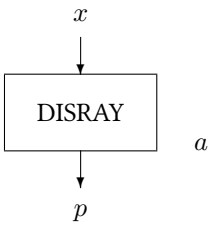
Block DISRAY

The DISRAY block calculates the Rayleigh distribution.





Name	DISRAY
Function	fb0029
Inputs	1
Outputs	1
Parameters	1
Strings	0
Group	S

Inputs

1 Independent variable x

Outputs

1 Probability density $p(x)$

Parameters

1 Distribution parameter a

Strings

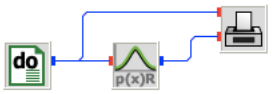
None

Description

The Rayleigh distribution is defined by the probability density function

$$p(x) = \max\left\{0, \frac{x}{a^2}\exp\left(\frac{-x^2}{2a^2}\right)\right\}$$

disray.vseit



A DO block varies x from 0 to 5 in steps of 0.01. The DISRAY block calculates the Rayleigh distribution with distribution parameter one which is plotted by a PLOT block.

