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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.

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-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
A	Danger	Indicates a hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.
0	Warning	Indicates a hazardous situation which, if not avoided, could result in possible injury to the operator or to bystanders.
A	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

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Table of Contents 1 About this Manual 1	
1.1 Target Reader1	
1.2 Typographic Conventions 1	
1.3 Symbols 1	
2 About X-PROG32)
2.1 Product Overview)
2.2 Power Source	5
2.3 Technical specifications	ŀ
3 Diagnostics	ŀ
3.1 Common Operations	-
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	2
3.2.3 Engine Programming	7
3.2.4 Return from Diagnostic Function	ô
4. Software Upgrade	6 7

www.diagtools.eu, Pernavas 43A, Riga, Latvia, LV-1009, +37129416069, info@diagtools.eu

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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 Health Check screen, tap Enter .
Message	""	The "success" message appears.

1.3 Symbols

Following symbols are used in this document:

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

1

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	 Red light indicates faults. Orange light indicates functions normally.
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 Main diagnostic cable	Connect with Launch VCI connector for data transmission	Connect with vehicle's DLC	Connect with X-PROG3



Engine/ Gearbox programming	EndA EndB EndC 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 🔀 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



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		f	ē	₽
BMW V50.54 > Anti-Theft System				🖽 11.80V
Intelligent Mode	IMMO			
EGS System	Engine System			
January 1997				
DMW				

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

Intelligent Mode
Current IMMO Type: CAS3/CAS3+
ок

c. Touch Key Operation.





Show Menu	A 🖶 🕞
BMW V50.54 > Anti-Theft System	🖽 11.74V
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	🔒 👘 👘 🕞
BMW V50.54 > Anti-Theft System	🖽 11.74V
Key Data Operation	Key Learning
Key Unlock	Key Enable/Disable
Startup Repair	Key Status
BMW	

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

⁄ 9`

Key Lear	ning	
Perform The Function To Key.	Generation A Dealer	
1. Before Carrying Out The Function, Please Connect The Programmer Properly And Ensure The Network Has Been Connected.		
CANCEL	ок	

f. Touch OK.



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

Key Learning		
Key Data Read Successfully. Whether To Save Key Data?		
NO	YES	

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				the second se	• F	
BMW V50.54 > An	ti-Theft System					🖽 11.75V	
Key Position	Key ID	Кеу Туре		Key Status	Vehicle Information	Enable/Disable Status	
Key 2	BB53EE90	PCF 7953 rem	note key	Used	014B00	Disable	
Key 3	1454EE90	PCF 7953 rem	note key	Used	004B00	Enable	
Key 4	47AE9896	PCF 7953 rem	note key	Used	004300	Enable	
Key 5	9C03869E	PCF 7953 rem	note key	Used	004300	Enable	
Key 6	FFFFFFF	Unknown		Unused	007608	Enable	
Key 7	FFFFFFF	Unknown		Unused	007608	Enable	
Key 8	FFFFFFF	Unknown		Unused	007608	Enable	
Key G	Generated By Ignitic	on Switch	Key Ge	enerated By Program	nmer	Erase Key 1	
BMW							

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

11



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

Key Le	arning	
Is The Current Key A Smart One?		
NO	YES	

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

Information	
Dealer Key Is Generated Successfully. Please Try To Start The Vehicle. If The Newly Generated Key Cannot Start The Vehicle, Please Execute DME Synchronization Or DLE Synchronization Function According To The Situation.	
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	A 🖶 🕞
BMW V50.60 > Anti-Theft System	🖻 12.03V
Intelligent Mode	ІММО
EGS System	Engine System
BMW	

b. Touch the correct chassis type.

Show Menu	f	ē	ŀ
BMW V50.60 > Anti-Theft System			€ 12.03V
F Chassis 8HP			
G Chassis 8HP			
BMW			

c. You will then see a corresponding connection diagram. Touch $\ensuremath{\mathsf{OK}}$.

