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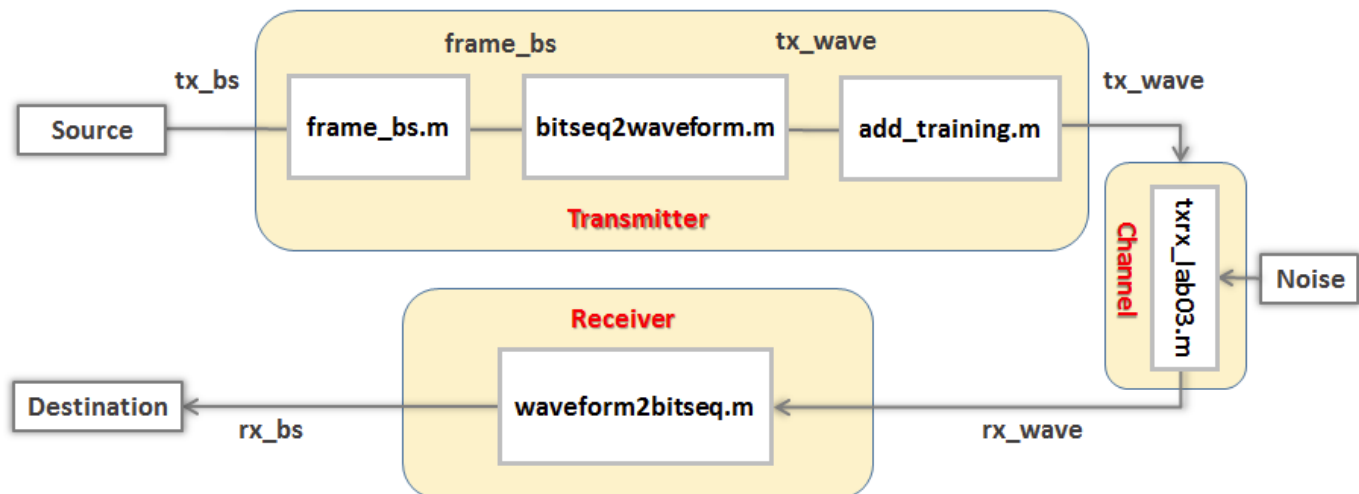
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LAB 3 TASK 2 - FIND THE THRESHOLD (SANDBOX)

In this task, you will simulate the transmission of the frame signal and estimate the threshold value for detecting the bit sequence.



The window below contains the MATLAB code to simulate the transmission of a framed signal through the channel. Your task here is to plot the transmitted waveform `tx_wave` and the received waveform `rx_wave`, and estimate the threshold value by inspecting the received training sequence from the plot of `rx_wave`.

```

1 tx_bs = rand(1,1280) > 0.5; % generate random bit sequence
2 SPB=5; % bit time in samples
3
4 % transmitter %
5 tx_bs_frame = frame_bs(tx_bs); % add start and stop bit and generate framed block
6 tx_wave = bitseq2waveform(tx_bs_frame,SPB); % create a samples waveform with SPB samples per bit
7 tx_wave = add_training(tx_wave); % add a training sequence
8
9 %channel
10 rx_wave=txrx_lab03(tx_wave,15); % simulate channel with distance=15 cm
11
12 n=[1:3000];
13 figure(1);
14 %---your code here to generate plot of tx_wave---
15 plot(n, tx_wave(n));

```

Unanswered

Figure 1

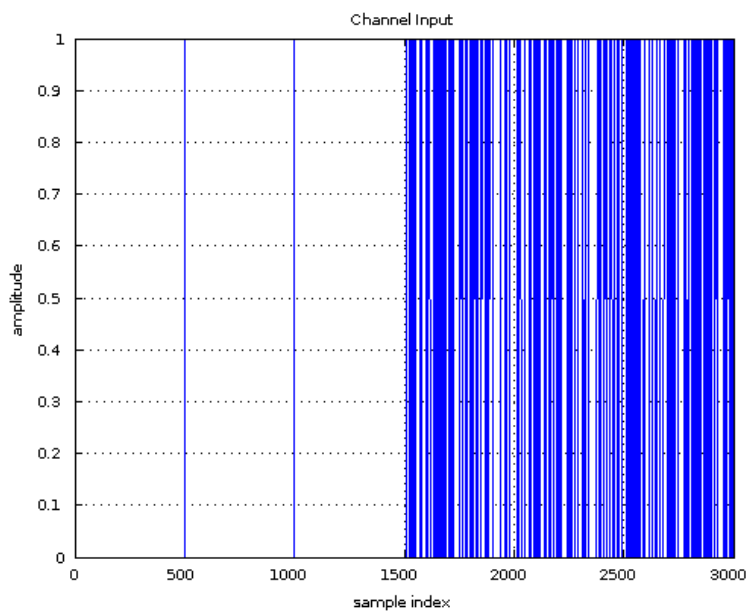
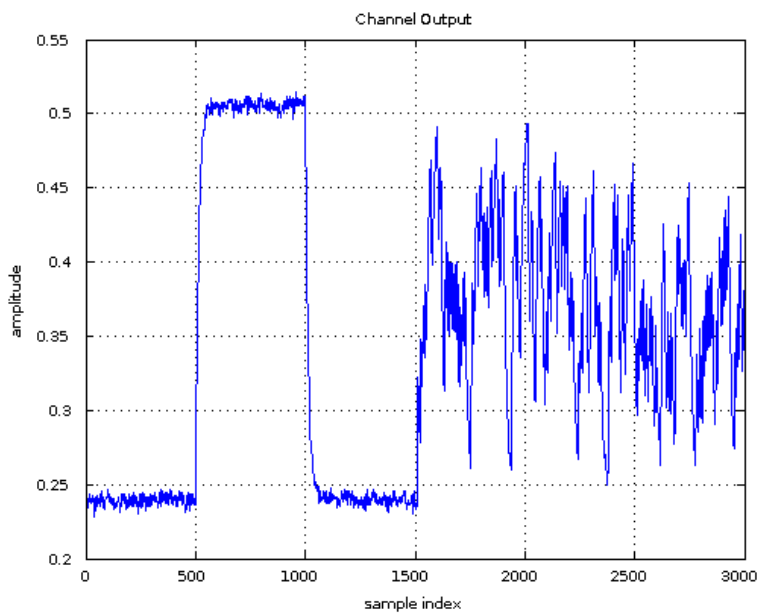


Figure 2

**Run Code**

Check

Show Answer





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