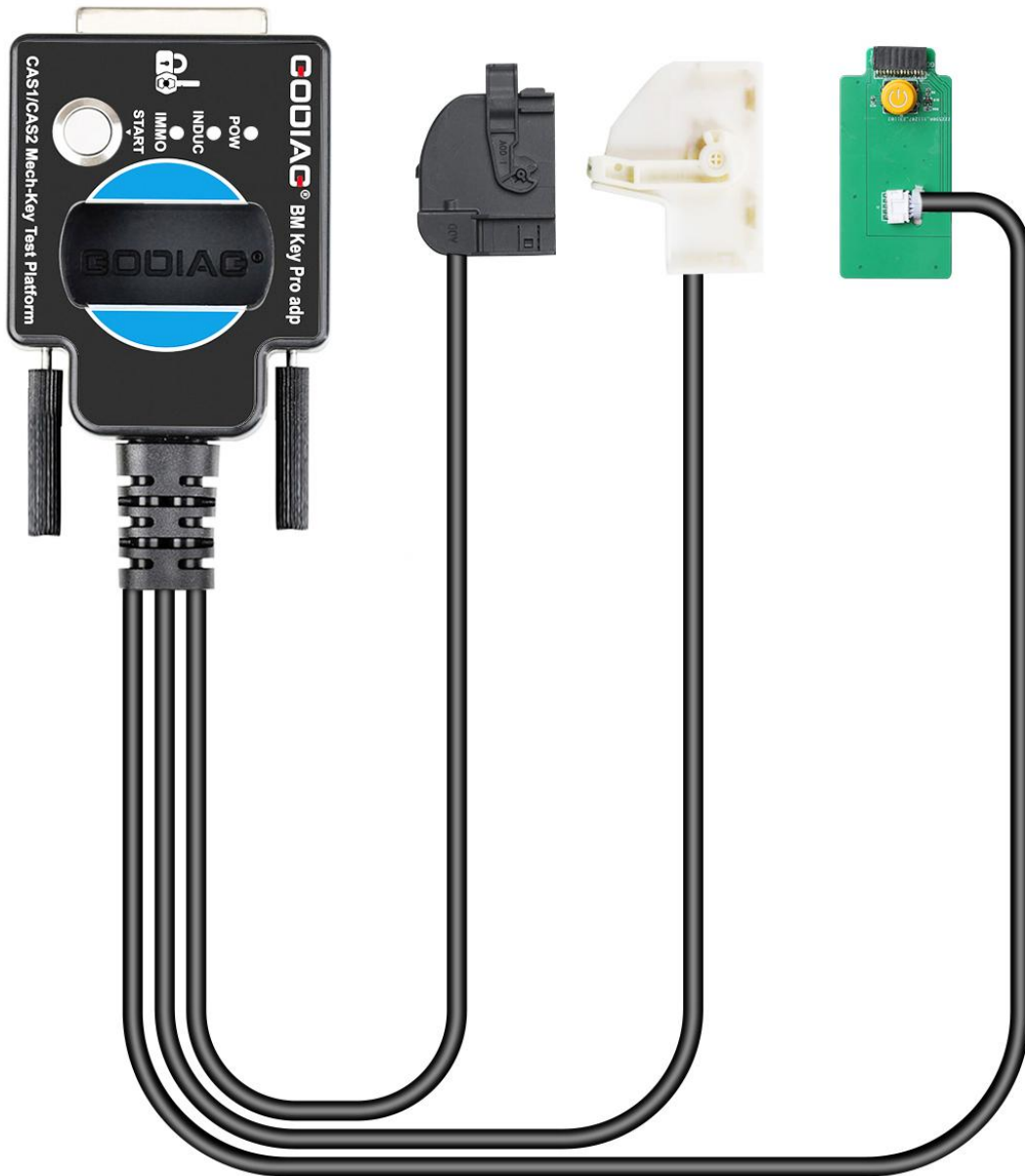# GODIAG®

GODIAG BMW CAS1/CAS2 Mech-Key Test Platform

## User Manual

2024 V1.1

Product overview

GODIAG BMW CAS1/CAS2 Mech-Key Test Platform is a dedicated device developed for BMW locksmiths, maintenance engineers and CAS1 / CAS2 programming engineers. Please note that this product is only suitable for mechanical keys and does not support the semi-intelligent smart key CAS2. If necessary, please purchase a semi-intelligent smart key detection platform.

