

Demo Project for Auto. Backlight

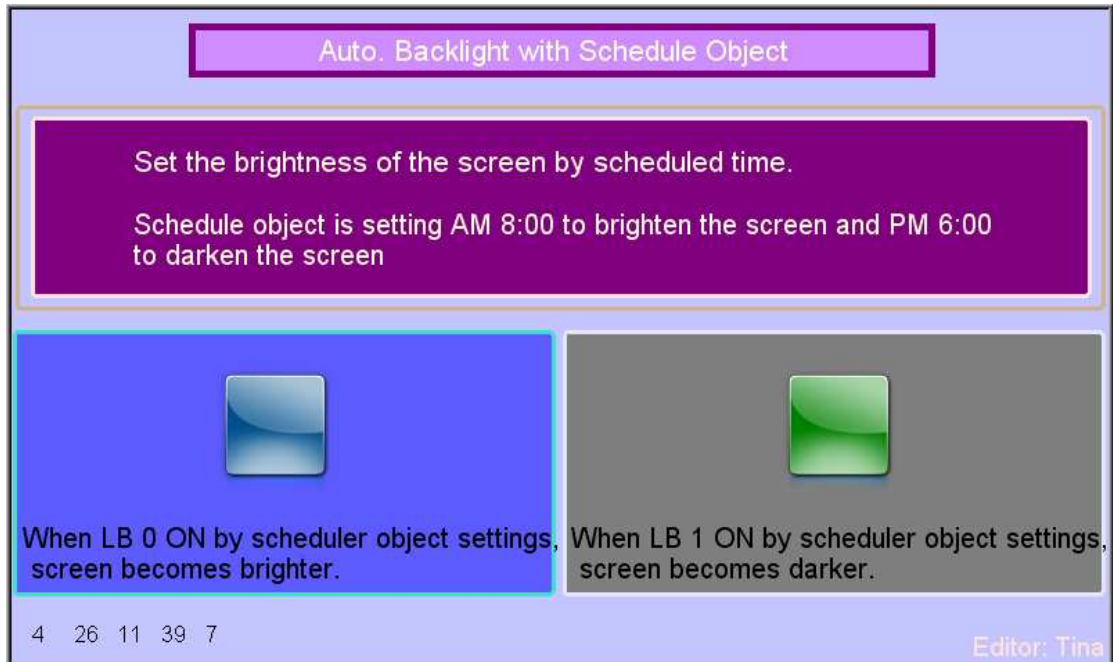
Table of Contents

1. Overview and Operation
2. Setting Up the Screen
3. Addresses

1. Overview and Operation

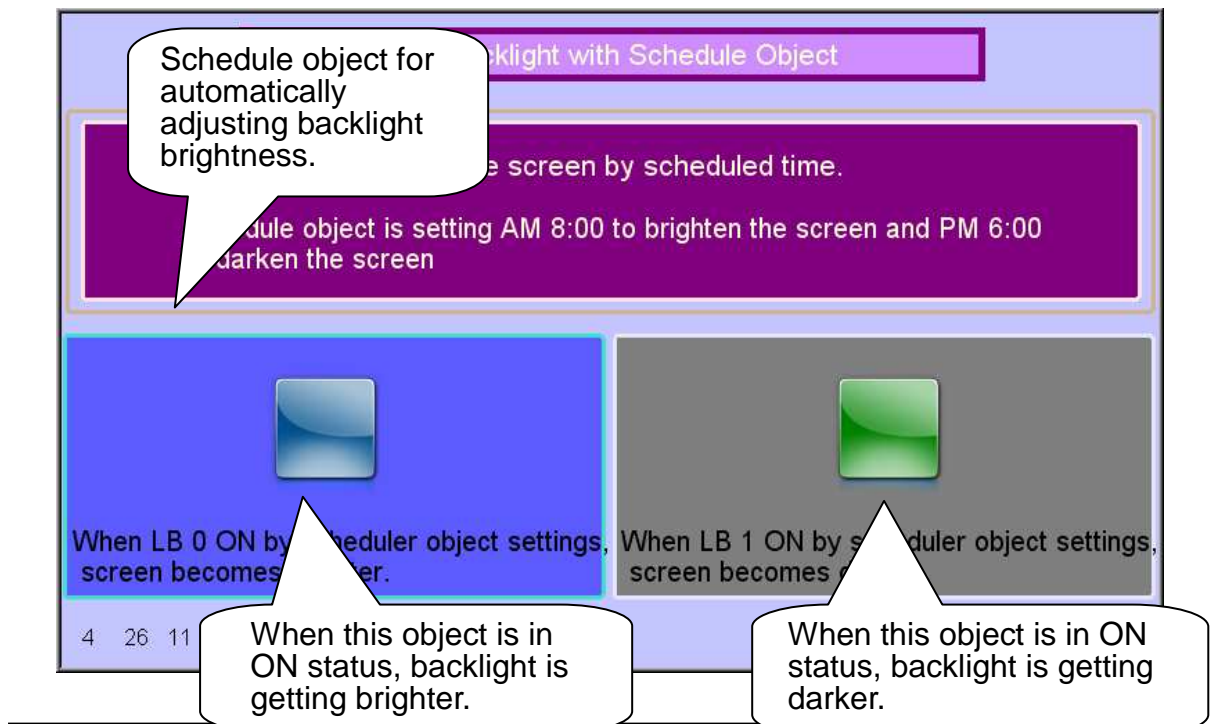
[Overview]

