Fiberoptic Switch Evaluation Kit
Switch Operation Program User's Guide

Photonwares, Inc
https://photonwares.com/

1. **Install the program**
   Click on *setup.exe* for the automatic installation. The default folder is *C:\Agiltron Inc\Switch Operation Program*. You can change it to any place you like, but **DON'T** put it under *C:\Program Files,* since it needs the permission to read and write its config file.

2. **Serial communication port settings**
   The communication cable between the switch board and computer should be a USB port. It is a virtual COM port (VCP, FTDI chips). The VCP driver emulates a standard PC serial port. The PC serial port setting should be 9600 baud rate, 8 data bits, 1 stop bit, no parity bit.

3. **Copy the config file**
   Our company would always provide the config file for the specific type of switch that you have purchased. The name config file should be the same as the type of the switch with extension of PTH. Please copy the config file to the same directory with the application. If you don't have the config file, please contact our company immediately.

4. **Run the program**
   Run the program and the program will open the configuration window shown in Fig. 1. This page establishes a connection between the computer and a specific switch type.

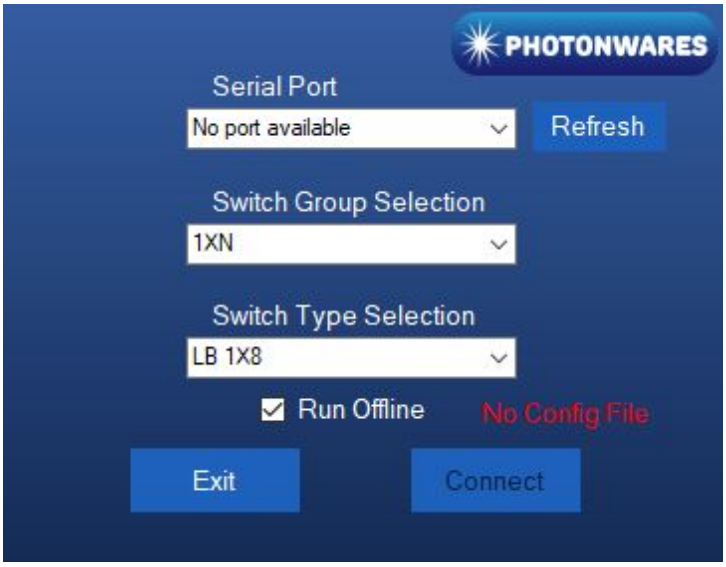

Figure 1. Configuration Window

Selection Communication Port

The program automatically detects all available serial ports. So normally you don't have to check the port number of your device. However, if the number of available serial ports exceeds one, please check in **Manage/Device Manage/Ports (COM & LPT)** for the correct serial port number. The "Refresh" button can be used for detecting available serial ports manually, so you don't have to reopen the program.

Selecting Switch Group

Use the pull down menu to select the specific group of switch, as in Fig. 2.

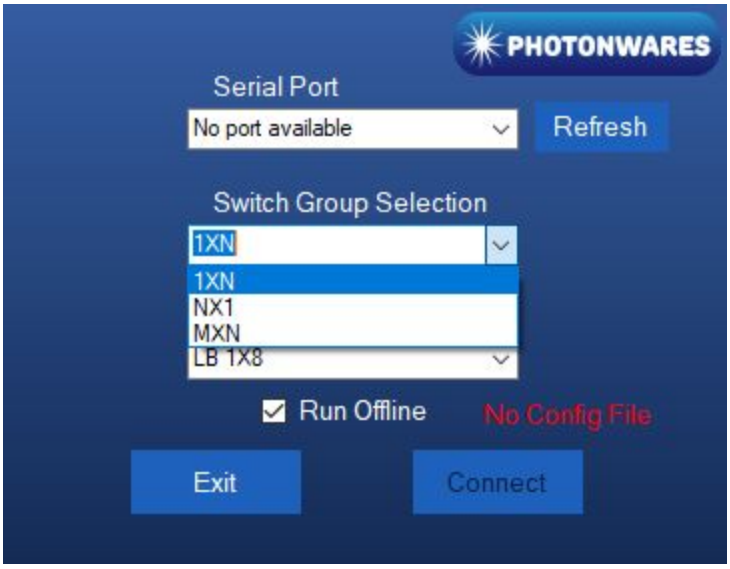

Fig. 2 Switch group selection

Selecting Switch Type

Use the pull down menu to select the specific type of switch to be controlled, as in Fig. 3

