

Program version: **BMW, BMW\_CODING, BMWMINI, BMWSSS 1987-2009** 

June 2010

#### 1987-2007 with Manual Selection

SYSTEM	TYPE S	YSTEM	YEAR	READ	CLEAR	DATA	ACTIVATION	CLEAR	SERVICE	EWS SYN.
				COD	CODE	STREAM		ADAPTION		
				Ε						
Drive	DIESEL	<b>DDE 2.1</b>	1987-	+	+	+	+			
	ENGINE	<b>DDE 2.2</b>	2007							
		<b>DDE 6.0</b>								
		<b>DDE 6.2.6</b>								
		<b>DDE 7.0</b>								
		<b>DDE 7.1</b>								
		DDE 3.0	1987-	+	+	+			+	
		<b>DDE 5.0</b>	2007						Idle speed control	
		<b>DDE 4.0</b>	1987-	+	+	+	+		+	
			2007						Idle speed control Compression test Balance test	
		M51	1987-	+	+					
			2007							
	GASOLINE	DME 1.1	1987-	+	+	+	+			
	ENGINE		1988							

DME 1.2	1988-	+	+	+	+		
DNIE 1.2	1988-	I	I	I	I		
	(M70 88- 99/S38 91-						
	93 M70,1~6						
	Cyl.)	+	+	+	+		
DME 1.2	1991-	Ŧ	Ŧ	Ŧ	+		
Right	1993						
	(M70,7~12 Cyl.)						
DME 1.3	1988-	+	+	+	+		
	1992						
<b>DME 1.7</b>	1992-	+	+	+	+		
	1995						
DME 1.7.1	1994-	+	+	+	+		
/ DME	1995						
1.7.1 Right							
DME 1.7.2	1995	+	+	+	+		
DME 1.7.3	1992-	+	+	+	+		
	1995						
<b>DME 3.1</b>	1991-	+	+	+	+		
	1992						
DME 3.3	1993-	+	+	+	+		+
	1996						
DME 3.3.1	1993-	+	+	+	+		+
	1995						
DME 5.2	10/1995	+	+	+	+	+(M44/M62)	
	-6/1999						
	(M73,1~6						
	Cyl.)						
DME 5.2	1/1995-	+	+	+	+	+(M44/M62)	
Right	8/2001						
	(M73,1~12						
DME 5 2 1	Cyl.) 1998-	+	+	+		+	
DME 5.2.1	1998-	ļ	ļ.	!		ļ	

/ DME	2000							
5.2.1 Rig								
	Cyl.)							
DME 5.		+	+	+	+	+		
M62	9/1998							
NSV 70		+	+	+	+			
M52								
MS 40.0	/ 1991-	+	+	+				
MS 40.1	1995							
MS 41.0	1995-	+	+	+	+	+		+
	1999							
MS 41.1	11/1995	+	+	+	+	+		+
	-9/1999							
MS 41.2	4/1996-	+	+	+	+	+		
	8/2000							
MS 42	6/1998-	+	+	+	+	+	+	+
	10/2000						Idle speed control	
MS 43 /	MS 4/2000-	+	+	+	+	+	+	+
45	3/2003						Idle speed control	
MS S50		+	+	+	+	+		
MS S52	8/2003							
MS 854	5/2000-	+	+	+		+		
	2007							
BMS 43		+	+	+	+	+		+
BMS 46		+	+	+	+	+	+	+
	2000						Idle speed control	
ME 7.2	9/1998-	+	+	+	+	+	+	+
	10/2002						Idle speed control	
ME 9 N		+	+	+	+	+	+ Idle speed control Learning valvetronic limit positios	
ME 9		+	+					
N52K								

(E60/61)								
ME 9 N52K		+	+	+				
(E70)								
ME 9 N62		+	+	+	+	+	+ Idle speed control	+
ME 9 N62TU		+	+	+	+	+	+ Idle speed control CO adjustment Consumption indicator	+
ME 9 M54	L I	+	+	+	+	+		+
ME 9.2 N4		+	+	+	+	+	+ Idle speed control Learning valvetronic limit positios	
ME 9.2.1 N62	9/2003- 9/2005	+	+	+	+	+	+ Idle speed control Consumption indicator	+
ME 9.2.3 N62TU2	9/2007-	+	+	+	+			
ME 17.2.1 N46	3/2007-	+	+	+	+			
MED 9.2.2 N73 TU	2 9/2006-	+	+	+	+	+		
<b>MSD 80</b>	3/2007-	+	+	+	+			+
MSD 85		+	+	+	+			
MSV 70 N52		+	+	+	+		+ Idle speed control Learning valvetronic limit positios	
MSV 80 N52		+	+	+	+		+ Learning valvetronic limit positios	
MSS 60 865	9/2007-	+	+	+	+			

MSS 65	+	+	+	+		
<b>S85</b>						

## Drive, EGS/AGS (Transmission) 1987-2007 with Manual Selection

CONTROL	ENGINE	BODY	TRANSMISSION	READ	CLEAR	DATA	ACTIVATION	CLEAR
SYSTEM	MODEL	<b>F22</b>		CODES	CODES	STREAM	-	ADAPTION
EGS 1.2x	M30, M70	E32	4HP-22/24	+	+		+	
EGS 2.2x	M70, S70	E31, E32	4HP-24	+	+	+	+	+
EGS 4.1x	M42, M43,	E34, E36	A4S 270R/310R (THM	+	+	+	+	
	M44, M50		R1)					
EGS 7.10	M50	E34, E36	A5S 310Z (5HP-18)	+	+	+	+	+
EGS 7.11	S50 US	M3	A5S 310Z (5HP-18)	+	+	+	+	+
EGS 7.3	M60B30	E32, E34, E38	A5S 310Z (5HP-18)	+	+	+	+	+
AGS 7.32	M60B30	E32, E34, E38	A5S 310Z (5HP-18)	+	+	+	+	+
AGS 8.32	M51, M52,	E36, E38, E39,	A5S 310Z (5HP-18)	+	+	+	+	+
	S52	M3						
EGS 8.34	M43, M44,	E36, E38, E39,	A4S 270R (GMPT R1)	+	+	+	+	+
	M52	Z3						
EGS 8.36	M52	E36, E38, E39	A5S 310Z (5HP-18)	+	+	+	+	+
AGS 8.51	M62	E38, E39	A5S 440Z (5HP-24)	+	+	+	+	+
AGS 8.55	M62	E31, E38, E39	A5S 440Z (5HP-24)	+	+	+	+	+
GS 8.60	M52TU	E39, E46		+	+	+	+	+
AGS 8.60.2	M62	E38, E39	A5S 440Z (5HP-24)	+	+	+	+	+
EGS 8.60.4		E36, E38, E39,		+	+	+		+
		E46						
EGS 8.70	M52	E36, E38, E39		+	+	+	+	+
EGS9	M60	E32, E34	A5S 560Z (5HP-30)	+	+	+	+	+
AGS 9.22	M60	E31, E38, E39	A5S 560Z (5HP-30)	+	+	+	+	+
AGS 9.22.1	M62, M73	E31, E38, E39	A5S 560Z (5HP-30)	+	+	+	+	+
GS 20	M43,	E39, E46	A5S 360R (GM 5)	+	+	+	+	+
	M52TU		``´´					

