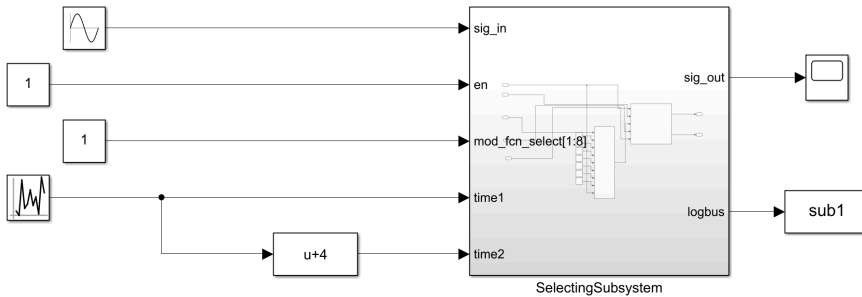


Signal Modifier

Below code opens sample simulink model of this block

```
sig_mod_block_6
```



How it works

The block replaces the input signal with the modification function between each time-interval pair t_1 t_2 . In the above sample, the output signal is switched between values of the input signal and the first modification function preset (a step function, transitioning from 0 to 1 at 5 seconds).

Double click the scope block attached to *sig_out* to open the scope view. Then run the simulation to observe the signal modifier's effect on the input sine function.

```
sim('sig_mod_block_6');  
open_system('sig_mod_block_6/Scope');
```

sig_in and en inports

sig_in is the input signal to be modified. In this example case, a simple sine function.

en is the enable. The block performs its signal modification when $en=1$. When $en=0$ the block doesn't modify the input signal, making $sig_in=sig_out$

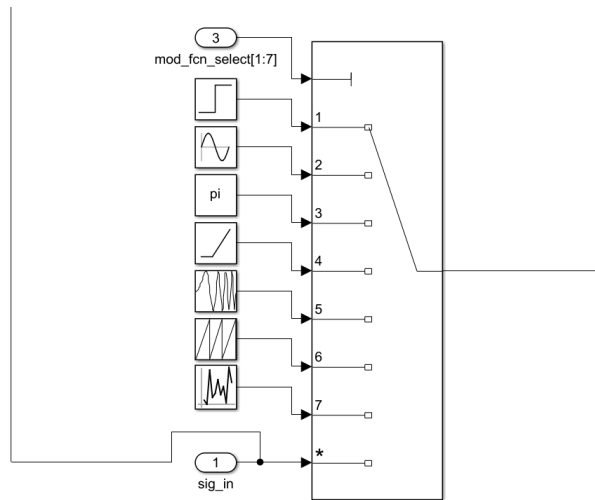
Double click on the constant block attached to the *en* inport to change the value.

```
set_param('sig_mod_block_6/Constant3', 'Value', '1');
```

Double click the scope block attached to *sig_out* to open the scope view. Then run the simulation to observe the signal modifier's effect on the input sine function.

```
sim('sig_mod_block_6');  
open_system('sig_mod_block_6/Scope');
```

mod_fcn_select[1:8]



This is a view of inside the *SelectingSubsystem* (parent) block. The *mod_fcn_select[1:7]* input is used to select from preset modification functions (shown above). These are the functions that the input signal *sig_in* will be modified by. *mod_fcn_select[1:7]* can take on integer values from 1 to 7 to select one of the 7 preset modification functions. If *mod_fcn_select[1:7]* takes on another value, the default modification function will be selected (in this case *sig_in*, which effectively ensures no modification to the input signal).

```
set_param('sig_mod_block_6/Constant1','Value','1');
```

Double click on the *SelectingSubsystem* parent block to access these presets.

```
open_system('sig_mod_block_6/SelectingSubsystem');
```

Double click on any of the preset modification functions to change their parameters.

```
open_system('sig_mod_block_6/SelectingSubsystem/Step');
```

Double click the scope block attached to *sig_out* to open the scope view. Then run the simulation to observe the signal modifier's effect on the input sine function.

```
sim('sig_mod_block_6');
open_system('sig_mod_block_6/Scope');
```