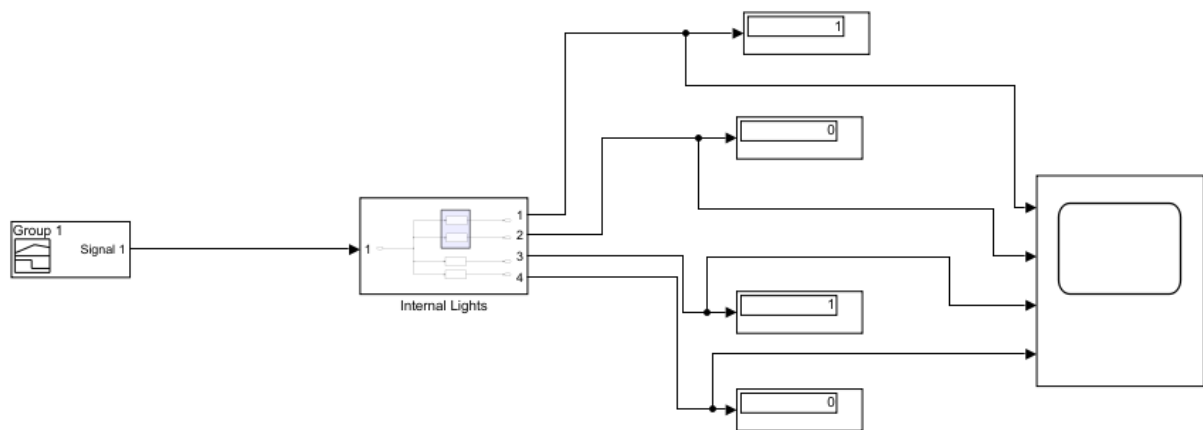


## internallights



## training

21-Dec-2020 13:29:57

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## **Model - internalights**

### **Full Model Hierarchy**

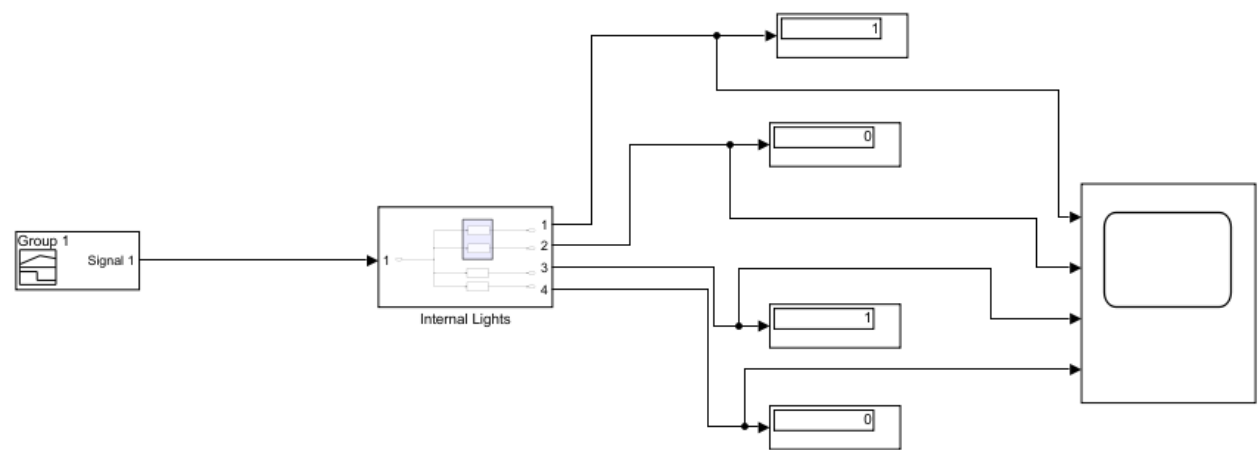
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  1. [Internal Lights](#)
    1. [LOW BATTERY](#)
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Simulation Parameter	Value
Solver	FixedStepAuto
RelTol	1e-3
Refine	1

