

# Walkthrough of the SmartCast Touchscreen

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## Introduction

The Cree Lighting SmartCast® Touchscreen introduces a rich set of new advanced lighting control features to the SmartCast® family of devices. The Cree Lighting SmartCast® Touchscreen provides a touch-based interface that is built to offer simplicity and flexibility to the users in creating lighting of their choice using features such as Scene control and Dynamic Lighting. The Cree Lighting SmartCast® Touchscreen works with all SmartCast Technology enabled lighting, currently installed and new.

The SmartCast Touchscreen supports the following key features:

- **Dynamic Lighting:** Dynamic lighting feature enables you to define how lighting in your space should change during the course of a day in an autonomous fashion.
- **Scene Control:** Preset lights to the level and CCT you want for any activity with 16 custom scenes to choose from providing complete control and flexibility with a single touch.
- **Manual Override Controls:** Instant control of your lights with these intuitive controls give you complete temporary override control.

This Deeper Dive article examines the functions and options available when using the Cree Lighting SmartCast® Touchscreen.

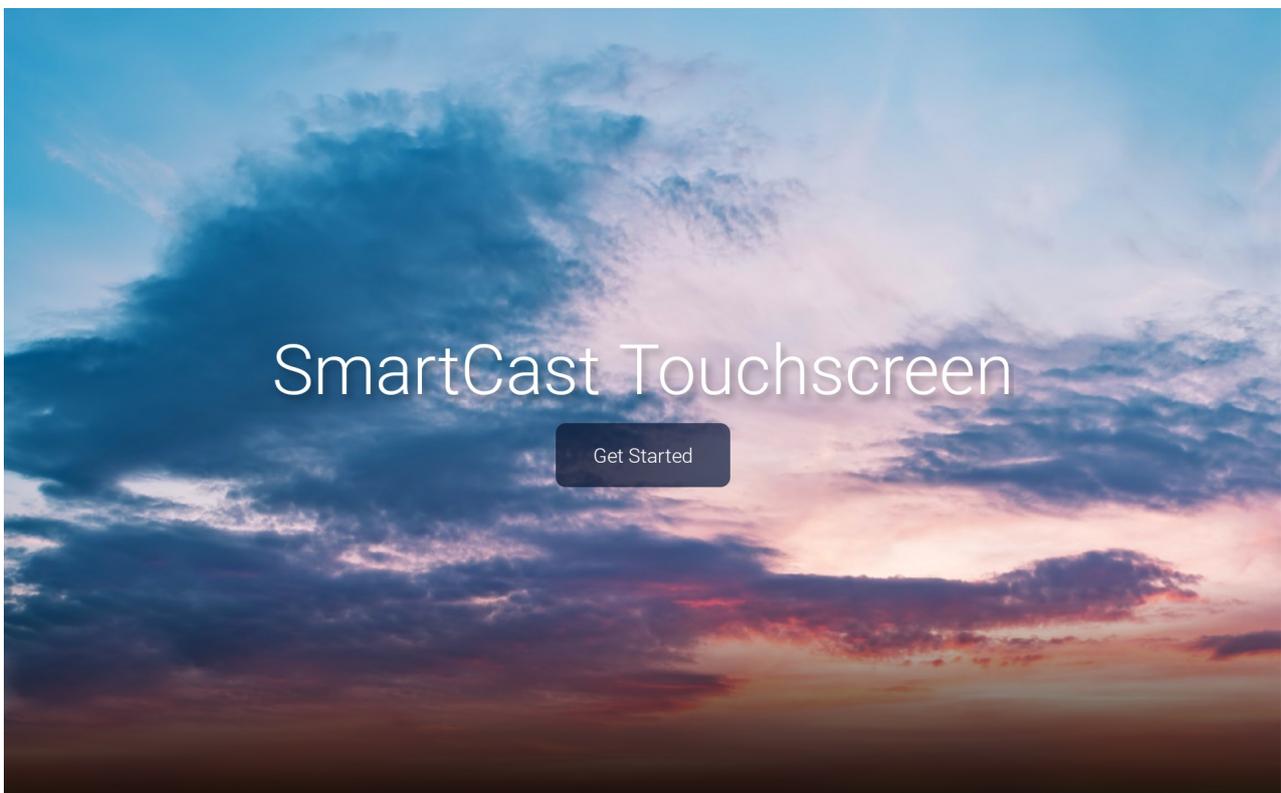


Figure 1. SmartCast Touchscreen Start Screen

The SmartCast Touchscreen Start Screen is the persistent screen displayed when the Touchscreen is idle. When conducting edits within the Touchscreen to any screen, the Touchscreen will return to this screen after a

timeout.

## Components of the SmartCast Touchscreen

The SmartCast® Touchscreen Control Kit includes:

- (1) Tablet - Hosts the SmartCast Touchscreen application and ships with its own charging cable
- (1) 90 degree USB-C to USB-C cable - cable for connecting the Tablet to the Battery Modulator
- (1) Wall-mount kit - A surface mount kit that provides a holder for the Tablet and a cover for the Recessed wall box
- (1) Recessed wall box - An AV power box that houses the Battery modulator and the 120V outlet
- (1) Battery modulator - Battery modulator monitors the battery level of the Tablet and removes power when the battery is at full charge

### Setup Diagram

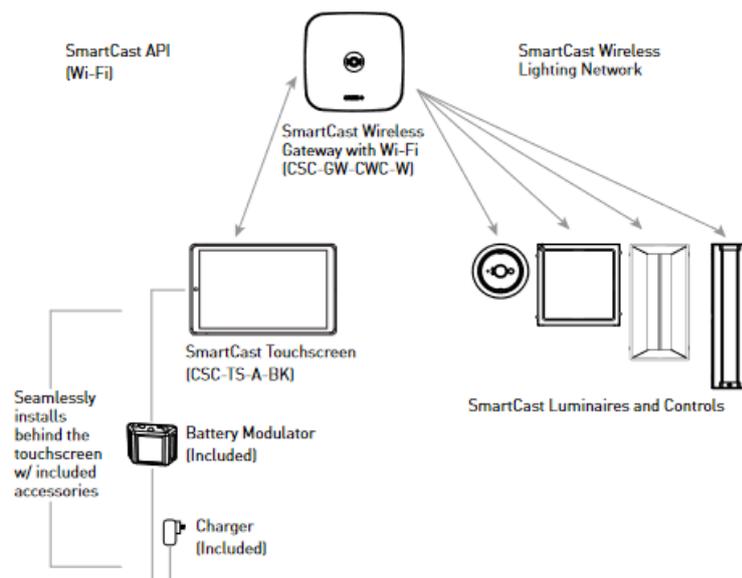


Figure 2. SmartCast Touchscreen Setup Diagram

These components are required but must be provided by the customer:

- 120V outlet - single gang outlet to provide AC power to the SmartCast Touchscreen
- Single gang wall plate - outlet cover

