Functional description

Functional Description of Nissan DPF I - key

This document gives an overview of the different device operation modes and the RF transmissions performance of the key. In this document the device is referenced as "key", even if the mechanical backup key might be separated from it.

For an overview of the electrical function blocks, please see the document "Block diagram of Nissan DPF I – key"

Operating modes

The key has three main operating modes which differ in the regard of signals transmitted on the RF. As there is

- Immobilizer transponder mode
- · Remote key functionality
- Passive key functionality

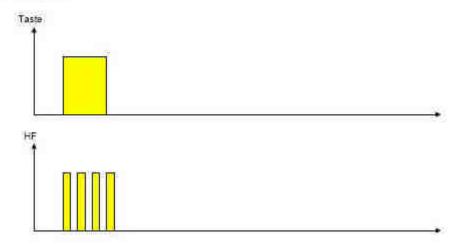
Immobilizer Transponder mode

When the key is operating as an immobilizer transponder, the communication is done via a "contact less interface" depending on a magnetic coupling. The transponder is the passive side of the link and there is no RF transmission from it involved in any aspect.

Remote key functionality

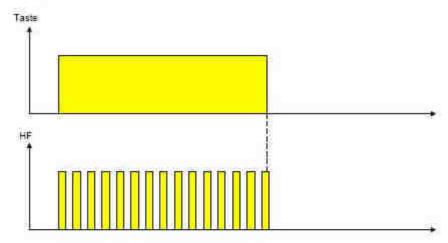
This mode refers to use the key as a remote control unit to initiate actions on the vehicle such as open or close door latches. RF transmission depends on a user activating (a button pressing) on the key. During the button pressing the amount of telegrams are sent on the RF channel.

Short Button press:



A short valid button pressing results a sending of the minimum number of the RF telegrams, as showed on the diagram.

Long button press:



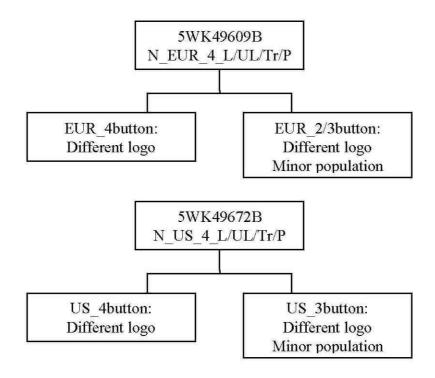
If the duration of the button pressing extents the time required for transmitting the minimum amount of RF telegrams, additional telegrams will be sent until the button is released or a timeout of 25s is reached. This timeout function prevents the unintended transmission over the extended time periods in case of a button was fixed.

Passive key functionality

For passive key operation no user action on the key side is required. The trigger is delivered by the vehicle via an LF data telegram. When the key receive a valid LF message, it responds with two RF telegrams and the inter telegram timing in this mode depends on the key configuration data (sort of time slot concept).

Variants

315 MHz		433.92 MHz		314.85 MHz	
5WK49670B	4bt	5WK49671B	4bt	5WK48902B	3bt
5WK49672B	4bt	5WK49609B	4bt	5WK48904B	3bt
5WK49608B	4bt	5WK49611B	2/3bt	5WK49606B	2/3bt
5WK49612B	3bt	5WK49613B	3bt	5WK49607B	2/3bt
5WK49614B	3bt	5WK49616B	3bt	5WK49610B	3bt
5WK49620B	4bt	5WK49617B	3bt	5WK49739B	3bt
5WK49622B	4bt	5WK49619B	3bt	5WK49618B	3bt
5WK49779B	3bt	5WK49621B	4bt		
5WK49848B	3bt	5WK49623B	4bt		
5WK49874B	4bt	5WK49673B	2/3bt		
		5WK49674B	3bt		
		5WK49675B	3bt		
		5WK49894B	3bt		
		5WK49895B	3bt		



Testmodedescription

Keys with label cw have a special function for testing. If you press the buttons, the key will send a continuous signal for 255s. Each button has a different function:

	LOCK	UNLOCK	TRUNK	PANIC	
US	-	modulated	low frequ.	high frequ.	
EU	high frequ.	low frequ.	modulated	=	

To stop the testmode earlier than 255s you have to open the housing.

Label Design US Variant

Continental 5WK49672B FCC ID: KR55WK49672B IC:267T- 5WK49672B

Warning Statement:

NOTE

This device complies with part 15 of the FCC Rules and RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept interference received, including interference that may cause undesired operation.

COUTION

Changes or modifications not expressly approved by the manufacturer could avoid the user's authority to operate the equipment.