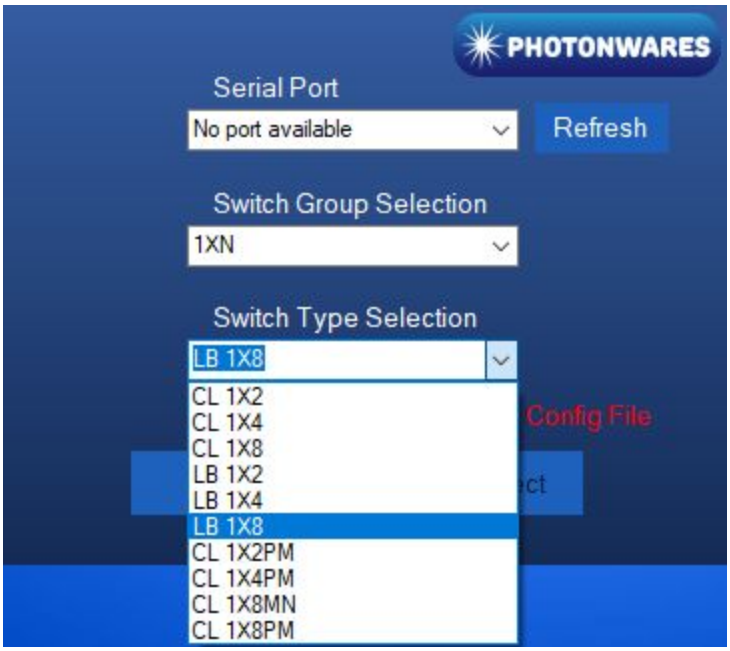

Figure 3. Switch type selection

Here CL designates Photonwares' CrystaLatch™ series switch, LB designates Photonwares' LightBend™ series switch.

Available Switch Type

If you have chosen the correct switch type purchased by your company, the program would be ready for start. Otherwise, it would say “No config file”. If the switch type purchased by your company shows “No config file”, please don’t hesitate to contact us.

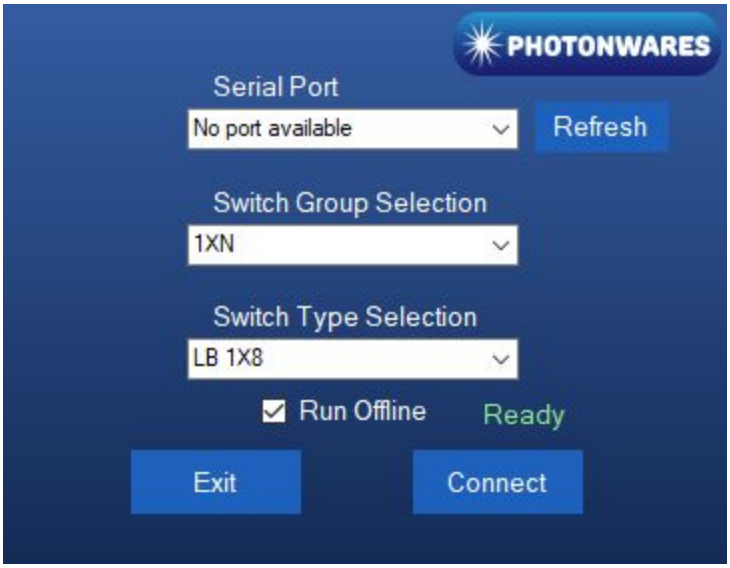

Figure 4. If config file exists, the program would say “Ready”

Connect the Switch

Click the “Connect” button to establish the connection. The program will connect successfully with the board if you have chosen the correct serial port number. If you run into any trouble, please remember to check whether the serial port number is the right one.

Checking the “Run Offline” box option will allow the software to run without establishing an actual connection to the board and switch.

