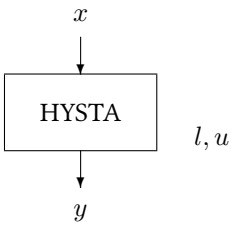
Block HYSTA

The HYSTA block simulates an anti-clockwise hysteris controller.





Name	HYSTA
Function	fb0071
Inputs	1
Outputs	1
Parameters	1
Strings	0
Group	S

Inputs

1	Any signal x

Outputs

1	Hysterestis signal y

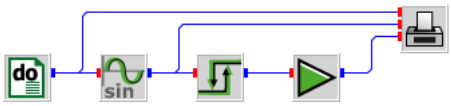
Parameters

1	Lower threshold l
2	Upper threshold u

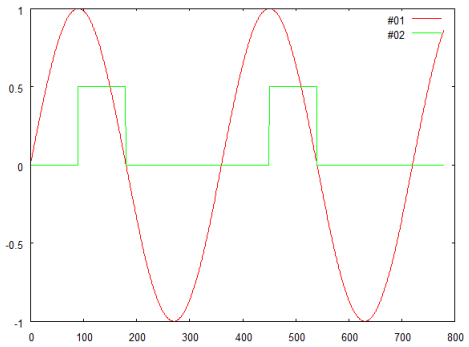
Strings

None

hysta.vseit



A DO block runs a SIN block with values for an angle α from 0 to 780 degrees in steps of 1. The $\sin(\alpha)$ data are used by a HYSTA block with lower threshold zero and upper threshold 1. The result is multiplied by a factor 0.5 by a GAIN block. The $\sin(\alpha)$ data together with the output of the GAIN block are plotted by a PLOT block.



It can be seen, that the output HYSTA block remains on the lower level zero until the upper threshold one is reached. As expected, the output remains on the upper level until the lower threshold is reached. The “switch” remains “off” until the upper threshold one is reached again. This is the typical behavior of a on/off switch with hysteris.