



# **Apprentice 3** Essentials Start Up Guide

Rev 2 March 2024



- Network up 48 control points and 64 LightSync Address per network
- Can be programmed using a USB port on your laptop and free AP3 Software
- Can accept several add-on cards for advanced capabilities such as BACnet, N2, MODBUS, TCP/IP, and DMX control as well as 0-10v Dimming
- 48 available timer banks that can turn relays on and off for time of day, astronomical times, and open/close times
- This guide will walk you step-bystep through the most essential functions of the AP3 including setting timers, configuring a photocell, and configuring an LSG3 switch



For additional support, contact ILC Tech Support at 952-842-2588 or ilc.techsupport@ilc-usa.com



- LightSync Devices such as LSG3 Switches and Photocell card must come off the right-side RJ45 port (out)
- Buttons on the left correspond to each row on the screen for selecting options (top button corresponds to the top row, second button to the second row, etc)
- Buttons on the right are for navigating the screen
- Toggle on far right turns CPU on and off
- All On/All Off Buttons on the bottom of the CPU will sweep all connected relays in the panel
- USB Type B Port for connecting to laptop







## All On/All Off Sweep

## Configure Your AP3

## Configure Relays

- 1. Edit
- 2. Configure System
- Change Size to number of relays in panel (e.g. 04, 08, 16)
- 4. Exit

#### Set Time and Date

- 1. Edit
- 2. Set Times
- 3. Time and Date
- 4. Set time and date using up and down keys
- 5. Exit

## Set Coordinates for Astro Clock (if needed)

- 1. Edit
- 2. Set Times
- 3. Astro Clock
- 4. Enter Latitude and Longitude
- 5. Verify time zone is correct

## **Grouping Relays**

- 1. Edit
- 2. Relay Outputs
- 3. Relay Grouping
- 4. Select Group
- 5. Select Relays
- 6. Include: Yes or No
- 7. Use arrows to move rows
- 8. Once groups have all required relays, you can exit

## Relay Output Status – Turn Relays On, Off, or Sweep

- 1. Edit
- 2. Relay Output Status
- 3. Single relays
- 4. Use arrows to scroll through relays
- 5. Select ON, OFF, or SWEEP to verify

## Setting Timers

## **Configure Timers**

- 1. Select Edit
- 2. Timers
- 3. Configure Timers
- 4. Time
- 5. Normal or Astro
- 6. Set time for timer or use Astro, SS (Sunset) or SR (Sunrise)
- Use –X for "before" or +X for "after" e.g. SS-015 is 15 minutes before sunset
- 8. Repeat for both timers

## Timer/Relay Control

- 1. Select Edit
- 2. Timer
- 3. Timer/Relay Control
- 4. Timer/Single Relays or Timer/Relay Groups
- 5. Using right buttons, scroll to timer
- 6. Using left button, select the Relay option
- 7. Using the right button, scroll the correct Relay
- 8. Using the left button, select Action
- 9. Using the right button, select "Turn ON" or "Turn OFF" for that relay
- 10. Repeat process until all relays for the required timer are configured
- 11. Repeat process for other timers, remember one Timer must be ON and the other must be OFF

### **Test Your Timer**

- 1. Edit
- 2. Timers
- 3. Force Timers
- 4. Scroll to desired Timer
- 5. Force will force the action prescribed
- 6. Verify lights are coming on and off with configured timers

## Configure a Photocell

## **Configure Photocell**

- 1. Edit
- 2. Switch Inputs
- 3. Light-Sync Inputs
- 4. Configure Devices
- 5. Select Address on Photocell Card (can use 01 as well)
- 6. Using the left button, select "Type"
- 7. Using the right button, scroll to find "Photocell"
- 8. Using the left button, select "Configure"
- 9. Using right and left buttons, set ON LEVEL to 100/255
- 10. Using the right and left buttons, set OFF LEVEL to 120/255

### **Confirm Device Status**

- 1. Edit
- 2. Switch Inputs
- 3. Light-Sync Inputs
- 4. Light-Sync Status
- 5. Using right button scroll to Photocell
- 6. Using the left button select "Show Status"
- 7. Verify on bottom row that Photocell is "Connected"
- 8. Verify light levels, reboot if necessary
- 9. Exit

#### Set Relays to the Photocell

- 1. Edit
- 2. Switch inputs
- 3. Light-Sync Inputs
- 4. Input/Relay Control
- 5. Confirm Node and Type are correct (e.g. Node LSYNC 01, TYPE PHOTOCELL)
- 6. Edit Control
- 7. Input/Single Relays or Input/Relay Groups
- 8. Verify Input is correct e.g. LSYNC 01.1 (this is your Photocell)
- 9. Using the button the left, select Relay
- 10. Using the buttons on the right, scroll to desired Relay
- 11. Using the button on the left, select Action
- 12. Using the buttons on the right, scroll to desired action (most like ON AND OFF)
- 13. Repeat process for all relays required
- 14. Exit



## Switch

## Configure Switch

- Edit 1.
- Switch Inputs 2.
- Light-Sync Inputs 3.
- **Configure Devices** 4.
- Select Address on switch (for this 5. example, we will use 04)
- 6. Using the button on the left, select Type
- Using the button on the right scroll to 1 Button. 7.
- Select Configure 8.
- Confirm the Type is MOM PB 9. (Momentary Push Button)
- Confirm the Input is LSYNC 04.1 (for this example. The first two numbers 10. will be the switch address, so if your switch is 05 it will be 05.1)

NOTE: If you are using a 2-5 Zone MZD, you must use a Preset for your "Off" button. The instructions are in the complete guide.

## **Confirm Device Status**

- Edit 1.
- 2. Switch Inputs
- 3. Light-Sync Inputs
- Light-Sync Status 4.
- 5. Using right button scroll to Photocell
- Using the left button select 6. "Show Status"
- Verify on bottom row that the 7. LSG3 is "Connected"
- 8. Exit

## Set Relays to the Switch

- 1. Edit
- Switch inputs 2.
- Light-Sync Inputs 3.
- Input/Relay Control 4.
- Confirm Node and Type are correct (eg Node LSYNC O4, TYPE 1 BUTTON) 5.
- Edit Control 6.
- Input/Single Relays or Input/Relay Groups 7.
- Verify Input is correct eg LSYNC 01.1 (this is your LS Device) 8.
- Using the button the left, select Relay 9.
- Using the buttons on the right, scroll to 10. desired Relay
- Using the button on the left, select Action 11.
- Using the buttons on the right, scroll to 12. desired action Repeat process for all relays required
- Exit 13.



## Configure Switch

- 1. Edit
- 2. Switch Inputs
- 3. Local Inputs
- 4. Switch Input Options
- 5. Select Input
- 6. Select Type
- 7. Using the button on the right scroll to 1 Button.
- 8. Exit

## Set Relays to the Switch

- 1. Edit
- 2. Switch inputs
- 3. Local Inputs
- 4. Input/Relay Control
- 5. Input/Single Relays
- 6. Select Input
- 7. Using the buttons on the left, select Relay
- 8. Using the buttons on the right, select the correct relay
- 9. Using the buttons on the left, select Action
- 10. Using the buttons on the right, select the correct Action
- 11. Repeat the last four steps until all relays have been correctly mapped
- 12. Exit





If further assistance is needed, please contact ILC Tech Support: 952-842-2588 or ilc.techsupport@ilc-usa.com