5. **Create and edit a switch testing sequence**

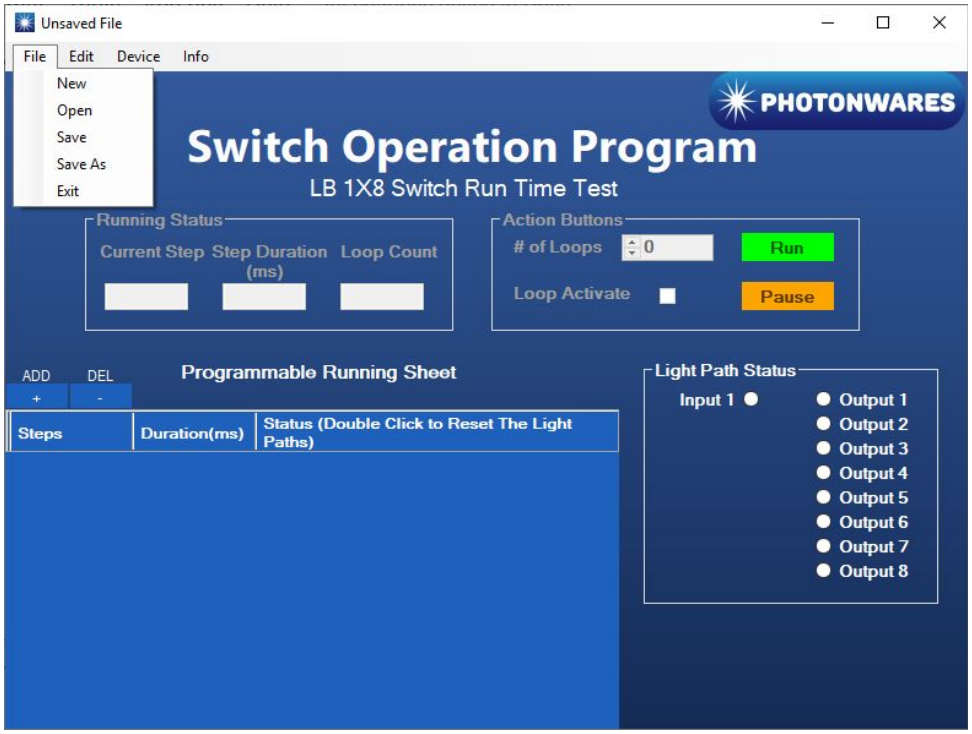

Figure 5. File Menu Operation

File Menu Operation

File menu commands are:

New: Create a new switch operating sequence.

Open: Open an existing switch operating sequence.

Save: Save current switch operating sequence.

Save As: Save current operating sequence as a different file name.

Exit: Exit program.

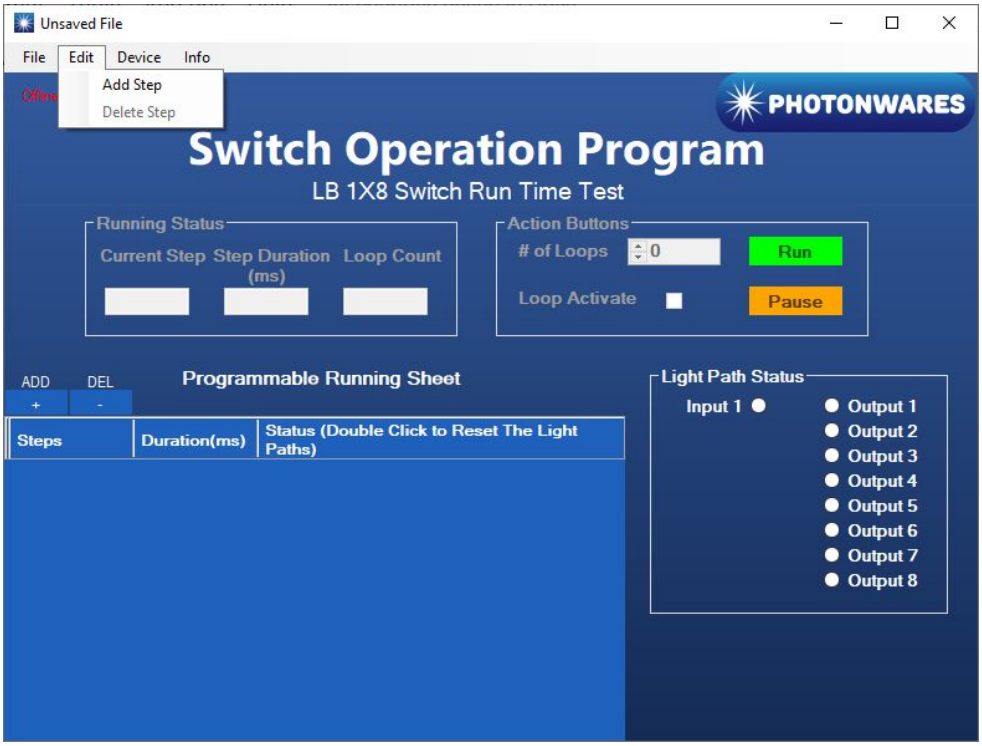

Figure 6. Editing operation sequence

Edit an operation sequence

Add step: Click the “Add Step” button in the menustrip or click the “+(ADD)” button would both add a step to the Programmable Running Sheet.

