

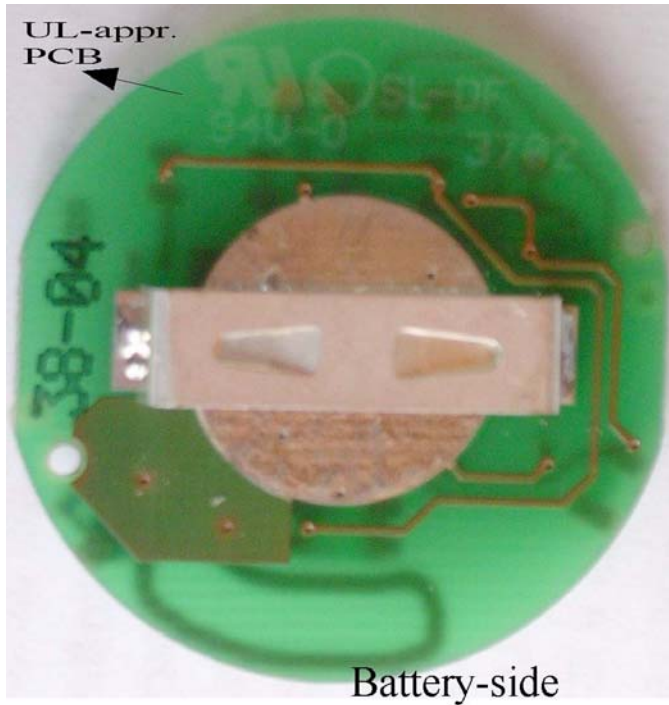
Functional Description of hand-held Transmitter HCS-TXn-916

NEFA16PLUSF-1

Technical Datas are the same as HCS-TX3-868 except transmitter carrier frequency

Referring to attached schematic "TX_HCS300AM" and physical layout, the function of the individual components are as follows:

- The transmitter frequency of 916.500MHz is generated in an oscillator consisting of RF-Transistor T1, SAW-Resonator marked 298 (see attached data-sheet of RF Monolithics), reactive components and biasing resistors. The radiated power of 0.5mW is emitted via a loop antenna integrated in the layout of the PCB
- The oscillator is modulated (OOK) from the PWM-port of HCS300, an encoder from Arizona-Microchip with integrated EEPROM .
- Each time the push-button SW3 is pressed, the IC2 (Encoder) is supplied with a voltage of 3Volts (single Lithium-Cell), less the forward voltage of D3. After an initialization a pulse-width-modulated image of the stored 28-bit serial number, 4-bit function code, 2-bit status code and the internal generated 32-hopping code is generated and leaves the encoder through the PWM-Port (pin 6). The serial resistor R4 between IC2 -6 and Base of T1 takes care for the adequate modulation. The code is repeated as long as the button of SW3 is pressed, for the maximum time of approx. 6 seconds.
- The LED D2 indicates that the code is emitted.
- The PCB -material has UL-approval (see battery-side / bottom layer)



TX916.5