



TEANA 2014/8-2015/2 N001

# TUTORIAL



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# For Services and Support:



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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 essential to perform tests in an appropriate and acceptable manner that does not 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.

#### A DANGER

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

#### **M** WARNING

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 moloxide, 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 Nissan TEANA 2014/8-2015/2 key learning with Auro OtoSys IM100 Immobilizer/Smart key system.

#### Procedure before getting started:

- 1. Connect the IM100 tablet to the test vehicle's DLC via the included main cable for both communication and power source.
- Make sure the WiFi service is available in case the operation data needs to be sent.

There are two scenarios of learning keys for Nissan Teana 2014/8-2015/2 with IM100 systems:

- After replacing or installing.
- When performing key registration.

Both electronic key and ignition key can perform key learning with this system in these scenarios.

#### **⊘** 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 after Replacing or Installing Operation**

1. Turn on the IM100 tablet, tap **OtoSys** on the main interface screen, then **IMMO**. A vehicle menu displays and a disclaimer prompts up. Tap **Accept** to continue.



Figure 1 Sample Main Interface



Figure 2 Sample OtoSys Interface

2. Tap **Nissan** on the vehicle menu, the Main Function Select interface displays. Tap **Immobilizer/Smart key system**.

#### **⊘** NOTE

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





Figure 3 Sample Vehicle Menu

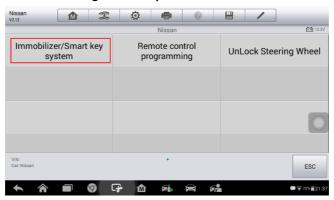


Figure 4 Sample Function Select Screen

3. Tap **TEANA** on the vehicle model interface. Select the year.



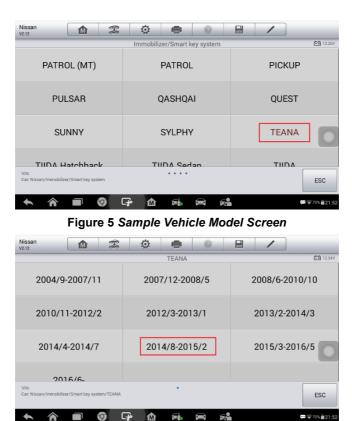


Figure 6 Sample Year Screen



4. The Function Select interface displays after choosing the year. Key learning of both electronic key and ignition key can be performed after replacing or installing operation.

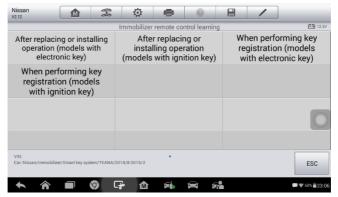


Figure 7 Sample Function Select Screen

- 4.1 For key learning with electronic key, tap **After replacing or installing operation** (models with electronic key) to the Operation Select interface.
- 4.1.1 Four operations display. The key learning procedures of Replace ECM, Replace nats immu and Replace steering lock control unit are the same, while that of Install remote control engine starter (models for japan with electronic key) is a little bit different.

Take **Replace ECM** (models with electronic key) as an example here.

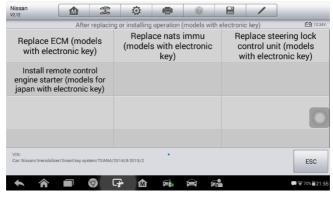


Figure 8 Sample Operation Select Screen

1) Tap Replace ECM (models with electronic key), proceed as information



displayed, tap **OK** when operation over.

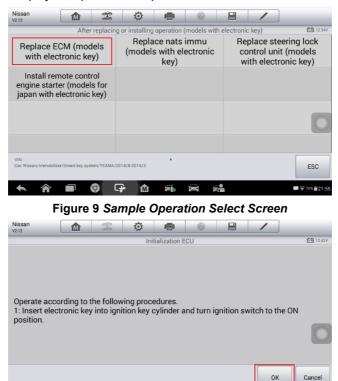


Figure 10 Sample Information Screen

2) Proceed as per procedures on the Registration Key interface. Tap **OK** when operation over.

#### ∧ NOTE

Conduct step 2 to 4 with the key removed from the ignition key cylinder in step 1 if it needs to be learned as well.

<del>,...</del> <del>-</del> ₹70% **=** 21:5



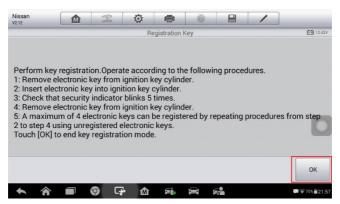


Figure 11 Sample Registration Key Screen

3) Proceed as information displayed on the Complete Registration Key interface. Tap **OK** when operation over.

