AK90 Operation

Step1 : Install software Open the AK90 file from CD



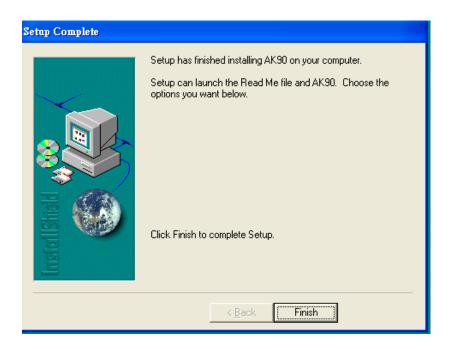
Click "SETUP " for installing the software



Next step

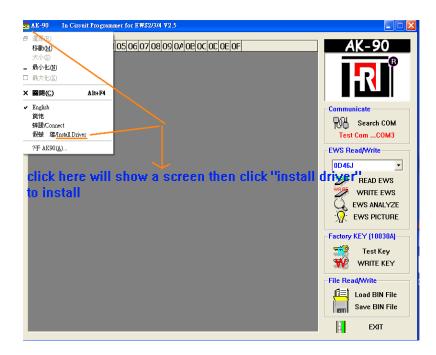
User Information	
Instel Istical	Type your name below. You must also type the name of the company you work for and the product serial number. Ignore here,just type any words is OK Name: dell Company: 0 Serial: Q Ignore here,just type any words is OK
	< <u>B</u> ack <u>N</u> ext > Cancel

Next step

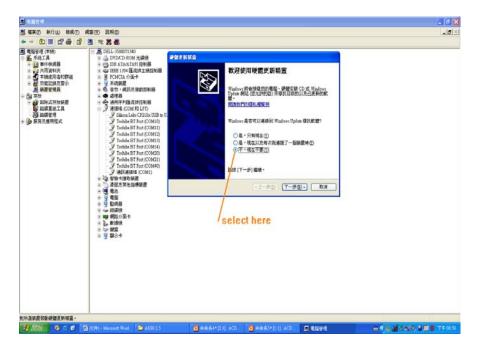


Software is installed completely

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 .

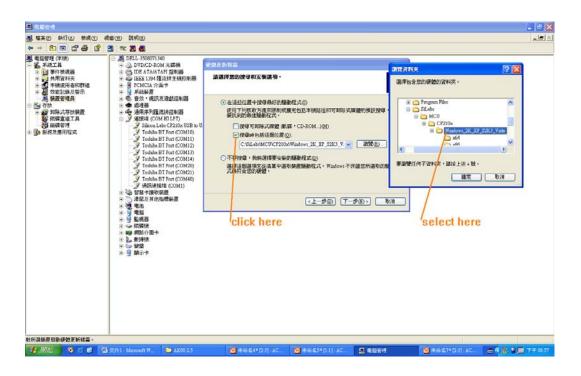


Get into "Disk C" to find out a file called "SiLabs" .

Next step



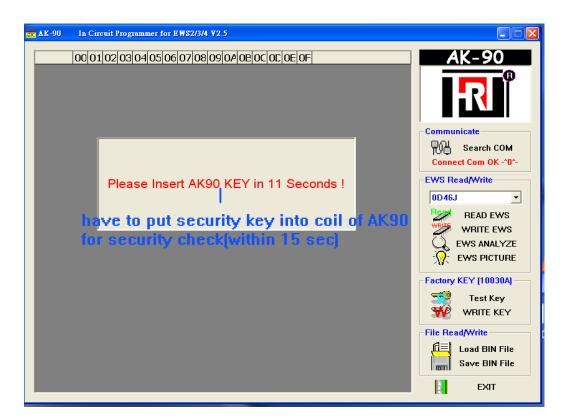
Next step



Next step

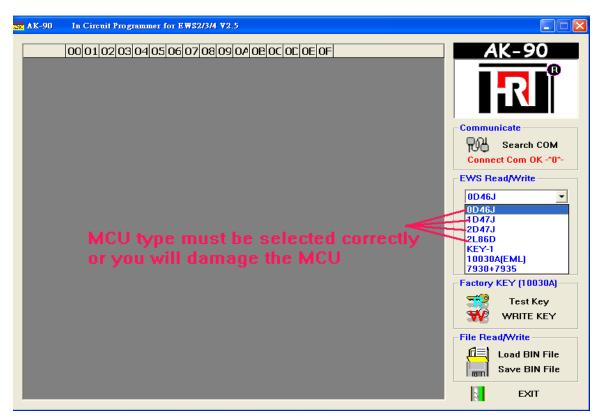
After driver installed completely then plug AK90 to computer .

