THEIΛ

SCYNCELED
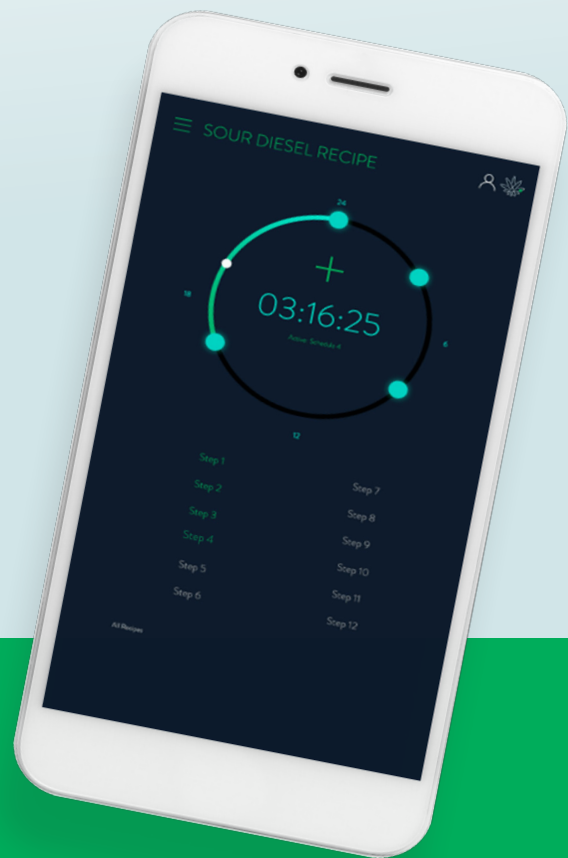
USER MANUAL & INSTALLATION GUIDE

MANUAL FOR END USER AND INSTALLER

Thank you for purchasing the Scynce Theia App. This manual contains all the information needed to quickly familiarize yourself with the product. Please review this information carefully, before installing and/or operating the product.

We recommend you keep this manual on hand for future reference.

For further information please contact:
SCYNCE
4641 East Ivy Street, Mesa, AZ 85205
T: 480 256-0017 E: Info@scynce.ag
www.scynceled.com

TABLE OF CONTENTS

HARDWARE REQUIREMENTS

- An iOS or Android device with support for Bluetooth Version 4.1 or Higher.
- Minimum Android Version. 6.0.
- Minimum Apple Version. 10.0.

WIRELESS TECHNOLOGY OVERVIEW

Scynce lights combine two different wireless technologies to allow control of many lights at the same time from the Theia App. The first is Bluetooth Low Energy (BLE). This is how an IOS or Android device sends command and configuration data to a Scynce light. BLE is a single point-to-point technology and can only connect to a single light at any given time. To overcome this limitation Scynce lights also use Google's Thread Mesh, a wireless mesh network technology (originally designed for IoT applications), to communicate between themselves. Scynce lights are designed to bridge these two different wireless technologies together. When a command is sent to a light from the app (via BLE) that light will then resend the command (via Thread Mesh) across the network of other lights. Using the combination of these two wireless technologies, the Theia app can control thousands of lights simultaneously.

