

# AK90 Operation

Step1 : Install software

Open the AK90 file from CD



Click "SETUP" for installing the software



Next step

**User Information** [Close]

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:

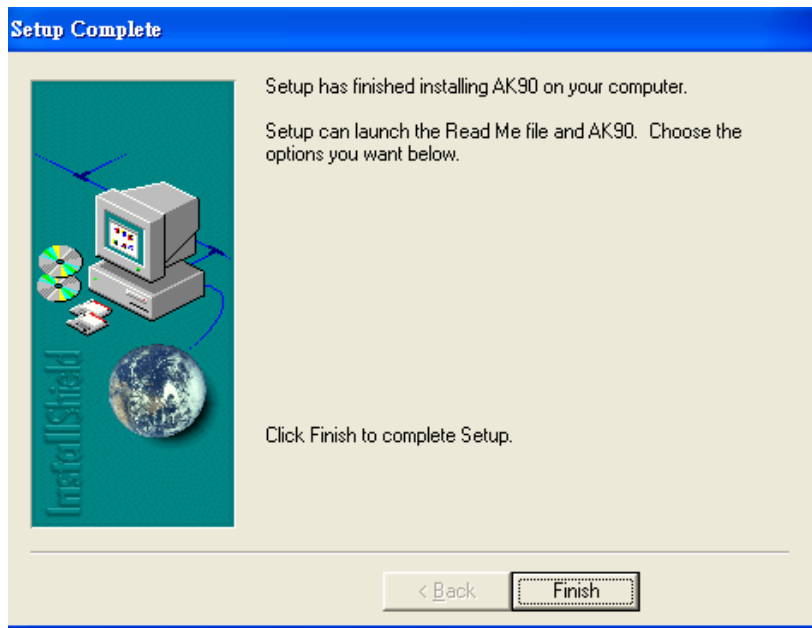
Company:

Serial:

**Ignore here, just type any words is OK**

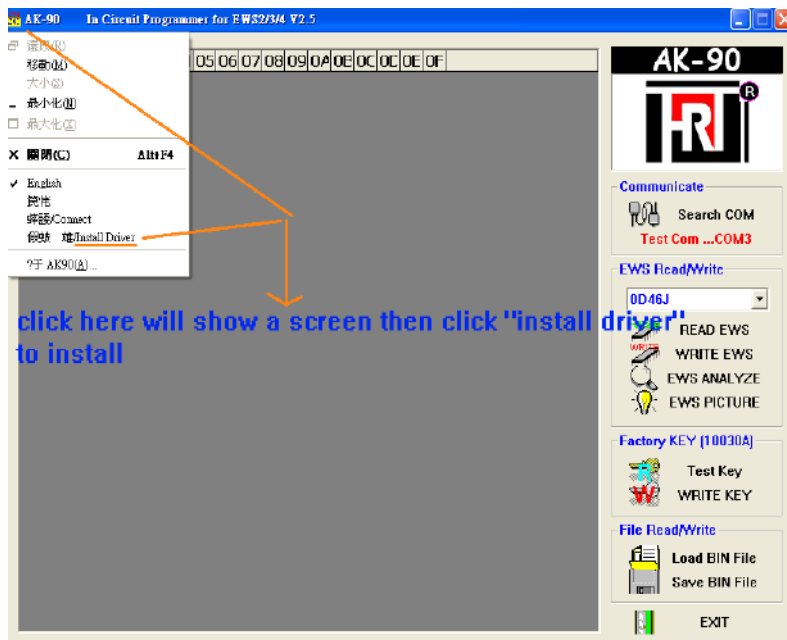
< Back   Next >   Cancel

## Next step



Software is installed completely

## Next step install driver for AK90



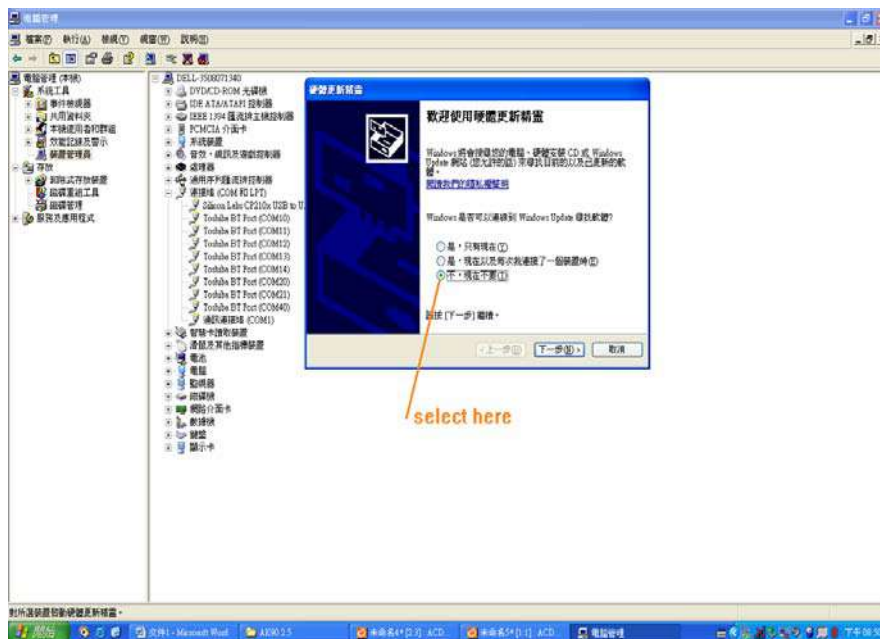
click here will show a screen then click "install driver" to install

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

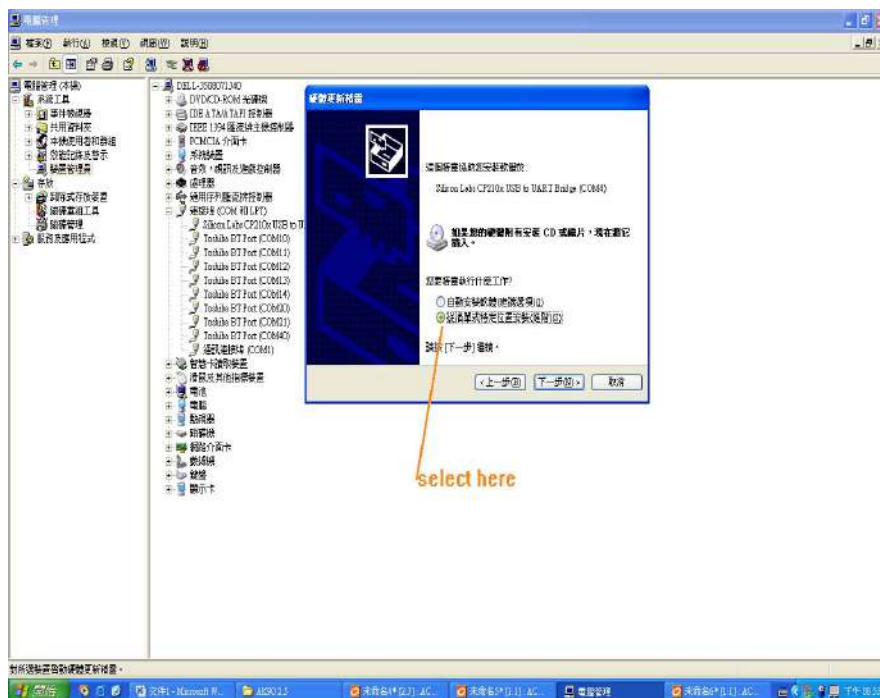
**PS: The connection port had better is "port2 to port5 ", you also can change the port Number in computer manager selection of your computer .**

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 .

