## 2006 BMW X5 (E53)

### Wiring Information

| Item | Wire Color | Polarity | Wire Location |
|---|---|---|---|
| 12 Volts | red (80A on 3.0L) (5A on 4.4L and 4.8L) | + | ignition switch, 11 pin plug, pin 5 |
| Second 12 Volts | red (50A) | + | ignition switch, 11 pin plug, pin 6 |
| Starter | black/yellow | + | ignition switch, 11 pin plug, pin 8 |
| Second Starter | N/A | | |
| Ignition | green | + | ignition switch, 11 pin plug, pin 9 |
| Second Ignition | purple/black (needs to be powered before ignition) | + | ignition switch, 11 pin plug, pin 2 |
| Third Ignition | purple/white | + | ignition switch, 11 pin plug, pin 10 |
| Accessory | N/A | | |
| Second Accessory | N/A | | |
| Third Accessory | N/A | | |
| Key Sense | N/A | | |
| Data Bus | white/red/yellow (instrument bus) | data | Immobilizer Control Unit, 13 pin plug, pin 13 |
| Can Bus High | yellow/black (powertrain bus) | data | instrument cluster, 26 pin plug, pin 24 or 8 |
| Can Bus Low | yellow/brown (powertrain bus) | data | instrument cluster, 26 pin plug, pin 26 or 9 |
| Can Bus Sw | N/A | | |
| Power Lock | yellow/red | - | General Module, white 26 pin plug, pin 24 |
| Power Unlock | same as power lock | | |
| Lock Motor | white or black | 5 wire | General Module, black 20 pin plug, pin 13 or 6 |
| Unlock Motor | blue | 5 wire | Driver Door Module, 12 pin plug, pin 12 |
| Disarm Defeat | blue | 5 wire | General Module, black 20 pin plug, pin 14 |
| Parking Lights (+) | gray/green (LF); gray/blue (RF) | + | Light Module, black 54 pin plug, pin 18; black 14 pin plug, pin 3 |
| Parking Lights (-) | black (interrupt to turn on parking lights) | - | headlight switch or Light Module, black 54 pin plug, pin 51 |
| Hazards | brown/blue | - | Light Module, black 54 pin plug, pin 7 |
| Turn Signal (Left) | blue/green (F); blue/green (R) | + | Light Module, white 15 pin plug, pin 11; black 14 pin plug, pin 8 |
| Turn Signal (Right) | blue/brown (F); blue/brown (R) | + | Light Module, black 14 pin plug, pin 6; white 15 pin plug, pin 12 |

*Wiring Information (Continued)*

| Item | Wire Color | Polarity | Wire Location |
|---|---|---|---|
| **Headlight** | yellow/green (L); yellow/blue (R) | + | Light Module, black 14 pin plug, pin 11; white 15 pin plug, pin 3 |
| **AutoLights** | | | |
| **Reverse Light** | blue/yellow | + | Light Module, white 15 pin plug, pin 10 |
| **Left Front Door Trigger** | brown/white | - | Driver Door Module, 12 pin plug, pin 11 |
| **Right Front Door Trigger** | brown/white | - | Passenger Door Module, 12 pin plug, pin 11 |
| **Left Rear Door Trigger** | brown/gray | - | General Module, white 26 pin plug, pin 7 |
| **Right Rear Door Trigger** | brown/white | - | General Module, white 26 pin plug, pin 6 |
| **Dome Supervision** | red/blue | + | General Module, black 20 pin plug, pin 20 |
| **Trunk/Hatch Pin** | gray/white | - N.C. | General Module, white 26 pin plug, pin 19 |
| **Rear Glass Pin** | N/A | | |
| **Hood Pin** | purple/green | - | General Module, white 26 pin plug, pin 19 |
| **Trunk Hatch/Release** | gray/brown | - | General Module, black 26 pin plug, pin 11 |
| **Trunk Release Motor** | yellow/brown (top), brown/yellow (bottom) | 5 wire | General Module, black 20 pin plug, pins 3 and 7 |
| **Fuel Door Release** | unlocks along with rear doors | | |
| **Power Sliding Door (Left)** | N/A | | |
| **Power Sliding Door (Right)** | N/A | | |
| **Factory Alarm Arm** | blue/red | - | Driver Door Module, 12 pin plug, pin 4 |
| **Factory Alarm Disarm** | white/black (double pulse) | - | Driver Door Module, 12 pin plug, pin 3 |
| **Disarm No Unlock** | Transponder and ignition | | |
| **Trunk Alarm Shunt** | N/A | | |
| **Tachometer** | black | ac | data link connector, 16 pin plug, pin 9 |
| **Wait to Start** | N/A | | |
| **Neutral Safety** | N/A | | |
| **Clutch Pedal** | brown/black (in), blue/black (out) | - | clutch switch, 4 pin plug, pins 1 and 4 |
| **Fuel Pump** | white/blue | + | dash fuse box, rear, black 10 pin plug, pin 8 |
| **Rear Defroster** | blue/brown | - latched | Heating and A/C Control Module, 26 pin plug, pin 7 |
| **Mirror Defroster** | N/A | | |
| **Left Front Heated Seat** | green/yellow | 5 wire | center console switch, pin 1 |
| **Right Front Heated Seat** | green/yellow | 5 wire | center console switch, pin 13 |