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



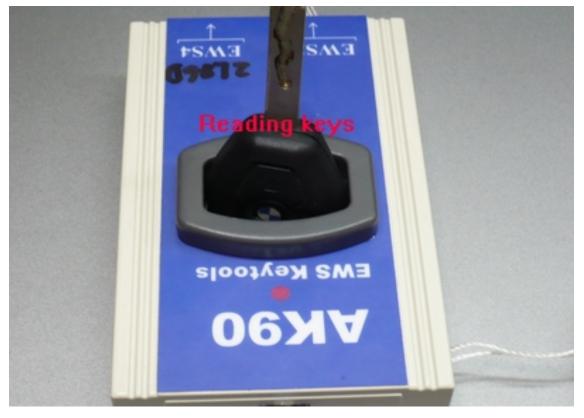
Please see the EWS picture on the software for the help with how to connect MCU for EWS2,3,3+ and EWS4



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.

000102030405060708090A0E0C0C0E0F	AK-90
00000 42 21 42 21 40 01 43 31 42 21 FF FF FF FF FF FF BIB!@.C1B!	
00010 FF EWS ANALYZER 00020 88	■ ₽]
00020 88. 00030 FF EWS INFOMATION	
00040 CE VIN: WBAGF410302112 1222 Odometer: 1000001 km F.	
00050 24	Communicate
00060 8A1 TYPE EWS 3	₩0 H Search COM
00070 F4 GM: 41414603C	Connect Com OK -^0^-
00070 E4 cm. can be changed	
	EWS Read/Write
0008FDFEA8M	2L86D <
000B0 02. KEY STATUS	READ EWS
000C0 F2 No. Used Locked No. Used Locked	WRITE EWS
	EWS ANALYZE
000F0 FF 2 shows used keys	
	-Factory KEY (10030A)
00110 EC and reactive keys	Test Key
	WRITE KEY
00130 OF 5 14 10 1	YYPUTE NE Y
00140 FF MODIFY TO DUMP	File Read/Write
00150 FF	Load BIN File
00160 03 43 00 09 02 15 09 00 00 CS 33 00 08 FC FE A& .C3	Save BIN File
00170 4£ FF	
00180 FF	EXIT

Reading keys



00 01 02 03 04 05 06 07 08 09 04 0E 0C 0C 0E 0F 00000 55 02 D2 6E 39 94 24 AC A4 8E 1C 23 77 00 00 0L U.k9,*#w 00010 00 04 7C 6E 00 01 02 00 00 01 FC 00 15 00 00 00}k@ 00030 4C 47 53 57 30 33 35 00 FF FF FF FF FF FF 00 000 0C LGSW035 DWW KEY ANALYZEK Key Type: EWS:3/EWS-4 Key Number (1-10): 3 VIN: WBAPB120300WC27210 KM: Z7517 Reading keys for information About the car	χ AK-90 In Circuit Programmer for EWS2/3/4 ¥2.5	. . .
Key Type: EWS-3/EWS-4 Key Number (1-10): 3 VIN: WBAPB12030WC27210 KM: 27517 Reading keys for information	00000 55 02 D5 6E 39 9A 2A AL A2 8E 1C 23 77 00 00 0U U.k.9.*#w 00010 00 04 7C 6E 00 01 02 00 01 FC 00 15 00 00 }k 00020 20 2C AE 4E 04 20 30 02 1C 20 40 00 00 ,	AK-90
Save BIN File	Key Type: EWS-3/EWS-4 Key Number (1-10): 3 VIN: WBAPB12030WC27210 KM: 27517	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

Writing keys into PCF7935

<mark>ж АК-90 (С</mark>	\Documents and Settings\dell\My Documents\Gambit2.01\御匙範例\2D47J.bin)		2
	00 01 02 03 04 05 06 07 08 09 04 0E 0C 0E 0E 0F	-	AK 90
	42 21 42 21 40 01 43 31 42 21 FF FF FF FF FF FF B!B!@.C1B!		71-20
	FF 01 FE	••••	
	88 37 49 45 01 81 81 07 11 97 06 55 F0 00 F0 FF .7IEU	_	
	FF FF 00 40 FF 0A 01 0A 0A F8 00 CC 5A 5A E9 54@ZZ.T	_	
	CE C3 04 17 5C 3C 26 5E A2 48 C3 50 B/ 46 A7 DF]<&[.H.P.F.		
	2A 4A 69 2C C7 F1 DC C3 02 27 9E DC 51 1F 63 6F *Ji,Q.co		Communicate
	8A 6E B7 DE 52 7A 64 21 1F 8E DE 1E 37 C3 02 26 .nRzd!7&		Barch COM
00070	E4 CE 15 1A E 53 65 77 84 52 67 AF 52 D6 B6 55mwU		Connect Com OK -^0^-
	00 DE E6 C1 04 7C 64 CS CE 9E 16 CF F4 C6 8C 5C [d]		EWS Read/Write
00000			
000A0	used, new or locked		KEY-1
000B0	Select Key		READ EWS
000C0	C Key01 Used Key06 Used		WRITE EWS
000D0	© Key02 Used © Key07 NoUse		EWS ANALYZE
000E0	C Key03 Used C Key08 NoUse		- OF EWS PICTURE
000F0	○ Key04 Locked(Write EWS) ○ Key09 NoUse		/U
00100	C Key05 Used C Key10 NoUse		Factory KEY (10030A)
00110			式 Test Key
00120	Transponder	_	
00130	○ 10030A(EML) • PCF7930/35		1
00140	Write Key Cancel	-	File Read/Write
00150	Calici	-	Load BIN File
00160	4C FF		Save BIN File
	40. FF		170
00100	FE F		EXIT