## Scenes

Provides a scene controller interface for the Cadiant system

- Up to 16 customizable scenes per space

- Up to 12 lighting zones per scene

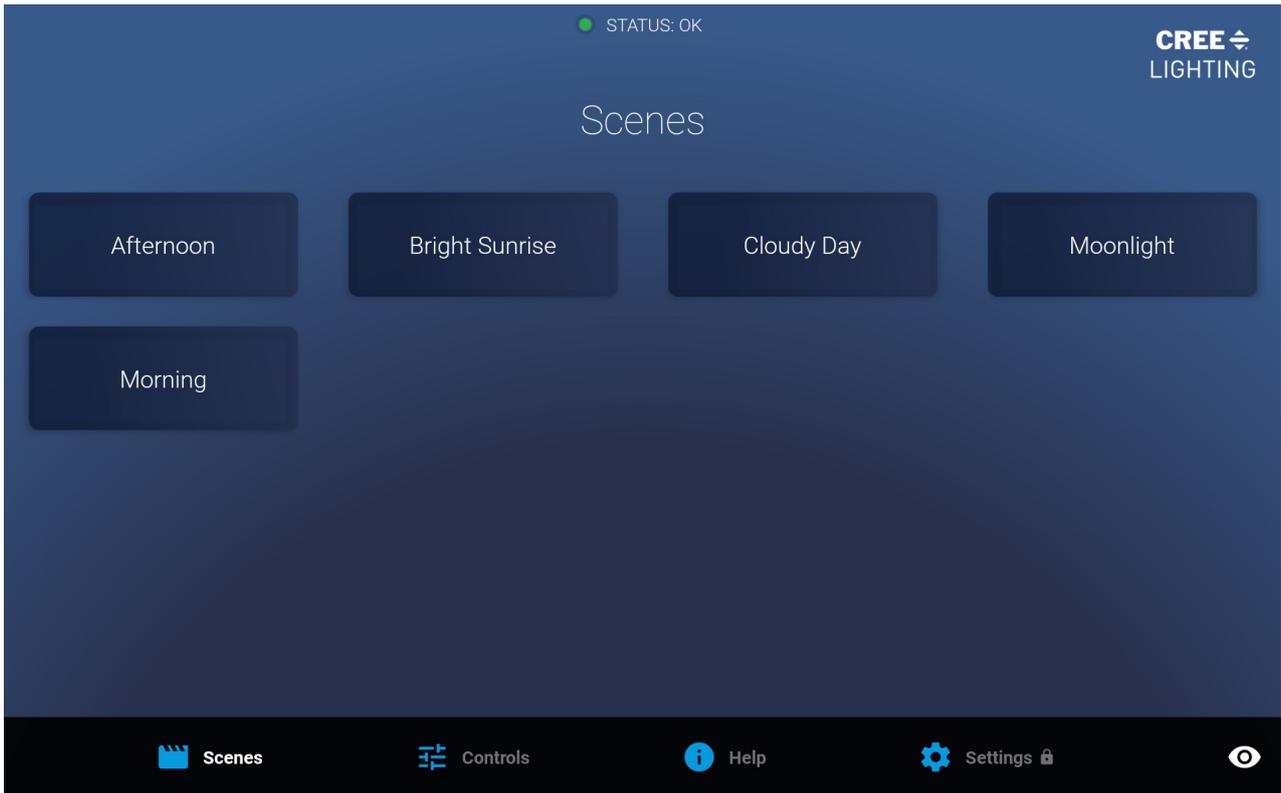


Figure 3. SmartCast Touchscreen Scene Selection Screen

The Scene Selection Screen can display up to 16 scenes for use in controlling the light within the assigned spaces.

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## Controls

Provides granular control of light fixtures within the system

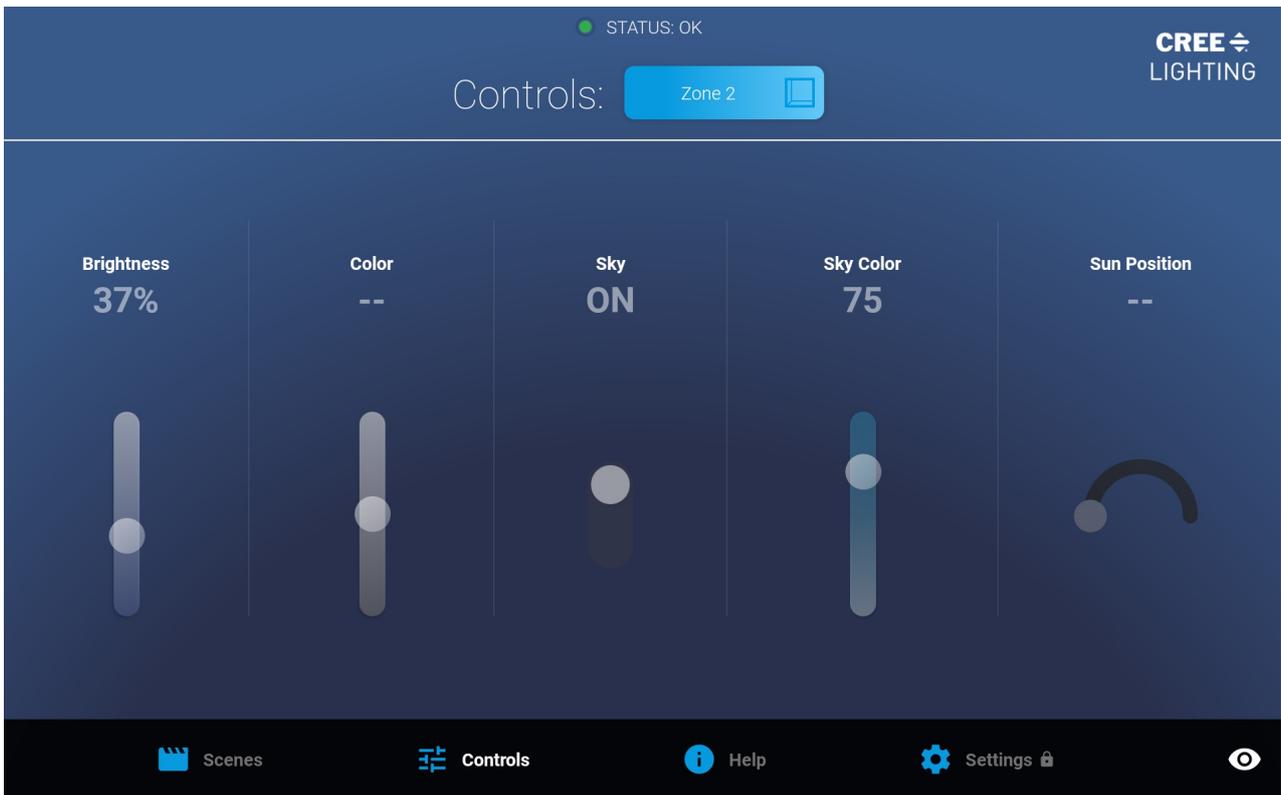


Figure 4. Manual Override Controls Screen

The Controls Screen provides local manual override for individual zones. The editable settings for use with a Cadiant Skylight are:

Brightness	Dim level of the Sun Portion of the Cadiant Skylight
Color	CCT Level of the Sun Portion of the Cadiant Skylight
Sky	Toggle switch for turning the Sky portion of the Cadiant Skylight on and off
Sky Color	Percentage of Blue light emitted from the Sky portion of the Cadiant Skylight
Sun Position	Perceived location of the Sun portion of the Skylight based on the percentage of light emitted from the East and West panels of the Sun portion

## Help

Provides a data screen for contacting Cree Lighting Technical Resources

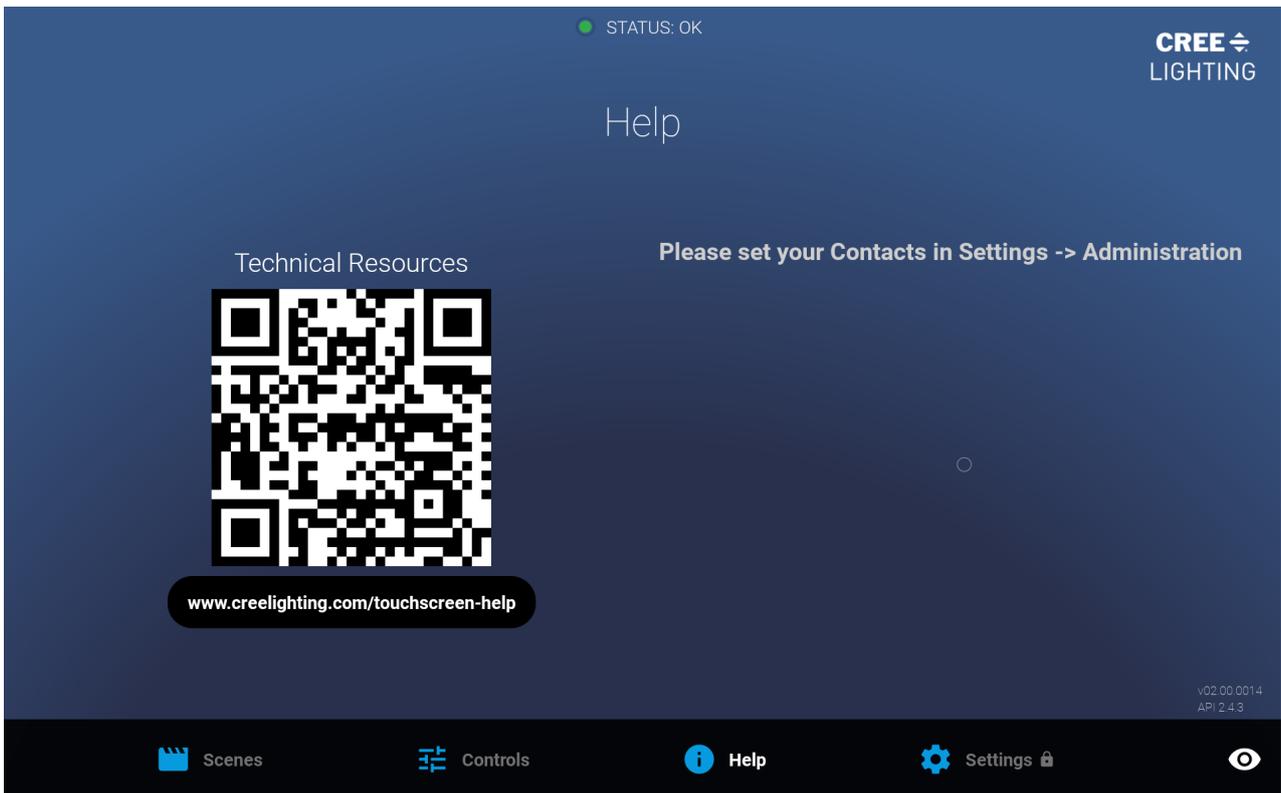


Figure 5. Help Screen

This help screen provides contact information for the System Administrator for the SmartCast Lighting System. The website listed takes the user to the Cree Lighting Intelligent Lighting Support Site.

