

## Stairwell light with pre-warning

WAGO-I/O-PRO 32 Library elements		
<b>Category:</b>	Building automation	
<b>Name:</b>	Fb_StairwellLight2	
<b>Type:</b>	Function <input type="checkbox"/>	Function block <input checked="" type="checkbox"/> Program <input type="checkbox"/>
<b>Library name:</b>	StairwellLight_01.lib	
<b>Applicable to:</b>	All programmable fieldbus controllers	
<b>Input parameter:</b>		
<b>Data type:</b>	<b>Comment:</b>	
xSwitch	BOOL	Input for switching signal
xManuel	BOOL	Switching command, constant light
dwT_10tel_s	DWORD	Stairwell time Value range 10 – 65535 [0,1s] Default setting = 1200
dwTw_10tel_s	DWORD	Pre-warning time 50 – 300 [0,1s] Default setting = 150
<b>Feedback value:</b>		
<b>Data type:</b>	<b>Comment:</b>	
xActuator	BOOL	Output switching signal
<b>Graphical display:</b>		
<b>Time referenced behavior:</b>		

**Function description:**

The output "**xActuator**" is set to 1 with a rising flank at input "**xSwitch**". Once the settable stairwell time has elapsed "**dwT\_10tel\_s**" a switch-off pre-warning occurs in that the output is reset to 0 for the duration of 1 second. Subsequently the output for the pre-warning duration "**dwTw\_10te\_s**" is switched on. If another rising flank is detected at input "**xSwitch**" during this period, the stairwell time will be re-triggered. If the time is not re-triggered, the output switches back to 0 once the pre-warning time "**dwTw\_10tel\_s**" has elapsed. The output is set (constant light) for as long as an ON signal is pending on input "**xManuel**".

## Stairwell light without pre-warning with manual OFF

WAGO-I/O-PRO 32 Library elements		
<b>Category:</b>	Building automation	
<b>Name:</b>	Fb_StairwellLight1	
<b>Type:</b>	Function <input type="checkbox"/>	Function block <input checked="" type="checkbox"/> Program <input type="checkbox"/>
<b>Library name:</b>	StairwellLight_01.lib	
<b>Applicable to:</b>	All programmable fieldbus controllers	
<b>Input parameter:</b>		
<b>Data type:</b>	<b>Comment:</b>	
xSwitch	BOOL	Input for switching signal
xStop	BOOL	Stopping the stairwell time
dwT_10tel_s	DWORD	Stairwell time Value range 10 – 65535 [0,1s] Default setting = 1200
<b>Feedback value:</b>		
<b>Data type:</b>	<b>Comment:</b>	
xActuator	BOOL	Output switching signal
<b>Graphical display:</b>		
<b>Time referenced behavior:</b>		

**Function description:**

The function module 'stairwell' operates as a dynamic, mono-stable flip flop. With a rising flank at input "**xSwitch**" a plus is generated at output "**xActuator**". The duration of the stairwell time is set via parameter "**dwT\_10tel\_s**". Should another rising flank occur at the input during the stairwell time, the time is reset and the pulse extended (retriggerable).

The stop input sets the output signal to zero at any time (stairwell light with manual OFF).

With the output set and the arrival of a signal on inputs "**xSwitch**" and "**xStop**" the stop input has the priority and the stairwell time will be discontinued. If the output is not set and if the inputs are simultaneously circuited with a 1, the output is set and the stairwell time started.