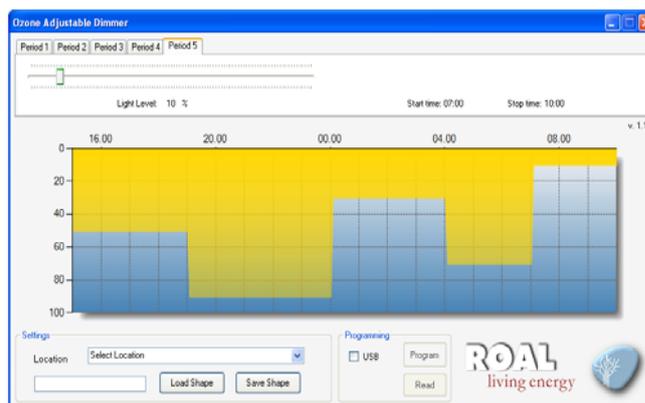# Adjustable dimmer User Manual

- **Software installation**
- **Operative instructions**

Introduction

The high grade of intelligence and flexibility behind OZONE led driver and the "Living Energy" philosophy undertaken by ROAL, permitted us to develop the most innovative and "environmentally friendly" constant current LED driver.

The aim of our work is energy saving. OZONE and its "Adjustable dimmer" feature are the result.

The "Adjustable dimmer" function permits a fast and easy custom outdoor lighting management, focused on large areas lighting applications, like parking lots, shopping centers and urban spaces, allowing companies or public organizations to optimize their costs taking care of the environment.

The "OZONE adjustable Dimmer" PC software supplied by ROAL permits to plan up to five (5) dimming levels for a custom night-light profile, worldwide time zones synchronized. By a USB connection, the customized light profile shape can be transferred in the OZONE Programming Tool (see AN3_Ozone setting) and then installed in the OZONE LED driver memory to be executed.

The self-updating OZONE's embedded firmware determines the night real time without an internal real time clock. This means no battery inside, therefore no field maintenance.

Just turning the lighting fixture ON/OFF, the custom light profile shape will be self-synchronized to the real time zone, without any clock setting in the installation area.

1 Minimum PC Requirements and License Agreement

1.1 Operating System: Windows XP SP3 / Windows Vista / Windows 7
Microsoft.NET Framework 4 Client Profile (x86 and x64)

1.2 The "OZONE Adjustable Dimmer" PC software is property of ROAL Electronics S.p.a. and it is managed and distributed only by ROAL.

- The "OZONE Adjustable Dimmer" PC Sw can be installed in any number of computers.
- The "OZONE Adjustable Dimmer" program file can not be modified in any way.
- The "OZONE Adjustable Dimmer" can be distributed or sold exclusively by ROAL Electronics S.p.a.

The "OZONE Adjustable Dimmer" PC Sw and related documentation are provided without any kind of warranty. This SW does not warrant that its functions or documentation will meet your requirements or that the Sw operation will be error-free or complete, or that defects in the Sw or documentation will be corrected.

Under any circumstances, including negligence, the "OZONE Adjustable Dimmer" PC Sw and related documentation shall not be liable for any lost revenue or profits or any incidental, indirect, special, or consequential damages that result from the use or inability to use the Sw or related documentation.

ROAL Electronics reserves all the rights to change or modify the "OZONE Adjustable Dimmer" PC Sw and related documentation without notification.

Contact ROAL Sales Engineering Department to get the latest SW revision.

2 Software installation procedure

2.1 Unzip "OZONE Setup Files.zip" in your dedicated PC folder, two subfolders will be generated "Ozone Adjustable Dimmer" and "usb Driver".

2.2 Enter the "Ozone Adjustable Dimmer" folder and launch the "Setup" file.

It is required to install the "Microsoft .NET Framework 4 Client Profile (x86 e x64)"in your PC system. If it is already installed in you computer, the procedure will automatically continue.
If not, the installation procedure will directly download it from the Microsoft website (it could take some minutes and requires the system restart).

2.3 Once the Microsoft .NET Framework 4 is installed, or skipped if already present, Click "install" in the following window.

2.4 The "Ozone Adjustable dimmer" software will be automatically launched at the end of the installation procedure.
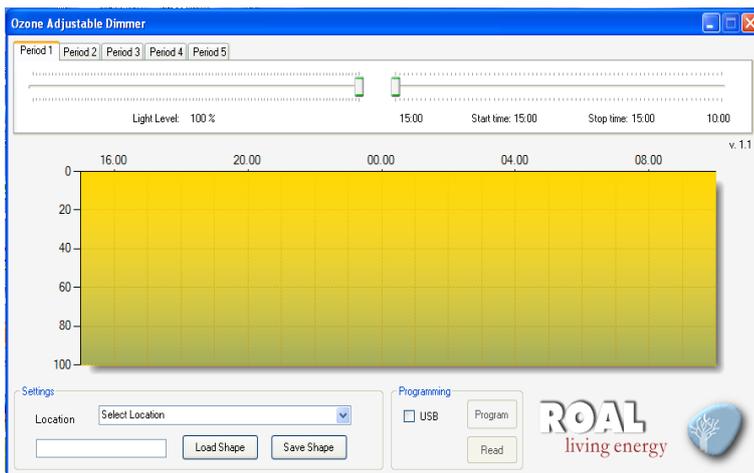
A new dedicated desktop icon and Start menu folder will be created for direct SW execution.

3 USB driver and Ozone Programming Tool installation procedure

3.1 Enter the "usb driver" folder (included in the "Ozone Setup Files.zip") and launch "OzoneDriverSetup" file.

3.2 If you have User Account Control enabled (Windows Vista or Windows 7), click "Yes" or "Continue" in the window that will appear on the screen.