1. Check if the CAS1/CAS2 module and mechanical keys are synchronized.
2. Cooperate with the key programming devices like xhorse vvdi 2 / bmw vvdi bim tool / Autel im608 / CGDI BMW etc. to perform all key lost matching or key addition operations.
3. CAS1/CAS2 module diagnostics
4. CAS1 / CAS2 module programming

Product Structure
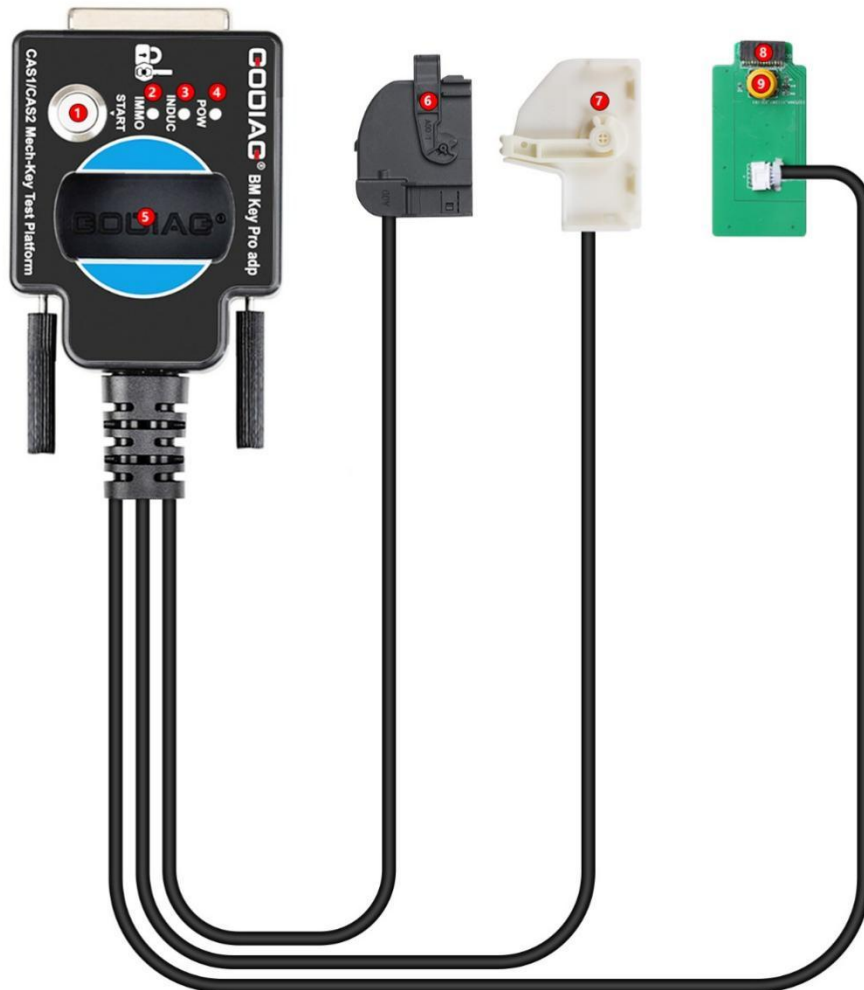
(1) Check the start switch.

(2) IMMO synchronization detection indicator light.

(3) CAS module key induction coil indicator light.

(4) Power indicator light.

(5) Key identification port.

(6) CAS2 module 41PIN connector.

(7) CAS1 module 54PIN connector.

(8) CAS2 module 14PIN connector

(9) Start/stop button

Functions:

A. Synchronous detection of module and key:

Check whether the CAS2 module and mechanical key can be synchronized:
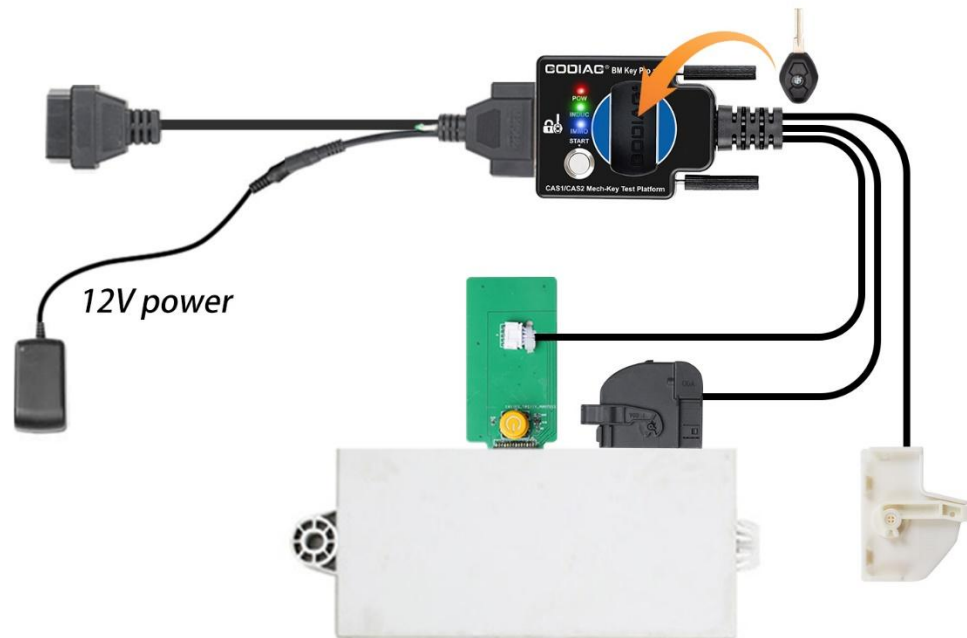
Step 1: Connect the CAS2 module according to the connection diagram

