



CLA-VAL e-Timer

Electronic Autonomous Time Controller

► User Manual





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1 ► INTRODUCTION

1.1 PRECAUTIONS BEFORE STARTING



: Before commencing work on site, connect to our internet address in order to update your e-Timer with the latest version of the software and firmware (chapter 3.4).

1.2 MINIMUM BATTERY VOLTAGE FOR USE



: To enable switching of the solenoid, the e-Timer must have a minimum battery voltage of 7.2 V.

When battery level is low the unit will default to the last programmed condition until the battery is replaced. (cf. chapter 3.10). The batteries are designed to function for 5 years based on 2 solenoid operating cycles per day (open / close x2) at a temperature of 20°C.

1.3 GENERAL DISCLAIMER

In accordance with our policy of continuous development and improvement, CLA-VAL Europe reserves the right to modify or improve these products at any time without prior notice. CLA-VAL Europe assumes no liability or responsibility for any errors or omissions in the content of this document.

1.4 ENVIRONMENTAL PROTECTION

Help to preserve and protect the environment. Recycle used batteries and accessories.

1.5 TYPOGRAPHY

Throughout this manual, the following typographical conventions and symbols have been adopted to help readability:

- a. **"Bold"**: Menu, command, tab and button.
- b. ***BOLD ITALIC***: Important information.
- c. **(1)**: Number of the reference mark on image.
- d. www.cla-val.ch: Internet address.



- e.  : Some tips.



- f.  : Warning!

2 ▶ E-TIMER CHARACTERISTICS

The e-Timer is programmable and supplied with an internal battery. It can drive one bistable solenoid.

e-Timer electronic module (EM)



USB wire



2.1 REPLACED BATTERY

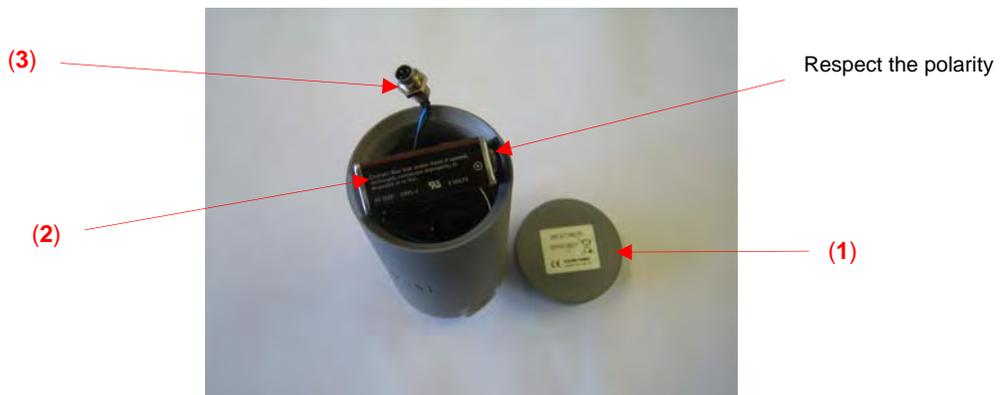
The battery is inside the body of e-Timer (pictures bellow).

To change the battery, open the cover (1) of the e-Timer.

Remove the battery Lithium type 9 VDC (2) and replace by a news, respect the polarity.

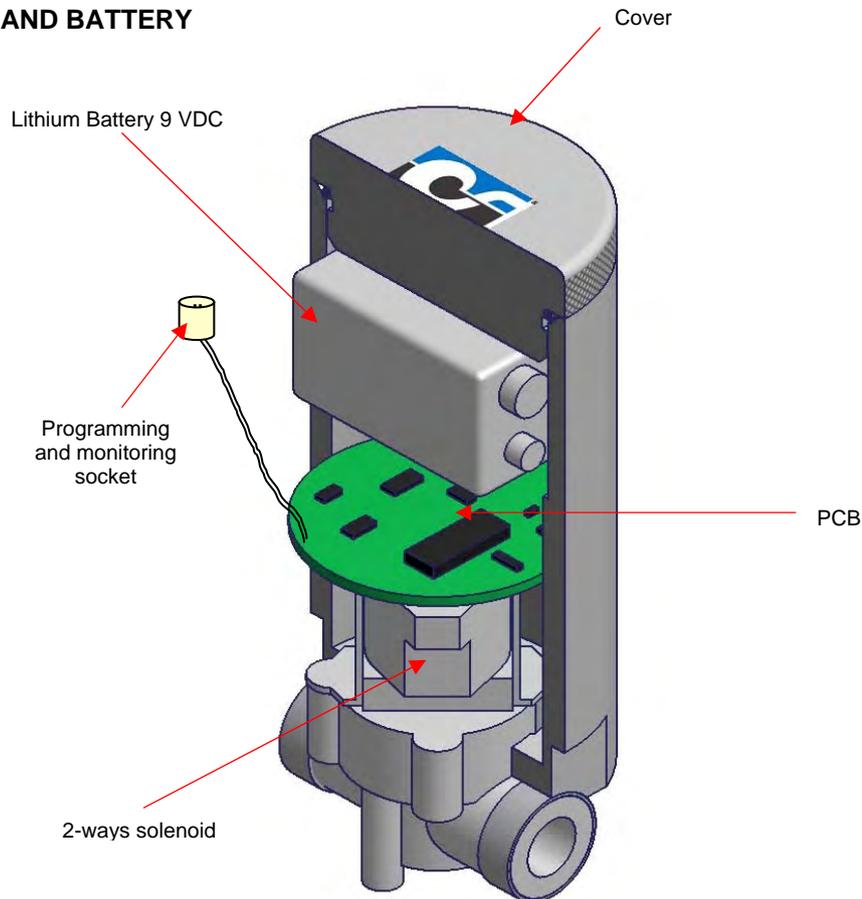
Close the cover of e-Timer, make sure the communication connection (3) is inside the body of e-Timer.

