

## Lighting Control STARTUP

Smart Lighting Solutions is an Authorized Service Provider for the manufacturers that we represent. We employ Certified Technicians to assist the Electrical Contractor with any size project that includes lighting controls.

#### STARTUP ASSISTANCE

Startup Service is required for Networked Lighting Controls Systems that include Time Based Control, Dimming, Daylight Harvesting, and/or Occupancy/Vacancy Sensing. This service is designed to assist the Electrical Contractor with initial checkout and programming of system prior to owner acceptance and commissioning agent approval. Smart Lighting Solutions' Certified Technician shall assist the Electrical Contractor with check-out, verification and programming based upon the project documents and information provided.

Startup Service is scheduled by submitting the online Service Request Form (contact Smart Lighting for access) a minimum of ten (10) business days prior to the requested service date(s). The Electrical Contractor shall be onsite to assist Smart Lighting Solutions personnel throughout the Startup period. In addition to the Service Request Form, the Electrical Contractor must also submit the following items before an On-Site Confirmation can be provided;

- a) Installation Worksheet (verify that system is fully installed and communicating)
- b) Floor plans with accurate device serial numbers (stickers) and locations
- c) Network wiring detail and routing (how the CAT 5/Network wire is physically run between devices)
- d) As-built drawings and/or documents fixtures and controls
- e) Programming details:
  - o Software labeling of devices and zones
  - o Time schedules
  - Zoning and channels
  - Written control sequence

## **SCOPE OF WORK - INITIAL INSTALLATION INSPECTION:**

Upon arrival at the project site that Smart Lighting Solutions Certified Technician shall review the system installation to determine if all work can be completed without delay. If Technician discovers an incomplete installation;

- Less than 50% of work is able to be completed: Smart Lighting Technician Certified Technician shall inform the Electrical Contractor of the situation and provide a Rescheduling Notice to the Electrical Contractor. The Smart Lighting Solutions Certified Technician shall depart the site immediately. A Rescheduling Fee is required for any unplanned return visit to the site, and it will include any additional labor charges required to complete the Startup work.
- More than 50% of work but less than 100% of work can be completed: Smart Lighting Solutions Certified Technician shall inform the Electrical Contractor of any gaps that will require an additional visit and provide a Rescheduling Notice to the Electrical Contractor. The Smart Lighting Solutions Certified Technician shall preform as much work as possible while on-site and depart the site when the work is impeded or stopped by the incomplete installation, damaged parts and/or missing information.
- 100% Complete: Smart Lighting Solutions Certified Technician shall inform the Contractor the startup work shall commence

A Rescheduling Fee is required for any unplanned return visit to the site, and it will include any additional labor charges required to complete the Startup work.





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#### SCOPE OF WORK - SYSTEM PROGRAMMING AND VERIFICATION:

- Verify installation matches project documentation (Approved Lighting Control Shop Drawings) and/or any discrepancies have been documented by the Electrical Contractor
  - o Provide Electrical Contractor a list of any discrepancies and/or recommendations
- Verify installation meets or exceeds manufacturer recommendations
  - o Provide Electrical Contractor a list any discrepancies and/or recommendations
- Program system devices as shown on documentation (Approved Shop Drawings) and/or documentation provided by the Electrical Contractor:
  - Sequence of operation
  - o Zones and channels
  - o Time Schedules
  - Label devices (For nLight systems refer to nLight Standard Naming)
- Program zones and channels as shown on project documentation (Approved Shop Drawings). Rooms equal a zone.
  Some zones may require further clarification by the Electrical Contractor like corridors and open office areas. Channels are groups of lights within a zone that are controlled together (front down lights, back down lights, etc...)
- Program timers and time schedules as shown on the project documentation (Approved Shop Drawings) and/or documentation provided by the Electrical Contractor
- Daylight Harvesting Zones and Channels programmed as shown on the project documentation (Approved Shop Drawings) and/or documentation provided by the Electrical Contractor
  - System set points shall be determined by Technician based upon desired light levels
    Example: System set points for closed loop, dimming daylight harvesting are typically 5-15 foot-candles
    measured at the ceiling plane. The system set point will be selected based upon the engineer or lighting
    designer provided criteria; maintain a minimum of 40 foot-candles at desktop (XX inches from floor) halfway
    between two fixtures nearest the window.
- Verify local operation of zones and channels, and sequence of operation
  - During testing Occ. sensors shall be set to minimum time delay. After testing is complete sensor timers shall be restored to final setting
- As time allows, provide Electrical Contractor with basic product overview and orientation

#### **PART NUMBERS:**

**Startup A:** Normal business hours (8am - 5pm) Monday through Friday **Startup B:** Hours between 12:01am Monday through 11:59pm Friday

**Startup C:** Weekends and Holidays

### **DELIVERABLES:**

Electronic copy of Project database (nLight – SVBD files) Field Service Report (FSR)

## **ADDITIONAL NOTES AND CLARIFICATIONS:**

- Scheduling Lead Time without additional cost: Ten (10) business days prior to on-site date
- Cancellation / Rescheduling without additional cost: Three (3) business days prior to on-site date
- Additional exclusions: installation of product, as-built drawings, troubleshooting installation issues, repair or replacement of defective product, background check, safety training, drug screening, work with commissioning agent, attending project meetings, project management or any other work not directly related to initial startup and programming. Startup excludes Training, sold separate.
- Limited Warranty: One (1) Year from date of Startup completion. Startup warranty does not include changes or corrections beyond the original project scope. Warranty does not include parts and/or labor to repair and/or replace of defective product.