

TIB Progressive Code	Product	Date
TIB 15	MOSAIC - New firmware and MSD new features	15/11/2016
Description	M1 Master unit new firmware version - Ver. 3.0.1 New features for the Mosaic Safety Designer (MSD) software - Ver. 1.5.0.	
Object	New features overview	

## “MOSAIC SAFETY DESIGNER” NEW FEATURES

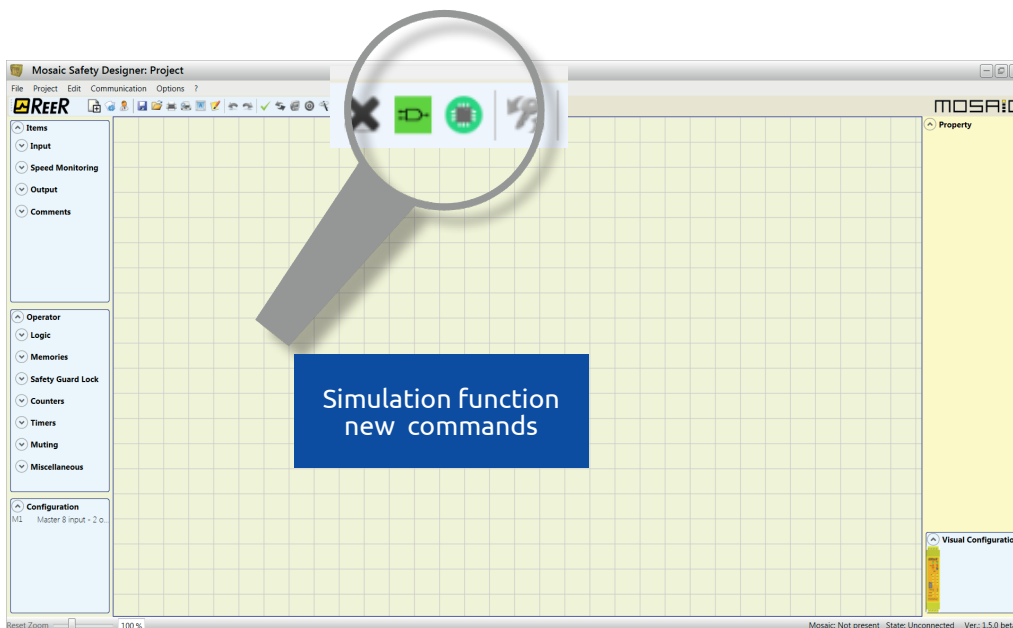
MSD software release 1.5.0 integrates some new functions:

- Monitor simulation
- Remote connection
- Terminator operator

### MONITOR SIMULATION FUNCTION

The Simulator allows to verify the functionality and correct operations of a project created with MSD before the assembly of the machinery.

It allows to activate the inputs of the system manually or in a programmed way in order to ensure the outputs gained are correct.