Reset time is necessary to readjust internal timer of e-Timer (cf. chapter 3.14).



3 ► HOW TO USE THE E-TIMER

3.1 SOCKET AND BATTERY



3.2 E-TIMER TECHNICAL DATA

	Electrical Specifications
Electrical Power:	Lithium Battery type 9 VDC (Life time ~ 5 years for two actions/day at temperature 20°C)
Output:	1x 2-ways bistable solenoid 6 VDC
	Other Specifications
Rules:	<ul style="list-style-type: none"> Up to 8 rules (for 4 opening / closing per day) Programming on a base of Time & Calendar
Operating Pressure:	0.2 bar to 10 bar
Temperature range:	-10°C to +80°C
Protection / Media:	IP68 / Drinking water
Interface:	USB plug & Play / NT / 2000 / XP / Vista / Win 7
	Default mode
Troubleshooting:	Output status modification without programmed rule changes
Control battery:	Output default values apply at 7V

3.3 INSTALLATION INSTRUCTIONS

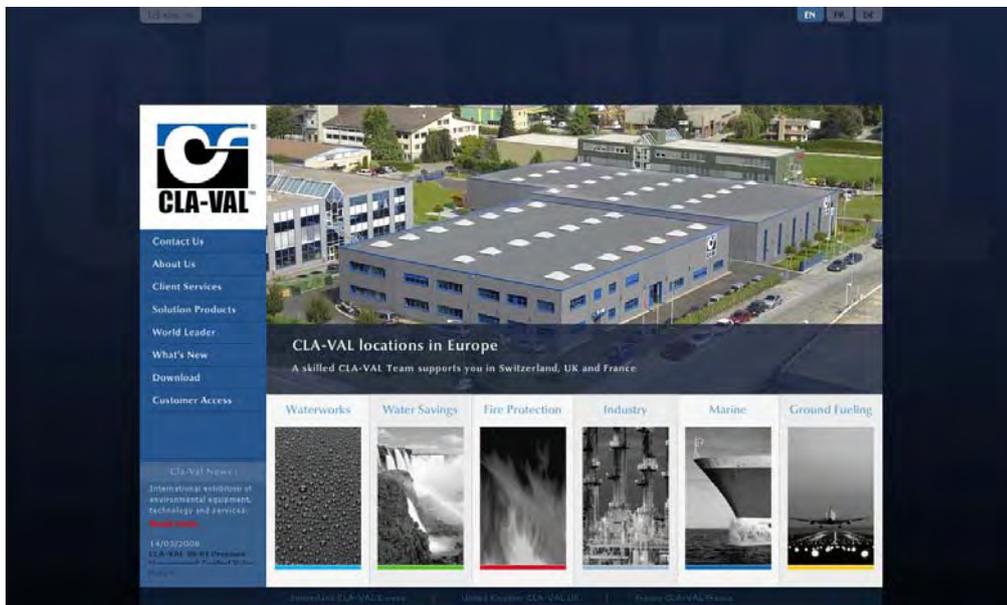
- 1- All installation, adjustment and maintenance should be carried out by a competent electrician.
- 2- Do not exceed the maximum ratings given in the specifications and printed on the label.
- 3- The electrical connections should be made as described in the user's manual.
- 4- Before any maintenance operation the main power should be turned off.



: Do not attempt to open the product as this will invalidate the warranty!

3.4 SOFTWARE / FIRMWARE UPDATE

For Software updates please refer to our web site www.cla-val.ch.



Select "**Download**" and "**e-Line**". You will find all the latest Software (PC) & Firmware (internal software) updates. Just click on the link to download automatically.

All the software is Multilanguage, only the install Software is in English.



3.5 FIRMWARE UPDATE (INTERNAL SOFTWARE)



: Before the Firmware update, save your program on your PC.

- 1- Connect the USB wire to the USB connection of your PC.
- 2- Connect the e-Timer to the USB wire.
- 3- Select "**Read Parameters**" in order to read e-Timer settings and record output parameters.
- 4- Select "**Firmware update**" in "**Parameters**".
- 5- Open the corresponding file ".hex".
- 6- Select "**Read Parameters**" in order to check that the Firmware is updated.

3.6 INSTALLATION DRIVER USB

When you connect the e-Timer cable for the first time, your PC will detect it and request a driver.



Windows 1

- a. Select "**Cancel**".
- b. Install the software "Multi-USB driver setup" on your PC (you can download this software on internet www.cla-val.ch).
- c. When you see this message below, select "**Continue Anyway**".



Windows 3

Installation of the driver USB is now finished.



Windows 5

3.7 UPDATE DRIVER USB OR INSTALL ON ANOTHER PORT

To update your USB driver, please follow procedure below. Install the software «Multi-USB Driver Setup» downloads on our web site www.cla-val.ch.

Connect your cable USB to your PC.

- a. Select: "Install from a list or specific location".



Windows 1

- b. Browse to file: C:\Program Files\CLA-VAL\Multi-USB Driver Setup.