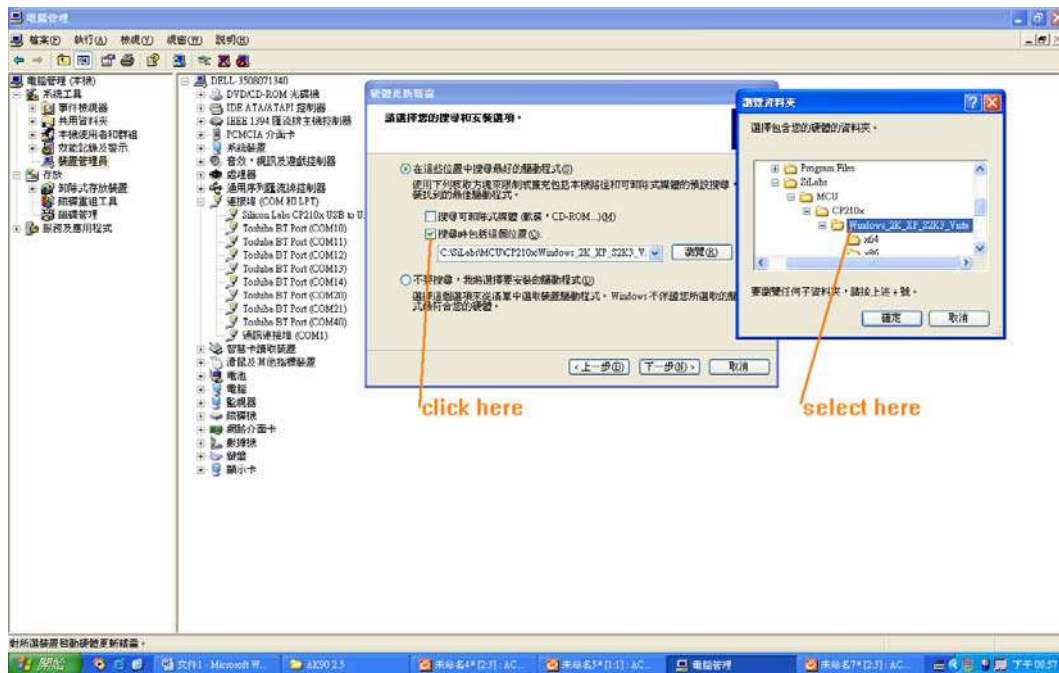
Get into “Disk C” to find out a file called “SiLabs” .