Use Schedule function together with Macro to switch ON/OFF the backlight automatically at a specified time.



[Operation]

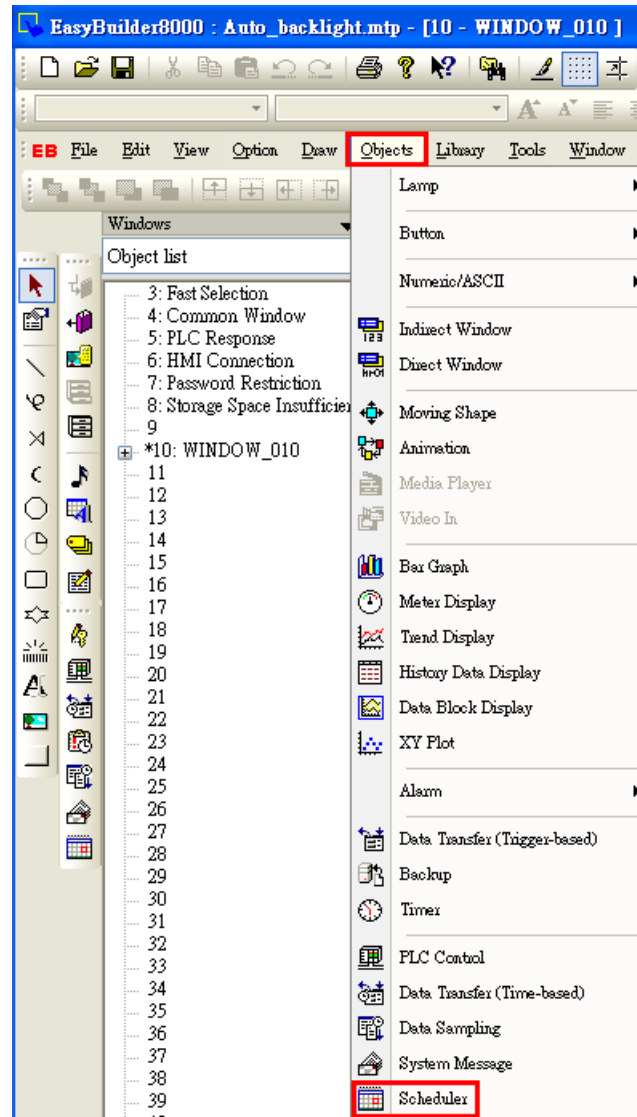
Use Scheduler object to automatically adjust the brightness of the backlight. Set the trigger time and Scheduler bit address to trigger this function at a specified time.