Thread Mesh is a network topology where the devices connect to each other and are not dependent on a central hub; nor do they connect to WiFi or take up any bandwidth that could conflict with the rest of your facility's network. This means there is no single point of failure. If a device in the network fails, the network will reconfigure (heal) itself to reroute data and prevent failures.
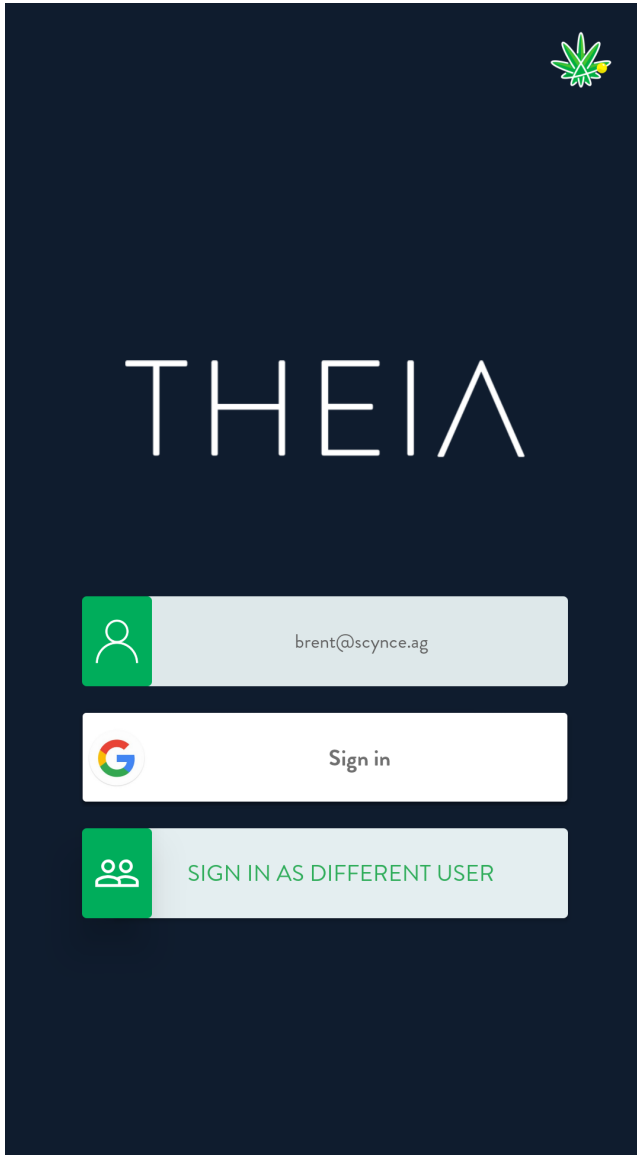
SETUP

Download and install Scynce's "Theia" app from the iOS or Android Play store.

WARNING

- Make sure that your BlueTooth connection is turned on
- Make sure that "Location Services" is turned on
- **DO NOT** connect your BlueTooth directly to a light. Only connect to a light from within the Theia app.

LOGIN PAGE

After the install completes, open the app and the login page will be shown first. A Google email is required to login and use the app. If no Gmail account information is entered the app will redirect you to the Gmail signup page. Once a Gmail account is validated, the landing page will be displayed (the End User License Agreement will be displayed if this is the first time login) .

If you do not have a Gmail account (either private or corporate) we suggest creating a new email on the Gmail platform. If you are part of a commercial grow operation, we suggest you create an account that is unique to your business and one that can be used as a corporate login to share among those needing access to the app. This way all of your stored recipes will be available for anyone needing to adjust the lights.

· SCYNCELED

LANDING PAGE

The Landing Page is the dashboard where you will find all of the lights that are within wireless range and able to be connected to. Each light has a device name, model, group and signal strength listed.
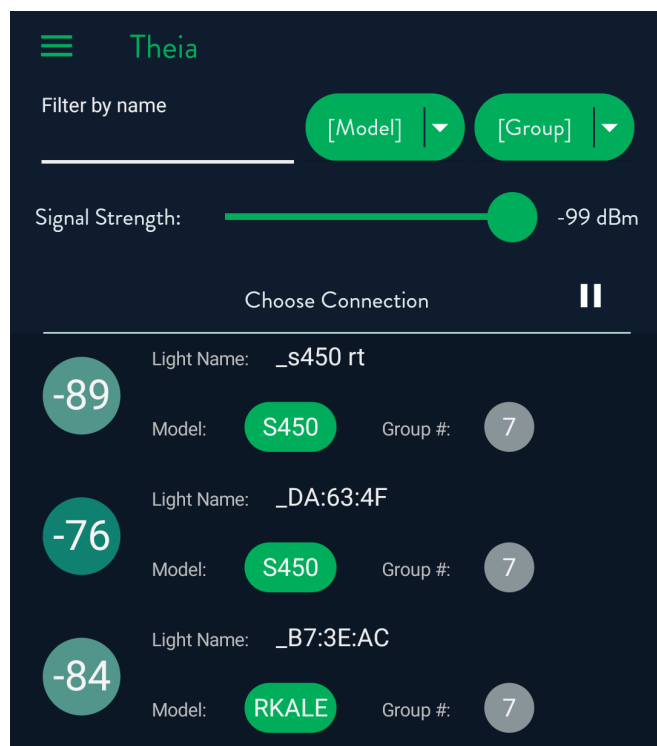
The following is a list of what the "model" name of each type of light is:

