

# Universal Sensor Timing Device

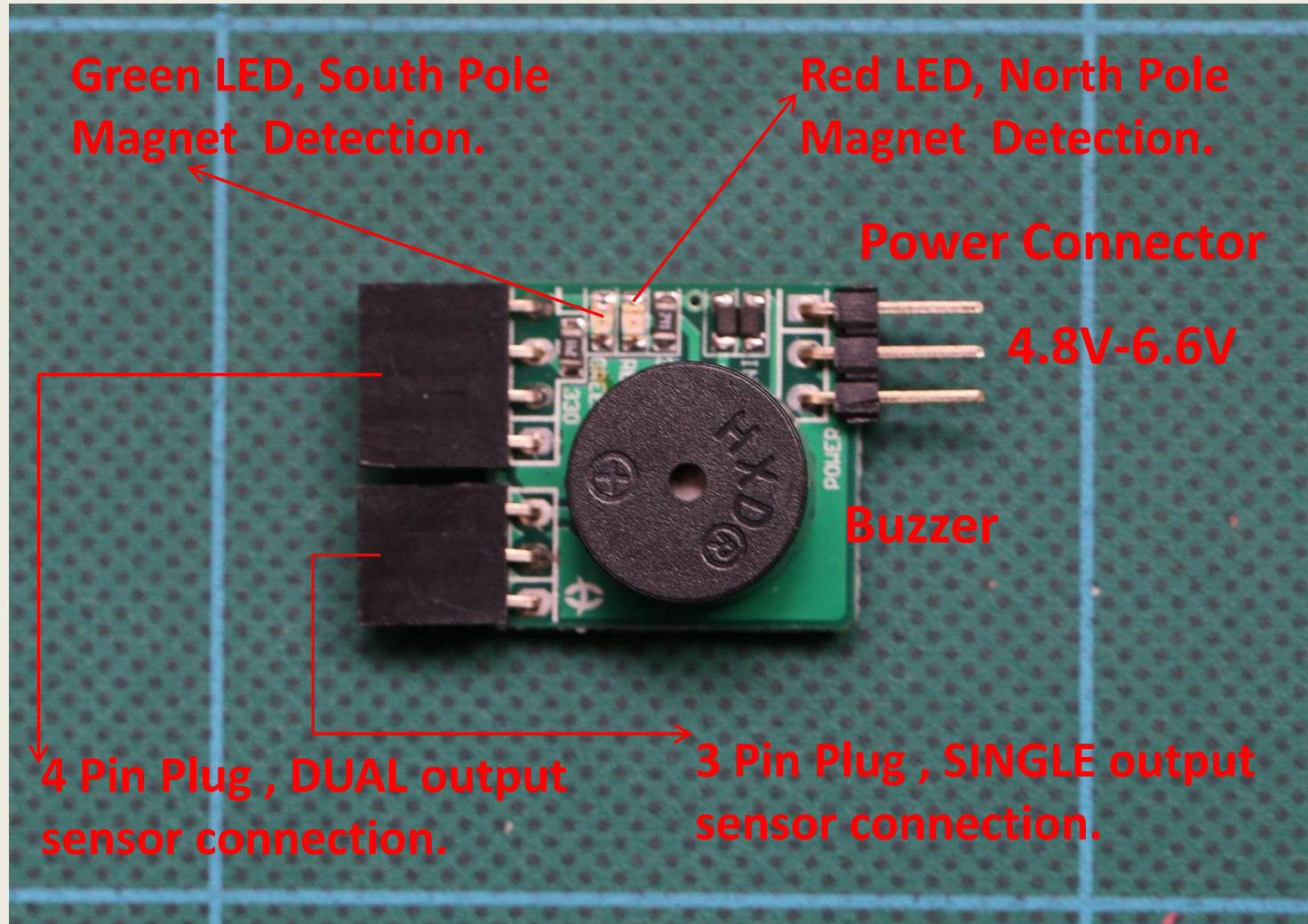
## Device Overview,

The universal Sensor Timing Device is a necessity , a must have “Toy” for correct setting the timing on your engine according to your OEM specification . It can be used with any CDI ignitions that has the Rcxel and/or made by Rcxel or CH Ignitions.