*Wiring Information (Continued)*

| Item | Wire Color | Polarity | Wire Location |
|---|---|---|---|
| **Speed Sense** | black/white | ac | instrument cluster, 26 pin plug, pin 14, or 18 pin plug, pin 3 |
| **Brake Wire** | brown/gray (functions with ignition on only) | + | brake switch, 4 pin plug, pin 3 |
| **Parking Brake** | blue/brown/yellow | - | parking brake switch |
| **Horn Trigger** | purple/gray | + | dash fuse box, rear, black 10 pin plug, pin 3 |
| **Wipers** | brown/blue | - | General Module, black 26 pin plug, pin 15 |
| **Left Front Window (Up/Down)** | use factory alarm arm/disarm | | |
| **Right Front Window (Up/Down)** | see left front window | | |
| **Left Rear Window (Up/Down)** | see left front window | | |
| **Right Rear Window (Up/Down)** | see left front window | | |
| **Sun Roof (Open/Close)** | use factory alarm arm/disarm | | |
| **Sun Roof (Limit/Close)** | N/A | | |
| **Memory Seat 1** | switch part of module | | |
| **Memory Seat 2** | switch part of module | | |
| **Memory Seat 3** | switch part of module | | |
| **Radio 12V** | red/green | + | radio, 16 pin plug, pin 15 |
| **Radio Ground** | brown | - | radio, 16 pin plug, pin 12 |
| **Radio Ignition** | purple/white | + | radio, 16 pin plug, pin 16 |
| **Radio Illumination** | gray/red (dimmer) | + | radio, 16 pin plug, pin 14 |
| **Factory Amp Turn-on** | same as power antenna | | |
| **Power Antenna** | white | + | radio, 16 pin plug, pin 13 |
| **Left Front Speaker (+/-)** | yellow/red - yellow/brown or yellow/red - brn/org | +,- | radio, 8 pin plug, pins 3 and 7 |
| **Right Front Speaker (+/-)** | blue/red - blue/brown or blue/red - brown/orange | +,- | radio, 8 pin plug, pins 2 and 6 |
| **Left Rear Speaker (+/-)** | yellow/purple - yellow/gry or yellow/blk - brn/org | +,- | radio, 8 pin plug, pins 4 and 8 |
| **Right Rear Speaker (+/-)** | blue/purple - blue/gray or blue/black - brown/org | +,- | radio, 8 pin plug, pins 1 and 5 |
| **Center Channel (+/-)** | N/A | | |
| **Subwoofer (+/-)** | | +,- | amplifier, 15 pin plug (Top HIFI) |
| **Aux. Audio Input Left (+/-)** | yellow - brown | +,- | radio, 12 pin plug, pins 3 and 10 |
| **Aux. Audio Input Right (+/-)** | black - brown | +,- | radio, 12 pin plug, pins 4 and 10 |
| **RSE Video (+/-)** | N/A | | |
| **RSE Audio Left (+/-)** | white/red - white/brown (CD changer audio) | | radio, 12 pin plug, pins 8 and 2 |
| **RSE Audio Right (+/-)** | white/blue - white/brown (CD changer audio) | | radio, 12 pin plug, pins 9 and 2 |
| **Satellite Radio 12 Volts** | | | |

| | | |
|---|---|---|
| **Satellite Radio Ground** | | |
| **Satellite Radio Ignition** | | |
| **Satellite Radio Antenna** | | |
| **Satellite Audio Left (+/-)** | | |
| **Satellite Audio Right (+/-)** | | |

*What Fits*

| Item | Size | Depth | Location |
|------|------|-------|----------|
| Headunit | irregular | | center of dash |
| Left Front Speaker | 6.5 | | left front door |
| Left Front Tweeter | | | left front door (tweeter), front dash (midrange) |
| Right Front Speaker | 6.5 | | right front door |
| Right Front Tweeter | | | right front door (tweeter), front dash (midrange) |
| Left Rear Speaker | 6.5 | | left rear door |
| Left Rear Tweeter | | | left rear door (midrange) |
| Right Rear Speaker | 6.5 | | right rear door |
| Right Rear Tweeter | | | right rear door (midrange) |
| Center Channel | N/A | | |
| Subwoofer | | | right side of luggage compartment |
| Left Front Headrest | | | |
| Right Front Headrest | | | |
| Left Right Headrest | | | |
| Right Rear Headrest | | | |
| Satellite Radio Tuner | | | |