S300X = Dragon S
S450T = Dragon S-turbo
SL600 = Dragon SL
RKUSH = Raging Kale
RKALE = Raging Kush

- Device Signal Strength is listed in the circle on the left hand side(scaled from 0 to -100) .
- Device Name / Light Name is shown across the top. The default name is a little cryptic as it uses the last 3 bytes of the device's unique BlueTooth address. The light name is editable on the configuration page for android devices (iOS does not allow this).
- Model Name is inside of the green oval.
- Group # lists the current group, if any, that the light is currently in.

Across the top of the page are options for filtering the list by name, model, group and signal strength. Tapping into the space below "Filter by name" will bring up a keypad to enter text with. The filter will look at the list of near-by devices and only show the ones with matching characters in the name.

Pressing the green MODEL or GROUP button will show a list of models or groups. If a model or group is selected, then only the devices matching that group and or model will be shown in the list.

The signal strength slider bar can be used to filter devices that have a lower signal strength. By moving the slider to the left, lights with lower signal strengths will be removed from the list. The closer to zero the signal strength is, the closer it will be to the device running the app (-99 is further away, and thus has a weaker signal than -32).

Tapping on one of the devices listed here will initiate the connection between the app and the device. Once the app is connected to the device the "Spectrum Page" will be displayed.
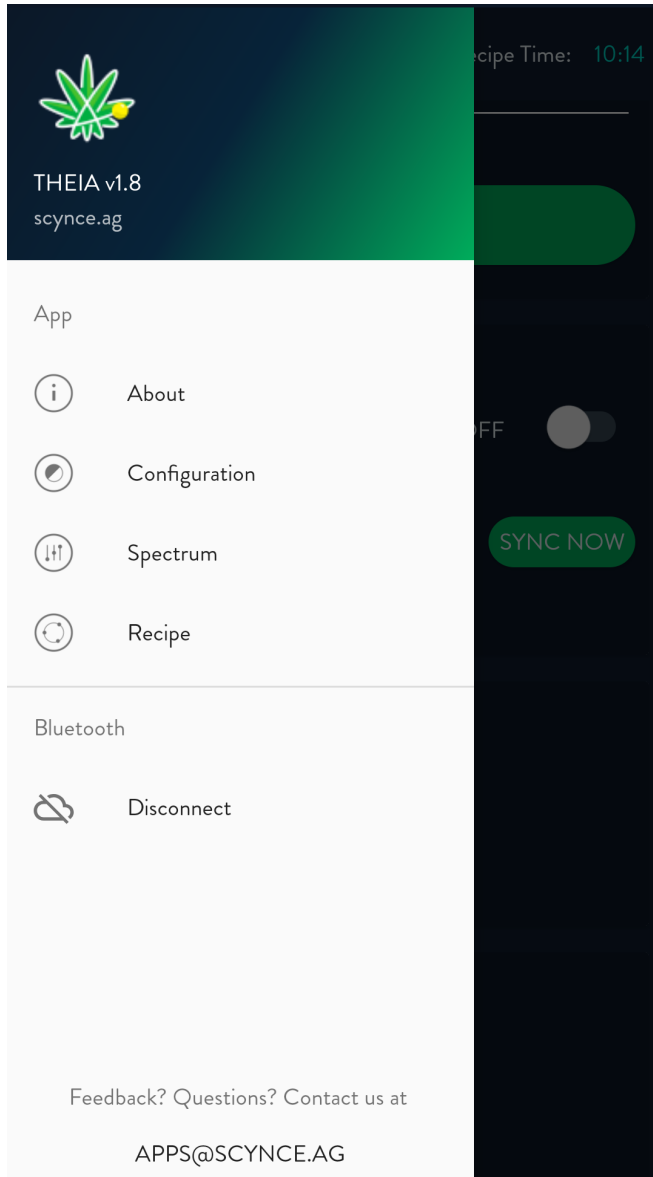
SPECTRUM PAGE

