|  |
| --- |
| **IBus Devices & Operations**  [Start](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/index.htm) [Up](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/IBus.htm) |

|  |  |  |
| --- | --- | --- |
| **Links from this page:** |  | **Devices** 00    Broadcast, GM 08    SHD  18    CD Player  24    HKM 28    FUM  30    CCM 3B    NAV, GT 3F    DIA  40    FBZV 43    Menu Screen, GTF 44    EWS 46    CID 47    FMBT  **50    MFL, Multi Functional Steering Wheel Buttons** 51    MML 5B    IHK  60    PDC 66    CDCD 68    RAD, Radio 6A    DSP  70    RDC 72    SM 73    SDRS 76    CDCD 7F    NAVE  80    IKE  9B    MMR 9C    CVM  A0    FMID A4    ACM A7    FHK A8    NAVC AC    EHC  B0    SES BB    TV, NAVJ BF    LCM, Light Control Module. GLO  C0    MID, Multi Information Display C8    Telephone  D0    Navigation Location, LKM **D7    USED BY ME: PC D8    USED BY ME: GPS and Powercontrol Module** DA    SMAD  E0    IRIS E7    OBC Textbar, ANZV E8    ISP ED    Lights, wipers, seat memory, TV  **F0    Bordmonitor Buttons** F5    CSU FF    Broadcast, LOC    **Operations** 01    closed without CD. "I am alive". Poll CD.02    Unlock (quick press) or CD self anounce ("02 01") or poll responce ("02 00") 10    Request Ignition status 0C    External lights and open boot or lock/unlock car[11](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/ibusdevicesandoperations.htm#11)    Ignition status  (and "flash low small"?) (and poll)[13](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/ibusdevicesandoperations.htm#13)    <IKE Sensor Status> (reverse gear) 14    Country coding request 15    Country coding response?. Set unit on IKE. [18](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/ibusdevicesandoperations.htm#18)    Speed and rpm 1A 35 00    Followed by text to panel 23 62 30    Write value to NAV field 0 24    IKE data request (text data update, E39) [2B](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/ibusdevicesandoperations.htm#2B)    LED command to BM 2C    Display Phone symbol 31 60 00 nn    NAV to radio. Change to CD 'nn' 32    Left BM nob turn (and steeringwheel '+' & '-')  [38](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/ibusdevicesandoperations.htm#38)    Request CD and track info [39](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/ibusdevicesandoperations.htm#39)    CD status and track info response 3B    Steering wheel buttons except vol+ and - 40    Set date and time 41    OBC get and reset value 46    Menu commands to NAV 47    BM info button 48    BM buttons 49    Right BM nob turn [4A](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/ibusdevicesandoperations.htm#4A)    LED on left BM button 4F    Power message ? Switch off NAV screen 5D    ? [6D](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/ibusdevicesandoperations.htm#6D)    Sideview Mirror [72](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/ibusdevicesandoperations.htm#72)    Remote key [74](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/ibusdevicesandoperations.htm#74)    Ignition lock 76    External lights 79    ? [7A](https://web.archive.org/web/20190210133920/http:/web.comhem.se/bengt-olof.swing/ibusdevicesandoperations.htm#7A)    Window and door message, interior light control A2    NAV position and time A5 62 01 nn Write value to nav field nn    ***Ignition status***  11 dd  dd : (bit mapped) Bit 0 = KL\_R (Pos1\_Acc). Radio Position Bit 1 = KL\_15 (Pos2\_On). Ignition Bit 2 = KL\_50 (Pos3\_Start). Starter    ***IKE Sensor Status***  13 02 **1**0 00 00 00 00 38  // in reverse 13 02 **0**0 00 00 00 00 38  //out of reverse  handbrake on, oil pressure low, brake pads worn, transmission emergency program, gearbox not in P, motor running, vehicle driving, reverse not plausible, Gear: R, Gear: 1, Gear: 2, Gear: D, alarm horn on, immobiliser on,  Aux heating on, Aux ventillation on, Temp deg F    ***Speed message***  18 ss rr  ss = speed / 2 [km/h] (512km/h max) rr = revs / 100 rpm    ***LED control messages***  2B Data  8 bits of data:  76 54 32 10 00 gg yy rr  00: off 01: on 11: on/flashing    ***Request CD and track info***  38 00    Request CD and track info 38 01    Stop play 38 03    Start play 38 04    Fast Scan 38 06    Load CD 38 07    Scan Mode 38 08    Random Mode 38 0A    Change track    ***CD status and track info***  39 **00 02** 00 3F 00 dd tt 00   CD and Track Status Not Playing Response 39 **00 09** 00 3F 00 dd tt 00   CD and Track Status Playing Response 39 **02 09** 00 3F 00 dd tt 00   Track Start Playing 39 **03 09** 00 3F 00 dd tt 00   CD Status Scan Forward 39 **04 09** 00 3F 00 dd tt 00   CD Status Scan Backward    ***Set date and time***  40 01 0C 3B  40 = OBC  Set data  01 = Time 0C = hours in hex 3B = minutes in hex  40 02 1B 05 08 40 = OBC  Set data  02 = Date 1B = day in hex  05 = month in hex 08 = year in hex    ***Turning on an off LED next to left knob***  4A FF switch on and  4A 00 to switch it off."    ***Sideview mirror***  6D 40   right 6D 80   left    ***Remote key***  72 22  unlock in 72 12  lock in 72 42  boot in 72 02    ***When key is inserted into the ignition lock these messages are sent***  74 04 01  in  74 00 FF  out    ***Window and door message***  7A 51 20 |

