

wave squarer

If you have a circuit that requires a square wave or squared pulse input, but have available only a sine wave or rounded pulse, this handy squarer circuit is just what you need. It's an updated version of the classic Schmidt Trigger, or zero crossing detector.

The output is normally zero volts. However, when the input signal crosses zero in a positive going direction, the

output jumps to near the supply voltage in about 200 nanoseconds. It remains at this voltage until the input crosses zero in the negative going direction.

By offsetting the input, an asymmetrical output can be obtained. However, if you have a sine wave with a dc offset, and want a symmetrical square wave, you can use the optional input filter. Also shown is an optional amplifier that provides a low impedance output.

