ConnectLED

Reference Guide
Android Tablet v2.1

evluma

Contents

Introduction

ConnectLED™ is a software application that communicates with the Evluma AreaMax™ LED luminaire for area and security lighting, and the OmniMax™ decorative luminaire retrofit via BLE (Bluetooth Low Energy). It operates up to 150 feet from the luminaire.

The following functionality is available in Tablet v2.1:

- connect and disconnect the luminaire from service
- view lamp status and set configuration parameters
- set up to 4 custom dimming schedules with individual brightness levels
- access to event history for RMA support
- create custom data fields

ConnectLED reads FaultCast™ status transmissions from both the AreaMax and the OmniMax and verifies Photocontrol Failsafe™ conditions. ConnectLED is also available for Windows 7, 8.1and 10 laptops. Please contact Evluma for more information.

Android Tablet Overview

The Android tablet supplied with ConnectLED is preconfigured at the factory with software and customer license installed. On the back of the tablet is a unique device name for identification purposes. The tablet is also preconfigured with a Gmail account. The username (@gmail.com) and password are attached to the back of the device. Charge the tablet prior to use. See the User Guide from the tablet manufacturer for instructions.

To Turn on the Tablet

Press and release the smaller On/Off button on the right-hand side of the

tablet. When you first power the tablet on, the Lock screen should appear. Swipe the screen to the left to unlock it, revealing the Home screen.

Navigation Bar

Three buttons appear at the bottom of the screen as shown. They are Back, Home and Active Program List.

Back, Home and Active Program List buttons

The center button is Home. Press to return to the Home screen. The Home screen toolbar contains the featured programs installed on the device: ConnectLED, Gmail, Settings and Google Maps. Touching any of them will bring that program up on the screen. Above the Home button is a small array of six boxes. Touch this to bring up all the applications available on the device.

The Back button is on the left. Press to return to the previous screen when inside an operation. Pressing Back may be required to end a current operation.

The Active Program List button is on the right. This is a list of current programs being used and allows a quick way to switch between applications. The Active Program List also provides a means of terminating a program if it hangs or becomes unresponsive. Swiping an application to the left will close it.

To Turn Off the Tablet

To power the device off, press and hold the On/Off button. Follow the prompt.

To Initialize ConnectLED GPS - WiFi/Google Maps

If you have an ENTERPRISE or PROMO license you will need to initialize ConnectLED over WiFi and run Google Maps before you use the tablet if you intend to set the luminaire location. While the tablet's timezone is set to the owner's location at the factory by default, the last GPS position of the tablet, by default, may be the Evluma factory. Proceed to the nearest WiFi hotspot or source before attempting to connect the tablet.

Setting luminaire location is optional. The factory settings for latitude and longitude for the AreMax are the baseline for Photocontrol Failsafe calibration. After three weeks at the installed location Photocontrol Failsafe has received enough dusk-till-dawn data to make these refinements. See also the Config screen, Location.

Recommended Practice: Initialize ConnectLED GPS at the maintenance facility prior to heading out in the field to install an AreaMax as there may not be an accessible WiFi hotspot at the pole. If there is no WiFi hotspot

at the pole and you are attempting to set the location of the luminaire, ConnectLED will use the last known GPS location of the tablet when installing a lamp.

Connecting to a WiFi Source
Touch the Settings icon to open the Settings screen. At the top of the Settings screen touch the WiFi toggle to turn it to the On position. Select the account you wish to use and follow the password prompt. Once you have successfully connected to a WiFi source, touch the Home button to return to the Home screen. See also How to Connect to WiFi on your Android Tablet.

Starting Google Maps
Touch the GoogleMaps icon to open Google Maps. Depending on the speed of your WiFi connection you will see a map with your current location indicated. You have successfully initialized ConnectLED GPS and enabled it to retrieve the current GPS location of tablet.

To Turn Off ConnectLED
To turn off ConnectLED, touch the Active Programs button and swipe the ConnectLED application to the right. You may also press the Clear All button.
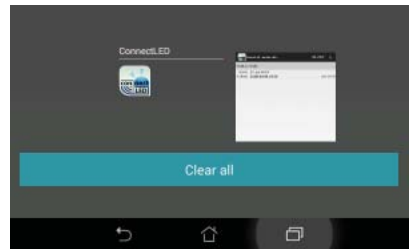
Open Applications List. Swipe right to clear.

System Updates
Android will periodically release updates for your tablet. These updates are unrelated to ConnectLED but are part of the standard operation of the tablet. The tablet will receive an alert message letting you know an update is available. Updates require WiFi and can take time to download and install.

Recommended Practice: Periodically check for and install updates in advance of operation to avoid connectivity delays. You can manually check for updates. In the Settings app, choose About. If there is a new update available you may choose to Cancel, Postpone or Install. Installs typically take 10 minutes.

ConnectLED Operation Overview
FIND LAMPS is the main screen. It displays all lamps within range of the tablet. Select a lamp to initiate a secure connection to the lamp. Once connected, you may view or change the operating configuration of the lamp in the Config screen.

On the left of the action bar is the
ConnectLED logo and screen name.
In the example provided, the screen

The Action Bar

name is Config. Touch the logo to return to the FIND LAMPS screen at any
time. The 3 vertical squares to the right mean "more actions" and provide
additional commands if available.

Licenses and Security

Each ConnectLED tablet is factory-configured with the license type and
a unique license assignment to protect against unauthorized installation
and use of the application. The license type controls the functionality
available within ConnectLED, in addition to the number of lamps that can be
controlled.

The unique customer license assignment is used to establish ownership of a
new AreaMax when installed. When ConnectLED first connects to a new
AreaMax, it will take ownership of the lamp for the configured licensee.