## Settings

The Settings Menu provides access to the administrative functions for setup and editing of the SmartCast Touchscreen functions.

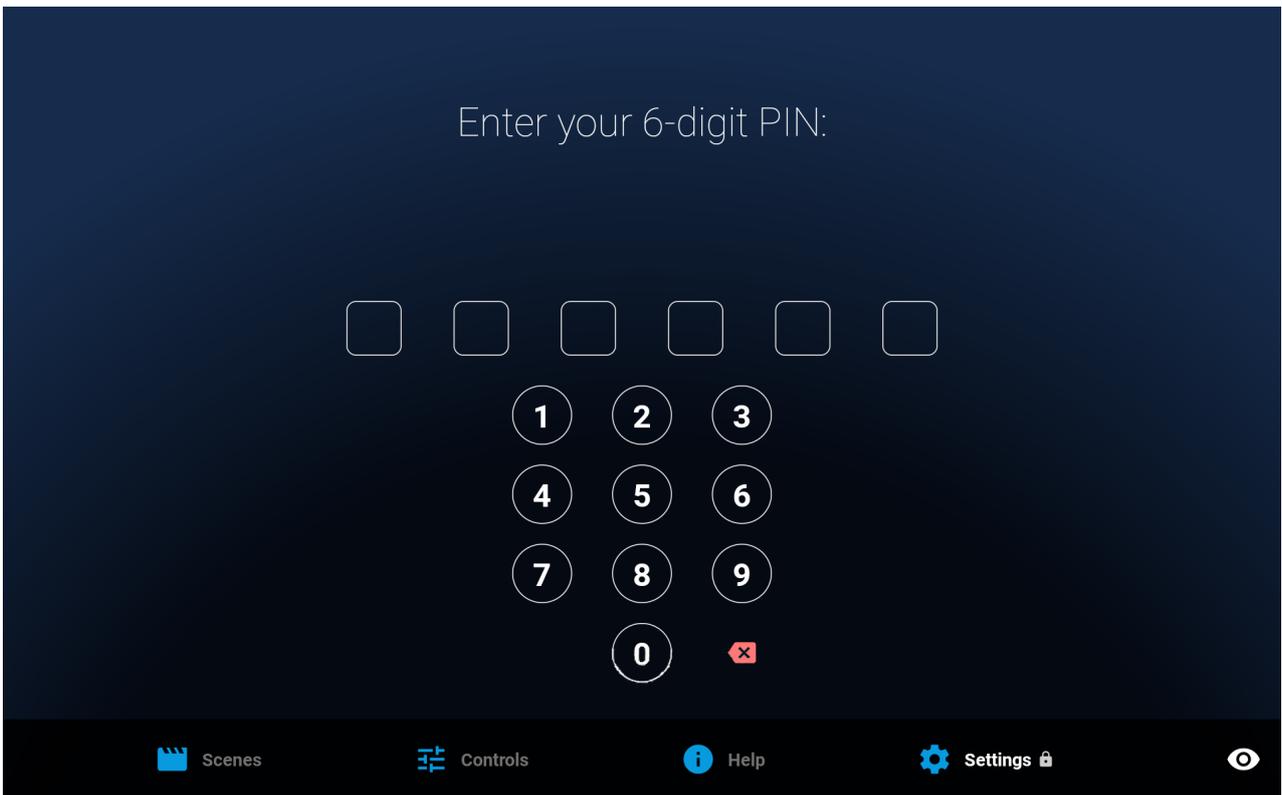


Figure 6. Security Screen requires a 6-digit PIN to access to the Settings Menu .

Enter the customer provided 6-digit PIN to access the Settings Menu.

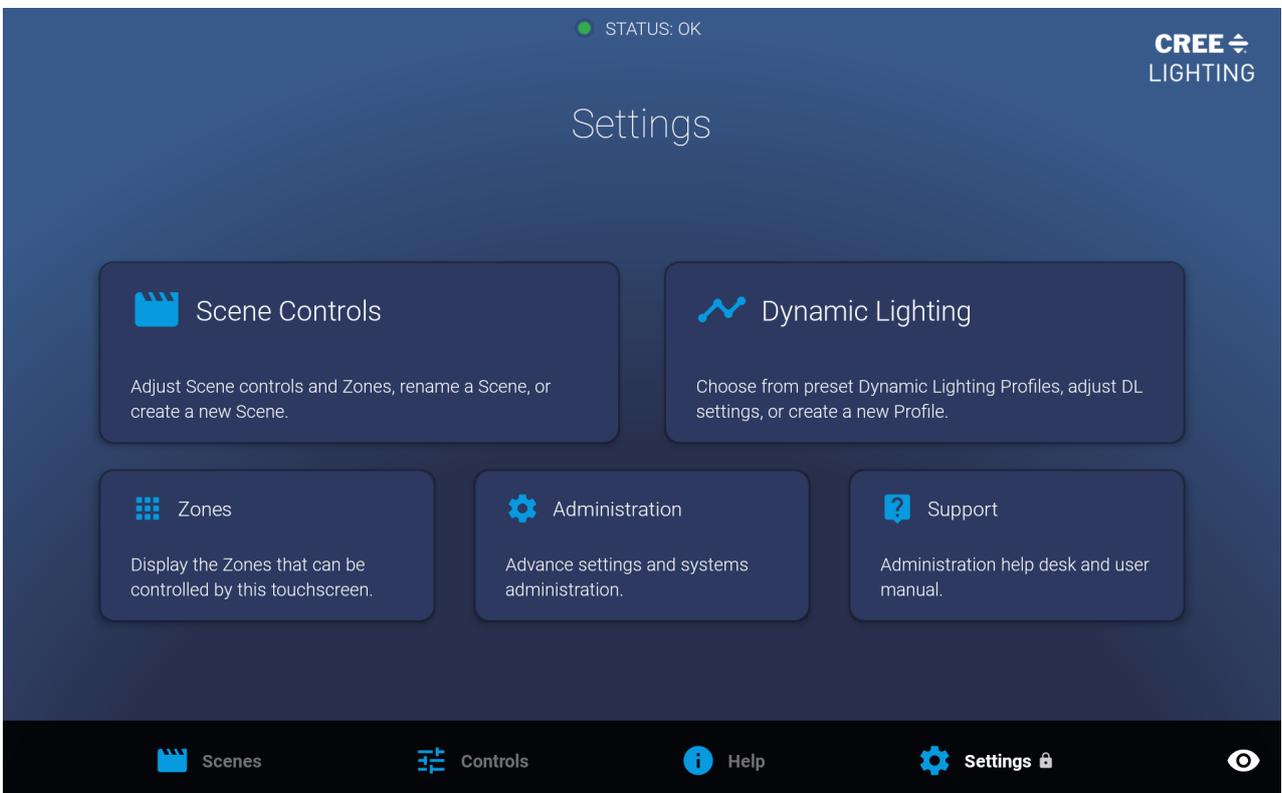


Figure 7. Settings Menu Screen

The Settings Menu provides the following submenus. Each submenu will be explored further below.

Scene Controls	Adjust Scene controls and Zones, rename a Scene, or create a new Scene
Dynamic Lighting	Choose from preset Dynamic Lighting Profiles, adjust Dynamic Lighting settings, or create a new Profile
Zones	Display the Zones that can be controlled by this touchscreen
Administration	Advanced settings and systems administration
Support	Administration help desk and user manual

## Scene Controls

The Scene Controls Screen lists the scenes available for use and the Zones that are assigned to each Scene.