#### ✓ NOTE

If you have registered more than one electronic key, only one is needed to insert to ignition key cylinder.

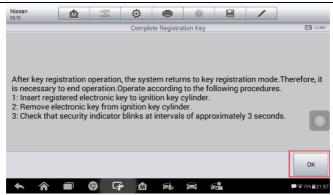


Figure 12 Sample Complete Registration Key Screen

4) Proceed as information displayed on the Confirmation of Operation interface to check whether key learning is successful. Tap **OK** when operation over, back to the Operation Select interface.



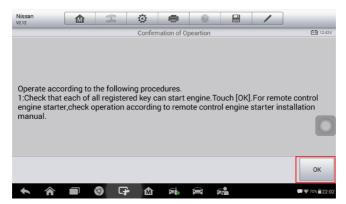


Figure 13 Sample Confirmation of Operation Screen

- 4.1.2 The procedures of **Install remote control engine starter (models for japan with electronic key)** is a little bit different. See details below.
  - Tap Install remote control engine starter (models for japan with electronic key), proceed as information displayed, tap OK when operation over.

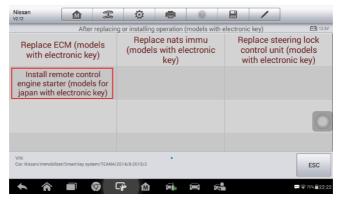


Figure 14 Sample Operation Select Screen





Figure 15 Sample Information Screen

2) Proceed as information displayed on the Registration Key interface. Tap **OK** when operation over.

#### **⊘** NOTE

Conduct step 2 to 4 on the Registration Key interface with the key removed from the ignition key cylinder in step 1 if you want it to be leaned as well.

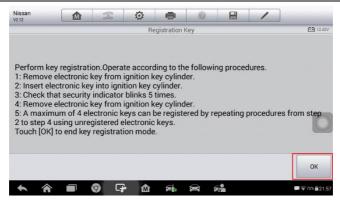


Figure 16 Sample Registration Key Screen

 Proceed as information displayed on the Complete Registration Key interface. Tap **OK** when operation over.

#### NOTE

If you have registered more than one electronic key, only one is needed to insert to ignition key cylinder.



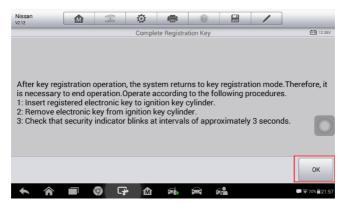


Figure 17 Sample Complete Registration Screen

4) Proceed on the Initialize Remote ENG Starter interface. Tap **OK** when operation over.

#### **⊘** NOTE

If you have registered more than one electronic key, only one is needed to turn the ignition on.

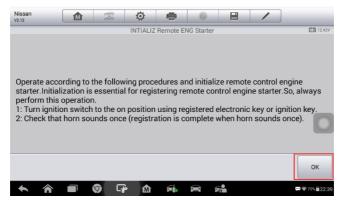


Figure 18 Sample Initialization Screen

5) Proceed as information displayed on the Confirmation of Operation interface. Tap **OK** when operation over. The key learning completes.



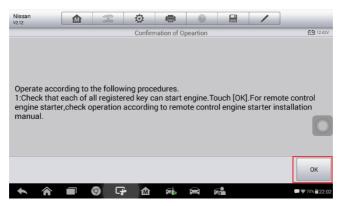


Figure 19 Sample Confirmation of Operation Screen

4.2 For key learning with ignition key, tap After replacing or installing operation (models with ignition key) on the Function Select interface, the Operation Select interface displays.

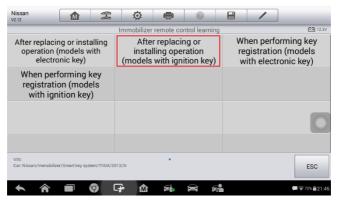


Figure 20 Sample Function Select Screen

4.2.1 Four operations display. The key learning procedures of Replace ECM (models with ignition key), Replace nats immu (models with ignition key) and Replace steering lock control unit (models with ignition key) are the same, while that of Install remote control engine starter (models for japan with ignition key) is a little bit different.

Take Replace ECM (models with ignition key) as an example here.