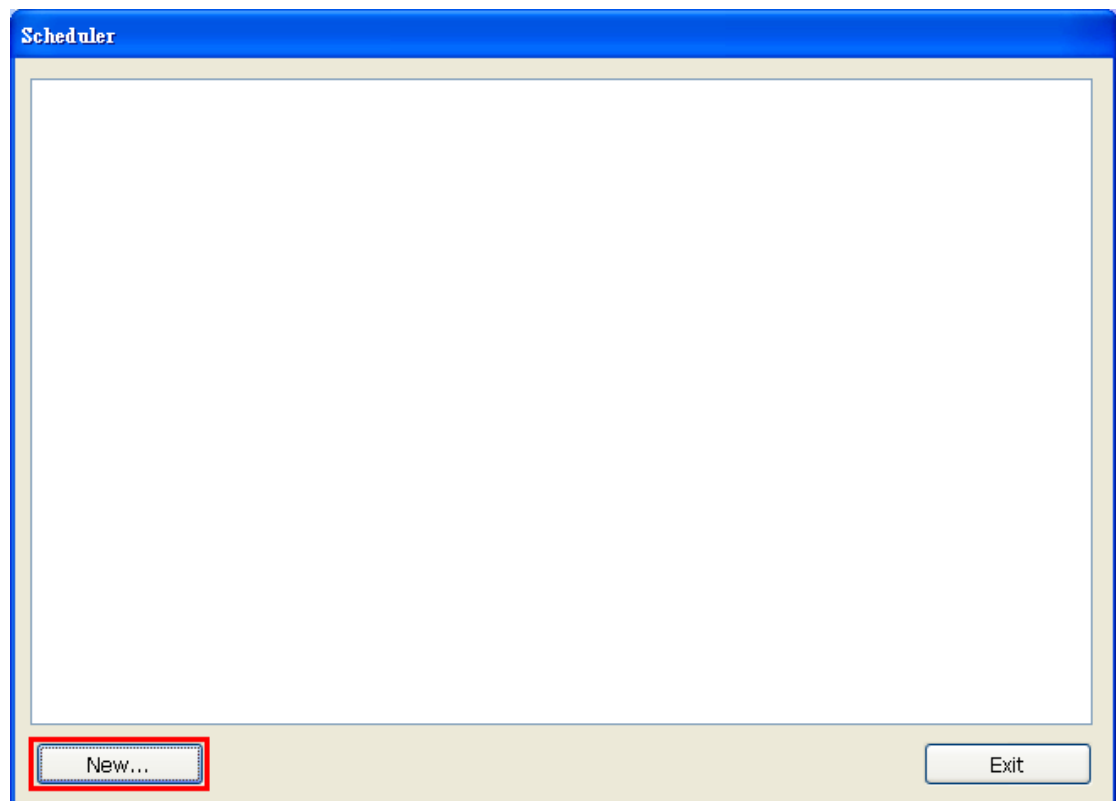
2. Setting Up the Screen

2-1 Setting of the Scheduler.

Go to Objects/Scheduler.