Step 2: Put the key into the key sensing area
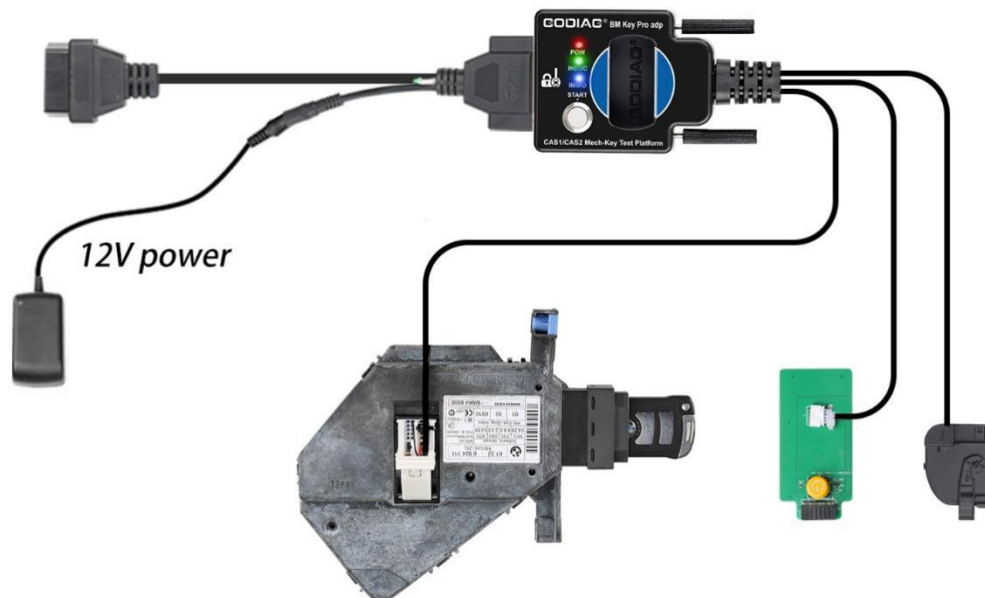
Step 3: Connect the power supply.

Step 4: Press the start switch (press the start switch once to turn on the CAS power and automatically detect whether the key and CAS are synchronized, press it again to turn off the CAS power and turn off the detection).

Synchronization judgment method: when the detection start switch is pressed, the Power indicator light will light up. If the key is synchronized with CAS2, the CAS module key induction coil indicator light will flash regularly. If it is an unsynchronized key, the key induction coil indicator light will only flash quickly for 2 seconds. [If the key is synchronized with the CAS module, the IMMO synchronization detection indicator light will light up and the internal buzzer of the machine will sound. If the key is not synchronized with the CAS module, the IMMO synchronization detection indicator light will not light up and the internal buzzer of the machine will not sound.]

Step 5: Press and hold the analog start/stop button, the IMMO synchronization detection indicator light will go out after 3 seconds. The INDUC sensor indicator light also goes out.

After releasing, the IMMO synchronization detection indicator light will light up. The INDUC sensor indicator light flashes.

CAS1 module and key synchronization detection:

1. Connect the device according to the connection diagram. Please use 12V 2.5A for power supply, otherwise the CAS1 module cannot be driven. [Do not connect the CAS2 module]

2. Press the start switch [you can see the START-STOP indicator light on the CAS lights up]

3. Insert the key into CAS1

4. Press the CAS1 key. If the key is synchronized with the CAS1 module, the CAS1 key will be locked. It will automatically exits if the key is not synchronized.

