## **DESCRIPTION OF OPERATION**

The KEYFOB is a transmitter designed to provide remote keyless entry.

- Remotely lock the doors.
- Remotely unlock the doors.
- Remotely turn on light test.
- Remotely move down the window doors

This function allows the user to access and exit (lock and unlock) the vehicle and also to perform a light test by pressing (short) the corresponding button on the KEYFOB

The KEYFOB transmitter is realized FSK data modulation with a Radio frequency of 433.92 MHz, integrated electrical parts of Colpitts oscillation circuit with SAW resonator coupled and an optimized PCB strip line antenna for the radio frequency emission and a microprocessor with an 4-bit single chip microcontroller which controller generates a high security rolling code data to control all RKE remote functions.

- Microprocessor: NCF2960 with integrated RF transmitter and transponder interface
- 3 buttons of switch inputs for Unlock, Lock and Light test.
- High efficiency optimized PCB strip line antenna.

The RKE key sends following RF commands:

- Lock when the unlock button is pressed for minimum 20 ms
- UnLock when the lock button is pressed for minimum 20 ms
- Light test when the trunk button is pressed for minimum 20 ms
- Window open when the Unlock button is pressed more than 800 ms