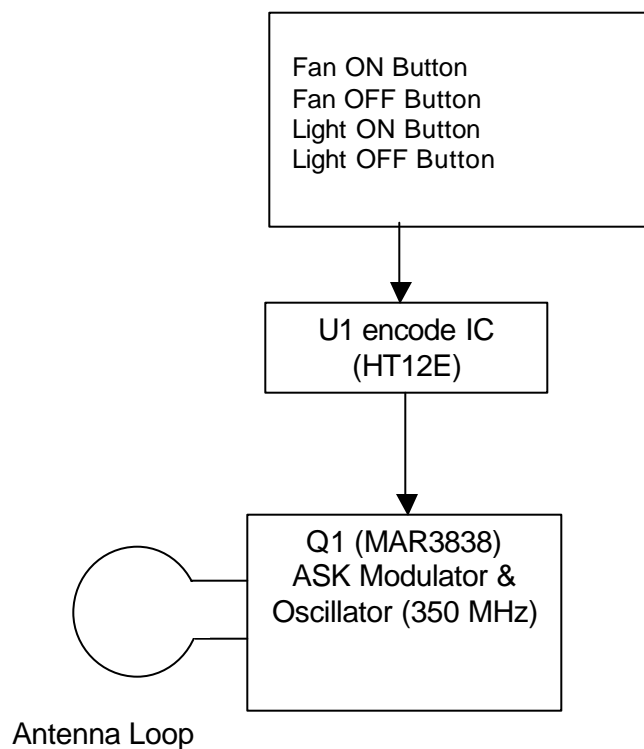


Hunter simple ON-OFF combo Description of Operation

Description:

The top box of the diagram below represents all of the potential keys that may be pressed for the Hunter transmitter. 12VDC(23A) is supplied to the transmitter, Pressing Fan ON Button / Fan OFF Button / Light ON Button / Light OFF Button generates an encoded PCM code word which will modulate on a 350 MHz RF carrier for transmission. The encoded PCM code word is obtained from encode IC HT12E (U1) and is ASK modulated by the RF oscillator formed by transistor Q1.



Hunter simple ON-OFF combo Transmitter Coding

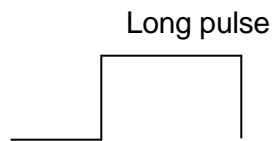
Description: The Hunter transmitter uses the following code words to modulate on a 350 MHz RF carrier by using ASK modulation.

Code words for the different commands:

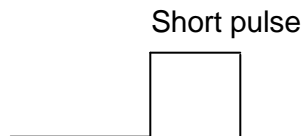
```
XXXXXXXXX1000  
XXXXXXXXX0100  
XXXXXXXXX0010  
XXXXXXXXX0001
```

(Where "x" .)

Code "0" is represented as:



Code "1" is represented as:



The timing of the pulses is detailed in the test report.

Hunter simple ON-OFF combo Receiver Description of Operation

Description:

Refer to the block diagram of the Hunter receiver below. Power is supplied to the receiving and control circuits through a 5-Volt regulator U₃, which is not shown in the diagram. Transistor Q1 is the front amplifier to amplify the signal received from the monopole antenna. Transistor Q2 is the super-regenerative receiving stage, whose frequency can be factory tuned by coil L2. Op-Amp U1 is configured as the detector. Microcontroller U2 converts the PCM data signal to performs the desired actions to control the fan and light.