CAS2 mechanical key module key programming and module programming identification diagnostic connection demonstration:

The following uses Xhorse vvdi2 device to perform BMW CAS2 mechanical key programming and matching operations:

1. Connect the CAS2 mechanical key module and key programming diagnostic equipment according to the connection diagram. Press the start button to provide power to CAS2.

12V power

2. Select "key learn—CAS/EWS Information---Connect-- Read EEPROM". [Note: Take away the key and do not perform synchronization detection between the key and the CAS2 module before connecting to read data. Just press the start button to power the CAS module. If the CAS module detects a synchronized key, then the connected device cannot read the data.]
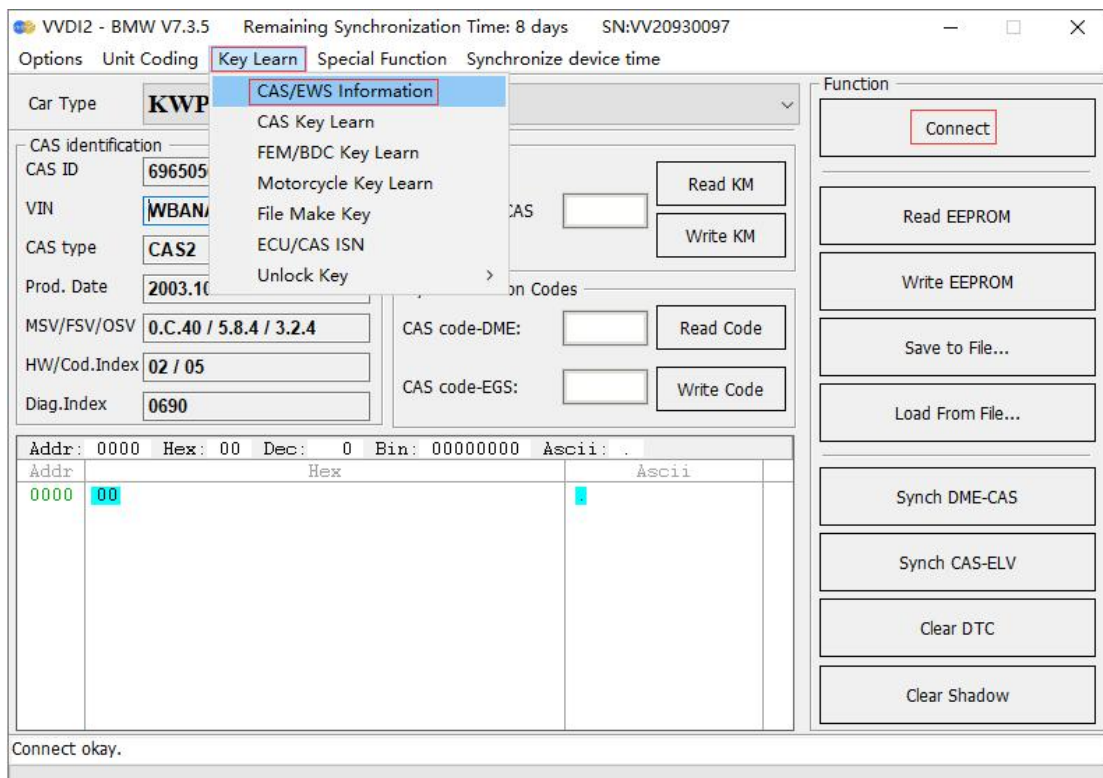
Save to File...
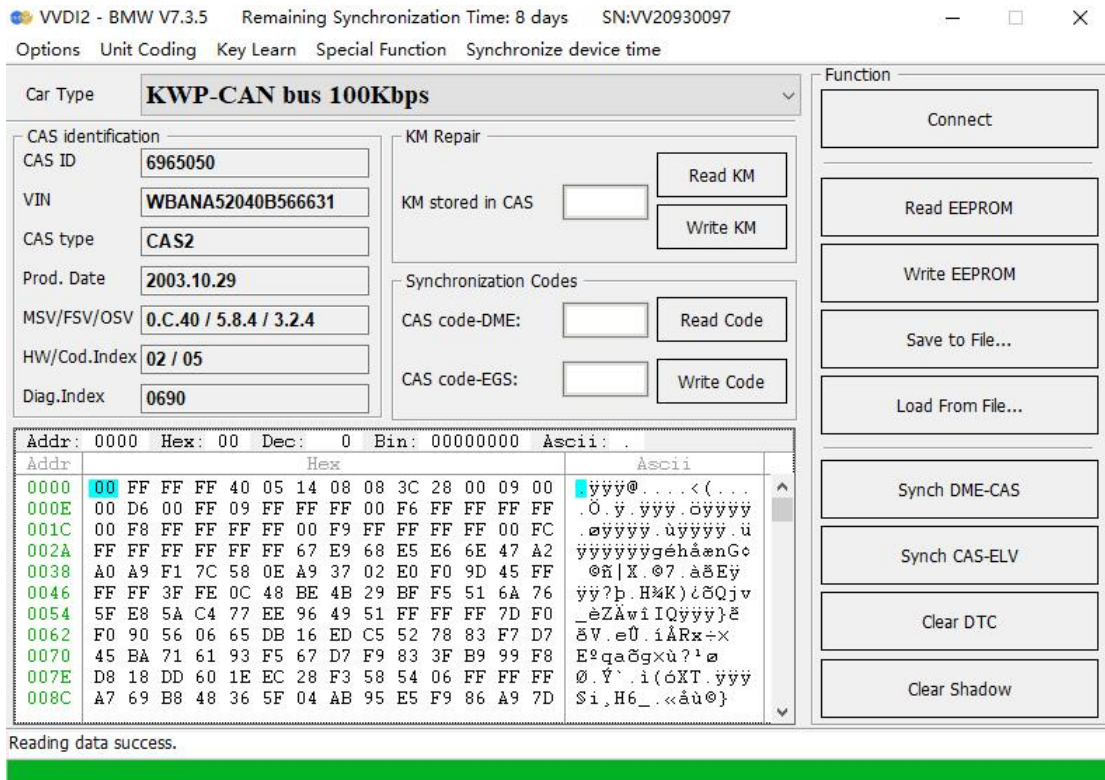
If you want to read the CAS mileage or modify the CAS mileage, please operate the corresponding menu"Read KM".

