

User Manual

of the

Continental

Radio Frequency Transmitter

Model:

TXN1 (433.92 MHz)
TXN2 (315 MHz)

User manual of the TXN1 and TXN2 key

1 General Product Information

This document gives an overview of the different device operation modes and the RF transmissions performance of the key model TXN1 and TXN2. In this document the device is referenced as "key", even if the mechanical backup key might be separated from it.

1.1 Trade mark

Continental

1.2 Brand

Continental

1.3 Manufacturer

Continental Automotive GmbH
Siemensstr. 12
93055 Regensburg
Germany

2 Operating modes

The key has three main operating modes which differ regarding of the signal transmitting with the RF:

- **Immo** Immobilizer transponder mode
- **RKE** Remote keyless functionality
- **PASE** Passive key functionality

2.1 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.

2.2 Remote keyless 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.

A short valid button pressing results a sending of the minimum number of the RF telegrams.

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 10s is reached. This timeout function prevents the unintended transmission over the extended time periods in case of a button was fixed.

2.3 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 125 kHz data telegram. When the key receives 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).

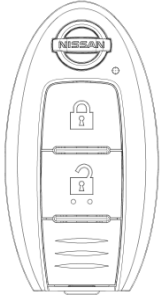
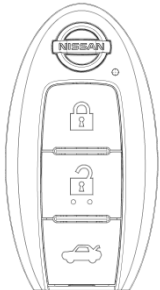
- The Low Frequency stage operates at 125 kHz

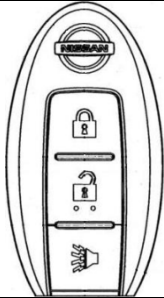
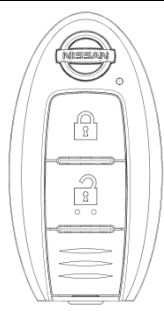
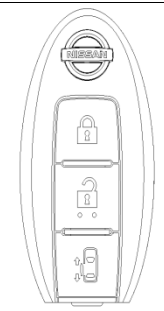
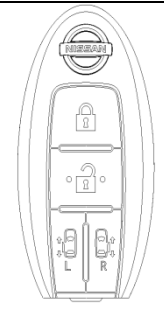
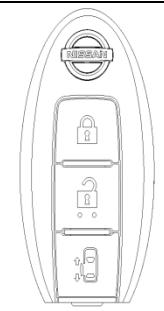
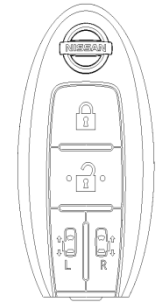
3 Button functions


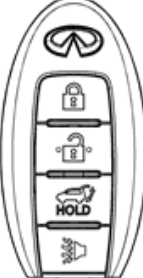
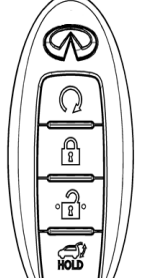
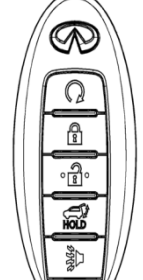
The validation of the accurate frequency deviation and the measurement of the transmission function of the key are implemented basing on RF test software. The graphic below shows the functionality of the buttons.

	<i>First Button press</i>	<i>Press and hold button</i>
Button Lock	Lock vehicle	Comfort Close
Button UnLock	Unlock vehicle	Comfort Open
Button Trunk	Open trunk	Open trunk
Button Panic	Alarm signaling	Alarm signaling

4 Key fobs Variants

Product reference	Product variant	Drawing
S180144500	Lock/Unlock 433.92 MHz	
S180144501	Lock/Unlock/Trunk 433.92 MHz	

<p>S180144502</p>	<p>Lock/Unlock/Panic 433.92 MHz</p>	
<p>S180144600</p>	<p>Lock/Unlock 315 MHz</p>	
<p>S180144601</p>	<p>Lock/Unlock/PSD-L 315 MHz</p>	
<p>S180144602</p>	<p>Lock/Unlock/PSD-L/PSD-R 315 MHz</p>	
<p>S180144603</p>	<p>Lock/Unlock/PSD-L 433.92 MHz</p>	
<p>S180144604</p>	<p>Lock/Unlock/PSD-L/PSD-R 433.92 MHz</p>	

<p>S180144700</p>	<p>Lock/Unlock/PBD 433.92 MHz</p>	
<p>S180144701</p>	<p>Lock/Unlock/PBD/P 433.92 MHz</p>	
<p>S180144702</p>	<p>RES/Lock/Unlock/PBD 433.92 MHz</p>	
<p>S180144703</p>	<p>RES/Lock/Unlock/PBD/P 433.92 MHz</p>	

5 Label Information

5.1 EC



Continental
Model: TXN1

5.2 USA/Canada

Continental
Model: TXN1
FCC ID: KR5TXN1
IC:7812D-TXN1

6 Owner Manual

6.1 Owner Manual USA/Canada

FCC ID: KR5TXN1
IC:7812D–TXN1

This device complies with Part 15 of the FCC Rules and Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Le présent appareil est conforme à l'exposition aux radiations FCC / IC définies pour un environnement non contrôlé et répond aux directives d'exposition de la fréquence de la FCC radiofréquence (RF) et RSS-102 de la fréquence radio (RF) IC règles d'exposition. L'émetteur ne doit pas être colocalisé ni fonctionner conjointement avec à autre antenne ou autre émetteur.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAN ICES-3 (B) / NMB-3 (B)

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de classe B est conforme à la norme canadienne NMB-003.

Continental Automotive GmbH has not approved any changes or modifications to this device by the user. Any changes or modifications could void the user's authority to operate the equipment.

Continental Automotive GmbH n'approuve aucune modification apportée à l'appareil par l'utilisateur, quelle qu'en soit la nature. Tout changement ou modification peuvent annuler le droit d'utilisation de l'appareil par l'utilisateur.