable oscillator /timer IC CD4541 acts as a oscillator and divider here this IC is programmed to divide by 8192Hz which gives 600 Hz frequency using 4.9152 MHz crystal.

This crystal is available in market about Rs. 15/-. 600 Hz is further divided by 10 using CD 4017 IC to obtain 60 Hz output at Pin 11 of CD4017. Total circuit require 9 to 12V supply to work. Please use reg. supply if possible.

