# Ripley PhotoClock II Programmer

**Getting Started**

Rev: 0
Rev Date: 9/1/14


The PhotoClock® II is a GPS time synchronized (time clock) photo- control (light sensing) with 7 day programmability. Combined with the available RIP-USB cable (available separately) the device can be field programmable. Note that, if a PhotoClock is received with either the proper default settings or with your customized program, it will not be necessary to re-program the PhotoClock. This document serves as a functionality and programming guide. (For purposes in this manual, "program" is used interchangeably with "schedule".)

### Setup

Install the Ripley PhotoClock II Programmers software on a suitable PC, it can be downloaded from [www.ripleylightingcontrols.com\PhotoClock2](www.ripleylightingcontrols.com\PhotoClock2) .

Once the programming software is installed, connect the RIP-USB cable to an available USB port. A brief delay is required while the drivers are loaded for the programming interface cable. A restart could be required to complete interface installation.

### Overview

*The PhotoClock features a powerful customizable schedule, capable of switching at four time based switch points plus dusk and dawn events.*

The PhotoClock® II is customized by exception, meaning that the default program will be executed unless an exception is set.

## Communication with the PhotoClock® II

- Connect a PhotoClock® II via the RIP-USB interface cable and launch the Ripley PhotoClock II Programmer software.  You will be prompted upon application startup to connect the interface.
- Click Continue, The software should automatically find the proper COM port for the RIP-USB interface cable.  *If the software does not automatically locate proper com port a dialog will be prompted as such. Ripley recommends changing USB ports and restarting your computer if the interface cable is not detected.*

    *Note: Programs can be created and stored while in offline mode without a PhotoClock attached. Stored programs can then be written to a PhotoClock at a later time.*
- Once connection is established with the interface cable you will be prompted to continue.
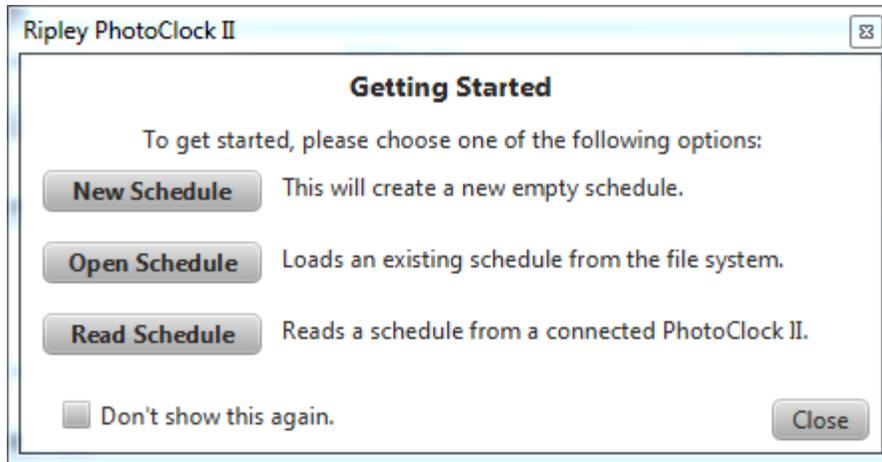
**New Schedule –**This option will cause the application to open with a blank schedule. Basic setup will be required for operation.

**Open Schedule-** This option to load a previously created or template schedule. Visit http://www.ripleylightingcontrols.com/PhotoClock2 for schedule templates

**Read Schedule-** This option will establish a connection with the PhotoClock® II connected and load the application with the current schedules stored in the device. The existing schedules can then be altered, saved as a program and reloaded into the device.

## Basic Configuration (REQUIRED)

Basic configuration will cover essential settings required for operation.
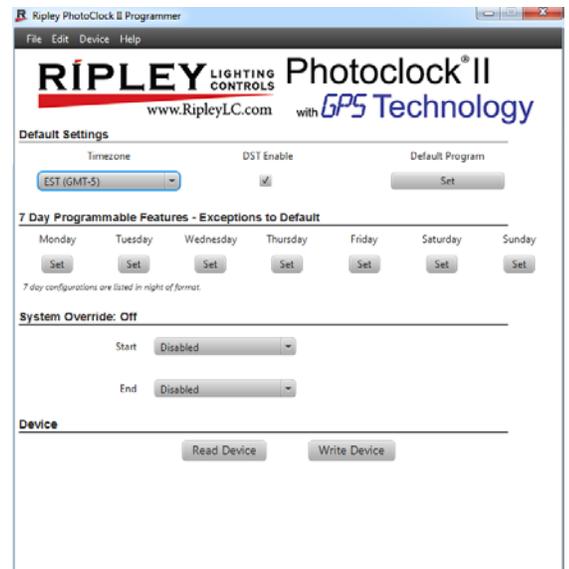


**Timezone:**

The timezone is a required setting for time based events to function accurately. Uncheck DST Enable if you do not want to follow Daylight Saving Time.