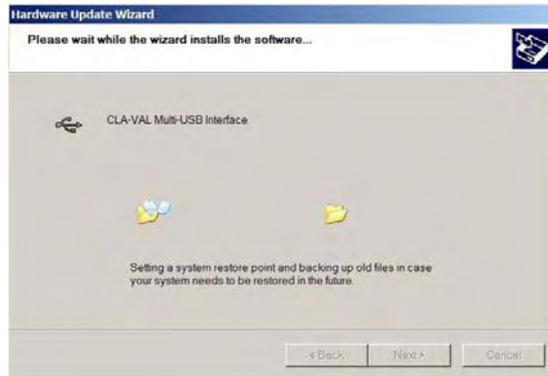
Windows 2

- c. Microsoft validation press "Continue Anyway".



Windows 3

d. Installation.



Windows 4

e. Installation completed.



Windows 5

Visit our web site www.cla-val.ch frequently in order to download freely the latest update and news.

3.8 CONFIGURATION MODE

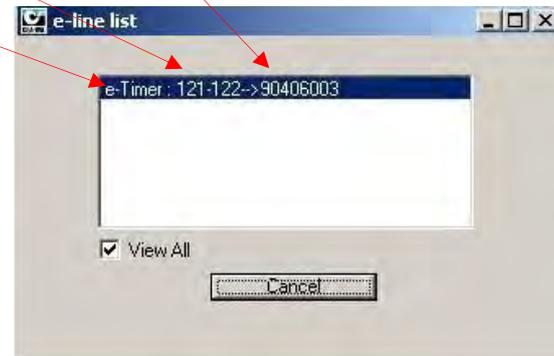
To launch e-Timer Software when not connected to your PC, the e-Line list (which allows the multi connection of e-Line products) is empty (see picture below), click "**Cancel**".



GEN001

If you are connected to one or more e-Timer's or another e-Line product, click on "**View All**" then select the e-Timer you would like to communicate with from the list (see picture below) then click once on left mouse button.

The name of product, Firmware version and serial number are displayed.



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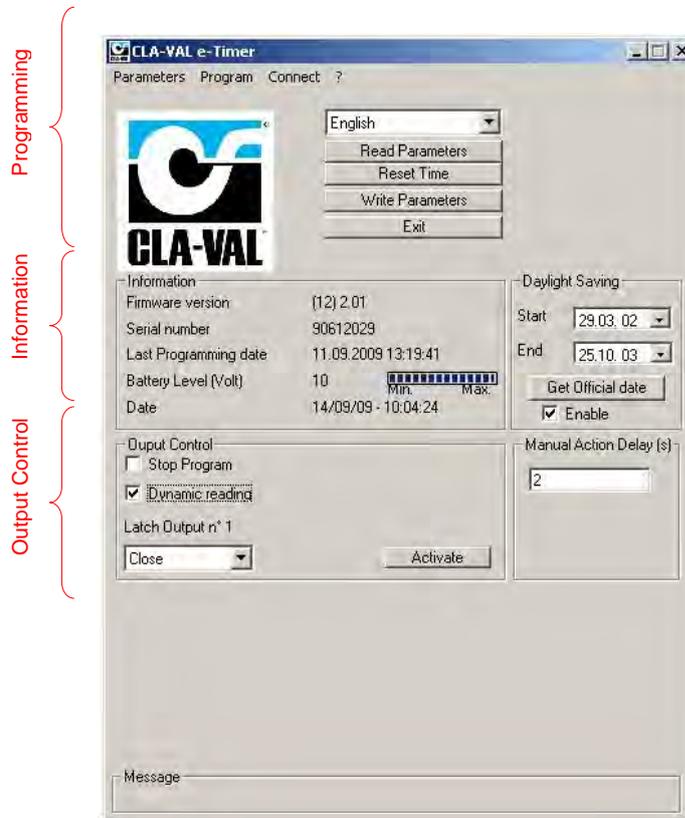
If your e-Line product isn't updated with the "Multi connection" version, the e-Line list stays empty. Click on "**View All**", the e-Line product appears with name "**Generic e-Line**" (see picture below), then click once on left mouse button on this line to communicate with the product.

For the name and serial number of this product to appear, a Firmware update is necessary (see chapter 3.5).



