

VW-A001

# TUTORIAL

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### **Safety Information**

For your own safety and the safety of others, and to prevent damage to the device and vehicles upon which it is used, it is important that the safety instructions presented throughout the product user manual be read and understood by all persons operating or coming into contact with the device.

There are various procedures, techniques, tools, and parts for servicing vehicles, as well as in the skill of the person doing the work. Because of the vast number of test applications and variations in the products that can be tested with this equipment, we cannot possibly anticipate or provide advice or safety messages to cover every circumstance. It is the automotive technician's responsibility to be knowledgeable of the system being tested. It is crucial to use proper service methods and test procedures. It is endanger your safety, the safety of others in the work area, the device being used, or the vehicle being tested.

Before using the device, always refer to and follow the safety messages and applicable test procedures provided by the manufacturer of the vehicle or equipment being tested. Use the device only as described in this manual. Read, understand, and follow all safety messages and instructions in this manual.

### **Safety Messages**

Safety messages are provided to help prevent personal injury and equipment damage. All safety messages are introduced by a signal word indicating the hazard level.

### 

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.

### 

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.

### **Safety Instructions**

The safety messages herein cover situations Auro is aware of. Auro cannot know, evaluate or advise you as to all of the possible hazards. You must be certain that any condition or service procedure encountered does not jeopardize your personal safety.

### A DANGER

When an engine is operating, keep the service area WELL VENTILATED or attach a building exhaust removal system to the engine exhaust system. Engines produce carbon mooxide, an odorless, poisonous gas that causes slower reaction time and can lead to serious personal injury or loss of life.

### SAFETY WARNINGS

- Always perform automotive testing in a safe environment.
- Wear safety eye protection that meets ANSI standards.
- Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
- Operate the vehicle in a well ventilated work area, for exhaust gases are poisonous.
- Put the transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking brake is engaged.
- Put blocks in front of the drive wheels and never leave the vehicle unattended while testing.
- Be extra cautious when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.
- Keep a fire extinguisher suitable for gasoline, chemical, and electrical fires nearby.
- Do not connect or disconnect any test equipment while the ignition is on or the engine is running.
- Keep the test equipment dry, clean, free from oil, water or grease. Use a mild detergent on a clean cloth to clean the outside of the equipment as necessary.
- Do not drive the vehicle and operate the test equipment at the same time. Any distraction may cause an accident.
- Refer to the service manual for the vehicle being serviced and adhere to all diagnostic procedures and precautions. Failure to do so may result in personal injury or damage to the test equipment.
- To avoid damaging the test equipment or generating false data, make sure the vehicle battery is fully charged and the connection to the vehicle DLC is clean and secure.
- Do not place the test equipment on the distributor of the vehicle. Strong electromagnetic interference can damage the equipment.

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## Introduction

This manual introduces how to conduct VW Key Learning on Auro OtoSys IM600.

Two options are available when accessing the IMMO function:

- Smart Mode accesses to a function menu where each function is configured as a smart guide system.
- Expert Mode accesses to a function menu where each function is separated from each other.

#### > Procedures before getting started:

- 1. Connect the OtoFlash to the vehicle's DLC via the included main cable for both communication and power source.
- 2. Connect the OtoFlash to the IM600 tablet via BT pairing or USB connection.
- 3. Connect the IM600 tablet to the programmer UP400 via the included USB cable.
- 4. Make sure the user has access to WiFi service.
- 5. Insert an original key into the ignition switch and turn the ignition on.

### ⊘NOTE

Illustrations used in this manual are samples, and the actual testing screens may vary by vehicle. Observe the menu titles and on-screen instructions to make correct selections and operations.

### Key Learning via Smart Mode

- 1. Turn on the IM600 tablet and connect to WiFi.
- Tap OtoSys > IMMO. A vehicle menu displays and a disclaimer prompts up. Tap Accept to continue.