Delete step: Click the “Delete Step” button in the menustrip or click the “-(DEL)” button would both delete a step in the Programmable Running Sheet.

Edit step: There are two things that you can modify for one step. One is the light path, and the other is the duration for each step. Double click the cell that you want to modify, and the program will allow you to modify the setting.

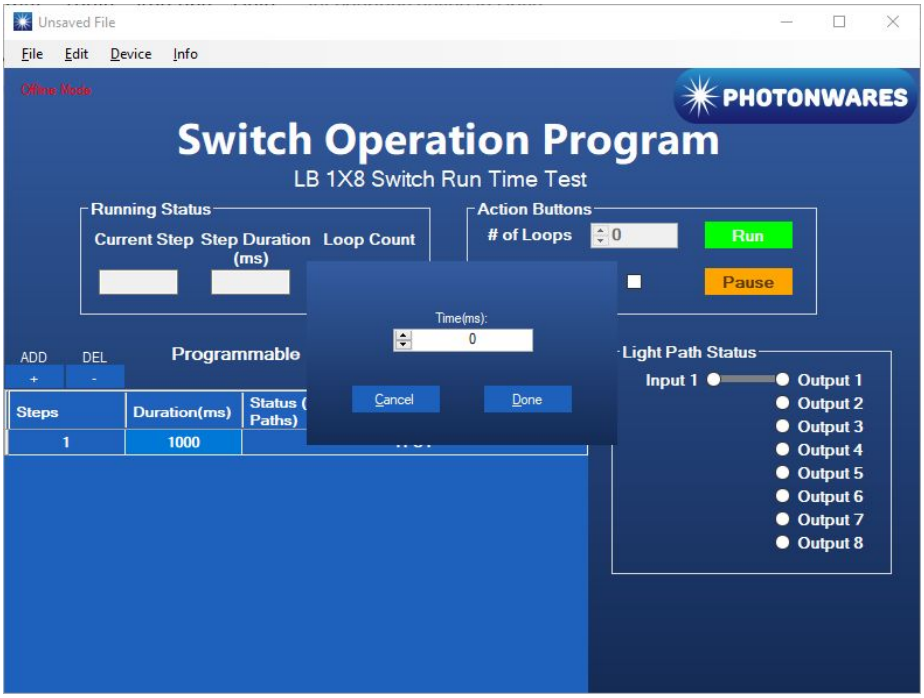

Figure 7. Change step duration

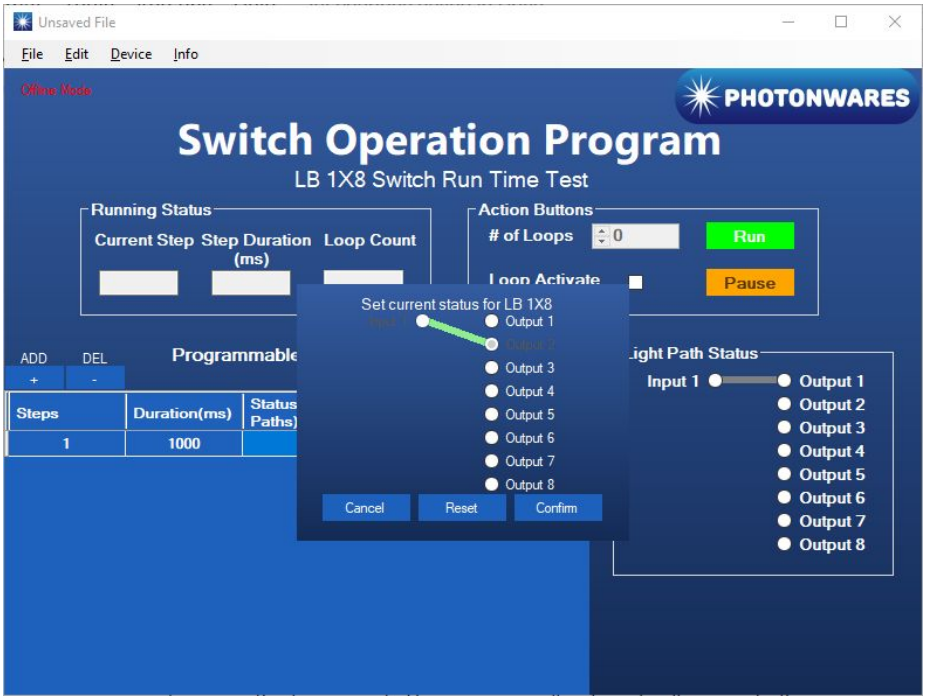

Figure 8. Set light path

6. Looping Operation

Check the Looping Activation option box to loop through the operating sequence a selected number of times. Enter the number of loop cycles or use the adjustor arrows to increase or decrease the loop count. The program will automatically execute the operating sequence the number of times indicated by the loop count.

Figure 9. Looping Operation

7. Running an Operation Sequence