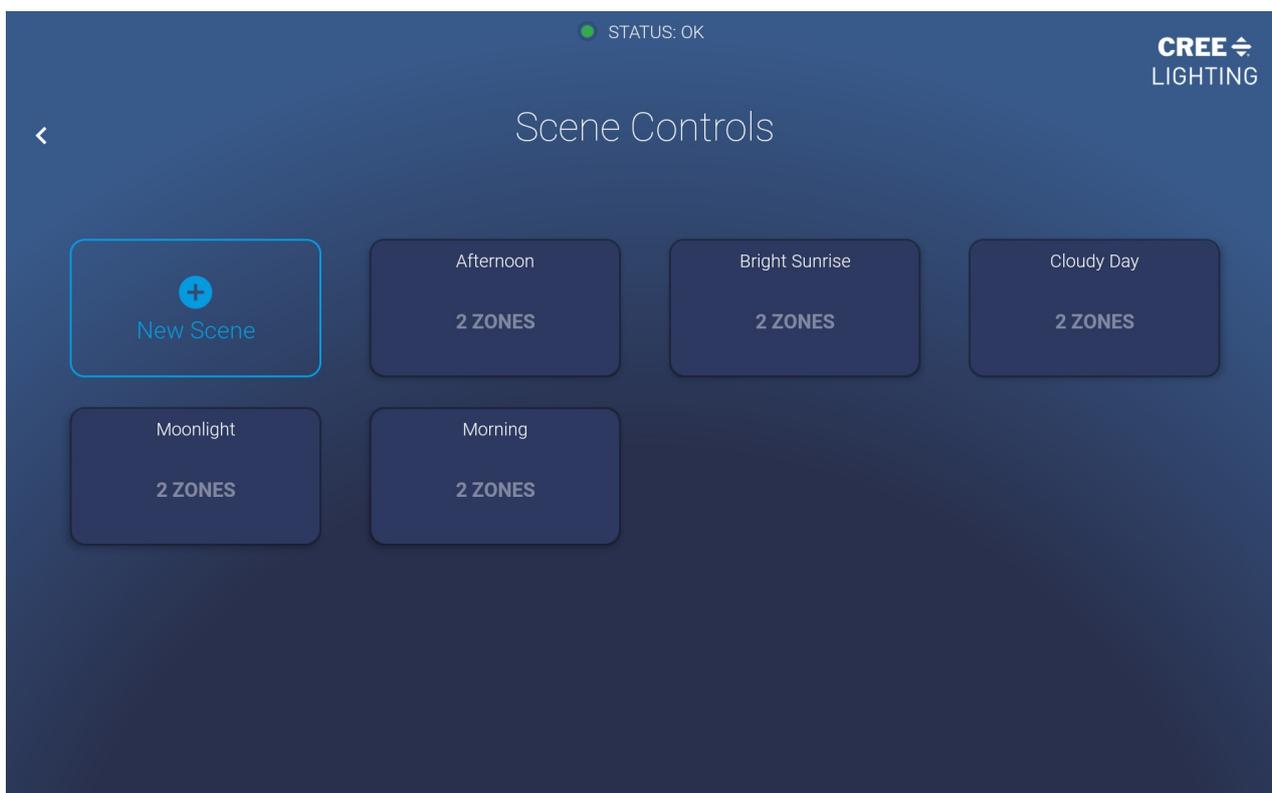


Figure 8. Scene Controls Settings Screen

## Dynamic Lighting

Dynamic lighting enables automated changes to light intensity, color temperature (CCT), and Cadiant sun position

- Dynamic lighting profiles configured and controlled via the SmartCast Touchscreen
- Up to 16 customizable profiles per SmartCast Lighting Network
- Preloaded with 4 profiles: Education, Healthcare, Office, and Follow-the-Sun

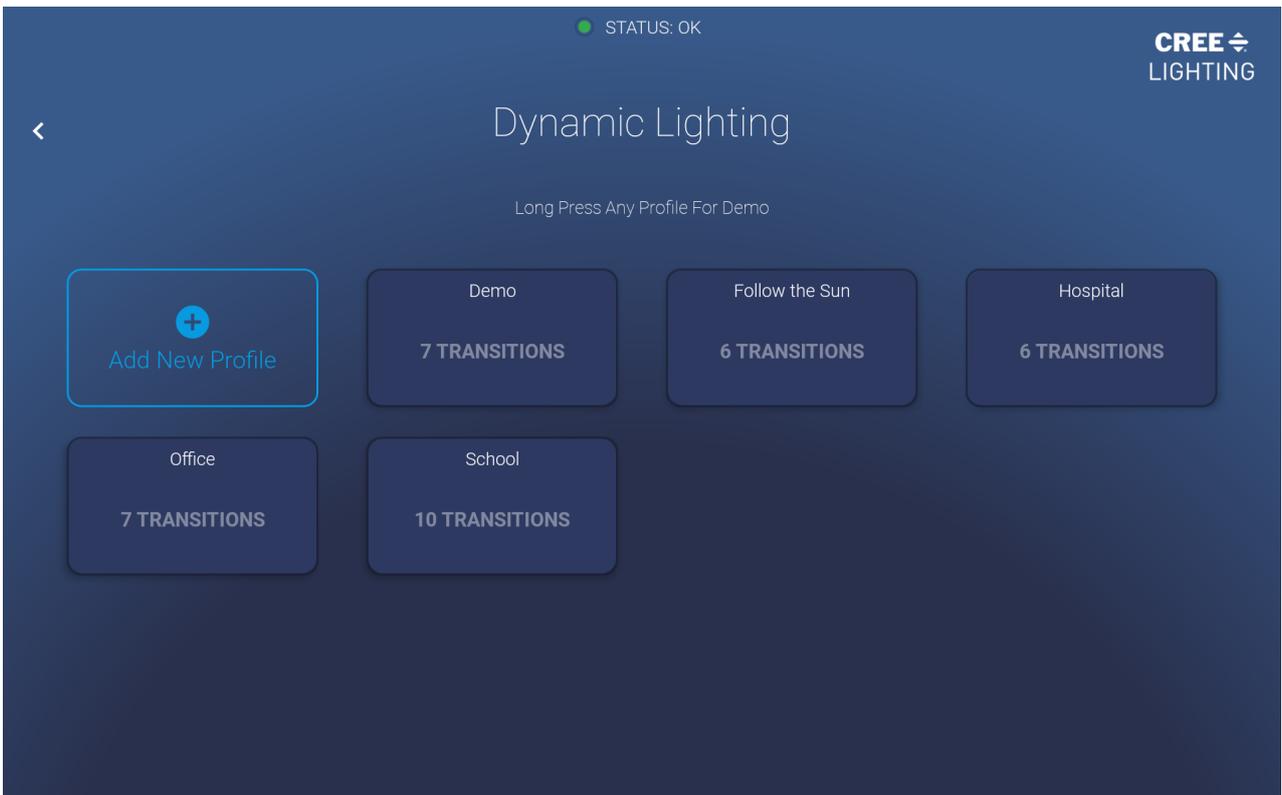


Figure 9. Dynamic Lighting Settings Screen

The Dynamic Lighting Screen allows the user to create new profiles either from scratch or by copying existing profiles and to edit existing profiles to include assigning zones to profiles.

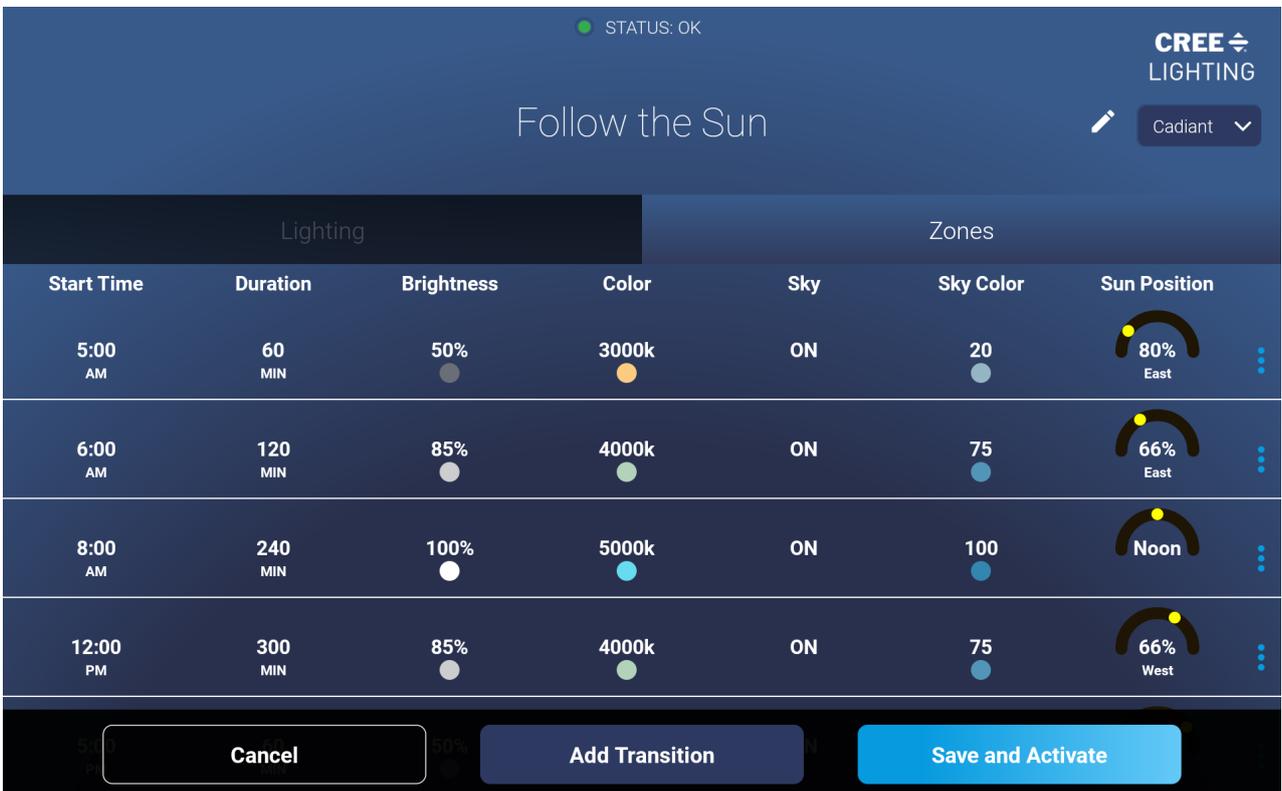


Figure 10. Dynamic Lighting Lighting Transitions Screen

In Dynamic Lighting, a transition is a unit of lighting. The light level and color level for the transition are the settings achieved over time. The settings are changed at a subtle rate to enable user comfort.

