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#### Disclaimer

The contents of this document are subject to changes without notice due to continued improvements in design, manufacture, and methodologies. Launch is not liable for the damage or losses due to the use of this document.

#### FCC Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- a. This device may not cause harmful interference
- b. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

**()** Important: Please read this manual carefully and understand the safety precautions before performing any operation to this product.

#### Safety Grades

Safety grade definitions in this manual are as followings:

Symbol	Definition	Usage
	Danger	Indicates a hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.
9	Warning	Indicates a hazardous situation which, if not avoided, could result in possible injury to the operator or to bystanders.
<b>A</b>	Caution	Indicates a hazardous situation which, if not avoided, could result in serious equipment damage or property losses.

#### **Safety Precautions**

- Never collide, throw, or puncture the test equipment, and avoid falling, extruding and bending it.
- Do not insert foreign objects into or place heavy objects on your device. Sensitive components inside might cause damage.
- Do not use the test equipment in exceptionally cold or hot, dusty, damp or dry environments.
- In places using the test equipment may cause interference or generate a potential risk, please turn it off.
- The test equipment is a sealed unit. There are no end-user serviceable parts inside. All internal repairs must be done by an authorized repair facility or qualified technician. If there is any inquiry, please contact the dealer.
- Never place the test equipment into apparatus with strong electromagnetic field.
- Do not attempt to replace the internal rechargeable lithium battery. Contact the dealer for factory replacement.
- Use the included battery and charger. Risk of explosion if the battery is

replaced with an incorrect type.

- Do not disconnect power abruptly when the test equipment is being formatted or in process of uploading or downloading. Or else it may result in program error.
- Do not delete unknown files or change the name of files or directories that were not created by you, otherwise the test equipment software might fail to work.
- Be aware that accessing network resources can leave the test equipment vulnerable to computer viruses, hackers, spyware, and other malicious activities that might damage your device, software or data. Ensure that you have adequate protection in the forms of firewalls, anti-virus software, and anti-spyware software and keep such software up to date.
- Do not disconnect battery or any wiring cables in the vehicle when the ignition switch is on, as this could avoid damage to the sensors or the ECU.
- Do not place any magnetic objects near the ECU. Disconnect the power supply to the ECU before performing any welding operations on the vehicle.
- Use extreme caution when performing any operations near the ECU or sensors. Ground yourself when you disassemble PROM, otherwise ECU and sensors can be damaged by static electricity.
- When reconnecting the ECU harness connector, be sure it is attached firmly, otherwise electronic elements, such as ICs inside the ECU, can be damaged.

### **Packing List**

- Main unit
- Power adapter with power cable
- · Main diagnostic cable
- MCU cable with multiple leads
- SOP8 chip converter
- EEPROM PCBA
- MCU PCBA V1
- MCU PCBA V2

Table of Contents           1 About this Manual         1
1.1 Target Reader1
1.2 Typographic Conventions 1
1.3 Symbols 1
2 About X-PROG3
2.1 Product Overview
2.2 Power Source
2.3 Technical specifications
3 Diagnostics
3.1 Common Operations 4
3.1.1 Establish Hardware Connection
3.1.2 Establish Wireless Connection
3.1.3 Perform Common Operations
3.2 Diagnostic Operations
3.2.1 Key Programming7
3.2.2 Gear Box Programming 12
3.2.3 Engine Programming17
3.2.4 Return from Diagnostic Function
<ul><li>4. Software Upgrade</li></ul>

ΊV

# **1 About this Manual**

This manual introduces the basic information of X-PROG3 and instruction on the product usage. X-PROG3, the next generation of X-PROG1, is a powerful anti-theft solution and an ideal choice for professional repair shops and vehicle maintenance businesses. It has achieved vehicle key, Engine and gear box programming, featuring powerful multiple parts reprogramming and wide range of vehicle coverage.

## 1.1 Target Reader

This document is intended for vehicle owners or repair technicians to perform various diagnostic procedures using X-PROG3; it assumes a basic knowledge of vehicles.

## **1.2 Typographic Conventions**

The typographic elements that may be found in the document are defined in the following table:

Item	Presentation	Example
Cascading Menus	->	X431->Local Diagnosis
Parameter/value	Bold	Silde the WLAN switch to "ON".
Variable/unfamiliar term	Italic	Visit us by http://cnlaunch.com.
UI control	Bold	On the <b>Health Check</b> screen, tap Enter.
Message	6633	The "success" message appears.

