

AK90 Operation

Step1 : Install software

Open the AK90 file from CD



Click “ SETUP “ for installing the software



Next step

User Information

Type your name below. You must also type the name of the company you work for and the product serial number.

Ignore here,just type any words is OK

Name:

Company:

Serial:

Ignore here,just type any words is OK

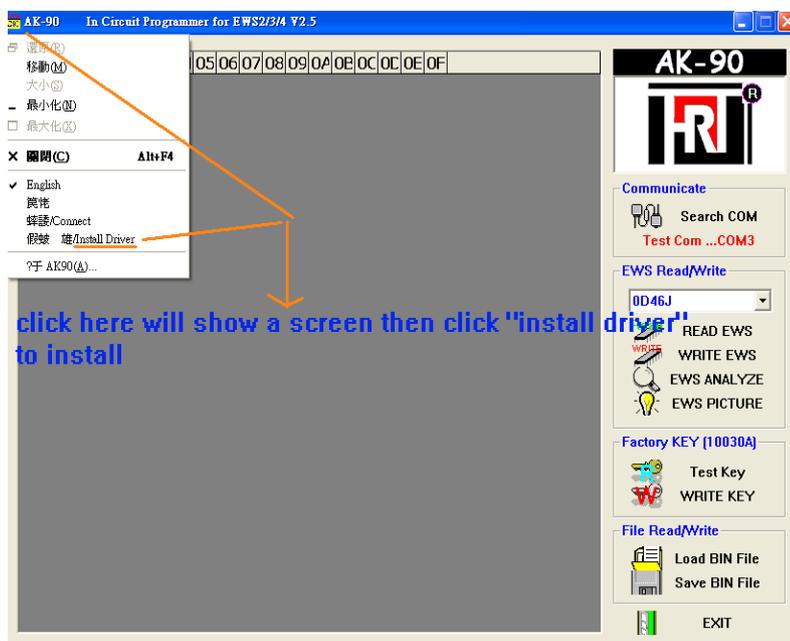
< Back Next > Cancel

Next step



Software is installed completely

Next step install driver for AK90

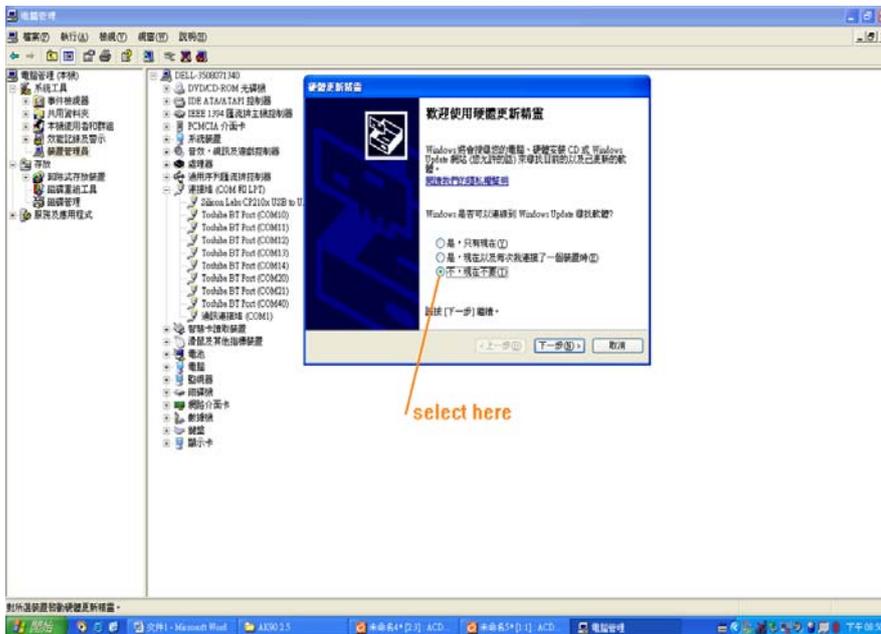


After installing driver plug AK90 to computer to test the connection of AK90 with computer .

