

Remote Flip Key – User Manual	Doc. Ref.: MVASPL-RFLIPUSERMNL-R0
	   MINDA VAST ACCESS SYSTEMS

Remote Flip Key

USER’S MANUAL

Project Name:

Wave2- Remote Key (Model no 30037AZ)

Wave1- Remote Key (Model no 30037CZ)

Author	Nirmlesh
Version	1.0

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Document revision history:

Sr No	Status	Version	Date	Change description	Author
1	Initial	1.0	11/01/2024	Initial Release	Nirmlesh K
2		2.0	29/01/2024	S/W and H/w Version details added	Nirmlesh K

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1 INTRODUCTION

1.1 Device Description

Remote Flip key has following 2 functions

- a) HF function - To transmit Lock / Unlock function
- b) Transponder function- To function as transponder PF7939AM in presence of Immobilizer coil energy (at 125KHz). Remote key LF function is activated in presence of vehicle immobilizer
- c) coil energy, and mutual authentication is done with vehicle immobilizer

Transmitting frequency : 433.92 MHz

Modulation : FSK

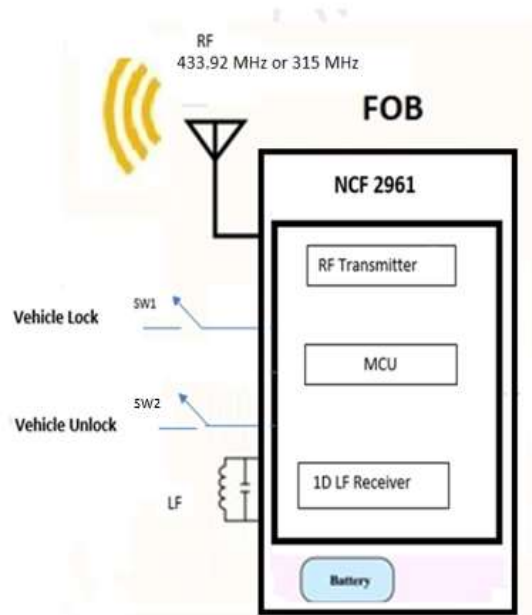
Data rate : 2 kbps



Remote key is powered by a coin cell of 3V

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2 Block Diagram of the Device

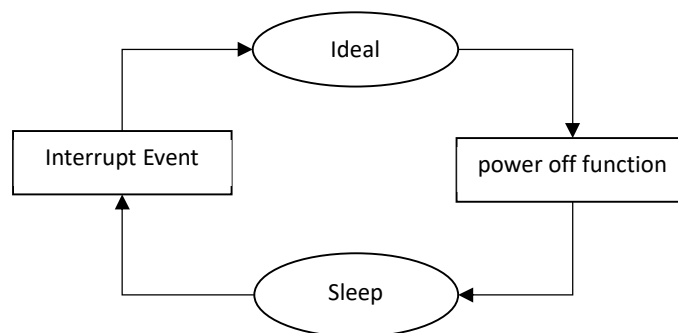


3 Operating Mode

FOB has two operation modes idle mode and sleep mode. Remote Flip key is a low power device, IT goes into sleep as soon as there are no active inputs are present.

There are three events through which fob can wake up.

- i) Lock/ Unlock button press detection
- ii) LF event



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4. RADIATED POWER

Effective radiated power of the remote key is less than 10mW(For EU)

5. Hardware and Software version

5.1 Model 30037AZ

Hardware version: 1.40

Software Version: 4.0

5.2 Model 30037AZ

Hardware Version: 1.40

Software Version: 3.0

6. Manufacturer Address

Minda VAST Access Systems Pvt Ltd
B-21, M.I.D.C., Chakan, Post Kuruli, Tal. Khed,
Dist. Pune-410501
Maharashtra

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7. Declaration of conformity

EU Declaration of Conformity

Hereby we, [Minda VAST Access Systems Pvt Ltd]

Address: B-21, M. I. D. C Chakan, At Nighoje, Post Kurulji, Tal. Khed, Dist. Pune – 410501,
Maharashtra, India

declare that this DoC is issued under our sole responsibility for below equipment:

Product description: Remote Flip Key

Type designation(s): 30037AZ, 30037CZ

Trademark:

Spark



Supplied accessories and components:

Wiring Harness, Ignition key lock set with LF antenna, Peak CAN tool

Hardware version:

-

Software version:

-

Object of the declaration described above is in conformity with the relevant Union harmonization legislation as below:

Radio Equipment Directive: 2014/53/EU	Article 3.1a: EN 62479:2010 EN IEC 62368-1:2018+A11:2020 Article 3.1b EMC: EN 301 489-1 V2.2.3 EN 301 489-3 V2.1.1 Article 3.2 Radio Spectrum: EN 300 220-1 V3.1.1 EN 300 220-2 V3.2.1 EN 300 330 V2.1.1
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Furthermore, The Notified Body [SGS North America, Inc.], with Notified Body number [2906] performed Modules B in Annex III of Directive [2014/53/EU], and issued the EU TEC No. []

Signed for and on behalf of: Minda VAST Access Systems Pvt Ltd

Place and date: Chakan, Pune, India

Signature:



Printed name: Nirmlesh Kumar

Function: Sr. Manager (Design)

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8. Declaration FCC Compliance

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.

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 void the user's authority to operate the equipment.

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.

RF Exposure Compliance

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

END of DOC