SMG	S38, M52, MSS50	M3, M5	+	+	+		
SMG II		M3	+	+	+		+
EGS JECS	M50	E34, E36	+	+	+		
(Jatco)							
GM6	N46	E90	+	+	+	+	
GS19	M54	E60 /E61	+	+	+	+	+
GS19	N62	E63	+	+	+	+	+
GS19	N62	E65/E66	+	+	+		+
GS1904	N62	E53	+	+	+	+	+
GS1911	N46	E90 /E91	+	+		+	+
GS1911.3	N46	E90	+	+	+	+	+
GS1911.3	N54	E71	+	+	+	+	+
6HP19TU	N52K	E60/61	+	+			
<b>6HP19TU</b>	N52K	E70	+	+	+		

### Drive, EML (Engine Power Control/Electronic Throttle System) 1988-2000

CONTROL SYSTEM	ENGINE	<b>ENGINE MODEL</b>	BODY	DATA STREAM	<b>READ CODES</b>	CLEAR CODES
	SYSTEM					
<b>EML M70</b> (12 Cyl)	M1.2, M1.7	M70B50	E32	+	+	+
<b>EML S70</b> (12 Cyl)	M1.7.1	S70B50	E31, E32	+	+	+
<b>EML M30</b> (6 Cyl)	M1.3	M30B35	E32	+	+	+
EML IIIS M73 (12 Cyl)	M5.2.1	M73B54	E31, E38	+	+	+

Note: EML systems ECU independent up to M73 Engine. Newer EML systems combined in new model Engine control systems (DME/DDE)

#### Drive Related 1995-2007

SYSTEM	BODY TYPE	MODEL	DATA	READ	CLEAR	ACTIVATION
		YEAR	STREAM	CODES	CODES	

<b>EWS</b> (Electronic	EWS II – E31, E34, E36, E38, E39	1995-2003	+	+	+	
Drive-Away	EWS III – E36, E38, E39, E53	1997-2003				
Protection)	EWS III $D - Z3$	1999-2002				
<b>GR</b> (Cruise	E38, E39, E46, E53			+	+	
Control)						
GWS (Gear	E70, E71	2007~		+	+	
Selection Switch)	E60/E61	2007~	+	+	+	
<b>EKPS</b> (Electric	E60/E61	2007~	+	+	+	+
Fuel Pump)	E70	2007~		+	+	+
	E71	2007~		+	+	
TOENS (Thermal	Z3	1996-2002		+	+	
Oil Level Sensor)						
EWA (Anti-theft	E65,E66		+	+	+	+
alarm)						
VTC 1	E65, E66, E63			+	+	
(Valvetronic 1)						
VTC 2	E65, E66, E63			+	+	
(Valvetronic 2)						
QMVH (Lateral-	E71		+	+	+	+
moment						
distribution, rear						
axle)						
CAS (Car Access	E 87, E90, E91, E60, E61, E63, E65,	1995-2007		+	+	
System)	E66,E70, E71					
	E60/E61	2007~	+	+	+	+
	E70	2007~		+	+	+

## CHASSIS, ABS/ASC/DSC 1988-2007 with Manual Selection

SYSTEM MAKE	CONTROL SYSTEM	DATA STREAM	<b>READ CODES</b>	CLEAR CODES	ACTIVATION
BOSCH	ABS MK	+	+	+	

	ADC MIZ $UU/2$		1	+	
TEVES	ABS MK IV/3	+	+		+
TEVES	ABS MK IV/G	+	+	+	+
TEVES	ABS MK IV/G1	+	+	+	+
TEVES	ABS MK 20-I/ERL	+	+	+	+
BOSCH	ABS 5	+	+	+	+
TEVES	ABS/ASC	+	+	+	+
BOSCH	ABS/ASC	+	+	+	+
TEVES	ABS/ASC for 4 Cyl	+	+	+	+
TEVES	ABS/ASC MK IV/3	+	+	+	+
TEVES	ABS/ASC 20-I/ERL	+	+	+	
BOSCH	ABS/ASC 5 M51/M60/M62	+	+	+	+
TEVES	ABS/ASC ITT Auto ERL	+	+	+	
BOSCH	ABS/ASC 5.7	+	+	+	+
BOSCH	ABS/DSC 2	+	+	+	+
BOSCH	ABS/DSC 3 M62/M73	+	+	+	+
BOSCH	ABS/DSC 5.0	+	+	+	
BOSCH	ABS/DSC 5.7	+	+	+	+
BOSCH	ABS/DSC E46	+	+	+	
BOSCH	ABS/DSC E65/E66	+	+	+	
BOSCH	ABS/DSC E60/E61 (~2007)	+	+	+	+
BOSCH	DSC E90/E91	+	+	+	+
TEVES	ABS/ASC M44	+	+	+	+
BOSCH	DSC EHB3-E60	+	+	+	+
TEVES	DSC MK60	+	+	+	+
BOSCH	DSC 7.0 E70/E71	+	+	+	+
BOSCH	DSC 8	+	+	+	+
BOSCH	DSC 8PLUS	+	+	+	+