**Default Schedule**

The PhotoClock II is customized by exception; the default program is followed if no exceptions are set. This program must be configured.

## Default / 7 day Program Configuration

The PhotoClock II is fully customizable. Once selecting the Default or a Week day Schedule you will be placed into the Schedule setup screen. It is important to note that the schedules are configured as the night of that day. e.g. Monday is considered as Noon Monday to Noon Tuesday. Tuesday runs from noon Tuesday until noon on Wednesday. (Otherwise, Monday night would need to be programmed as Monday night up until midnight and then Tuesday morning until sunrise.)

When using the 7 Day Programmable Features, each day can be set individually.

For convenience, if more than one day is the same, one day can be configured. That day can then be copied to other days. Example: Monday – Friday is set for On at Dusk, Off at midnight, Back On at 5:00 AM, Off at Dawn. Now Return to Main, Set Tuesday, Select Monday per below, then "Copy From" to duplicate Monday's schedule to Tuesday. Repeat this for Wednesday – Friday.



An interactive chart is generated as an aid to assist in the setup of schedules. Dusk and dawn levels are calculated astronomical times. These astronomical times are *only used for representation in this chart*. The PhotoClock's light sensor will turn On and Off according to the actual light levels of that day (which will change with cloud conditions, etc.). These astronomical times are calculated using the coordinates as set on the Edit – Application Settings menu.
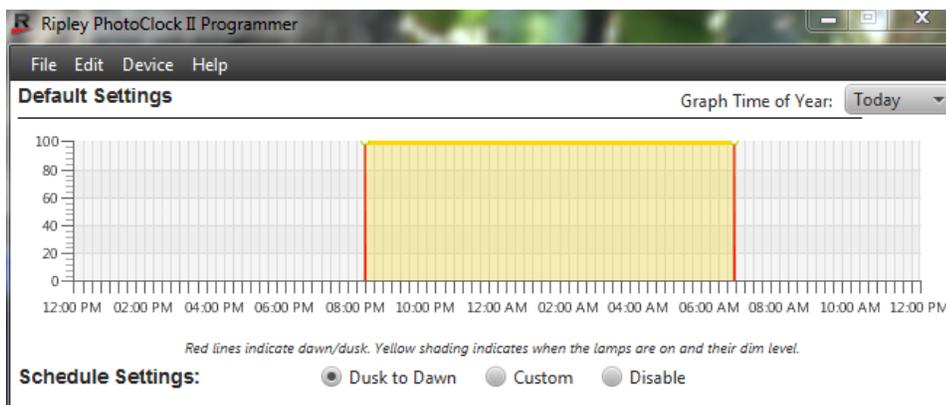
**Schedule Settings**

- **Dusk To Dawn –** The Unit will operate via the built in light sensor at the factory calibrated light levels.
- **Custom-** *See Custom Schedule Programming*
- **Disabled –** The Unit will not switch on (will remain off) regardless of Time or Light level events.

**Custom Schedule Settings**



Custom Schedules can begin and/or end with factory calibrated light level events or time based events.

**Custom Time Events** (Add Custom Event )

For a custom time event, select the "Add Custom Event" tab. This will cause the following pop-up.



Select the appropriate time and mode to be inserted into the schedule. (Non-dimmable PhotoClocks have only On (100%-full bright) and Off (0%) modes.)  The event will be inserted into the interactive chart. Note: Events will automatically be sorted.  Off events must occur after an On event.

Add up to 4 time events (On and then Off constitutes 2 time events).

Uncheck the "Would you like the lights to turn ON automatically…" if you do not want the light sensor to operate at that time.

Example: If you want the schedule to turn off at 5:00 AM each morning, independent of the light level, then uncheck "Would you like the lights to turn ON automatically at DAWN" and use a time event set to turn off at 5:00 AM as your last event for that day. See illustration below:

The following is an example of ON at DUSK, OFF at Midnight, Back ON at 5:00 AM and OFF at DAWN:



## Writing a Program (Set of Schedules) to a Device (PhotoClock)

After a new program is configured or an existing program is loaded from a file, from the top bar select "Device", then "Write Device". (The PhotoClock to be programmed must be connected via the RIP-USB cable.) The internal LED in the window of the PhotoClock will turn on solid after the program is successfully read and stored by the device.

The PhotoClock is now ready for use.