## ZAustir

## QUICK PROGRAMMING GUIDE



## Table of Contents

User Interface ..... 1
Setting the Clock. ..... 3
Low Voltage Switch ..... 4
Momentary ..... 6
Maintained ..... 7
Momentary Timed ..... 8
Digital Switch. ..... 11
Activating Luma-net ..... 14
Photocell Input ..... 16
Scheduler Setup ..... 20
Disable Switch Inputs ..... 27

## User Interface



These instructions were designed to assist the programmer with common setups. It makes the assumption all high and low voltage connections have been properly connected and confirmed.

Since this is a condensed quick document you may see addtional selections in some menus. Don't let this confuse you. Only concern yourself with the selections in the instructions.

Ok, here we go...

The LCD display shows the current operational status of your relay panel and provides a way to operate and configure your product.

> SUN 03:56a uE--STATUS: NORMAL

When the system is operating normally, the top line of the LCD display shows the day, time, locked/unlocked status of the panel, and the status of the event scheduler. The second line shows the status of the panel: Normal, Bypass ON, Bypass OFF, or Emergency.

## User Interface

## Programming/Function Buttons

| MEN | Allows the user to navigate through the system configuration and setup menus. |
| :---: | :---: |
| $\begin{gathered} \text { SELECT } \\ \hline \text { SAVE } \end{gathered}$ | Selects or Saves the current menu item. |
|  | Aborts the current entry and returns back one level in the menu structure. |
|  | Clears the current entered value. |
| RELAY ON/OFF | Allows for direct front panel control of basic relay functions |
| ALL ON ALL OFF | Activates all relays in an override state. This operation temporarily disables all switch inputs. |

## Navigation Buttons

Use the keypad buttons for alpha-numeric data entry.


The UP/DOWN buttons are also used for data entry/value changes and to navigate menus.

The LEFT/RIGHT buttons are also used to changed between "fields" when configuring your panel.

NOTE After approximately 3 minutes of inactivity on any menu screen, the LCD will revert back to the status screen.

## User Interface



NOTE For astronomical settings, contact the factory at (800) 959-6004.

## Low Voltage Switch

The following behaviors are available for programming low voltage switches:
1- Momentary: first switch press is on, second switch press is off.
2- Maintained (SPST): typically a standard wall switch; when the switch is closed, the relays will turn on and when the switch is opened the lights will turn off.
3- Momentary Timed: when switch is pressed, lights on for a specified time period.


## Low Voltage Switch

Step 15: Display should read:

## ASSIGN SWITCHES 001: LOCAL

NOTE Use $\uparrow \downarrow$ to select desired switch input. Switch inputs are the hardwired locations within the panel. For instance, a Z-MAX 8 panel has 8 switch inputs; therefore, 001 is the first input and 008 is the eighth input. We will use switch input 001 for this example.

## Step 16: Press $\frac{\text { SELECT }}{\text { SAVE }}$

To program a Momentary Low Voltage Switch, proceed to Step 17a on page 6.

To program a Maintained Low Voltage Switch, proceed to Step 17b on page 7.

To program a Momentary Timed Low Voltage Switch, proceed to page 8.

## Low Voltage Switch | Momentary



Step 24: To add additional relays, repeat Steps 19 thru 23.


If no additional relays are required, press Cancel. To proceed to additional input configurations, repeat Steps 15 thru 23.

Step 25: Press MENU to exit.

## Low Voltage Switch | Maintained



Step 24: To add additional relays, repeat Steps 19 thru 23.

$$
\begin{aligned}
& \text { SWITCH: } 001 \text { LOCAL } \\
& \text { Add 2: RLY } 07
\end{aligned}
$$

If no additional relays are required, press Cancel. To proceed to additional input configurations, repeat Steps 15 thru 23.

Step 25: Press MENU to exit.

## Low Voltage Switch | Momentary Timed

A timed switch could be used when there is not an occupancy sensor in the area but you want to make sure the lights don't remain on over a determined period of time.

NOTE You will be required to go through two processes:
A. Setting up the switch TYPE, action and relays to be controlled.
B. Assigning a time to the action.

Process A: Setting up the switch, action and relays to be controlled.


