Let f_1 = 1300   Mark frequency (Hz)

Let f_2 = 2100   Space frequency (Hz)

Let f_c = 458.8570   Carrier frequency (MHz)

T_b = bit period

y(t) = FSK modulated signal

$y(t) = a \cos(2\pi[f_c + f_2]t) * m(t) + a \cos(2\pi[f_c - f_1]t) * \{1 - m(t)\}$

$m(t) = \text{rect}(t / T_b\ )$

$y(t) = a*\text{rect}(t / T_b\ )*\cos(2\pi[f_c + f_2]t) + a*\{\cos(2\pi[f_c - f_1]t) * \{1 - \text{rect}(t / T_b\ )\}$

$y(t) = a*\text{rect}(t / T_b\ )*\cos(2\pi[f_c + f_2]t) + a*\cos(2\pi[f_c - f_1]t) - \text{rect}(t / T_b\ )*a*\cos(2\pi[f_c - f_1]t)$