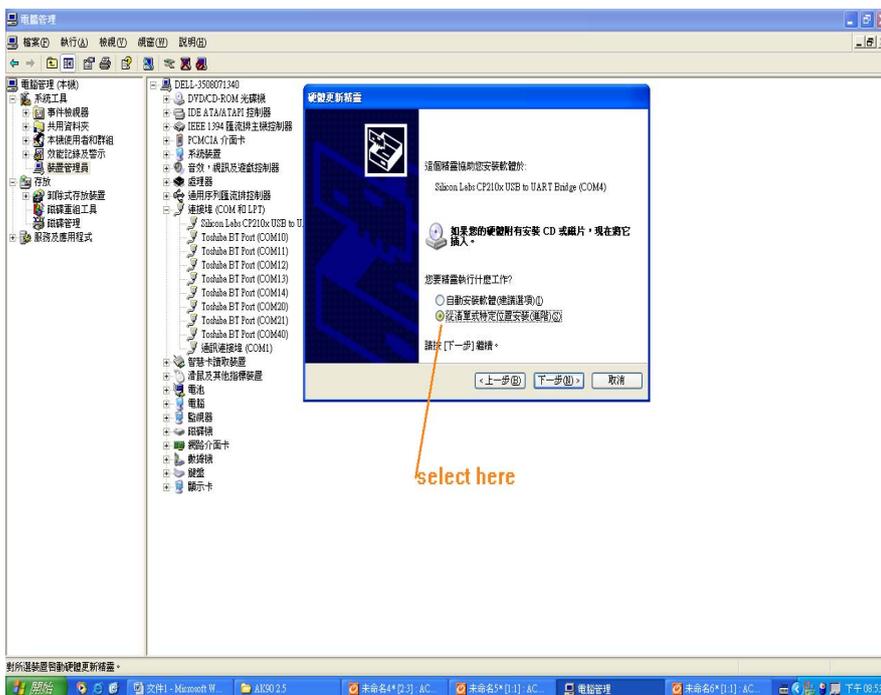
PS: The connection port had better is "port2 to port5", you also can change the port Number in computer manager selection of your computer .

When you plug AK90 to computer if screen shows “ find a new unit “ and then asks you To install driver for unit , You need to install driver again by manually .

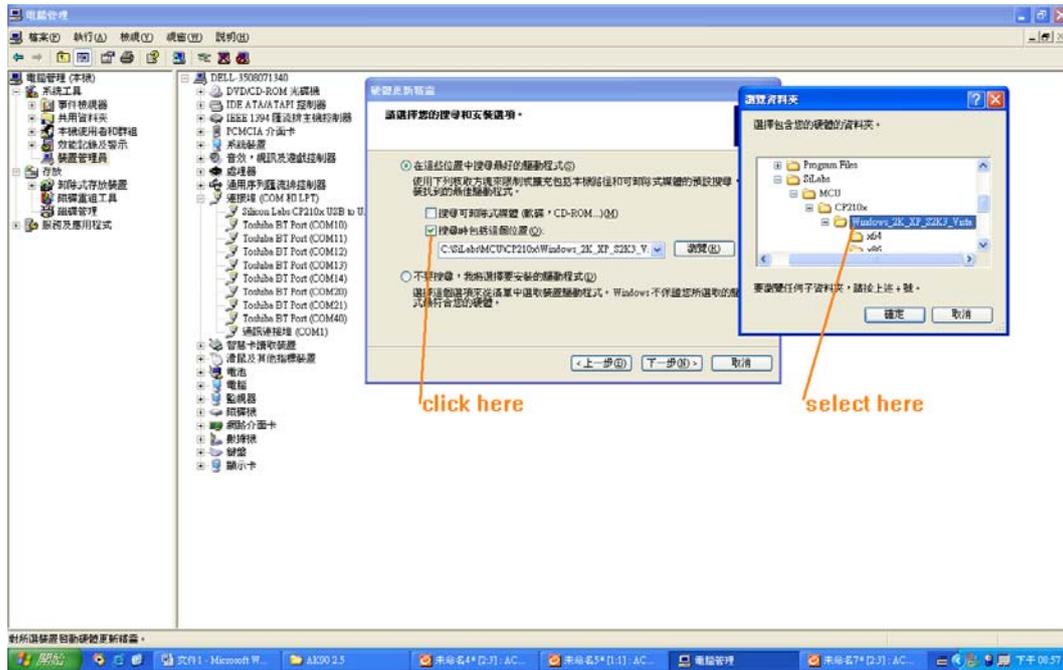
Get into “Disk C” to find out a file called “SiLabs” .