II Z



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

Show Menu	A 🖶 🖟
BMW V50.60 > Anti-Theft System	€ 12.03V
ECU Information	EGS Erasure
EGS Repair	Authentication Status
Reset Adaptation	Encoding Operation
BMW	

b. Touch **DOWNLOAD**.

EN



c. Touch OK.



d. Touch DOWNLOAD.



e. Touch OK.



f. Touch YES.

16



g. Touch YES.

ECU R	eset
CAFD Code File Is Lost Or Current CAFS Does Not Support Back-Up! ! Whether To Continue To Erase?	
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

17

🛃 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	
IMMO PROG. V10.01 > Anti-Theft Key Matching Adaptor	🖽 11.95V
EEPROM	Engine
Gearbox	Кеу
SCM (single chip microcomputer)	
IMMO PROG.	

b. Select Engine Brand.

Show Menu	f	ē	ŀ
IMMO PROG. V10.01 > Engine			🖽 11.95V
Bosch			
IMMO PROG.			

c. Touch Search for ECU model.



N EN

Show Menu 🔒 🖶	
IMMO PROG. V10.01 > Bosch	🗎 11.95V
Search for ECU model	TC1724
TC1766	TC1767
TC1782	TC1793
TC1796	TC1797
INMAG DROC	

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 12412
4201 MED17.7.7 4 ZYL FD 18M06
000007332308101013012301
0-261 S20 34 650 18-26-18 1039128124

Information		
Input engine type (such as MED17.1)		
CANCEL OK		

e. Touch OK.





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

Show Menu 🔒 🖶	
IMMO PROG. V10.01 > MED17.1.10 TC1793	🖻 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**.



c. Touch Read chip ID.

Show Menu	A 8
IMMO PROG. V10.01 > MED17.1.10 TC1793	🕮 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	



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

Show Menu	🔒 🕞
IMMO PROG. V10.01 > MED17.1.10 TC1793	🛅 12.24V
Backup EEPROM Data	Back up FLASH data
Restore EEPROM Data	Read chip ID
View Wiring Diagram	
IMMO PROG	

b. Enter the file name for EEPROM data.

Anti-Theft Function		
Please Input The Saved File Name:		
CANCEL	ОК	

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.

23



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

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

a. Touch Restore EEPROM Data.

Show Menu 🔒 🖶	
IMMO PROG. V10.01 > MED17.1.10 TC1793	🖽 12.14V
Backup EEPROM Data	Back up FLASH data
Restore EEPROM Data	Read chip ID
View Wiring Diagram	
IMMO PROG.	

b. Touch Backup EEPROM file name.



Anti-Theft Function	f	i	₽
IMMO PROG. V10.01 > Anti-Theft Function			💼 12.14V
Backup File Name			
າງຫຼຸມຫາ			
jjkkkk.bin			
12346789.bin			
yiopkmnn.bin			
uijnnnmk.bin			
23344%.bin			
Med17.bin			
Bosch_ecu.bin			
EXIT			

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

Information	
Selected File Is:Bosch_ecu.bin Select [YES] To Continue, [NO] To Exit.	
NO	YES

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

Information
Data Successfully Restored!
ок
ОК

/25

• 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:

 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				^	
Upgradeable software(179)				Serial Number: 989340001497	
Available Downloaded QEnter the model name					
Vehicle	Current Version	Update Version	Size	Update content	
AutoSearch		V10.74	36.5 M	Software optimization and update \gg	
CUAID		V11.33	143.8 M	Software optimization and update	
SmartLink_C_Update_File	V10.18	V10.19	20.6 M	Software optimization and update	
Audi		V28.67 💌	136.0 M 🔨	Added supporting portable target for ADAS (Advanced Driving Assistance System) function; Optimized online function, actuation test for so	
Chrvsler/Dodge/Jeep		V33.25 🔻	26 9 M	Software optimization and update	
				Refresh Update Renewals	

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



Update		^
Software Installed(2/3)		0KB/S Serial Number: 989340001497
Name	Version	State
IMMO PROG	V10.01	Installed successfully
SmartLink_C_Update_File	V10.19	Installed successfully
ECUAID	V11.33	Installing
		All start
		All start All stop

🛃 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.



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.