1) Tap **Replace ECM (models with ignition key)**, proceed as information displayed, tap **OK** when operation over



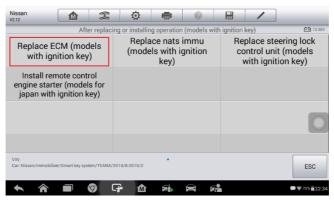


Figure 21 Sample Operation Select Screen

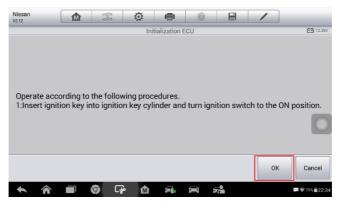


Figure 22 Sample Information Screen

 Proceed as information displayed on the Registration Key interface. Tap OK when operation over.

#### **⊘** NOTE

Conduct step 2 to 4 with the key removed from ignition key cylinder in step 1, if you want it to be learned as well.



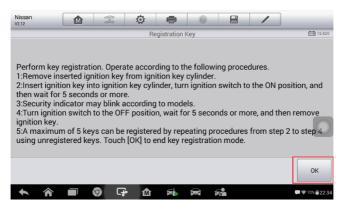


Figure 23 Sample Registration Key Screen

3) Proceed as information displayed on the Complete Registration Key interface. Tap **OK** when operation over.

#### **⊘**NOTE

If you have registered more than one electronic key, only one is needed to insert to ignition key cylinder.

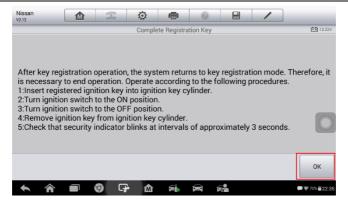


Figure 24 Sample Complete Registration Key Screen

4) Proceed as information displayed on the Confirmation of Operation interface. Tap **OK** when operation over, back to the Operation Select interface. Key learning completes.



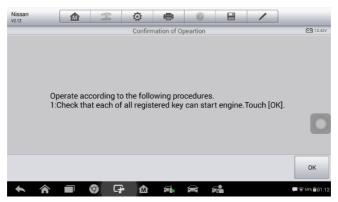


Figure 25 Sample Confirmation Screen

- 4.2.2 Procedures of Install remote control engine starter (models for japan with ignition key) are a little bit different. See details below.
  - Tap Install remote control engine starter (models for japan with ignition key), proceed as information displayed, tap OK when operation over.

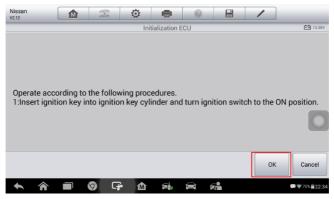


Figure 26 Sample Operation Select Screen



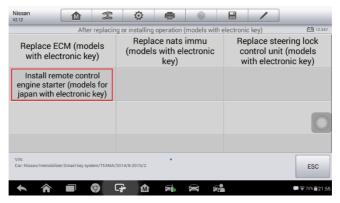


Figure 27 Sample Information Screen

 Proceed as information displayed on the Registration Key interface. Tap OK when operation over.

#### **⊘**NOTE

Conduct step 2 to 4 with the key removed from the ignition cylinder, if you want it to be learned as well.

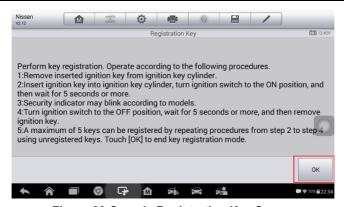


Figure 28 Sample Registration Key Screen

3) Proceed as information displayed on the Complete Registration Key interface. Tap **OK** when operation over.

#### **⊘**NOTE

If you have registered more than one ignition key, only one is needed to insert to the ignition key cylinder.



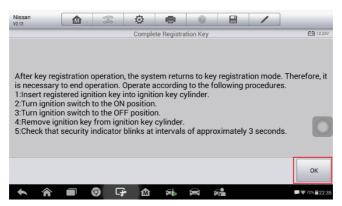


Figure 29 Sample Complete Registration Screen

 Proceed on the Initialize Remote ENG Starter interface. Tap **OK** when operation over.

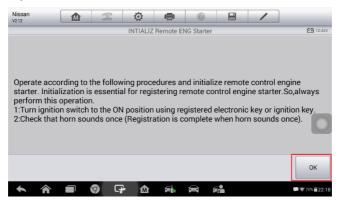


Figure 30 Sample Initialization Screen

5) Proceed as information displayed to check whether key learning is successful. Tap **OK** when operation over, key learning completes. Tap **ESC** to the back to the Function Select interface.