GEN002

3.9 ASSISTANCE MODE



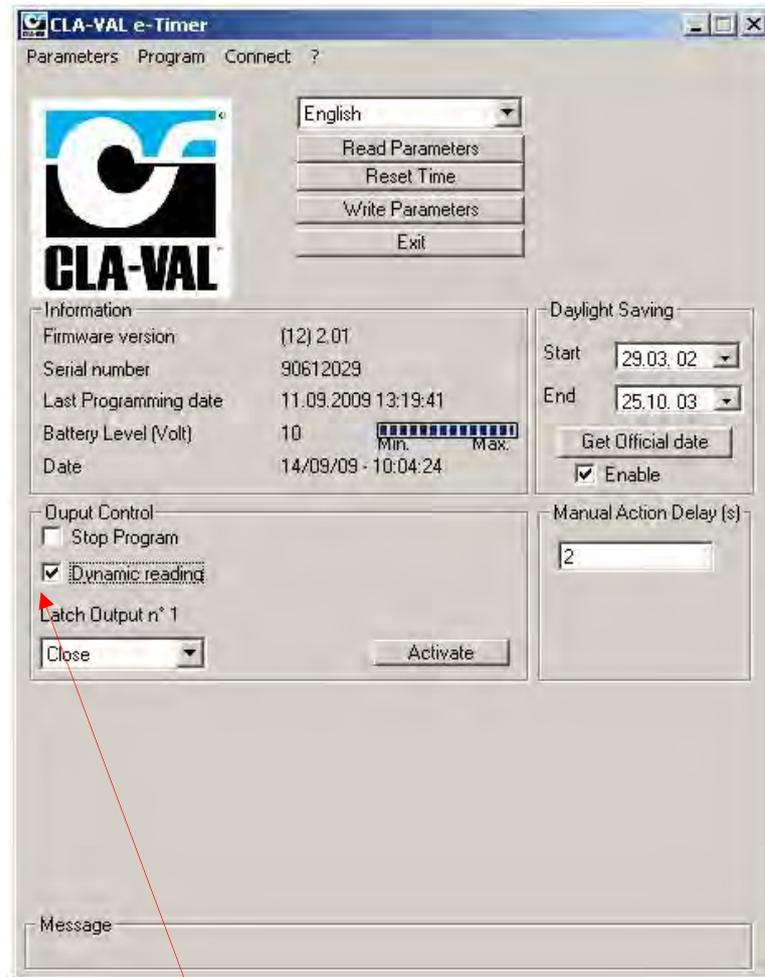
LIN038UE-01

- ▶ Output Control:
 - 1x latch output.



: a- You can override the output value by clicking on "**Activate**". Don't forget to first disable the "**Dynamic reading**".

3.9.1 "DYNAMIC READING" MODE



LIN038UE-01

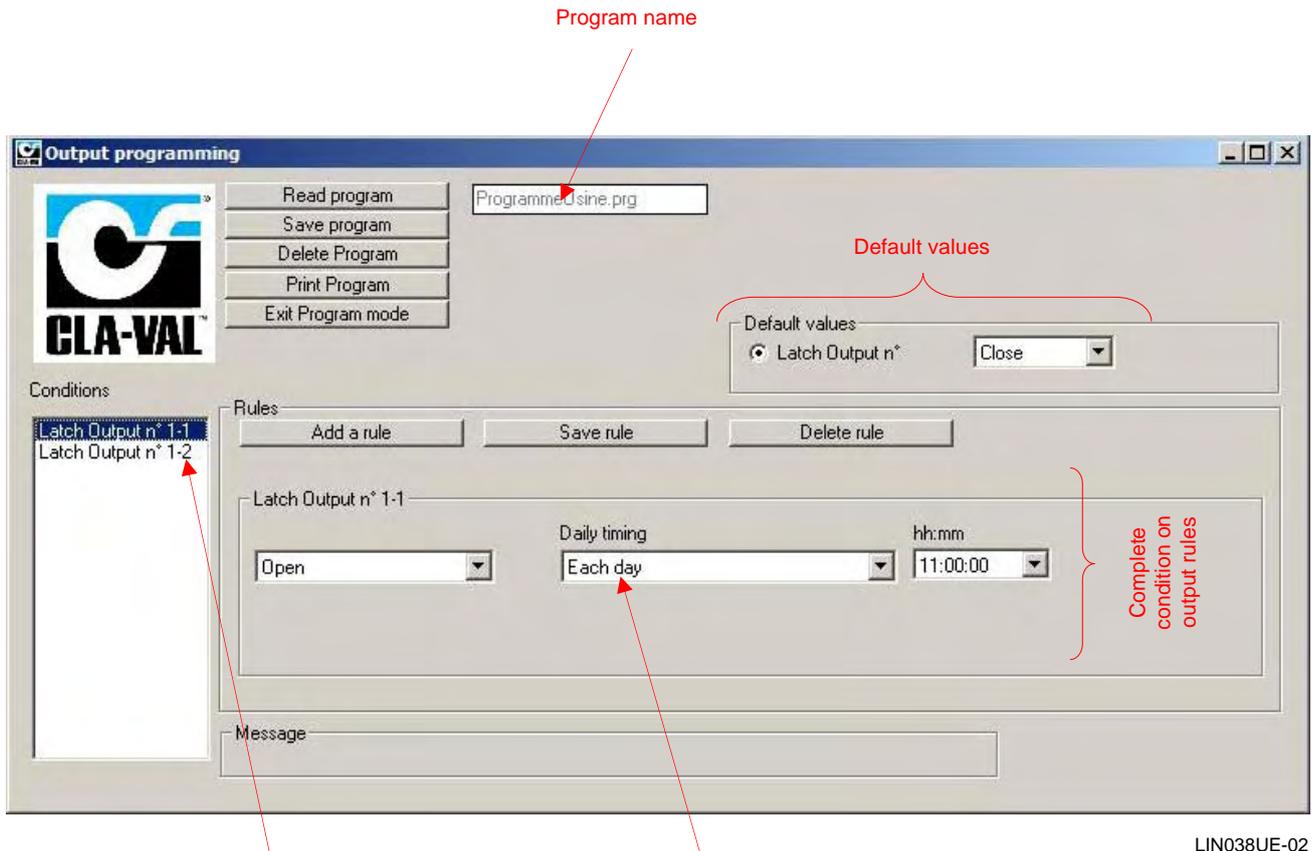
"Dynamic reading" mode activation



: a- Dynamic reading: the output values are read continuously. You can check the position of your valve.

b- If you select "Stop Program", the program's running is frozen until you click it again.

