

Minleon USA

Unicorn Cloud-Based LED Control System



Unicorn Cloud-Based LED Control System

Table of Contents

1. Create an Account
2. Become an Installer
3. Installing the Gateway
4. Create an Installation
5. Installing Field Controllers
6. Uploading Configuration to The Cloud
7. Box Delivery & Verification
8. Create a Group of Controllers
9. Control the Lights
10. Schedule Effects
11. Troubleshooting Tips



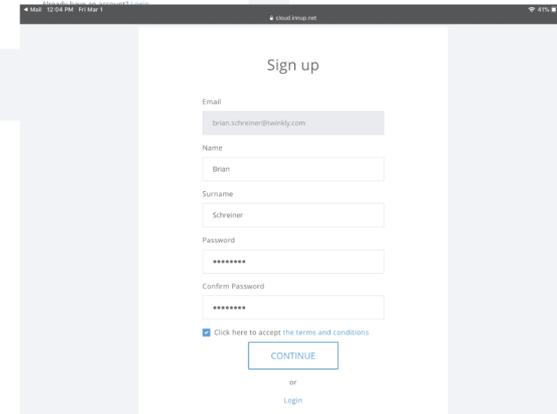
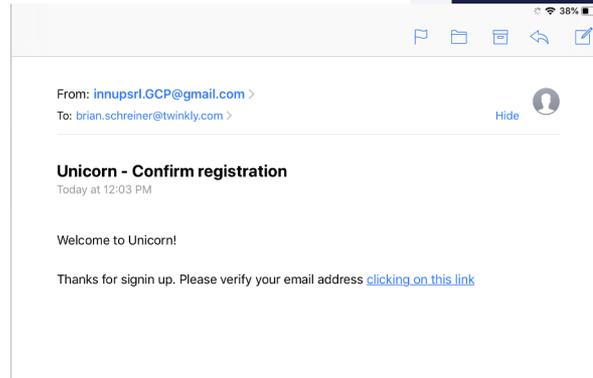
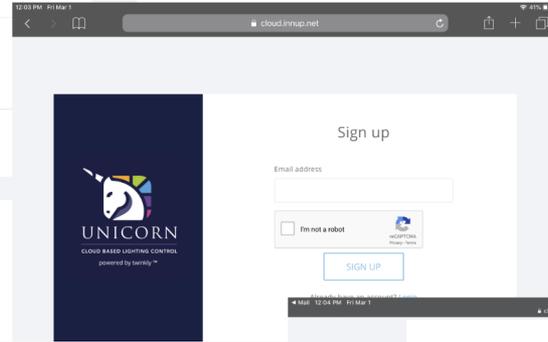
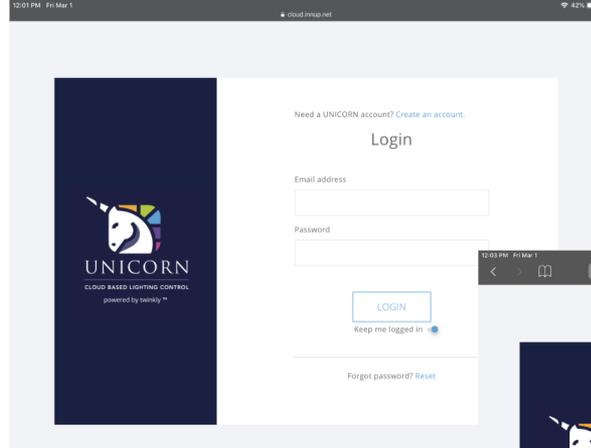
Account Creation

Go to the Unicorn Cloud account homepage: cloud.innup.net

- Select: CREATE AN ACCOUNT
- Fill out the form with all information
- Check your email for confirmation
- Verify your account by clicking the link.
- Fill out the Account Form and
- Create an easy to remember password.

Note: This step also can be used for a customer account creation.

Important: This info will also be used when Configuring your Field Controllers in the *SpectraShow* App (pp 14-20).



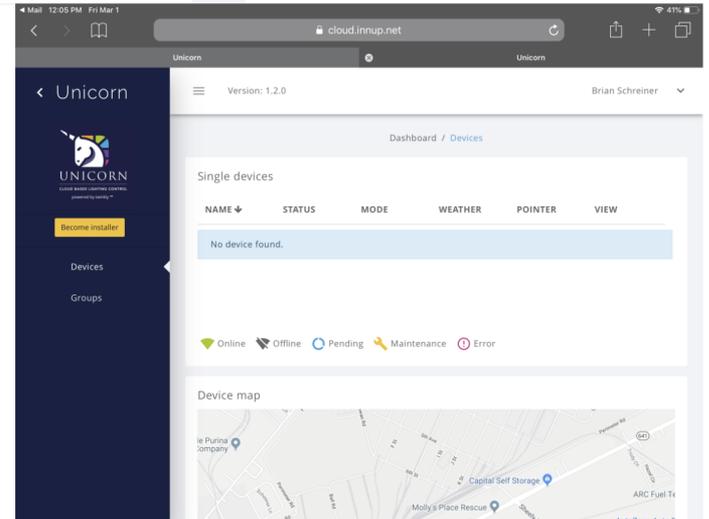
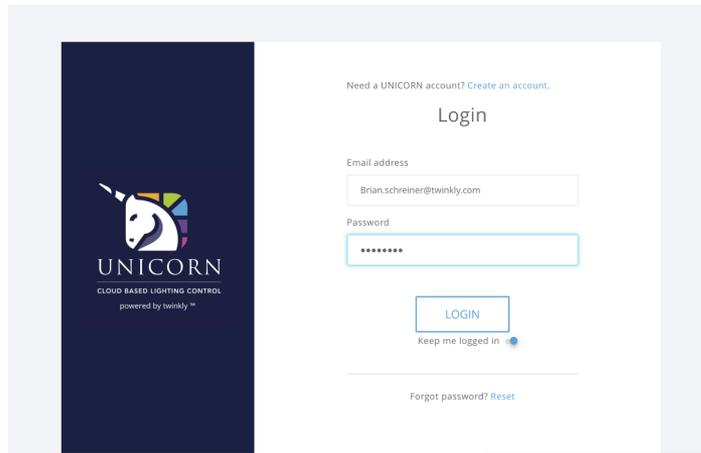
Logging in for the first time

Go to cloud.innup.net and log in using the email you created an account with and the password you created.

Once you login you will see the Cloud as a user. This would be the view the customer has as well.

If you are going to be an Installer, click the **Become Installer** button.

Note: This is only used for being an installer. Customers will be denied this access.



Becoming An Installer

Once you click on ***Become Installer*** you will fill out a Form requesting this permission:

- In the “Company Code” type “unicloud”.
- Forward request to DISTRIBUTOR, not Administrator.
- In “Distributor’s Email” field always type: unicorn@minleonusa.com
- SEND the form and wait for a response. This may take up to 24 hours.

Note: The status will change from PENDING to a disappeared status.

Pending installer request

The screenshot displays the Unicorn mobile application interface. On the left is a dark blue sidebar with the Unicorn logo (a unicorn head with a rainbow mane) and the text "UNICORN CLOUD BASED LIGHTING CONTROL powered by twinkl™". Below the logo is a yellow "Become installer" button. The sidebar also contains menu items for "Devices" and "Groups". The main screen shows a form titled "Single device" with a "NAME" dropdown and a "No device" button. The form fields include: "Company code (registration number)", "Company address", "Mobile number", and "Forward request to" (a dropdown menu currently set to "Distributor"). Below these is the "Distributor's Email" field. A note at the bottom of the form states "*Fill the required informations". At the bottom of the screen are two buttons: "SEND" (blue) and "CANCEL" (yellow). The top right corner of the app shows "Version: 1.2.0".

Installer Level

This is the Installer Level of the Unicorn. You can manage your installations from this screen.

This is also where you create new projects for your customers

This is a management tool for the installers.

It is helpful to think in these terms:

Customer Box=Group of Field Controllers (aka “Devices”)

delivered to the job site

Device=single Field Controller

Mail 12:09 PM Fri Mar 1 cloud.innup.net

Version: 1.2.0 You are viewing the **INSTALLER** interface schreiner23

Customer Box List

ID	NAME ↓	CUSTOMER EMAIL	CONTRACT	COLOR	VIEW
ac02aad81b	400N	lightsofbryan@gmail.com	SOLD		
4ba964f04d	Austwick Property	specialprojects@minleonusa.com	RENT - Jan 22, 2019		

Customer box map

Installer Box

This is a virtual holding tank for controllers not currently in use.

We place controllers that are taken off site along with controllers that have come out of a rental status here.

Again, a “box” is a group of “devices”. “Devices” are “Field Controllers”

The screenshot shows the Unicorn web interface. The top navigation bar includes the Unicorn logo, the text "Version: 1.2.0", and "You are viewing the INSTALLER interface schreiner23". The left sidebar contains the Unicorn logo and navigation options: "Installer Box", "Customer Boxes", and "Laboratory (2)". The main content area displays a table of "Installer box devices (528fd4e35f)".

NAME ↓	STATUS	MODE	WEATHER	POINTER	VIEW
400Lights Test	Offline	Fix	140.7°F 15.7%	Location pin	Eye icon
crowley rec car port	Offline	LIGHT OFF	104.0°F 26.7%	Location pin	Eye icon
crowley rec	Offline	LIGHT OFF	N.D	Location pin	Eye icon

Legend: Online (Green), Offline (Grey), Pending (Blue), Maintenance (Yellow), Error (Red).

Device map: A map of the United States with a black circle and the number 5 indicating a device location in the Philadelphia area.

Laboratory

This is a virtual holding tank for controllers (aka “Devices”) that a customer will “send to you” in the cloud for service. It is simple a place to isolate and test a controller and it not affect the customer’s scheduled events.

The screenshot shows a web browser interface for 'cloud.innup.net'. The page title is 'Unicorn' and the version is '1.2.0'. The user is logged in as 'schreiner23'. The interface is divided into a dark blue sidebar and a main content area.

Sidebar:

- Unicorn logo: CLOUD BASED LIGHTING CONTROL, powered by twinklly™
- Installer Box
- Customer Boxes
- Laboratory (2) ←

Main Content Area:

Version: 1.2.0 You are viewing the **INSTALLER** interface schreiner23

Laboratory

ID	CUSTOMER	STATUS	POINTER	VIEW	RETURN
00800000400 E20B					
00800000400 E1BB	Hartfordlights WI@gmail.com				

Legend: Online Offline Pending Maintenance Error

Device map

Installing the Gateway

The Gateway is the conduit to the Cloud. Therefore it needs Internet to communicate the commands from the Cloud to the Field Controllers.