Figure 1 Sample Main Interface



Figure 2 Sample OtoSys Job Menu

3. Tap **VW** on the vehicle menu.



Figure 3 Sample Vehicle Menu



4. Tap **Smart Mode** on the mode menu and then the IM600 tablet automatically identifies the vehicle information. Tap **Yes** to continue.

### NOTE

You can click the icon near the top-right corner to record the operation data. If you encounter any difficulties, click the icon again to send us the data and the problem, so that our engineers could help.

♠	É.	¢	•	?	間	3		
VIN:			Function Select			12.23V		
Smart Mode		Expert	Mode	0				
VW V2.02.13 Car:						ESC		
<b>ጎ ሰ</b>	<b>.</b>			<b>i</b>		🚥 🗊 🗣 65% 💼 7:04		
	Figure 4 Sample Mode Menu							
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<b>a</b>	ír)	¢	ē	?	間	õ
VIN:		Con	firm vehicle informa	ition		12.23V
Vehicle type		Pas	sat			
Vehicle year		201	2			
<b>VW</b> v2.02.13						
Car:					Yes	No
5 A		0 26	<b>☆</b> <u>v</u> ⊂	e f	6 <b>4</b>	⊕ �64%∎7:12

Figure 5 Sample Vehicle Information Screen

 Read the information of Key Learning and other functions as you may need. Tap OK to continue.



Figure 6 Sample Function Information Screen

6. Check the key status if needed and tap **ESC** to continue.

<b>a</b>	<b>M</b>	¢	ē	?	冒	6
VIN:LSVCE6A42BN	191765		Check key statu	s		12.23V
Number of key	ys present in the v	/ehicle			2	
Is the current	y inserted key (or	induction key)	a dealer key?		Yes	
Is the current	y inserted key (or	induction key)	a locked key?		Yes	
Is the current	y inserted key (or	induction key)	a learned key?		Yes	
						ESC
5 🔿				7 G	a 🚓	

Figure 7 Sample Check Key Status Screen

7. Tap Key Learning on the function menu.

#### NOTE

In case of the data loss during Key Learning, you may tap **Backup vehicle data** on the function menu to save the vehicle data before performing Key Learning.



<b>d</b>	<b>A</b>	¢ 🖶	?		6
VIN:LSVCE6A42BN:		Function Select			12.23V
Immobilizer	system status	Key Learning		Backup vehicle data	
Key Add		All keys lost		Remote Control Lea	rning
Remote Cor	ntrol Add	Copy Megamos-48 Key		Immobilizer Parts Replacement	
Help Inform	ation				
VW v2.02.13 Car: VW/Passat/VDO 2012 color	NEC+24C64				ESC
5 እ		o 🕺 🍙 🚾		<b>a *</b>	\$64%≣7:13

Figure 8 Sample Function Menu

8. Then the IM600 tablet starts to perform three steps to complete the operation, i.e., Read IMMO Data, Make Dealer Key and Learn Key.

#### NOTE

During the process of Read IMMO Data, the vehicle instrument will go blank for a while and will light up soon.

₫	<b>A</b>	ф	ē	?	間	6
VIN:LSVCE6A42	BN191765		Key Learning			12.14V
	Function				Progress	
	Read IMMO	data			1%	
	Make dealer	key		,	Not Started	
	Key adaption to	vehicle		I	Not Started	
VW V2.02.13 Car: VW/Passat/VI 2012 color	DD NEC+24C64					OK
5		<b>0</b> 92				■ @ <b>@</b> 63%≣7:17

Figure 9 Sample Key Learning Screen 1





Figure 10 Sample Key Learning Screen 2

9. When Make Dealer Key starts, a "Do you need to make a dealer key?" message prompts up. Tap **Yes** to continue.



Figure 11 Sample Key Learning Screen 3



10. Follow the onscreen instruction to put a Blank Key into the key slot of the UP400. Then tap **OK** to continue.



Figure 12 Sample Key Learning Screen 4

11. A "Make dealer key success!" message prompts up when the process is completed. Tap Yes to repeat step 10 and make the next dealer key with a new key; tap No to move to the next step, Learn Key.