*Additional Wiring Notes*

| Item | Note |
|------|------|
| **Data Bus** | The Immobilizer Control Unit is above the driver kick. The security light wire is gray/black/yellow (-) at the General Module, black 26 pin plug, pin 19. The General Module is behind the glove box. |
| **Reverse Light** | The Light Module is in the passenger kick. |
| **Hazards** | The Light Module is in the passenger kick. |
| **Parking Lights (+)** | The Light Module is in the passenger kick. The LR - RR wires are black/green - black/white at the Light Module, white 15 pin plug, pins 5 and 13. |
| **Turn Signal (Left)** | The Light Module is in the passenger kick. |
| **Turn Signal (Right)** | The Light Module is in the passenger kick. |
| **Parking Lights (-)** | The Light Module is in the passenger kick. |
| **Headlight** | The Light Module is in the passenger kick. |
| **Dome Supervision** | The General Module is behind the glove box. |
| **Left Front Speaker (+/-)** | If equipped, the amplifier is in the left side of the luggage compartment. On vehicles with amplifier, the high range wires are yellow/red - yellow/brown at the amplifier, 42 pin plug, pins 33 and 34 (HIFI), or 26 pin plug, pins 14 and 15 (Top HIFI). The mid range wires are gray/black - gray/brown at the amplifier, 42 pin plug, pins 40 and 39 (HIFI), or 26 pin plug, pins 5 and 10 (Top HIFI). The low range wires are blue/white - blue/brown at the amplifier, 42 pin plug, pins 4 and 3 (HIFI), or 26 pin plug, pins 1 and 2 (Top HIFI). |
| **Right Front Speaker (+/-)** | If equipped, the amplifier is in the left side of the luggage compartment. On vehicles with amplifier, the high range wires are blue/black - blue/brown at the amplifier, 42 pin plug, pins 11 and 12 (HIFI), or 26 pin plug, pins 12 and 25 (Top HIFI). The mid range wires are blue/yellow - brown at the amplifier, 42 pin plug, pins 42 and 41 (HIFI), or 26 pin plug, pins 9 and 4 (Top HIFI). The low range wires are blue/red - blue/brown at the amplifier, 42 pin plug, pins 23 and 22 (HIFI), or 26 pin plug, pins 13 and 26 (Top HIFI). |
| **Left Rear Speaker (+/-)** | If equipped, the amplifier is in the left side of the luggage compartment. On vehicles with amplifier, the high/mid range wires are yellow/black - yellow/gray at the amplifier, 42 pin plug, pins 31 and 32 (HIFI), or 26 pin plug, pins 19 and 16 (Top HIFI). The low range wires are yellow - brown at the amplifier, 42 pin plug, pins 2 and 1 (HIFI), or 15 pin plug, pins 3 and 11 (Top HIFI). |
| **Right Rear Speaker (+/-)** | If equipped, the amplifier is in the left side of the luggage compartment. On vehicles with amplifier, the high/mid range wires are white/black - white/brown at the amplifier, 42 pin plug, pins 13 and 21 (HIFI), or 26 pin plug, pins 11 and 24 (Top HIFI). The low range wires are blue - brown at the amplifier, 42 pin plug, pins 25 and 24 (HIFI), or 15 pin plug, pins 12 and 5 (Top HIFI). |
| **Power Lock** | The General Module is behind the glove box. |
| **Lock Motor** | The General Module is behind the glove box. |
| **Passenger Unlock Motor** | The General Module is behind the glove box. |
| **Left Rear Door Trigger** | The General Module is behind the glove box. |
| **Right Rear Door Trigger** | The General Module is behind the glove box. |
| **Trunk/Hatch Pin** | The General Module is behind the glove box. |
| **Hood Pin** | The General Module is behind the glove box. |
| **Trunk Release Motor** | The General Module is behind the glove box. |
| **Factory Alarm Arm** | Meter this wire while turning the key in the driver door key cylinder. |
| **Factory Alarm Disarm** | Meter this wire while turning the key in the driver door key cylinder. |
| **Trunk Hatch/Release** | The General Module is behind the glove box. |
| **Subwoofer (+/-)** | If equipped, the amplifier is in the left side of the luggage compartment. |
| **Radio 12V** | The radio is in the luggage compartment floor. |
| **Wipers** | The General Module is behind the glove box. |