## Low Voltage Switch | Momentary Timed

NOTE Use
 to select desired switch input. Switch inputs are the hardwired locations within the panel. For instance, a Z-MAX 8 panel has 8 switch inputs; therefore, 001 is the first input and 008 is the eighth input. We will use switch input 001 for this example.


Step 20:
Press

to relay selection section; the left hand side of 01-01 should be flashing.

Step 21: Use


Ex.

Step 22:
Press


Step 23: To add addtional relays, repeat Steps 14 thru 22.


If no additional relays are required, press Cancel. To proceed to additional input configurations, repeat Steps 14 thru 22.

## Low Voltage Switch | Momentary Timed

Process B: Now we will assign a hold time to the swtich alone. This is the amount of time the switch will remain active before deactivating and thus shutting the lights off.


NOTE The time you set is a global time and applies to all timed switches.

## Digital Switch | Momentary

The following behaviors are available for programming digital switches:
1- Momentary: first switch press is on, second switch press is off.
2- Maintained (SPST): typically a standard wall switch; when the switch is closed, the relays will turn on and when the switch is opened the lights will turn off.
3- Momentary Timed: when switch is pressed, lights on for a specified time period.

NOTE This section will only cover momentary switch functions.
There are two types of swtiches - low voltage and digital. Low voltage switch inputs are local to the panel with 48 maximum inputs available (1-48). For this discussion, you will begin assigning digital switches beginning at 49 thru 252.

Since digital switches have address switches you will be required to add:
1- Input \#
2- Station \#
3- Button \#
4- Refer to Activating Luma-Net starting on page 16


## Digital Switch | Momentary

## Step 11: Pres

Step 12: Use the numeric keypad to enter "049" for the first digital switch.
Ex.

## SET INPUT TYPES 049: SWT Act HIGH

Step 13: Press
 twice.

Step 14: Use the numeric keypad to enter the digital switch address.


Step 15: Press $\quad \rightarrow$ once to enter digital switch button.

Ex.
SET NETWORK: ecL
ADD: 2 BT: 1

Step 16:
Press


Step 17: For additional inputs or buttons, press the up arrow to "050" for switch input.

Repeat Steps 9 thru 12 for any additional switches or buttons. Otherwise, proceed to Step 14.

EXAMPLE 1: 5 Button Station

INPUT: 049

INPUT: 050

INPUT: 051

INPUT: 052

INPUT: 053

SET NETWORK: ecL ADD: 2 BT: 1

SET NETWORK: ecL ADD: 2 BT: 2

SET NETWORK: ecL ADD: 2 BT: 3

SET NETWORK: ecL ADD: 2 BT: 4

SET NETWORK: ecL ADD: 2 BT: 5

## Digital Switch | Momentary

## OR

EXAMPLE 2: 3 Single Button Stations

INPUT: 049

```
                                    SET NETWORK: ecL ADD: 2 BT: 1
```

> SET NETWORK: ecL ADD: 3 BT: 1
INPUT: 050

INPUT: 051

```
SET NETWORK: ecL ADD: 4 BT: 1
```



Step 23: Use the numeric keypad to select the desired switch input.


## Digital Switch | Momentary

Step 29: Press

to relay selection section; the left hand side of 01-01 should be flashing.


Step 32: To add additional relays, repeat Steps 27 thru 31.
Ex.
SWITCH:049 NETWK ADD 2:RLY 08-12

If no additional relays are required, press Cancel. To proceed to additional input configurations, repeat Steps 23 thru 31.

Step 33: Press MENU once to go back to the main screen.

Step 34: The final step for completing this process will be to activate Luma-net. Refer to Activating Luma-net below.

Activating Luma-net


## Digital Switch | Activating Luma-net



NOTE The System ID \# cannot be equal to a Station ID \#.
Voltage Selection: For 24 or 48 relay panels, install jumper JP5 to 24 V . For 8 relay panels, install jumper JP10 to 24 V .

## Photocell Input

A photocell is a device that receives light, and provides a $0-10 \mathrm{Vdc}$ output proportional to the amount of light received. The term foot-candle is a term we use to describe the amount of light received at a point, in this case by a photocell. Since the amount of light in a space can vary greatly from a little bit of light (an office room) to a lot of light (a skylit lobby) various photocells specifically calibrated to the amount of light they may receive exist.