Start Time	Start time for each transition
Duration	Length of time required to complete the transition
Brightness	Dimming level of the Sun portion achieved at the completion of the transition
Color	CCT Level of the Sun portion achieved at the completion of the transition
Sky	Sky setting (on or off) during the transition
Sky Color	Percentage of Blue light in the Sky portion achieved at the completion of the transition
Sun Position	East / West position of the Sun portion at the completion of the transition

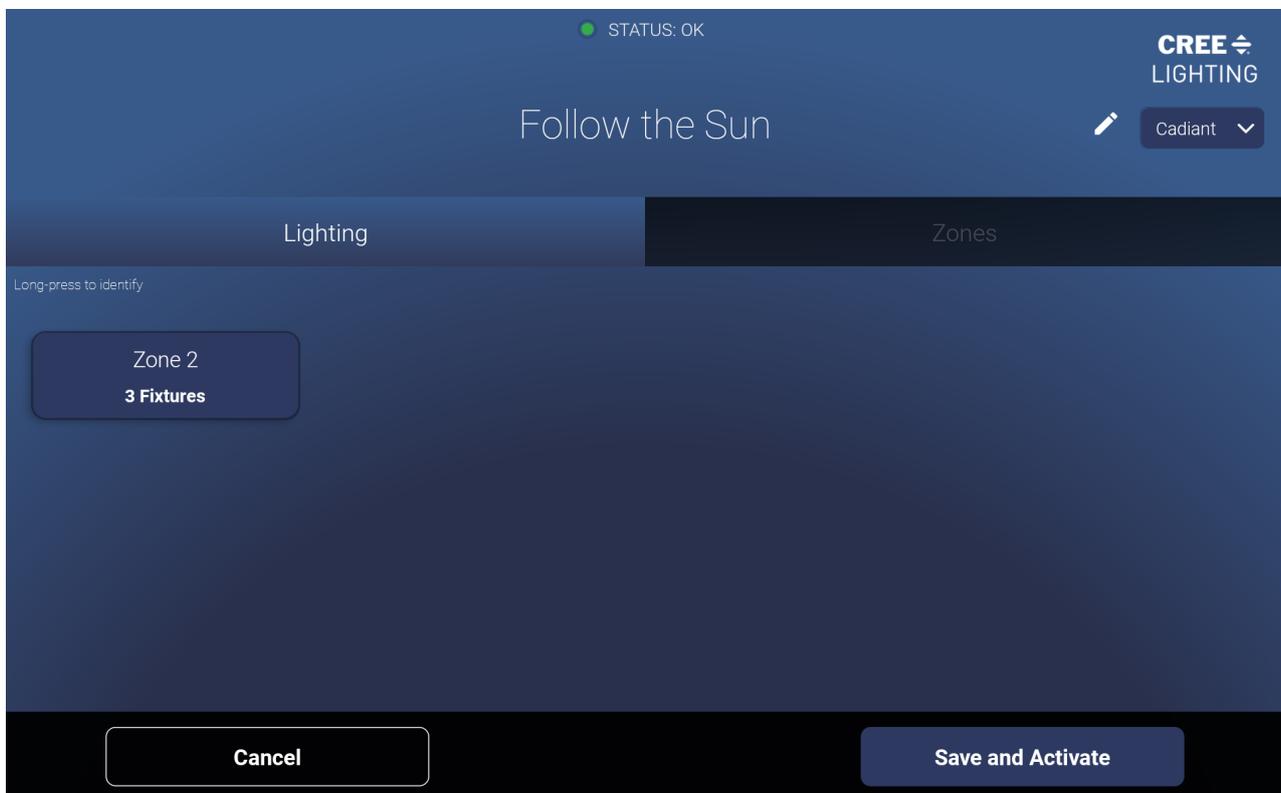


Figure 11. Dynamic Lighting Zone Assignment Screen

The Zone tab of the Dynamic Lighting screen allows the user to assign zones to a particular Dynamic profile.

## Zones

The Zone screen lists the zones assigned to the SmartCast Touchscreen via the SmartCast Wireless Gateway. The screen also allows for the renaming of the Zones.

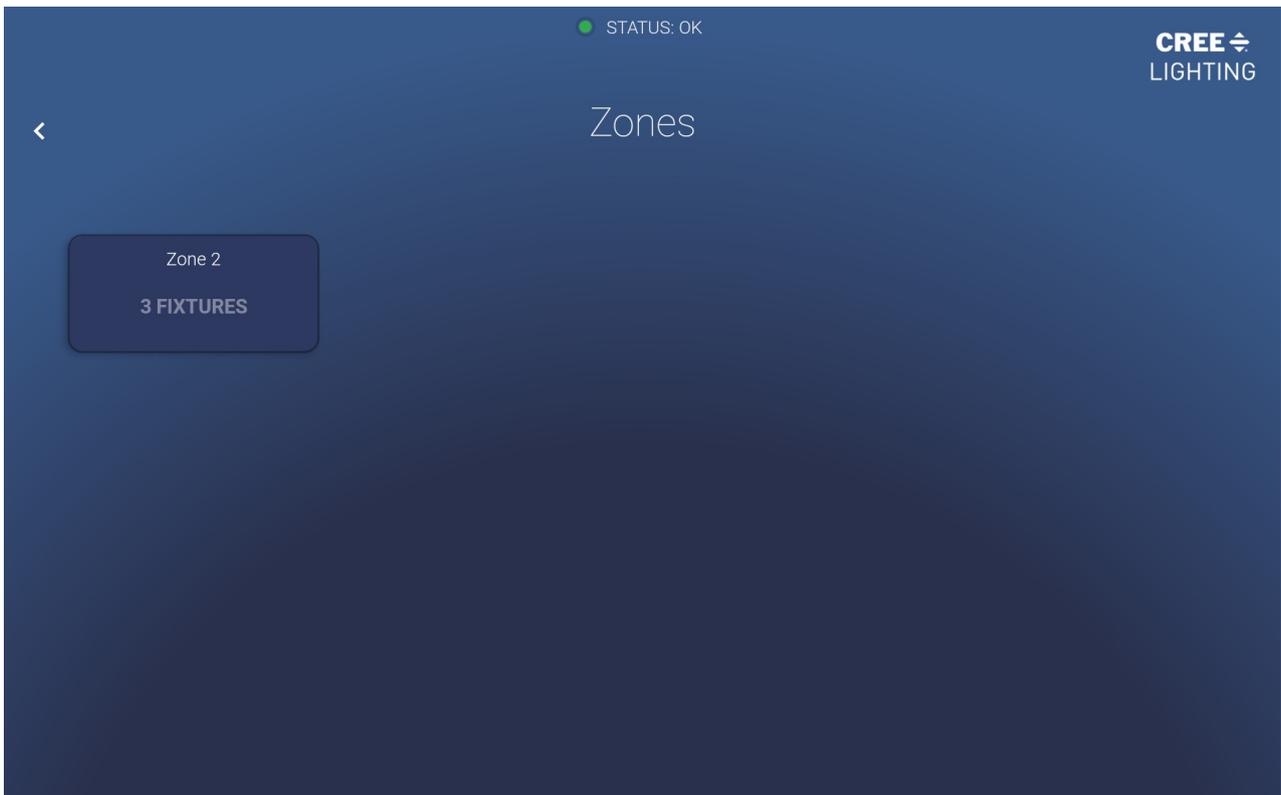


Figure 12. Zones Setting Screen

## Administration

The Administration screen provides settings for the following functions.