#### CHASSIS RELATED 1988-2007

		YEAR	STREAM	CODES	CODES	
EDC (Electronic Damper Control)	E31,E32,E38	1988-2001		+	+	
EDC (Electronic Damper Control)	E60/E61 (~2007)		+	+	+	+
<b>EDCSHL</b> (Damper satellite, rear left)	E70, E71		+	+	+	+
<b>EDCSHR</b> (Damper satellite, rear right)	E70, E71		+	+	+	+
<b>EDCSVL</b> (Damper satellite, front left)	E70, E71		+	+	+	+
<b>EDCSVR</b> (Damper satellite, front right)	E70, E71		+	+	+	+
<b>EHC</b> (Electronic Height Control)	E39 (Wagon 99~), E53, E65/E66, E71	1999-2004	+	+	+	+
ICM (Integrated Chassis Management)	E71		+	+	+	+
LWS/LEW (Steering Angle Sensor)	Z3, E38, E39, E46, E52, E53	1996-2004		+	+	
RDC/RDW (Tire Pressure Control)	E38, E39, E46, E52, E53, E71	1996-2004	+	+	+	
<b>VDM</b> (Vertical Dynamics Management)	E71		+	+	+	+
VTG (Transfer case)	E53, E71		+	+	+	+
<b>ELV</b> (Electrical Steering Column Lock)	Z3, E38, E39, E46, E52, E53	1996-2004		+	+	
AHK (Active Real Axle Kinematics)	E32, E34	1988-1994		+	+	
<b>CIM</b> (Chassis integration module)	E65/E66		+	+	+	+
AFS (Active Front Steering)	E60/E61 (~2007)		+	+	+	
<b>EMF</b> (Electro-Mechanical parking brake)	E65/E66, E71		+	+	+	+
AL (Active Steering)	E63, E71		+	+	+	
ARS (Dynamic Drive 2)	E63, E71		+	+	+	+

## **BODY, SRS (AIR BAG) 1988-2007**

BODY TYPE	AIR BAGS	CONTROL SYSTEM TYPE	MODEL	DATA	READ	CLEAR
			YEAR	STREAM	CODES	CODES
E30,E31,E32, E34	Drivers Air bag	5WK4 027	1988-1991		+	+
E31,E32, E34, E36	Drivers Air bag	5WK4 060	1991-1993		+	+
E31,E32, E34, E36, E38	1 or 2 Air bags	ZAE, BAE	1993-1995		+	+
E31.E36,E38,E39,Z3	4 or 8 Air bags	ZAE2, MRS, MRS2	1995-1999		+	+

E38, E39, E46, Z3	6 or 10 Air bags	MRS3	1999-2001		+	+
E38,E39,E46,E53	6 or 10 Air bags	MRS4	2001-2003		+	+
E87,E90/E91	1 or 2 Air bags	MRS5	2004-2006	+	+	+
E60/E61(~2007),E85	6 or 10 Air bags	SFZ, SBSL, SBSR	2002-2004	+	+	+
E65/E66,E85	8 or 10 Air bags	SASL, SASR, SBSL, SBSR, SSFA, SSBF, SSH, SFZ, STVL, STVR	2002-2004	+	+	+
E63, E70, E60/E61(2007~), E71, E85/E86(9/2005~)	6 or 10 Air bags	ACSM		+	+	+

# **BODY, INSTRUMENT CLUSTER 1987-2007**

BODY TYPE	DATA STREAM	READ CODES	CLEAR CODES	ACTIVATION	OTHERS
E31, E32, E34, E36, E38, E39, E46, E52, E53, E60/61, E63, E65/E66, E85, E70, E71, E87, E90, Z3	+	+	+	+	Service Reset/CBS

SERVICE INTERVA	L RESET (ANALOG)					
BODY TYPE	MODEL YEAR	OIL	MILEAGE	INS	SPECTION	
E30 (3 series)	1988-1990		+		+	
E36 (3 series)	1991-1998		+		+	
E34 (5 series)	1988-1995		+		+	
E32 (7 series)	1987-1994		+	+		
E31 (8 series)	1990-1998		+	+		
SERVICE INTERVA	L RESET (DIGITAL)					
BODY	MODEL YEAR	OIL MILEAGE	SERVICE TIME	SERVICE DISTANCE	ATF OIL	
E36 (3 series)	1995-1998	+	+	+	+ (up to 1995)( no ATF oil Reset function from Kombi E36)	
E36/7 (Z3)	1996-2002	+	+	+		

E46 (3series)	1999-2004	+	+	+	
E34 (5 series)	1988-1995	+	+	+	+
E39 (5 series)	1995-2003	+	+	+	
E38 (7 series)	1994-2002	+	+	+	
E52 (Z8)	2001-2003	+	+	+	
E53 (X5)	2000-2004	+	+	+	

SERVICE RESET			
CONTROL SYSTEM	BODY TYPE	CONTROL FUNCTION	ADAPTATION
CBS RESET 1	E60/E61 ~2007	Time Reset Service	+
	E63	Rear Brakes	+
	E65/E66	Engine Oil	+
	E70/E71 (Microfilter, Coolant, Spark Plugs not included)	Vehicle Check	+
	E87 (TIME RESET not included)	Microfilter	+
	E90/E91 (TIME RESET not included)	Front Brakes	+
CBS RESET 2	E60/E61~2007	Spark Plugs	+
	E63 E65/ E66	Exhaust Emission Inspection	+
	E70/E71 (Microfilter, Coolant, Spark Plugs not included)	Brake Fluuid	+
	E87 (COOLANT RESET not included)	Vehicle Inspection	+
	E90 /E91(COOLANT RESET not included)	Coolant	+

# BODY, ZKE (Central Body Electronics) 1988-2006

CONTROL SYSTEM	BODY TYPE	MODEL YEAR	CONTROL FUNCTION ECUs	DATA STREAM	READ CODES	CLEAR CODES	ACTIVATION
ZKE 1	E32	1987-1994	Wiper and washer control	+	+	+	+
	E34	1988-1995	Contact pressure control	+	+	+	+
			Head-light cleaning system	+	+	+	+

