

**LIGHTX 3.1 Software  
Basic Operator Manual**



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## Adding a New User

When starting LightX 3.0, a user account must be created before proceeding. As seen in figure 1.0, select *User Manager* → *User*.

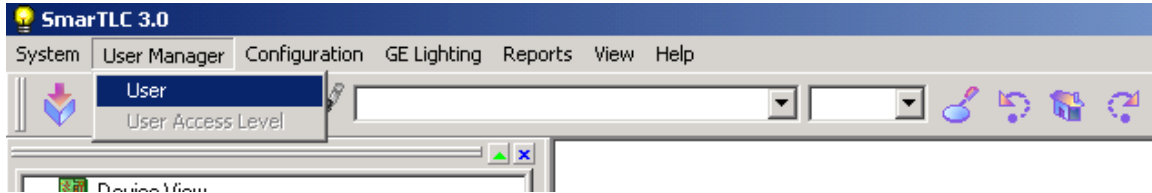


Figure 1.0

Fig

From the User Properties menu select *New*, to create a new user as seen in figure 1.1

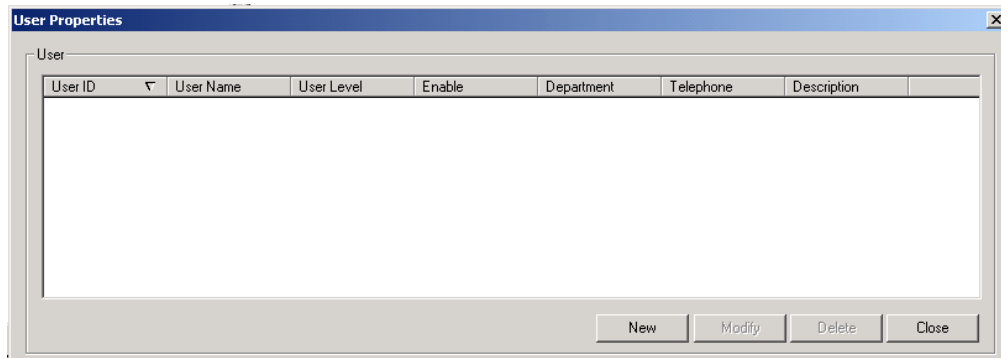


Figure 1.1

User properties dialog seen in figure 1.2, will require to fill out the following fields:

*User ID*: This will be the login name used to login into LightX 3.0.

*Username*: Full user name for administrative purpose.

*Password*: Login password to be used to gain access to LightX 3.0

*Confirm*: Confirms password entered matches as in password dialog box.

*UserLevel*: Administrator has complete access to all functions in LightX 3.0, or up to nine custom levels of access can be assigned to different areas of LightX.

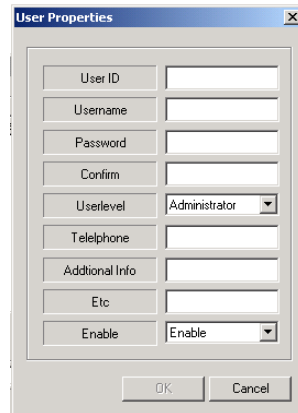


Figure 1.2

To login into the software select System → Login and entered the username and password as entered in figure 1.3.

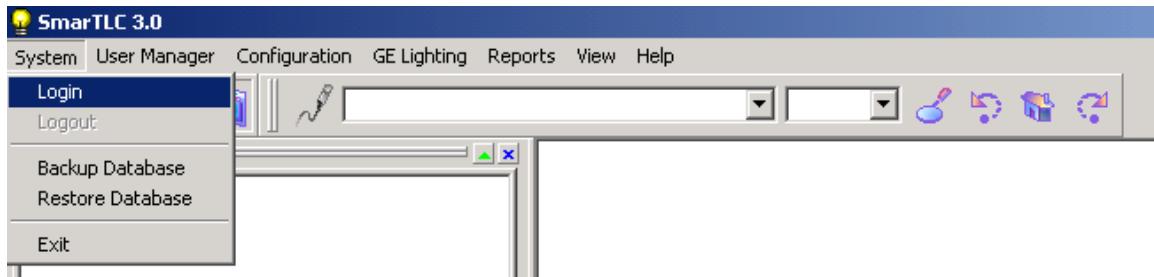
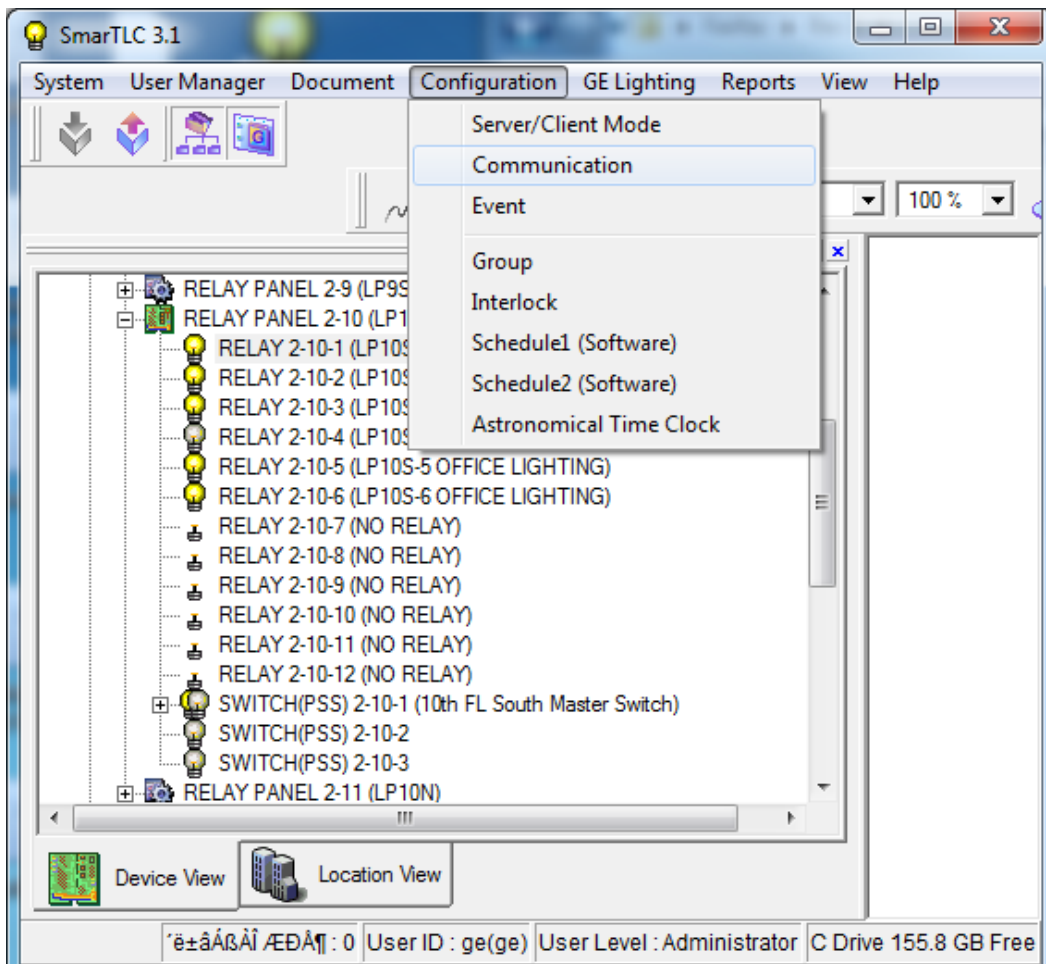


