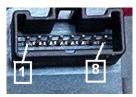


## NATS-4

This module for Orange-5(O5) programmer will work with the following Nissan NATS-4, built around TMS: 5WK4738, 5WK4750, 5WK4803, 5WK48543A, 5WK48543B, 5WK48692.



Immobilizer pin out:

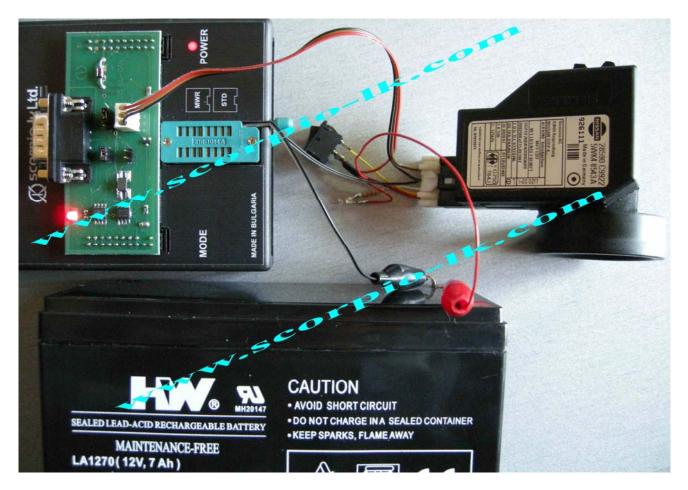


2 – K-Line; 4 – GND; 6 – Indication LED; 7 – +12V (Ign); 8 – +12V (Batt).

The only hardware difference between NATS4 and NATS5 is the K-Line pin position. <u>NATS4 K-Line is located at second pin</u>, while <u>NATS5 K-Line is located on first pin</u> of the plug.

**Never attempt to run this application on a car using OBDII plug.** This application is able to act only with dismounted immobilizer. Connect an immobilizer as shown on the picture using the O5 KL-CAN adapter.

View of the assembled application:



The device provides advanced features as well as basic mode. The basic mode intended for keys producing and described below. The advanced mode is for engineer purposes and isn't described in this document.

The basic mode allows to erase and add keys, read version, manual and automatic changing of eeprom content.

## How to make a key.

- 1. Assemble the device as shown on the picture above.
- 2. Supply an external power to the immobilizer +12V as shown above.
- 3. Push the "KEY" button in ON position. This button emulates ignition.
- 4. Run Orange.exe.
- 5. Click the "Select Type" and choose "O5 immo".
- 6. In the left window select "Nissan"
- 7. In the right window choose NATS-4(TMS) depending on the label with marking "5WK4..." as described above.
- 8. Click the "R" (Read) button.
- 9. After success reading save the dump.
- 10. Apply the saved dump on Tango to make a key. Tango will generate a new dump. Save the new dump.
- 11. Open the new dump with O5 end write it to the immobilizer clicking on the "W"(Write) button.

Review of the module additional features.

It's strongly suggested to begin the work by reading and saving an EEPROM dump. Only after that, continue your work as needed. The EEPROM dump contains synchronization code with the engine ECU and if its content is damaged, immobilizer will not unlock the ECU.

"Immo Version" – will provide immobilizer software version.

<u>"Add Key"</u> – registers new keys to the system (maximum of four). This function should be started after the new key is placed in an immobilizer antenna coil. To properly use this function, ignition switch must be cycled to

OFF and back ON as requested by program and only then click <OK>. If more then one key has to be registered, place the next key into the antenna coil and cycle the ignition as program requests. If there are no more keys to register, select <Cancel>. At the end of the new key registering procedure the program will request to cycle the ignition switch once again.

<u>"Delete All Key"</u> – will delete all the key information from the EEPROM. If some of the keys previously registered in the system need to be reused, <u>"Add Key"</u> procedure must be executed after erasing all the key information from the EEPROM.