THE INTERNET CONNECTION MUST BE OPEN WITH NO FIREWALLS & HARDWIRED.

Also, *the Ethernet PORT of the network to which you are connecting must be configured for DHCP*, random IP address assignment.

All configuration is done prior to you receiving the Gateway, so all you need to do is plug it in and connect the Cat 5 cable.

Note: The only thing our Gateways talk to is the Cloud and to the controllers, it can not communicate with anything else, so it is extremely secure.

Range: 1-2 mile radius - 4 mile end to end, must place in Drybox or indoors.



Installation of the IP67 Military Gateway

Like the Indoor Gateway, the Military Grade GW needs the same internet connection, but without the need for a dry box. This unit also uses POE, Power-Over-Ethernet, allowing you to plug the power supply closer to the internet connection and run cat5 cable up to 200' away to the GW. This will give you the most mounting options and the ability to get it as high as possible giving you maximum coverage.

Range: 2.5 - 5 mile radius - 10 Miles
end to end coverage max

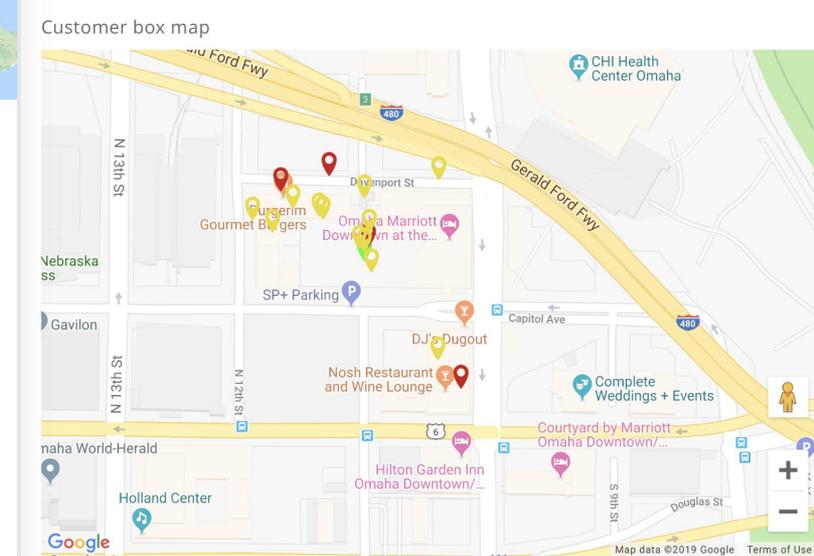


Creating a new installation

Because there is one Transmitter (aka: Gateway) to many Unicorn Receivers (aka: Field Controllers) and everything is controlled via the Cloud, you must have a unique ID for the installation.

This ID can be a single location (city or shopping center) but it can also be multiple locations across the country.

The ID allows us to assign specific controllers to specific customers, regardless of their physical location.



Create a Project ID

In the upper right hand corner of the Installer interface, in the Customer Boxes section press CREATE. Fill in:

CUSTOMER BOX NAME – Installation description

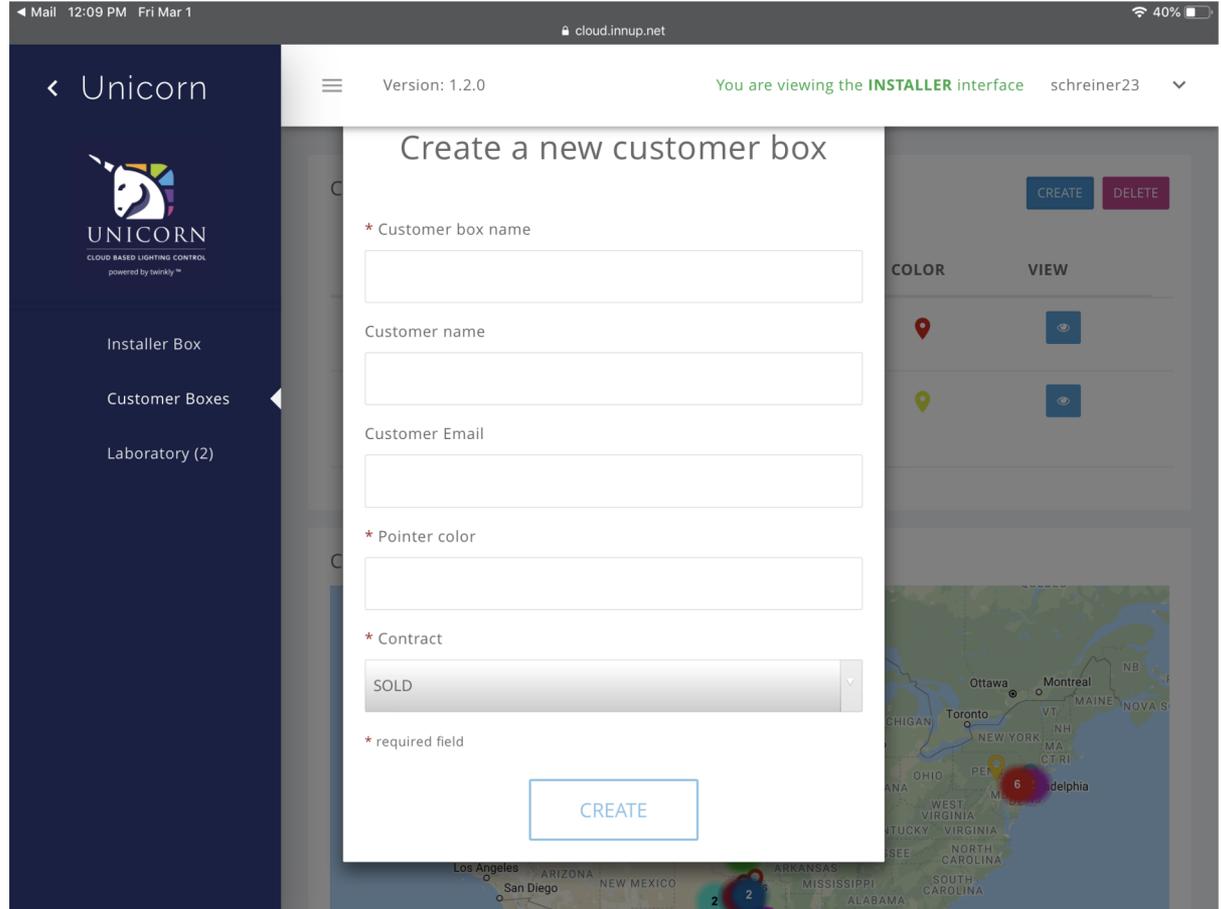
CUSTOMER NAME – Your client

CUSTOMER EMAIL – Email of customer, or an email you set up for the customer if you are managing the day to day operation of the system.

POINTER COLOR – Color of the PIN on the map)

CONTRACT – SOLD or RENT, select rent if there is an end date to a contract

Click CREATE - and you will see it appear in you list of CUSTOMER BOXES



The screenshot shows the Unicorn installer interface. The top navigation bar includes the Unicorn logo, a hamburger menu, the version '1.2.0', and the user 'schreiner23'. The main content area is titled 'Create a new customer box' and contains the following form fields:

- * Customer box name**: A text input field.
- Customer name**: A text input field.
- Customer Email**: A text input field.
- * Pointer color**: A color selection field.
- * Contract**: A dropdown menu with 'SOLD' selected.

A 'CREATE' button is located at the bottom of the form. A red asterisk indicates required fields. The background shows a map with several location pins and a sidebar with navigation options: 'Installer Box', 'Customer Boxes', and 'Laboratory (2)'.

Customer Box ID

This ID tells the Cloud where the controllers belong.

Once you create this ID, it is important your ground installers have this code. Make sure you email, take a photo, or text it... somehow share it.

Have them copy & paste the ID to their notepad in their phone, or jot it down.

In the example to the right, the Box belongs to UNICORN TEST and customer brianschreiner23@gmail.com.

The screenshot shows the Unicorn installer interface on a mobile device. The top navigation bar includes the Unicorn logo, a sidebar menu with options like 'Installer Box', 'Customer Boxes', and 'Laboratory (2)', and a header with 'Version: 1.2.0' and 'You are viewing the INSTALLER interface schreiner23'. The main content area displays a 'Customer Box List' table with columns for ID, NAME, CUSTOMER EMAIL, CONTRACT, COLOR, and VIEW. A context menu is open over the first row, showing 'Copy', 'Look Up', and 'Share...' options. Below the table is a 'Customer box map' showing a map of the United States with colored markers indicating the locations of customer boxes.

ID	NAME	CUSTOMER EMAIL	CONTRACT	COLOR	VIEW
fb08a30b7b	Unicorn Test	Brianschreiner 23@gmail.com	SOLD	Red	Eye icon
aa2617c7ff	vintagetabernacle	vintagetabernacle2019@gmail.com	SOLD	Blue	Eye icon

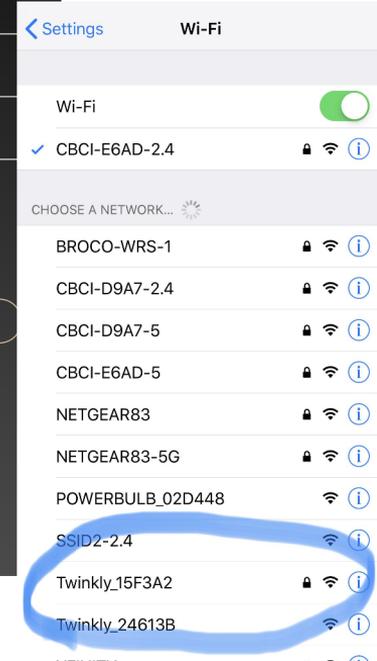
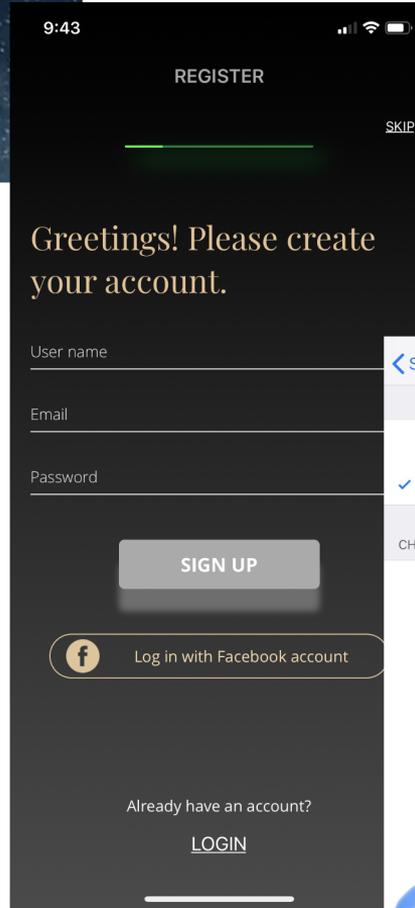
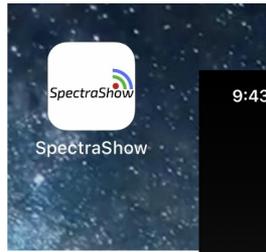
Customer box map

The map shows the United States with several colored markers: a red marker in the Northeast (Philadelphia area), a blue marker in the South (Atlanta area), a yellow marker in the Midwest (Chicago area), a green marker in the South (Dallas area), and a black marker in the West (Los Angeles area). Other markers are visible in the Midwest and South.