It can also read CAS code-DME.
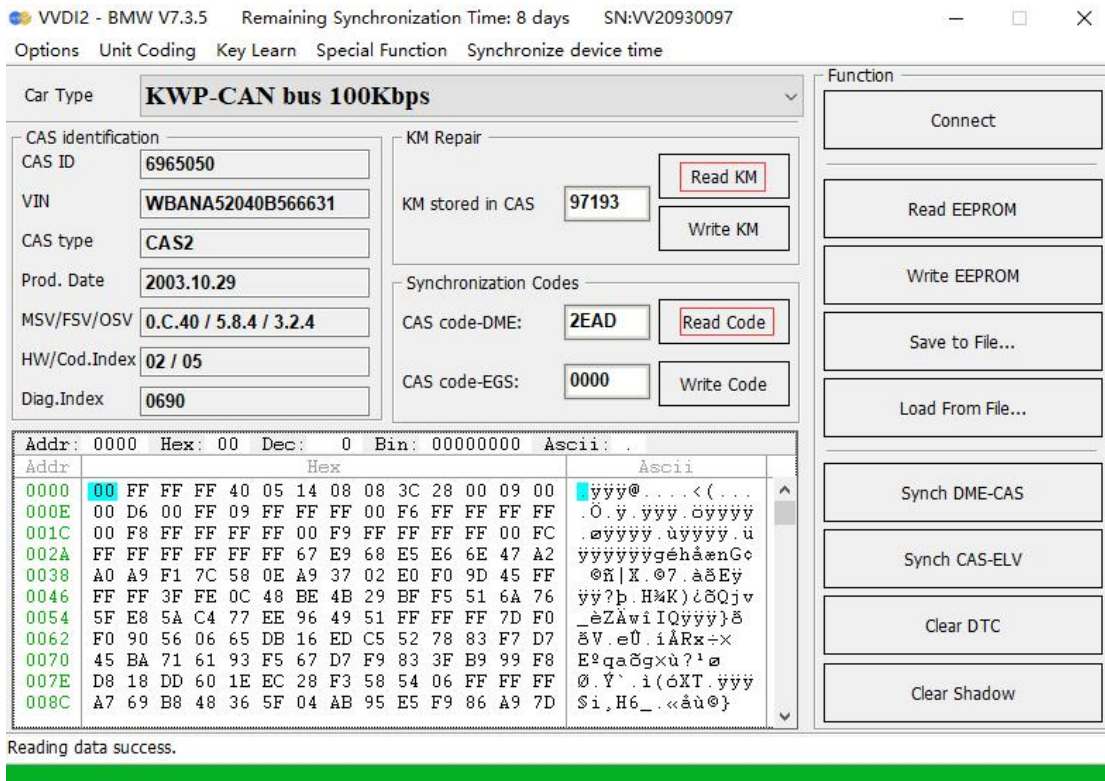
3. Key programming steps: select "key learn—CAS Key Learn ---Connect" , select "Get Key Info" and "Save Key Info".