Schematic simulation

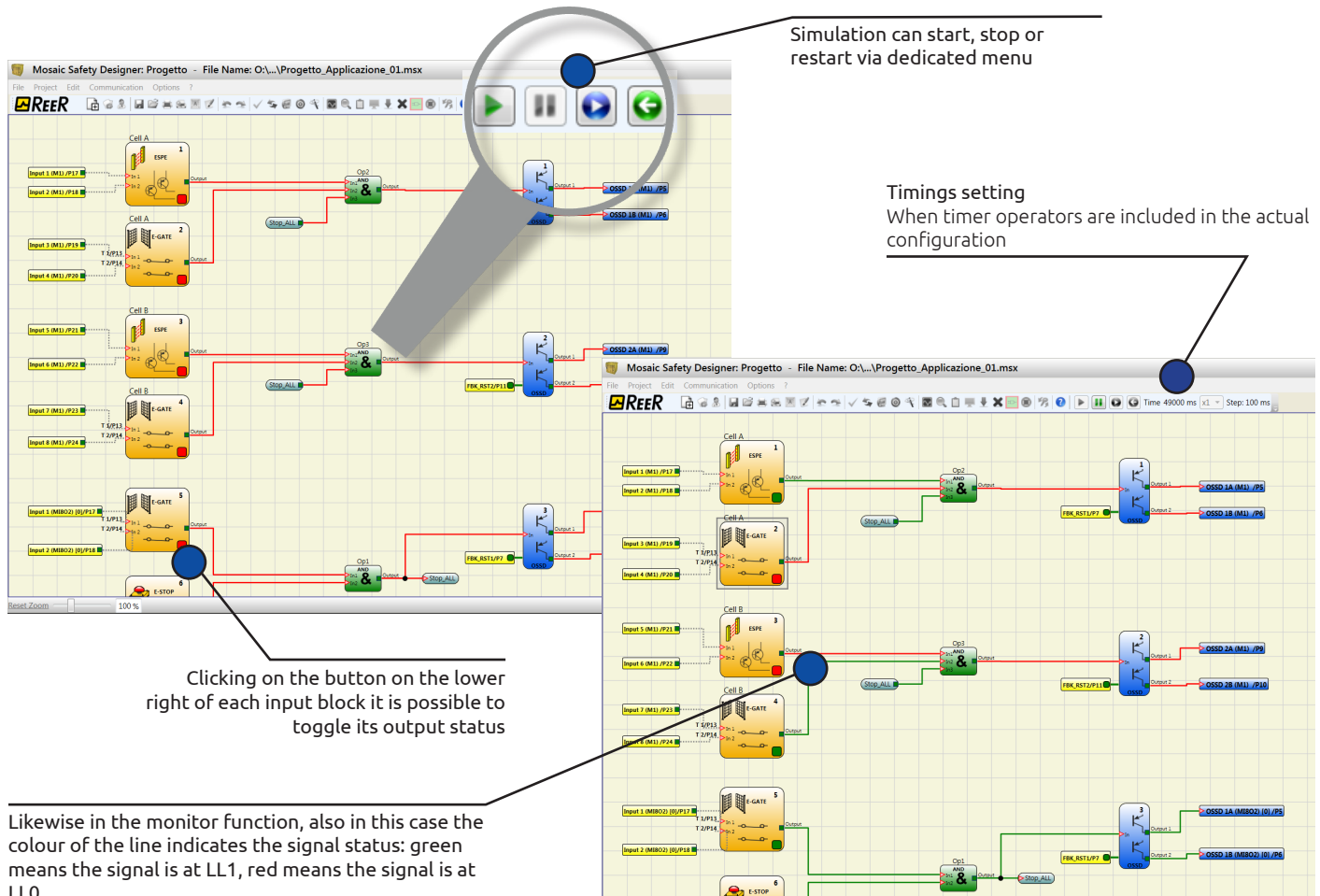


Managing graphic simulation

**Note:** The simulation feature is available with MSD version 1.5.0 and M1 firmware version 3.0.1. or higher.

## SCHEMATIC SIMULATION

The schematic simulation allows to “start” the project via a dedicated menu and to operate directly on any of the inputs to verify the system logs.



## Schematic simulation

## MANAGING GRAPHIC SIMULATION

The graphic simulation allows to load a number of programmed inputs status change and to verify the logic of the system as a graphical output diagram. This methodology allows to create templates replicating the exact functionality of a machinery and apply them on different projects..

### Template Stimuli

Based on the loaded diagram, it creates a template file to fill with the desired values.

The user can modify the status of the input signals in a certain time.

### Parameters Editor

The user must save the file with the required name and open it again with a text editor to modify the parameters.

### Simulation with Stimuli

Load the template file saved and starts the simulation.

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prova.sti - Blocco note
File Modifica Formato Visualizza ?