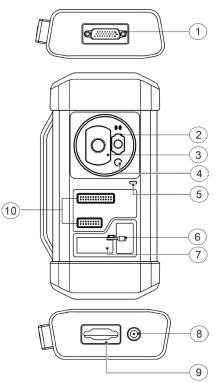
## 1.3 Symbols

Following symbols are used in this document:

S	Symbol	Definition	Usage
	₽⁄	Note	Widely used for any supplementary information.
	()		Refers to easily overlooked tricks that is necessary for a better user experience.

# 2 About X-PROG3

### 2.1 Product Overview





No.	Part Name	Description
1	DB26 diagnostic connector	To connect with all anti-theft cables.
2	Benz key slot	To place Benz car key.
3	Key slot	To place car key for RF defection.
4	Key chip slot	To place key chip.
5	Power indicator	<ul> <li>Red light indicates faults.</li> <li>Orange light indicates functions normally.</li> </ul>
6	Valve	To tighten loose EEPROM board.
7	EEPROM slot	To insert EEPROM board
8	Power port	For power charging
9	DB15 diagnostic connector	To connect with main diagnostic cable.
10	DIY slot	To insert vehicle DIY board.

## 2.2 Power Source

The product does not have an independent power supply, you can powered it up by the followings ways:

- Use the power adapter supplied by Launch
- Connect the device through the vehicle's DLC

# 2.3 Technical specifications

Input voltage	12 V DC
Input current	500 mA
Working temperature	0 to 50 °C
Storage temperature	- 20 to 70 °C
Dimension	39 x 107 x 298 mm

# **3 Diagnostics**

X-PROG3 diagnostic function supports key programming, engine and gearbox replacement for various of vehicles, you can retrieve ECU information, read, erase, and write in for a range of chips as shown in the product options.

## 3.1 Common Operations

### • 3.1.1 Establish Hardware Connection

You need to turn off the ignition and correctly locate the vehicle Data Link Connector (DLC) so as to perform hardware connection.

You can refer to the table below for hardware connection:

User Scenario	Cable Image		End A	End B	End C
Key programming	End A End B	End C cable	Connect with Launch VCI connector for data transmission	Connect with vehicle's DLC	Connect with X-PROG3

Engine/ Gearbox programming	End A End B End C Power cable	Connect power supply	N/A	Connect with end B the main diagnostic cable
Engine/ Gearbox programming	End A End B MCU cable with mutiple leads	Connect with X-PROG3	Connect with the engine or gear box to be repaired/ replaced	N/A
Engine/ Gearbox programming	End A End B End C Main diagnostic cable	Connect with Launch VCI connector for data transmission	Connect power supply cable	Connect with X-PROG3

### • 3.1.2 Establish Wireless Connection

You must make sure that your diagnostic tool is well connected with X-PROG3, follow steps below to check wireless connection:

₽ Note: It is strongly recommended to connect the diagnostic tool with the VCI connector using a USB cable for effective data transmission.

1. Slide down the status bar from the top.

2. Touch 🔹 , go to Wireless and network->Bluetooth.

3. Select the X-PROG3 to be connected, wait until the connection is successful.

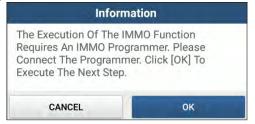
• 3.1.3 Perform Common Operations

You should enter the function interface before using the programmer.

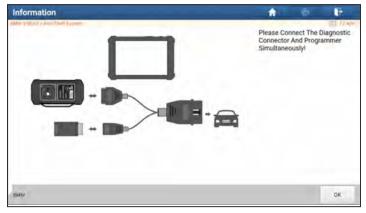
1. Turn on a Launch diagnostic tool, and/or open we on the home

#### screen.

2. On the main diagnostic screen, enter Anti-theft system either from **Local Diagnose** or **Reset**, touch **OK**.



3. You will view the connection diagram, touch OK.



- 4. Depending on your requirement, touch any of the following options :
  - Gear Box Learning
  - Anti-Theft System
  - Engine System

6

# 3.2 Diagnostic Operations

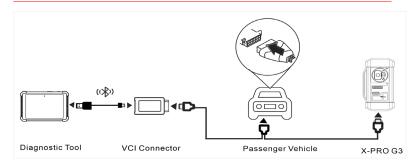
### 3.2.1 Key Programming

You can use anti-theft system to access key chip programming functions. The product supports reading, retrieving and writing key information, as well as other key-related functions.

#### Connecting diagnostic system

#### 🛃 Note:

The USB cable shown in below diagram is not included in the packing list for now, using a USB cable could effectively enhance your data transmission speed.



