**I-Bus Codes: E39 (5 Series 1996-2003)**

|  |  |
| --- | --- |
| **IBUS Code** | **Windows** |
| 3F 05 00 0C 00 45 CK | Driver Front Window: Open |
| 3F 05 00 0C 00 44 CK | Driver Rear Window: Close |
| 3F 05 00 0C 00 47 CK | Passenger Front Window: Open |
| 3F 05 00 0C 00 65 CK | All Windows: Open |
| 3F 05 00 0C 00 66 CK | Sunroof: Open |
|  |  |
| **IBUS Code** | **Doors and Lock** |
| 3F 05 00 0C 00 0B CK | All Locks: Toggle Lock/Unlock |
| 3F 05 00 0C 00 08 CK | Trunk: Open |
|  |  |
| **IBUS Code** | **Radio** |
| C0 06 68 31 00 00 0B 94 | "Mode" Button: Press |
| C0 06 68 31 00 13 4B C7 | "Mode" Button: Release |
| 50 03 C8 01 9A | "R/T" Button: Press |
| 68 03 18 01 72 | Radio polling CD Changer |
| 18 04 68 02 00 76 | CD Changer answer to Radio polling |
|  |  |
| **IBUS Code** | **Lights** |
| 3F 05 00 0C 00 11 CK | Turn on Interior Lights for 3 seconds, then dim |
|  |  |
| **IBUS Code** | **Seats** |
| 3F 05 00 0C 05 00 CK | Driver Seat: Move Forward |
| 3F 05 00 0C 05 01 CK | Driver Seat: Move Backward |
|  |  |
| **IBUS Code** | **Mirrors** |
| 3F 06 00 0C 01 31 01 04 | Driver Mirror: Fold In |
| 3F 06 00 0C 01 30 01 05 | Driver Mirror: Fold Out |
| 3F 06 00 0C 02 31 01 07 | Passenger Mirror: Fold In |
| 3F 06 00 0C 02 30 01 06 | Passenger Mirror: Fold Out |
|  |  |
| **IBUS Code** | **Misc** |
|  | Spray Window Washer Fluid for 2-3 seconds |
|  |  |