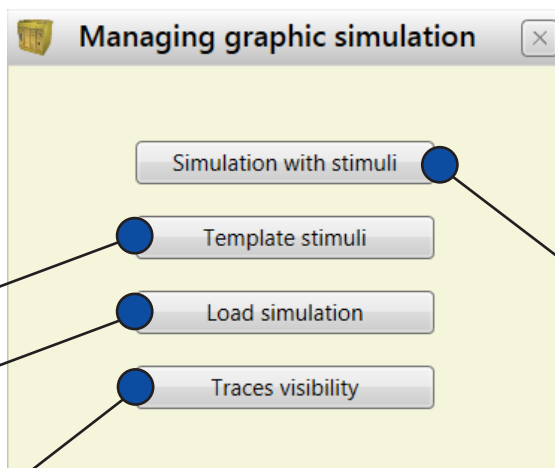
// E-Stop
Input6
0:0
500:1
1000:0
1500:1

// OSSD
Fbk_rst1
0:0
500:1
1000:0
1500:1

// OSSD
Fbk_rst2
0:0
500:1
1000:0
1500:1

// OSSD
Fbk_rst3
0:0
500:1

```



```

prova.sti - Blocco note
File Modifica Formato Visualizza ?

// E-Stop
Input6
0:0
500:1
1000:0
1500:1

// OSSD
Fbk_rst1
0:0
500:1
1000:0
1500:1

// OSSD
Fbk_rst2
0:0
500:1
1000:0
1500:1

// OSSD
Fbk_rst3
0:0
500:1

```

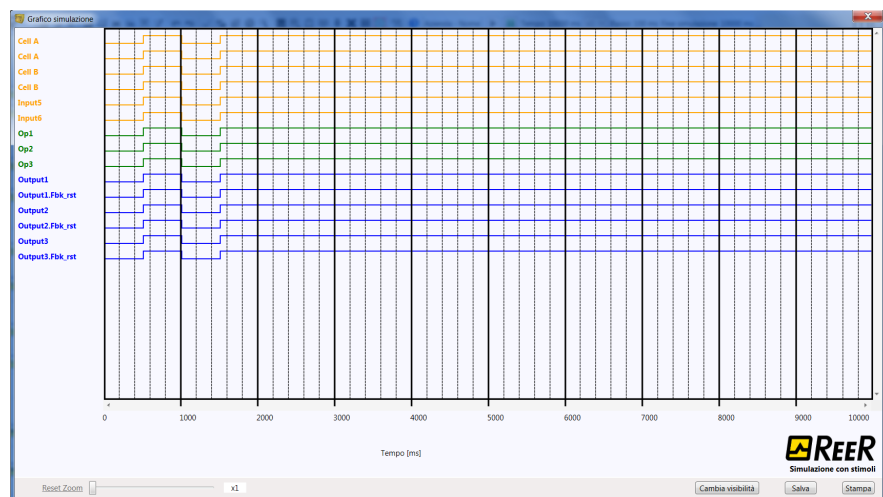
### Load simulation

With this feature is it possible to load a previous completed simulation.

### Traces visibility

With this option the user could select the traces (waveform signal) to be displayed in the graph or not.

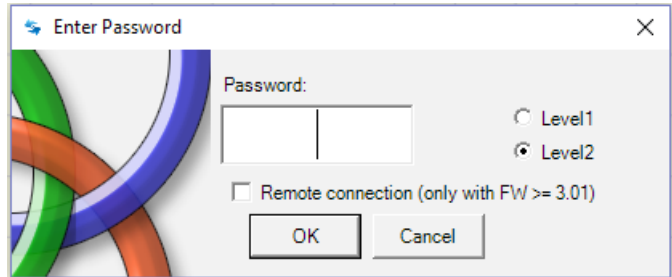
At the end of the simulation a graph with all the resulting signals is shown.



## MOSAIC REMOTE CONNECTION

Starting from the M1 Master unit firmware version 3.0.1, it's possible to connect to the USB communication port via remote connection. This feature allows you to access the Mosaic features through industrial routers with VPN service web network portal.