In order to configure your photocell to work with Z-MAX, you must first know a little bit about how your photocell is calibrated. The calibration is expressed by looking at the maximum amount of foot-candles that your photocell is calibrated to receive. This information can usually be found written on the photocell itself, or in its accompanying literature. The photocells Leviton sells and their calibration points are as follows:

Photocell Types and Ranges

| Part No. | Max FC | FC/Volt (program into cabinet, see Step 33) |
| :---: | :---: | :---: |
| ODCOP | 70 | 7 |
| PCIND | 100 | 10 |
| PCOUT | 250 | 25 |
| PCSKY | 2000 | 200 |
| PCATR | 2500 | 250 |

Also note that in the above table we've indicated the amount of "foot-candles per volt" which is information you will need in the setup process. This number can be calculated simply by dividing the maximum number of foot-candles by 10 Volts.

For example, a photocell which is calibrated to a maximum of 250 footcandles, $250 \mathrm{Fc} / 10 \mathrm{~V}=25 \mathrm{FC} / \mathrm{V}$.

## Photocell Input



Step 15: Choose desired input for photocell.


Step 16: Press


Step 17: Use

to:

## SET INPUT TYPES 001: PHO

## Photocell Input



## Photocell Input

Step 30: Press

## SELECT

Step 31: Change delay setting, if needed.

$$
\begin{gathered}
\text { PHOCEL: } 001 \text { LOCAL } \\
\text { DELAY: } 005 \mathrm{~min}
\end{gathered}
$$

Step 32: Press

## SELECT SAVE

Step 33: Press
 so the "N/A" for "ON" is flashing.

Step 34: Use the numerical keys to enter the desired foot-candle value for the lights to be triggered on.

Step 35:
Press

so the " $\mathrm{N} / \mathrm{A}$ " for "OFF" is flashing.

Step 36: Use the numerical keys to enter the desired foot-candle value for the lights to be triggered off.

Step 37:


Step 39:
Press

to relay selection section; the left hand side of 01-01 should be flashing.


$$
\begin{aligned}
& \text { PHO: } 001 \text { LCL T: } 01 \\
& \text { Ex. } 1 \text { ADD RLY 01-04 }
\end{aligned}
$$

Step 41:
Press
SELECT
SAVE
Step 42: To add additional relays, repeat Steps 37 thru 41.
Ex. PHO: 001 LCL T: 01
ADD 2: RLY 08-12

## Scheduler Setup | Creating Actions

You will need to understand the items listed below before starting the procedure.

Actions: Actions define what is going to happen. The things that are going to happen are called Action Items. You will be required to enter the following information:

1. Action Name
2. Action Items

## Action Items:

1. Relay ON or OFF
2. Groups ON or OFF
3. Blink Warn Override (BWO)

Events: Events establish the time when Actions are supposed to happen. You will be required to enter the following event information:

1. Event Name
2. Event Time

## Creating Actions and Action Items:

The example below will walk you through creating a lights on and off action.

(If the display reads MODE:ADVANCED, proceed to Step 9.)


## Scheduler Setup | Creating Actions



## EDIT ACTION NAME Act 1

 (ACT 1 should be flashing.)Step 14: Name the Action: ON.
NOTE You can change the name using the right and left arrow buttons to move the cursor and the up or down arrow buttons to change the character. You can also use the alpha-numeric keypad to enter characters. Tapping the alpha-numeric button the first time will result in the number, tapping the same button again will result in the character listed above the number on the button.

In the case of the 1 and 0 buttons, a hyphen or space character will be displayed respectively. In the case of the number keys 2-9, the left most character will be displayed. For these keys, as they are pressed repeatedly, each successive character, from left to right is displayed until all have been displayed, at which time it wraps back to the number and repeats.

Step 15: Press $\frac{\text { SELECT }}{\text { SAVE }}$ when you have finished naming the Action.
Step 16: Press

to:


Step 17:
Press

once, then use the arrow keys to set the
Step 18:
Press
 appropriate range of relays to be controlled by the Action.

