# Deciphering Wiring Colors

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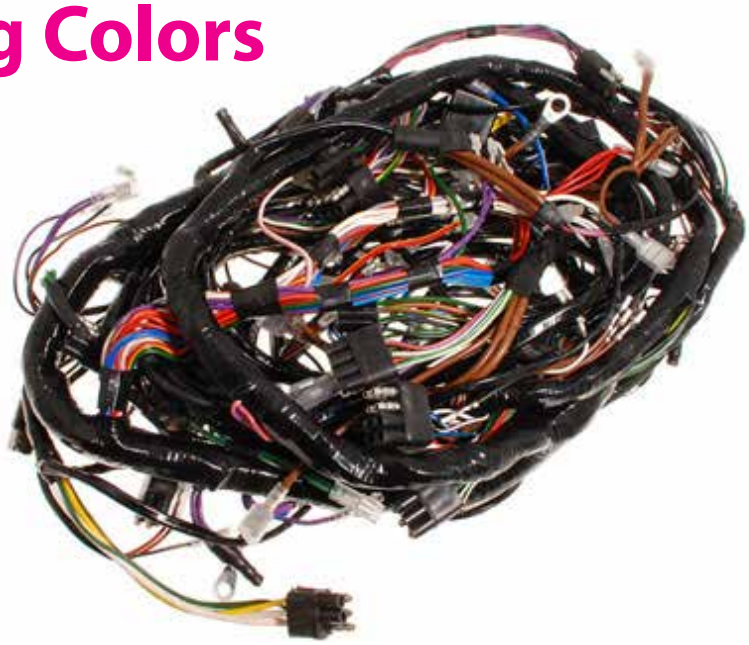

Many British made vehicles, including most post-WWII sports cars, have been wired to the British Standards Institute BS-AU7 wiring color standard, which was based on an earlier Lucas wiring loom standard. Other wiring color standards have been, and still are being, used by different car makers.

In recent years far more devices have been added to car specifications and many are now addressed by a central control unit using a "multiplexing system" which reduces the number of wires required. This has lead to new and radically different wiring standards.

When undertaking electrical repairs, you should obtain the correct wiring diagram for your particular make and model and use it to ensure that the correct wire colors (and correct gauge or thickness of wire) are being used to connect your instruments and accessories. If you make wiring changes and end up using different colored wires from the original, you should note those changes on the wiring diagram so as to provide that information to a subsequent owner(s).

If your vehicle was wired to the BS-AU7 standard, however, the following guide should be of help.

## Basic wire colors

Seven basic wire colors were used in the majority of the Triumph (Lucas) wiring looms. These include **black** (ground or earth connections); **brown** (main battery feed, always HOT & unfused); **white** (base color for ignition circuits, HOT with ignition ON & unfused); **purple** (auxiliary devices not fed via the ignition switch, e.g. horn, interior light, always HOT & fused); **green** (feeds to auxiliary devices controlled by the ignition switch, e.g. wipers, flashers, etc., HOT with ignition ON & fused); **red** (sidelights, instrument lights, rear lights, fused or unfused); **blue** (with white trace main beam headlamp, with red trace - dipped beam headlamp; plain blue is used from the main lighting switch to the dip-switch headlamps, unfused). These were supplemented by a further group of solid colors.

In addition to wires that only use the basic colors, there are many that use one of these same basic colors in combination with a different colored stripe.

Handbooks were often printed in black


and white, so the cable colors are identified by a lettering code. When a wire has a base color and a second trace color the code is two letters, for example: WG = White with green tracer, RLG = Red with a Light Green tracer.

## Other colors

Other colors are used, according to equipment specifications. For example, **light green** (various applications); **slate** (HOT with ignition OFF, fused or unfused); and **yellow** (overdrive circuit - HOT in 3rd/4th, ignition ON, unfused).