Next step



Next step

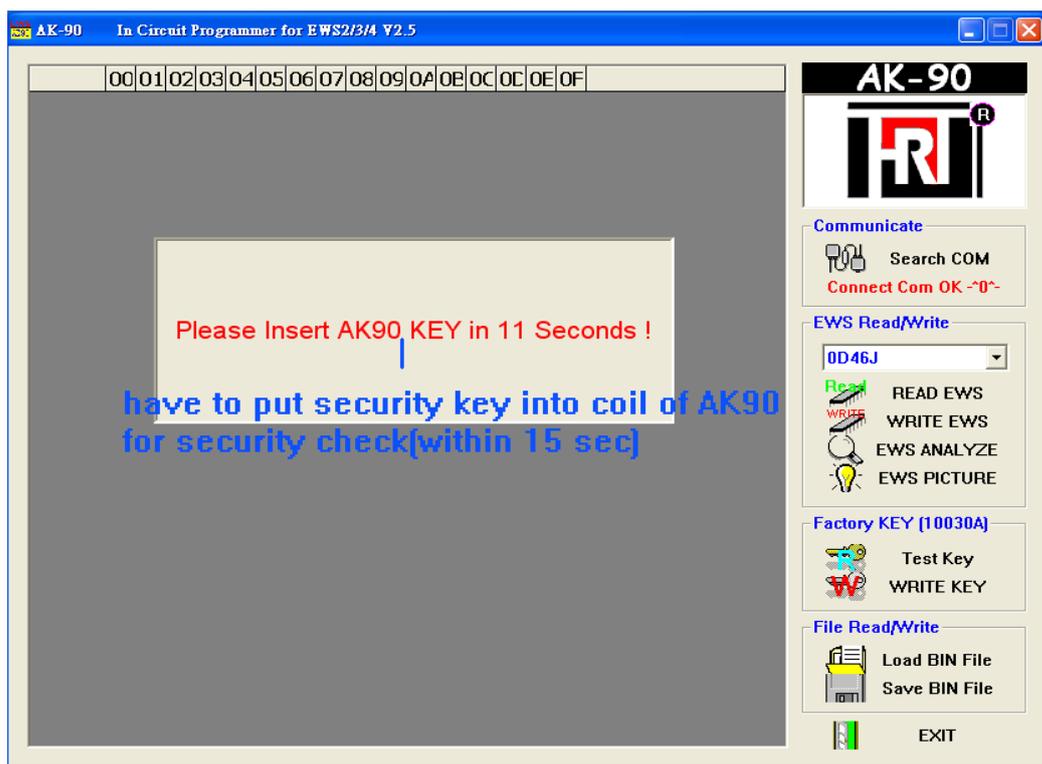


Next step

After driver installed completely then plug AK90 to computer .