## Scheduler Setup | Creating Actions

Step 19: Press $\frac{\text { SELECT }}{\text { SAVE }}$
Step 20: If you need to add a second group of relays to turn on, repeat Steps 15 thru 18. Otherwise, proceed to Step 21.


Step 26: Name the Action: OFF.


Step 30:
Press
 once and then use the arrow keys to set the appropriate range of relays to be controlled by the Action.

Step 31: Press
once and then use the up or down arrow keys to choose the OFF command

Step 33: If you need to add a second group of relays to turn off, repeat Steps 27 thru 31. Otherwise, proceed to Creating Events.

## Scheduler Setup | Creating Events



Step 6: Enter the event time.


Step 7:


Step 8: Choose the days of the week that the event is to be active on.


If the day of the week is capitalized, then the event will be active on that specific day.

Step 9:
 to choose the appropriate action for the
Step 10: Use event.


Step 11: Press


Step 12: Use T to choose if this event is to be a single event (only happens once).

$$
\begin{aligned}
& \text { 07:00am New:001 } \\
& \text { Ex. } \quad \text { Single Event }=\mathrm{NO}
\end{aligned}
$$

## Scheduler Setup | Creating Events

Step 13:
Press
SELECT

Step 14: Use
 to choose if this event is to be a single event (only happens once).


NOTE Default sweep count time is 60 minutes; see manual for further information on sweep count or contact our technical support staff at (800) 959-6004.

Step 15:


Step 16:

to:

## SCHEDULE MENU ADD A NEW EVENT

Step 17:
Press

## SELECT

SAVE
Step 18: Enter the event time.

> Ex. $\quad$ Add Event E:002
> 07:00pm

Step 19: Press

## SELECT SAVE

Step 20: Choose the days of the week that the event is to be active on.

```
Ex. 07:00PM NEW:002
    MTWTFSS H:----
```

If the day of the week is capitalized, then the event will be active on that specific day.

Step 21: Use
 to choose the appropriate action for the
Step 22: Use
 event. Ex.

```
                07:00PM NEW:002 
```


## Scheduler Setup | Creating Events



## Scheduler Setup | Testing Events



Step 6: Change the current time to one minute before the ON event is to happen.

Step 7:
Press $\frac{\text { SELECT }}{\text { SAVE }}$

Step 8: Please wait one minute and when the scheduled event time comes up, the selected relays should come on.

Step 9: Press MENU

Step 10:

to:
MAIN MENU SELECT TIME/DATE/ASTRO

Step 11: Press


Step 12: Press

to:
TIME/DATE/ASTRO SET TIME \& DATE

Step 13:
Press

## SELECT <br> SAVE

Step 14: Change the current time to one minute before the OFF event is to
happen.

Step 15: Please wait the one minute and when the scheduled event time comes up, the selected relays should go off.

## Disable Switch Inputs | Creating Actions

In some cases, the customer may desire to disable a switch, photocell, or occupancy sensor during certain times of the day. The below instructions outline how to set up this scenario.

(If the display reads MODE:ADVANCED, proceed to Step 9.)


Step 8: Display should read:

## CONFIGURATION MODE: ADVANCED



Step 14: Name the Action: ON.

## Disable Switch Inputs | Creating Actions

NOTE You can change the name using the right and left arrow buttons to move the cursor and the up or down arrow buttons to change the character. You can also use the alpha-numeric keypad to enter characters. Tapping the alpha-numeric button the first time will result in the number, tapping the same button again will result in the character listed above the number on the button.

In the case of the 1 and 0 buttons, a hyphen or space character will be displayed respectively. In the case of the number keys 2-9, the left most character will be displayed. For these keys, as they are pressed repeatedly, each successive character, from left to right is displayed until all have been displayed, at which time it wraps back to the number and repeats.

Step 15: Press


Step 16: Press

to:

## ACTION CHOOSE TO ADD A NEW ITEM

Step 17: Press

once and then use the arrow keys to set the appropriate range of relays to be controlled by the Action.

## SELECT ITEM <br> Ex. RLY: 01-04 ON 07

Step 19: Press once and then use the up or down arrow keys to choose the ON command.

