

Description of Operation

The PATS transceiver is a component of the Ford Passive Anti-Theft System (PATS). The transceiver interfaces directly with the vehicle's body control Module (BCM). The PATS Transceiver communicates with the key transponder via an LF link and to the BCM via dedicated Transmit (Tx) and Receive (Rx) lines.

The Passive Anti-Theft System (PATS) is a vehicle anti-theft system that uses Radio Frequency Identification (RFID) technology to provide drive-away theft protection. The transceiver module, in conjunction with the system components, enables or disables vital engine electronics through the engine management system during vehicle engine start. The transceiver module interfaces to the Body Control Module (BCM) via an ISO 9141 communication bus.

- The Control Function provides power to the PATS Transceiver

- The PATS Transceiver translates data to and from the Key and Control Function

- The PATS Transceiver carrier frequency is 134.2 kHz

- The Transponder derives its energy from the 134.2 kHz carrier frequency

The PATS transceiver module contains a broadband LC tank circuit, coil drive transmitter, receiver amplifier, FSK demodulator, SCI (Serial Communications Interface) byte packer and a 5V power supply.