3.3 Wait until the installation procedure ends.

3.4 Connect the Ozone Programming Tool to the USB PC port and follow all the instructions to complete the driver setup.

4 Software update

4.1 Uninstall the old SW version.

Go to: Start→Control Panel→Programs and Features→Ozone Adjustable Dimmer→Click "Uninstall/Change" button.

4.2 Install the new SW version, following the procedure from paragraph 2.

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5 OZONE Adjustable dimmer SW setting

The "Ozone Adjustable dimmer" PC software has been designed to work in combination with the "Ozone programming tool" (see AN3_Ozone Setting). A custom night light profile shape can be created using the computer SW. After that, by a USB connection, it will be stored in the Ozone programming tool to program the Ozone LED driver memory without using a PC, directly in the final product field.

Once the custom night light profile shape is stored in the Ozone programming tool, it can be reloaded by using the PC SW or saved in a dedicate computer folder.

The procedure below will allow you an easy and fast product usage.

5.1 Start the PC SW clicking on the desktop icon or go to:
Start→Programs→Real Electronics Spa→Ozone tools→Ozone Adjustable Dimmer.

The following Main Sw window will appear:

Up to 5 programmable independent light-level periods

Light level dimming slider

Period duration setting slider

Light dimming profile window

Settings section

5.2 Creating a new custom night light profile
Starting from "Period 1" up to "Period 5", adjust all light levels and period durations by using the two dedicated sliders (see the example below).

Period 1:

Light level=50%
Duration= Start time 15:00 – Stop time 19:00
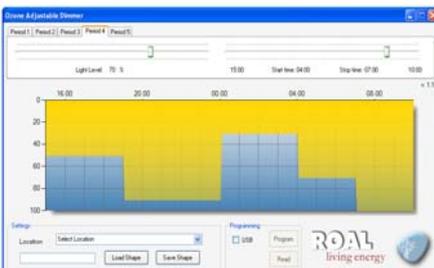

Period 2:

Light level=90%
Duration= Start time 19:00 – Stop time 24:00

Period 3:

Light level=30%
Duration= Start time 24:00 – Stop time 04:00

Period 4:

Light level=70%
Duration= Start time 04:00 – Stop time 07:00

Period 5:

Light level=10%
Duration= Start time 07:00 – Stop time 10:00

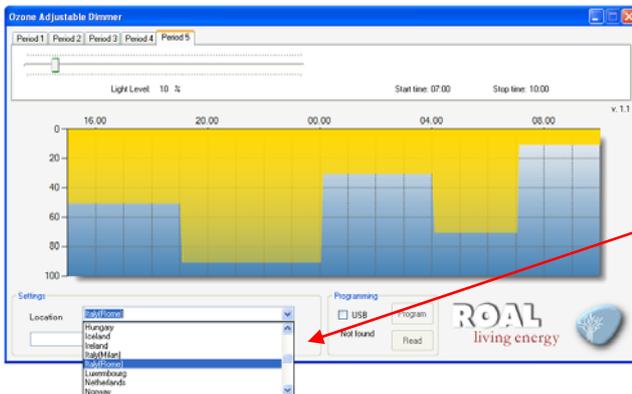**5.3** Geographic location selection and file saving

Open the Location dropdown menu in the Settings section and select the geographic installation area.

Now it is possible to save (as .oad files) the custom light profile shape in a computer folder by clicking the "Save Shape" button.
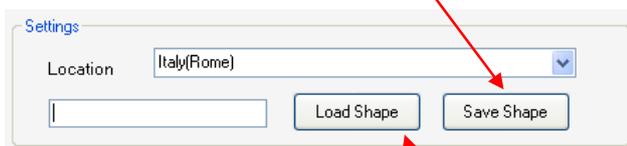
It is possible to load .oad files from the computer folder at any time by simply clicking the "Load Shape" button.

NOTES: The "Ozone Adjustable Dimmer" PC Sw permits to program a maximum 19 hours light profile shape. If the lamp remains powered for a time longer than 19 hours, during the additional hours (over 19 hours) the light level will remain at the "Period 5" level.

The custom light profile will be synchronized with the local (installation place) time after two (2) nights cycles.

Night durations below three (3) hours, will not be considered for the local time calculation.

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5.4 Programming sequence

Once the custom lighting profile shape has been defined, it can be transferred into the "Ozone Programming Tool" in order to be loaded in the OZONE LED Driver memory.

- Create your custom lighting profile shape or load an existing .oad file.
- Connect the Ozone Programming Tool to the PC by a USB cable.

- Tick the USB connection in the Programming SW section (1) to establish the communication between the PC and OPT. The word "connected" will appear in the Programming section (2).

(1)

(2)
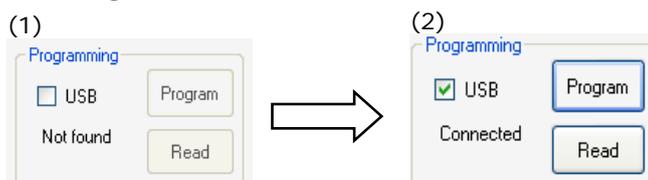
If the device is not connected to the PC USB port or if a problem was encountered during the connection, an error message will appear.

- Click the "Program" button (2) to transfer the lighting profile shape into the Ozone Programming Tool.
  A success feedback message will appear.

For a double check click the "Read" button (2) to display the light profile shape loaded in the Ozone Programming tool.

- Disconnect the OPT from the computer USB port and follow the AN3_Ozone Setting instruction to install your custom light profile shape in the Ozone LED driver.