# **CKM200** Instruction

Version (V1.03)

March 2th,2010

# Content

Ι	Product Introduction
	1 Features ·······1
	2 Applicable Vehicles1
	<b>3 CKM200 Device</b> 3
II	Software Installation ······ 4
III	Activation · · · · · · · · · · · · · · · · · · ·
IV	Payment6
V	Upgrade ·······7
VI	Examples ······11
	1 BENZ series ······11
	2 BMW series ······18
	3 Programmer 23
VII	Appendix 29
	Appendix 1: The Ways of Identifying the Pin Order ••••••••••• 29
	Appendix 2: Chip Dismantling and Soldering29

#### **Important Statement:**

This instruction is only available for reference for users. Nanning Auto Service Co., Ltd. reserves the right to change the product or product instruction without notice, reserves the right not to update this document to inform these changes.

#### I. Product Introduction

#### 1. Features

- For BMW & BENZ and more vehicles in the coming future;
- Multi-functions: Integrate functions such as key information reading, data calculating, key writing, and is applicable to both old and new models.
- Easy operation: Graphical workflow will make it easy for your operation.
   What s more, our CKM200 can be operated via OBD socket, CAN or K
   line on many models without disassembly.
- Innovative Payment Methods --- Pay as you go!
- **High security of G3 platform:** CKM200 is based on our G3 (the third generation) platform which adopted IDEA (International Data Encryption Algorithm) for registration, upgrade and payment.

### 2. Applicable Vehicles

### 2.1 BENZ

Benz S CLASSW140 W220

Benz CL CLASSW215

Benz SL CLASSR230

Benz E CLASSW210, W211

Benz CLK CLASSW208, W209

Benz CLS CLASS (W219)

Benz C CLASS (W202, W203)

Benz ML CLASS (W163)

#### **2.2BMW**

Old BMW (EWS2.EWS3.EWS4)

BMW 1/3/5/6E87.E90.E91.E92.E60.E61.E63.E64series white shell CAS 2

BMW 1/3/5/6/XE87.E90.E91.E92.E60.E61.E63.E64.E70.E71series black shell CAS 2

BMW 1/3/5/6/XE87.E90.E91.E92.E60.E61.E63.E64.E70.E71series black shell CAS 3

BMW 7 series E66 CAS 2005- CAS 2

# 3. CKM200 Device





## **II Software Installation**

Operation steps:

InstallShie



InstallShield

Cancel

<Back Finish

You have completed the software installation ,and the computer desktop displays



# **III** Activation

Note: Make sure the computer has been online before doing product activation

operation.

Operation steps:

- 1. Connect device power;
- 2. Operate device manually, select the "PC mode", then the device connect computer with USB cable ;



3. Click to run CKM-200 Car Key Master; (Operate as the following figure)



# **IV** Payment

Function: input token card account to hardware device, ensure that the device can be used normally.

Note: Make sure the computer has been online before doing product payment operation.

Operation steps:

1.Connect device power;

2.Operate device manually, select the "PC mode", then the device connect computer with USB cable ;

David Cardina	V1.03
Benz Series	
Programmer	
Browse File	Note
Special function :	Currently in the pc mode, pla ase connect the USB cable.
Device Info	Note:To exit, please unplg
PC Mode (Active/Update/Charge)	the power suppry.
File Management	
YH Key List	
YH Key ID	

3. Run Car Key Master(CKM 200.exe), click "Management" → "Payment",



operate as the following figure

# V Upgrade

#### **Product Upgrade**

Function: Update the device operation interface and functionality

Note: Make sure the computer has been online before doing product upgrade operation.

Operation steps:

- 1. Connect device power;
- 2. Operate device manually, select the "PC mode", then the device connect

computer with USB cable ;



3. Run Car Key Master(CKM 200.exe), click "Management" → "Update"→

"Product Update" ,operate as the following figure



4. After the firmware upgrade completed there will pop up a dialog box and prompt whether you need to upgrade adapter, if yes, click "Yes" to upgrade adapter; If not, click "No" to cancel adapter upgrade.





