Input

A stream of bits divided into frames, divided into PDUs. Each frame has a particular # of subchannels, frame id, and more.

Randomizer

Also Known as whitener, is a LFSR with a single tap (output is input xor last shift register, next bit shifted in is output)

Convolution Coder

Multiple outputs, with each output being the xor of a few shift register entries. Some bits are discarded to achieve "rates" other than 1/X (where X is the number of output bits per 1 input bit)

Reed Solomon Encoder

Galios Field multiplication on GF(2^8) by a polynomial, results shifted through a series of GF(2^8) sized blocks. Remainder of operation appended to data.

Interleaver

Swap chunks of the frame with other chunks of the frame.

Constellation Mapper

Convert a stream of bits into an I,Q coordinate in one of the modulations

Pilot Subcarrier Insertion

Add I,Q = 1,0 components at particular points in the ODFM symbol (a series of I,Q coords)

IFFT

Inverse fast fourier transform.

Output to analog wireless hardware

Convert the digital I,Q to an analog equivilent.