Next step



Next step

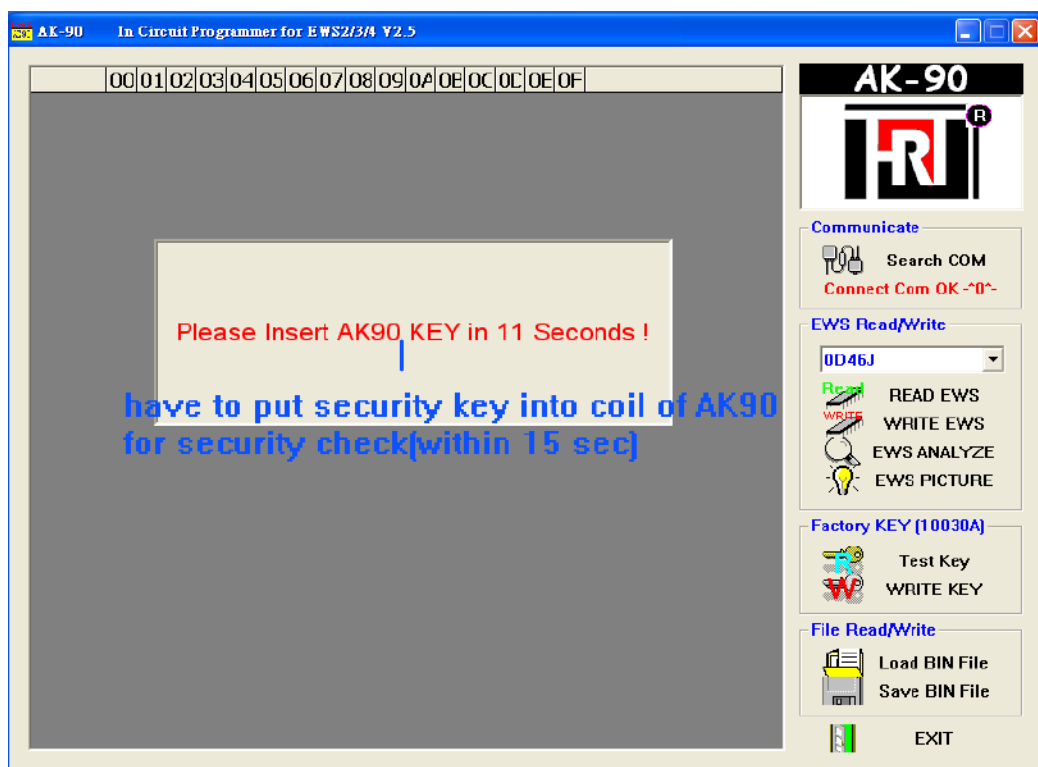


Next step

After driver installed completely then plug AK90 to computer .

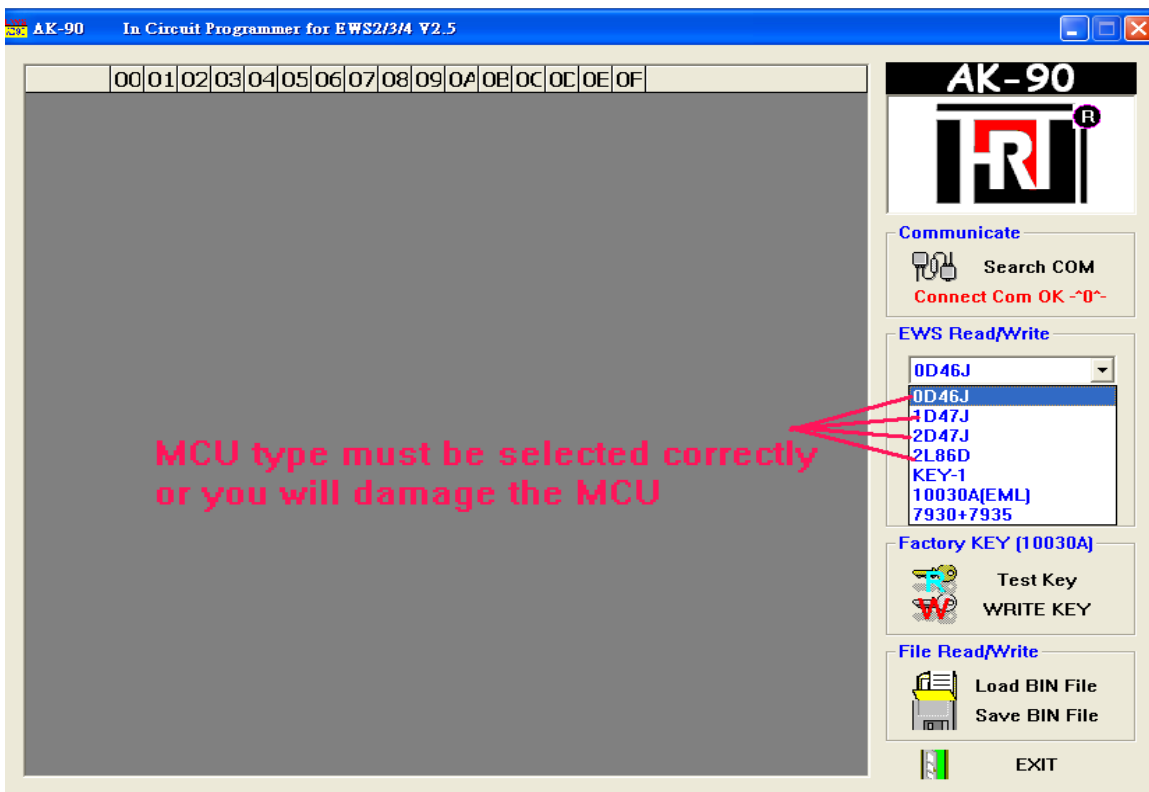
Note: plug AK90 to PC , you will hear a sound “ Bi “ means unit connects to PC successfully

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\elll\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	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	M.....
00180	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	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 Y2.5