The Spectrum page is where real-time control of the light output, intensity and color spectrum are controlled. The four color sliders each control an individual color. Not all lights use all of the color sliders. The intensity slide controls the overall output light level of the fixture and is used by all lights.

The SINGLE/GROUP slider enables and disables the lights from the mesh network. When in single mode, the device does not communicate with other lights around it. If the slider is in group mode, the light will connect via Thread Mesh with the other lights around it that are in the same group. When you are in group mode, commands sent to the light from the app will be synchronized to any light nearby that is in the same group.

The Recipe Time in the upper right corner is the current time that is stored in the light. Note that the Recipe Time will begin at 00:00 (Midnight) when the light is plugged in and will RESET to 00:00 any time the light is power cycled. If you would like the recipe time to match your phone/tablet time, please see Menu > Configuration > Time Sync for further details & instructions.

The RECIPE ON/OFF slider disables or enables the recipes that can run in the lights. If the slider is in the off position, the light outputs are controlled from the sliders on the Spectrum page in real-time. If the slider is in the "on" position, the light output is controlled by the last recipe that was activated and sent to the light from the recipe page. Please note that the sliders on the Spectrum page will be disabled when recipes are turned on, but it will still show the light's current output levels. Tapping the three green bars in the upper left corner will slide out the navigation menu.

NAVIGATION MENU

The Navigation Menu can be accessed from any page by tapping the 3 bars in the upper left corner of the screen. The Navigation Menu has 5 choices: About, Configuration, Spectrum, Recipe and Disconnect.

About will display general information about the device.

Configuration is where settings such as "group" and "device name" can be changed.

Spectrum is where you can adjust the light spectrum and intensity in real-time.

Recipe is where the recipe information is configured and uploaded to the lights.

Disconnect will simply disconnect form a device and return to the landing page.

ABOUT PAGE

☰ **Theia** SCY_S300T_G00_s450 rt	Recipe Time: 10:20

About: DRAGON S450

Radio Serial Number:	0x00002F7CDB472E7F
Radio Firmware Version:	0.80
Intensity:	50
Channel Cool level:	75
Channel Natural level:	75
Channel Red level:	100
Channel Warm level:	100
Network Time:	10:20
Recipe Active (Y/N):	true
Network Status (mesh):	true
Group:	7
Primary Serial Number:	0x7098380425262B00
Primary Firmware Version:	3.02
Primary Temp: (External temp):	37
Primary Fan Speed:	15

The About page will display information about the device that can be used by tech support to help if any problems occur. The data is broken into several parts depending on the model. Typically, there will be 1 to 3 sections of data. All devices will have the first section which contains the radio, serial number, firmware version and a summary of the device's current configuration. If the light is part of the Dragon series it will have 1 or 2 more sections of data depending on the model. This data is the status information from the internal power supplies. It also contains the serial #, firmware version, temp, fan speed, fan faults, rollback and hours of operation.

**Temp** values show the temperature of the LED board that is being monitored in degrees Celsius.

Fan speed is displayed as a percentage of the maximum fan speed.

Fan Faults displays the number of fan faults that have happened since the last power cycle.