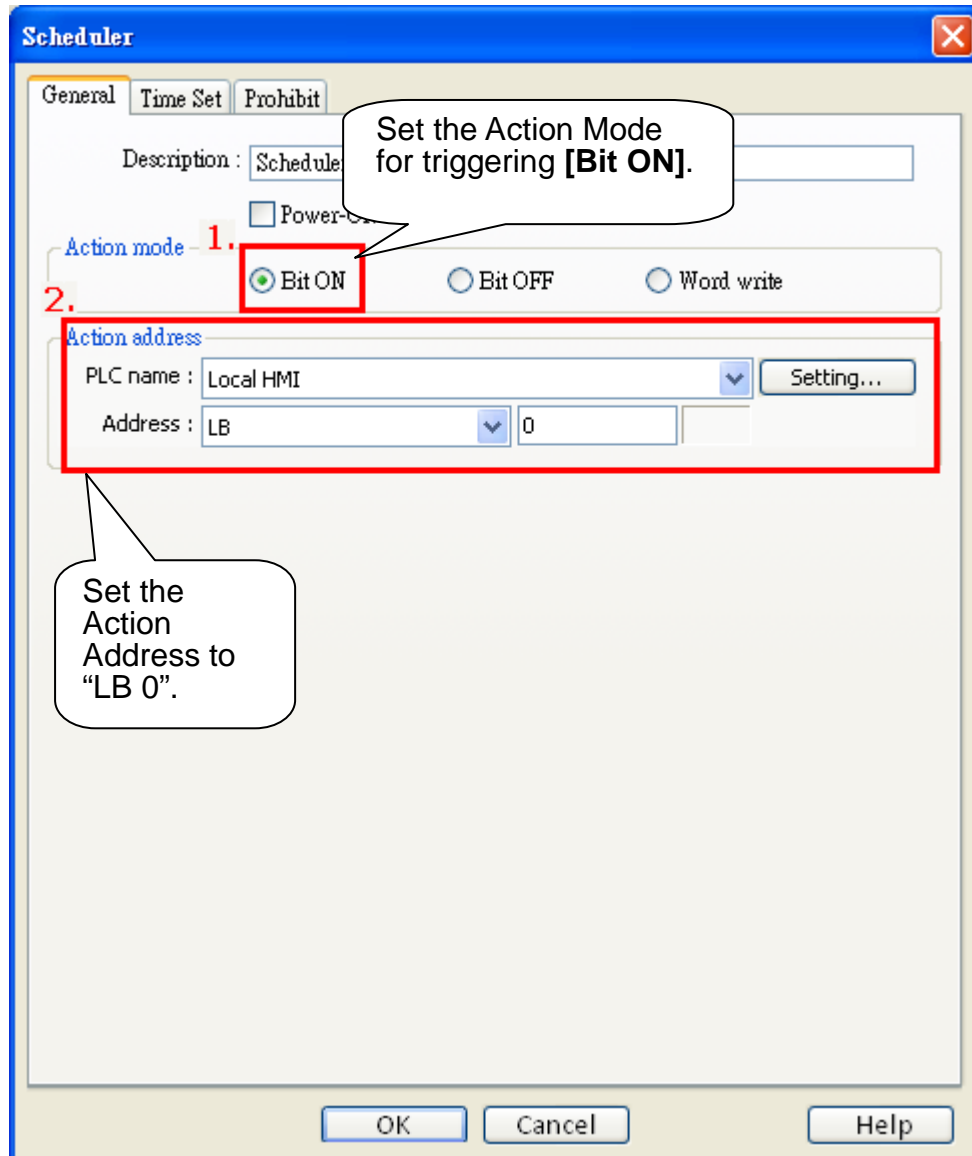


The Scheduler appears as below.