#### Operating on key programming

You can use key programming function to backup old key data and write in data for new keys. Below procedure shows you how to perform key programming for BMW using Launch diagnostic product, it contains backup current key data and new key generation.

- 1. Backup current key data.
- a. Touch Intelligent Mode.

Show Menu		*		₽
BMW V50 54 > AnleTheR System			-	EB 11.80V
Intelligent Mode	IMMO			
EGS System	Engine System			
BMW				

b. Touch **OK** to confirm the IMMO Type.

Intelligent Mode	
Current IMMO Type: CAS3/CAS3+	
ок	

c. Touch Key Operation.

8

Show Menu	A 🖨 🗗
BMW VS3.54 > Anti-Theft System	E 0.74V
Vehicle Information	Vehicle Frequency
ECU Reset	Key Operation
Synchronize Operations	Clear DTC (S)
Tool Version Repair	Read ISN (Initial Serial Number)
BMW	

### d. Touch Key Learning.

Show Menu	A 0 0
MW VS0,54 > Anti-Theft System	E3-11.74V
Key Data Operation	Key Learning
Key Unlock	Key Enable/Disable
Startup Repair	Key Status

e. Touch **OK** after reading the the onscreen instruction.



f. Touch OK.

Information
ake The Key Out From The Ignition Switch! The Key Is A Smart One, Please Put It outside The Vehicle. Iease Click OK Directly If There Is No Key In he Ignition Switch.
ОК

g. Touch **OK** to save the key data.

Key Le	earning
Key Data Read Succes Key Data?	sfully. Whether To Save
	The second s

h. Enter the key file name and touch **OK**.





i. Key file saved, touch OK to confirm.

Key Learning	
Key Information Backup Successful!	
ок	

- 2. Generate a new key.
- a. Touch the desired blank key position.

Key Learn	ing			tî .	
IMW V30 54 + A4	ti Thaih Syndoni				8 11,71
Key Position	Key ID	Кеу Туре	Key Status	Vehicle Information	Enable/Disable Status
Key 2	BB53EE90	PCF 7953 remote key	Used	014800	Disable
Key 3	1454EE90	PCF 7953 remote key	Used	004B00	Enable
Key 4	47AE9896	PCF 7953 remote key	Used	004300	Enable
Key 5	9C03869E	PCF 7953 remote key	Used	004300	Enable
Key 6	FFFFFFF	Unknown	Unused	007608	Enable
Key 7	FFFFFFF	Unknown	Unused	007608	Enable
Key 8	FFFFFFFF	Unknown	Unused	007608	Enable
Key	Senerated By Ignitic	on Switch Key	Generated By Program	nmer	Erase Key 1

b. Place the new key into the programmer key slot and touch OK.



c. Confirm the key type, if the you are using a smart key, touch YES.

ning
t One?
YES

d. If the key generation is done, touch OK to confirm.

	Information
Try To Start Th If The Newly G Vehicle, Please	enerated Key Cannot Start The e Execute DME Synchronization onization Function According
	ок

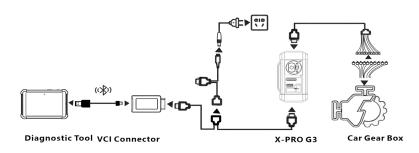
• 3.2.2 Gear Box Programming

You can use gear box programming function to restore the old gear box data or write in new data after a new gear box is replaced.

· Connecting diagnostic system for gear box programming

### 🛃 Note:

- The USB cable shown in below diagram is not included in the packing list for now, using a USB cable could effectively enhance your data transmission speed.
- Certain Vehicle gear boxes are connected based on the real chassis type, for information how to connect the gear box, refer to the *onscreen connection diagram*.



Operating on Gear Box programming

Below procedure shows you how to perform gear box programming for a BMW using Launch diagnostic product, the procedure contains Gear Box connection and Erasure of Gear Box data.

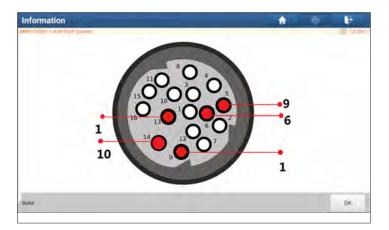
- 1. Connecting the Gear Box.
- a. On the programmer function interface, touch **EGS System** to enter gear box programming.

Show Menu		ŵ	•	ŀ
IMAW V50.60 - Anti-Theft System				🗎 12.89V
Intelligent Mode	IMMO			
EGS System	Engine System			

b. Touch the correct chassis type.