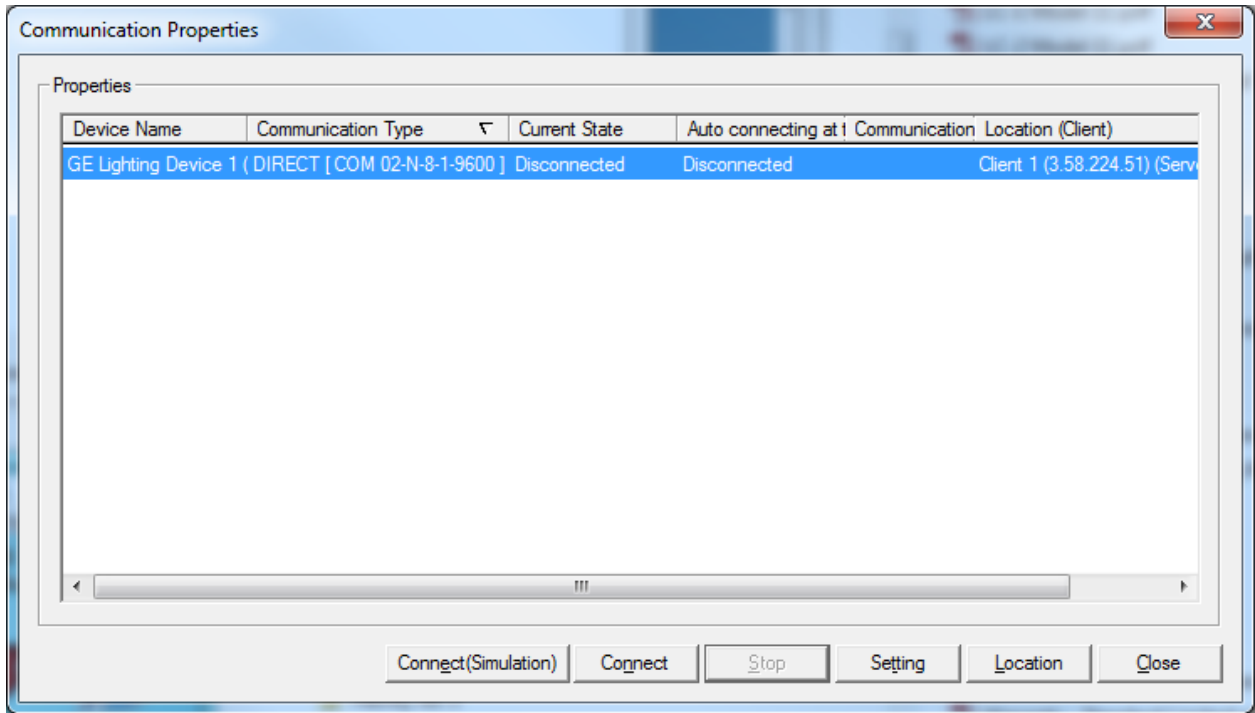
Figure 1.3

## Connecting to the network

From the top Menu select Configuration -> Communication



Highlight the GE Lighting Device and click Connect – the line will change to lite blue color and Communication will show connected.



Relay status screen (page 17) will confirm connection to the panels.

## Creating Lap Schedules

In order to create schedules or modify schedules select GE Lighting and then LAP Schedules as seen in figure 2.0.

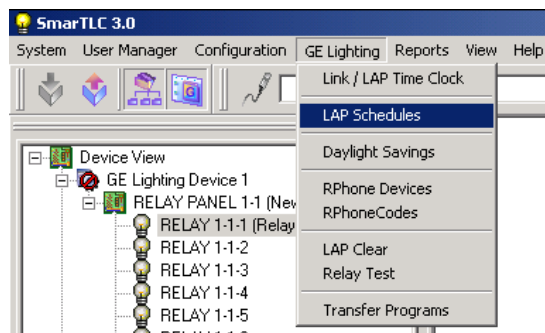


Figure 2.0

Each panel has 12 Local Schedules (LAP) A ~ L that can be used only for relays within that panel and 12 System Schedules (SYS) M~X that are duplicated in all panels in the network.

The system schedules shall be used when relays in multiple panels shall follow same schedule.

**NOTE:** One relay can be associated to a single schedule. Re-assigning the relay to a different schedule will remove it from the first schedule.

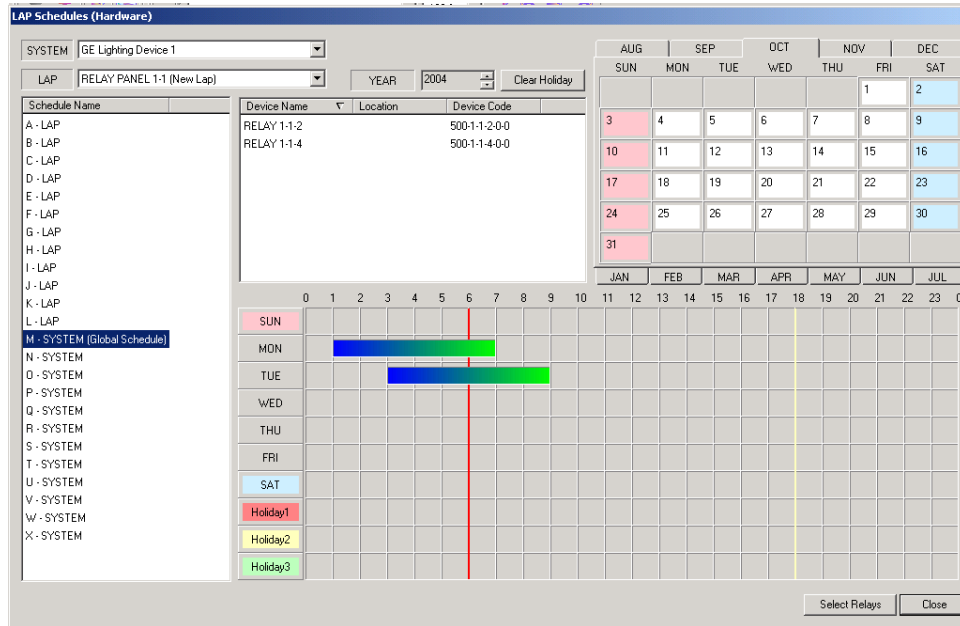


Figure 3.1

Using the slider bar you can select time, or right click on the day as seen in figure 3.2, and select *Properties*. As seen in figure 3.3 up to eight on/off events can be entered for each day.