<b>a</b> i		¢	ē	9			H	6
			Key Le	arning				
	Functio	in				Pre	ogress	
Re	ad If		Inforn	nation			əted	
Mi	ake						5	
Key ad		ake dealer key ontinue to gen			?		irted	
		Yes			No			
VW V2.02.13 Car: VW/Passat/VDD NEC+24Ce 2012 color								
<b>∽ ☆ ∎</b>	0			VC	€ <b>¦</b>	â	£.	···· 🐨 63% 🛢 7·22

Figure 13 Sample Key Learning Screen 5

12. When Learn Key starts, a "Does vehicle have Kessy?" message prompts up. Make selection accordingly.





Figure 14 Sample Key Learning Screen 6

13. Input the number of keys to be learned and tap **OK** to continue.

### **⊘**NOTE

The number of keys that need to be learned is the sum of the dealer key(s) and original key(s).



#### Figure 15 Sample Key Learning Screen 7

14. Follow the onscreen instruction to insert the keys to be learned into the vehicle ignition switch.





Figure 16 Sample Key Learning Screen 8

15. When a "Key learning completed!" message prompts up, tap **OK** to continue.

<b>a</b>		¢	ō			li	6
			Key Lear	ning			12.15V
	Function					Progress	
	Read II		Learn H	Key		əted	
	Maked					eted	
	Key adapt	Key	learning c	completed!			
			ОК				
VW V1.90.24 Car: VW/Passat/VDD 1 2012 color							ок
<b>ጎ ଜ</b>		0 20	€	VC		a 🐔	🚥 🕮 🐨 69% <b>≣</b> 8:48

Figure 17 Sample Key Learning Screen 9

16. Follow the onscreen instruction to turn the ignition off and then back to ON. Then tap **OK** to continue.



Figure 18 Sample Key Learning Screen 10

17. When Key Learning is completed, tap **OK** to check the key status. Then tap **ESC** to exit.

₫	áđ)	¢	ē	?	冒	ē
VIN:LSVCD6A43	KN111961		Key Learning			12.19V
	Function	ı			Progress	
	Read IMMO	data			Completed	
	Make dealer	key			Completed	
	Key adaption to	vehicle			Completed	
VW V1.90.24 Car: VW/Passat/VI 2012 color	DD NEC+24C64					ок
5 A	Q_	0 26		e: 8	i 64	🚥 🕀 🐨 69% 🛢 8:48

Figure 19 Sample Key Learning Screen 11



<b>a</b>	ís,	¢	ē	?	i	õ
VIN:LSVCD6A43CP	N111961		Check key status			12.19V
Number of key	ys present in the	vehicle			3	
Is the currentl	y inserted key (or	induction key)	a dealer key?		Yes	
Is the currentl	y inserted key (or	induction key)	a locked key?		Yes	
Is the currentl	y inserted key (or	induction key)	a learned key?		Yes	
						ESC
5 እ		0 25	🔂 🔤	<b>i</b> a	<b>F</b>	🚥 💷 🐨 69% 🛢 8:48

Figure 20 Sample Key Learning Screen 12

### Key Learning via Expert Mode

- 1. Turn on the IM600 tablet and connect to WiFi.
- Tap OtoSys > IMMO. A vehicle menu displays and a disclaimer prompts up. Tap Accept to continue.



Figure 21 Sample Main Interface



Figure 22 Sample OtoSys Job Menu

3. Tap **VW** on the vehicle menu.



Figure 23 Sample Vehicle Menu

4. Tap **Expert Mode** on the mode menu.

### **NOTE**

You can click the icon near the top-right corner to record the operation data. If you encounter any difficulties, click the icon again to send us the data and the problem, so that our engineers could help.