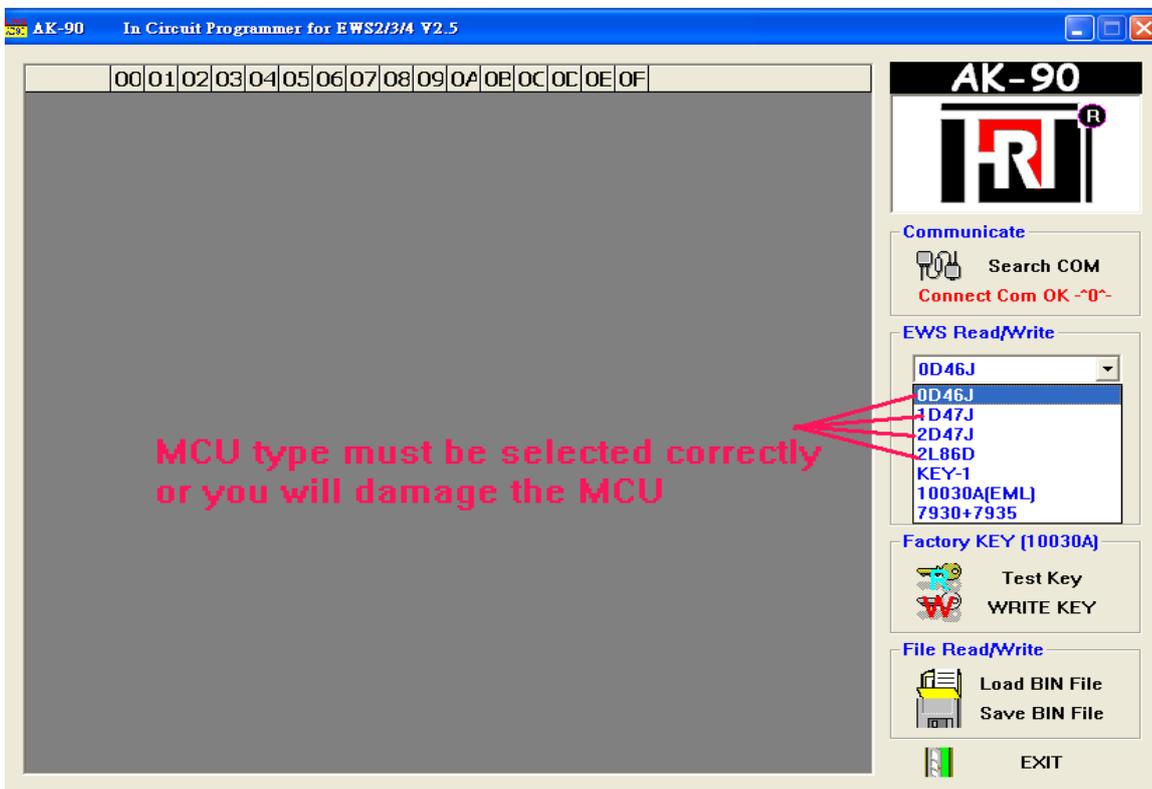
Note: plug AK90 to PC , you will hear a sound “ Bi “ means unit connects to PC successfully

Then start the software . Do not open the software first without plug AK90 to PC .





If the security key is checked OK , you will hear a sound “ Bi Bi Bi “ for 3 times .
Then you can start every function in AK90 software



Please see the EWS picture on the software for the help with how to
connect MCU for EWS2,3,3+ and EWS4



For EWS2,3 you have to clean the pins on the MCU for reading data .
 For EWS4 you only solder a 6 wires on circuit by following the number on the cable.

AK-90 (C:\Documents and Settings\del\My Documents\Gambit2.01\钥匙案例\2D47J.bin)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	
00000	42	21	42	21	40	01	43	31	42	21	FF	FF	FF	FF	FF	FF	B!Bl@.C1Bl.....
00010	FF																
00020	88																
00030	FF																
00040	CE																
00050	2A																
00060	8A																
00070	E4																
00080	00																
00090	2C																
000A0	DE																
000B0	02																
000C0	F2																
000D0	FF																
000E0	AF																
000F0	FF																
00100	FF																
00110	EC																
00120	42																
00130	0F																
00140	FF																
00150	FF																
00160	03	43	00	09	02	15	09	00	00	C9	33	00	08	FD	FE	A8	.C.....3....
00170	4C	FF	M.....														
00180	FF															

EWS ANALYZER

EWS INFORMATION

VIN: WBAGF41032DK24225 Odometer: 1000001 km

TYPE: EWS 3

GM: 41414603C

SA: 00090215090000C93

VN: 0008FDFEA8M

can be changed

KEY STATUS

No.	Used	Locked	No.	Used	Locked
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7	<input type="checkbox"/>	<input type="checkbox"/>
3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9	<input type="checkbox"/>	<input type="checkbox"/>
5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	<input type="checkbox"/>	<input type="checkbox"/>

shows used keys and reactive keys

lock key

MODIFY TO DUMP EXIT

AK-90

TRT

Communicate

Search COM

Connect Com OK ~0~

EWS Read/Write

2L86D

READ EWS

WRITE EWS

EWS ANALYZE

EWS PICTURE

Factory KEY (10030A)

Test Key

WRITE KEY

File Read/Write

Load BIN File

Save BIN File

EXIT

Reading keys



AK-90 In Circuit Programmer for EWS2/3/4 V2.5

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	
00000	55	02	D8	6E	39	9A	2A	AC	A4	8E	1C	23	77	00	00	00	U..k9.*...#w...
00010	00	04	7C	6E	00	01	02	00	00	01	FC	00	15	00	00	00	..}k.....
00020	20	2C	A6	4E	04	20	03	02	03	02	1C	20	40	00	00	00	.,K. @...
00030	4C	47	53	57	30	33	35	00	FF	FF	FF	FF	FF	00	00	00	LGSW035.....