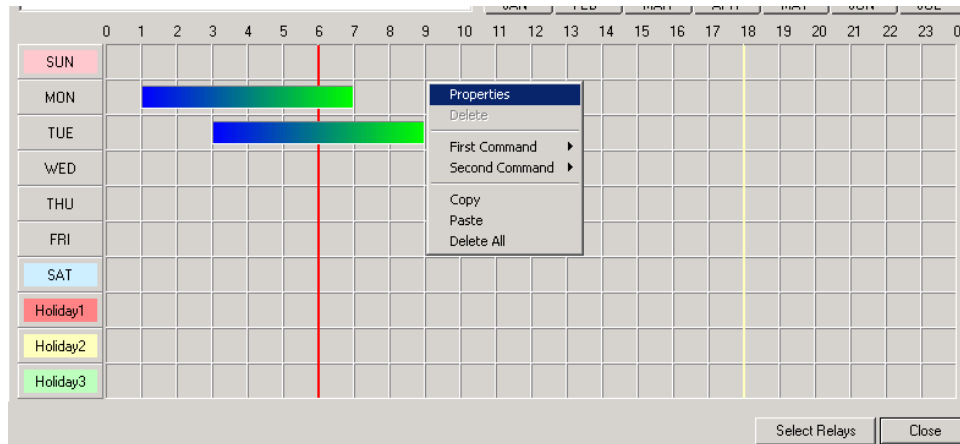


Figure 3.2

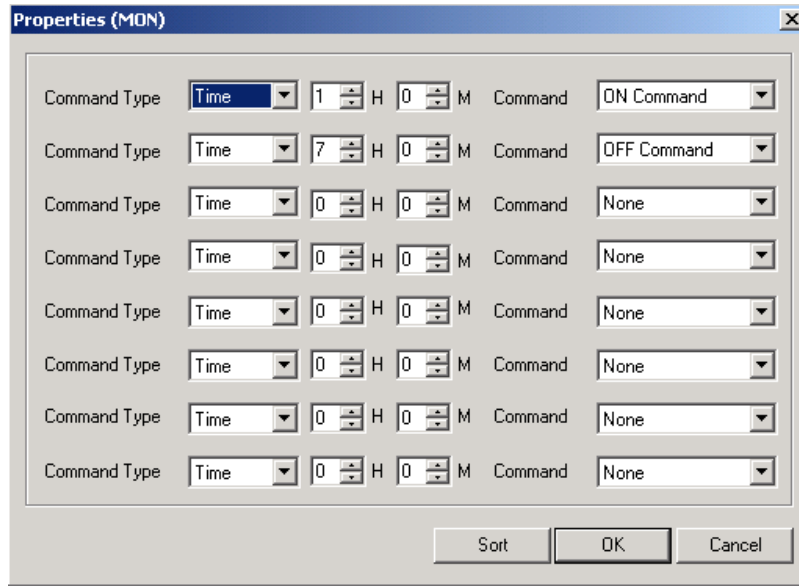


Figure 3.3

By selecting the button *Select Relays* as seen in figure 3.3, figure 3.4 will appear allowing to select (highlight) and move relays to be included into the schedule.

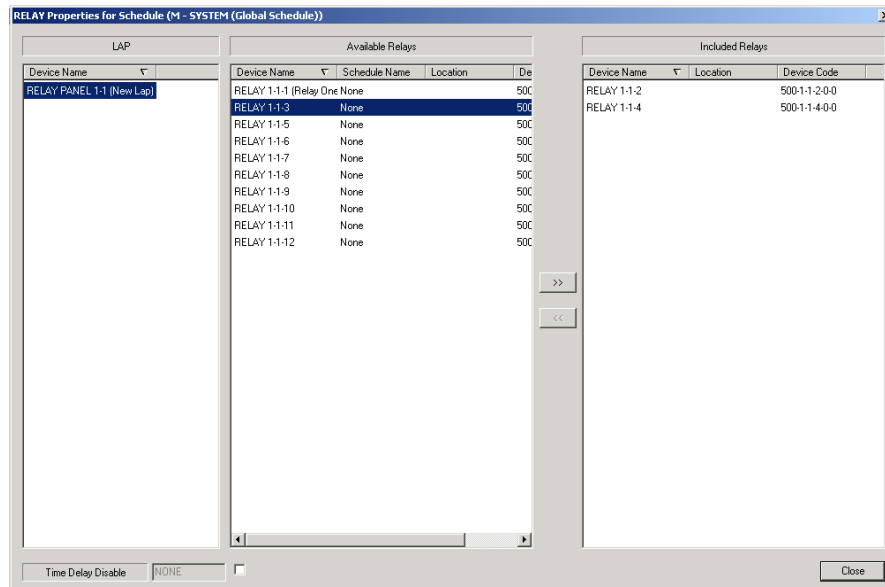


Figure 3.4

To assign the H1 holidays select the month in the Calendar and click the date.