Installing field level controllers

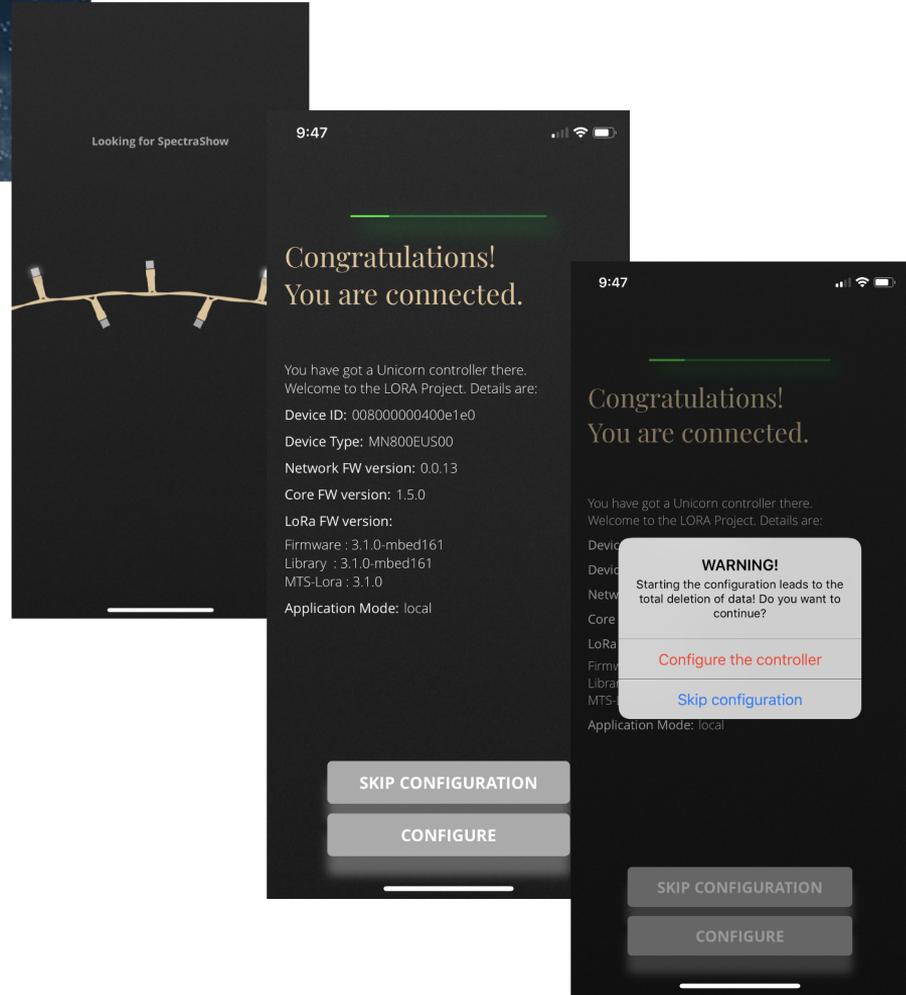
The process of bringing a controller online is done via a WiFi connection using an iOS device.

- Download *SpectraShow* from the App Store.
- Create an account, or use the account you created in the Cloud (p 3).
- Restart the app
- Look for an available WiFi Network name TWINKLY_____ that has a lock beside it.
- Connect using the password “Installer” with a capital “i”.



Controller Installation

- Open *SpectraShow* and wait for the app to connect to the controller.
- If prompted to do an update, do it... they are needed to function properly.
- Click CONFIGURE
- Click CONFIGURE THE CONTROLLER



Controller Installation

Have your CUSTOMER BOX ID ready to Copy/Paste into a notepad on your phone, or written down exactly as it appears.

Remember this ID is the location where the CLOUD assigns the field controller its home. If this is not done correctly, you will be asked to reinstall the controllers.

The screenshot shows the Unicorn installer interface on a mobile device. The top status bar indicates the time is 12:10 PM on Friday, March 1st, and the battery is at 40%. The app header shows the Unicorn logo and the text "Version: 1.2.0". A notification says "You are viewing the INSTALLER interface" for user "schreiner23".

The main content area is titled "Customer Box List" and contains a table with the following data:

ID	NAME	CUSTOMER EMAIL	CONTRACT	COLOR	VIEW
fb08a30b7b	Unicorn Test	Brianschreiner23@gmail.com	SOLD	Red location pin	Eye icon
aa2617c7ff	vintagetabernacle	vintagetabernacle2019@gmail.com	SOLD	Blue location pin	Eye icon

A context menu is open over the first ID, showing options: Copy, Look Up, and Share... The "Look Up" option is highlighted.

Below the table is a "Customer box map" showing a map of the United States with several colored location pins. The pins are numbered: 2 (red), 7 (green), 10 (yellow), 11 (green), 12 (yellow), 27 (yellow), and 6 (red). Major cities like San Francisco, Los Angeles, San Diego, Las Vegas, Chicago, Toronto, New York, Philadelphia, and Montreal are labeled.

Configuring your Controllers

APPLICATION MODE - select LORAWAN

CUSTOMER BOX ID - Copy & paste, or type the ID you created for this project

DESCRIPTION- Type the location, or name of the controller

LED TYPE - Select the LED type

NO of PORTS - Select how many ports you are using

LED per PORT - Select how many LEDS(up to 200 per)

CLICK - NEXT

10:09

10:09

Configure mode and LEDs

Configure mode and LEDs

Please provide the following information about your device(s)

Please provide the following information about your device(s)

Application Mode: lorawan

Application Mode: lorawan

Customer Box ID

Customer Box ID

fb08a30b7b

fb08a30b7b

Description

Description

7st Street NW - A

7st Street NW - A

Minleon RGB Plus

Minleon RGB Plus

No. of Ports: 2

No. of Ports: 2

LEDs per port: 200

LEDs per port: 200

Lamp Type

Minleon Inception

Minleon RGB Plus

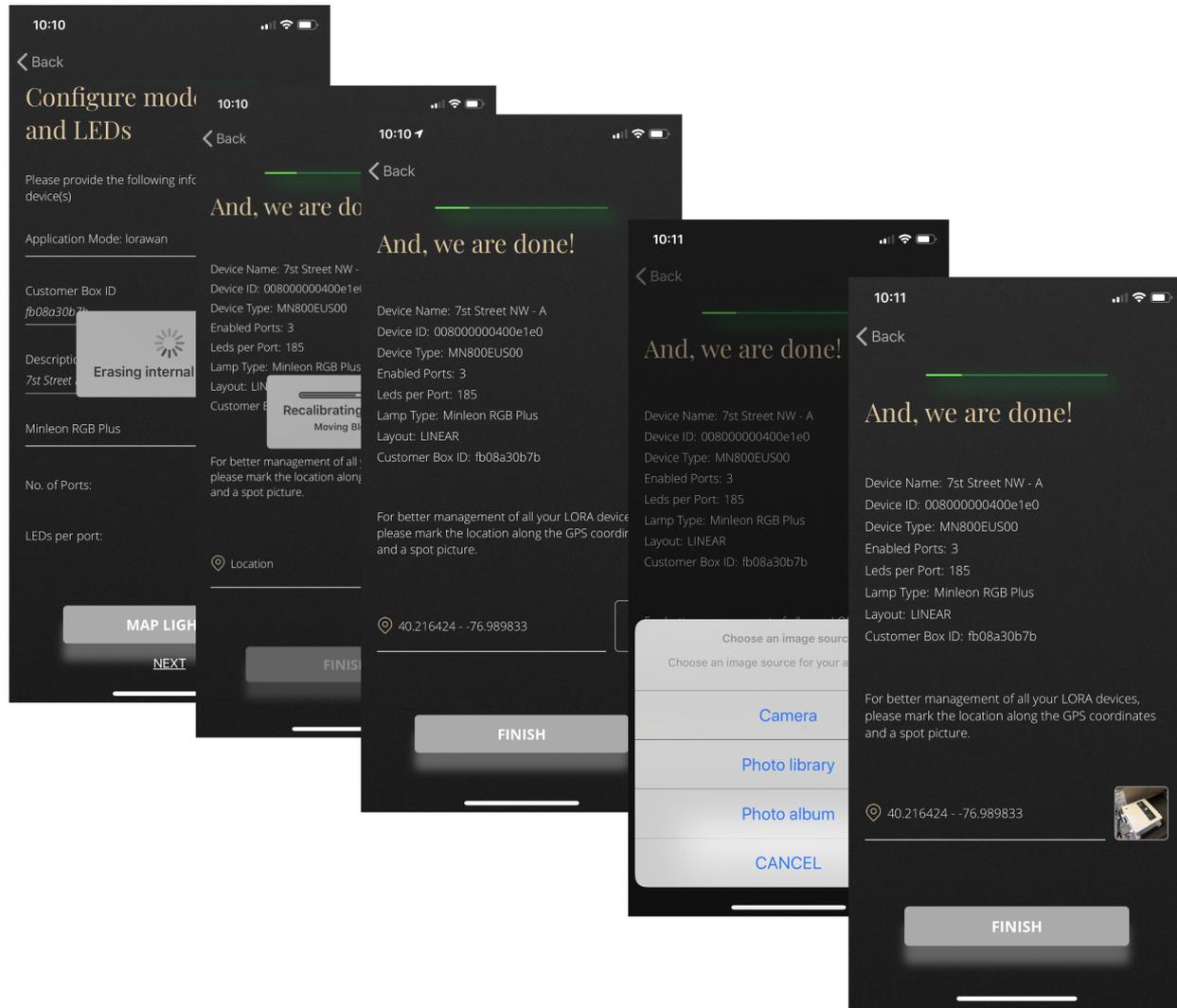
MAP LIGHTS

NEXT

Configuring your Controllers

Once you click next the APP will delete all existing information on the field controller.