Roll back is the output power relative to the output power set with the sliders on the spectrum page. In normal operation this should be 100. If this is less than 100 the unit is too hot and the output power is being reduced by our software for self-preservation purposes.

Hours of Operation is the amount of time the unit has had power applied.

SCYNCELED

CONFIGURATIUON PAGE
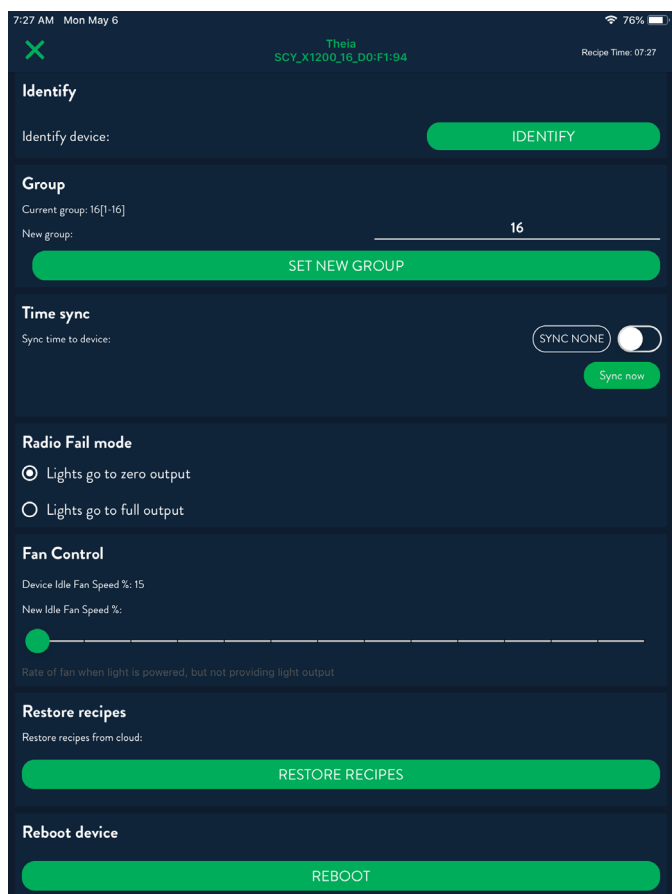
The Configuration page is where setup and configuration are done. The IDENTIFY button is used to help find the specific light you are connected to. When the button is pressed the light will flash for 5 seconds. This is a great tool to help you find a specific light when there are many of them in one room.

Group is the group/zone that the light will be a member of. The valid groups are 1 to 16. Grouping is used to allow control of more than one light. If multiple lights are in a group and if the single/group slider is in the group mode, then any control command sent will be sent to all lights in the group. Configuration commands are only sent to the light that the Theia app is directly connected to. The connected light will forward those commands on to every other light in the same group via Thread mesh.

Time sync has both a slider and a button. If the button is pressed, the app will send the current time of your device to the lights. If connected to an Echo, it will also send the updated current time. If the Auto Sync slider is enabled when the app connects to a light, it will automatically send the current time to the light or the Echo, which in turn will synchronize that time across all the other lights that are in the same group. *This process must be repeated for each different group that you have your lights assigned to.* *Also, be sure to re-sync your lights any time there is a power outage.*

Radio Fail Mode only applies to the Dragon series of lights. If for some reason the communication link between the power supply and the radio fails, which is extremely rare, this lets the user choose what happens next. You can have the lights either go to full brightness or shut off completely. The default setting is for the light to shut off completely, so as to keep the lights from turning on in the event a fail happens during your dark cycle.

To avoid confusion, the radio fail mode has no effect on the Raging K lights. If the radio fails in the Raging K lights, the lights will just turn off. The Dragon lights use a different power supply that has a processor in them so the light output will keep going even if the radio fails. The radio fail mode is there to tell the Dragon light's power supply what to do if it loses communication with the radio.