Click on the “RUN” button to start an operating sequence. Once started, the “RUN” button label will change to “STOP”. Click on the “STOP” to abort the operating process.

The current step of a running operating sequence will be highlighted with a yellow background color, as shown in Fig 6.

The number displayed in the “Current Step” block indicates the current sequence step even if the sequence was stopped and corresponds to the yellow highlighted row in the run time sheet. The number displayed on the “Current Loop” block shows the number of cycles the running sequence has completed.

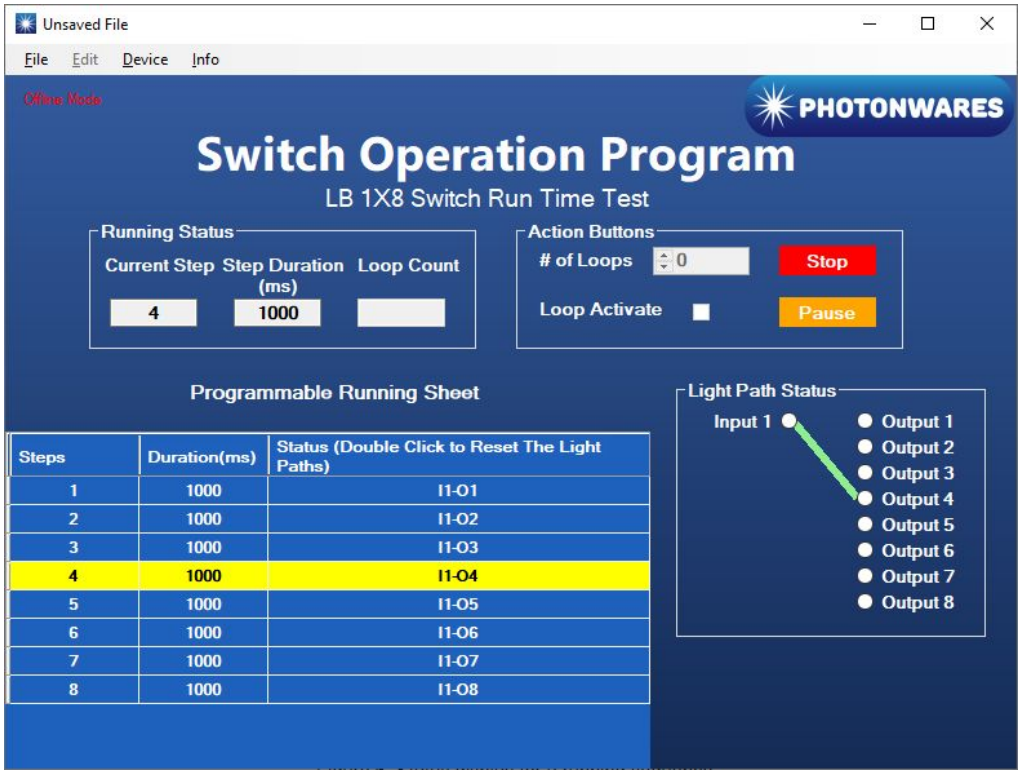

Figure 10. Status display for a running sequence.

8. **Pausing a Operation Sequence**
   Click on “Pause” to pause the current running step of the operating sequence with yellow highlight. Once you pause an operating sequence, the program will step at that step. Click on “Resume” to finish the current step and then continue to run.