|  |
| --- |
| **BM Buttons** |

|  |  |  |
| --- | --- | --- |
| Links from this page: |  | Left side  F0 05 FF 47 00 38 75 <Info> press F0 05 FF 47 00 78 35 <Info> hold (0x40 added) F0 05 FF 47 00 B8 F5 <Info> release (0x80 added)  F0 04 68 48 30 E4 <cassette> Press F0 04 68 48 70 A4 <cassette> Hold F0 04 68 48 B0 64 <cassette> Release  F0 04 68 48 31 E5 <FM> press F0 04 68 48 71 A5 <FM> hold F0 04 68 48 B1 65 <FM> release (0x80 added)  F0 04 68 48 21 F5 <AM> press F0 04 68 48 61 B5 <AM> hold F0 04 68 48 A1 75 <AM> release (0x80 added)   F0 04 68 48 23 F7 <Mode> press F0 04 68 48 63 B7 <Mode> hold F0 04 68 48 A3 77 <Mode> release  F0 04 68 48 11 C5 <1> F0 04 68 48 51 85  F0 04 68 48 91 45   F0 04 68 48 02 D6 <4> F0 04 68 48 42 96  F0 04 68 48 82 56   F0 04 68 48 01 D5 <2> F0 04 68 48 41 95  F0 04 68 48 81 55   F0 04 68 48 13 C7 <5> F0 04 68 48 53 87  F0 04 68 48 93 47   F0 04 68 48 12 C6 <3> F0 04 68 48 52 86  F0 04 68 48 92 46   F0 04 68 48 03 D7 <6> F0 04 68 48 43 97  F0 04 68 48 83 57  F0 04 68 32 10 BE <left nob> Left turn F0 04 68 32 11 BF <left nob> Right turn F0 04 68 48 06 D2  F0 04 68 48 46 92 F0 04 68 48 86 52    Right side  F0 04 68 48 24 F0 <Eject> Press F0 04 68 48 64 B0 <Eject> Hold  F0 04 68 48 A4 70 <Eject> Release   F0 04 FF 48 08 4B <Phone> F0 04 FF 48 48 0B F0 04 FF 48 88 CB  F0 04 68 48 10 C4 <<> F0 04 68 48 50 84 F0 04 68 48 90 44  F0 04 68 48 00 D4 <>> F0 04 68 48 40 94 F0 04 68 48 80 54  F0 04 68 48 14 C0 <rev> F0 04 68 48 54 80  F0 04 68 48 94 40   F0 04 FF 48 07 44 <clock> F0 04 FF 48 47 04 F0 04 FF 48 87 C4  F0 04 68 48 04 D0 <tone> F0 04 68 48 44 90 F0 04 68 48 84 50  F0 05 FF 47 00 0F 42 <select> F0 05 FF 47 00 4F 02 F0 05 FF 47 00 8F C2  F0 04 FF 48 34 77 <menu> press F0 04 FF 48 74 37 <menu> hold F0 04 FF 48 B4 F7 <menu> release  F0 04 3B 49 81 07 <right nob> Left turn F0 04 3B 49 01 87 <right nob> Right turn F0 04 3B 48 05 82 <right nob> push  F0 04 3B 48 45 C2 <right nob> hold  F0 04 3B 48 85 02 <right nob> rel |

|  |
| --- |
| **Steering Wheel Buttons** |

|  |  |  |
| --- | --- | --- |
| Links from this page: |  | 50 04 68 32 11 1F <+> press 50 04 68 32 31 3F <+> release  50 04 68 32 10 1E <-> press 50 04 68 32 30 3E <-> release  50 04 68 3B 01 06 <next> press 50 04 68 3B 21 26 <next> release  50 04 68 3B 08 0F <previous> press 50 04 68 3B 28 2F <previous> release  50 04 C8 3B 80 27 <R/T>  50 04 C8 3B 80 27 <voice> press 50 04 C8 3B 90 37 <voice> hold 50 04 C8 3B A0 07 <voice> release |