3.10 CONDITIONS PROGRAMMING



Programming conditions files

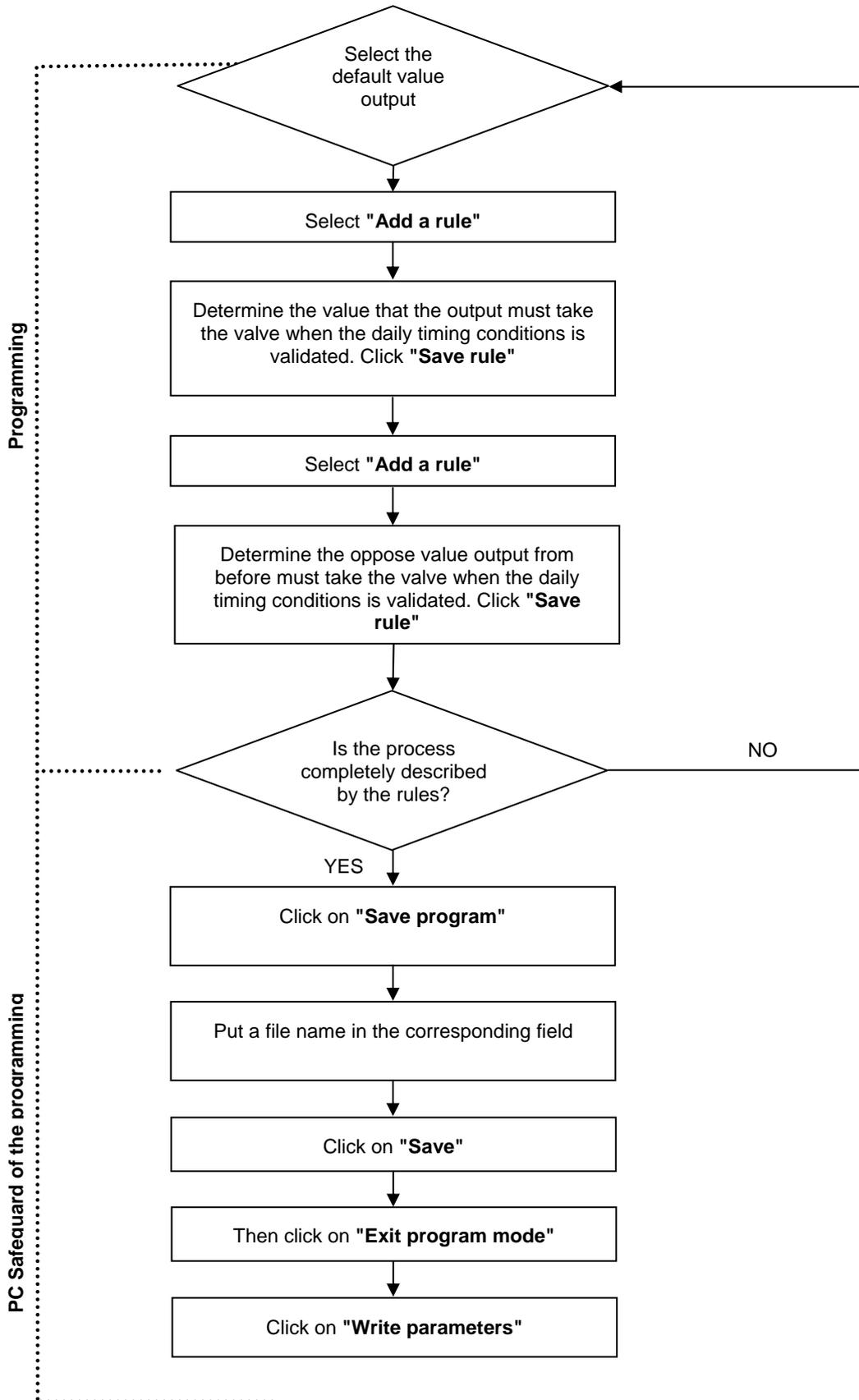
Choose the daily timing



a- The default value from the last condition will be applied when the USB cable is unplugged or when the battery level is too low. If the low level is reached, then the default value will be held.

b- A condition is a rule that you define from day / hours and minute to output.