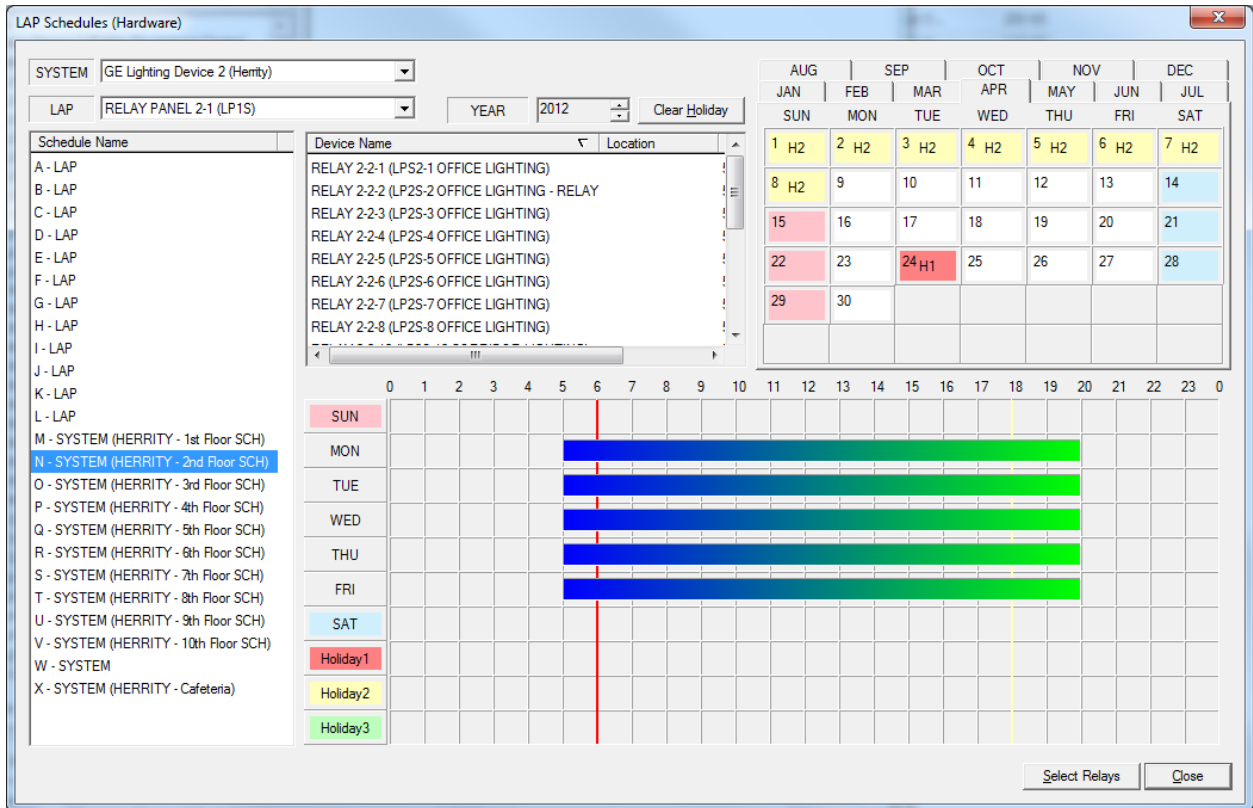


Figure 3.4

Every click on the date will cycle H1(red)->H2 (yellow)->H3(green)-> none(white).

Update the holidays on a yearly basis. Before updating click "Clear Holiday" button.

A holiday will apply to all schedules in the system (A-X).



## DOWNLOADING PROGRAMS

To download any program change select GE Lighting → Transfer Programs as seen in figure 4.0.

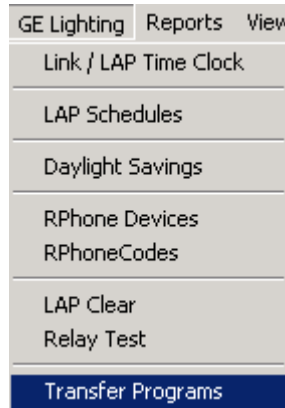


Figure 4.0

Use top option – Downloading Programs when making modifications. Select the second option Downloading All Programs when a control card was replaced or this is a new panel.

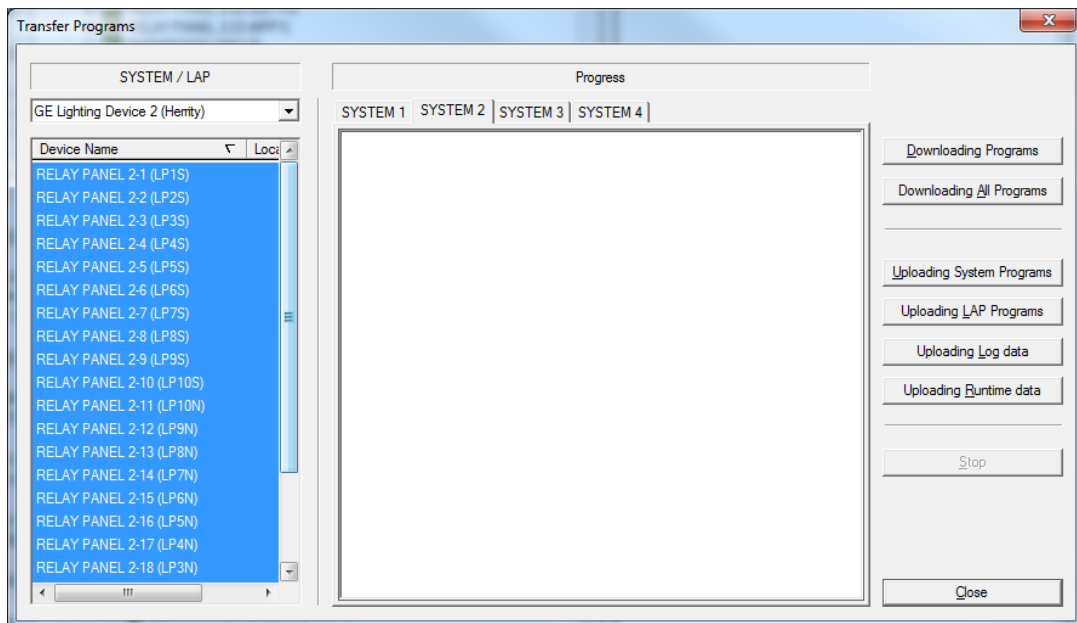


Figure 4.1

## Programmable Switch Input Programming

From the device view select the programmable switch and right click and select Properties as seen in figure 5.0.

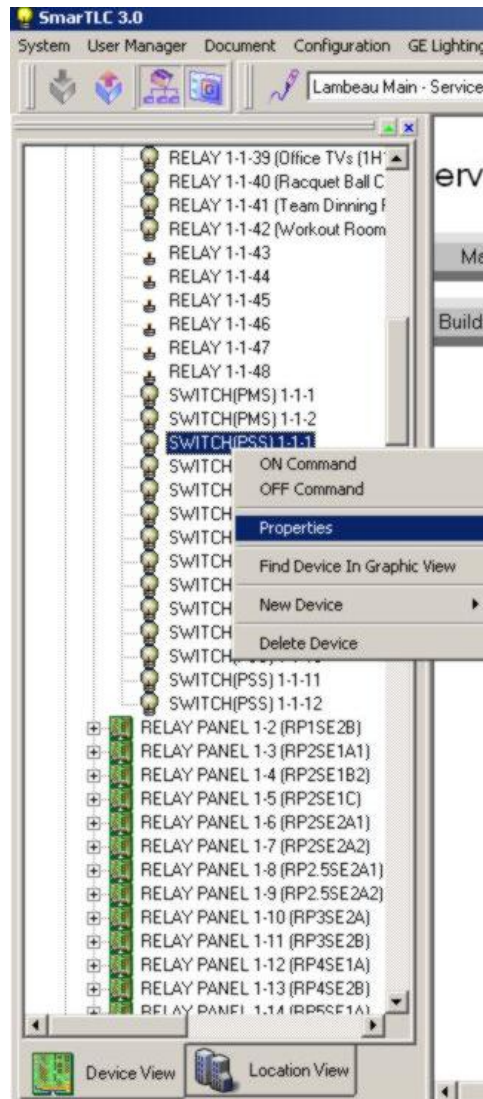


Figure 5.0

As seen in figure 5.1 select the type of function of the switch, either, Master, Shed, Flick or Clean and then from the drop down menu this will define how the switch will function. To add relays to the switch select the lighting control panel from the drop down box and the corresponding relays and click on the right arrow to add them to *Included Relays*.