BMW KEY ANALYZER

Key Type:
EWS-3/EWS-4

Key Number (1-10):
3

VIN:
WBAPB12030WC27210

KM:
27517

OK
**Reading keys
for information
about the car**

AK-90



Communicate

Search COM
Connect Com OK ~0~

EWS Read/Write

KEY-1

READ EWS
WRITE EWS
EWS ANALYZE
EWS PICTURE

Factory KEY (10030A)

Test Key
WRITE KEY

File Read/Write

Load BIN File
Save BIN File

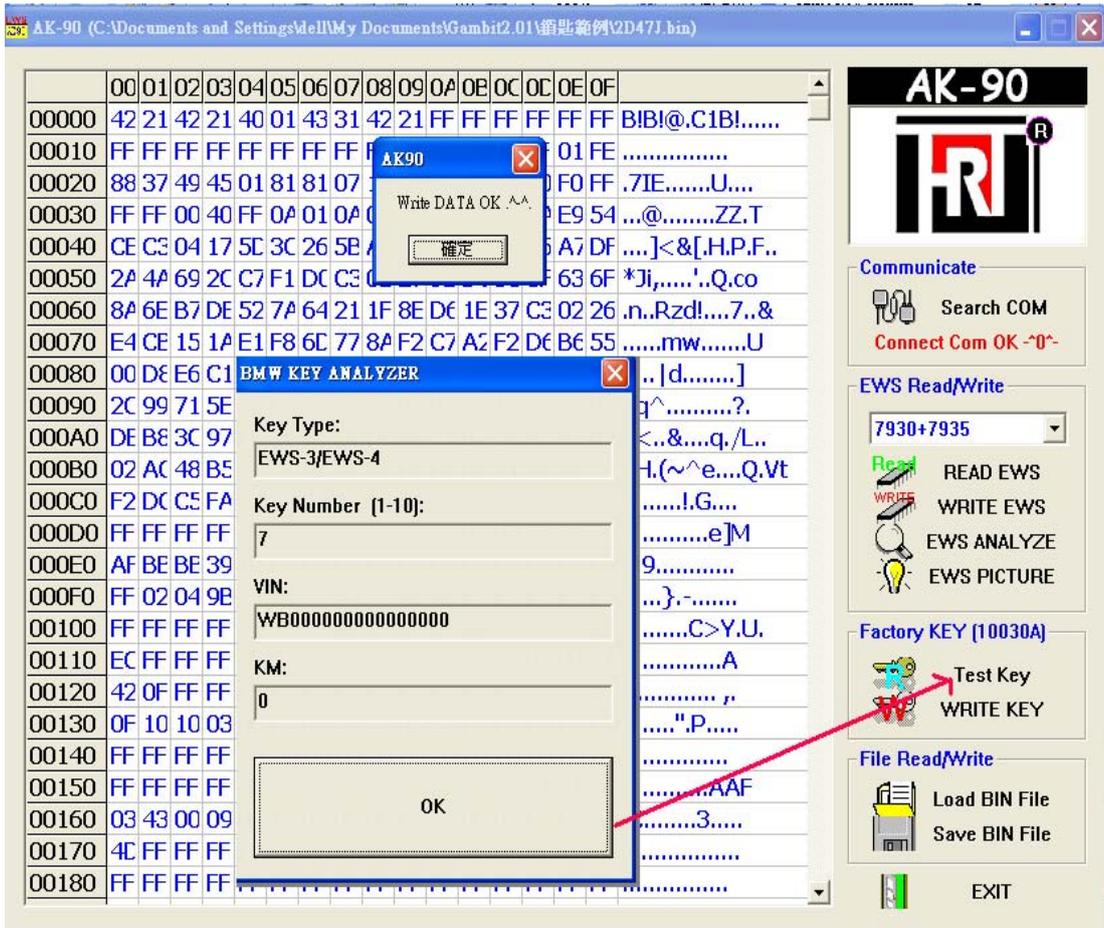
EXIT

Writing keys into PCF7935

The screenshot shows the AK-90 software interface. On the left is a hex dump with columns labeled 00 to 0F and rows of hexadecimal data. On the right is the main control panel with sections for 'Communicate', 'EWS Read/Write', 'Factory KEY (10030A)', and 'File Read/Write'. A 'Write BMW Key' dialog box is open in the foreground, containing a 'Select Key' section with radio buttons for Key01 through Key10, categorized as 'Used', 'Locked', or 'NoUse'. A red arrow points from the 'WRITE KEY' button in the dialog to the 'WRITE KEY' button in the main interface. Red text annotations are overlaid on the dialog box: 'keys information about keys are in used, new or locked' with a red line pointing to the key selection options.