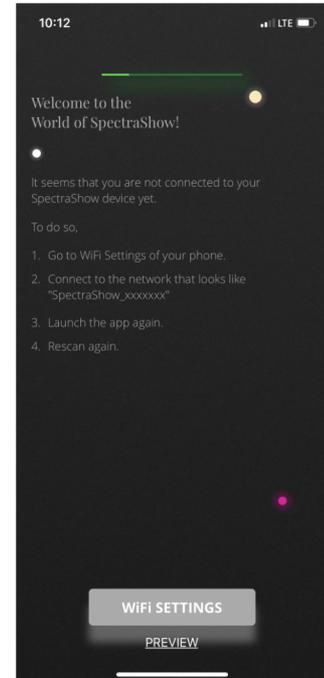
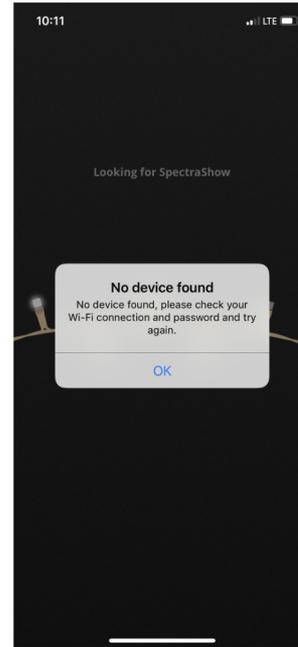
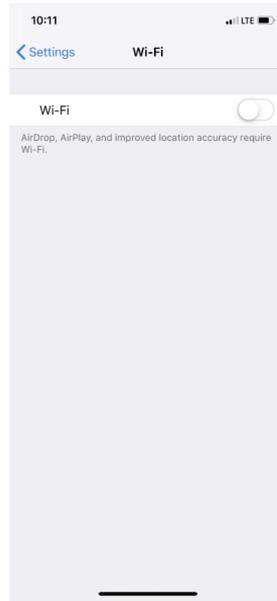
- Notice a summary of your configuration.
- Click the LOCATION link. The App will use your iPhone's GPS & drop a PIN for the Cloud to record where it has been installed.
- Click the CAMERA at the bottom right and take a photo of where the controller is installed (NOT A CLOSE UP)
- Click FINISH



Uploading your Controllers to the Cloud

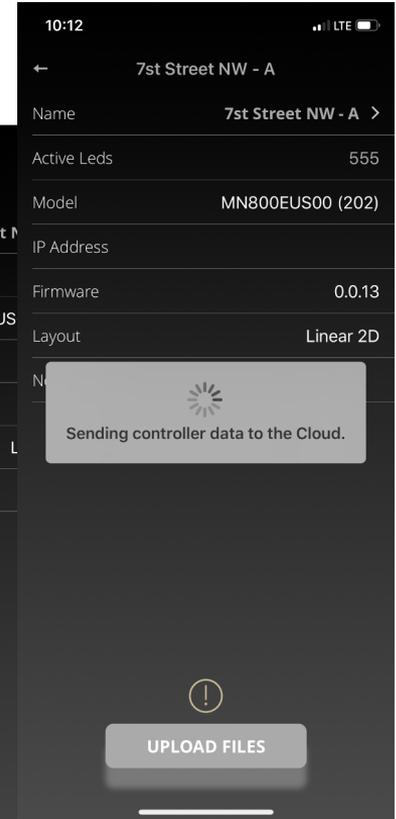
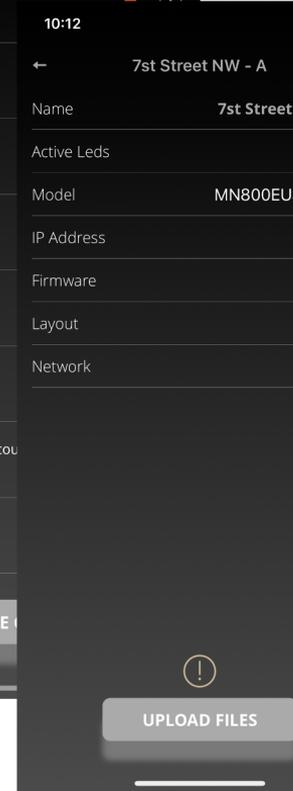
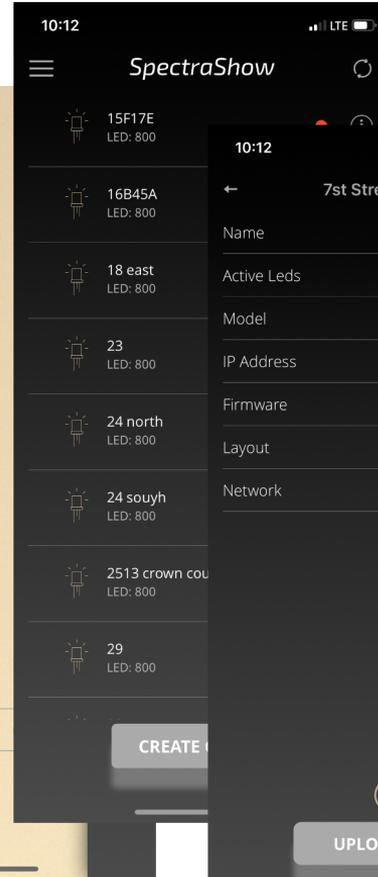
Now that you have configured the Controller you have to upload the profile to the Cloud. This is done using your **Cellular data**, or WiFi that has **Internet**.

- CLOSE THE APP
- *DISCONNECT from the controller's network*
- *CONNECT to the Internet or cellular data plan*
- REOPEN THE APP
- You will get an error that says it can't connect, CLICK OK, then click PREVIEW at the very bottom.



Uploading your Controllers to the Cloud

- In the upper Left Hand Corner hit the 3 horizontal Lines
- Select DEVICES
- FIND THE CONTROLLER YOU CONFIGURED
- Select the “i” button
- At the bottom you will see UPLOAD FILES with an “!”
- Click UPLOAD FILES
- The “!” Will change to a check mark once uploaded
- This should take about 10-20 seconds



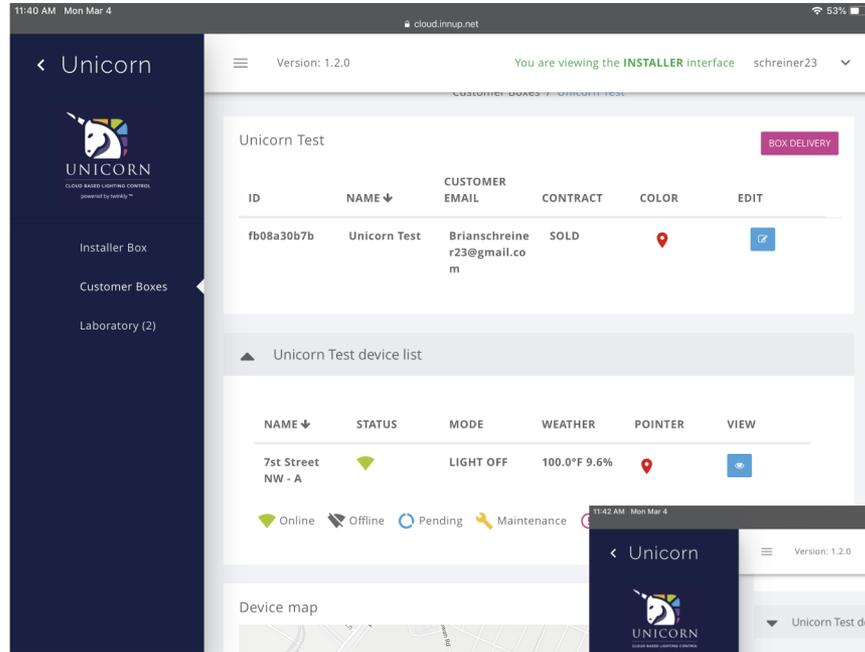
Confirmation Of Uploaded Controllers

Once you hit UPLOAD PROFILE and the Check Mark appears you will now be able to see the Controller in your Customer Box List under the Customer's Project ID.

Notice that the Controller is listed as ONLINE in the STATUS area and currently the Lights are OFF.

You will also see the TEMP and HUMIDITY of the controller

You can also see the LOCATION in visual form on the MAP. This was done when you hit LOCATION in the app.



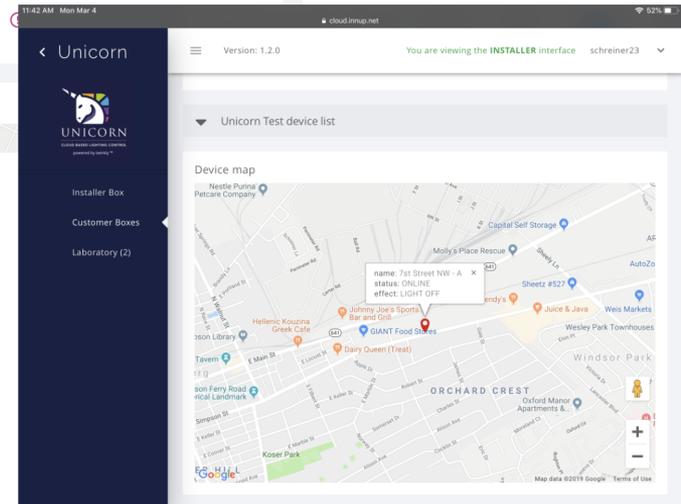
The screenshot shows the Unicorn installer interface. The top navigation bar includes the Unicorn logo, the text "cloud.inmap.net", and the user "schreiner23". The main content area displays a table of customer boxes and a device list.