Simulation Parameter	Value
MaxOrder	5
FixedStep	0.1
ZeroCross	on

[\[more info\]](#)

**System - internallights**



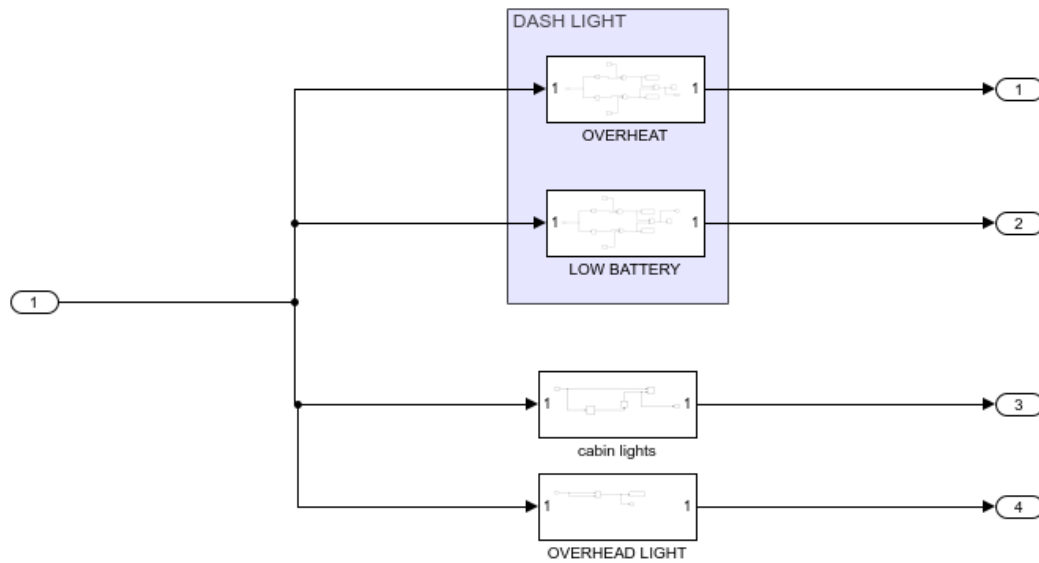
**Table 1. Display Block Properties**

Name	Format	Decimation	Floating
Display	short	1	off
Display1	short	1	off
Display2	short	1	off
Display3	short	1	off

**Table 2. Sigbuilder block Block Properties**

Name
Signal Builder

System - [internallights](#)/Internal Lights



**Table 3. Inport Block Properties**

Name	Port	Defined In Blk
In1	1	Demux

**Table 4. Outport Block Properties**

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Unconnected	Output When Unconnected Value
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0
Out2	2	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0
Out3	3	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Unconnected	Output When Unconnected Value
Out4	4	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0