		1	1					
			Central locking(ZV	/)	+	+	+	+
			Door heating		+	+	+	+
			Power windows (F	H)	+	+	+	+
			Sliding/tilting sunr	oof (SHD)	+	+	+	+
			Electronic fuse	, , , , , , , , , , , , , , , , , , ,	+	+	+	+
ZKE 2	E31	1990-1998	Interior lights			+	+	
			Wiper and washer	control		+	+	
			ADV			+	+	
			SRA			+	+	
			Head-light cleaning	g system		+	+	
			Central locking(ZV			+	+	
			Power windows (F			+	+	
			Sliding/tilting sunr			+	+	
			Door lock heating			+	+	
ZKE 3	E38	1994-2002	Base module	Door contact	+	+	+	+
-	E39	1995-2003	(GM)	Central locking	+	+	+	+
	E53	2000-2006		Power windows	+	+	+	+
				Wiper	+	+	+	+
				Anti-theft	+	+	+	+
				Interior lights	+	+	+	+
			Driver door (FT)		+	+	+	+
			Driver memory (SI	M/LSM)	+	+	+	+
			Passenger memory	/	+	+	+	+
			Passenger memory	```	+	+	+	+
ZKE 4	E36	5/1994-1999	Central locking		+	+	+	+
	Z3	5/1997-2002	Power windows		+	+	+	+
			Interior lights		+	+	+	+
ZKE 5	E46	1999-2004	PM	Sunroof	+	+	+	+
	E52	2000-2003		Driver seat	+	+	+	+
				memory				
				Passenger seat	+	+	+	+
				memory				

	Switch block	+	+	+	+
SA	Wiper	+	+	+	+
	Headlight	+	+	+	+
	cleaning				
	Door locking	+	+	+	+
	Rear view	+	+	+	+
	mirror				
	SCA truck lid	+	+	+	+
	Central	+	+	+	+
	Locking				
	Power	+	+	+	+
	window				
Anti-theft system	n (DWA)		+	+	+

#### BODY RELATED 1995-2007

SYSTEM	BODY TYPE	MODEL	DATA	READ	CLEAR	ACTIVATION
		YEAR	STREAM	CODES	CODES	
LM/LCM/LSZ (Light check	LM/LCM – E38, E39, E52, E53,	9/1995-	+	+	+	+
module)	E65/E66, E60/E61	2007	E60/E61(2007~)			E60/E61(2007~)
	LSZ - E46					
	LM2 – E63					
LRA (Headlight vertical aim	E38,E39,E53		+	+	+	+
control)						
FLA (High Beam Assist)	E63,E71			+	+	+
SZM/SZL (Center Console	E38, E39, E46, E60/E61, E63	1995-2006	+	+	+	+
switch Center)	SZL: E65/ E66, E63					
<b>XENON_L</b> (Xenon head	E38, E39, E46, E53	1999-2006	+	+	+	
light, Left)						
<b>XENON_R</b> (Xenon head	E38, E39, E46, E53	1999-2006	+	+	+	

light, Right)					
PDC (Park Distance Control)	E36, Z3, E38, E39, E46, E65/ E66,E60/E61, E70,E71 E90/ E91, E63	+ E60/E61(2007~)	+	+	+ E70,E60/E61(2007~)
<b>CVM</b> (Convertible Top)	E36, Z3, E46, E85	+	+	+	
AIC/RLS (Rain Sensor/Rain and Light Sensor)	E38, E39, E46, E52, E53, E65, E66, E60/ E61, E71,E87, E90/ E91, E63	+	+	+	
MFL (Multi-functional Steering Wheel)	E38, E39, E46, E53		+	+	
SHD (Sunroof)	E38, E39, E46, E53, E60/E61, E70, E63	+ E70,E60/E61(2007~)	+	+	+ E70,E60/E61(2007~)
SM (Seat Memory)	E38, E39, E46, E53	+	+	+	+
CCM (Check Control Module)	E38, E39, E46		+	+	
<b>BSM/SMB</b> (Seat Memory, Passenger Side)	E38, E39, E46, E53		+	+	
<b>FBZV</b> (Remote Control for Central Lock)	E38, E39, E46, E53		+	+	
<b>HKM</b> (Trunk Lid Module)	E38, E39, E46, E53		+	+	
<b>SBE2</b> (Seat Occupation Detection)	E38, E39, E46, E53		+	+	
<b>SPMBT</b> (Mirror Memory, Passenger Side)	E38, E39, E46, E53		+	+	
<b>SPMFT</b> (Mirror Memory, Driver Side)	E38, E39, E46, E53		+	+	
<b>ZUHEIZ/STH</b> (Additional Heater, Park Heating)			+	+	
TMFAT (Driver door)	E65/E66, E60/E61(~2007)	+	+	+	+
<b>TMBFT</b> (Driver side rear door)	E65/E66, E60/E61(~2007)	+	+	+	+
<b>TMFAH</b> (Driver side rear door)	E65/E66	+	+	+	

<b>TMBFH</b> (Passenger side rear	E65/E66	+	+	+	
door)					
MPM (Micro Power Control)	E60/E61(~2007)	+	+	+	+
<b>KBM</b> (Body Basic Module)	E60,E61,E70, E63	+ E70,E60/E61(2007~)	+	+	+ E70,E60/E61(2007~)
FRM (Foot Well Module)	E87, E90/E91	+	+	+	+
FZD Function Centre Roof)	E87, E90/E91	+	+	+	+
<b>SMFA</b> Seat Module, Driver)	E60/E61,E70, E71,E87, E90/ E91	+ E70,E60/E61(2007~)	+	+	+ E70,E60/E61(2007~)
SMBF (Seat Module,	E60/E61 (~2007)	+	+	+	+
Passenger)					
<b>PM</b> (Power Module)	E65/E66	+	+	+	+
HKL (Rear-lid lift)	E65/E66,E71	+	+	+	+
AHL (Active Head Light)	E60/E61 (~2007)	+	+	+	+
KGM (Body Gateway	E63, E70, E60/E61 (2007~)	+	+	+	+
Module)		E70,E60/E61(2007~)			E70,E60/E61(2007~)
<b>WIM</b> (Wiper module)	E65	+	+	+	+
<b>SINE</b> (Siren and tilt Sensor)	E60/E61 (~2007)	+	+	+	
ALBFA (Active Backrest	E60/E61 (~2007)	+	+	+	
Width, Driver)					
ALBBF (Active Backrest	E60/E61 (~2007)	+	+	+	
Width, front passenger)					