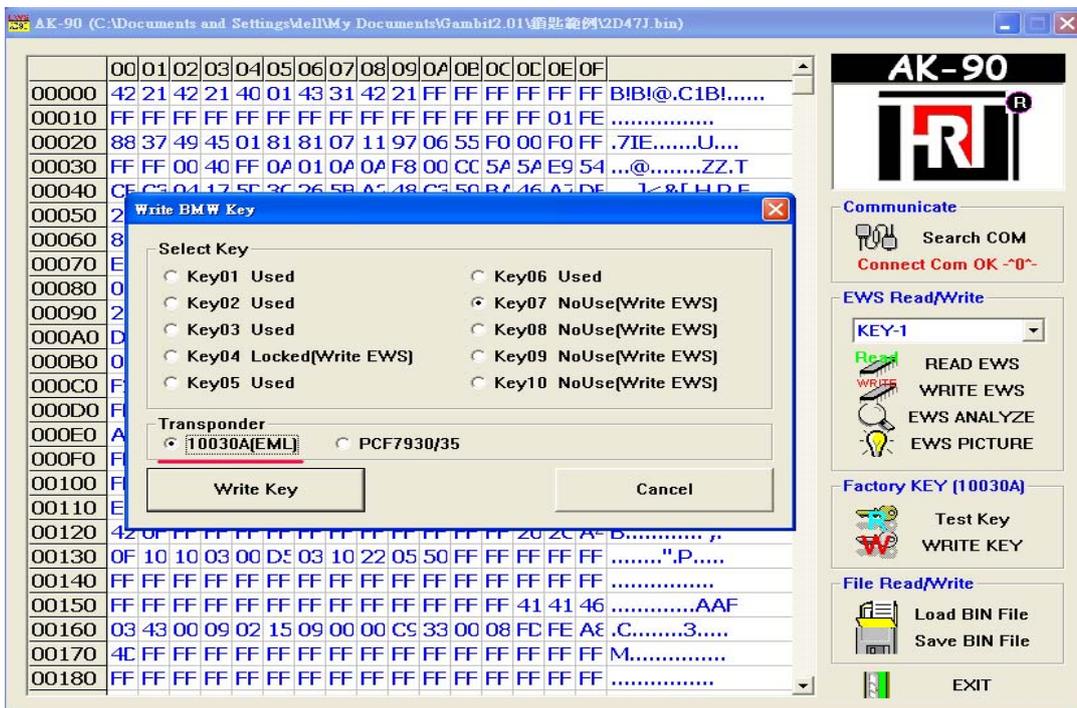


Waiting for 1 minute , do not move during programming
Or the key will be failed in programming



After programming keys , you also can test the key again to see
If the key number is correct.

Writing keys into EML chips



Please check the battery power if it is in full power before programming



Now you can start the car with the new key , turn ignition on to wait for 5 sec .

Another function

AK90 can read keys with CAS system only , not program .



AK-90 (C:\Documents and Settings\MellMy Documents\Gambit2.01\鎖匙範例2D471.bin)

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	
00000	00	06	01	00	57	42	41	47	4E	36	33	34	38	33	44	52WBAGN63483DR
00010	31	31	33	31	37	2C	02	F1	15	68	01	02	30	33	35	34	11317,...h..0354
00020	55	36	46	41	FF	00	C5	8C	1F	U6FA.....							
00030	03	9F	95	71	0E	0A	18	02	07	D6	00	00	00	00	00	00	...q.....

BMW KEY ANALYZER

Key Type:

Key Number (1-10):

VIN:

KM:

OK

AK-90



Communicate

 Search COM
 Connect Com OK -0-

EWS Read/Write

KEY-1

 READ EWS
 WRITE EWS
 EWS ANALYZE
 EWS PICTURE

Factory KEY (10030A)

 Test Key
 WRITE KEY

File Read/Write

 Load BIN File
 Save BIN File

 EXIT