ID	NAME ↓	CUSTOMER EMAIL	CONTRACT	COLOR	EDIT
fb08a30b7b	Unicorn Test	Brianschreiner23@gmail.com	SOLD		

Unicorn Test device list

NAME ↓	STATUS	MODE	WEATHER	POINTER	VIEW
7st Street NW - A	Online	LIGHT OFF	100.0°F 9.6%		

Device map



The screenshot shows the Unicorn installer interface with a map view. The map displays the location of the device "7st Street NW - A" in a residential area. A tooltip for the device shows its name, status (ONLINE), and effect (LIGHT OFF). The map includes various landmarks and a search bar.

Check Functions

Verify everything is working. If you are doing a LARGE installation with many controllers, the preferred method is turning on each building as you go. This will give your installers a visual representation of what is completed. This also allows you to double check lights and communication

- Select a controller/device - Click VIEW, then click EDIT.
- **Change Mode=LED Mode**
- TOGGLE the ON/OFF switch to ON, then Select an effect.
- **Fix=Static effect**
- Press APPLY—If you don't hit APPLY and wait, a command is not sent

You will see the status change from ONLINE to PENDING as the command is being sent to the controller and the controller reports back to the Cloud that it received the command.

Single devices

NAME ↓	STATUS	MODE	WEATHER	POINTER	VIEW
7st Street NW - A	🟢	LIGHT OFF	100.0°F 9.6%	📍	👁️

Customer Boxes / 9003111986 / 9th ave NW

NAME ↓	STAT US	MODE	WEATHER	POINTER	EDIT	INFO
9th ave NW	🟢	LIGHT OFF	N.D	📍	✏️	👁️

cloud@msup.net 39% 🔋

You are viewing the INSTALLER interface schreiner23 📄 ⚠️ Error

Devices / 9th ave NW

Change mode

On Off

Effect Movie

Rainbow

Apply Command available 🟢

Change password

password not set...

Change mode

On Off

Effect

Fix

- Rainbow ✓
- Bright Twinkle
- Snake
- Waves
- Collision

Rainbow

EXTRA: 2 SPEED: 5

🟢🟢🟢🟢🟢🟢🟢🟢

Check Functions

You will see the status go from PENDING to ONLINE once the system is satisfied everything is communicating properly. If there is a communication error the system will indicate it in the STATUS field.

A preview window gives you a quick view of what is currently playing or not playing. Notice the box on the RIGHT, has changed from a BLANK off effect preview, to the effect that we now have playing on the lights.

The image displays two screenshots of the Unicorn installer interface, illustrating the system's status change from PENDING to ONLINE.

Top Screenshot (Pending Status):

- Header:** Unicorn logo, Version: 1.2.0, You are viewing the INSTALLER interface, schreiner23
- Navigation:** Installer Box, Customer Boxes, Laboratory (2)
- Table:**

NAME	STAT	MODE	WEAT	POIN	EDIT	INFO
↓	US		HER	TER		
9th ave NW	PENDING	LIGHT OFF	N.D			
- Preview:** A dark blue square with a grid of white dots.
- Scheduler:** March 2019
- Installation Picture:** UNICORN Installation Picture

Bottom Screenshot (Online Status):

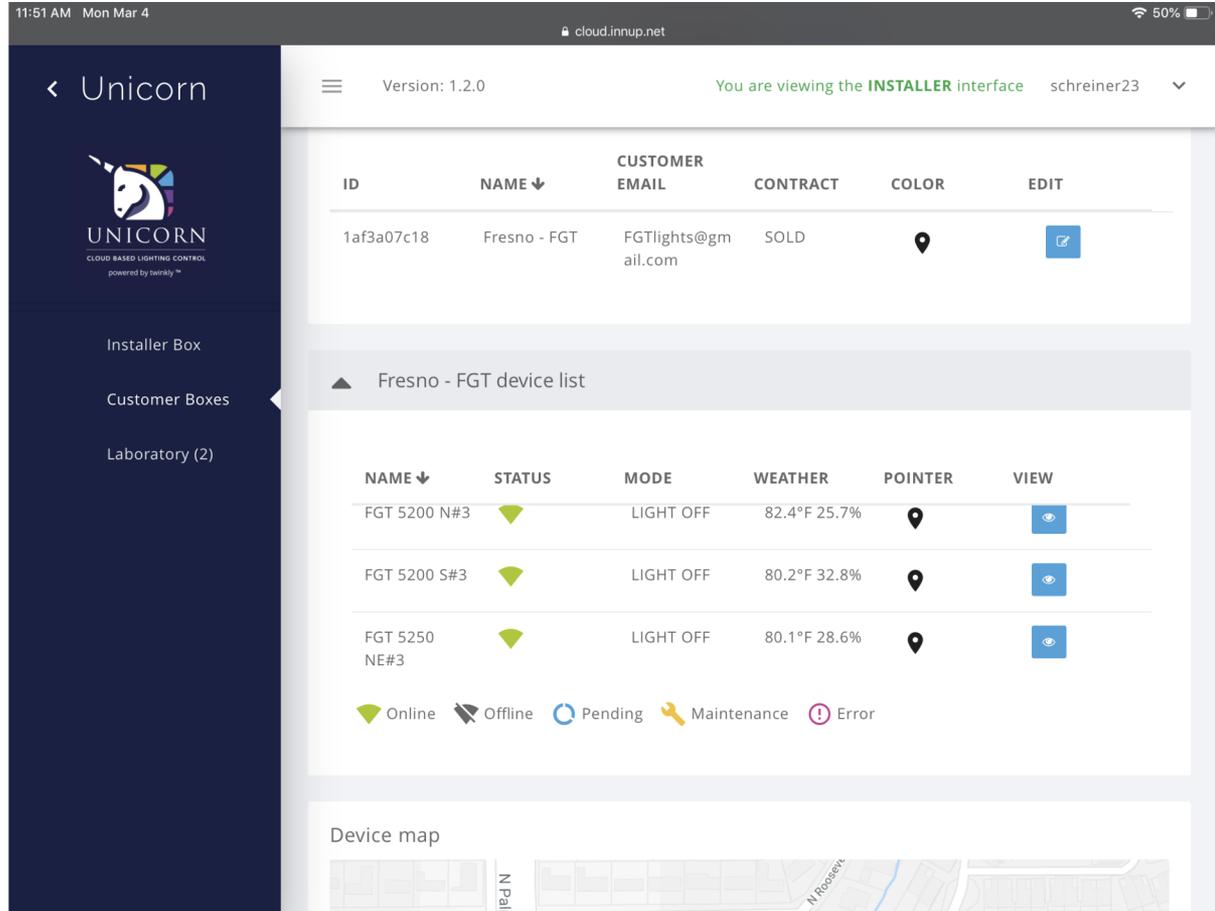
- Header:** Unicorn logo, Version: 1.2.0, You are viewing the INSTALLER interface, schreiner23
- Navigation:** Installer Box, Customer Boxes, Laboratory (2)
- Table:**

NAME	STAT	MODE	WEAT	POIN	EDIT	INFO
↓	US		HER	TER		
9th ave NW	ONLINE	Bright Twinkle	N.D			
- Preview:** A light gray square with a grid of orange circles, some of which are red.
- Scheduler:** March 2019
- Installation Picture:** UNICORN Installation Picture

Finishing your Installation

The process for adding additional controllers for the installation is nearly identical. Simply repeat the process changing only the **Description**, which is the name of the controller in the Cloud. Using street names or business names works well and allows for efficient troubleshooting later.

Make a Note: Does the Status say ONLINE or OFFLINE? Are there Temp Readings? This confirms the controller is communicating with the Gateway and in turn communicating with the Cloud.



The screenshot displays the Unicorn installer interface. The top navigation bar shows the time (11:51 AM), date (Mon Mar 4), and the URL (cloud.innup.net). The interface includes a sidebar with navigation options: Unicorn, Installer Box, Customer Boxes, and Laboratory (2). The main content area shows a table of customer information and a detailed view of the Fresno - FGT device list.

Version: 1.2.0 You are viewing the **INSTALLER** interface schreiner23

ID	NAME ↓	CUSTOMER EMAIL	CONTRACT	COLOR	EDIT
1af3a07c18	Fresno - FGT	FGTlights@gmail.com	SOLD		

Fresno - FGT device list

NAME ↓	STATUS	MODE	WEATHER	POINTER	VIEW
FGT 5200 N#3	Online	LIGHT OFF	82.4°F 25.7%		
FGT 5200 S#3	Online	LIGHT OFF	80.2°F 32.8%		
FGT 5250 NE#3	Online	LIGHT OFF	80.1°F 28.6%		

Online Offline Pending Maintenance Error

Device map

Install Complete - Now Deliver to customer

Once installation is complete, we need to VIRTUALLY deliver your BOX of field controllers (devices) to the customer...

Moving the responsibility for LED control from the Installer's Cloud account to the Customer's Cloud account. This will go to the account linked to customer email address you provided before generating a "Customer Box ID" on page 12:

- Click on the CUSTOMER BOX you installed
- Click on BOX DELIVERY in the upper RIGHT
- Verify Customer Email (they need to setup a CLOUD ACCOUNT)
- Click DELIVER BOX

The image displays two screenshots of the Unicorn installer interface. The top screenshot shows the 'Send customer box' dialog box with the following fields: *Customer Email (Brianschreiner23@gmail.com), *Contract (SOLD), and a *required field. A blue 'SEND' button is visible at the bottom. The bottom screenshot shows the same dialog box, but with a green 'SEND' button and a green notification box at the top that says 'Customer box delivered!'. The background of both screenshots shows a map and a table with columns for ID, NAME, CUSTOMER, EMAIL, CONTRACT, COLOR, and EDIT. The Unicorn logo and 'Version: 1.2.0' are visible in the top left and top right of the interface respectively.

VERIFY DELIVERY

At this point the status of this CUSTOMER BOX has been changed to BOX ALREADY DELIVERED, meaning now the customer has control of their lights. The INSTALLER can view what is going on, but for customer security and liability we shift the control to the customer.

Your customer will receive an email letting them know that a new UNICORN(s) has been sent to their dashboard.

They can now control their lights as they wish.