5. In the last step, it will prompt to upgrade device, you must first unplug the USB cable and device power line, press F1 of CKM-200, then plug device power line(please hold down F1 until plug the device power ), handset device will upgrade procedure (in the device upgrade process, please do not off power supply) until the device prompts: "Upgrade Success!". This is a successful upgrading. As shown below:



Current process
Upgrading, don't power off !

## **VI** Examples

# 1. BENZ series( such as: C Class)

V1.03

Benz Series		
BMW Series		
Programmer		
Browse File		
pecial function :		
Device Info		
PC Mode (Active/Update/	Charge)	
File Management		
YH Key List		

Program keys for Me	cedes-Benz:
S Class	CL Class
SL Class	E Class
CLK Class	CLS Class
C Class	ML Class
Use the last data	
Change key	
Read key info	

Note: The amount of tokens is different depending on the car model and the function model.

#### Please select :

YH Key ID

Automatic Mode Advanced Mode

Automatic Mode: Device finish the calculation of key data automatically.

Advanced Mode: Key data calculated byanother devices.

### Please select : W202 Chassis W203 Chassis

Step1: EIS

W203:(process 4 steps as follow) Step 1: EIS Step 2: DME Step 3: ESL Step 4: Key Programming

W203 Chassis-->EIS:

08AZ60/1J35D

11

#### W203-->EIS

08AZ60/1J35D:

1. Chip and Adapter Diagram
2. Next

f.



Note	
Save the current	data?
. YHS . BIN	Cancel

npu	ss F2 to cancel the it of file name
P:	lease input
	Please enter the file name, don exceed 7 characters. 2031311
	OK Cancel

Wata			
Save	the	file	successfully!
		<u> </u>	<u>K</u>

Note Please select operation: Prog Key Recover Exit	D: A0578ED8 sword: 6BC2B5FBA6645B6 : Unknow	
Please select operation: Prog Key Recover Exit	Note	
Prog Key Recover Exit	Please select operation:	
	Prog Key Recover Exit	

Pres	s O	K t the	o s red	ele sta	ot k inds	tey for	us	ed k	evs	
F	Please select a key:									
	1	2	3	4	5	6	7	8		
	Г	Г	Г	Г	Г	Г	Г	Г		
	9	10	11	12	13	14	15	16		
	(	(	)K			Canc	el	]		
				-		T2 T				
				Fre	SS		to	con	111	



ote	
Remaining tok Dedncted toke	cens: 595 ens: 5
OK	Cancel

# Step2: DME

W203:(process 4 steps as follow) Step 1: EIS Step 2: DME Step 3: ESL Step 4: Key Programming



#### W203-->DME

5P08/95040:

1. Chip and Adapter Diagram
2. Next



Note Save the current data?	Note Save the current data?
Save the current data?	Save the current data?
. YHS .BIN Cancel	
	. YHS .BIN Cancel





DME VIN Spar Fact	inforamtion: WDBUF46J64A457652 re part number: 112545533 ory data: 1C7C1C7CODOCEEAB314E234A5FA79 C3031323135333534376930313045 303135
	Note
	Please select operation:
	Prog Key Recover Exit



ote	
Remaining to Dedncted tok	kens: 594 ens: 1
OK	Cancel

Step3: ESL

W203:(process 4 steps as follow) Step 1: EIS Step 2: DME Step 3: ESL Step 4: Key Programming



W203-->ESL

05E6/0F82B(K Line):

1. Chip and Adapter Diagram
2. Next





ress F2 to cancel nput of file name	the
Please input	
Please enter th exceed 7 characte 7B541	he file name, don ers.
	Culleer









Remaining tokens: 589
OK Cance

# **Step4: Key programming**





# W203-->Key Programming YH Key: 1. Chip and adapter Diagram 2. Next



Please se	let a l	cey			
Please s ngkey, ent 1 2 ( 9 10 (	select er to p 3 4 11 12	the prog: 5 13	cor ram 6 14	resp key 7 15	pondi 8 16
				EXI	

Note	
Program	key successfully!
	OK



Note	
Remaining to Dedncted to OK	okens: 584 kens: 5 Cancel
10 million and a second	

#### 2.BMW series(such as:X5)



Program Keys for BMW:	
New BMW	
Old BMW	
Use the last data	

#### Program Keys for BMW:

New BMW

Old BMW

#### Use the last data

Note: The amount of tokens is different depending on the car model and the function model.