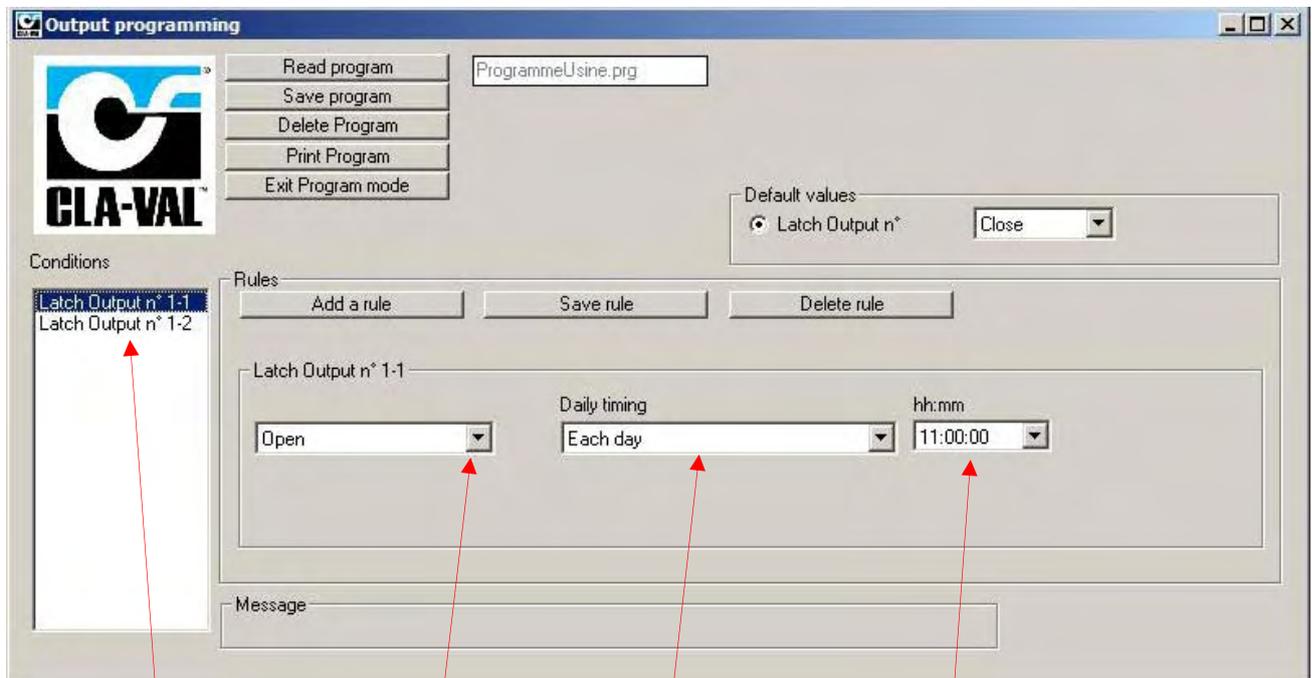
c- To activate a condition, the day / hour and the minutes selected must be validated.



3.11 EXAMPLES OF USES

3.11.1 PROGRAMMING

- 1- Connect the USB wire to the USB connection of your PC.
- 2- Connect the e-Timer to the USB wire.
- 3- Select "**Read Parameters**" to read e-Timer settings and record output parameters.
- 4- Select "**Programming**" in order to program outputs and inputs.
- 5- Select your program from the list **OR** enter your program according to the diagram in paragraph 3.10.



LIN038UE-02

Conditions list for the corresponding output

Choose the output value

Programming day

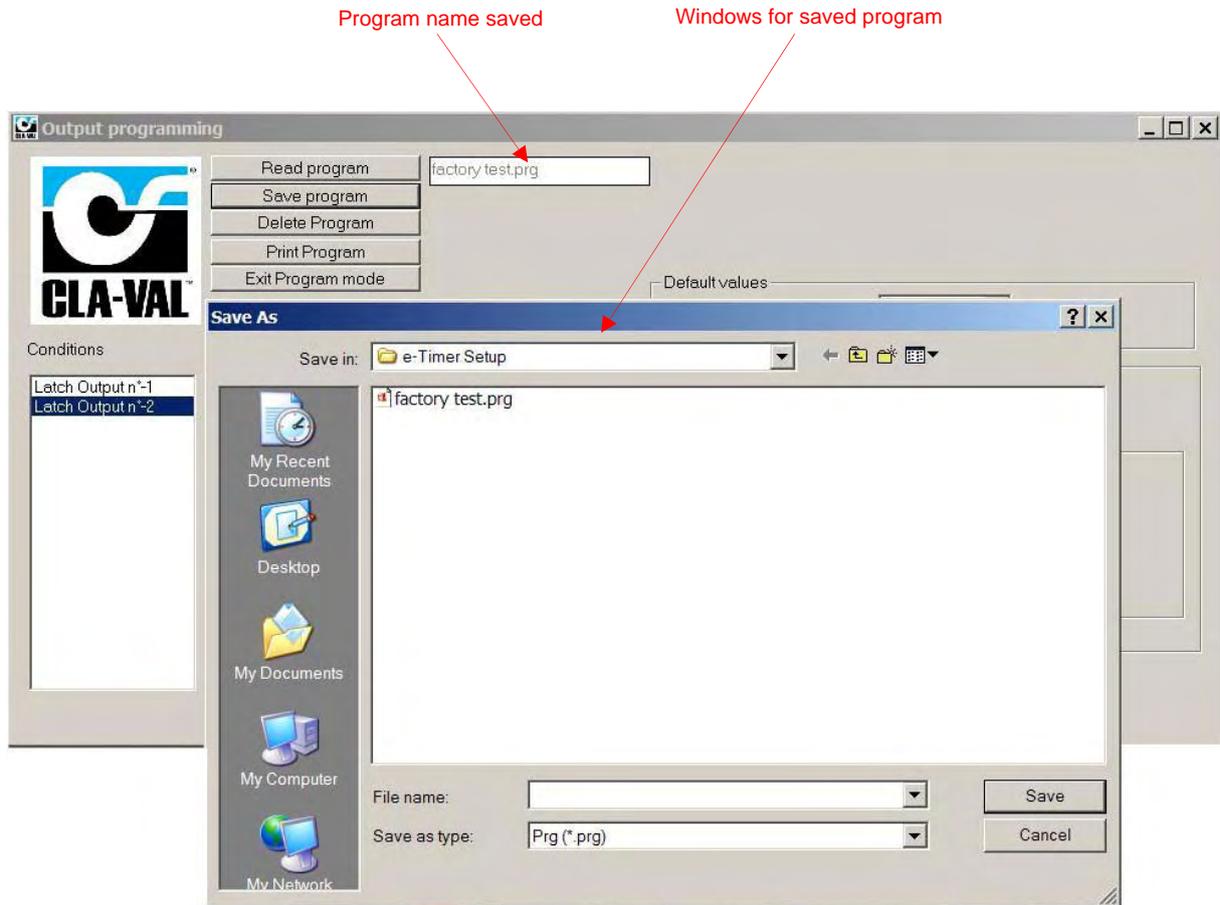
Start time

Select "**Save rule**" as soon as the input and output rule programming is finished.

