

Application Note

Tunable White Lighting with Dialog® Centralized Lighting Control System

INTRODUCTION

Douglas Lighting Controls now offers compatibility with 0-10V Tunable-White fixtures. This application note will lay out how to use the existing Dialog technologies to utilize the feature of a tunable-white fixture.

The Dialog system can control Tunable-white fixtures that are the type of 2x 0-10V inputs, 1 being the intensity and 1 being the warmth/CCT.

The methods we can do this are:

1. A Dialog Control panel with a WLC-4150 and a WDB-3314
2. A Dialog Room Controller WRC-4244/22, optionally WLC-4150

The WLC-4150 is programmed to simulate the circadian rhythm via it's internal timer and sequencing to achieve the desired pattern.

APPLICATION

Any room with tunable white lighting fixtures combined with the Dialog Centralized Lighting Controls system can control the fixtures color temperature output. Typical applications might include classrooms, healthcare environments, offices and retail spaces, where there is a desire to create varying ambiances to influence human mood, behavior or functionality. A classroom would like the lights to follow a circadian pattern through the day to provide optimized lighting to encourage student productivity. A hospital would like the lights to follow a circadian pattern to assist with patient care and recovery.

FEATURES AND BENEFITS

- Universal design supports 2-channel tunable white fixtures
- Approved to be used in non-architectural/non-theatrical applications
- User inputs can be a switch station of preselected colors (scenes) or 2-sliders for custom color tuning, or automated control through scheduling and time of day
- Tailored for two 0-10V Channel Tunable-White Fixtures, intensity & CCT
- Dialog-based 0-10V Technologies
- Compatible with all 0-10V outputs from WRC-3x60, WRC-42xx & WDB-3314
- Time-based circadian rhythm via WLC-4150-C or -L

If no circadian rhythm timing required, the WLC-4150 can be removed when using a WRC-42xx.

