

Functional description

User Manual

of the

Continental

Remote Control System

**Type:
PL6 ID**

General description of the RF transceiver PL6 ID

The RF remote control system consists of a RF transceiver within the PL6 ID and a RF transceiver mounted inside the car. The RF transceiver is mechanically integrated in the head of the PL6 ID. The PL6 ID is used to transmit the information for locking or unlocking the vehicle by a bidirectional RF transmission for normal remote operation by pressing a button.

In general the following functions are provided:

- Lock the car
- Unlock the car
- Unlock the trunk of the car
- Activate Panic-Function
- Engine Start of the Car (via LF Wake Up)

Power supply

The transmitter is provided with 1 Lithium battery (CR 2450) that gives a power supply of +3V.

Buttons

There are four buttons which enable to lock and unlock the doors, to unlock the trunk and activate the panic-function of the car.

During activation, the button is forced to the ground via a "pull-up" within the microcontroller.

Protocol Overview

After a button-push the PL6 ID will send a RF-code-telegram for 92 ms. When the car acknowledges the success of the transmission the PL6 ID starts the comfort-telegram (duration 9 ms), which is repeated all 75 ms till the button is released or the timeout is reached. When the car doesn't acknowledge the success of the transmission then the RF-telegram is repeated on the second channel. This procedure is repeated 4 times with a time-distance of 500 ms when the button is still pressed.

Typical usage pattern

The typical usage are 10 lock/unlock operations in 24 hours with a typical transmission duration of 0,2 seconds

→ 0,42 lock/unlock operations within one hour

Transmitter ON 0,084 seconds / hour

Transmitter OFF 3599,916 seconds / hour

Duty Cycle: $T_{ON} / T_{(ON+OFF)} \times 100\% = 0,084 / 3600 \times 100\% = \underline{0,002\%}$

Variants

Model	Description
5WK4 9661	868,1/868,5 MHz variant for Europe
5WK4 9662	433,92 MHz variant for Korea
5WK4 9663	314,6/315MHz variant for USA/ Japan
5WK4 9861	868,1/868,5 MHz variant for Europe
5WK4 9862	433,92 MHz variant for Korea
5WK4 9863	314,6/315MHz variant for USA/ Japan

Technical Data

Carrier frequency model 5WK4 9661/861:	868,1/ 868,5 MHz
Carrier frequency model 5WK4 9662/862:	433,92/ 433,92 MHz
Carrier frequency model 5WK4 9663/863:	314,6/ 315.0 MHz
Output power model 5KW4 9661/861:	< 10 mW
Output power model 5KW4 9662/862:	< 5 mW
Output power model 5KW4 9663/863:	< 75.6 dB μ V/m
Type of modulation:	FSK
Method of frequency generation:	PLL
Number of channels:	2
Power supply:	battery (CR2450)
Supply Voltage Maximum	3,2 V
Typical	3,0 V
Minimum	2,2 V
Type of battery:	lithium
Type of RF-antenna:	PCB-Loop antenna

NOTE:

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

Label design

Europe: (868 MHz)

Continental

5WK4 9661



Europe: (868 MHz)

Continental

5WK4 9861



USA/CAN: (315 MHz)

Continental

5WK49663

IC: 267T-5WK49663

FCC ID:KR55WK49663

5WK49863

IC: 267T-5WK49863

FCC ID:KR55WK49863

Owner Manual:

Canada:

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

USA:

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

Changes or modifications not expressly approved by the party responsible for compliance could