

# Invisible Fence Transmitter



## General Description

This is the transmitter circuit for the invisible fence acting as the perimeter of the competition board for the IEEE SEC '09 hardware competition.

## Kit Contents

- Transmitter board
- AC power supply (YC-1018-B05-U)
- 40 ft wire

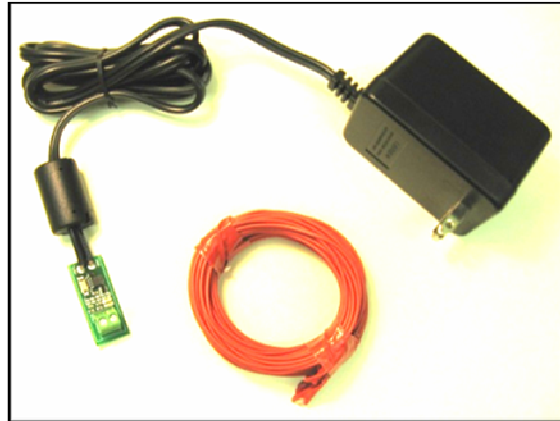


Figure 1. *Kit contents*

The Transmitter Board is permanently attached to the AC power supply.

## Electrical Characteristics

Operating Temperature = 25°C

Parameter	Min	Typ	Max	Unit
Output Frequency	9.80	10.00	10.20	kHz
Output Current	23.7	25.0	26.3	mA P-P
Input Voltage	100		120	VAC
Input Frequency		60		Hz

## Schematic Diagrams and Board Information

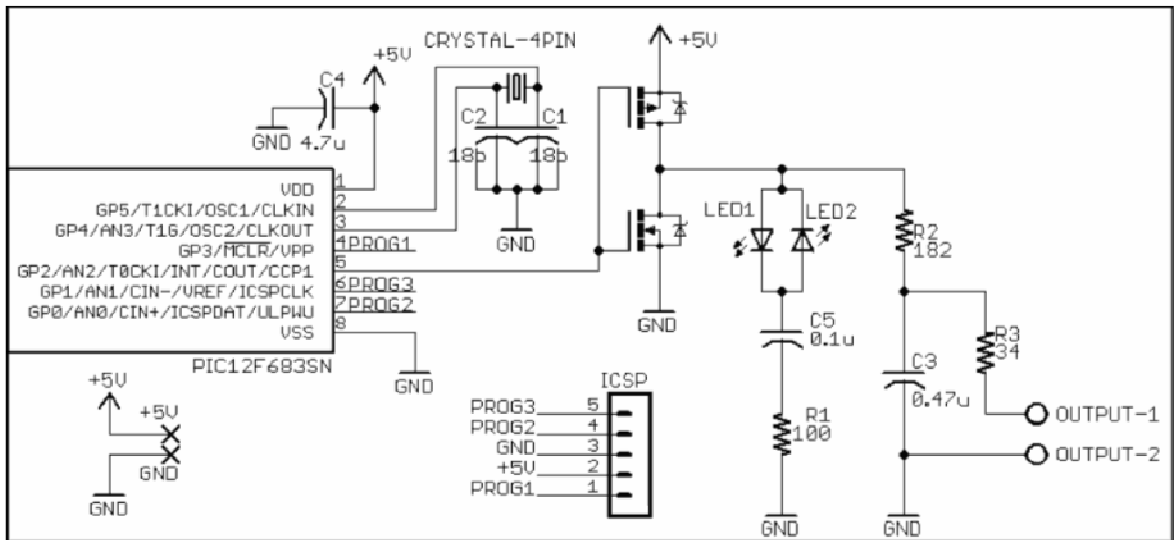


Figure 2. Transmitter Schematic

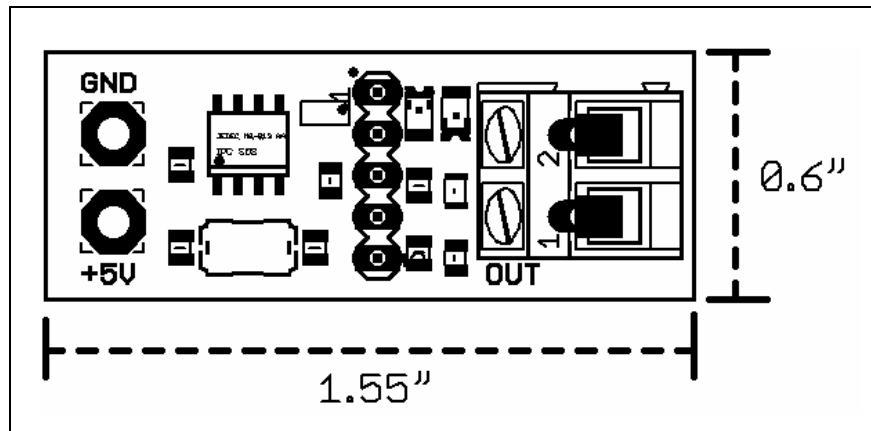


Figure 3. Board dimensions

This is a scope capture of the output waveform from the transmitter with the load attached.

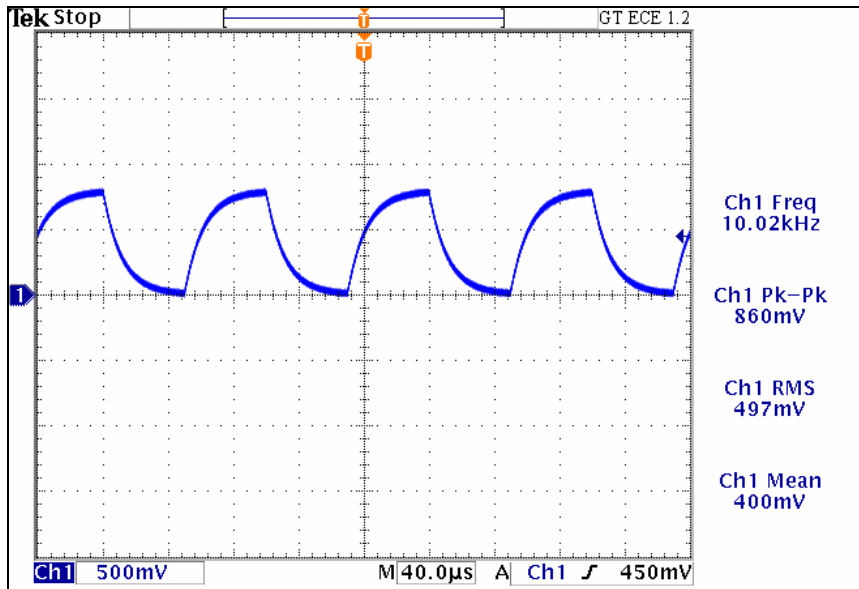


Figure 4. Output Waveform (voltage across R3 34Ω resistor)