**I-Bus Codes: E46 (3 Series 1999-2005)**

|  |  |
| --- | --- |
| **IBUS Code** | **Windows** |
| 3F 05 00 0C 52 01 65 | Driver Front Window: Open |
| 3F 05 00 0C 53 01 CK | Driver Front Window: Close |
| 3F 05 00 0C 41 01 76 | Driver Rear Window: Open |
| 3F 05 00 0C 42 01 CK | Driver Rear Window: Close |
| 3F 05 00 0C 54 01 CK | Passenger Front Window: Open |
| 3F 05 00 0C 55 01 CK | Passenger Front Window: Close |
| 3F 05 00 0C 44 01 CK | Passenger Rear Window: Open |
| 3F 05 00 0C 43 01 CK | Passenger Rear Window: Close |
| 3F 05 00 0C 7E 01 CK | Sunroof: Open |
| 3F 05 00 0C 7F 01 CK | Sunroof: Close |
|  |  |
| **IBUS Code** | **Doors and Locks** |
| 3F 05 00 0C 47 01 CK | Driver Front Door: Lock |
| 3F 05 00 0C 46 01 CK | Passenger Front Door: Lock |
| 3F 05 00 0C 34 01 CK | All Doors: Toggle Lock/Unlock |
| 3F 05 00 0C 02 01 CK | Trunk: Open |
| 3F 05 00 0C 03 01 CK | Lock doors and fade out interior lights |
|  |  |
| **IBUS Code** | **Radio** |
| C0 06 68 31 00 00 0B 94 | "Mode" Button: Press |
| C0 06 68 1 00 13 4B C7 | "Mode" Button: Release |
| 50 03 C8 01 9A | "R/T" Button: Press |
| 68 03 18 01 72 | Radio polling for CD changer. Expects response of 18 04 68 02 00 76. |
| 18 04 68 02 00 76 | CD changer responding to Radio to confirm existance. |
| 50 04 68 32 10 1E | "Volume Down" Button: Press |
| 50 04 68 32 11 1F | "Volume Up" Button: Press |
|  |  |
| **IBUS Code** | **Lights** |
| 00 04 BF 76 00 CK | Turn all exterior lights off. |
| 00 04 BF 76 02 CK | Flash warning lights on/off repeatedly. |
| 00 04 BF 76 04 CK | Flash lowbeams on/off repeatedly. |
| 00 04 BF 76 06 CK | Flash lowbeams and warning lights on/off repeatedly. |
| 00 04 BF 76 08 CK | Flash highbeams on/off repeatedly. |
| 00 04 BF 76 0A CK | Flash highbeams and warning lights on/off repeatedly. |
| 00 04 BF 76 0C CK | Flash highbeams and lowbeams on/off repeatedly. |
| 00 04 BF 76 0E CK | Flash highbeams, lowbeams and warning lights on/off repeatedly. |
| 3F 05 BF 0C 01 01 CK | Cycle through exterior lighting patterns (high, low, fogs). |
| D0 07 BF 5B 60 00 04 00 CK | Flash dash blinkers (without flashing exterior blinkers) |
| D0 07 BF 5B 60 00 80 00 CK | Flash dash blinkers FAST/SLOW intermitent. |
| 3F 05 00 0C 01 01 CK | Turn off interior lights. |
| 3F 05 00 0C 4E 01 CK | Turn on clown nose for 3 seconds. |
| 3F 05 00 0C 60 01 CK | Turn on interior lights for 3 seconds. |
|  |  |
| **IBUS Code** | **Seats** |
| 3F 06 72 0C 01 01 00 CK | Driver Seat: Move Forward |
| 3F 06 72 0C 01 02 00 CK | Driver Seat: Move Backward |
| 3F 06 72 0C 01 04 00 CK | Driver Seat: Move Up |
| 3F 06 72 0C 01 08 00 CK | Driver Seat: Move Down |
| 3F 06 72 0C 01 40 00 CK | Driver Seat: Move Upper Portion Forward |
| 3F 06 72 0C 01 80 00 CK | Driver Seat: Move Upper Portion Backward |
|  |  |
| **IBUS Code** | **Mirrors** |
| 9B 04 51 6D 41 CK | Passenger Mirror: Move Out |
| 9B 04 51 6D 42 CK | Passenger Mirror: Move In |
| 9B 04 51 6D 44 CK | Passenger Mirror: Move Up |
| 9B 04 51 6D 48 CK | Passenger Mirror: Move Down |
| 9B 04 51 6D 40 CK | Passenger Mirror: Stop (motor won't stop until you tell it to) |
|  |  |
| **IBUS Code** | **Bluetooth** |
| 3F 04 C8 1B 86 6E | Bluetooth Passkey Request to Phone |
| C8 08 3F A0 86 XX XX FF FF CK | Phone answer for Passkey Request, XX XX is the passkey. |
| 3F 04 C8 1C 84 6B CK | Bluetooth Coupling Mode |
| 3F 08 C8 1C 86 XX XX FF FF CK | Set Bluetooth Passkey. |
| 3F 05 C8 1C 88 00 66 | Turn Bluetooth On. |
| 3F 05 C8 1C 88 01 67 | Turn Bluetooth Off. |
| 3F 04 C8 08 03 F8 | Request for Bluetooth Name from phone. |
| C8 LL 3F A0 03 XX ... CK | Response from phone with Bluetooth Name. |
|  |  |
| **IBUS Code** | **Memory** |
| 00 04 BF 72 20 E9 | Car opened with remote/key 1 |
| 72 05 BF 78 05 00 B5 | Save Memory: Position 1 |
| 3F 06 72 0C 02 01 00 CK | Driver Seat: Move to Memory Position 1 |
| 3F 06 72 0C 02 02 00 CK | Driver Seat: Move to Memory Position 2 |
| 3F 06 72 0C 02 04 00 CK | Driver Seat: Move to Memory Position 3 |
|  |  |

**Module Address**

|  |  |  |  |
| --- | --- | --- | --- |
| **Abbreviation** | **Device** | **Address (hex)** | **Comments** |
|  | Broadcast | 00 |  |
| CDC | CD Player | 18 |  |
| NAV | Navigation / Videomodule | 3B |  |
|  | Menu Screen | 43 |  |
| MFL | Multi Function Steering Wheel Buttons | 50 |  |
| PDC | Parking Distance Control | 60 |  |
| RAD | Radio | 68 |  |
| DSP | Digital Sound Processor | 6A |  |
| IKE | Instrument Control Electronics | 80 |  |
| LCM | Light Control Module | BF |  |
| MID | Multi-Information Display Buttons | C0 |  |
| TEL | Telephone | C8 |  |
|  | Navigation Location | D0 |  |
| OBC | Textbar | E7 |  |
|  | Lights, Wipers, Seat Memory | ED |  |
| BMB | Board Monitor Buttons | F0 |  |
|  | Broadcast | FF |  |
|  | Unknown | 44 |  |
|  | Unknown | 08 | 08 05 BF 7C 00 01 CF gets a lot of info back including time ??? |
|  | Unknown | 30 |  |
| DIS | Diagnostics PC / General Module | 3F | Used by BMW technicians. |
|  | Unknown | 7F |  |
|  | Unknown | A8 |  |
|  | TV Module | BB |  |
|  | Driver's Mirror | 9B |  |
|  | Passenger Mirror | 51 |  |

When a button is pressed on the remote key these messages are sent:  
00 04 BF 72 22 EB // unlock in  
00 04 BF 72 12 DB // lock in  
00 04 BF 72 42 8B // boot in  
00 04 BF 72 02 CB // out