Contacts	Lists the Admin Contacts for the SmartCast Lighting System
Wifi and Network	Provides access to the WiFi menu of the Tablet
Reset PIN	Provides ability to reset the PIN that secures the Settings Menu
Space	Identifies the Spaces that this SmartCast Touchscreen services
Time	Displays the current Time and Time Zone
Troubleshooting	Provides onboard Troubleshooting functions for the Touchscreen

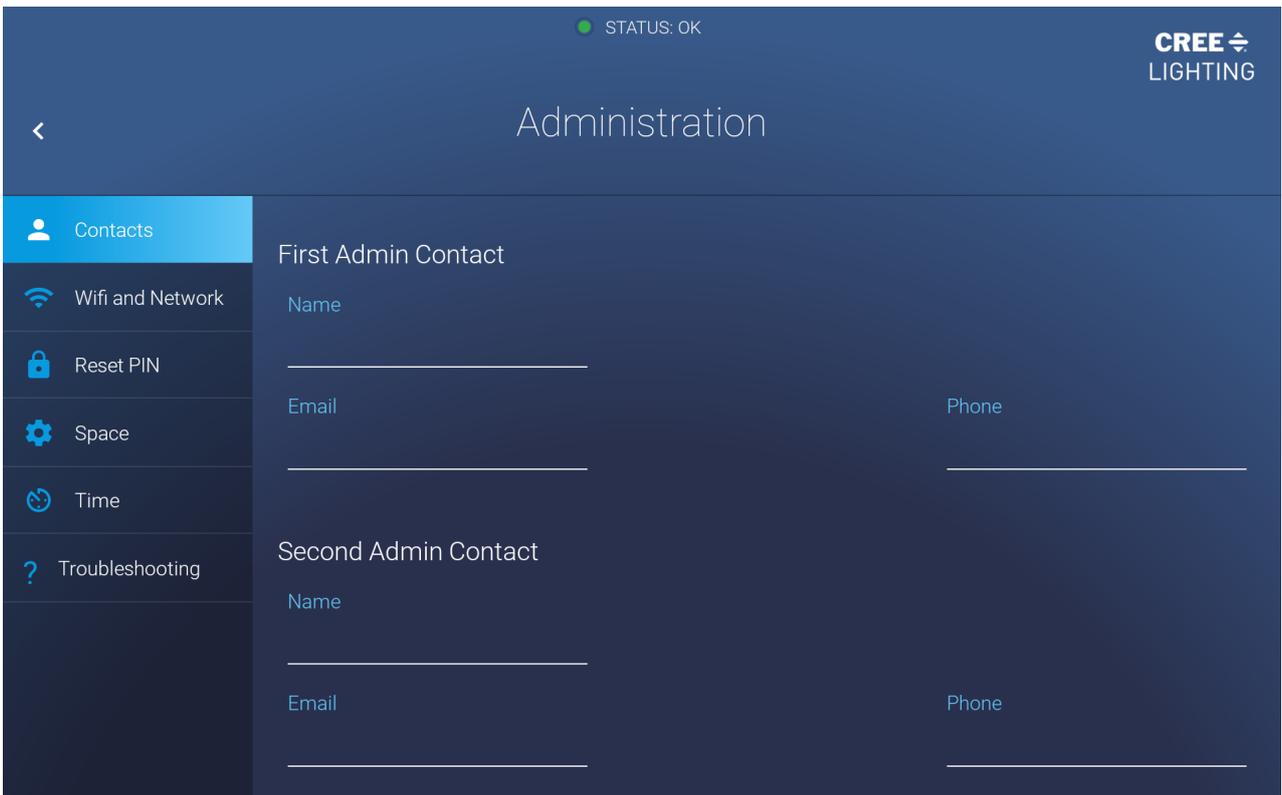


Figure 13. Administrative Contacts Screen

The Administrative Contacts Screen provides fields for recording the system administrator of the SmartCast Lighting System. The system administrator would be the first point of contact for fielding questions regarding the operation and maintenance of the SmartCast Lighting System and SmartCast Touchscreen.

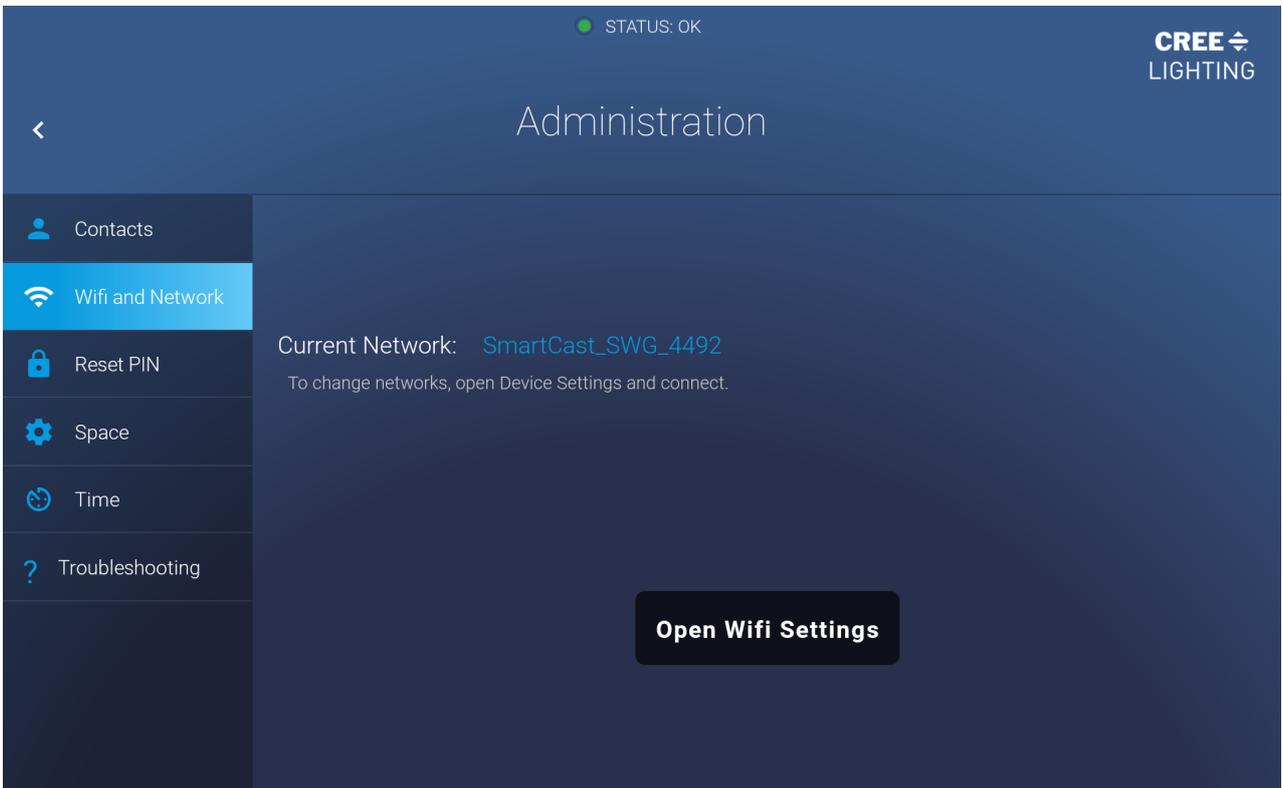


Figure 14. Administration WiFi and Network Screen

The WiFi and Network Screen identifies the WiFi network of the SmartCast Wireless Gateway to which the SmartCast Touchscreen is connected. This screen also provides access to the host tablets WiFi Settings screen to allow for changing WiFi networks. The SmartCast Touchscreen requires temporary connection to a WiFi network with Internet access when software updates are available for download.

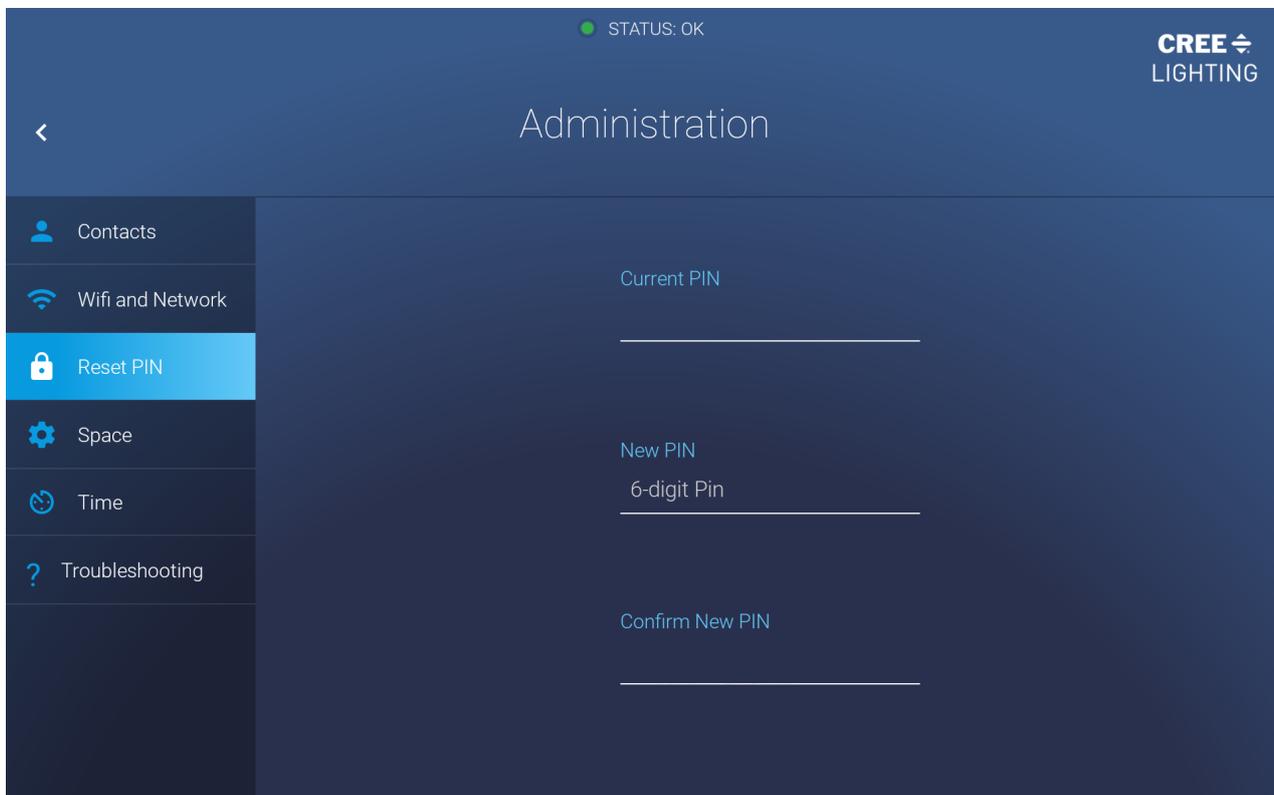


Figure 15. Administration Reset PIN Screen

The Reset PIN screen provides a method for changing the PIN required to access the Settings Menu.