VVDI2 - BMW V7.3.5   Remaining Synchronization Time: 8 days   SN:VV20930097

Options Unit Coding Key Learn Special Function Synchronize device time

Car Type   CAS

| CAS/EWS Information |
| CAS Key Learn |
| FEM/BDC Key Learn |
| Motorcycle Key Learn |
| File Make Key |
| ECU/CAS ISN |
| Unlock Key |

General info
CAS ID:
Key cutting code: type: CAS2
CAS remote control fre
Current key in ignition

Function

Connect

Get Key Info

Write Key Info

Save Key Info   Load Key Info

Erase/Edit Key Info   View all key information in detail

Prepare dealer key with programmer

Prepare dealer key with ignition switch

Add Key   Repair Keyless Key

Enable Key   Disable Key

Key Information

Position	Key ID	Status	Type	Info	Low	High	CFG	PS
Key 1	BD6ACD14	Enable	PCF 7936 transpc	002B00	5B38B1AA	49B9	CE	B8:
Key 2	00CDAB17	Enable	PCF 7936 transpc	00A100	A1162D42	D153	C8	1A!
Key 3	72199B19	Enable	PCF 7936 transpc	002100	A1DDE3C3	C4C0	C8	60E
Key 4	FFFFFFFF	Disable	Unknown	017608	90F12579	7AD4	C8	D2I
Key 5	FFFFFFFF	Disable	Unknown	017608	713E486F	E1E9	C8	A8.
Key 6	FFFFFFFF	Disable	Unknown	017608	14C3E501	5257	C8	1F2
Key 7	FFFFFFFF	Disable	Unknown	017608	89323455	1E56	C8	30(
Key 8	FFFFFFFF	Disable	Unknown	017608	775FB336	6C97	C8	B4(
Key 9	FFFFFFFF	Disable	Unknown	017608	745194F6	1CED	C8	8C/
Key 10	FFFFFFFF	Disable	Unknown	017608	CB2F257B	BF5D	C8	11(

Reading data success.

4. Select an unused key position, be sure to select the "prepare dealer key with programmer" menu, and use the VVDI2 key programmer to generate the key. If the key is placed in the key sensing area of the GODIAG BMW CAS1/CAS2 Mech-Key Test Platform, the dealer key will not be generated.

5. After programming the dealer key, place the key into the Godiag BMW CAS1/CAS2 Mech-Key Test Platform sensor port for testing. For test steps, please refer to module and key synchronization detection.

If the new key detection is out of sync, please synchronize CAS and DME or synchronize CAS and ELV. Reconnect the device and module and press the button'Check the start switch'. If the IMMO light cannot light up, enter the VVDI2 menu "Key Learn—CAS/EWS Information — Connect — Synch DME-CAS or Synch CAS-ELV" for synchronization operation. [When performing synchronization, the key must be placed in the key sensing programming area of the VVDI2 device.]