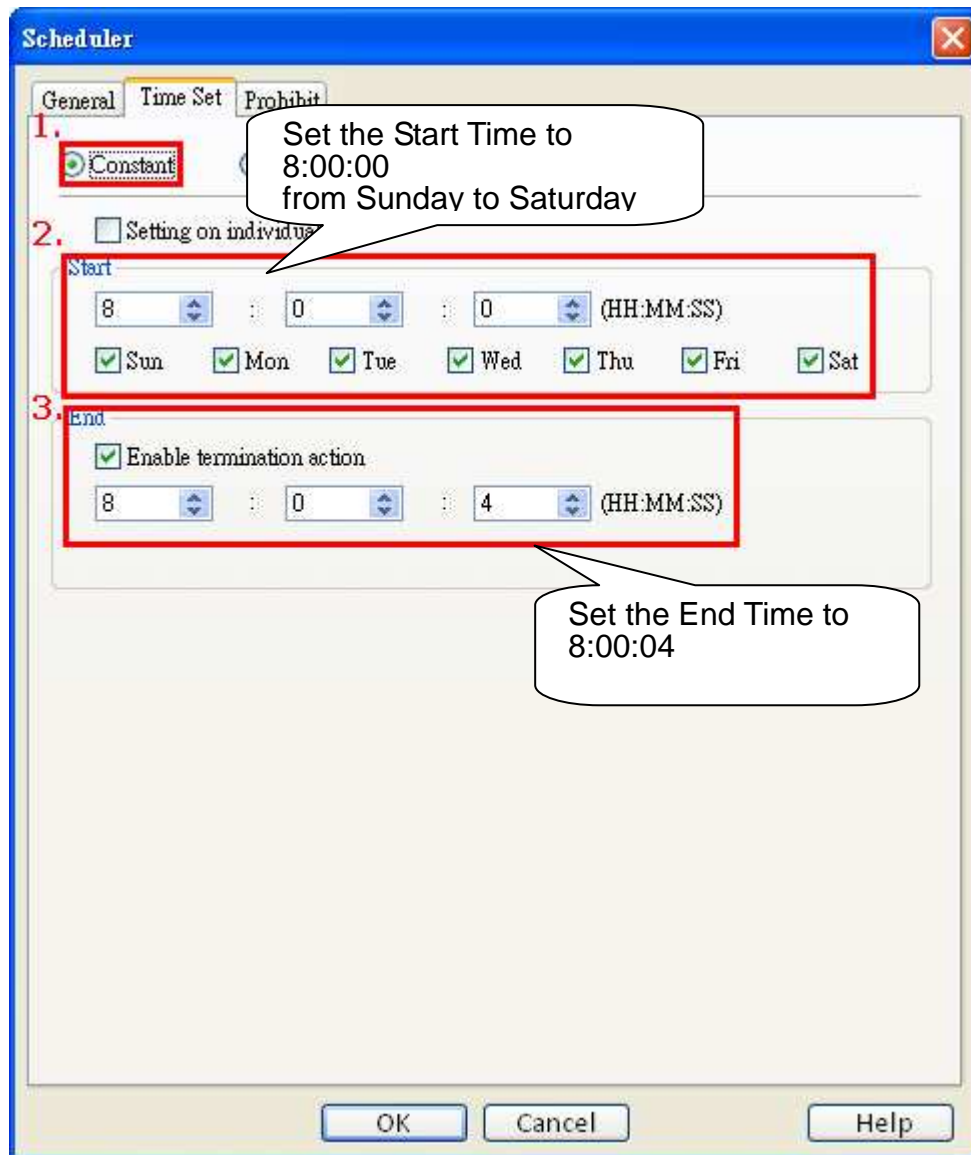


Click **[New]** to create a new schedule.

- In the **[General]** page, set the **[Action Mode]** and **[Action Address]**.

