

KIT NO 78
ACM CAR BATTERY CONDITION INDICATOR

The car battery indicator displays the condition of the battery with the help of three LED's, the red LED indicate that the battery is nearly discharged, and less than 10 Volts. The yellow LED indicate that the battery voltage is normal, that is between 10V and 12V. The green LED indicate the voltage above 12V when the battery is being charged.

COMPONENTS

RESISTORS

- | | | |
|--------------------|--------|-------|
| R1. 1k ohm Brown | Black | Red |
| R2. 470 ohm Yellow | Violet | Brown |
| R3. 470 ohm Yellow | Violet | Brown |
| R4. 470 ohm Yellow | Violet | Brown |
| R5. 8k2 ohm Grey | Red | Red |
| R6. 8k2 ohm Grey | Red | Red |

SEMICONDUCTORS

- | | |
|-----------------------|------------------|
| Q1 & Q2 | BC 238 |
| D1 & D2 | 1N4001 or 1N4007 |
| LED 1 | RED LED |
| LED 2 | YELLOW LED |
| LED 3 | GREEN LED |
| PRINTED CIRCUIT BOARD | |

ZENER DIODES

- | | | |
|-----|---------|-------|
| Z1. | 3,9VOLT | 400mW |
| Z2. | 9,1VOLT | 400mW |
| Z3. | 12 VOLT | 400mW |