System - [internalights/Internal Lights](#)/LOW BATTERY

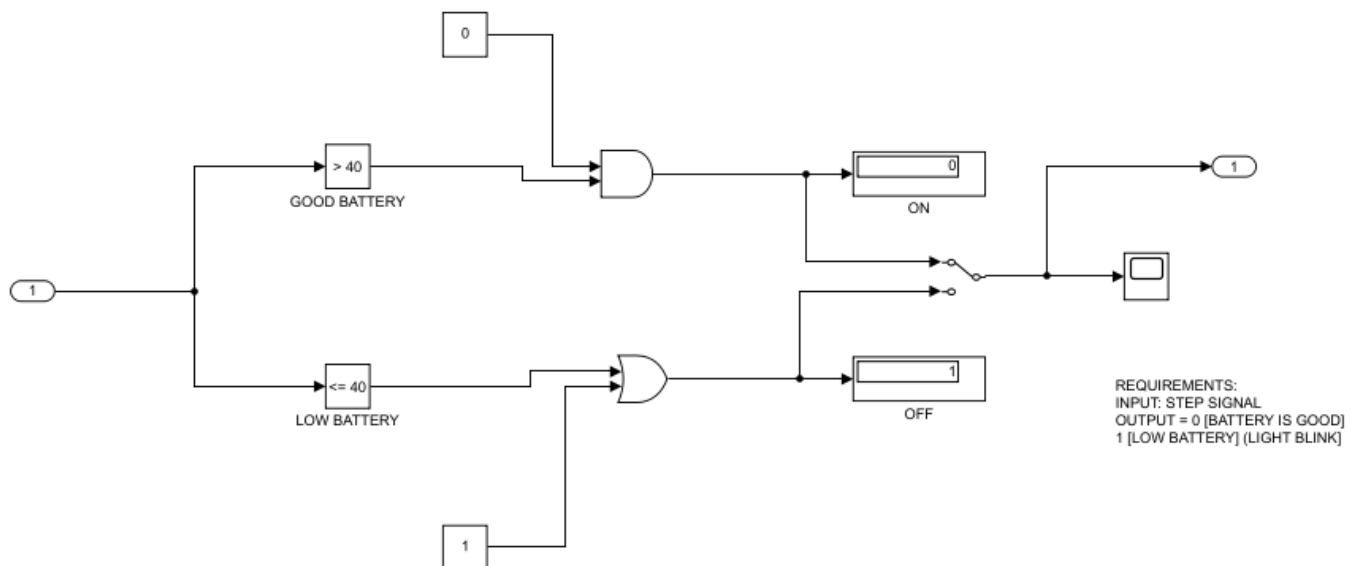


Table 5. Compare To Constant Block Properties

Name	Relop	Const	Out Data Type Str	Zero Cross
GOOD BATTERY	>	40	boolean	on
LOW BATTERY	<=	40	boolean	on

Table 6. Constant Block Properties

Name	Value	Out Data Type Str	Lock Scale	Sample Time	Frame Period
Constant	0	Inherit: Inherit from 'Constant value'	off	inf	inf
Constant1	1	Inherit: Inherit from 'Constant value'	off	inf	inf

Table 7. Display Block Properties

Name	Format	Decimation	Floating
OFF	short	1	off
ON	short	1	off

**Table 8. Inport Block Properties**

Name	Port	Defined In Blk
In1	1	Demux

**Table 9. Logic Block Properties**

Name	Operator	Inputs	Icon Shape	All Ports Same DT	Out Data Type Str
AND	AND	2	distinctive	off	boolean
OR	OR	2	distinctive	off	boolean

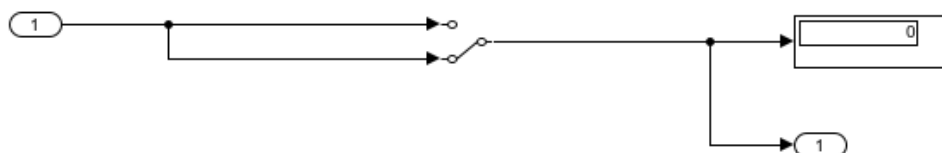
**Table 10. ManualSwitch Block Properties**

Name	Varsize
Manual Switch	off

**Table 11. Outport Block Properties**

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Outport Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0