This device has the ability to work with Single or Dual output sensors. The Single Sensors Output (3 Pin Connector) are used mostly on single and twin 2 or 4 stroke engines where is a even fire . The Dual Sensor Output (4 Pin Connector) are used on multi cylinder 2 or 4 stroke engines; uneven twins, inline ,”V” and radial engines .

# Universal Sensor Timing Device

## Device Over View



# Universal Sensor Timing Device

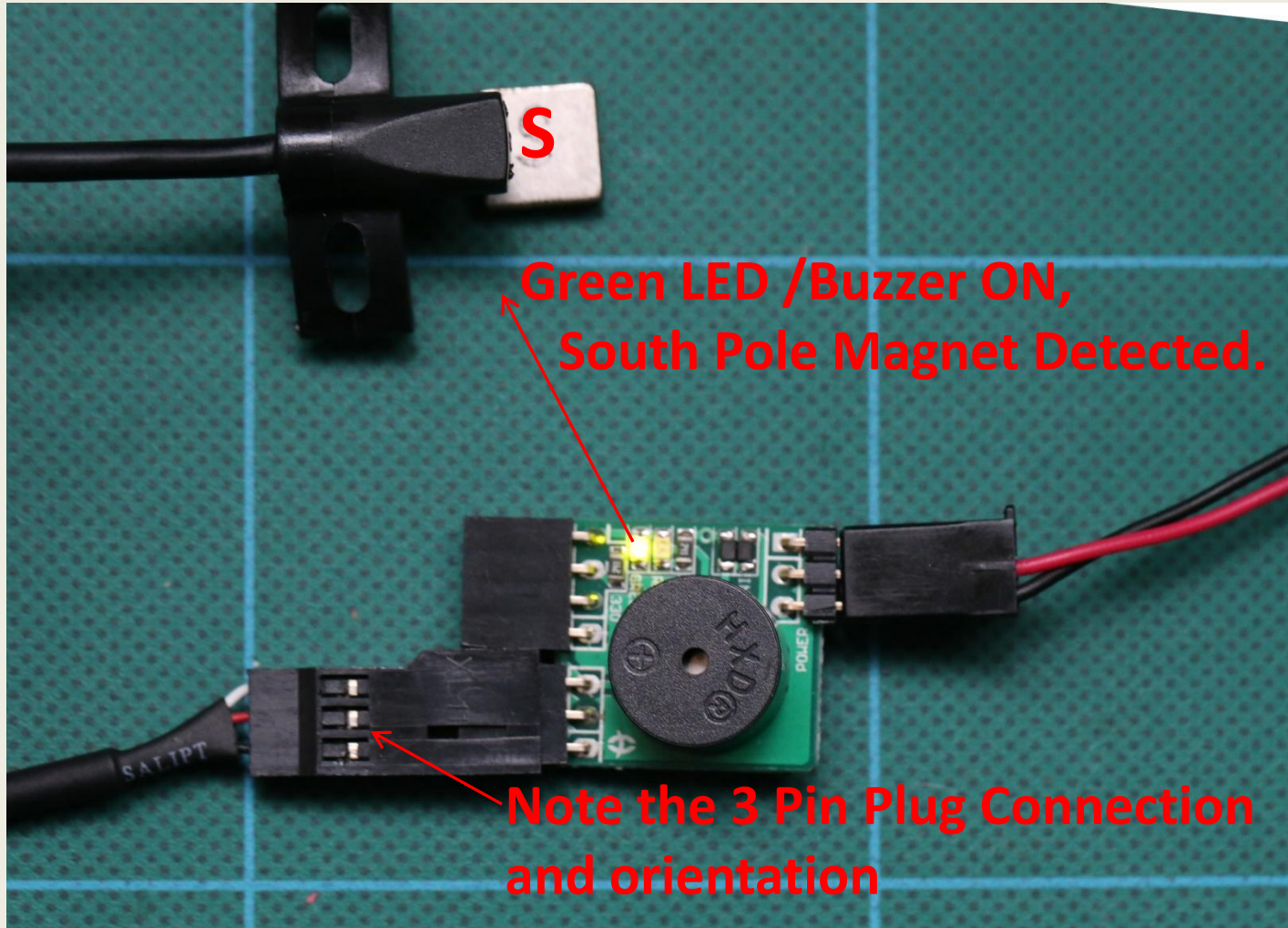
## Device Operation,

1. Connect the power, 4.8v-6.6v battery pack is need it. Do not worry about plug polarity , device is design to take care of that. The “+” (Positive) is placed in to the middle of the connector and the “– ” (Negative) is placed on the outsides ...this way will be easy and one thing less for you to worry about.
2. For 3 Pin Plug Connector , connect the plug to the 3 pin socket connector. The **Green** LED and Buzzer will turn **ON** giving you a audible and visual indication when the SOUTH pole of the magnet triggers the sensor.  