The image shows a mobile browser interface for the Unicorn installer. The top part displays the Unicorn logo and navigation options: 'Installer Box', 'Customer Boxes', and 'Laboratory (2)'. The main content area shows a table for 'Unicorn Test' with columns for ID, NAME, CUSTOMER EMAIL, CONTRACT, COLOR, and EDIT. A pink button 'BOX ALREADY DELIVERED' is visible. Below the table is a 'Device map' showing a location on a map with a popup for '7st Street NW - A' with status 'ONLINE'. An email notification is overlaid on the right, showing the sender 'innupsrl.GCP@gmail.com', recipient 'Brian Schreiner', and subject 'Unicorn - Devices update'.

ID	NAME	CUSTOMER EMAIL	CONTRACT	COLOR	EDIT
fb08a30b7b	Unicorn Test	Brianschreiner23@gmail.com	SOLD		

Hi!

New devices have been sent to your Unicorn dashboard.
Control them from the web and enjoy !

For security reason, please login and change device's wifi password.

Adding Controllers to a Customer

Many times customers install things in phases. We need to be able to add or replace controllers if one goes bad. The process is easy.

Create a NEW CUSTOMER BOX ID and repeat the steps from the installation process using the NEW ID.

Deliver the NEW CONTROLLER virtually to the customer. They see no difference, just an additional Controller appears in their account.

Note: Do NOT use a previously delivered ID. You will have to repeat the install with a new Box ID. This is necessary to avoid issues with multiple controllers in multiple areas.

Version: 1.2.0 You are viewing the **INSTALLER** interface schreiner23

UNICORN TEST 2 - Add controller

ID	NAME	CUSTOMER EMAIL	CONTRACT	COLOR	EDIT
9003111986	UNICORN TEST 2 - Add controller	Brianschreiner 23@gmail.com	SOLD		

UNICORN TEST 2 - Add controller

NAME	STATUS	MODE
9th ave NW	Online	LIGHT OFF

Device map

Version: 1.2.0 Local Control Test

Dashboard / Devices

Single devices

NAME	STATUS	MODE	WEATHER	POINTER	VIEW
7st Street NW - A	Online	LIGHT OFF	100.0°F 9.6%		

Online Offline Pending Maintenance Error

Device map

Nestle Purina Petcare Company

7st Street NW - A status: ONLINE effect: LIGHT OFF

Notice the customer view only has 1 Controller listed, we still have to DELIVER the new controller to the customer, only then will it appear as a DEVICE they can control.

Delivering New Controllers

Repeat the process of delivering the CUSTOMER BOX.

Send the new Controller(s) to the customer. Say you sold a job with 1 controller, delivered it and your client has been using it for a month. They only see 1 controller in their Customer Account. Now, you want to add a new controller to their account. Deliver the box and it will now appear in their Dashboard as an additional Device.

< Unicorn



Become installer

Devices

Groups

Version: 1.2.0 Local Control Test

Dashboard / Devices

Single devices

NAME ↓	STATUS	MODE	WEATHER	POINTER	VIEW
7st Street NW - A		LIGHT OFF	100.0°F 9.6%		

Online Offline Pending Maintenance Error

Device map

Nestle Purina Petcare Company

< Unicorn



Become installer

Devices

Groups

Version: 1.2.0 Local Control Test

Dashboard / Devices

Single devices

NAME ↓	STATUS	MODE	WEATHER	POINTER	VIEW
7st Street NW - A		LIGHT OFF	99.3°F 11.9%		
9th ave NW		Bright Twinkle	N.D		

Online Offline Pending Maintenance Error

Device map

Mechanicsburg Self Storage

Rite Aid

Western Union

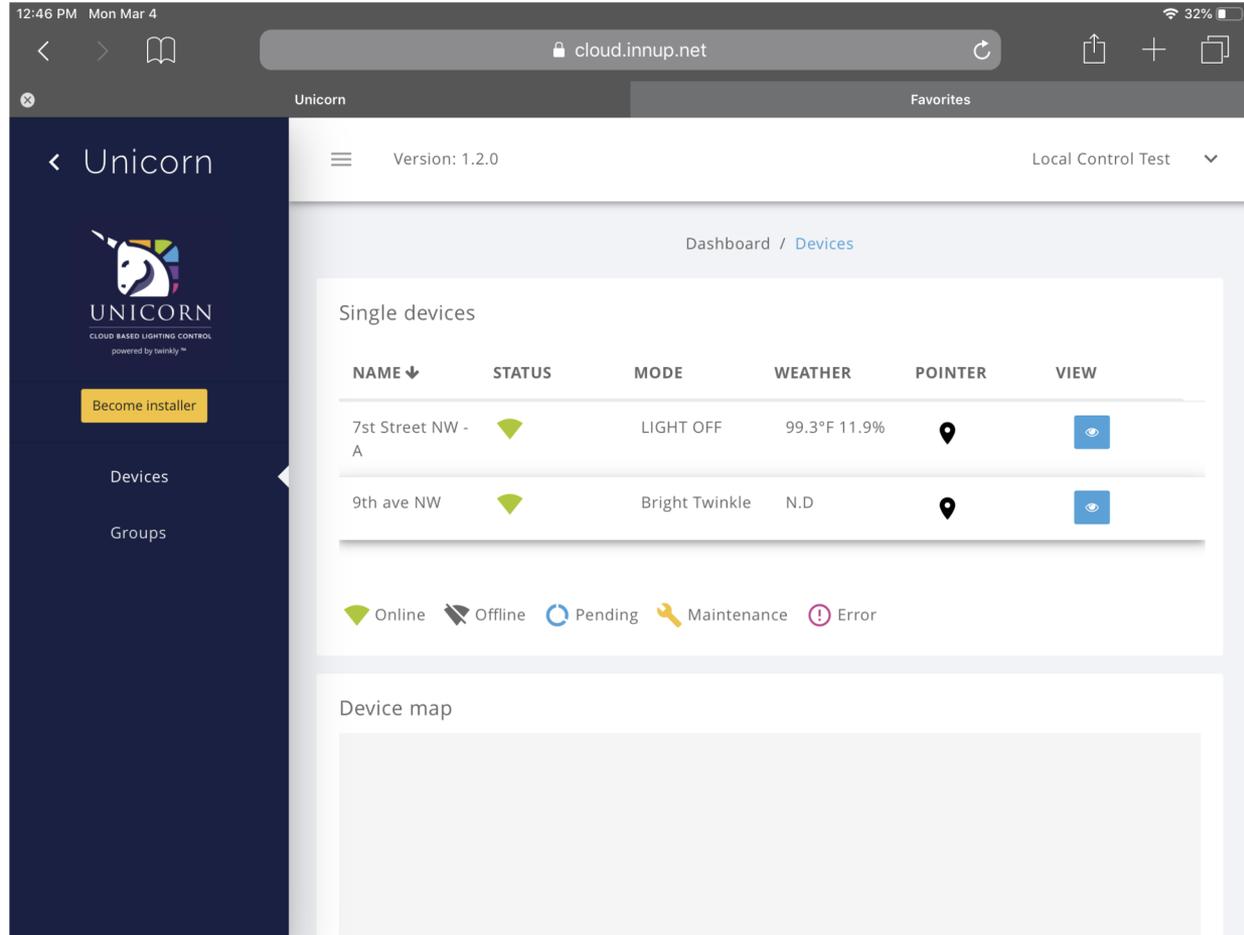
E Simpson St

Customer View

DEVICES - This is a list of **Unicorn Filed Controllers** available for control. They are available to set a schedule, run an effect, change colors, switch OFF, rename, check Temps and Humidity, but only individually.

GROUPS - this is a place to create a **GROUP** of individual devices/field controllers. A device/field controller can not occupy multiple groups.

Groups can be edited or undone. Changes here do not have to be permanent. Group or ungroup as you experiment with your display.



The screenshot shows a mobile browser interface for the Unicorn web application. The browser address bar shows 'cloud.innup.net'. The page title is 'Unicorn' and the version is '1.2.0'. The user is logged in as 'Local Control Test'. The main content area displays a list of 'Single devices' with columns for NAME, STATUS, MODE, WEATHER, POINTER, and VIEW. Two devices are listed: '7st Street NW - A' and '9th ave NW'. A legend at the bottom indicates device statuses: Online (green Wi-Fi icon), Offline (grey Wi-Fi icon), Pending (blue circular arrow icon), Maintenance (yellow wrench icon), and Error (red circle with exclamation mark icon). A 'Device map' section is visible at the bottom but is currently blank.

NAME ↓	STATUS	MODE	WEATHER	POINTER	VIEW
7st Street NW - A	Online	LIGHT OFF	99.3°F 11.9%	Location pin	Eye icon
9th ave NW	Online	Bright Twinkle	N.D	Location pin	Eye icon

Legend: Online (green Wi-Fi icon), Offline (grey Wi-Fi icon), Pending (blue circular arrow icon), Maintenance (yellow wrench icon), Error (red circle with exclamation mark icon)

Creating a GROUP

- Select GROUPS
- Select CREATE GROUP
- NAME THE GROUP
- Select a POINT COLOR
- Select each Controller in the GROUP
- CLICK SAVE

The image is a collage of screenshots from the Unicorn web interface, illustrating the steps to create a group. The interface is dark-themed with a blue sidebar and white content areas.

Step 1: Select GROUPS
Screenshot of the Unicorn dashboard showing the 'Groups' sidebar menu item highlighted.

Step 2: Select CREATE GROUP
Screenshot of the 'Groups' page with the 'CREATE GROUP' button highlighted in blue.

Step 3: NAME THE GROUP
Screenshot of the 'Create Group' form with '1. Group name' and 'TEST GROUP' entered.

Step 4: Select a POINT COLOR
Screenshot of the 'Create Group' form with '2. Select color' and a red color swatch selected.

Step 5: Select each Controller in the GROUP
Screenshot of the 'Select devices' dialog box showing a list of devices with checkboxes for selection.

Step 6: CLICK SAVE
Screenshot of the 'Create Group' form with the 'Save' button highlighted in blue.

Final State: Group Created
Screenshot of the 'Groups' page showing the newly created 'TEST GROUP' in a table. The table has columns for NAME, STATUS, MODE, POINTER, and VIEW. Below the table is a 'Groups map' showing a red location pin on a map.

