

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 IM100.

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 IM100 tablet to the vehicle's DLC via the included main cable for both communication and power source.
- 2. Connect the IM100 tablet to the programmer UP200 via the included USB cable.
- 3. Make sure the user has access to WiFi service.
- 4. Insert an original key into the ignition switch and then turn on the ignition.

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 IM100 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 IM100 tablet automatically identifies the vehicle information. Tap **Yes** to continue.

NOTE

You can click the pen 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.



Figure 4 Sample Mode Menu

VW V1.60.01	F	Ø	e	0	/	
		Confirm ve	ehicle info	ormation		■ 11.71V
Vehicle type		Passat				
Vehicle year		2012				0
					Yes	No
◆ 佘	9 G	M	F.			

Figure 5 Sample Vehicle Information Screen



5. 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 and tap **OK** to continue.

VW V1.60.01		(FS	Ø	÷	0		1	
			Che	eck key st	atus			■ 11.75V
Number of ke	ys prese n t	in the vehic	le				1	
Is the currently	y inserted	key (or indu	iction key	y) a deal	er key?		Yes	0
Is the currently	y inserted	key (or indu	iction key	y) a lock	ed key?		Yes	
Is the currently	y inserted	key (or indu	iction key	y) a learr	ned key?		Yes	
								ОК
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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.

VW V1.60.01		F	Ø	6	0		1]			
		-	F	unction Sel	ect			드린 11.83V			
Immo	bilizer syste status	em	Ke	ey Learn	ing	В	Backup vehicle data				
	Key Add		A	ll keys lo	ost		Remote Control Learning				
Remo	te Control A	dd	Сору М	legamos	s-48 Key		Immobilizer Parts Replacement				
VIN:LSVCD6A43	Informatio	n									
Car: VW/Passat, 2012 color	/VD0 NEC+24C64							ESC			
+ 4		🧿 C	₽ 1	F.				;== 🗢 57% 🖬 09:41			

Figure 8 Sample Function Menu

8. Then the IM100 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.

VW V1.60.01		- Fe	<u>ن</u>			/	
			Key L	earning			🛋 11.75V
	Func	tion			Pro	gress	
	Read IMI	MO data		•	1	1%	
	Make de	aler key			Not S	started	
	Key adaptio	n to vehicle			Not S	started	
							ОК
+		9 F#	n t				;::: € 57% = 09:4 3

Figure 9 Sample Key Learning Screen 1

VW V1.60.01			To	ø	600	0		1	
					Key Learnir	ng			프 11.64V
		Fu	_	I	nformatio	n		255	
		Read I							
		Make						rted	
		Key adapt	The inst Later	rument wil	s rted				
									ОК
+	Â		🌀 C;	P 🗠	5				💬 🗢 57% 🖥 09:43

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 UP200. Then tap **OK** to continue.

VW V1.60.01		25	k nije			/	
			Key Learnir	ng			■ 11.71V
	Fu		Informatio	on	_	255	
	Read I					eted	
	Make	Please put a Blan	k Key in the pr then press [0	ogrammer ke DK].	eyhole and	d	
	Key adapt					rted	
		ОК		C	Cancel		
							ОК
✦	^ ■	🕥 🕞 👔	≙				;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;

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.



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).

1.60.01		460	104 1	Learn Key				FA 11.64V
				Leannikey				
		Nu	imber of ke	eys that nee	d to be lea	rned		
	2						•	
	2							
VIN:LSVCD6A43CN11 Car: VW/Passat/VD0 2012 color	1961 NEC+24C64						ОК	ESC

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.



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.