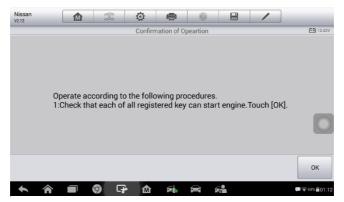


Figure 31 Sample Confirmation Screen

# Key learning when performing key registration

 Turn on the IM100 tablet, tap OtoSys on the main interface, then IMMO. A vehicle menu displays and a disclaimer prompts up. Tap Accept to continue.



Figure 32 Sample Main Interface





Figure 33 Sample OtoSys Interface

2. Tap Nissan > Immobilizer/Smart key system to the Vehicle Model interface.



Figure 34 Sample Vehicle Menu



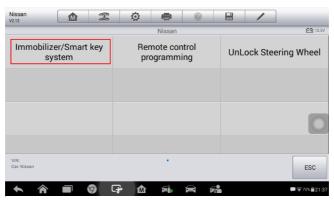


Figure 35 Sample Main Function Select Screen

3. Tap **TEANA** on the vehicle model interface. Choose the year.



Figure 36 Sample Vehicle Model Screen



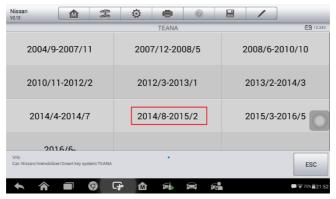


Figure 37 Sample Year Screen

4. The Function Select interface displays after choosing the year. The procedures of key learning with electronic key and ignition key are basically the same. Take electronic key as an example here.

#### **⊘**NOTE

The old keys are erased automatically and become invalid after key learning completes.

 For key learning with electronic key in this scenario, tap When performing key registration (models with electronic key) > Register/erase key (models with electronic key).

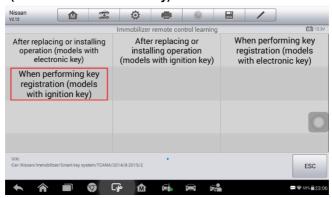


Figure 38 Sample Function Select Screen



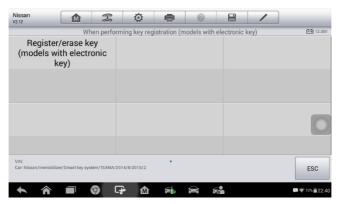


Figure 39 Sample Operation Select Screen

Proceed as information displayed to initialize ECU. Tap **OK** when operation over.

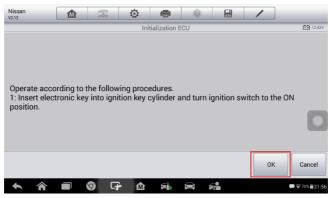


Figure 40 Sample Information Screen

 Proceed as information displays to perform key registration. Tap **OK** when operation over.

#### **⊘** NOTE

Conduct step 2 to step 4 on the Registration Key interface with the key removed from the ignition key cylinder, if you want it to be learned as well.



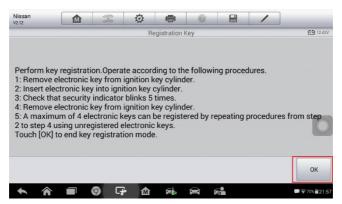


Figure 41 Sample Registration Key Screen

 Proceed as information displayed to complete key registration. Tap **OK** when operation over.

#### **⊘** NOTE

If you have registered more than one electronic key, only one is needed to insert to ignition key cylinder.

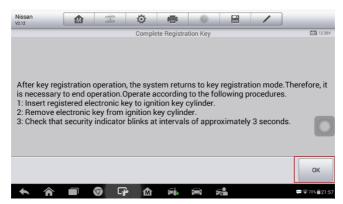


Figure 42 Sample Complete Registration Key Screen

 Proceed as information displayed to confirm key registration. Tap **OK** when operation over. Key learning completes.

#### **⊘** NOTE

Each key that was registered needs to be checked.



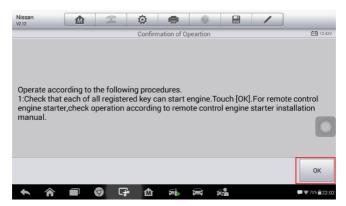


Figure 43 Sample Confirmation of Operation Screen