NAME	STATUS	MODE	POINTER	VIEW
TEST GROUP	🟢	LIGHT OFF	📍	+

STAT US	MOD E	POIN TER	SELEC TED
🟢	LIGHT OFF	📍	<input checked="" type="checkbox"/>
🟢	Bright Twinkl	📍	<input checked="" type="checkbox"/>

Groups

Now that you have placed the controllers in a GROUP, they will no longer appear in DEVICES, since they are now occupying a GROUP. They cannot be in both. They are either a single device or in a group.

The screenshots illustrate the Unicorn web interface's handling of devices and groups. The interface includes a dark blue sidebar with the Unicorn logo, a 'Become installer' button, and navigation options for 'Devices' and 'Groups'. The main content area shows the following views:

- Single devices view:** Shows a table with columns for NAME, STATUS, MODE, WEATHER, POINTER, and VIEW. A message states 'No device found.' Below this is a 'Device map' showing a location for 'le Purina Company'.
- Groups view:** Shows a table with columns for NAME, STATUS, MODE, POINTER, and VIEW. A 'TEST' group is listed with status 'Online', mode 'LIGHT OFF', and a red location pin. Buttons for 'CREATE GROUP' and 'DELETE GROUP' are visible. Below the table is a 'Groups map' showing a red location pin on a map.
- Group details view:** Shows a detailed view for the 'TEST' group, including a table with columns for NAME, STATUS, MODE, POINTER, and EDIT. The 'TEST' device is listed with status 'Online', mode 'LIGHT OFF', and a red location pin. Below this is a 'TEST device list' section.
- Scheduler view:** Shows a calendar for 'March 2019' with a grid of dates from 24 to 2.

The Unicorn logo and 'powered by nestlé' tagline are visible in the sidebar of all screenshots. The version '1.2.0' and 'Local Control Test' are displayed in the top right corner of the main content area.

Controlling your Group

Now that you created a group, to control them as one use the same process for single devices:

- Select your GROUP and hit VIEW
- Click EDIT
- Toggle the ON/OFF switch to ON
- Select the EFFECT, COLOR, and SPEED, you desire
- Click APPLY
- Status will go from PENDING to ONLINE once all devices receive the command

The image displays a series of screenshots from the Unicorn mobile application, illustrating the steps to control a group of devices. The app interface includes a navigation bar with a back arrow, the Unicorn logo, and the text 'CLOUD BASED LIGHTING CONTROL powered by twinkl™'. The main content area shows a list of groups, with the 'TEST' group selected. The 'TEST' group is shown in a table with columns for NAME, STATUS, MODE, POINTER, and VIEW. The 'VIEW' button is highlighted in blue. The 'EDIT' button is also visible. The 'Change mode' screen shows a toggle switch for 'On/Off' and a 'Fix' button. The 'Change password' screen shows a password field and a 'Group devices share the same password' message. The 'Change name' and 'Change color' screens show input fields for the group name and a color picker. The 'Change mode' screen also shows a 'COLORS_NUM' slider and a color picker.

Controlling Lights

The Cloud system is a redundant system meaning the command to a group will be sent over and over again until every controller in the group receives the information. Once every controller reports back that all is ok and received, only then will the status appear as ONLINE for the entire group.

Once in a group you can click VIEW to see all controllers in the group and the status of each as well. This is a TOP DOWN view of the GROUP and everything in it.

The screenshot displays the Unicorn Cloud-Based Lighting Control interface. The top navigation bar shows the Unicorn logo, the version (1.2.0), and the current test name (Local Control Test). The main content area is divided into several sections:

- TEST Summary:** A table with columns for NAME, STATUS, MODE, POINTER, and EDIT. The row for 'TEST' shows a status of 'LIGHT OFF' and a 'VIEW' button.
- Device Status:** A row of status indicators: Online (green checkmark), Offline (grey checkmark), Pending (blue circle), and Error (red circle with exclamation mark).
- TEST device list:** A section header for the group of devices.
- Single devices:** A table with columns for NAME, STATUS, MODE, WEATHER, POINTER, and VIEW. The row for '7st Street NW - A' shows a status of 'LIGHT OFF', a mode of 'LIGHT OFF', a weather of '99.3°F 11.9%', and a 'VIEW' button.
- 9th ave NW:** A row showing a status of 'Online' (green checkmark).

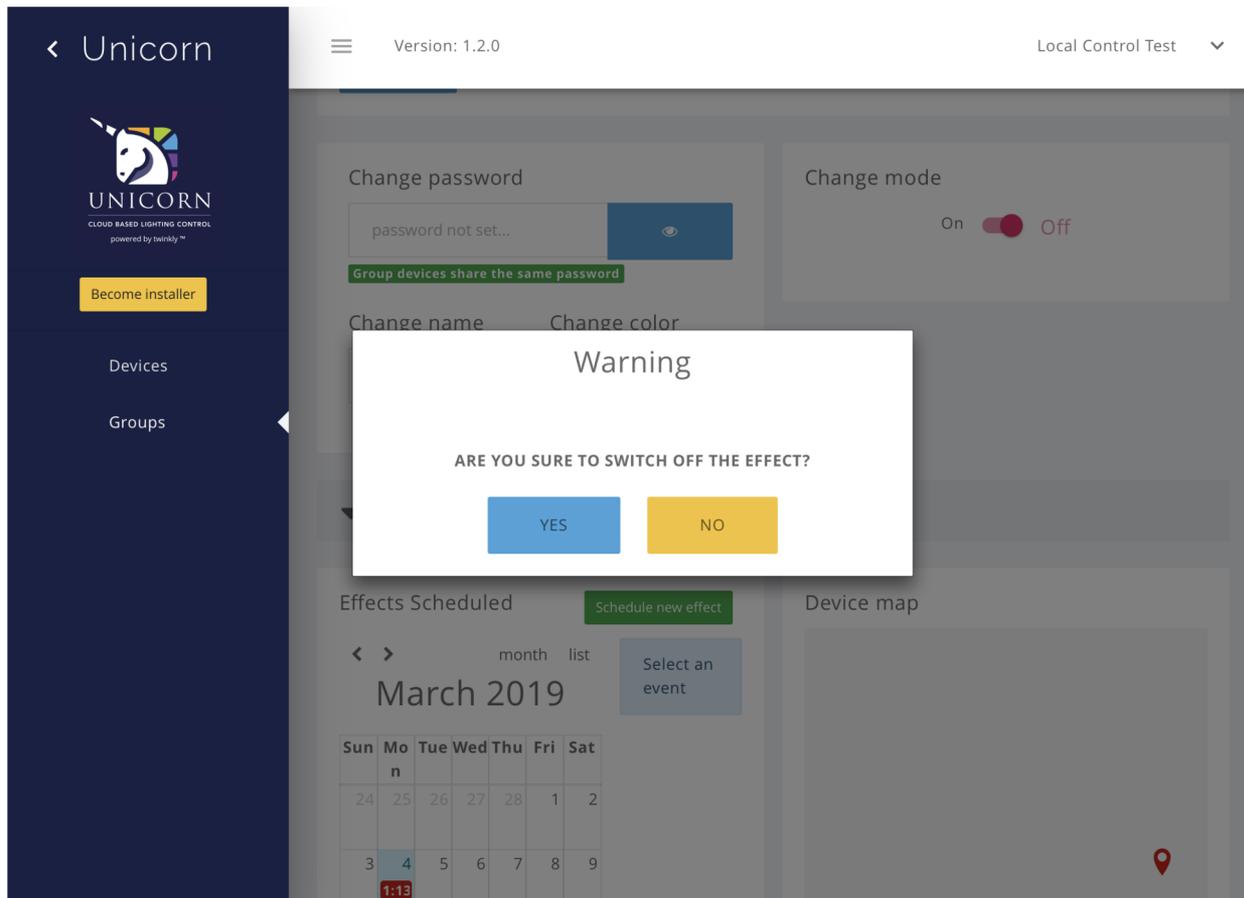
The interface also features a dark blue sidebar with the Unicorn logo, a 'Become installer' button, and navigation options for 'Devices' and 'Groups'. A secondary view of the interface is shown in the bottom right, highlighting the 'VIEW' button for the 'TEST' device, which leads to a detailed view of the device list and status.

Turning off the lights

This system functions under a Command for everything scenario. So an OFF command is just like an effect. So we must tell the controller to TURN OFF the lights, which actually CUTS POWER to the ports.

This is a great feature as it increases the life of the pixels. By having no power running to the lights, your “burning hours” are decreased.

To turn OFF the lights simply follow the previous steps but this time toggle the switch to OFF and then CLICK YES and wait.



The screenshot displays the Unicorn lighting control interface. The top navigation bar includes the Unicorn logo, the text "Version: 1.2.0", and "Local Control Test". The left sidebar contains a "Become installer" button and navigation links for "Devices" and "Groups". The main content area shows settings for "Change password" (with a "password not set..." field and a "Group devices share the same password" message), "Change mode" (with an "On" toggle switch set to "Off"), "Change name", and "Change color". A white "Warning" dialog box is centered on the screen, asking "ARE YOU SURE TO SWITCH OFF THE EFFECT?" with "YES" and "NO" buttons. Below the dialog, there are sections for "Effects Scheduled" (with a "Schedule new effect" button) and "Device map". A calendar for "March 2019" is visible, with the date "4" highlighted in blue and "1:13" in red.