12V power
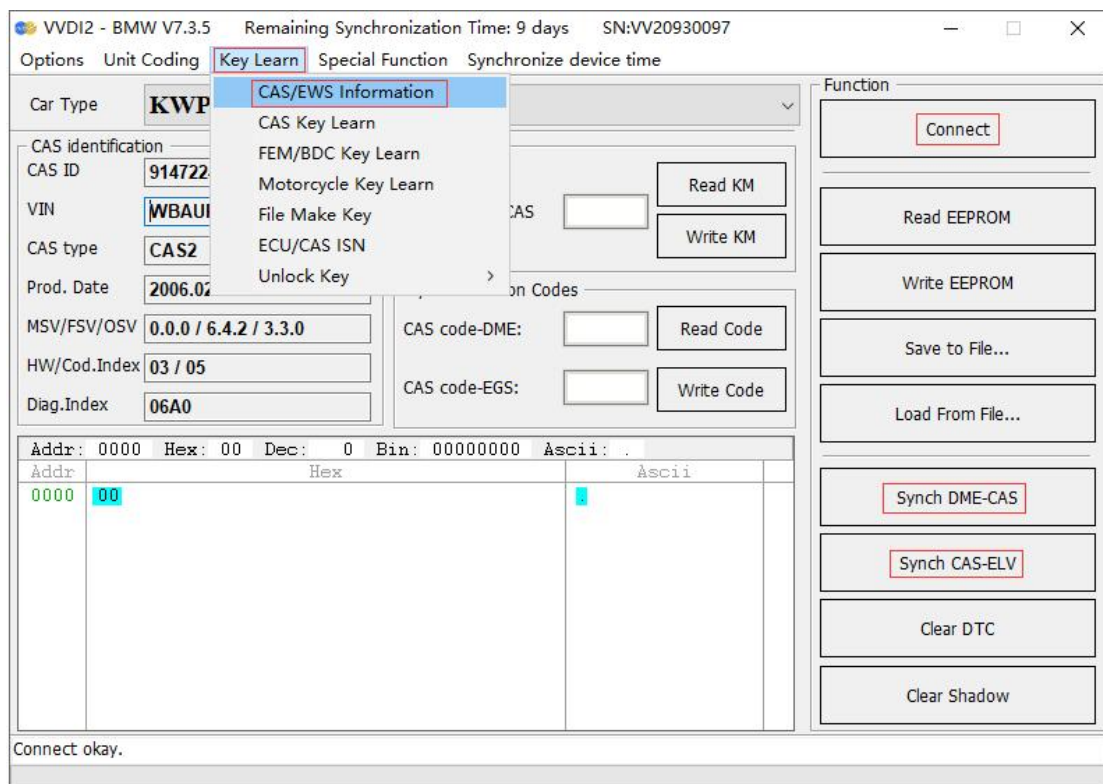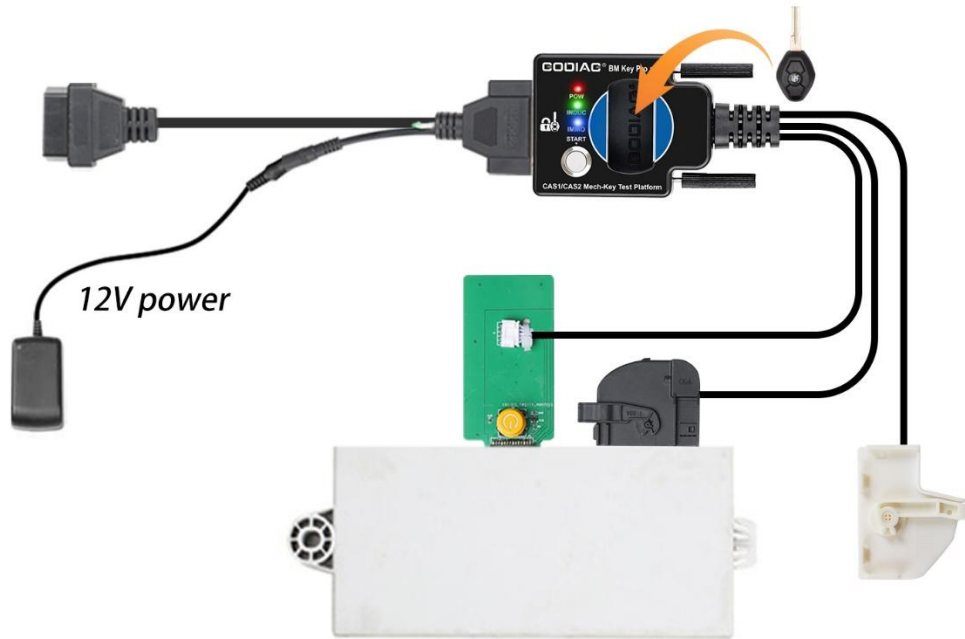
The following uses the Xhorse vvdi2 device to perform the BMW CAS1 key programming and matching operation:

1. Connect the CAS1 module and the key programming diagnostic device according to the connection diagram. Press the START switch on the Godiag BMW CAS1/CAS2

Mech-Key Test Platform and the POW indicator light will light up, indicating that the test platform has output power. The indicator light on the CAS1 mode will also light up. [Please use 12V 2.5A power supply, otherwise it will not be able to drive the CAS1 module]
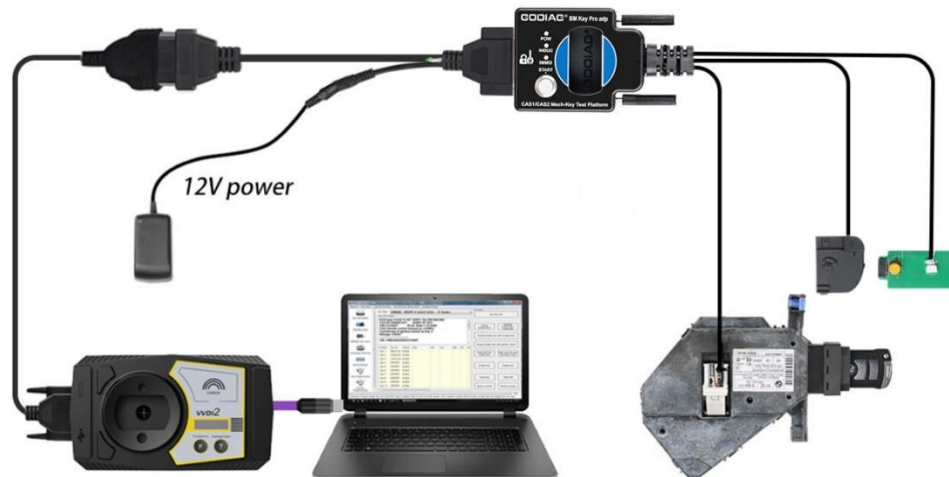
2. Select "key learn—CAS/EWS Information---Connect-- Read EEPROM". [Be careful not to insert the key. If the data cannot be read, please reconnect and turn on the platform power.] [**Note:** Do not perform a synchronization test between the key and the CAS1 module, otherwise the connection or data reading will not be possible. If a synchronization test is performed, please disconnect the power supply and reconnect the device and CAS module.]