System - [internalights/](#)[Internal Lights/](#)OVERHEAD LIGHT



REQUIREMENTS:  
INPUT= 1,0  
OUTPUT = ON,OFF  
LOGIC = SWITCHING CIRCUIT

**Table 12. Display Block Properties**

Name	Format	Decimation	Floating
Display	short	1	off

**Table 13. Inport Block Properties**

Name	Port	Defined In Blk
In1	1	Demux

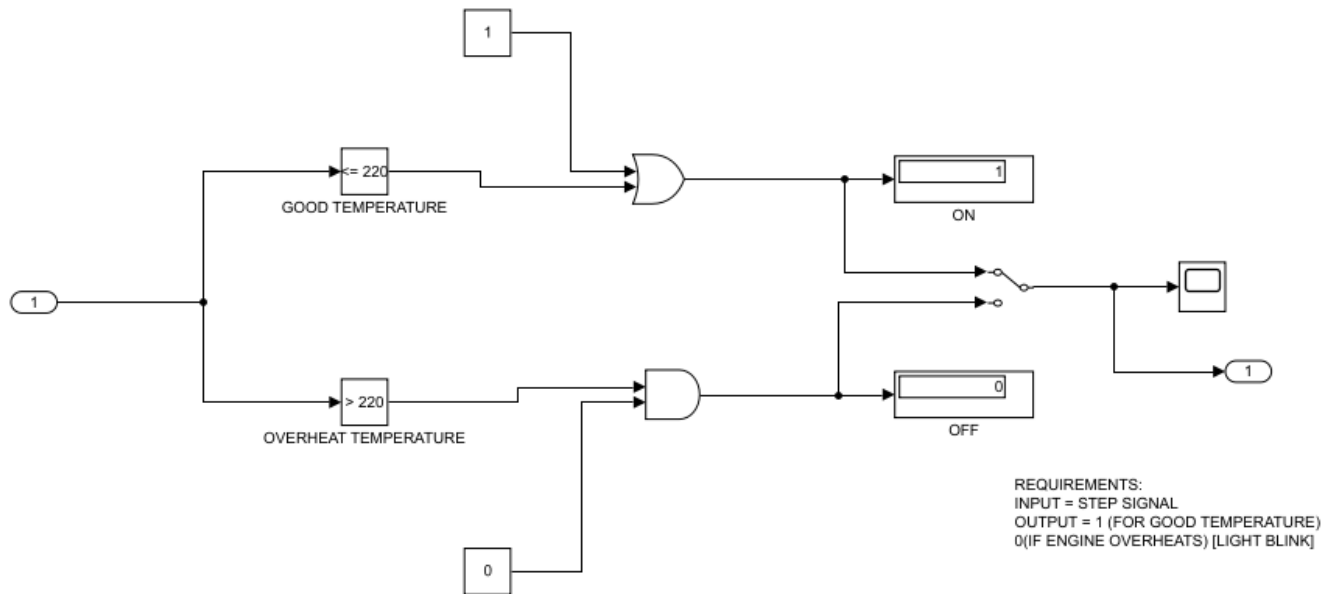
**Table 14. ManualSwitch Block Properties**

Name	Varsize
Manual Switch	off

**Table 15. Outport Block Properties**

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Outport Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0

System - [internallights/Internal Lights/OVERHEAT](#)



**Table 16. Compare To Constant Block Properties**

Name	Relop	Const	Out Data Type Str	Zero Cross
GOOD TEMPERATURE	<=	220	boolean	on
OVERHEAT TEMPERATURE	>	220	boolean	on

**Table 17. Constant Block Properties**

Name	Value	Out Data Type Str	Lock Scale	Sample Time	Frame Period
Constant	1	Inherit: Inherit from 'Constant value'	off	inf	inf
Constant1	0	Inherit: Inherit from 'Constant value'	off	inf	inf

**Table 18. Display Block Properties**

Name	Format	Decimation	Floating
OFF	short	1	off
ON	short	1	off

**Table 19. Inport Block Properties**

Name	Port	Defined In Blk
In1	1	Demux

**Table 20. Logic Block Properties**

Name	Operator	Inputs	Icon Shape	All Ports Same DT	Out Data Type Str
AND	AND	2	distinctive	off	boolean



Name	Operator	Inputs	Icon Shape	All Ports Same DT	Out Data Type Str
OR	OR	2	distinctive	off	boolean