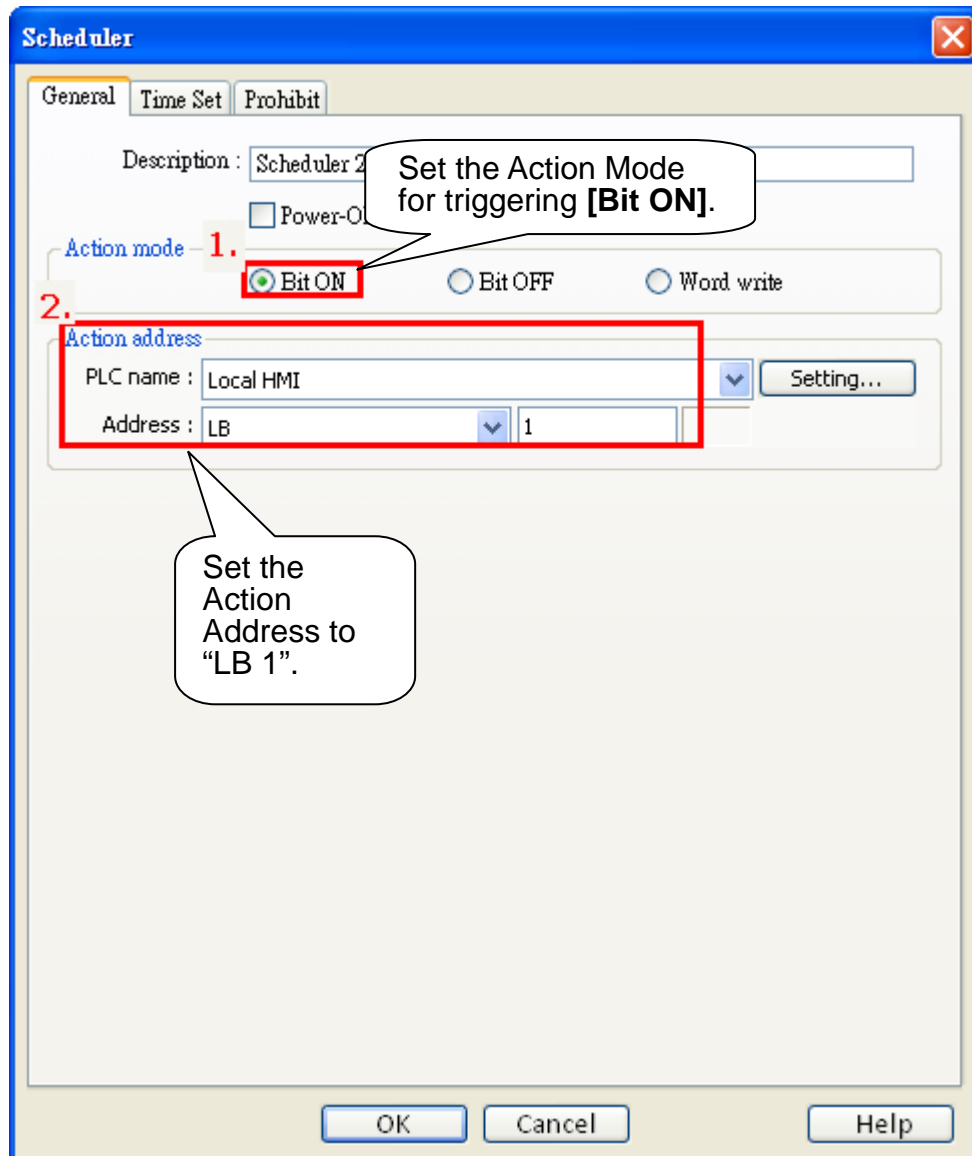


- For [Time Set], select [Constant] and set the time of [Start] & [End].