Fan Control only applies to the Dragon series of lights as they are the only models that utilize active cooling. This gives you the option of setting the minimum fan speed from between 15% and 80% of maximum speed. This can be used to force more air circulation in the room if the user desires. The software in the light will automatically raise the fan speed above this level to keep itself cool and protected, should the need arise.

The RESTORE RECIPES button reloads the recipes from your cloud storage.

The REBOOT button sends a reboot command to the light or the whole network depending on the position of the Single/Group Slider.

Pressing the FACTORY RESET button will cause the light configuration settings to be reset to factory condition. The app will ask for a verification before sending the command. In lights with firmware version 0.69 or less the command only needs to be sent once. But if connected to a light with firmware version later than 0.70, this command will need to be sent a second time. If the light has firmware later than 0.70 the app will display a warning that the factory reset command will need to be confirmed by sending the command a second time. After sending the command the first time the light will flash for 5 seconds, pause for 1 second, then flash again for 5 seconds, then reboot itself. After about 5 seconds, but in less than 2 minutes, the app must connect to the light again and send the factory reset command again. If the factory reset is not sent again within 2 minutes the light will restore itself to the condition prior to the first factory reset, essentially negating the reset.

RECIPES

The Theia app allows the user to create and store up to 3 recipes. A recipe is a series of events (steps) that are scheduled to happen at a specific time during a 24 hour period. Each of these recipes can have up to 12 steps. A step is a combination of time when the step will happen, the output levels that the light will change to at that time and the transition type. A light or group can only have one recipe active at any given time. If the user has more than one light or groups, each could have a different recipe active. Once a recipe is activated and enabled the recipe runs autonomously in the lights, The app can be disconnected and the lights will keep running the scheduled steps in the recipe until they are sent a new command (even if the power were to go off).

RECIPE LIST PAGE
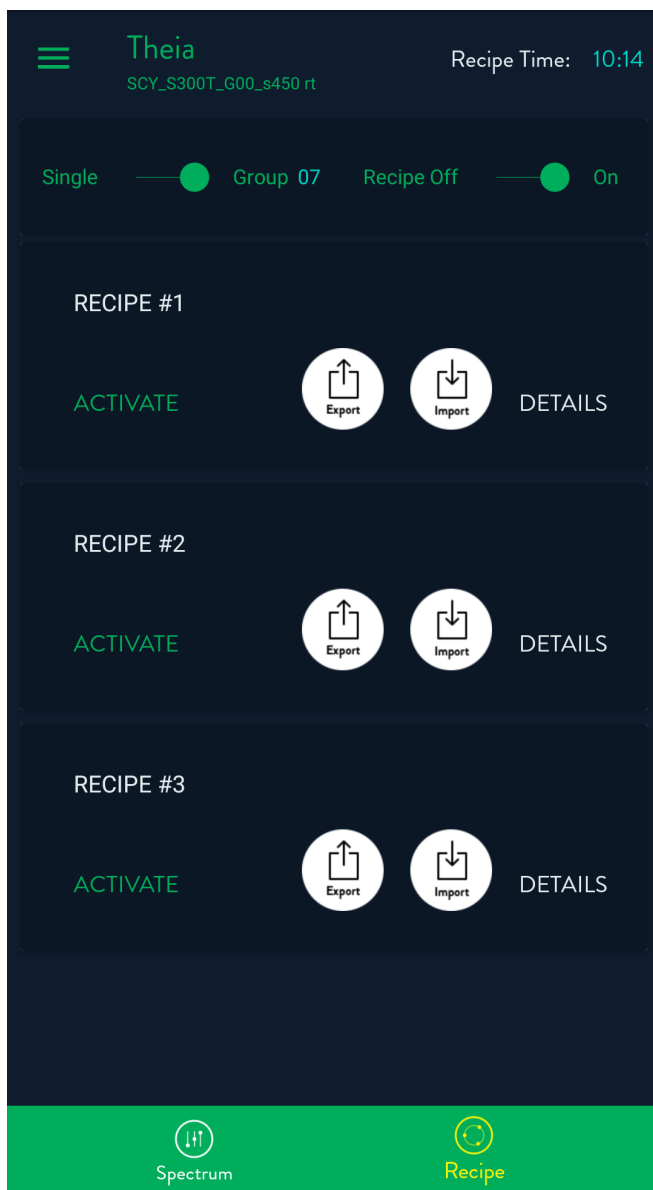
This page shows the three available recipes. Each recipe has a name that is editable by pressing and long-holding on the name. The default names are Recipe #1, #2 and #3. Pressing ACTIVATE will upload the recipe to the light that the app is currently connected to. *The only time the recipe data is uploaded is when ACTIVATE is pressed.*