#### INFORMATION AND COMMUNICATION

SYSTEM	BODY TYPE	MODEL YEAR	DATA STREAM	READ CODES	CLEAR CODES	ACTIVATION
<b>BIT</b> (Basis Interface telephone)	E38, E39, E46, E52, E53	1997-2004	JIKEAN			
				'	'	
<b>BMBT</b> (On-board Monitor)	E38,E39, E46, E53	1997-2004		+	+	
<b>DSP</b> (DSP Booster Module)	E38,E39, E46, E53	1995-2004		+	+	
FOND_ZIS/FID (Rear Multi-	E38	1998-2001		+	+	
information Display)						
<b>ZIS/MID</b> (Multi-information	E38,E39, E46, E53	1995-2004		+	+	

Display)						
<b>IRIS</b> (Integrated Radio Information	E38,E39, E46, E53	1998-2004		+	+	
System)						
NAV (Navigation System)	E38,E39, E46, E52, E53,	1997-2004		+	+	
	E60/E61(~2007)					
NAV JAP (Japanese Version	E38,E39, E46, E53,	1998-2004		+	+	+
Navigation System)	E60/E61(~2007)					
RAD (Radio)	E38,E39, E46, E52, E53	1995-2004	+	+	+	+
RAD2 (Radio)	E87, E90, E91	2004-2006	+	+	+	+
VIDEO_GT (Video Module	E38,E39, E46, E53	1998-2004		+	+	
Graphics Part)						
VIDEO_TV/VID (Video Module	E38,E39, E46, E53	1998-2004		+	+	
TV part)						
<b>SIM</b> (Safety and Information module)	E60/E61(~2007), E65,E66	2002-2004	+	+	+	+
ASK (Audio System)	E65,E66	2002-2004	+	+	+	+
<b>CD</b> (Control Display)	E65,E66	2002-2004		+	+	+
<b>CDGW</b> (Control display GW)	E65,E66	2002-2004	+	+	+	+
<b>CDC</b> (CD changer)	E65,E66, E63,	2002-2004		+	+	+
	E60,E61,E70,E71					E70,E60/E61(2007~)
<b>DVDC</b> (DVD changer)	E65,E66	2002-2004		+	+	
CA (Comfort Access)	E63,E71	2002-2004	+	+	+	
CCCA (CCC-A Applications)	E60/E61(~2007), E71		+	+	+	+
CCCANT (CCC-ANT Antenna	E60,E61,E70,E71		+	+	+	+
tuner)			E70,E60/E61(2007~)			E70,E60/E61(2007~)
CCCASK (CCC-ASK Audio system	E60,E61,E70.E71		+	+	+	+
controller)			E70,E60/E61(2007~)			
<b>CCCBO</b> (CCC-BO User Interface)	E60,E61,E70,E71		+	+	+	+
			E70,E60/E61(2007~)			E70,E60/E61(2007~)
CCCBW (CCC-GW Gateway)	E60,E61,E70,E71		+ E70,E60/E61(2007~)	+	+	+ E70,E60/E61(2007~)
<b>CID</b> (Central Information)	E60,E61, E63,E70,E71		+	+	+	+
			E70,E60/E61(2007~)			E70,E60/E61(2007~)
SGMSIM (Safety and Gateway	E60,E61(~2007)		+	+	+	+
Module (SIM))						

SGMZGM (Safety and Gateway	E60,E61(~2007)		+	+	
Module (ZGM))					
TCU (Telematic Control)	E60,E61,E70,E71		+	+	+
					E70,E60/E61(2007~)
CON (CON control)	E60,E61, E63,E70,E71	+	+	+	+
		E70,E60/E61(2007~) +	+	+	E70,E60/E61(2007~) +
VM (Video Module)	E60,E61				Ŧ
MASKNAV (Navigation System)	E60,E61	+	+	+	
MASKBO (Navigation System User	E60,E61, E63,E70,E71	+	+	+	+
Interface)		E70,E60/E61(2007~)			E70,E60/E61(2007~)
MASKGW (Navigation System	E60,E61, E63,E70,E71	+	+	+	+
Gateway)		E70,E60/E61(2007~)			E70,E60/E61(2007~)
<b>ULF</b> (Hands Free Utility)	E60,E61, E63, E70, E90	+	+	+	+
		E70,E60/E61(2007~)			E70,E60/E61(2007~)
<b>JBE</b> (Junction Box Electronics)	E71,E87, E90, E91	+	+	+	+
<b>BYTEF</b> (Byte Flight)	E60,E61		+	+	
HUD (Head-Up Display)	E60,E61, E63,E71	+	+	+	+
AMP (Amplifier)	E60,E61, E63	+	+	+	+
<b>AMPH</b> (Hi-Fi amplifier)	E71	+	+	+	+
<b>AMPT</b> (Top Hi-Fi amplifier)	E71	+	+	+	+
<b>SDARS</b> (Satellitle tuner)	E71	+	+	+	+
<b>FRM2</b> (Foot well module 2)	E71	+	+	+	+
<b>RFK</b> (Reversing camera)	E71	+	+	+	+
ULF_SBOX (Interfase box)	E71	+	+	+	+
VSW (Video switch)	E71	+	+	+	+

#### AIR CONDITIONING

SYSTEM	BODY TYPE	MODEL YEAR	DATA	READ	CLEAR	ACTIVATION
			STREAM	CODES	CODES	
<b>IHKR</b> (Automatic Heating and A/C	3 Series – E36, Z3, E46, E90 5 Series – E34, E39, E60,E61 8 Series – E31	1987-2006	+	+	+	+

	X5 -E53					
IHKA (Regulated Heating and	1 Series – E87					
A/C)	3 Series – E36, E46					
	5 Series – E34, E39,		+	+	+	+
	E60,E61	1987-2008				
	6 Series – E63					
	7 Series – E32, E38,					
	E65,E66					
	8 Series – E31					
	X5 -E53, E70					
	X6-E71					
	X3 -E83	2003-2004		+	+	
	Z4 -E85					
<b>IHKS</b> (Standard Heating and A/C)	E36/5 (ti), Z3, Z8	1991-2003	+	+	+	
<b>FKA</b> (Rear heater/air conditioning)	E65/E66, E71		+	+	+	+
FGB (Rear Compartment Blower)	E38	1995-2001		+	+	

