 Block Parameters: Bit Source

×

Bernoulli Binary Generator

Generate random Bernoulli distributed binary numbers.
[Source code](#)

Parameters

Probability of zero:

0.5

Source of initial seed:

Parameter

Initial seed:

61

Sample time:

1/bitRate

Samples per frame:

bitsPerFrame

Output data type:

boolean

Simulate using:


Interpreted execution

OK

Cancel

Help

Apply

 Block Parameters: QPSK Modulator Baseband

×

QPSK Modulator Baseband (mask) (link)

Modulate the input signal using the quaternary phase shift keying method.

Main

Data Types

Parameters

Input type:

Bit

Constellation ordering:

Gray

Phase offset (rad):

pi/4

View Constellation

OK

Cancel

Help

Apply

Block Parameters: Multipath Rayleigh Fading Channel

parameter.

You can check the box "Open channel visualization at start of simulation" to enable the channel visualization.

Parameters

Maximum Doppler shift (Hz):

maxDopplerShift

Doppler spectrum type: Jakes

Discrete path delay vector (s):

delayVector

Average path gain vector (dB):

gainVector

☒ Normalize gain vector to 0 dB overall gain

Initial seed:

12345

☒ Open channel visualization at start of simulation

☐ Complex path gains port

☐ Channel filter delay port



OK

Cancel

Help

Apply

Block Parameters: Multipath Rician Fading Channel

Parameters

K-factor (scalar or vector):

Doppler shift(s) of line-of-sight component(s) (Hz):

Initial phase(s) of line-of-sight component(s) (rad):

Maximum diffuse Doppler shift (Hz):

Doppler spectrum type: Jakes

Discrete path delay vector (s):

Average path gain vector (dB):

☒ Normalize average path gain vector to 0 dB overall gain

Initial seed:

☒ Open channel visualization at start of simulation

? OK Cancel Help Apply

Discrete Time Scatter Plot Scope Settings

Samplespersymbol =1

Offset=0

Pointsdisplayed=bitsPerFrame/2

Newpoints per display = bitsPerFrame/2