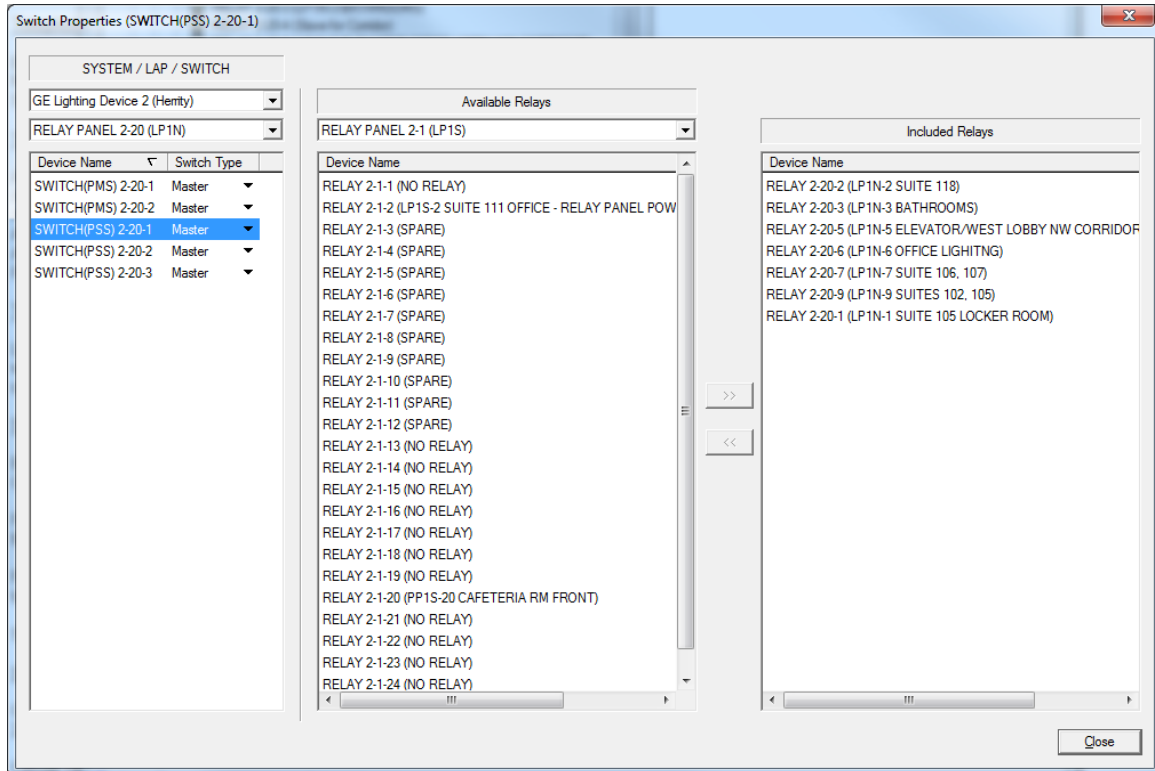


Figure 5.1

All panels are using PSS1 as a Master override for all relays in the panel

## Daylight Saving

The daylight saving can be configured from GE Lighting → Daylight Savings as seen in figure 6.1 & 6.2.

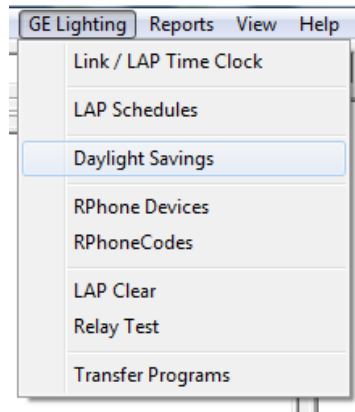


Figure 6.1

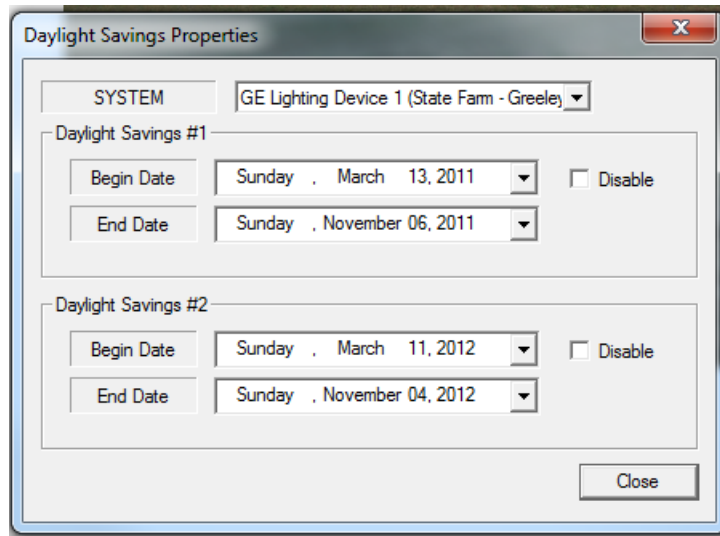


Figure 6.2

Daylight Savings dates can be setup in advance for the next four events. The panels will keep the information in local memory.

**DST dates shall be updated at least once every two years.**

## Configuration of Telephone Override Card

Under GE Lighting → Rphone Devices (as seen in figure 11) will disable configuration of telephone card as seen in figure 7.0.

Answer and Off Function item has [Disable, Enable, Follow Relay]. If user selects 'Follow Relay' option, you can choose which RELAY to follow.

RPhone cards are either LINE1 or LINE2 and up to 10 Rphone cards can be installed.