Step 20: Press
 once and then use the numerical keys to set the priority level to 7 . This allows the scheduler to turn the relays on at one priority level higher than the default of 8 .

NOTE The switch inputs default priority is 8 . See manual for further information on priorities.

## Disable Switch Inputs | Creating Actions

Step 22: If you need to add additional relays to turn on, repeat Steps 15 thru 21. Otherwise, proceed to Step 23.


Step 27: Name the Action: OFF.


Step 31:
Press

once and then use the arrow keys to set the appropriate range of relays to be controlled by the Action.

## SELECT ITEM Ex. $\quad$ RLY: 01-04 REL 07

Step 32:
Press
 once and then use the up or down arrow keys to choose the REL (RELINQUISH) command.

Step 33:
Press
 once and then use the numerical keys to set the priority level to 7 . This allows the scheduler to relinquish control of the relays back to priority level 8.

NOTE The switch inputs default priority is 8 . See manual for further information on priorities.

## Disable Switch Inputs | Creating Actions

## Step 34: Press $\frac{\text { SELECT }}{\text { SAVE }}$

Proceed to Creating Events if Blink Warn command is NOT required.


Step 36: Press $\quad$ once and then use the arrow keys to set the appropriate range of relays to be controlled by the Action.

Step 37: Press $\rightarrow$ once and then use the up or down arrow keys to choose the BWO (BLINK WARN ON) command.

## $\begin{array}{cc}\text { SELECT ITEM } \\ \text { Ex. } & \text { RLY: 01-04 BWO DE }\end{array}$

Step 38: Press

## SELECT <br> SAVE

Step 39: If you need to add additional relays to REL, repeat Steps 29 thru 33. Otherwise, proceed to Creating Events.

## Disable Switch Inputs | Creating Events

| Step 1: | Press | twice to: | MAIN MENU SELECT ACTION EDITOR |
| :---: | :---: | :---: | :---: |
| Step 2: | Press | MAIN MENU SELECT SCHEDULER |  |
| Step 3: | Press |  |  |
| Step 4: | Press | SCHEDULER MENU ADD A NEW EVENT |  |
| Step 5: | Press |  |  |

Step 6: Enter the Event time.


Step 7:
Press

```
SELECT
    SAVE
```

Step 8: Choose the days of the week that the event is to be active on.

$$
\begin{array}{ll}
\text { Ex. } & \text { 07:00am New:001 } \\
\text { MTWTFSS H:---- }
\end{array}
$$

If the day of the week is capitalized, then the event will be active on that specific day.

Step 9:


Step 10: Use $\uparrow \downarrow$ to choose the appropriate action for the event.


Step 11: Press


Step 12: Use $\sim$ to choose if this event is to be a single event.

$$
\begin{array}{c|c} 
& \text { 07:00am New:001 } \\
\text { Ex. } & \text { Single Event=NO }
\end{array}
$$

## Disable Switch Inputs | Creating Events

Step 13: Press $\frac{\text { SELECT }}{\text { SAVE }}$

Step 14: Use $\downarrow \downarrow$ to choose a sweep count, or leave as 000 if no sweep count is needed.


Default sweep count time is 60 minutes; see manual for further information on sweep count.

Step 15:


Step 16: Press $\frac{\text { SELECT }}{\text { SAVE }}$ to add a second event.
Step 17: Enter the Event time.


Step 18:
Press


Step 19: Choose the days of the week that the event is to be active on.
Ex.

```
07:00PM NEW:002
MTWTFSS H:---
```

If the day of the week is capitalized, then the event will be active on that specific day.

Step 20:


Step 21: Use $\uparrow \downarrow$ to choose the approriate action for the event.

Ex.

```
07:00PM NEW:002
OFF
```

Step 22:
Press


## Disable Switch Inputs | Creating Events



## Disable Switch Inputs | Testing Events



Step 6: Change the current tme to one minute before the ON event is to happen.

Step 7:
Press $\frac{\text { SELECT }}{\text { SAVE }}$

Step 8: Please wait one minute and when the scheduled event time comes up, the selected relays should come on.


Step 14: Change the current tme to one minute before the OFF event is to happen.

Step 15: Please wait the one minute and when the scheduled time comes up, the selected relays should go off.


