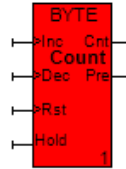


## Function Description

Output will increment/decrement by one for every 0-to-1 transition at the Inc/Dec inputs. High and Low limits and a Reset value are set at design time. A 0-to-1 transition on the Rst pin will copy the current counter value (Cnt) to the Pre output and then force the counter output to the Reset Value. The counter will not react to Inc or Dec signals if the Hold input is at logic 1. Inc has priority over Dec and Rst has priority over the Hold input. All input signals can be inverted. Output will be set to Reset Value at start.



## Popup Parameters

- Output High Limit: Range: 1...255  
Inc input ignored when output at this value. Value must be greater than Low Limit.
- Output Low Limit: Range: 0...254  
Dec input ignored when output at this value. Value must be less than High Limit.
- Reset value: Range: 0...255  
Value must be equal or less than High Limit, and greater or equal to Low Limit.

## Input/Output Parameters

| Type   | Description   | Data Type | Range   |
|--------|---------------|-----------|---------|
| Input  | Increment     | Boolean   | 0, 1    |
| Input  | Decrement     | Boolean   | 0, 1    |
| Input  | Reset         | Boolean   | 0, 1    |
| Input  | Hold          | Boolean   | 0, 1    |
| Output | Counter value | BYTE      | 0...255 |

## Application

Up/Down counter. Can also be used as a setpoint station with Inc and Dec buttons to obtain a user-adjustable value, similar to a digital pot.

## Note:

Function block 39 can be executed in Cycle and Time tasks.