


**Annex acc. to FCC Title 47 CFR Part 15
relating to
Hirschmann Car Communication GmbH
920510A**

Annex no. 5 User Manual Functional Description

**Title 47 - Telecommunication
Part 15 - Radio Frequency Devices
Subpart C – Intentional Radiators
ANSI C63.4-2014
ANSI C63.10-2013**



Deutsche
Akkreditierungsstelle
D-PL-12053-01-00

	Transceiver Remote Control 920510A	Stand: 09.11.2018 Version: V1.0 Status: approved
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920510A


Transceiver Remote Control

User's manual / Operational Description



2/61

	Name, Department	Date	Sign
Author	J. Nebel, ODA		
Release			
Distrib	--		


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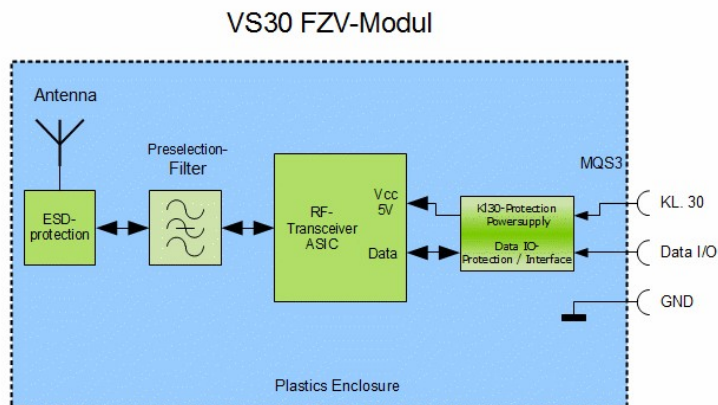
2 Change history

Datum	Chapter	Change	Author	Version
09.11.2018	all	initiale release	Nebel	V1.0

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3 Overview

3.1 Block diagram



3.2 Figure 1: Blockdiagram of the remote control circuitFunctional description

920510A is part of a car remote key / door opener on the car side. The RF-Signal is received/transmitted by the integrated antenna.

3.3 Installation


The remote control box is installed inside a vehicle and behind the cabin cover. Only service personel is able to touch or handle it.

3.4 Operating temperature range

-40 ... +85°C

3.5 Interface

- Supply Voltage (+12V)
- RF-Interface: integrated antenna
- Data-Interface 1-wire

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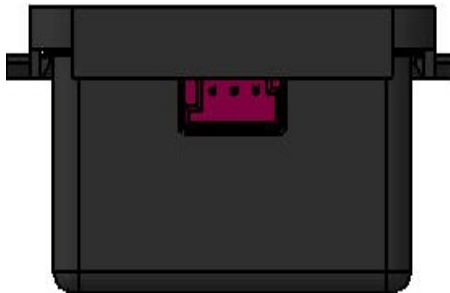


Figure 2: View of the Remote Control Module connector

4 Operational characteristics

4.1 General Information

parameter		min	max	
Supply voltage		10	14	V
Current consumption max	@+10dBm output power @ 500ohm		40	mA
Frequency range	ECE	433,40	434,40	MHz

4.2 Receiver


Sensitivity < -98dBm

4.3 Transmitter

parameter		min	max	
Transmit power	434MHz	+5	+10	dBm

Conducted measurement of the transmit power

4.4 Transmission


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4.4.1 Carrier frequency

The carrier frequency has a tolerance (including influences because of temperature, aging, manufacturing tolerance) of: $\pm 80\text{ppm}$

5 Operational procedures

After connecting it to the bus system the module starts operating mode:

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6 Certification / Type Acceptance

USA FCC ID: XTJ920510B

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.