Once the recipe is activated it will be indicated by the text [ACTIVE] next to the name. Any time the app connects to a light that has a recipe in the light that matches one of these three recipes, the recipe will be marked as active. If none of the recipes match what is in the app, a popup will be displayed indicating the recipes do not match. Tapping the DETAILS text will open the specific steps for each recipe.

Import and Export function. This will create a .JSON format file that can be loaded in any Theia app on any platform, or email to other users or Scynce for tech help.

EXPORT:
IOS will create a file and then ask where you would like to save it. We recommend using a dedicated folder on dropbox or Google drive so they are portable between platforms.

Andoird will open a box that asks if you want to save to "Other Apps" or "Files." Other apps opens a dialog to pick the location wher the files will go directly to a folder named "Thiea". Use any file manager app to move it to or from that folder. We recommend using "Other apps" and a dedicated folder on dropbox or Google drive (the app must be installed on the specific device) so they are portable between platforms.

IMPORT:
After clicking on "Import," locate the .JSON file (recipe) you wish to import. The file will be imported into the app and ready for you to modify and/or send it to your light via the "activate" protocol.

RECIPE PAGE
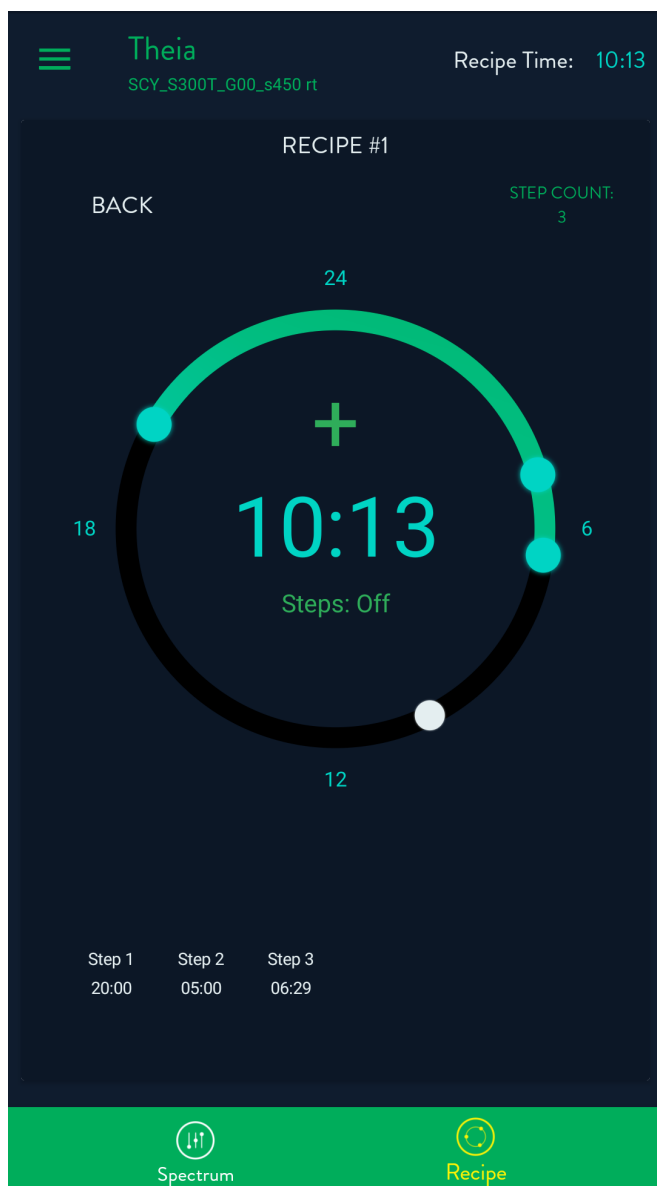
The recipe page shows the time during a recipe that the light is on/off. It is a round circle representing a 24-hour clock. The circle is blue for the time of day that the light is scheduled to be on and black when the light is scheduled to be off. The blue dots each represent a step while the white dot represents the current time. Along the bottom is a list of the steps in chronological order with the time below each step number.