Choose an output and select "**Add a rule**" if you want to do other conditions, (don't forget to select "**Save rule**" after each modification).

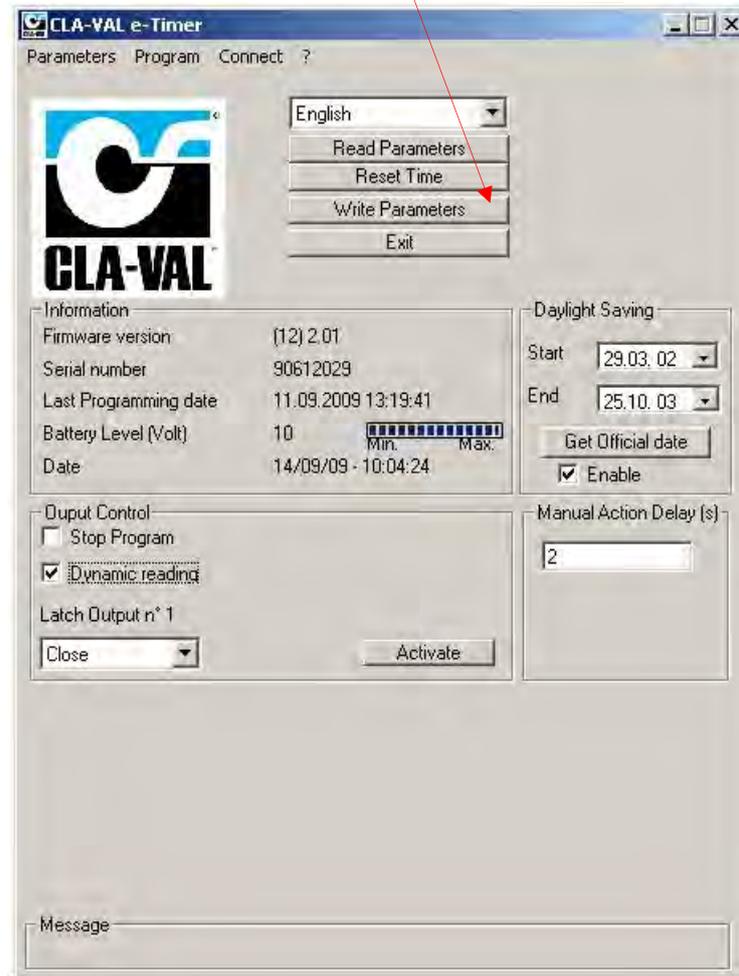
- 6- As soon as all the conditions are created, select "**Save program**" and a name for your program, to save your

7- Select "Exit Program mode".



LIN038UE-03

8- Select "Write Parameters" in order to upload e-Timer settings.



LIN038UE-01

3.12 SPECIAL MONITORING FEATURES

3.12.1 STOP PROGRAMS

When you are in dynamic reading you cannot enter figures into the output control dialog box because they are overwritten by the reading.

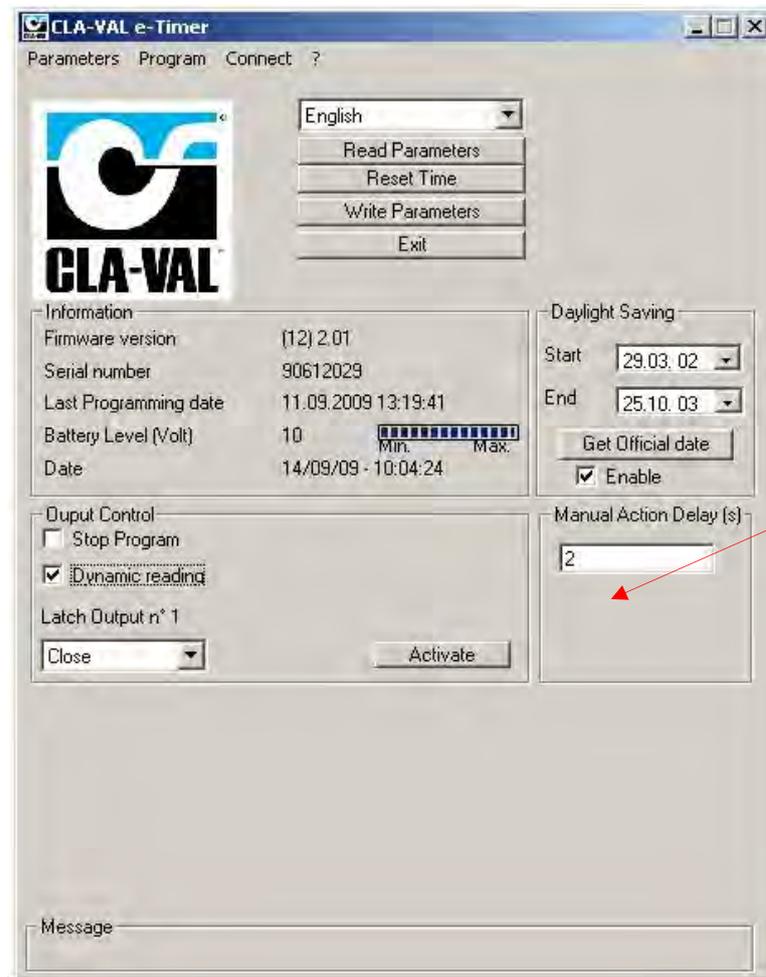
To apply specific values on the output, deselect "**Dynamic reading**" and select "**Stop Program**", then enter figures into the corresponding fields and click "**Activate**".