# **CODING AND PROGRAMMING**

SYSTEM	BODY TYPE	FUNCTIONS DESCRIPTION
КОМВІ	5 series – E39 / 7 series – E38 / 3 series – E46 / X series – E53	Recoding, Emergency Recovery
LEW	5 series – E39 / 7 series – E38 / 3 series – E46 / X series – E53	Recoding
AIRBAG	5 series – E39 / 7 series – E38 / 3 series – E46 / X series – E53	Recoding
IHKA/IHKR	5 series – E39 / 7 series – E38 / 3 series – E46 / X series – E53	Recoding
LCM	5 series – E39 / 7 series – E38 / X series – E53	Recoding

LSZ	3 series – E46	Recoding
ASC	5 series – E39	Recoding
DSC	7 series – E38 / 3 series – E46 / X series – E53	Recoding
ZKE	5 series – E39 / 7 series – E38 / 3 series – E46 / X series – E53	Recoding
RETROFIT XENON LIGHT	5 series – E39 / 7 series – E38 / 3 series – E46 / X series – E53	Retrofit

# **KEY MEMORY**

PROGRAMMING	BODY TYPE	FUNCTIONS	DESCRIPTION
KEY MEMORY (KEY1, KEY2) after 1999/09	5 series – E39 7 series – E38	Automatic locking after starting off	The vehicle is automatically locked after pulling away. Doors can be unlocked at any time from the inside.
		Selective central locking system	The first time the button on the key is pressed, only the driver's door is unlocked. If it is pressed a second time, the whole car is opened. This function is only effective when the remote control is used.

KEY MEMORY (KEY1- KEY4) after 1999/09	3 series – E46 X series – E53	Automatic locking after starting off	The vehicle is automatically locked after pulling away. Doors can be unlocked at any time from the inside.
		Selective central locking system	The first time the button on the key is pressed, only the driver's door is unlocked. If it is pressed a second time, the whole car is opened. This function is only effective when the remote control is used.
KEY INFORMAITION	E38 / E39/ E46 / E 53	Last-used key	Show the last-used key with remote control.

# CAR MEMORY after 1999/09

PROGRAMMING	BODY TYPE	FUNCTIONS	DESCRIPTION
CENTRAL LOCKING SYSTEM	5 series – E39 7 series – E38	RC interior light	The interior lighting is switched on if the car is locked and the lock button on the key is pressed.
	3 series – E46 X series – E53	Lock again 2 min	The vehicle will automatically lock again approx. 2 minutes after a single inadvertent unlocking (when no door or hatch was opened afterwards)
		Automatic locking after starting off	The vehicle is automatically locked after pulling away. Doors can be unlocked at any time from the inside.
POWER WINDOW / SLIDING /	5 series – E39	Switch off at open/close door	When "Open door" is selected, the power windows are deactivated if

TILT SUNROOF	7 series – E38		terminal R is "off" and the front door is open.
	3 series – E46	One-touch open driver's window	Open driver's window in one-touch.
	X series – E53	One-touch close driver's window	Close driver's window in one-touch.
		One-touch open passenger's window	Open passenger's window in one- touch.
		One-touch close passenger's window	Close passenger's window in one- touch.
		One-touch open rear's window	Open rear's window in one-touch.
		One-touch close rear's window	Close rear's window in one-touch.
		One-touch open sunroof	Open sunroof in one-touch.
		One-touch close sunroof	Close sunroof in one-touch.
		Convenient Locking RC	Windows and sliding/tilt sunroof can be closed by pressing the lock button on the key with remote control apply constant pressure to the "Lock" button.
		Convenient Opening RC	Windows and sliding/tilt sunroof can be opened by pressing the unlock button on the key with remote control apply constant pressure to the "Unlock" button.
LIGHTING	5 series – E39	Soft on/off	Dimmed interior lighting is switched on and off.
	7 series – E38	Daytime driving	The daytime driving lights are switched
	X series – E53		on as soon as the ignition is switched on and the light switch is turned to

			"position 2".
		Home lights	If terminal R is "off", the driving lights are switched on for the period of time selected when the headlight flasher is pulled. The following settings are possible: not active, 40s, 90s, 150s and 240s.
	3 series – E46	On during unlock	The interior lighting is switched on when manual unlocking is used.
		On at terminal R off light on beforehand	The interior lighting is only switched on when terminal R is "off" after driving with lights on.
		Soft on/off	Dimmed interior lighting is switched on and off.
		Daytime driving	The daytime driving lights are switched on as soon as the ignition is switched on and the light switch is turned to "position 2".
		Home lights	If terminal R is "off", the driving lights are switched on for the period of time selected when the headlight flasher is pulled. The following settings are possible: not active, 40s, 90s, 150s and 240s.
WINDSCREEN WIPERS	5 series – E39 X series – E53	Switch back when stationary	The system switches from speed 1 to intermittent operation or from speed 2 to speed 1 when the vehicle is stationary.
DISPLAY / LANGUAGE	5 series – E39	Consumpt	Fuel consumption: litres/100 km, mpg (UK), mpg (US), km/ liter

(without on-board monitor)	7 series – E38	Distance	Km/miles
	3 series – E46	Time	12h/24h
	X series – E53	Temperature	Degrees C / Degrees F
		Language	The display texts can be displayed in the given languages. English, French, Italian, Spanish, German

# **Coding and Programming**

	1 series – E81	
	3 series – E90/E91	
NEW CKM (KEY MEMO	ORY AND CAR MEMORY)	
FUNCTIONS	DESCRIPTION	
BURGLAR ALARM SYSTEI	M	
Arm visually	Arming of the DWA system is conformed by a brief blinking of turn signals when active	
Arm acoustically	Arming of the DWA system is conformed by a brief siren signal when active	
Disarm visually	Disarming of the DWA system is conformed by a brief blinking of turn signals when active	
	Disarming of the DWA system is conformed by a brief siren signal when active	

