

The 2017 PEPS bidirectional system consists of an RF transceiver integrated into the key which includes an RF receiver and transmitter. The antenna is common between the RF transmitter and the RF receiver. The RF transmitter is used to transmit information to the receiver in the vehicle for locking, unlocking, opening the trunk, starting the vehicle, and Panic function. The RF receiver in the bidirectional key is used to receive the engine status information from the vehicle. RF messages can be transmitted by one of two means. The keypad on the key can be used for locking, unlocking, unlocking the trunk, panic, and remote start. Lifting the door handle or pushing the start button in the vehicle will generate an LF field, which the key will respond to with a RF transmission to unlock or start the vehicle.

This device employs FSK modulation, a trace PCB antenna, and its radio signal is generated entirely within its radio IC. The internal workings of the radio IC are proprietary.