The table of wire colors and applications displayed below was passed on to me late last summer by Michael Coffey and explains the wiring colors used on the main components of our LBCs. **SN**

**BLACK** (B) Always EARTH (ground), unfused

| | |
|---|---|
| Black (B): | Various locations |
| Black/green (BG): | URP switch to cooling fans |
| Black /white (BW): | Brake warning light |

**BROWN** (N) Always HOT, unfused

| | |
|---|---|
| Brown (N): | Various locations |
| Brown/light green (NLG) | Windscreen motor to switch |
| Brown, yellow (NY) | Indicator light to alternator |
| Brown/purple (NP) | Unused |

**WHITE** (W) HOT with ignition ON, unfused

| | |
|---|---|
| White (W): | Key to ignition relay, cut-off switch, fuel pump, ignition ballast resistor, fusebox, various locations |
| White/black (WB): | Distributor to coil, coil to tachometer |
| White/blue (WU): | Stepped down voltage for distributor amplifier |
| White/brown (WN): | Ignition switch relay to fusebox, starter solenoid to starter relay, oil pressure sending unit to gauge (1968-'69 only) |
| White/green (WG): | Keyswitch to radio, HOT unfused at first key position; wipers and heater (earlier) |
| White/light green (WLG): | Solenoid to coil, ignition ballast resistor to coil |
| White/red (WR): | Keyswitch to starter relay, starter relay to brake warning diode. |

**PURPLE** (P) Always HOT, fused

| | |
|---|---|
| Purple (P): | Fusebox to horn, various locations |
| Purple/black (PB): | Horn to horn switch |
| Purple/green (PG): | Key buzzer to time delay buzzer |
| Purple/pink (PK): | Key switch to key buzzer |
| Purple/white (PW): | Courtesy lamp/boot lamp to earthing switches |

**GREEN** (G) HOT with ignition ON, fused

| | |
|---|---|
| Green (G): | From fusebox to various locations |
| Green/black (GB): | Fuel tank unit to gauge |
| Freen/blue (GU): | Temp. sending unit to gauge |
| Green/brown (GN): | Reverse lamp switch to reverse lights; heater fan to switch |
| Green/orange (GO): | Brake pressure switch, handbrake switch, brake warning diode, brake warning light |
| Green/pink (GK): | Service interval counter (EGR light) |
| Green/purple (GP): | Brake light switch to brake lights |
| Green/red (GR): | Left turn signals to switch |
| Green/white (GW | Right turn signals to switch |
| Green/yellow (GY): | Heater to fan switch |

**RED** (R) Parking lights, fused or unfused

| | |
|---|---|
| Red (R): | Fusebox to sidemarkers, parking lights Switch to lights (1963-'69) |
| Red/green (RG): | Light switch to fusebox, panel rheostat |
| Red/light green (RLG): | Wiper motor to switch |
| Red/white (RW): | Panel rheostat panel lights |

**BLUE** (U) Headlamps, unfused

| | |
|---|---|
| Blue (U): | Light switch to dimmer switch |
| Blue/light green (ULG): | Wiper motor to switch |
| Blue/red (UR): | Dimmer switch to low beam |
| Blue/white (UW): | Dimmer switch to high beam, high beam indicator |

**LIGHT GREEN** (LG) Various applications

| | |
|---|---|
| Light Green/black (LGB): | Washer pump to switch |
| Light Green/brown (LGN): | Flasher to turn signal switch, flasher to hazard switch |
| Light Green/green (LGG): | Voltage stabilizer to fuel/temp. gauges |
| Light Green/purple (LGP): | Hazard switch to hazard warning lamp |

**SLATE** (S) HOT with ignition OFF, fused and unfused

| | |
|---|---|
| Slate (S): | Key to in-line fuse |
| Slate/purple (SP): | Fuse to anti-run on valve |
| Slate/yellow (SY): | Anti-run on valve to oil pressure switch |

**YELLOW** (Y) HOT in 3rd/4th, ignition ON, unfused

| | |
|---|---|
| Yellow (Y): | Overdrive switch to relay (1963-'67) overdrive switch to 3/4 switch (1968-'76) |
| Yellow/brown (YB): | Driver's seat belt to time delay buzzer |
| Yellow/purple (YP): | Time delay buzzer to seat belt warning light; overdrive circuit |
| Yellow/red (YR): | Overdrive circuit |