The LED and Buzzer will turn **ON** when the trailing edge of the magnet and sensor first come together and will stay **ON** for the entire duration that magnet passes the sensor .  
The LED and Buzzer will turn OFF when trailing edge of the magnet and sensor are no longer in range.  
This is the time when you will know that timing need to be set . Usual 30 degrees BTDC. Some engines may very ,use manufacture manual for details on timing.



# Universal Sensor Timing Device

## Single Sensor Output Operation



# Universal Sensor Timing Device

## Dual Output Sensor South Pole Operation,

**Note: Dual Sensor Output timing is set different than Single Output Sensor. !!!**

3. For 4 Pin Plug Connector , connect the plug to the 4 pin socket connector.

The **Green** LED and Buzzer will turn **ON** giving you a audible and visual indication when the SOUTH pole magnet triggers the sensor.

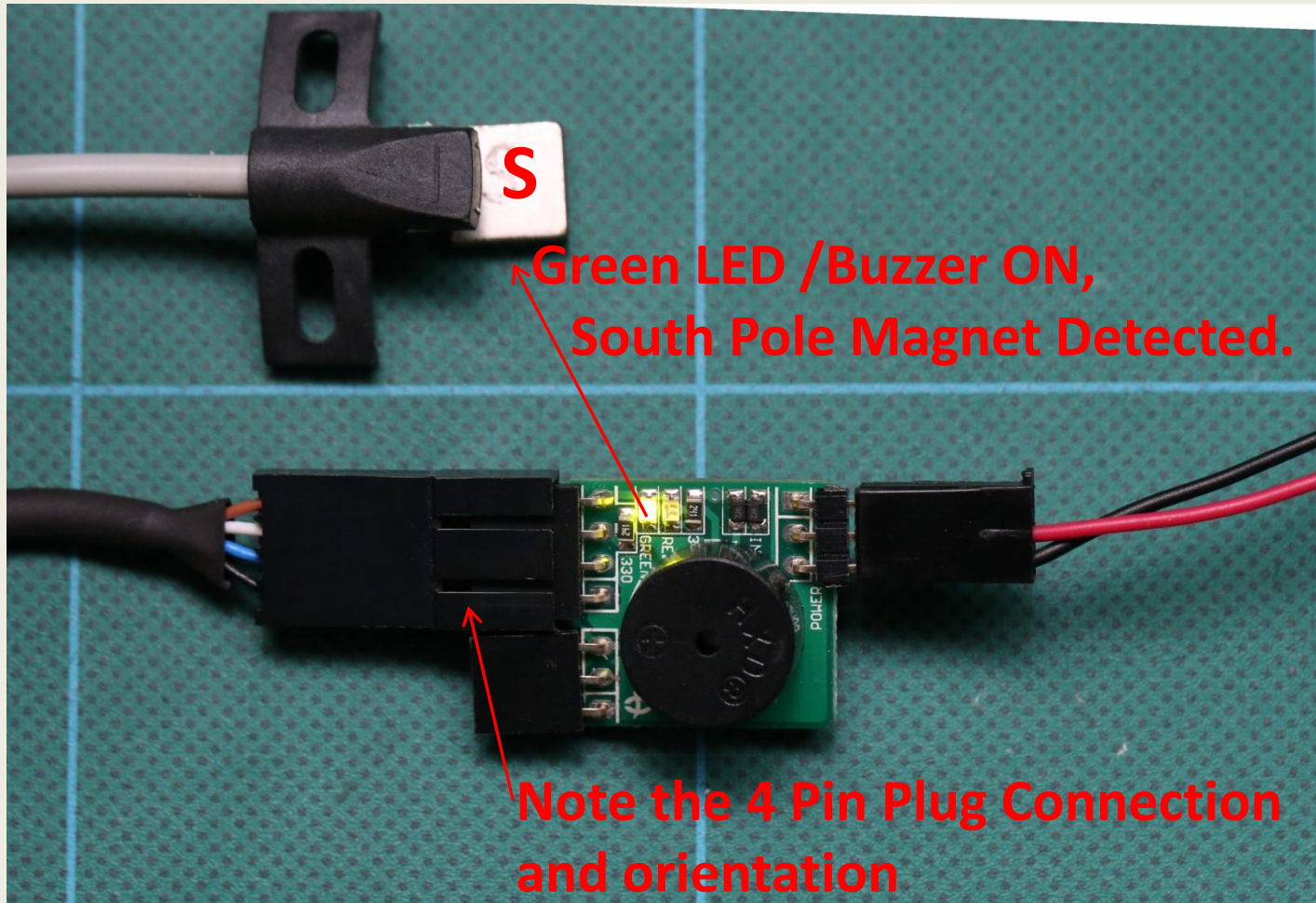
The LED and Buzzer will turn **ON** when the trailing edge of the magnet and sensor first come together and will stay **ON** for the entire duration that magnet passes under the sensor .