<b>⊕</b>	ér,	ф <del>б</del>	a 🛛	冒	්
VIN:		Function	Select		12.23V
Smart Mode	0	Expert Mode			
VW v2.02.13					
Car:					ESC
5 እ		D 🔀 🔂		ê M	💬 😳 🗣 65% 🖥 7:04

#### Figure 24 Sample Mode Menu

5. Make selections to step by step locate the IMMO type and display the function menu.

### ⊘NOTE

You can tap Auto Detect to automatically identify the instrument type.

ŧ	íя)	¢	ē	?		ĕ
Instrument CA	٨N		Function Select ment K-Line bilizerBox K-Lin	e	Engine	12.19V
Comfort modul Passat B6/CC	e	KESSY Phaete	/-VW on/Touareg		IMMO V Touareg	
Key Learning		Remo	te Learning		IMMO Adaptation	ı
Megamos-48 I	Key Copying					
<b>VW</b> v2.02.13 Car:						ESC

Figure 25 Sample Function Select Screen

₫	ít)	ф	ē	?		6	
VIN:			Instrument CAN			12.17	
Auto Detect		VDO	NEC 24C64 2014	N	VDO CDC32xx+24C32		
VDO NEC+24C32		VDO	NEC+24C64		'DO NEC+24C64 013	ļ	
VDO NEC+2 2012 color	4C64	VDO N 2013 d	NEC+24C64 color	١	DO NEC 35XX		
MagnetiMan NEC+95320	elli		etiMarelli ola 9512		ohnsonControls IEC+95320		
VW v2.02.13						ESC	
ታ ስ	<b>e</b>	0 20					
			e Instrume			• • ₹43.∎82 en @	
າ⊃ 🕋 Fig	ure 26 \$	Sample	Instrume	nt Se	lect Scre	en Ø	
າ⊃ົາ Fig ⊕	ure 26 \$	Sample © Curre	Instrume	ent Se	lect Scre	en Ø	
າ⊃ົາ Fig ⊕	ure 26 \$	Sample © Curre	Information	ent Se	lect Scre	en	

Figure 27 Sample Information Screen

6. To complete Key Learning, three functions on the menu need to be performed, i.e., Read IMMO Data, Make Dealer Key and Learn Key.

### ⊘NOTE

In case of the data loss during Key Learning, you may tap **Backup EEPROM data** and **Backup IMMO data** to save the vehicle data before performing Key Learning.



•	í۳,	¢	ē	2	Ē	õ
VIN:		VDO NE	C+24C64 2012 colo	r display		12.16V
Backup EEP	ROM data	Restor	e EEPROM dat	a Ba	ackup IMMO c	lata
Restore IMM	40 data	Load IN	4MO data	Re	ead IMMO dat	a
Make dealer	key	Learn k	key	A	dd key	
Copy Megar	nos-48 Key	All keys (Dump			ll keys lost )BDII Mode)	
<b>VW</b> v2.02.13 Car:						ESC
5 A	) D =	0 26	<b>∱</b> <u>v</u> ⊊	<b>i</b>	Film	🚥 🕮 🗢 54% 🛢 8:27

Figure 28 Sample Function Menu

7. Tap Read IMMO data on the function menu.

#### ⊘ NOTE

During the process of Read IMMO Data, the vehicle instrument will go blank for a while and will light up soon.

The second secon	<b>6</b> 7)	<b>O</b>	C+24C64 2012 color	? display	li	■ 12.16
Backup EEF	PROM data		e EEPROM data		Backup IMMO data	
Restore IM	MO data	Load IN	MMO data	<b>٦</b>	Read IMMO data	
Make deale	r key	Learn k	key	Þ	Add key	
Copy Mega	mos-48 Key	All keys (Dump			All keys lost OBDII Mode)	
VW v2.02.13 Car:						ESC