Save to File...

If you want to read the CAS mileage or modify the CAS mileage, please operate the corresponding menu "Read KM". It can also read CAS code-DME.

3. Key programming steps: select "key learn—CAS Key Learn----Connect". Select "Get Key Info" and "Save Key Info".

4. Select an unused key position, be sure to select the "prepare dealer key with programmer" menu, and use the VVDI2 key programmer to generate the key. [Because the CAS1 module key identification socket or GODIAG BMW CAS1/CAS2 Mech-Key Test

Platform key sensor cannot generate dealer keys.]

5. After the dealer key is successfully programmed, place the key into the CAS1 module key module socket for testing. For test steps, please refer to the CAS1 module and key synchronization detection steps.

If the IMMO light cannot light up, enter the VVDI2 menu "Key Learn—CAS/EWS Information—Connect—Synch DME-CAS or Synch CAS-ELV" for synchronization. [When performing synchronization, the key must be placed in the VVDI2 device key sensing area.]

VVDI2 - BMW V7.3.5   Remaining Synchronization Time: 8 days   SN:VV20930097

Options   Unit Coding   Key Learn   Special Function   Synchronize device time

Car Type	KWP-CAN bus 100Kbps

CAS identification

CAS ID	6942487
VIN	WBAGN41070DM76015
CAS type	CAS1
Prod. Date	2002.05.07
MSV/FSV/OSV	0.A.D8 / 6.C.8 / 2.3.0
HW/Cod.Index	03 / 03
Diag.Index	0310

KM Repair

KM stored in CAS [ ]   Read KM   Write KM

Synchronization Codes

CAS code-DME: [ ]   Read Code

CAS code-EGS: [ ]   Write Code

Function

Connect

Read EEPROM

Write EEPROM

Save to File...

Load From File...

Synch DME-CAS

Synch CAS-ELV

Clear DTC

Clear Shadow

```
Addr: 0000  Hex: 00  Dec:  0  Bin: 00000000  Ascii: .
Addr                        Hex                          Ascii
0000  00 55 44 03 14 08 08 78 28 00 02 00 00 0D  .UD....x(.....
000E  00 F5 00 FC 00 EB 00 ED 00 F1 FF FC FF FF  .õ.ü.ë.í.ñÿüÿÿ
001C  FF 54 A2 D4 C8 84 10 72 67 3E 20 61 90 EB  ÿT¢ÔÈ.rg> aë
002A  D1 2C 68 59 99 23 D8 8B D1 F3 21 AE AE 94  Ñ,hY#Øñó!®®
0038  AB 2F 13 9C 37 8D 63 36 B9 3A DD B2 80 8B  «⁄.7c¹:Ý²
0046  48 DF 88 7C AA 44 29 79 A5 F3 A9 F0 E4 83  Hß|ªD)y¥ó©ðä
0054  05 B4 22 60 C4 01 E2 7F 45 4E 25 FA 01 5C  .´"`Ä.âEN%ú.\
0062  D7 17 27 9B 73 41 DC B9 38 35 EE 87 86 DC  ×.'sAÜ¹85î Ü
0070  DE 91 69 9B 2F 96 BF FA 81 D8 FA 48 5F 5A  Þi⁄¿úØúH_Z
007E  18 A0 AA A3 57 D9 AA 82 E6 A5 F3 6E 8D AA  .ª£WÙªæ¥ón ª
008C  1F 3F D8 9E D7 2D 86 DC AB 6C 3E 38 DE 91  .?Ø×-Ü«l>8Þ
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Reading data success.

Thanks for reading!