VW V1.60.01	M	1	Ø	6	0		/	
			K	ey Learnir	ng			E11.68 V
	Fu	_	L	255				
	Read I						eted	
	Make	Turn ignitic	on off and sv	wait for § vitch to O	is. Then t N.	urn ignition	eted	
	Key adapt							
						ОК		
								ОК
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Figure 18 Sample Key Learning Screen 10

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

VW V1.60.01			0.0	C.	ø	6	0	6	-	1]		
					К	ley Learni	ng				🗐 11.64V		
		Fu	nction				Progress						
		Read II	MMO da	ita					Com	pleted			
		Make	dealer k	еу					Com	pleted	0		
	к	ey adapt	ion to ve	hicle					Com	pleted			
											ок		
+	â		9	G.	M	F.					;;:€ 56% 🗐 10:43		

Figure 19 Sample Key Learning Screen 11



VW V1.60.01		E.S.	Ø	÷	0		/				
			Che	eck key st	atus		_	프린 11.68V			
Number of key	2										
Is the currently	inserted l	key (or ind	uction key	y) a deal	er key?		Yes	0			
Is the currently	Is the currently inserted key (or induction key) a locked key?										
Is the currently	inserted l	key (or ind	uction key	y) a learr	ied key?		Yes				
								ОК			
*		9 G	•	۶.	Î			;=:10:43			

Figure 20 Sample Key Learning Screen 12

Key Learning via Expert Mode

- 1. Turn on the IM100 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 pen 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.

VW V1.60.01	[M	- Fr	Ø	6	. (?		/	
					Function	Select			E 11.83V
	Smart	Mode			Expert	Mode			
									0
VIN: Car:									ESC
÷	â		9	ጉ 1	1 F		7		;==;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;

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.



Figure 25 Sample Function Select Screen



VW V1.60.01	🌣 🖶 📀			
	Instrument CAN	🗃 11.68V		
Auto Detect	VDO NEC 24C64 2014	VDO CDC32xx+24C32		
VD0 NEC+24C32	VD0 NEC+24C64	VDO NEC+24C64 2013		
VDO NEC+24C64 2012 color	VDO NEC+24C64 2013 color	VDO NEC 35XX		
MagnetiMarelli	MagnetiMarelli	JohnsonControls		
VIN: Car:	••	ESC		
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Figure 26 Sample Instrument Select Screen



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.

VW V1.60.01	M	Ŧ	Ø	6	0		1		
VDO NEC+24C64 2012 color display									
Backup EE	lata	Restor	e EEPR(OM data		Backup IMMO data			
Restore II	ata	Load IMMO data Read IMMO dat					1MO data		
Make de	y	Learn key				Add key			
Conv Mega	All keys lost				All keys lost				
VIN: Car:				•••				ESC	
♠		ຈ ເ	. 7	F.	í í	(*		💬 🗢 53% 🖥 12:11	

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.

VW V1.60.01		F	Ø	6=	0		1]	
			VDO NEC+2	24C64 2012	color display			EÐ 0	
Backup EE	data	Restor	e EEPR(DM data	Backup IMMO data				
Restore I	ata	Loa	d IMMO	data		Read IMMO data			
Make d	y	Learn key			Add key				
Conv Mega	Kov	All keys lost				All keys lost			
VIN: Car:				•••				ESC	
		9 C	7° 🕜	<u>با</u>		2		;== 🗢 53% 🗐 12:	

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.



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 UP200 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.



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).



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

18. Tap **Check key status** on the function menu to check if all keys are learned. Tap **OK** 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.

VW 1.60.01	() 🖨 🔅	
	VDO NEC+24C64 2012 color display	🖽 11.71V
Reset instrument	Check key status	
		0
VIN: Car:	••	ESC
★ ★ ■ Ø	G- 🛆 🛋 📾 💏	💬 🗢 56% 🛢 10:48

Figure 41 Sample Check Key Status Screen 1



VW V1.60.01		F	Ö	÷			/	
			📑 11.68V					
Number of keys present in the vehicle								
Is the curre	ently inserted	key (or inc	luction ke	ey) a deal	er key?		Yes	0
Is the curre	ently inserted	key (or inc	luction ke	y) a locke	ed key?		Yes	
Is the curre	ently inserted	key (or inc	luction ke	ey) a learr	ned key?		Yes	
								ОК
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Figure 42 Sample Check Key Status Screen 2