

```
/*  
On Air Indicator by Glen Popiel - KW5GP
```

```
This program is free software: you can redistribute it and/or modify  
it under the terms of the version 3 GNU General Public License as  
published by the Free Software Foundation.
```

```
This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.
```

```
You should have received a copy of the GNU General Public License  
along with this program. If not, see <http://www.gnu.org/licenses/>.
```

```
*/
```

```
#define Signal_Threshold 100 // The signal strength required to turn on  
#define Signal_Pin A0 // select the input pin for the RF sensor  
#define relay 2 // The Relay control pin  
#define LED 3 // The LED pin  
#define hold_time 2000 // Hold for 2 seconds after signal input goes  
away  
  
int Signal_Strength = 0; // variable to store the value coming from the  
sensor  
unsigned long timeout = 0; // variable to store the timeout time  
bool on_air = false;  
  
void setup()  
{  
  pinMode(relay, OUTPUT); // set the relay control pin  
  pinMode(LED, OUTPUT); // set the LED pin  
  digitalWrite(relay, LOW); // Turn off the relay and LCD  
  digitalWrite(LED, LOW);  
}  
  
void loop()  
{  
  // read the value from the sensor:  
  Signal_Strength = analogRead(Signal_Pin); // Read the Signal Strength  
  from the RF Sensor  
  if (Signal_Strength >= Signal_Threshold) // Turn on relay and LED if  
  threshold is exceeded  
  {  
    digitalWrite(relay, HIGH);  
    digitalWrite(LED, HIGH);  
    timeout = millis() + hold_time; // set the timeout time  
    on_air = true;  
  }  
  if (millis() > timeout && on_air) // If we've passed the timeout time,  
  turn off the relay and LED
```

```
{  
    digitalWrite(relay, LOW);  
    digitalWrite(LED, LOW);  
    on_air = false;  
}  
delay(100); // Delay 100ms to allow A/D to settle  
}
```