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

<mark>號</mark> &K-90 (C:\Documents and Settings\dell\My Documents\Gambit2.01\ 鉺匙範例\ /	2D47J.bin)	
00 01 02 03 04 05 06 07 08 09 0A 0E 0C 0E 0E 0F		AK-90
00000 42 21 42 21 40 01 43 31 42 21 FF FF FF FF FF FF FF		
AK90		
White DATA OV AA	.7IEU	
00030 FF FF 00 40 FF 04 01 04 0 FE9 54	@ZZ.T	
]<&[.H.P.F	- Communicate
	*Ji,'Q.co	
00060 8A 6E B7 DE 52 7A 64 21 1F 8E DE 1E 37 C3 02 26		R에 Search COM
00070 E4 CE 15 1A E1 F8 6C 77 8A F2 C7 A2 F2 D6 B6 55		Connect Com OK -^0^-
00080 00 DE E6 C1 BMW KEY ANALYZER	[d]	EWS Read/Write
00090 2C 99 71 5E	<u>1</u> ^?.	7930+7935 👻
UUUAU DE BE 3L 97	<&q./L	
	H.(~^eQ.Vt	READ EWS
000C0 F2 DC C5 FA Key Number (1-10):	l.G	WRITE EWS
000D0 FF FF FF FF 7	e]M	EWS ANALYZE
000E0 AF BE BE 39	9	- Rews Picture
	<u>}</u>	
	C>Y.U.	Factory KEY (10030A)
00110 ECFF FF FF KM:	A	Test Key
00120 42 0F FF FF 0	н	WRITE KEY
00130 OF 10 10 03	".P	
00140 FF FF FF FF		File Read/Write
00150 FF FF FF FF 0K	AAF	Load BIN File
00160 03 43 00 09		Save BIN File
		- with
00180 FF FF FF FF	······	EXIT

After programming keys , you also can test the key again to see

If the key number is correct.

Writing keys into EML chips

📅 AK-90 (C:\Documents and Settings\dell\My Documents\Gambit2.01\鑽匙範例\2D47J.bin)	
000102030405060708090A0E0C0E0F	AK-90
00000 42 21 42 21 40 01 43 31 42 21 FF FF FF FF FF FF B!B!@.C1B!	0
00010 FF	
00020 88 37 49 45 01 81 81 07 11 97 06 55 F0 00 F0 FF .7IEU	
00030 FF FF 00 40 FF 0A 01 0A 0A F8 00 CC 5A 5A E9 54@ZZ.T	
00040 CECS04 17 50 30 26 58 AS 48 CS 50 B (46 AS DE 1280 H D E	Committee in the
00050 2 Write BMW Key	- Communicate
00060 8 Select Key	R에는 Search COM
00070 E C Key/01 Used C Key/06 Used	Connect Com OK -^0^-
00080 0 C Key02 Used C Key07 Nolloe(Write EWS)	EWS Read/Write
000A0 D C Key03 Used C Key08 NoUse[Write EWS]	KEY-1
000B0 0 C Key04 Locked(Write EWS) C Key09 NoUse(Write EWS)	READ EWS
000C0 F C Key05 Used C Key10 NoUse(Write EWS)	WRITE EWS
000D0 F	C EWS ANALYZE
	- Q- EWS PICTURE
	×u \
00100 F Write Key Cancel	Factory KEY (10030A)
00110 E	Test Key
00130 OF 10 10 03 00 DE 03 10 22 05 50 FF FF FF FF FF FF".P	
00140 FF	File Read/Write
00150 FF	Load BIN File
00160 03 43 00 09 02 15 09 00 00 CS 33 00 08 FC FE A& .C3	Save BIN File
00170 4£ FF	
00180 FF	EXIT

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\dell\My Documents\Gambit2.01\額匙範例\2D47J.bin)	
00 01 02 03 04 05 06 07 08 09 04 0E 0C 0C 0E 0F 00000 00 06 01 05 7 42 41 47 4E 36 33 44 52 WBAGN63483DP 00010 31 31 33 31 37 2C 02 F1 15 68 01 02 30 33 53 41 113177,h0354 00020 55 36 46 41 FF FF FF FF FF 60 00	AK-90
BMW KEY ANALYZER Key Type: CAS/CAS2/CAS3 Key Number [1-10]: VIN: WBAGN63483DR11317 KM: 50573 OK	Communicate Search COM Connect Com OK - 0^- EWS Read/Write KEY-1 READ EWS WRITE EWS EWS ANALYZE EWS PICTURE EWS PICTURE Eactory KEY (10030A) Test Key WRITE KEY File Read/Write Load BIN File Save BIN File Save BIN File