Show Menu		<b>^</b>	•	1
BMW V53.60 - Anti-Theft System:	-			E 12.03Y
F Chassis 8HP				
G Chassis 8HP				
BMW				

c. You will then see a corresponding connection diagram. Touch **OK**.



- 2. Erasing Gear Box data.
- a. Touch EGS Erasure.

Show Menu	A 🖶 🗗
BMW V53.50 - Anti-Theft System	E 120
ECU Information	EGS Erasure
EGS Repair	Authentication Status
Reset Adaptation	Encoding Operation

b. Touch **DOWNLOAD**.

15



c. Touch OK.



d. Touch DOWNLOAD.



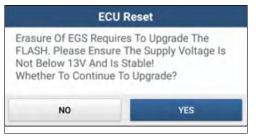
e. Touch OK.



f. Touch YES.

16

EZ



g. Touch YES.

	ECU	Reset
Not Sup	ode File Is Lost port Back-Up! ! r To Continue To	
	NO	YES

h. Touch OK.



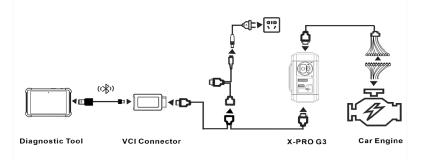
## 3.2.3 Engine Programming

The engine programming function supports engine data reading, after a new gear box is replaced, you can use engine programming function to write in the backup data.

• Connecting diagnostic system for Engine programming

### 🛃 Note:

- The USB cable shown in below diagram is not included in the packing list for now, using a USB cable could effectively enhance your data transmission speed.
- Vehicle engine connection could vary depending on engine types, for information how to connect the car engine, refer to the onscreen connection diagram.



### • Operating on Engine Programming

Below procedure shows you how to perform engine programming for a Volkswagen using Launch diagnostic product, the procedure contains chip ID retrieval, engine connection, data backup and data restoration.

- 1. Retrieve chip ID.
- a. Touch Engine.



Show Menu		<b>A</b>	•	F
IMMO PROG. V10.01 > Anti-Then Key Matching Adaptar				11,95V
EEPROM	Engine			
Gearbox	Key			
SCM (single chip microcomputer)				
IMMO PRDG				

b. Select Engine Brand.

Show Menu	â	÷.	P.
IMMO PROG. V10.01 × Engine		-	E 11.95V
Bosch			
IMMO PROG.			

c. Touch Search for ECU model.

19

	<b>*</b>		D-
			E 11.954
TC1724			
TC1767			
TC1793			
TC1797			
	_	_	_
	TC1767 TC1793	TC1724 TC1767 TC1793	TC1724 TC1767 TC1793

d. Check ECU model (printed on the sticker on the back of your Engine), enter the engine type in the dialogue box(In example below,the engine type should be MED17.7.7).

CA 264 900 07 00 1241
1.201 MED17.7.7 4.2YL FD 18M06
000007332308101013012301
0-26  S20 34 650 18-06-18 1839728124

Inform	nation
Input engine type (such	n as MED17.1)

e. Touch OK.

20



- 2. Connect the engine.
- a. Touch View Wiring Diagram.

Show Menu		<b>A</b>	ţ,
IMMO PROG. v10,01 > MED 17.1.10 TC1793			E 11.95V
Backup EEPROM Data	Back up FLASH data		
Restore EEPROM Data	Read chip ID		
View Wiring Diagram			
IMMO PROG.			

b. Read the connection diagram, perform the proper connection based on the engine type and then touch **OK**.

Information				•	<b>P</b>
2. 7		9	Please Connect The Diagnostic Connect Picture And Power	e Engine Ta or Accord	o The ing To The ing To The ion
AMMO PROD					OK

c. Touch Read chip ID.

Show Menu		1	1
IMMO PROG. V10.01 > MED17.1.10 TC1793			E 11.95V
Backup EEPROM Data	Back up FLASH data		
Restore EEPROM Data	Read chip ID		
View Wiring Diagram			
IMMO PROG.			

d. When below dialogue box appears, touch **OK**.

Information
Chip ID: 41C80805D543281E100C002011000000
ок

77

- 3. Backup data.
- a. Touch Backup EEPROM Data.

	î.		₽.
			🗇 12.24V
Back up FLASH data			
Read chip ID			
		Back up FLASH data	Back up FLASH data

b. Enter the file name for EEPROM data.



c. Confirm the storage path, and touch OK.