	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

AK-90 (C:\Documents and Settings\ell\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
00010	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	01	FE
00020	88	37	49	45	01	81	81	07	11	97	06	55	F0	00	F0	FF
00030	FF	FF	00	40	FF	0A	01	0A	0A	F8	00	CC	5A	5A	E9	54
00040	CE	C3	04	17	5C	3C	26	5E	A2	48	C3	50	BA	46	A7	DF
00050	2A	4A	69	2C	C7	F1	DC	C3	02	27	9E	DC	51	1F	63	6F
00060	8A	6E	B7	DE	52	7A	64	21	1F	8E	DC	1E	37	C3	02	26
00070	E4	CE	15	1A	E8	65	77	81	F3	C7	AF	F3	DC	BE	55	
00080	00	D8	E6	C1	04	7C	64	C3	C8	9E	16	CF	F4	CE	8C	5C
00090																
000A0																
000B0																
000C0																
000D0																
000E0																
000F0																
00100																
00110																
00120																
00130																
00140																
00150																
00160																
00170	4C	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
00180	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF

**Write BMW Key**

Select Key

- Key01 Used
- Key02 Used
- Key03 Used
- Key04 Locked(Write EWS)
- Key05 Used
- Key06 Used
- Key07 NoUse
- Key08 NoUse
- Key09 NoUse
- Key10 NoUse

Transponder

- 10030A[EML]
- PCF7935

Write Key Cancel

**AK-90**

Communicate

- Search COM
- Connect Com OK ^O^

EWS Read/Write

- KEY-1
- READ EWS
- WRITE EWS
- EWS ANALYZE
- EWS PICTURE

Factory KEY (10030A)

