Amperite Head-Alert 2 Motorcycle Headlight Modulator

- Enhancement of motorcycle headlamp illumination
- Quick and easy installation
- Incandescent lamp power rating 120 watts
- Photo-electric sensor equipped
- Epoxy sealed
- High reliability

The Amperite HEAD-ALERT 2 modulator has been designed to enhance awareness of motorcycle headlamp illumination in accordance with Federal Standard 49, CFR Part 571.106. Modulation of motorcycle headlamps has been shown to significantly reduce collisions between motorcycles and other vehicles.

The HEAD-ALERT 2 is a three wire device that is connected in series with either the high beam or low beam feed wire to the bulb. (See the installation diagram.) A photo-electric sensor is included in the unit to disable modulation at night-time as required by Federal law.

The rate of modulation is 200 to 280 cycles per minute, with maximum power being applied to the headlamp for 50 to 70% of each cycle. During the low intensity portion of the cycle, headlamp power is held to not less than 17% of maximum power.

OUTPUT CIRCUIT:
Solid state switching transistor.

POWER RATING:
120 Watts incandescent.

INPUT VOLTAGES:
11 to 16 volts (standard automotive range).

ENVIRONMENTAL INFORMATION:
Operating temperature range -40°C to +60°C. (-40°F to +140°F).

MECHANICAL:
Black plastic enclosure, epoxy sealed for protection against moisture and vibration. Size: 21/8 x 1 1/2 x 3/4 inches.
Three wire termination about 12 inches long.
Photocell assembly cable length 18 inches.

TIMING DIAGRAM:
MODULATION FREQUENCY 260 HERTZ
HEADLAMP ON
HEADLAMP OFF
0.25 SEC. 0.1 SEC.

INSTALLATION INSTRUCTIONS:

The Amperite HEAD-ALERT 2 is a three wire device that is connected in series with either the high-beam or low-beam +12 volt wire to the headlamp bulb. Only negative-ground systems may be accommodated. Use the following installation procedure:

1. Locate the +12 volt wire that feeds the high-beam or low-beam of the headlamp bulb. This wire will have a +12 volt potential when the desired beam is energized, and zero volts when not. Turn power off.
2. Select a location for the HEAD-ALERT 2 module.
3. Cut the +12 volt feed wire at a convenient location. Strip back both ends, being careful not to cut into the copper wires.
4. Connect the green lead of the HEAD-ALERT 2 module to the cut end that feeds the headlamp bulb. Use crimp terminals, wire nuts, or solder as desired.
5. Connect the other cut wire (+12 volt feed from the high-beam/low-beam switch) to the red wire of the HEAD-ALERT 2 module.
6. Connect the black lead of the HEAD-ALERT 2 module to chassis’ ground.
7. If necessary, use insulation to cover any exposed wires.
8. IMPORTANT: Reverse polarity connections will destroy the HEAD-ALERT 2 module. Check wiring carefully before applying power.
9. Locate and secure a place on the motorcycle for the photo sensor. It should be placed pointing up to measure ambient light coming from the sky.

INSTALLATION DIAGRAM:

High Beam Installation Shown