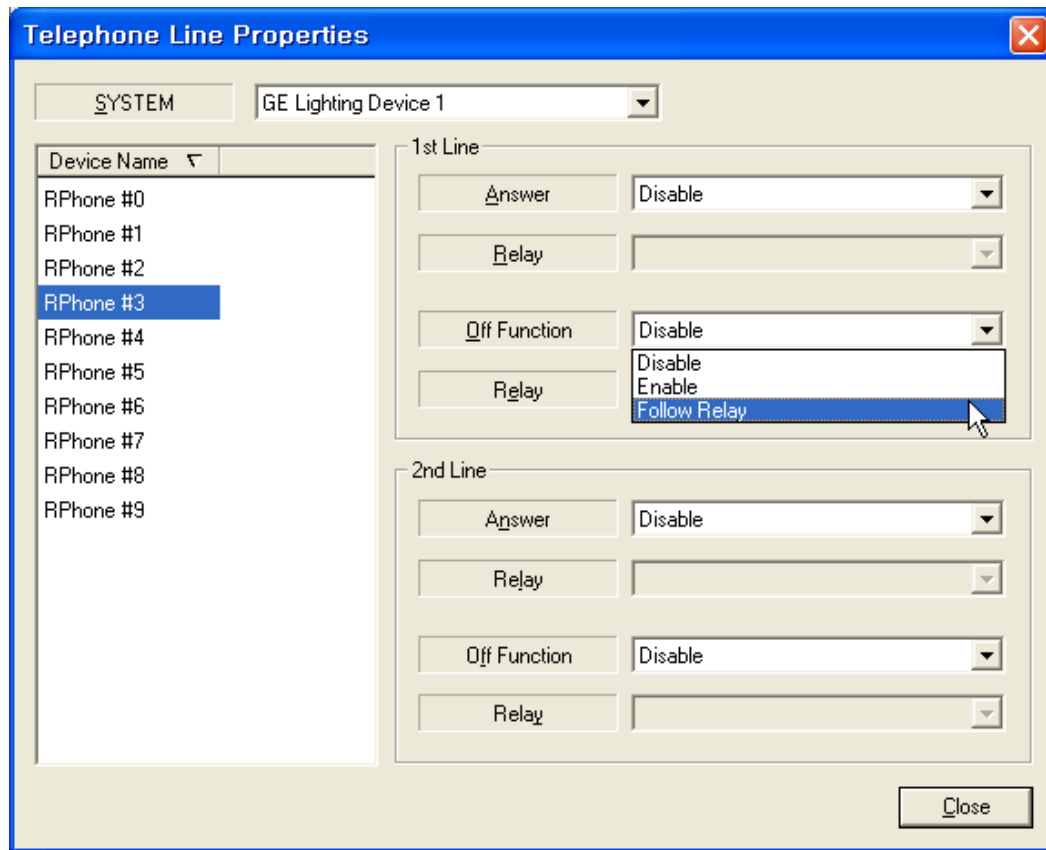


Figure 7.0

## Creating Telephone Codes

Create your phone codes to control relays. When a user inputs the phone code using his/her phone, the programmed relays will be toggled ON/OFF.

Select the relays you wish to control from the available relays list and move them to the included relays list.

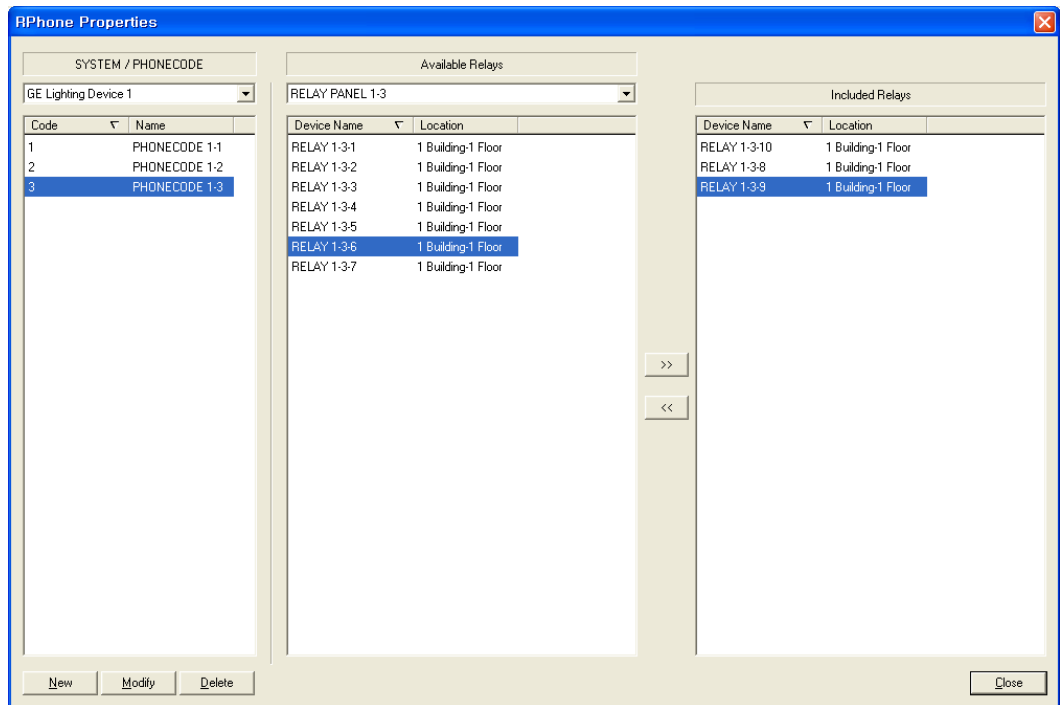
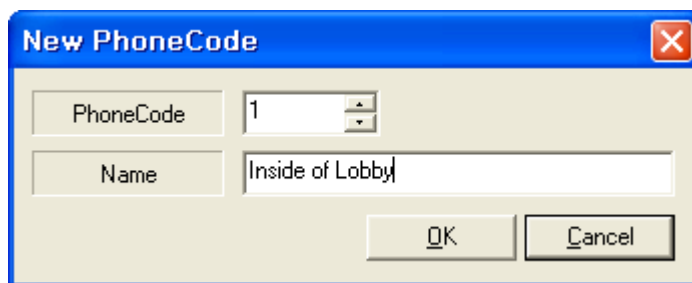
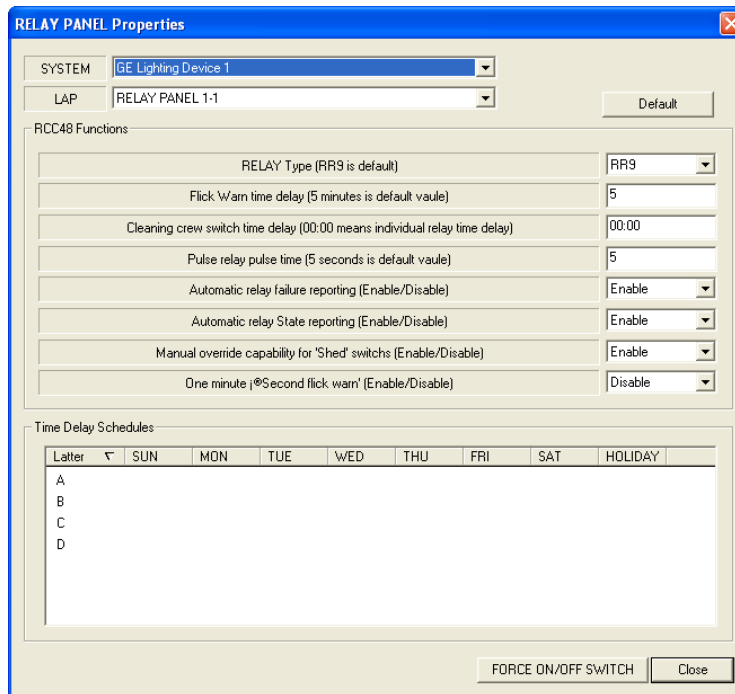


Figure 7.1



## Relay Panel Properties

Displays the properties of the Relay Panel, Relay, and Switch located below the Panel



**RELAY PANEL Properties**

SYSTEM: GE Lighting Device 1

LAP: RELAY PANEL 1-1 [Default]

**RCC48 Functions**

RELAY Type (RR9 is default)	RR9
Flick Warn time delay (5 minutes is default vaule)	5
Cleaning crew switch time delay (00:00 means individual relay time delay)	00:00
Pulse relay pulse time (5 seconds is default vaule)	5
Automatic relay failure reporting (Enable/Disable)	Enable
Automatic relay State reporting (Enable/Disable)	Enable
Manual override capability for 'Shed' switches (Enable/Disable)	Enable
One minute  @Second flick warn' (Enable/Disable)	Disable