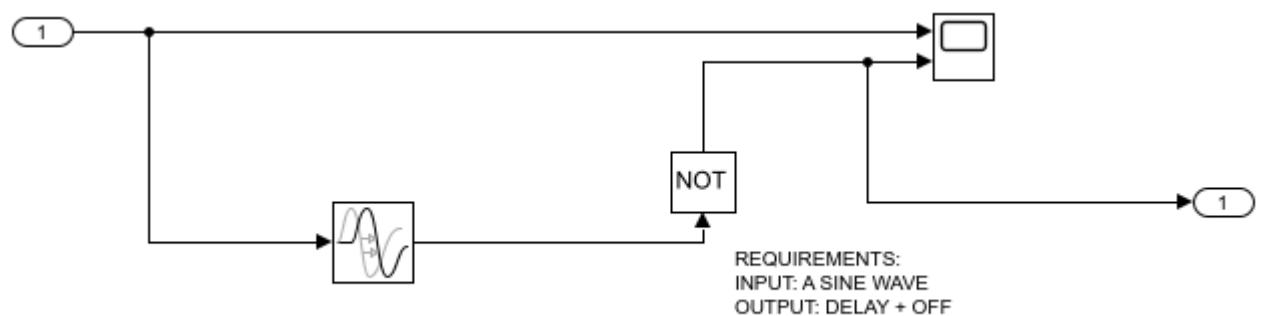
**Table 21. ManualSwitch Block Properties**

Name	Varsize
Manual Switch	off

**Table 22. Outport Block Properties**

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Unconnected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out 1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	Scope, <a href="#">Display</a> , Scope

System - [internalights](#)/[Internal Lights](#)/cabin lights



**Table 23. Inport Block Properties**

Name	Port	Defined In Blk
In1	1	Demux

**Table 24. Logic Block Properties**

Name	Operator	Inputs	Icon Shape	All Ports Same DT	Out Data Type Str
NOT	NOT	2	rectangular	off	boolean

**Table 25. Outport Block Properties**

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Unconnected	Output When Unconnected Value	Vector Params As 1D For Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	Scope, <a href="#">Display2</a> , Scope1

**Table 26. TransportDelay Block Properties**

Name	Delay Time	Initial Output	Buffer Size	Fixed Buffer	Trans Delay Feedthrough	Pad Order
Transport Delay1	3	0	1024	off	off	0

## Appendix

**Table 27. Block Type Count**

BlockType	Count	Block Names
Display	9	<a href="#">Display</a> , <a href="#">Display1</a> , <a href="#">Display2</a> , <a href="#">Display3</a> , <a href="#">OFF</a> , <a href="#">ON</a> , <a href="#">Display</a> , <a href="#">OFF</a> , <a href="#">ON</a>
Outport	8	<a href="#">Out1</a> , <a href="#">Out1</a> , <a href="#">Out1</a> , <a href="#">Out1</a> , <a href="#">Out2</a> , <a href="#">Out3</a> , <a href="#">Out4</a> , <a href="#">Out1</a>
SubSystem	5	<a href="#">Internal Lights</a> , <a href="#">LOW BATTERY</a> , <a href="#">OVERHEAD LIGHT</a> , <a href="#">OVERHEAT</a> , <a href="#">cabin lights</a>
Logic	5	<a href="#">AND</a> , <a href="#">OR</a> , <a href="#">AND</a> , <a href="#">OR</a> , <a href="#">NOT</a>
Inport	5	<a href="#">In1</a> , <a href="#">In1</a> , <a href="#">In1</a> , <a href="#">In1</a> , <a href="#">In1</a>
Scope	4	Scope, Scope, Scope1, Scope
Constant	4	<a href="#">Constant</a> , <a href="#">Constant1</a> , <a href="#">Constant</a> , <a href="#">Constant1</a>
Compare To Constant (m)	4	<a href="#">GOOD BATTERY</a> , <a href="#">LOW BATTERY</a> , <a href="#">GOOD TEMPERATURE</a> , <a href="#">OVERHEAT TEMPERATURE</a>
ManualSwitch	3	<a href="#">Manual Switch</a> , <a href="#">Manual Switch</a> , <a href="#">Manual Switch</a>
TransportDelay	1	<a href="#">Transport Delay1</a>
Sigbuilder block (m)	1	<a href="#">Signal Builder</a>