When the LED and Buzzer will turn **ON** , this will be the time when you will know that timing need to be set . Usual 30 degrees BTDC. Some engines may vary ,use manufacture manual for details on timing.

The LED and Buzzer will turn OFF when trailing edge of the magnet and sensor are no longer in range.

# Universal Sensor Timing Device

Dual Sensor Output, South Pole Operation



# Universal Sensor Timing Device

## Dual Output Sensor North Pole Operation,

4. For 4 Pin Plug Connector , connect the plug to the 4 pin socket connector.

The **RED** LED and Buzzer will turn **ON** giving you a audible and visual indication when the NORTH pole magnet triggers the sensor.

The LED and Buzzer will turn **ON** when the trailing edge of the magnet and sensor first come together and will stay **ON** for the entire duration that magnet passes under the sensor .

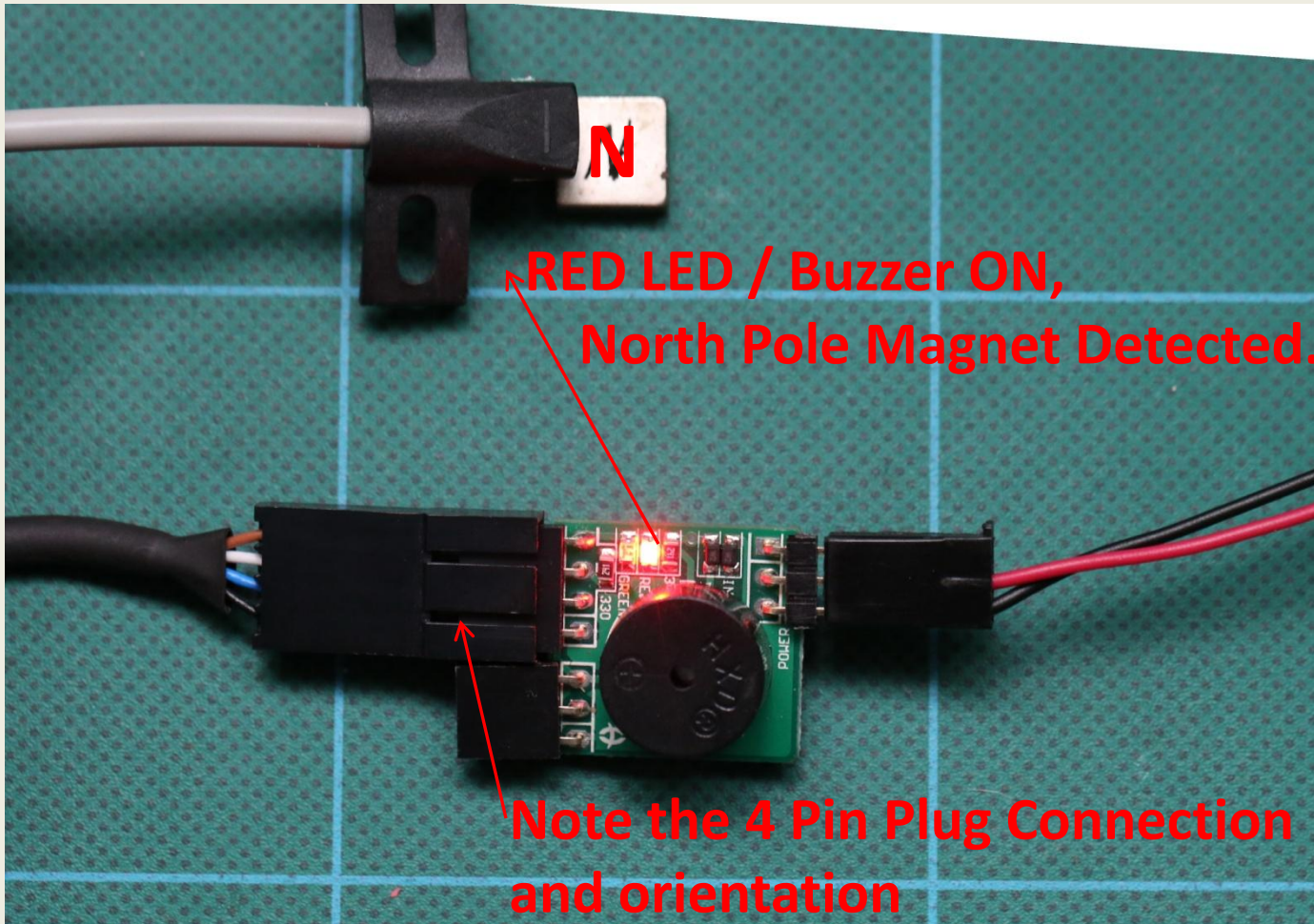
The LED and Buzzer will turn OFF when trailing edge of the magnet and sensor are no longer in range.