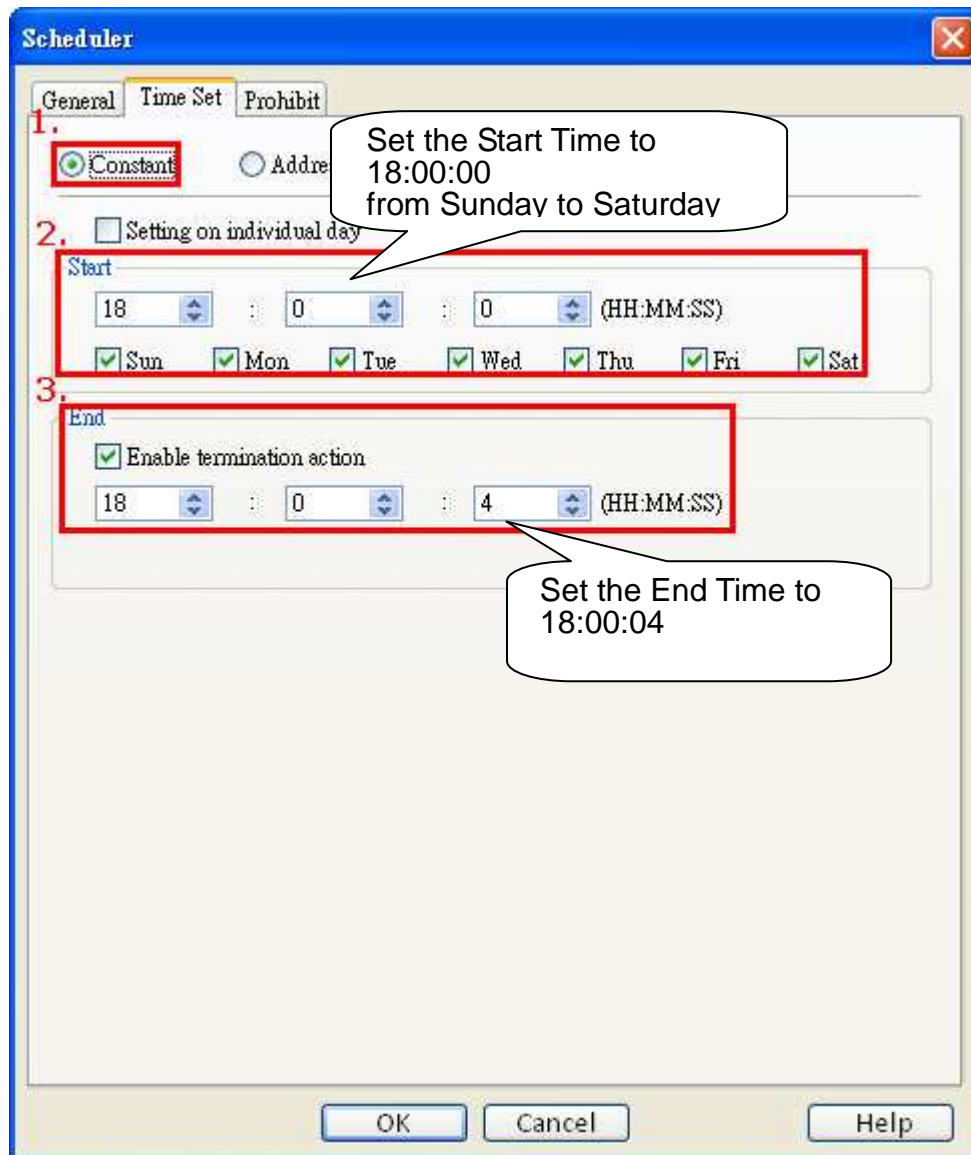


Set another Scheduler as below

- In the **[General]** page, set the **[Action Mode]** and **[Action Address]**.

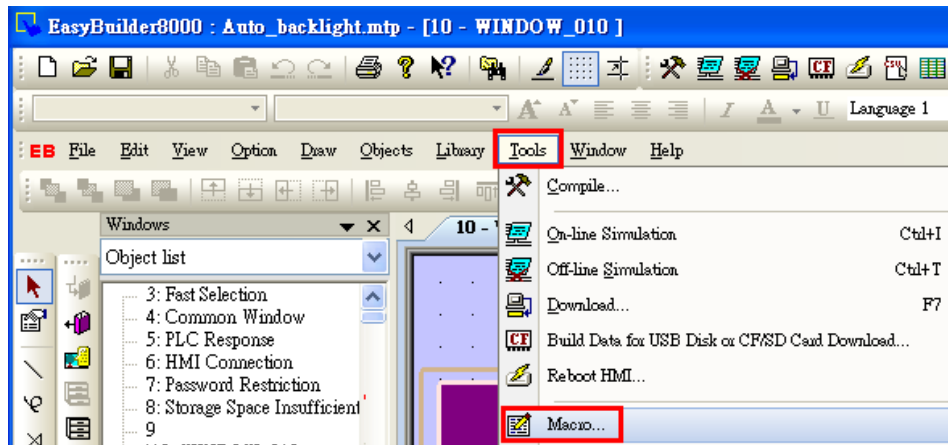


- For [Time Set], select [Constant] and set the time of [Start] & [End].