To enable this feature the check-mark box "Remote connection" in the password insertion windows must be selected.

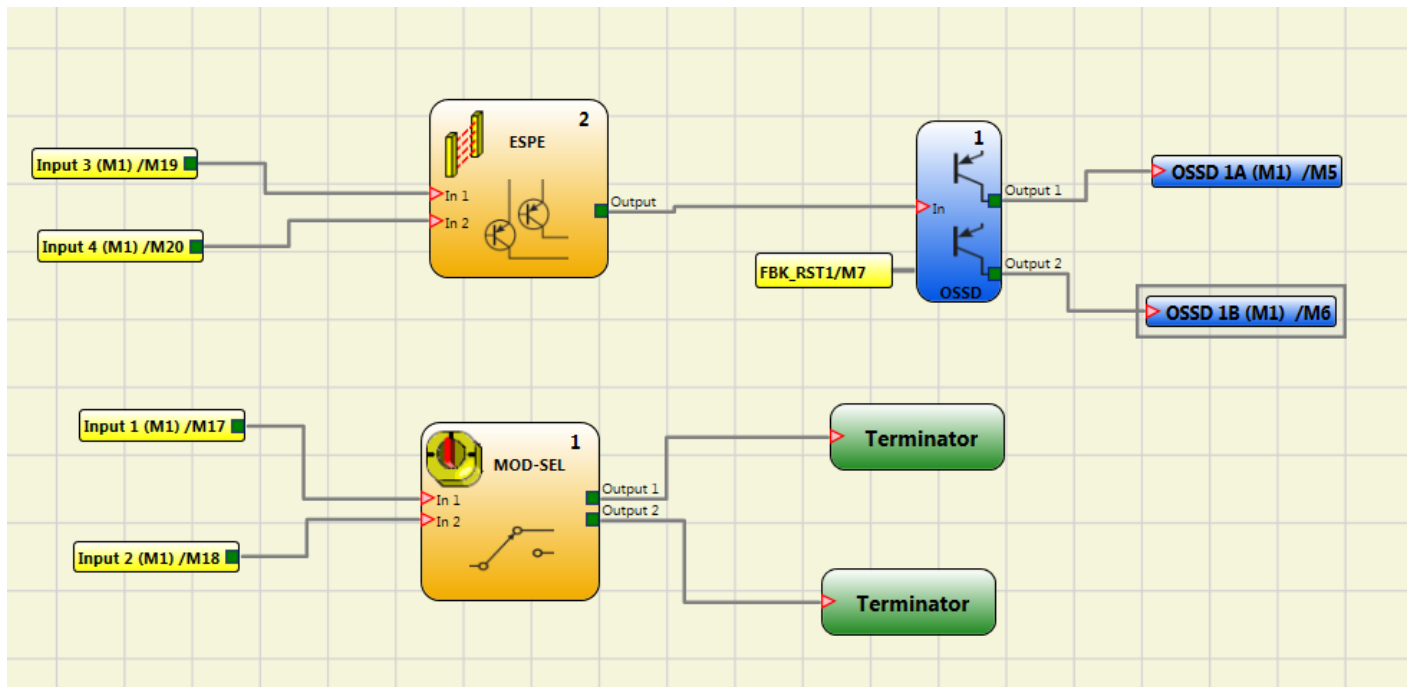


Enabling this function, the M1 Master unit USB communication line speed is adapted to the speed of the VPN routers protocols, allowing this direct connection. It's then necessary to use industrial routers with USB port integrated such as: eWON cosy 131, SECOMEA SiteManager 1129 types or USB/Ethernet converter connected to a VPN network.

## TERMINATOR OPERATOR

This operator allows to insert some input signals in the diagram without plug in the diagram.

So this operator can only be connected to OUTPUT of an input block as shown in the following example:



The entrance connected to the TERMINATOR operator appears in the map of the inputs and their status is transferred to the bus.