The North Pole operation is not used for timing unless specified, but it must to be checked to ensure proper sensor operation , The CDI unit must see this in order to function properly.



# Universal Sensor Timing Device

Dual Sensor Output, South Pole Operation

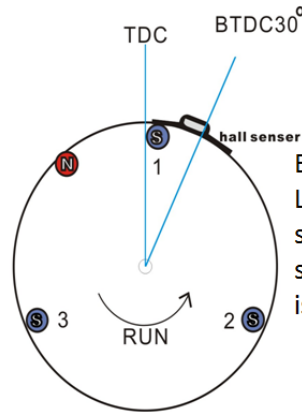




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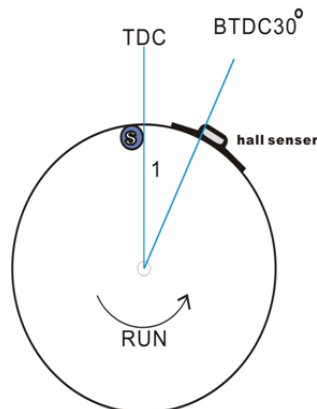
## Single & Multi Cylinder Timing Diagram

### Multi Cylinder Timing Set-up 2 cyl "V", Boxer, Inline' 3,5,7,9 Radial Engines



Bring engine to 30 Degree BTDC, Spark or buzzer /Green LED should be coming ON when trailing edge of the sensor and magnet comes together. The ignition module should spark or if you use a timing device then correct set is when buzzer and/or Green LED comes ON first time !.

### The original single-cylinder installation



Bring engine to 30 Degree BTDC, The buzzer and Green LED should be coming ON when trailing edge of the sensor and magnet comes together. **The ignition module should spark or if you use a timing device then correct set is when buzzer and/or Green LED turns OFF !!!**  
**And that is when magnet leaves the sensor**