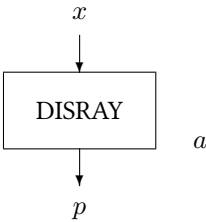


Block DISRAY

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.