Pressing on a dot or pressing a step in the list will open the page to edit that step. To add a new step press the + symbol in the center of the clock and the "edit step" page will open with a new step to edit. To return to the recipe list hit the back text in the upper left corner.

RECIPE EDIT

Theia
SCY_S300T_G00_s450 rt

Recipe Time: 10:04

Selected Step: 1

Hour	Minute	Cool	Natural	Red	Warm	Intensity
						100
4						
	0	0	0	0	0	

☐ Is Initial Step?

TRANSITION: IMMEDIATE   **STEP: DELETE**

CANCEL   **APPLY**

Spectrum   Recipe

The recipe edit page is where a step is configured. There are seven sliders to set the time, output spectrum and output intensity. The first two sliders on the left set the hour and minute that the step will initiate. The next four sliders control the spectrum (color). The last one on the far right is the total output intensity control of the fixture. There is a check box on the left just below the slider. If checked this will force the step to be displayed first in the list on the recipe page (placing it first chronologically).

Next, you will notice that there are four buttons on the bottom of the page: Transition, Step Enabled/Delete Step, Cancel and Apply. Pressing CANCEL will cause the app to return to the Recipe Page without saving any changes. Pressing APPLY will save the recipe "as is" and return to the Recipe Page. Pressing APPLY does not upload the recipe to the light, it only saves the data in the app.

When the STEP ENABLED button is pressed, it will change to DELETE STEP. If the APPLY button is pressed while the button reads DELETE STEP, the step will be deleted and removed from the step list on the Recipe page.

The transition button controls how the output of the light changes over time. If it is "immediate" then the light will change from the output level of the previous step to the output level of this step instantaneously at the set time. If the button is set to "ramp" the output will change at a mathematically even rate during the timestamps between this step and the previous step.

• SCYNCELED

RAMP EXAMPLE

An example of how the ramping transition works requires that there are at least two steps in the recipe. The first step in the ramp is configured as depicted in the RECIPE EDIT figure. The second step of the ramp is configured as in the RAMP Example figure. The first step has the outputs at 100% at 04:00. The second step has the outputs at 0% at 05:00 and the transition is set to ramp. This will cause the outputs to slowly change from 100% to 0% between the times of 04:00 and 05:00. Remember that a ramp transition always has to have two steps. A start step and an end step. Also, the transition type of the starting (or first) step does not matter. It is the transition type of the second step that determines if it is a ramp or immediate transition.

The final step during the Activation process (when you have finished designing your recipe and are ready to send to the light) is to navigate to the Recipe list page. From here, press "Activate" for the recipe you want to upload to the lights. Confirm that you want to initiate the upload then be patient as it will take 15 to 20 seconds for the data to propagate throughout the mesh. Finally, set the recipes to "on."

Remember, even if a recipe is sent to a light (activated), the light/group will not run the recipe unless you toggle the "Recipe On."

For additional support or questions please contact us at: support@scynce.ag or 480-256-0017