DESCRJPTION OF OPERATION

GENERAL

This is a transmitting device designed by ALPS Automotive, Inc. It was designed for the automotive industry to function as a "remote keyless entry" (RKE) device. This device is designed to allow the consumer the ability to lock/unlock the vehicle or open the trunk remotely via RF data transmission. It is designed to work with a multi- functional body control module that is being provided by the customer.

The body control module contains a microprocessor and a UBF receiver. The transmitter provides the vehicle owner with various remote control functions (Lock, Unlock, Panic, and Trunk/Hatch).

TRANSMITTER

The hand-held RF transmitter consists of the housing, four control buttons, microcontroller, a UBF oscillator (Colpits configuration), and a 3 Volt lithium battery. The micro-controller uses a crystal controlled clock running at 4.0 Nfflz, and the RF oscillator uses a SAW based oscillator to resonate at 3 1 5.0 Nfflz . The modulation fonnat used will be ASK, with a rolling code data forinat. 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 code data being sent. The signal is then sent to the body control module via RF data transmission. Once the data is received, the body control module will convert the RF energy to a digital signal which "I instruct the module to perform certain functions in correspondence to which transmitter button is pressed.