Day time driving lights (ECE), key 1-3	Switch on/off the day time running lights
----------------------------------------	-------------------------------------------

5 series – E60/E61		
CKM (KEY MEMORY AND CAR MEMORY)		
FUNCTIONS DESCRIPTION		
Lighting	Daytime driving lights	
Power Windows / SHD	Windows one-touch open / close	
Central Locking	Lock after unlock / Autolock after driver off / Selective locking	
Anti-theft	Arming / Disarming	
•		
FUNCTIONS	DESCRIPTION	
BURGLAR ALARM SYSTEM	Λ	
Interior Sensor	Active/Not active	
Tilt Sensor	Active/Not active	
Arm visually	Arming of the DWA system is conformed by a brief blinking of turn signals when active	
Arm visually doors/ lids closed	Arming of the DWA system is conformed by a brief blinking of turn signals as soon as hood/ trunk are closed, when active	

Arm acoustically doors/ lids closed	Arming of the DWA system is conformed by a brief siren signal as soon as hood/ trunk are closed, when active
Disarm visually	Disarming of the DWA system is conformed by a brief blinking of turn signals when active
Disarm acoustically	Disarming of the DWA system is conformed by a brief siren signal when active
CENTRAL LOCKING	
Open tailgame	Always/If double-unlocked
Automatic locking, car	The vehicle is automatically locked after pulling away. Doors can be unlocked at any time from the inside.
Automatic locking, key 1-4	Doors are automatically locked when speed exceeds 5.0 mph
Selective central locking/ convenient access, car	The first time the button on the key is pressed, only the driver's door is unlocked. If it is pressed a second time, the whole car is opened. This function is only effective when the remote control is used
Selective central locking/ convenient access, key 1-4	First press of the "unlock" button opens driver door only, second press opens remaining doors (if active). When feature not active, first press opens all doors.
Disarming	RC only/ Key and RC
EXTERIOR LIGHTING	
Automatic driving lights control	Normal/Sensitive/Very sensitive
Day time driving lights (ECE)	Switch on/off the day time running lights
Day time driving lights (US)	Switch on/off the day time running lights
Home lights duration	If terminal R is "off", the driving lights are switched on for the period of time selected when the headlight flasher is pulled The following settings are possible: not active, 40s, 90s, 150s and 240s
One touch turn signal flashes	1/3 times

Soft On/Off	Dimmed interior is switched on and off.
WINDOWS AND SUNROOF	
One touch open, driver's window	Open driver's window in one-touch
One touch close, driver's window	Close driver's window in one-touch
Mirror folding, driver's side	Active/Not active
One touch open, passenger's window	Open passenger's window in one-touch
One touch close, passenger's window	Close passenger's window in one-touch
Mirror folding, passenger's side	Active/Not active
One touch open rear window	Open rear window in one-touch
One touch close rear window	Close rear window in one-touch
Convenient closing RC	Windows can be closed by pressing the lock button on the key with remote control apply constant pressure to the "Lock" button
Convenient opening RC	Windows can be opened by pressing the unlock button on the key with remote control apply constant pressure to the "Unlock" button
Convenient OPEN/CLOSE sunroof	Sunroof can be opened/closed by pressing the unlock button on the key with remote control apply constant pressure to the "Unlock" button
HEATING/AIR CONDITIONING/	VENTILATION
Recirculated air memory	Air recirculation is retained after restarting
Set fan power, key 1-4	The normal setting provides a direct correlation between blower speed and displayed blower speed wedge in the IHKA control panel
Correction set temperature, key 1-4	The temperature setting in the display can be corrected by the said amount. When positive correction is selected, actual

	temperature in the vehicle is higher then the IHKA display indicates. The opposite is true for the "-" ranges	
A/C of with AUTO	Active/Not active	
A/C of memory, key 1-4	Active/Not active	

FUNCTIONS DESCRIPTION	
FUNCTIONS	DESCRIPTION
BURGLAR ALARM SYSTEM	
Interior Sensor	Active/Not active
Tilt Sensor	Active/Not active
Arm visually	Arming of the DWA system is conformed by a brief blinking of turn signals when active
Arm acoustically	Arming of the DWA system is conformed by a brief siren signal when active
Arm visually doors/ lids closed	Arming of the DWA system is conformed by a brief blinking of turn signals as soon as hood/ trunk are closed, when active
Arm acoustically doors/ lids closed	Arming of the DWA system is conformed by a brief siren signal as soon as hood/ trunk are closed, when active
Disarm visually	Disarming of the DWA system is conformed by a brief blinking of turn signals when active
Disarm acoustically	Disarming of the DWA system is conformed by a brief siren signal when active

Open tailgame	Always/If double-unlocked
Automatic locking, car	The vehicle is automatically locked after pulling away. Doors can be unlocked at any time from the inside.
Automatic locking, key 1-4	Doors are automatically locked when speed exceeds 5.0 mph
Selective central locking/ convenient access, car	The first time the button on the key is pressed, only the driver's door is unlocked. If it is pressed a second time, the whole car is opened. This function is only effective when the remote control is used
Selective central locking/ convenient access, key 1-4	First press of the "unlock" button opens driver door only, second press opens remaining doors (if active). When feature not active, first press opens all doors.
Disarming	RC only/ Key and RC
EXTERIOR LIGHTING	
Automatic driving lights control	Normal/Sensitive/Very sensitive
Day time driving lights (ECE)	Switch on/off the day time running lights
Day time driving lights (US)	Switch on/off the day time running lights
Home lights duration	If terminal R is "off", the driving lights are switched on for the period of time selected when the headlight flasher is pulled. The following settings are possible: not active, 40s, 90s, 150s and 240s
One touch turn signal flashes	1/3 times
INTERIOR LIGHTING	
Soft On/Off	Dimmed interior is switched on and off.
WINDOWS AND SUNROOF	
One touch open, driver's window	Open driver's window in one-touch
One touch close, driver's window	Close driver's window in one-touch