To restart the program, click "**Activate**" it again.

3.13 FUNCTION PROGRAM "MANUAL ACTION DELAY"

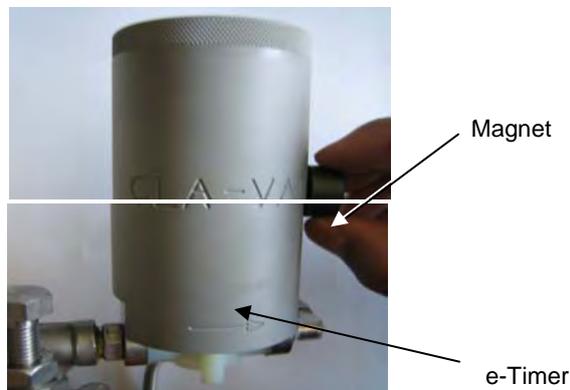
The function 'Manual Action Delay' allows a delayed action of output when you activate the e-Timer manually with a magnet.

The output will be controlled by removal of the magnet and the output will return to the initial position after the time delay is programmed.



LIN038UE-01

The position of magnet for activates the function manual action delay is show below.



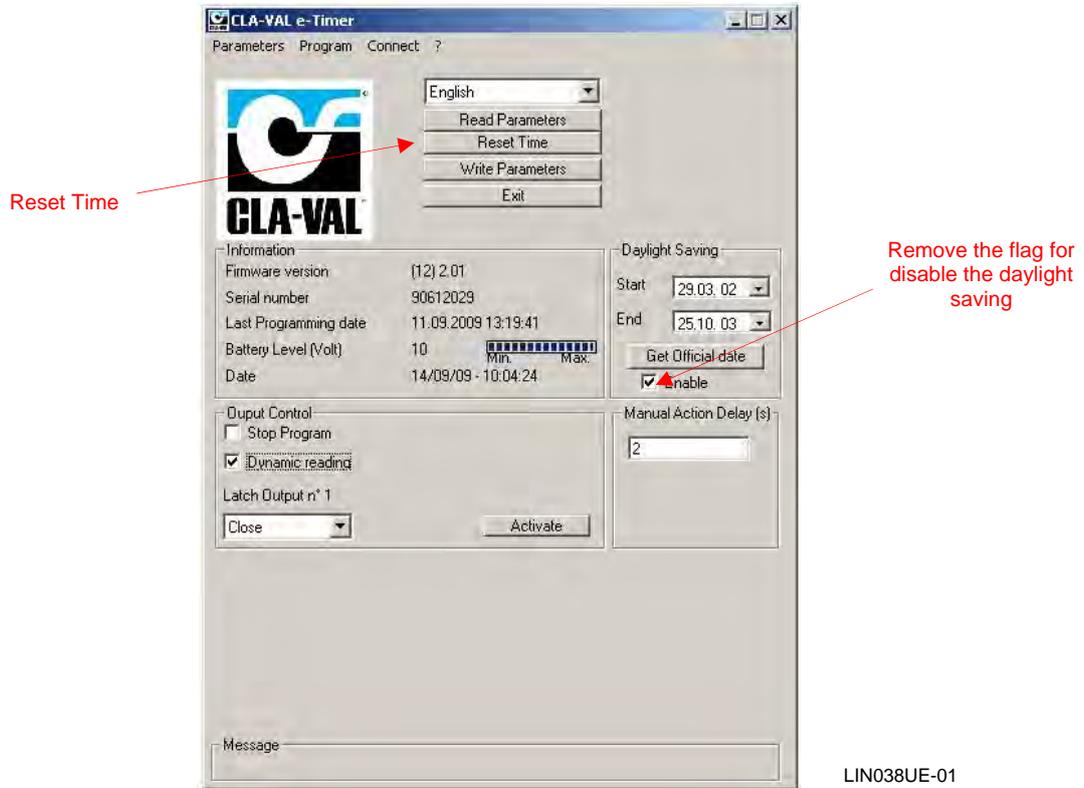
3.14 FUNCTION RESET TIME

If you click on "**Reset Time**", you readjusted internal timer of e-Timer corresponding to the time programmed into your PC without losing the program or parameter.

It's necessary to set the time when it's your first connection on the e-Timer or when you change the battery, in order to send the GMT time into the e-Timer.

The parameter GMT time is read automatically into the PC when you reset the e-Timer.

To disable option "Daylight Saving" click on "Enable" and set your parameter with click on "Set Time".



4 ► TECHNICAL INFORMATION

4.1 TROUBLESHOOTING

Problem	Check
► The Software is not working	Do you have full access rights?
<ul style="list-style-type: none"> ► No PC connection ► e-Timer missing 	<ul style="list-style-type: none"> • Check if the USB driver is working • Check if you have power supply (battery) • Disconnect the cable and then connect it again

If any other problems occur:

Please contact the technical support on our website: www.cla-val.ch.

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