# New BMW--->9S12 Adapter: CAS1 CAS2

#### New BMW-->9S12 Adapter-->>CAS2:

#### X5(E70) 9S12DG256

- 1 Series White shell 9S12DG256
- 1 Series Black shell 9S12DG256
- 3 Series White shell 9S12DG256
- 3 Series Black shell 9S12DG256
- 5 Series White shell 9S12DG256
- 5 Series Black shell 9S12DG256
- 6 Series White shell 9S12DG256
- 6 Series Black shell 9S12DG256

#### Step1: CAS Reading

New BMW-->9S12 Adapter-->CAS2-->X5(E70) 9S12DG256

Note: Please connect correctly referring to the Operation Diagram before operation.

#### **CAS Location Diagram**

**CAS Operation Diagram** 

Key Adapter Diagram

Step 1: CAS Reading

Step 2: Key Programming

Step 3: CAS Programming





Note		
Save the	current	data?
.YHS	.BIN	Cancel





Note		
Please se	elect opera	tion:
Prog Key	Recover	Exit





ccount info	
Remaining toke Dedncted toker	ens: 579 ns: 5
OK	Cancet

#### Step2: key Programming















#### **Step3: CAS Programming**







Note	
Success	to write data.
	OK

Remaining tokens: 569
Dedncted tokens: 5
OK Cancet

#### 3. Programmer

#### **3.1 IC Programming**





Please select the type of operation: IC Programming MCU Programming

Programmer>IC Programming	Programmer	>IC Programming>95 Series:
24 Series	95010	95020
25 Series	95040	95080
93 Series	95128	95160
95 Series	95320	95P01
29F Series	95P02	95P04
Other Chip	95P08	







01A1	01A1	01A1	01A1	01A1	01A1	01A1	01A1
E279	E279	E279	E279	E279	E279	E279	E279
7FBB	7FBB	7FBB	7FBB	7FBB	7FBB	7FBB	7FBB
A7F5	A7F5	A7F5	A7F5	A7F5	A7F5	A7F5	A7F5
B6C5	BE 35	RF 25	BSCS	R6C5	Becs	BSC5	B6C5
D6F7	DE.T	CLF.	1.31.7	3 F7	J.Fi	2.37	D6F7
B45D	B45D	B45D	B45D	B45D	B45D	B45D	B45D
F5D6	F5D6	F5D6	F5D6	F5D6	F5D6	F5D6	F5D6
A56F	A56F	A56F	A56F	A56F	A56F	A56F	A56F
C87D	C87D	C87D	C87D	C87D	C87D	C87D	C87D
Curr	rent	addre	ess: C	)x0000	00000		
	Ennotianal ana						
	L	щų	4E	HEG	4 9	HE	
	Page	up	Pag	e daw	n L	Exit	

01A1 E279	01A1 E279	01A1 E279	01A1 E279	01A1 E279	01A1 E279	01A1 E279	01A1 E279	
7FBB	7FBB	7FBB	7FBB	7FBB	7FBB	7FBB	7FBB	
80 81	litir ea.	Ig a	re a	nd f	unc	tion	al	
F5D6	F5D6	F5D6	F5D6	F5D6	F5D6	F5D6	F5D6	
A56F	A56F	A56F	A56F	A56F	A56F	A56F	A56F	
C87D	C87D	C87D	C87D	C87D	C87D	C87D	C87D	
Curi	Current address: 0x00000000							
	oper	1	Sa	ve as		Progr	am	
Page up Page dawn				n	Exit			

Note		
Fail	to program!	