Mirror folding, driver's side	Active/Not active
One touch open, passenger's window	Open passenger's window in one-touch
One touch close, passenger's window	Close passenger's window in one-touch
Mirror folding, passenger's side	Active/Not active
One touch open rear window	Open rear window in one-touch
One touch close rear window	Close rear window in one-touch
Convenient closing RC	Windows can be closed by pressing the lock button on the key with remote control apply constant pressure to the "Lock" button
Convenient opening RC	Windows can be opened by pressing the unlock button on the key with remote control apply constant pressure to the "Unlock" button
Convenient OPEN/CLOSE sunroof	Sunroof can be opened/closed by pressing the unlock button on the key with remote control apply constant pressure to the "Unlock" button
HEATING/AIR CONDITIONING/	VENTILATION
Recirculated air memory	Air recirculation is retained after restarting
Set fan power, key 1-4	The normal setting provides a direct correlation between blower speed and displayed blower speed wedge in the IHKA control panel
Correction set temperature, key 1-4	The temperature setting in the display can be corrected by the said amount. When positive correction is selected, actual temperature in the vehicle is higher then the IHKA display indicates. The opposite is true for the "-" ranges
A/C of with AUTO	Active/Not active
A/C of memory, key 1-4	Active/Not active

FUNCTIONS	DESCRIPTION					
Lighting	Daytime driving lights					
Power Windows / SHD	Windows one-touch open / close					
Central Locking	Lock after unlock / Autolock after driver off / Selective locking					
Anti-theft	Arming / Disarming					
Mirror / Seat	Automatic Adjustment					
Air Condition	Turn on air condition after ignition on.					
Parking Aid	The volume adjustment					
NEW CKM (KEY MEMOR	Y AND CAR MEMORY)					
FUNCTIONS	DESCRIPTION					
BURGLAR ALARM SYSTEM	Λ					
	Active/Not active					
Interior Sensor	Active/Not active   Active/Not active					
Interior Sensor Tilt Sensor Arm visually						

Arm acoustically doors/ lids closed	Arming of the DWA system is conformed by a brief siren signal as soon as hood/ trunk are closed, when active
Disarm visually	Disarming of the DWA system is conformed by a brief blinking of turn signals when active
Disarm acoustically	Disarming of the DWA system is conformed by a brief siren signal when active
CENTRAL LOCKING	
Unlock on removal of RC	Active/Not active
Entrance aid tilt direction	Active/Not active
Automatic locking, car	The vehicle is automatically locked after pulling away. Doors can be unlocked at any time from the inside.
Automatic locking, key 1-4	Doors are automatically locked when speed exceeds 5.0 mph
Relock 2 minutes after unlocking if doors unopened, key 1-4	The vehicle will automatically lock again approx 2 minutes after a single inadvertent unlocking ( when no door or hatch was opened afterwards)
Selective central locking/ convenient access, car	The first time the button on the key is pressed, only the driver's door is unlocked. If it is pressed a second time, the whole car is opened. This function is only effective when the remote control is used
Selective central locking/ convenient access, key 1-4	First press of the "unlock" button opens driver door only, second press opens remaining doors (if active). When feature not active, first press opens all doors.
Disarming	RC only/ Key and RC
EXTERIOR LIGHTING	
Automatic driving lights control	Normal/Sensitive/Very sensitive
Day time driving lights (ECE)	Switch on/off the day time running lights
Day time driving lights (US)	Switch on/off the day time running lights
Home lights duration	If terminal R is "off", the driving lights are switched on for the period of time selected when the headlight flasher is pulled. The following settings are possible: not active, 40s, 90s, 150s and 240s

One touch turn signal flashes	1/3 times
INTERIOR LIGHTING	
Soft On/Off	Dimmed interior is switched on and off.
WINDOWS AND SUNROOF	
One touch open, driver's window	Open driver's window in one-touch
One touch close, driver's window	Close driver's window in one-touch
Mirror folding, driver's side	Active/Not active
One touch open, passenger's window	Open passenger's window in one-touch
One touch close, passenger's window	Close passenger's window in one-touch
Mirror folding, passenger's side	Active/Not active
One touch open rear window, driver's side	Open rear window of driver's side in one-touch
One touch close rear window, driver's side	Close rear window of driver's side in one-touch
One touch open rear window, passenger's side	Open rear window of passenger's side in one-touch
One touch close rear window, passenger's side	Close rear window of passenger's side in one-touch
Convenient closing RC	Windows can be closed by pressing the lock button on the key with remote control apply constant pressure to the "Lock" button
Convenient opening RC	Windows can be opened by pressing the unlock button on the key with remote control apply constant pressure to the "Unlock" button

Convenient OPEN/CLOSE sunroof	Sunroof can be opened/closed by pressing the unlock button on the key with remote control apply constant pressur the "Unlock" button				
HEATING/AIR CONDITIONING/	/ENTILATION				
Key memory of heat/AC/ventilation	Active/Not active				
Recirculated air memory	Air recirculation is retained after restarting				
Set fan power	The normal setting provides a direct correlation between blower speed and displayed blower speed wedge in the IHKA control panel				
Correction set temperature	The temperature setting in the display can be corrected by the said amount. When positive correction is selected, actual temperature in the vehicle is higher then the IHKA display indicates. The opposite is true for the "-" ranges				
A/C on with ignition on, key 1-4	The A/C compressor is switched on with the ignition ON, or only when the "snow flake" button is pressed				
Auto fan control on with ignition on, key 1-4	Active/Not active				
PARK DISTANCE CONTROL					
Volume level	Not active 1,2,3,4,5,6,7,8				
SEAT / MIRROR					
Seat / Mirror position	Not active /When car is unlocked / when door is opened				

## FOR MINI R50, R52, R53

SYSTEM		READ CODE	CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTATION
<b>POWER TRAIN</b>	EMS2	+	+	+	+	
	EWS3	+	+			

CHASSIS	DSC MK60	+	+	+	+	
BODY	KOMBI KR50	+	+		+	Service Reset: 1.Oil Service 2.Time Inspection 3.Distance Inspection
	KOM2	ID only				
	EHPS(Electro-hydraulic Steering Assist)	+	+			
	Steering-angle sensor	+	+			
	PDC	+	+			
	ZKE	+	+	+	+	
	MRS4	+	+			
COMMUNICATION	DSP-booster	ID only				
INFORMATION	Radio	+	+			
AIR CONDITION	IHKA/IHKR (AC/heater)	+	+	+	+	