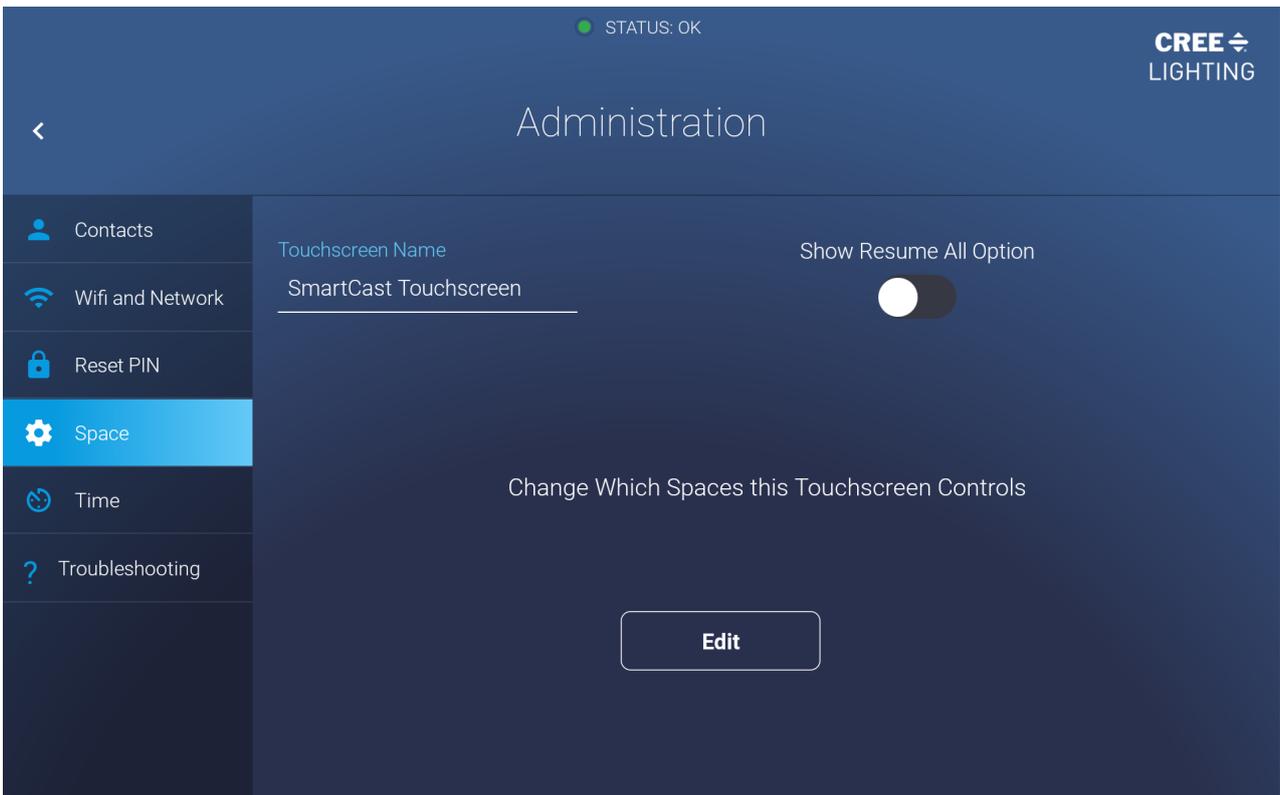


Figure 16. Administration Space Screen

The Administration Space Screen provides fields for changing the name displayed on the Touchscreen Start Screen. The Space Screen also provides a method for assigning Spaces to which the Touchscreen Controls.

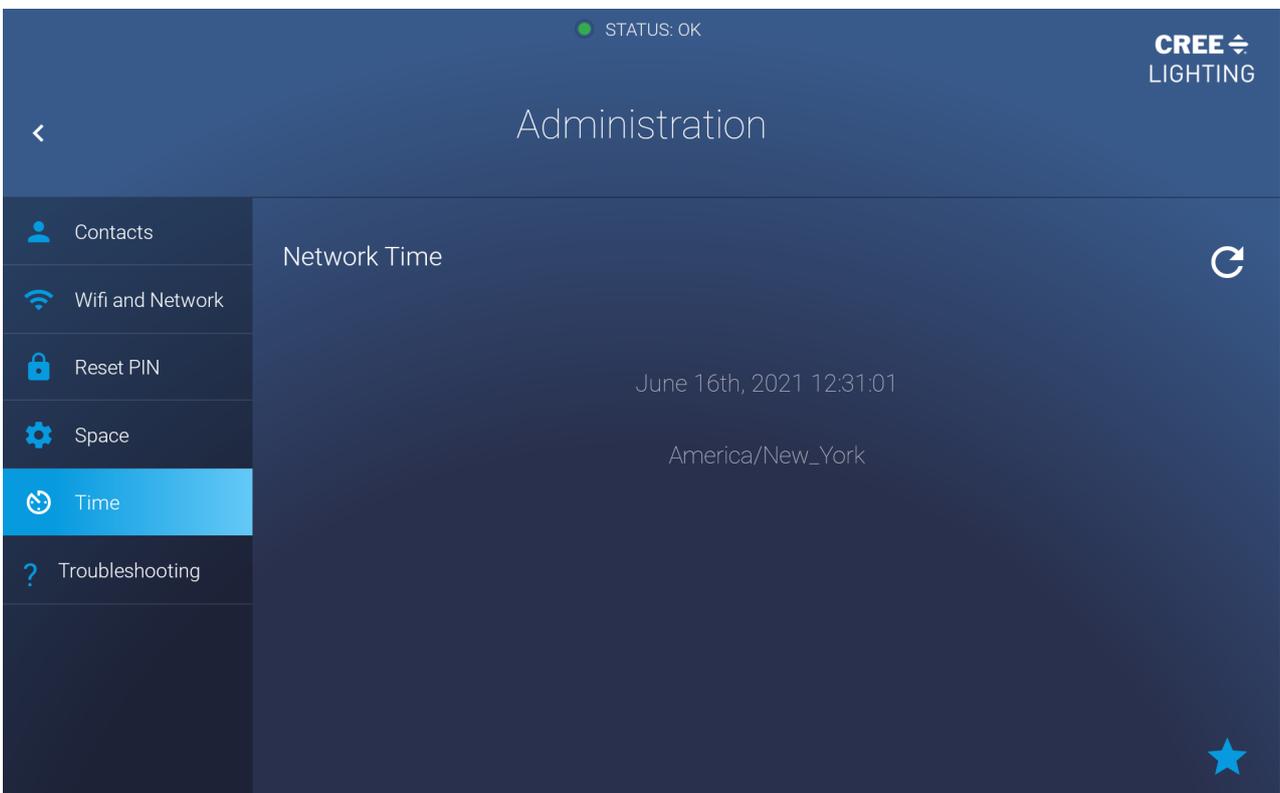


Figure 17. Administration Time Screen

The Administration Time Screen displays the current time and time zone provided to the SmartCast Touchscreen from the SmartCast Wireless Gateway.