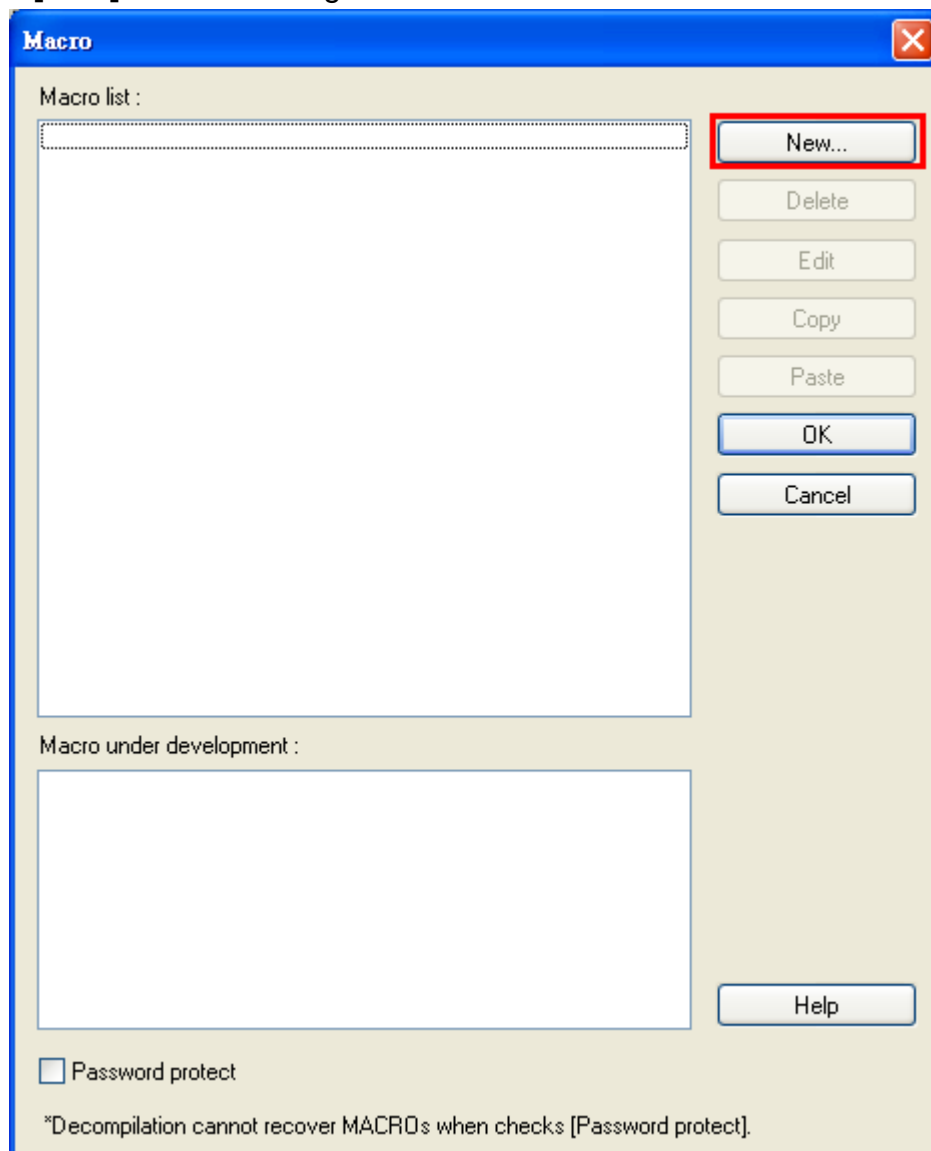


2-2 Setting of the Macro

Go to Tools / Macro.



Click **[New]** to enter editing screen.



Use LB9040 to turn the backlight up/down in Macro.

- In the Macro editing screen, write a Macro for backlight up.

```
macro_command main()  
bool a=1  
short i  
for i=0 to 30 step 1  
SetData(a,"Local HMI", LB, 9040, 1)  
next  
end macro_command
```

- Create another Macro for backlight down.

```
macro_command main()  
bool a=1  
short i  
for i=0 to 30 step 1  
SetData(a,"Local HMI", LB, 9041, 1)  
next  
end macro_command
```

2-3 Setting of the Bit Lamp and Set Bit objects

- Create two Bit Lamp objects set to LB0 and LB1 for displaying the Scheduler object status. When LB0/LB1 is ON, the backlight is activated.

Bit Lamp Object's Properties

General Security Shape Label Profile

Description :

Read address

PLC name : Local HMI

Address : LB 0

☐ Invert signal

Blinking

Mode : None

OK Cancel Help

Bit Lamp Object's Properties

General Security Shape Label Profile

Description :

Read address

PLC name : Local HMI

Address : LB 1

☐ Invert signal

Blinking

Mode : None

OK Cancel Help

- Create two Set Bit objects set to LB0 and LB1, and select **[Set OFF when window opens]** in **[Attribute]**.

Set Bit Object's Properties

General Security Shape Label Profile

1. Description :

Write address

PLC name : Local HMI

Address : LB 0

2. Attribute

Set style : Set OFF when window opens

Macro

☐ Execute macro

OK Cancel Help

Set Bit Object's Properties

General Security Shape Label Profile

1. Description :

Write address

PLC name : Local HMI

Address : LB 1

2. Attribute

Set style : Set OFF when window opens

Macro

☐ Execute macro

OK Cancel Help

3. Addresses

The addresses used in this demo project are listed below. Please change these addresses base on actual usage.

Addresses		Object ID	Detail
Window 10			
Bit	LB-0	BL_0	Will be triggered by Scheduler 1
	LB-1	BL_1	Will be triggered by Scheduler 2
	LB-0	SB_0	Set OFF when window opens
	LB-1	SB_1	Set OFF when window opens
	LW-9017	ND_1	HMI time – second
	LW-9018	ND_2	HMI time – minute
	LW-9019	ND_3	HMI time – hour
	LW-9020	ND_4	HMI time – day
	LW-9021	ND_5	HMI time – month