Information	
Selected File Is:/storage/sdcard/cnlaunch/ X431PADIII/985691113900/DIAGNOSTIC/ ImmoData/Bosch_ecu.bin	
ОК	

d. Touch OK.



- e. Follow the onscreen instructions to backup flash data also when the above is done.
- 4. Restore EEPROM data.

**9** Stop: The EEPROM restoration applies only when you have encountered irrevocable faults.

### a. Touch Restore EEPROM Data.

Show Menu		•		Þ
IMM/0 PR06. V10,01 > MED17.1.10 TC1793				E 12.14V
Backup EEPROM Data	Back up FLASH data	а		
Restore EEPROM Data	Read chip ID			
View Wiring Diagram				
JMMG PROG.	_		_	_

b. Touch Backup EEPROM file name.



Anti-Theft Function		<b>^</b>	F
IMMO PROG. VTIL (1 > Alle) Twiff Function			 E 12.14V
Backup File Name			
uldfrout.			
jjkkkkk.bin			
12346789.bin			
yiopkmin.bin			
uijnnnmk.bin			
23344%.bin			
Med17.bin			
Bosch_ecu.bin			
EXI	t -		
L			

c. Confirm the selected Backup EEPROM file, and touch OK.

Infori	mation
Selected File Is:Bosch Select [YES] To Contin	

d. When the data is successfully restored, touch OK.

Information	
Data Successfully Restored!	
ОК	

## • 3.2.4 Return from Diagnostic Function

After completion, you can press 5 to return from programming interface.

# 4. Software Upgrade

The software update function keeps your diagnostic software & App up-todate, you can also use it to customize your frequently used software.

To update Diagnostic Software & APP:

1. On the main diagnostic screen, tap **Software Update** to enter the update center. Check the software you want to upgrade, and then tap **Update**.

Software Update						<b>A</b>
/pgrade.ib/e software(179)				Se	ial Number: 9	89340001497
Available Downloade	d				C, Enter In	ve model name
Vehicle	Current Version	Update Version	Size	U	pdate content	
AutoSearch		V10.74	36.5 M	Software optimization	n and update	a
ECUAID		V11,33	143.8 M	Software optimization	n and update	
SmartLink_C_Update_File	V10,18	V10.19	20.6 M	Software optimizatio	n and update	
Audi Audi		V28.67 -	136.0 M 🔿	Added supporting po (Advanced Driving As Optimized online fun	sistance Syste	m) function;
Chrysler/Dodne/Jeen		V33 25 📼	269 M	Software cotimization	n and update	_
				Refresh	Update	Renewals

Once downloading completes, the software packages will be installed automatically.



Update			<b>1</b>
Software installed(2/3) OKE/S Serial Number: 98			er: 98934000149
Name	Version	State	
IMMO PROG	V10.01	Installed suc	cessibility
SmartLink_C_Update_File	V10.19	Installed suc	ceasfully
ECUAID	V11.33	matalling	
		All start	Alteron

🛃 Note:

- You may stop the process by tapping Stop, and tap Continue to resume the process later.
- In case of network connection failure, tap Retry.
- 3. You will see below dialogue box once the installation is completed.

	Information
	control chip corresponding to the gine type is: TC1793
-	ок

# 5. Warranty

Launch warrants its customer against any defects in workmanship and material of this product for 1 year after the date of delivery. Final judgment of defects shall be made by LAUNCH in accordance with procedures established by LAUNCH. No agent, employee, or representative of LAUNCH has any authority to bind LAUNCH to any affirmation, representation, or warranty concerning LAUNCH automotive meters, except as stated herein. The exclusive remedy for all automotive meters found to be defective is to repair or replace, and LAUNCH has no liability for any consequential or incidental



damages.

The following cases are not covered in product warranty:

- Products with mechanical serial number being altered, removed, or defected.
- Products exposed to extreme conditions, such as excessive temperature, or moisture.
- Products damage resulting from external causes such as fire, dirt, sand battery leakage, blown fuse, theft or improper usages of electrical source.
- Products subject to accidents, mishandling, unauthorized alteration, abnormal usage or conditions, improper installation, repair or storage.

#### Order Information

Replaceable and optional parts can be ordered directly from your LAUNCH authorized tool supplier. Your order should include the following information:

- 4. Quantity
- 5. Part number
- 6. Item description

**Customer Service** 

If you have any questions on the operation of the unit, please contact local dealer, or contact LAUNCH TECH. CO., LTD:

Tel: +86-755-84527891

E-mail: overseas.service@cnlaunch.com