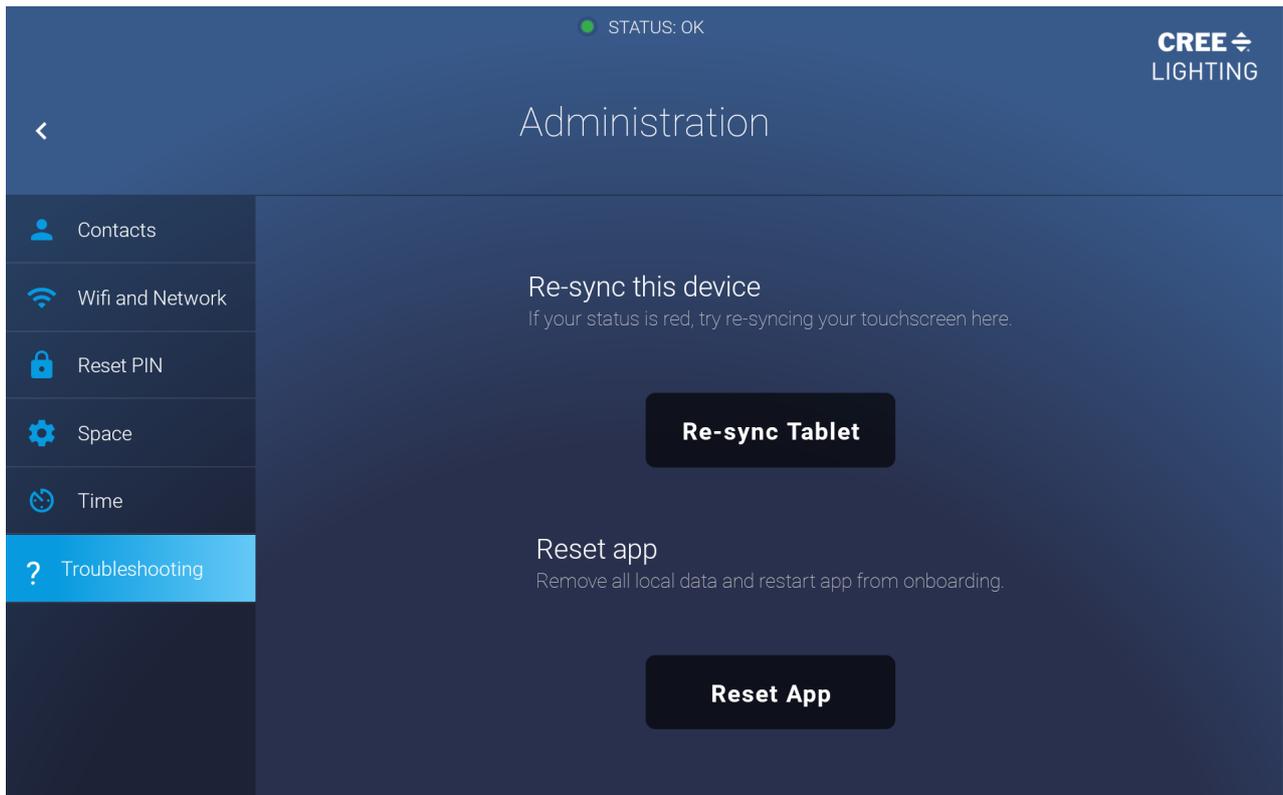


Figure 18. Administration Troubleshooting Screen

The Administration Troubleshooting Screen provides two tools to aid in troubleshooting issues that may develop during the operation of the SmartCast Touchscreen.

- Re-sync Tablet button syncs the SmartCast Touchscreen and the SmartCast Wireless Gateway back together.
- Reset App returns the SmartCast Touchscreen to a factory default state that allows for walking through the setup process again.

## Support

The Support Screen provides contact information for connecting with Cree Lighting for operational and maintenance support.

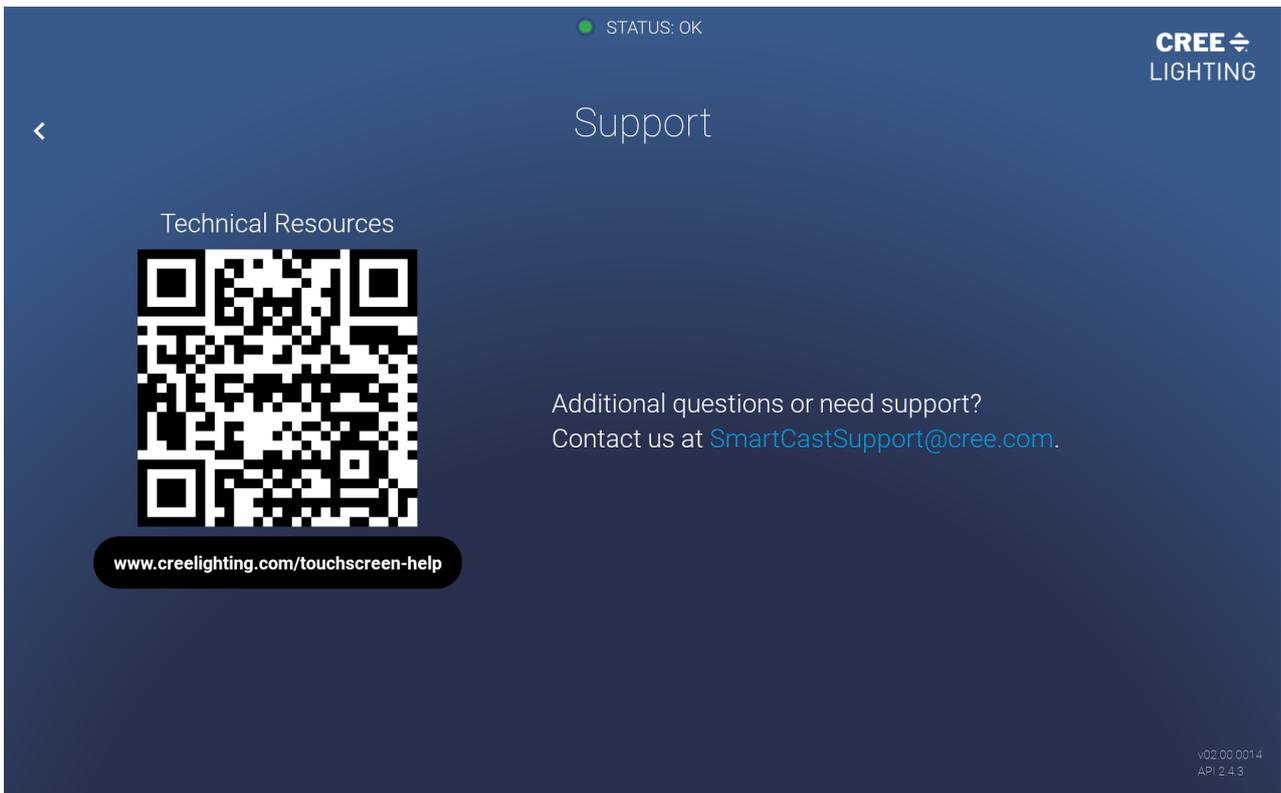


Figure 19. Support Screen

## Dynamic Lighting Profiles Examples

These profiles are included as defaults in the SmartCast Touchscreen to serve as examples for the user to experience Dynamic Lighting Profile.

### Follow The Sun

This Dynamic Profile mimics the path that the sun takes as it crosses the sky over the course of a day.

Start Time	Duration	Brightness	Color	Sky	Sky Color	Sun Position
5:00 AM	60 MIN	50%	3000K	ON	20	80% East
6:00 AM	120 MIN	85%	4000K	ON	75	66% East
8:00 AM	240 MIN	100%	5000K	ON	100	Noon
12:00 PM	300 MIN	85%	4000K	ON	75	66% West
5:00 PM	60 MIN	50%	3000K	ON	20	80% West
6:00 PM	60 MIN	40%	5000K	OFF	0	Noon

### Hospital

This Dynamic Profile provides first and second shift nurse teams with the same virtual daytime experience over the course of their respective shifts.

Start Time	Duration	Brightness	Color	Sky	Sky Color	Sun Position
5:30 AM	60 MIN	50%	3000K	ON	20	80% West

Start Time	Duration	Brightness	Color	Sky	Sky Color	Sun Position
6:30 AM	60 MIN	100%	5000K	ON	100	80% East
7:30 AM	600 MIN	100%	5000K	ON	100	65% West
6:30 PM	60 MIN	50%	3000K	ON	20	80% West
7:30 PM	60 MIN	100%	5000K	ON	100	80% East
8:30 PM	600 MIN	100%	5000K	ON	100	65% West

## Office

This Dynamic Profile provides a first shift virtual lighting experience that reflects the typical occupancy of the commercial office.

Start Time	Duration	Brightness	Color	Sky	Sky Color	Sun Position
6:00 AM	30 MIN	50%	3000K	ON	20	80% East
6:30 AM	120 MIN	75%	4500K	ON	100	66% East
8:30 AM	240 MIN	75%	4500K	ON	100	Noon
12:30 PM	60 MIN	100%	5000K	ON	100	Noon
1:30 PM	240 MIN	100%	5000K	ON	100	66% West
5:30 PM	120 MIN	50%	3000K	ON	20	80% West
7:30 PM	60 MIN	25%	3000K	ON	100	Noon

## School

This Dynamic Profile provides granular lighting changes to stimulate a more active learning environment for students.

Start Time	Duration	Brightness	Color	Sky	Sky Color	Sun Position
6:00 AM	90 MIN	50%	3000K	ON	20	80% East
7:30 AM	60 MIN	60%	4500K	ON	20	75% East
8:30 AM	180 MIN	75%	5000K	ON	100	65% East
11:30 AM	60 MIN	75%	3000K	ON	100	Noon
12:30 PM	30 MIN	75%	3000K	ON	100	Noon
1:00 PM	30 MIN	100%	5000K	ON	100	Noon
1:30 PM	90 MIN	100%	5000K	ON	100	65% West
3:00 PM	30 MIN	75%	3000K	ON	100	75% West
3:30 PM	120 MIN	50%	3000K	ON	50	80% West
5:30 PM	60 MIN	30%	3000K	ON	20	Noon