Note Save the current data?
Save the current data?
.YHS .BIN Cancel





01A1	01A1	01A1	01A1	01A1	01A1	01A1	01A1
E279	E279	E279	E279	E279	E279	E279	E279
7FBB	7FBB	7FBB	7FBB	7FBB	7FBB	7FBB	7FBB
A7F5	A7F5	A7F5	A7F5	A7F5	A7F5	A7F5	A7F5
B6C5	B6C5	B6C5	B6C5	B6C5	B6C5	B6C5	B6C5
D6F7	D6F7	D6F7	D6F7	D6F7	D6F7	D6F7	D6F7
B45D	B45D	B45D	B45D	B45D	B45D	B45D	B45D
F5D6	F5D6	F5D6	F5D6	F5D6	F5D6	F5D6	F5D6
A56F	A56F	A56F	A56F	A56F	A56F	A56F	A56F
C87D	C87D	C87D	C87D	C87D	C87D	C87D	C87D
Curi	Current address: 0x00000000						
open Save as Progr					Progr	am	
	Page	up	Pag	e daw	n [	Exit	

#### **3.2 MCU Programming**

# ProgrammerProgrammer...>MCU Programming:MC68HC(7)05MC68HC(9)08Please select the type of operation:MC68HC(7)11IC ProgrammingMC68HC9S12MCU ProgrammingCAS3MC68HC11MC68HC11MC68HC(9)12/MC68HC9S12MC68HC9S12

Programmer>MCU Progr 12/MC68HC9S12(Security)	amming>MC68HC(9) :
MC68HC912D60	MC68HC912DG128A
MC68HC9S12D64	MC68HC9S12DG128B
MC68HC912DC128	MC68HC9S12DG256C
MC68HC912DG128	E60 Flash
MC68HC912DC128A	E65 Flash

Programmer--->MCU Programming

MC68HC(9)12/MC68HC9S12(Security)

--->MC68HC9S12DG256C 80Pins 112Pins

#### Programmer-->MCU Programming

MC68HC(9)12/MC68HC9S12(Security)

-->MC68HC9S12DG256C

#### 112Pins:

- 1. Adapter Picture
- 2. Wiring Diagram
- 3. Next





Press F2 to cancel the input of file name
Please input
Please enter the file name, don' exceed 7 characters. D4216
OK Cancel



01A1	01A1	01A1	01A1	01A1	01A1	01A1	01A1
E279	E279	E279	E279	E279	E279	E279	E279
7FBB	7FBB	7FBB	7FBB	7FBB	7FBB	7FBB	7FBB
A7F5	A7F5	A7F5	A7F5	A7F5	A7F5	A7F5	A7F5
B6C5	BE 35	RF 25	BSCS	R6C5	BSCS	BSC5	B6C5
D6F7	DE	CLF.	LJI 7	3 F7	J.Fi	2.37	D6F7
B45D	B45D	B45D	B45D	B45D	B45D	B45D	B45D
F5D6	F5D6	F5D6	F5D6	F5D6	F5D6	F5D6	F5D6
A56F	A56F	A56F	A56F	A56F	A56F	A56F	A56F
C87D	C87D	C87D	C87D	C87D	C87D	C87D	C87D
Curi	rent	addre	ess: (	0000x0	00000		
П	Ennotianal anan						
	u	щ	4C	HEG	ЧС	HE	
	age	up	Pag	e daw	n	Exit	

| 01A1<br>E279 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 7FBB         |
| 60           | litin        | ig a         | re a         | nd f         | unc          | tion         |              |
| 8            | 88.          |              |              |              |              |              |              |
| F5D6         |
| A56F         |
| C87D         |
Curi	rent	addre	ess: (	0000x0	00000		
	oper	1	Sa	ve as		Progr	am
	Page	up	Pag	e daw	n 🗌	Exit	