- Test Key
- WRITE KEY

File Read/Write

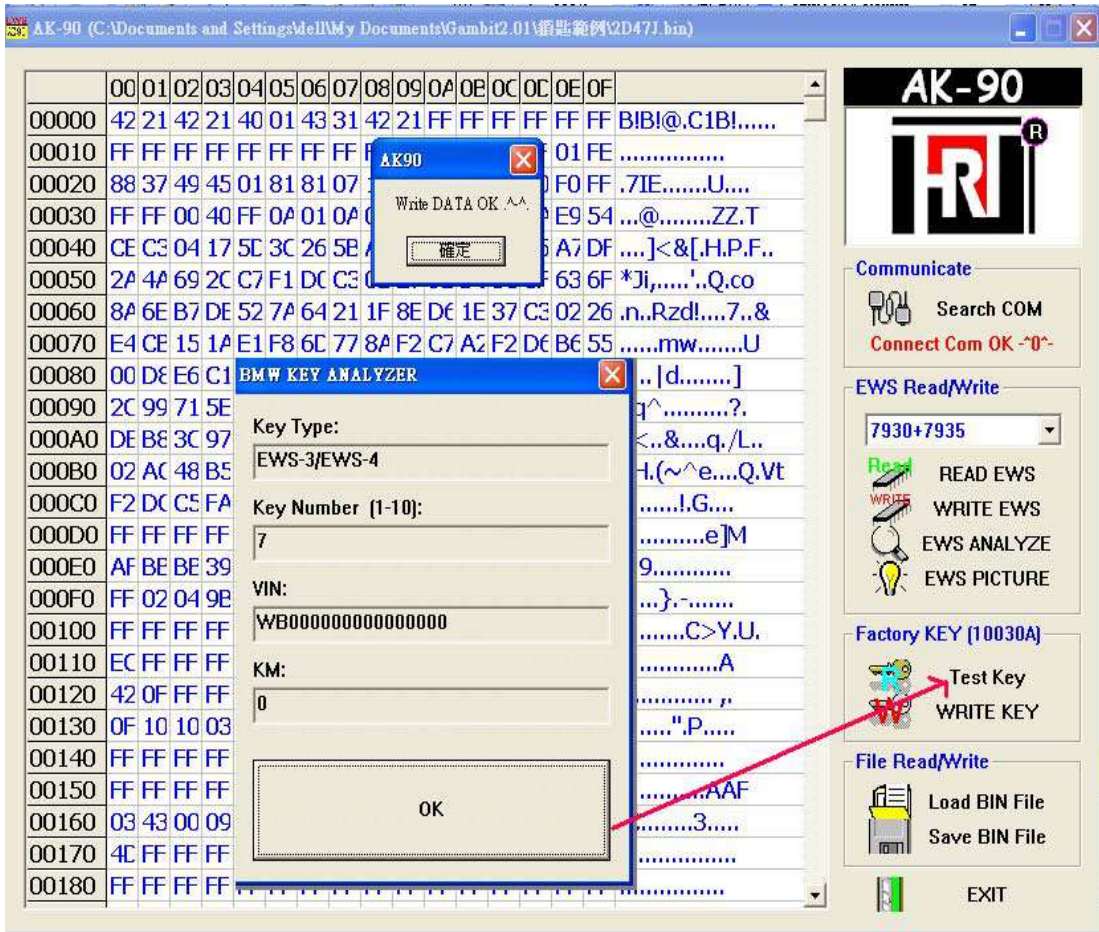
- Load BIN File
- Save BIN File
- EXIT

keys information about keys are in used,new or locked



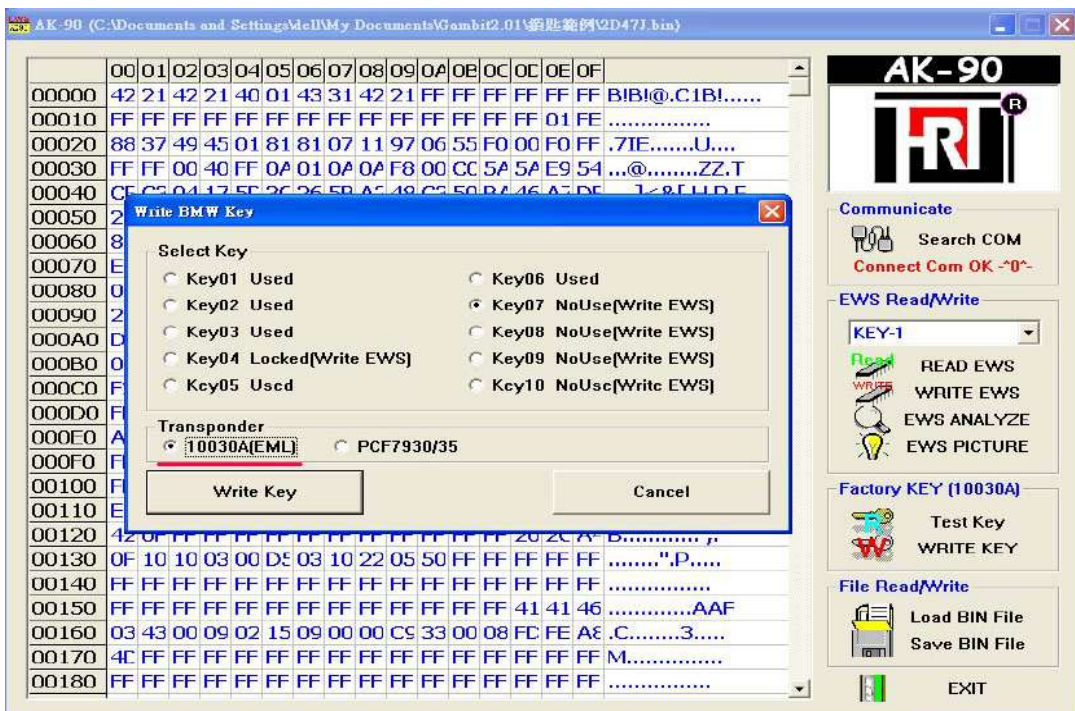
Waiting for 1 minute , do not move during programming  
Or the key will be failed in programming





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\mcl\My Documents\Gambit2.01\钥匙案例\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	52	...WBAGN63483DR
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	FF	FF	FF	FF	FF	FF	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 -"-

**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