

Solar Eye

Automatic Headlight Adjusting System

Jeremy Hewett	(JH)
Mark James	(MJ)
Gregory Priday	(GP)

System Outline

- 3 Main Subsystems
 - Senor
 - Relay
 - Control
- Sensor
 - Uses LDR circuit to sense a light source
- Relay
 - Receives signal from sensor and sets headlights
- Control
 - Input from user to enable or disable the system

Motivation

- Automatic headlight dimmers will improve vehicle safety
 - Driver is not forced to take concentration off the road to change bright settings.
 - An Automatic dimmer should react much faster than a manual dimmer, therefore “blinding” oncoming vehicle for fall less time.
- A vehicle Selling Point
 - Giving the driver less to worry about when driving improves sense of luxury.
 - Marketing department could easily create advertising focused on this feature.

Enclosure Drawing

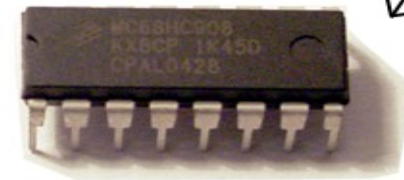


To select brights on, off or manual

3 Way Switch

A/D Converter

Microcontroller



Relay
Brights On/Off

References

- <http://www.carpages.co.uk/bmw/bmw-night->
- Illustration in slide 7
- Crocodile Clips 3.2 Professional Edition -
Circuit Diagram

Solar Eye

- No more forgetting to dim lights and endangering other road users!
- This new system will automatically dim or brighten headlights
- It will allow the driver to concentrate more on the road whilst driving in the dark
- Reaction time of the system is much quicker than that of a person
- It can be set on automatic or manual depending on the user
- Even automatically switches on headlights initially