**Time Delay Schedules**

Letter	SUN	MON	TUE	WED	THU	FRI	SAT	HOLIDAY
A								
B								
C								
D								

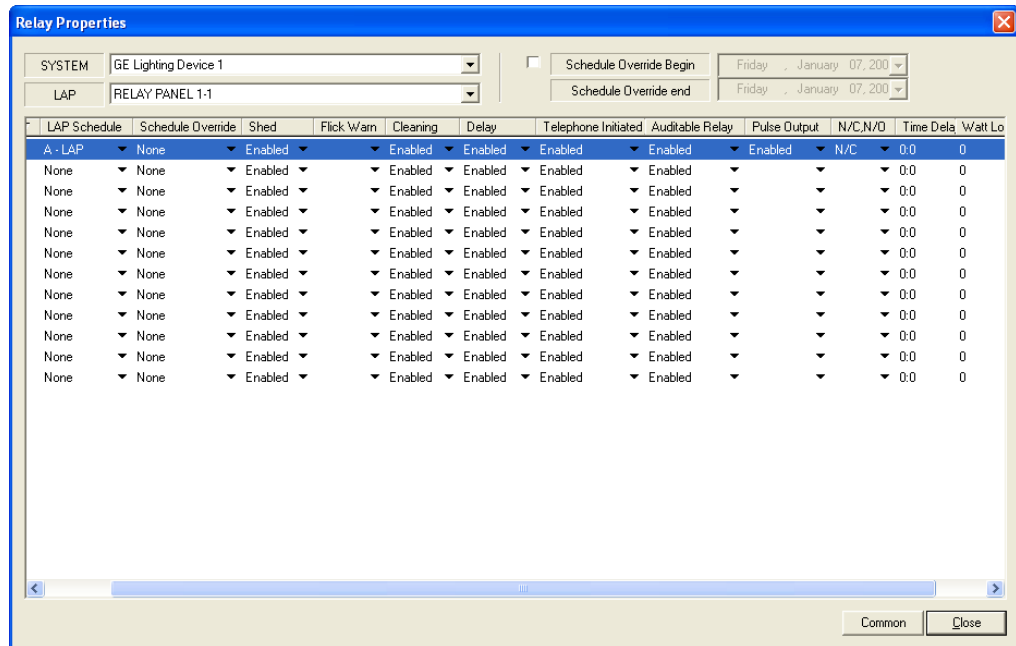
FORCE ON/OFF SWITCH [Close]

The Relay panel Properties display allow to configure:

- **Relay type** (RR9 or RR7 – default RR9),
- **Flick Warn time** for all relays in this panel (default 5min), but can be adjustable from 3 to 99 minutes. – **10 minutes for this project**
- **Pulse output relay option** allows user to specify how long the pulse will last per panel. Is user adjustable from 1 to 60 seconds.
- **Relay Failure Reporting** – When enabled failure will be automatically transmitted. When disabled it will not generate an alarm.
- **Automatic Relay State Reporting** – When relay changes state, the LAP will reported updated state information on the dataline. To minimize dataline activity you can disable this feature (though it is not recommended as correct status of relays will not be disabled in software).
- **Manual Override capability for Shed Switches** – When a relay is “Shed, it can be overridden with a direct relay override. This option allows you to select that direct relay overrides of a shed load will automatically be “Shed” back to the OFF state. Only a “Shed ON”command (resotre) will allow the relay back on.
- **One Minute Second Flick Warn** – You can enable the feature to provide occupants a final “Flick Warn” at least one minute before the OFF. This second flick warn will only happen after a regular flick. This second flick may be as early as two minutes before the OFF, but no later than one minute before the OFF.

Displays the system and LAP which the Relay belongs to allows editing the detailed options of Device Name, LAP Schedule, Schedule Override, Shed,

Flick Warn, Cleaning, Delay, Telephone Initiated Override, Auditable Relay, Pulse Output, N/C N/O, Time Delay, Watt Loads.



**LAP Schedule** – Each relay can be programmed to follow a schedule letter from A-X. Schedules A through L are panel schedules can be different for each LAP. Letters A-L should be used when unique schedules are required in each panel. Schedules M-X are system schedules and are the same for every LAP. Letters M-X should be used when schedules will be duplicated in individual panels.

If no schedule letter is entered for a relay, then that relay will have no scheduled ON and OFF activity, and will only respond to overrides of some type, including the Common Relay command. If a relay is not programmed to follow a schedule, then time delays will always be enabled, if programmed for the relay. If a relay is programmed to follow a schedule, then time delays are automatically disabled for that relay according to the time delay disable time for the schedule letter.

**Flick Warn** – Each relay may have flick “ENABLED” or if blank it’s disabled. If relay is flick enabled, then the relay will turn “OFF” for 1 second, then back “ON” in the following situations:

1. When it is scheduled OFF.
2. When it is turned off by a FLICK WARN switch (PMS or PSS)
3. When it reaches the end of a time delay override.

The Flick Warning time is defined in the Panel Properties screen and applies to all relays in the panel.

**Cleaning** – When relay “ENABLED” as cleaning it will follow cleaning priority under PSS switch inputs.

**Delay** – For time delay field must be “ENABLED” to follow time delays.



**Telephone Initiated** – When field is “ENABLED” relay will follow telephone override codes. If Disabled the relay will ignore phone commands.