Figure 29 Sample Read IMMO Data Screen 1





Figure 30 Sample Read IMMO Data Screen 2

8. Read the vehicle anti-theft information and tap **OK** to exit.

♠	<u>ج</u>	¢	ē	?		đ
VIN:		Veh	icle anti-theft informa	tion		12.19V
VIN			LSVCD	6A43CN11196	51	
PIN			55458			
CS code			63 D0 5	9 15 67 C8 69	82 C2 70 1C 62	
ECU hardware i	number		56D920	0880		
ECU software n	umber		56D920	0880		
<b>VW</b> v20213 Car:						ОК
5 እ		0 20	🔂 🖂	<b>i</b>		<b></b>

Figure 31 Sample Read IMMO Data Screen 3



9. Tap Make dealer key on the function menu.



Figure 32 Sample Make Dealer Key Screen 1

10. Follow the onscreen instruction to put a Blank Key into the key slot of the UP400 and tap **OK** to continue.



Figure 33 Sample Make Dealer Key Screen 2



11. When a "Make dealer key success!" message displays, tap OK to exit.



Figure 34 Sample Make Dealer Key Screen 3

12. Tap **Learn key** on the function menu.

<b>a</b>	íT)	¢	ē	?		5
VIN:		VDO NE	EC+24C64 2012 color	display		12.16V
Backup EEP	ROM data	Restor	re EEPROM data	a Ba	ickup IMMO da	ta
Restore IMN	10 data	Load II	MMO data	Re	ad IMMO data	
Make dealer	key	Learn	key	Ad	ld key	
Copy Megar	nos-48 Key	All key (Dump	rs lost Mode)		l keys lost BDII Mode)	
<b>VW</b> v2.02.13 Car:						ESC
5 â	■ Q (	0 20		e: 8	Frin a	⊕ \$54% 8:27

Figure 35 Sample Learn Key Screen 1



13. When a "Does vehicle have Kessy?" message displays, make selection accordingly.



Figure 36 Sample Learn Key Screen 2

14. Input the number of keys that need to be learned.

### ⊘ NOTE

The number of keys that need to be learned is the sum of the dealer key(s) and original key(s).

♠	會	ф	•	1	間	6
VIN:			Learn Key			12.16V
		Number	of keys that need to b	e learned		
	2				-	
VW v2.02.13						
Car:					ок	ESC
5 🏠		0 20	🔒 🖂	ei 🖻	<b>F</b>	

Figure 37 Sample Learn Key Screen 3



15. Follow the onscreen instruction to insert the keys to be learned into the vehicle ignition switch.



#### Figure 38 Sample Learn Key Screen 4

16. When a "Key Learning completed!" message displays, tap **OK** to continue.



#### Figure 39 Sample Learn Key Screen 5

17. Follow the onscreen instruction to turn the ignition off and then back to ON. Tap **OK** to complete Key Learning and exit.





Figure 40 Sample Learn Key Screen 6

 Tap Check key status on the function menu to check if all keys are learned. Tap ESC to exit.

### **⊘**NOTE

If the key is not made into a dealer key, repeat step 9-17; if the key is not successfully learned, repeat step 12-17.

_	at.	ф <b>Б</b>	?	iii	6
VIN:		VDO NEC+24C64 2012 col	or display		12.19
Restore IMMC	) data	Load IMMO data	Re	ad IMMO data	
Make dealer key		Learn key	Ad	d key	
Copy Megamo	s-48 Key	All keys lost (Dump Mode)		keys lost BDII Mode)	
Reset instrum	ent	Check key status	]		
<b>VW</b> v1.90.24 Car:					ESC

Figure 41 Sample Check Key Status Screen 1



⊕	Ś.	¢	ē	?	Ē	6			
VIN:			Check key status			12.18V			
Number of k	eys present in the	vehicle			2				
Is the curren	Is the currently inserted key (or induction key) a dealer key? Yes								
Is the curren	tly inserted key (c	r induction key)	a locked key?		Yes				
Is the curren	tly inserted key (c	r induction key)	a learned key?		Yes				
						ESC			
<b>か</b>	9	0		<b>i</b>	Frank I.	🚥 🕮 🗇70% 🛢 8:44			

Figure 42 Sample Check Key Status Screen 2