MHT Technologies

Control Narrative

Demo case: MHTi-Cisco Advanced Demo Kit V2

Overview

The MHTi-Cisco Advanced Demo Kit V2 demonstrates advanced lighting control capabilities utilizing 1x NS111 light sensor, 1x 7B wall switch, one 90W Constant Current (CC) MHT Node, 2x Autotune fixtures, and 3 splitters. The kit is designed to showcase seamless integration of manual and automated lighting controls with tunable color temperatures and dimming.

Control Operations:

1. 7B Wall Switch Functions: The 7-button (7B) wall switch provides manual control of the Autotune fixtures (AT fixtures):

- **ON Button:** Turns on the AT fixtures to 100% brightness at the last set color temperature.
- **OFF Button:** Turns off the AT fixtures, setting their brightness to 0%, while retaining the last set color temperature.
- **UP and DOWN Buttons:** Increment/decrement the brightness of the AT fixtures in 10% steps, based on the last set color temperature.
- **Scene1 Button:** Activates a preset scene, setting the AT fixtures to 3000K color temperature at 100% brightness.
- **Scene2 Button:** Activates a preset scene, setting the AT fixtures to 4000K color temperature at 100% brightness.
- **Scene3 Button:** Activates a preset scene, setting the AT fixtures to 5000K color temperature at 100% brightness.

Manual Override Feature: Pressing any button on the 7B wall switch disables the light sensor's automation for 1 minute, allowing manual override of the lighting system. After this period, the light sensor resumes its operation unless overridden again.

2. NS111 Light Sensor Operations: The NS111 light sensor enables automated control of the AT fixtures based on the ambient light levels in the space:

- **High Ambient Light:** If sufficient ambient light is detected, the NS111 will dim the AT fixtures proportionally to maintain optimal lighting conditions without over-illuminating the space.
- **Low Ambient Light:** If little to no ambient light is detected, the NS111 will increase the brightness of the AT fixtures to their maximum level to ensure adequate illumination.

Integration of Manual and Automated Controls:

The system integrates manual and automated operations seamlessly. Manual adjustments made through the 7B wall switch take precedence temporarily, ensuring user control and convenience. After the manual override period (1 minute), the NS111 light sensor regains control to maintain efficient lighting adjustments based on ambient light conditions.