

DESCRIPTION OF OPERATION

GENERAL

The NHVB1U215 transmitter is a Remote Keyless Entry FOB designed by ALPS Automotive, Inc.

This system contains hand-held RF transmitter. The transmitter provides the vehicle owner with various remote control functions (Lock, Unlock, Trunk).

TRANSMITTER

The hand-held RF transmitter (TFWB1U215) consists of the housing, three control buttons, microcontroller, a UHF oscillator (Colpits configuration), and a 3 Volt battery. The microcontroller uses a crystal oscillator running at 2.0 MHz, and the RF oscillator uses a SAW based oscillator to resonate at 315.0 MHz . The modulation format used will be ASK, with a Rolling/Manchester code data format. Once the user presses a button, power is applied to the microcontroller which turns the RF oscillator on and off at the rate of the Rolling/Manchester code data being sent. The signal is then sent to the receiver module via RF data transmission. The module will then act upon the RF data received and will perform certain functions in correspondence to which transmitter button is pressed.