

SPECIFICATION
TECHNICAL DESCRIPTION, ENRA-2402X-100-HHU

SYSTEM DESCRIPTION

The ENRA-2402X-100 board is used in the Remote end of a car starter system and operates at 433.920MHz.

2- 2016, 3V battery powers the board.

This is a 4 Button OOK remote.

CIRCUIT DESCRIPTION

The Q3 and SAW Resonator work as an OOK modulated oscillator. The output of Q2 is matched to 50 ohms by C6, L3, C7, C4, and R7.

TX Data is forwarded from U1 Micro PIN 2 to the oscillator.

DC Power Control

Any switch activation will turn on Q1, a PNP transistor switch. This in turn will activate the Micro (U1) and the oscillator/PA.

LED's

LED represent the following:

TX transmission, Blue LED

LED's are ON when the micro logic output is HIGH.

ENRA-2402X-100-HHU SPECIFICATION

TRANSMIT		
Transmitter Nominal Frequency	433.920 MHz	√
Fre Tol. @ 25C	+/- 100KHz	Typ. +/- 75 KHz
Output Power@ 5.5V	11,000 uV/M @ 3 Meters	
Transmitter Har. Spurious Output	1,100 uV/M @ 3 Meters	
Data Rate Transmit		1000usX6
Preamble		500us
Data start bit		500us
DATA short bit		500us
DATA long bit		1000us
Tx Modulator Input	0 to +3.7 volts Square Wave	√
Input Power Supply voltage	+5.5V nom., 3.5V min.	
Current Consumption (during TX)	12.5mA average max @ 5.5V	
Frequency tolerance	±150KHz Max Over Temp.	
Temperature range	-15°C to +55°C-	
Humidity	100% conden. @ 0°C	