Operational Requirements

1. If the product is in stand-by mode (low power consumption mode), the pressing any one of the five buttons for 100ms minimum shall bring the product out of stand-by mode and be used as the first digit of a five digit access code.
2. The LED shall be extinguished while any button is pressed.
3. The product shall enter stand-by mode 30 s after the last activated (pressed) button is released or if one or more buttons are held continuously pressed.
4. Upon entering a 5 digit code, the product shall RF transmit the proper KeeLoq formatted data word with the five button code embedded in the discriminator as the access code.
5. A 5 second timeout period is imposed between each button press until all 5 presses have been entered. If this time out limit is reached between any subsequent press, the product will go into stand by mode. The entire 5 digit code will have to be reentered.
6. Upon entering a 5 digit code, pressing any one of the five buttons while not in stand-by mode, shall cause the product to RF transmit the proper KeeLoq formatted data word with a new KeeLoq sync value
7. After any RF transmission, the LED shall blink on and off at a 1.5s rate, 33 duty-factor, for 30 s. Then the LED shall turn off (stand-by mode activated).
8. Pressing the two lower most buttons simultaneously shall cause the product to enter stand-by mode. (per Markings, item 1, lower most buttons refer to *"7/8", "9/0"*)

RF Specifications

1. Center RF: 372.5 MHz, +/- 1.0 MHz at -30°C to 70°C, (-22°F to 158°F).
2. The RF center frequency is determined by an LC oscillator and is only factory adjustable.
3. This product's RF data transmission range shall be 250 feet minimum, open air, when tested with a companion receiving unit.
4. RF power output shall not decrease more than TBD dBm and the RF center frequency shall remain within specifications when the product is mounted in the center of a 12" by 12" steel sheet.

Transmitted Data

1. This product shall transmit the KeeLoq code hopping data format, at a "1 out of 2" transmission data rate.
2. The KeeLoq format uses a 28-bit Serial Number scheme. The 28th of the Serial Number shall be set to zero (0) and the 27th bit shall be set to one (1) to indicate that this unit is a keypad (not a fixed wall-station).
3. Valid Serial numbers are 68287C1h to 7FFFFFFh (109,217,729 to 134,217,727 decimal).
4. This product does not use a Seed Value.
5. This product does not use Envelope Encryption.
6. The Overflow Bits shall be set to logic 1 (high) during the product's manufacturing process.
7. See Microchip's *HCS301 KeeLoq Code Hopping Encoder* data sheet DS21143 for additional information.