Note			
Save the 🤇	current	dat	a?
.YHS	.BIN		Cancel

input of file name \	the
Please input	
Please enter the exceed 7 characte: D4258	e file name, don' rs.
OK	Cancel



01A1	01A1	01A1	01A1	01A1	01A1	01A1	01A1
E279	E279	E279	E279	E279	E279	E279	E279
7FBB	7FBB	7FBB	7FBB	7FBB	7FBB	7FBB	7FBB
A7F5	A7F5	A7F5	A7F5	A7F5	A7F5	A7F5	A7F5
B6C5	B6C5	B6C5	B6C5	B6C5	B6C5	B6C5	B6C5
D6F7	D6F7	D6F7	D6F7	D6F7	D6F7	D6F7	D6F7
B45D	B45D	B45D	B45D	B45D	B45D	B45D	B45D
F5D6	F5D6	F5D6	F5D6	F5D6	F5D6	F5D6	F5D6
A56F	A56F	A56F	A56F	A56F	A56F	A56F	A56F
C87D	C87D	C87D	C87D	C87D	C87D	C87D	C87D
Curi	rent	addre	ess: (	)x0000	00000		
	oper	1	Sa	ve as		Progr	am
	Page	up	Pag	e daw	n [	Exit	

ccount info	
Remaining tok Dedncted toke	ens: 568 ms: 1
OK	Cancet

#### **VII** Appendix

#### Appendix 1: The Ways of Identifying the Pin Order

1. If the chip has nick, pin 1 is on the bottom left corner, and the number of Pins in Count-clockwise direction are 1, 2, 3, 4, 5, 6, 7, and 8.

2. If the chip has no nick, but "•", pin 1 is close to "•", and the identification of the others' number is the same as above.

3. If the chip has text only, from the text positive, pin 1 is on the bottom left corner, the identification of the others' number is the same as above.



Chip 93C56 outline diagram

#### **Appendix 2: Chip Dismantling and soldering**

1) The choice of iron:

It should be connected with ground safely. When there is no constant temperature soldering iron, the 20W internal heat-type or 25W external heat-type soldering iron can be OK, but ensure that the former should not exceed 25W, and the latter does not exceed 30W.

2) The choice of flux:

Rosin is the best choice. Solder paste will never be allowed to use in soldering. You should change the rosin immediately when it turns to black.

3) The choice of solder wire:

The imported solder wire with low melting point and rosin is the only choice.

2. Chip disassembling

1) When unsoldering biserial & straight inserted chip, you can clean out the soldering tin on the pin by disordering gun or disordering wire, please don't draw hard.

2) When unsoldering patch or chip, melting more rosin on the two rows of pins, and heat them up until the chip loose completely, then remove it. Please don't pry hard.

3) Please do not heat the chip too long, or it will be damaged.

4) If there is protection paint on the chip, please heat it up with iron, and scratch gently with a blade or tweezers, then dismantle the chip.

5) How to wipe off the protection paint on the circuit board or IC?

Before soldering, please heat the layer of protection paint with iron or hot air to 70-80 degrees Celsius, and then peel gently with a word screwdriver.

#### 3. Chip Soldering

1) Please do not heat the chip too long, or it will be damaged.

2) The iron should be wiped with a damp cloth or soaking sponge to keep it clean ,because it won't be easy to disordering tin in a state of high-temperature oxidation for a long time.

3) The heat conduction should depend on the tin, and it does no good to soldering by the iron head-to-chip hard.

4) Don't move or shake the chip before the soldering solidified.

5) When soldering, you had better first solder the diagonally pins to fasten the chip, and then do other pins.

Thank you!

Any query, please kindly contact with us !

Add : No. I room, 15Fl, International Chamber of Commercial Tower, No 59 Jinhu Road,Nanning, Guangxi, ChinaPost No. : 530021Tel : 86 -771-58424565846955Fax : 86-771-5846955Email: sales@autoemaster.comWeb:http:// www.carkeytool.com