Scheduling Effects

There is a full scheduling feature available. You can schedule as a group or single devices but it depends on your setup. To Schedule an event:

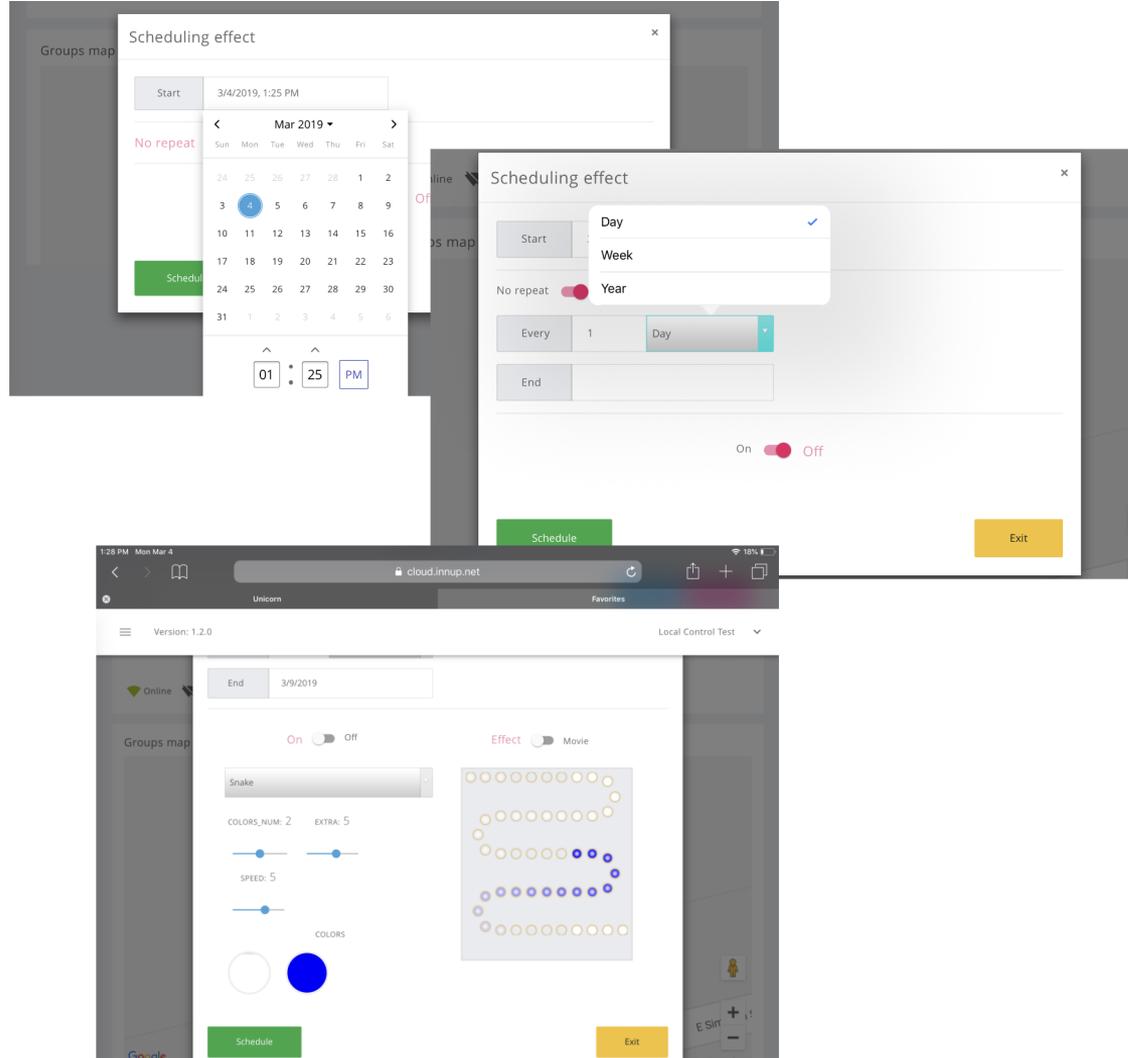
- Click VIEW
- Hit EDIT
- Scroll down to SCHEDULE NEW EFFECT

The screenshot shows the Unicorn web interface. The top bar displays the time (1:25 PM), date (Mon Mar 4), and browser address (cloud.innup.net). The page title is "Unicorn" and the version is "1.2.0". The interface is divided into several sections:

- Left Sidebar:** Contains the Unicorn logo, the text "CLOUD BASED LIGHTING CONTROL powered by twinkl", a "Become installer" button, and navigation options for "Devices" and "Groups".
- Top Right:** Shows "Local Control Test" with a dropdown arrow.
- Main Content Area:**
 - A "TEST" button and a red rectangular block.
 - A "TEST device list" section with a dropdown arrow.
 - An "Effects Scheduled" section featuring a calendar for March 2019. The calendar shows dates 24 through 9. On the 4th, there are two red boxes with times "1:13" and "1:22". A "Schedule new effect" button is located above the calendar, and a "Select an event" button is to its right.
 - A "Device map" section on the right, which is currently empty except for a few red location pins and a person icon at the bottom.

Scheduling

- Select your START date and time
- Select if you want it to REPEAT, Daily, weekly, monthly, yearly... and an END DATE of the repeated Effect.
- Toggle to ON and select the effect you want.
- Click SCHEDULE



Scheduling OFF

We need to send an OFF, or dark, command via the Scheduler when we do not want the LED's on.

Schedule an additional EFFECT, but this time don't select the toggle ON...

Leave toggler in the OFF position & do you repeat functions, and the time to make it happen. Once that is done click APPLY way up at the top.

The screenshot shows a 'Scheduling effect' dialog box overlaid on a background interface. The dialog box has a title bar with a close button (X) in the top right corner. It contains the following elements:

- Start:** A text input field containing '3/4/2019, 1:33 AM'.
- End:** A text input field containing '3/10/2019'.
- Frequency:** A dropdown menu set to 'Every 1 Day'.
- Repeat Toggle:** A toggle switch labeled 'No repeat' (grey) and 'Repeat' (pink), currently set to 'Repeat'.
- On/Off Toggle:** A toggle switch labeled 'On' (grey) and 'Off' (pink), currently set to 'Off'.
- Buttons:** A green 'Schedule' button at the bottom left and a yellow 'Exit' button at the bottom right.

The background interface is partially visible, showing a calendar grid with dates 10, 11, 17, 18, 19, 20, 21, 22, 23. There are also some text elements like 'Change name', 'Change color', 'TEST', 'TEST de', 'ects Sched', 'Ma', and 'n Mon Ti'.

Scheduling

Now that you have scheduled when your effects turn ON and OFF you will see them in your CALENDAR at the bottom of the screen. You can MOUSE over each event to see what is scheduled.

If you made an error simply click VIEW, then EDIT and scroll to the bottom and click on the event you want to delete. Select REMOVE and then CLICK APPLY

You will have to create a NEW event in the place of the deleted event.

The screenshot displays a user interface for scheduling events. At the top, there are controls for 'Change name' (with a text input containing 'TEST') and 'Change color' (with a red color swatch). Below this is a section titled 'TEST device list' with a dropdown arrow. The main area is divided into two panels. The left panel, 'Effects Scheduled', shows a calendar for 'March 2019' with a 'Schedule new effect' button. The calendar has red event markers for 'Rainbow' on several days. The right panel, 'Device map', shows a map with two red location pins and a 'Remove' button. The 'Rainbow' effect details show a start time of 'Mar 8, 2019, 5:33:00 PM' and parameters: 'EXTRA: 2' and 'SPEED: 5'.

Change name: TEST

Change color: [Red Swatch]

TEST device list

Effects Scheduled

Schedule new effect

Rainbow

Start: Mar 8, 2019, 5:33:00 PM

Parameters:

- EXTRA: 2
- SPEED: 5

Remove

Sun	Mon	Tue	Wed	Thu	Fri	Sat
24	25	26	27	28	1	2
3	4	5	6	7	8	9
	1:13p 1:22p 5:33p	1:33a 5:33p	1:33a 5:33p	1:33a 5:33p	1:33a 5:33p	1:33a 5:33p
10	11	12	13	14	15	16
1:33a						
17	18	19	20	21	22	23

Device map

Unicorn Cloud-based LED Control System

Troubleshooting Tips

GATEWAY TIPS:

1. Be sure your Internet port is *not* firewalled.
2. Be sure your Internet port is **set to DHCP** (random IP addressing). Static IP addresses are unsupported.
3. Be sure the **antennae is as unobstructed** as possible. Outdoors is preferable. Obstructions to line-of-sight will reduce the maximum range of the Gateways. Ideal placement is often on a rooftop with open surroundings.

FIELD CONTROLLER TIPS:

1. When installing the RGB+Line Unicorn controllers, please abide by the cable limitations outlined in **Minleon's [Field Guide to Power & Data Management](#)**. Use Power injections and Data Boosters where necessary.
2. The power transformers for the Field Controllers are switching power supplies—they protect themselves & turn OFF when overpowered with LED's and spacers. **If your power supply cuts power**, remove light strings and extra cabling and try again.
3. Are you running **more than 400 lights total, or more than 200L per output**? This is the maximum lights given the 24Vdc Field Controller's power supply. (*The 12Vdc Unicorn Field Controller will power 200L max.*) Move lights #401+ to a new Field Controller. If under the data limitations, another option is to inject proper voltage inline with a Power T.
4. Do the **lights flash when powered ON**? This means we do not have enough power for the display. Reduce the amount of lights, or the amount of spacer cables which could be inducing extra voltage drop. Or inject power.
5. One or more of the **output ports is not working**? Maybe a fuse has blown. Was a light run overpowered, or shorted by water ingress? Unscrew the control box and see if one of the fuses has blown. Replace if needed. (*more...*)

Unicorn Cloud-based LED Control System

Troubleshooting Tips (continued)

FIELD CONTROLLER TIPS (*cont.*):

6. If the Field Controller **will not accept the password** "Installer" (with a capital I), and you are certain that you typed it properly, the controller will need hard reset. Unscrew the lid, and press the button next to the antennae for 5 seconds. Only reset the controller once at a time. Never twice within the same minute, as this could damage the controller. Be sure you can log into the controller with the password, before re-assembling the box. If this does not work, contact your account manager or sales rep for a warranted replacement.
7. Field Controllers are **only able to communicate to one device** (smart phone or tablet) at a time. Make sure all other smart phones and tablets are disconnected before trying to log in.
8. When configuring in the *SpectraShow* App, it **will not allow Preview Mode** – Remember to sign in with your Unicorn ID and password.
9. Configuration **files will not upload** – Be sure your wireless device is connected to the Internet, and not the Field Controller's access point. Double check you have the correct "Installer Box ID"
10. Field Controller (Device) **will not appear in the Unicorn Cloud** – Make sure the Box ID is correct. Make sure you are not using a previously delivered box ID – As this will cause the controller to be uploaded to nowhere. Re-cycle the power to the Field Controller & reconfigure via *SpectraShow*.

CLOUD TIPS:

1. Be sure to select "**APPLY**" when making changes to the Groups, Scheduler or Effects in the Unicorn Cloud.
2. To turn your lights OFF, in the Unicorn's Cloud Scheduler, remember to **schedule a unique OFF command**—separate from the Effect command.

Unicorn Cloud-Based LED Control System



HAVE MORE QUESTIONS?

Please e-mail

support@minleonusa.com

& reference this presentation.

Minleon USA