**Auditable Relay** – When field is “ENABLED” relay will be part of logging data for reports.

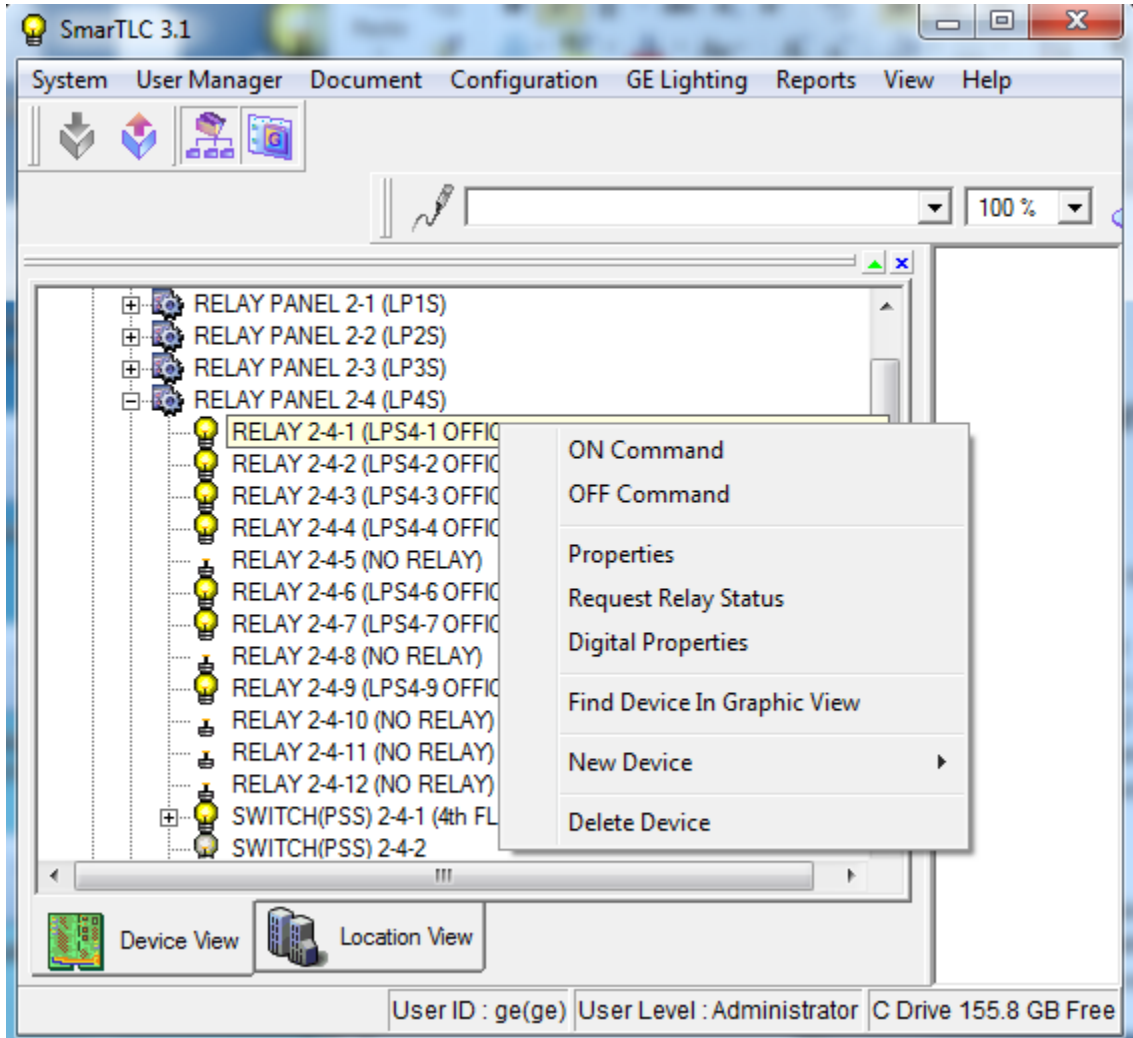
**Pulse Output** – When “ENABLED” the relay will only remain in the designated state for 5 seconds. This is useful for connection to contactors that require a momentary pulse.

**Time Delay** – Each relay can be programmed for a time delay up to 24 hours. Time delays are utilized by the system to turn the relay OFF after the relay has been override ON. Time delays can be “disabled” automatically by the system at the time specified for the schedule letter selected for each relay. Time delays are disabled automatically when a relay is scheduled ON, or turned on with a flick warn switch type. Time delays are enabled again when a relay has been scheduled OFF. If a relay does not have a schedule letter specified, then the time delays are not automatically disabled at a specific time each day. – set to two hours.

**Common** – A relay which is designated as a common area relay is programmed with a list of relays that may include as few as one or as many as all other relays in the panel. The list of relays consists of those which correspond to occupant area. When any of the occupant area relays are turned “ON”, then the common area relay will be turned ON if it is not ON already. The common area relay status will show the relay as being ON due to interlock.

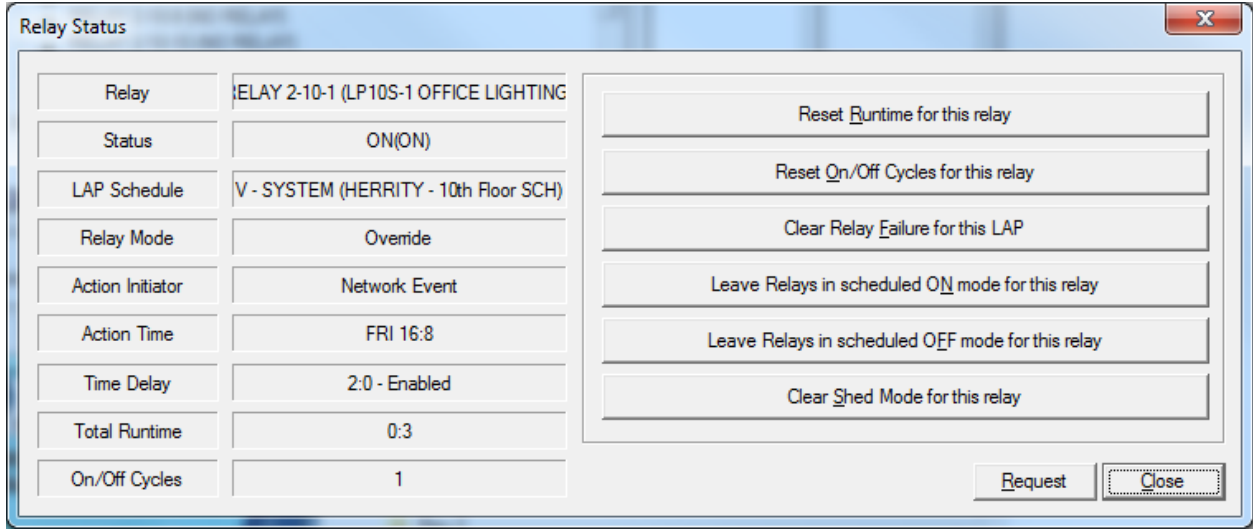
## Relay Status Screen

Relay Status Screen allows retrieving information from the relay panel regarding current status, last event and the action initiator.



To view the relay status and the last event, expand the relay panel and right click on the relay. Select Request Relay Status option

If the only field populated is the Relay – showing the description – indicates the panels is off-line.



Relay	RELAY 2-10-1 (LP10S-1 OFFICE LIGHTING)
Status	ON(ON)
LAP Schedule	V - SYSTEM (HERRITY - 10th Floor SCH)
Relay Mode	Override
Action Initiator	Network Event
Action Time	FRI 16:8
Time Delay	2:0 - Enabled
Total Runtime	0:3
On/Off Cycles	1

#### Indications:

- Status – current relay status:
  - ON
  - OFF
  - FAIL
- LAP Schedule – the schedule associated to the relay (None if relay no schedule assigned)
- Relay Mode – shows the command
  - Schedule
  - Override
- Action Initiator:
  - Local Event – switch or PSS
  - Telephone Event
- Action Time – shows the date and time the event occurred
- Time Delay:
  - 2:0 – time assigned (two hours)
  - Disabled – during occupied time. Time delay is disabled by an ON schedule
  - Enabled – after hours. Enabled by an OFF Schedule event.
- Total Runtime – number of hours the relay was ON
- ON/OFF Cycles – relay cycles counter

#### Commands:

- Reset runtime – clears the runtime counter.
- Reset ON/OFF cycles – clear the Cycles counter
- Clear relay Failure for this LAP – clears the relay alarms
- Leave relay in schedule ON mode for this relay – acts as an ON schedule (will disable the time delay)
- Leave relay in Schedule OFF mode for this relay – operates as an OFF schedule event (enables the time delay).