There are three types of licenses available for ConnectLED: BASIC,
PROMO and ENTERPRISE. The BASIC license has restricted functionality,
ENTERPRISE has full functionality and a PROMO license provides full
functionality to a restricted number of lamps. The BASIC license allows you
to Connect and Disconnect an unlimited number of AreaMax luminaires from
service, send event history and license information to Evluma with an RMA,
and view lamp information.

License Renewals

Your license may have a time limit. ConnectLED will notify you when your
license is about to expire. All PROMO licenses will expire 60 days after
factory provisioning. Should you wish to extend your license, please contact
Evluma Customer Support.

Functionality Overview

Start the application, accept the license agreement and find lamps.

To Start ConnectLED

Touch the ConnectLED icon on the Home screen to start the application.
The splash screen will be displayed for a few seconds.

The license agreement will be displayed on the first use of the software.
Press OK to accept the license terms.

Find Lamps

After you accept the license terms, the first screen will be FIND LAMPS. ConnectLED will automatically search for lamps. Status will be: Finding devices. Any AreaMax or OmniMax found within range will be displayed. Status will change to Status: ready when the search has finished. If no lamp is nearby and powered up, the screen will be blank. Move the tablet to a location near a powered lamp.

Touch FIND LAMPS in the upper right action bar to initiate a search of nearby lamps, Any lamps within range will appear with their unique Bluetooth address and RSSI value (signal strength). If multiple lamps are detected, the larger the RSSI number the closer the lamp (-60db is closer than -80db).
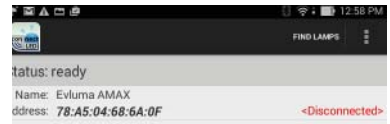
The FIND LAMPS screen

Note: Name: Evluma AMAX will appear for AreaMax lamps with an internal version earlier than FW14. With FW14 the name changed to AMXXXXXXXXXXXXX. OmniMax names will present as OMXXXXXXXXXXXXX. The X's represent the unit's serial number.

Fautlcast™

The RSSI message can also be replaced by an error or status message from the lamp. <disconnected> means that the lamp you have found is in a disconnected state. This is helpful if you are trying to troubleshoot

AreaMax with <disconnect> status message

a lamp during the daytime. <sensor failure> is the error message if the lamp misses 3 dawn to dusk events indicating that either no sensor is installed, or it has failed.

Select one of the available lamps to initiate a connection. The selected lamp will blink 6 times to confirm connection.

Once the tablet connects to the selected lamp, the Config screen will be presented and the DISCONNECT/CONNECT command will appear on the action bar.

The CONNECTION screen

Connect or Disconnect the lamp using the CONNECTION screen. This controls the service state of the lamp. Touch CONNECT or DISCONNECT in the action bar to open the CONNECTION screen.

A Connected lamp operates normally, turning on at dusk and off at dawn.

A Disconnected lamp remains off at all times.

If the lamp is currently in a Connected state, the DISCONNECT item will appear in the action bar, upper right. If the lamp is currently in a Disconnected state, the CONNECT item will appear.

Press the large button in the center of the CONNECTION screen to initiate either a Connect or Disconnect command as displayed. The AreaMax will visibly respond to commands from ConnectLED in the following manner:

The BASIC screen

- Disconnect – lamp flashes 3 times plus 1 quick flash.

- Connect – lamp will turn on. It will remain on at night, or turn off after 10 minutes during the day.

Caution: The lamp is still connected to a live power source even if it is in a Disconnected service state. The AreaMax continues to draw a small amount of power, between 1-5W, in the Disconnected state.

The Config Screen - BASIC license

The information displayed in this view cannot be edited if you have a BASIC license and is for information purposes only. Dimming is not included in the BASIC license; however, the Dimming button is active allowing you to view the option.

The Config Screen - ENTERPRISE & PROMO license

ENTERPRISE and PROMO licenses may change the lamp's operational parameters using the Config screen. Select CONFIG from the action bar, upper right. Parameters are outlined below.
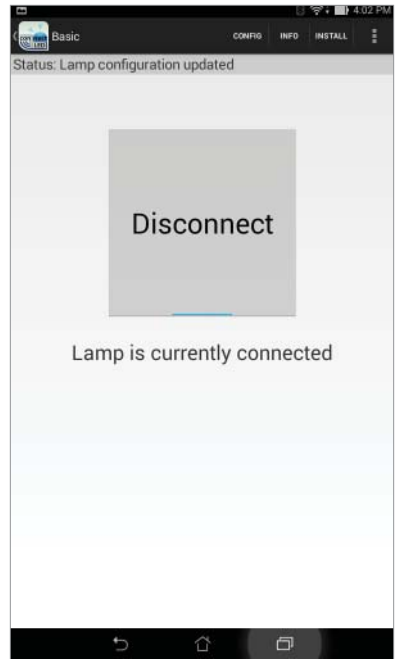
Lamp Owner

The Lamp Owner field displays the name of the licensee holder. This is provisioned at the factory. Field is read only.

Model

ConnectLED works with both the AreaMax and the OmniMax. This field will indicate which Evluma product you have connected to. Field is read only.

Serial Number

This is the serial number of the connected lamp: AreaMax or OmniMax. Rev A12 AreaMax and later will populate this field with a unique serial number, as will Rev A07 and earlier. It will be empty otherwise. Field is read only.

Software Version

This is the software version of the connected Evluma lamp: AreaMax or OmniMax.

Lamp Mode (Failsafe/Classic)

Select between Failsafe and Classic. Photocontrol Failsafe™ is an Evluma proprietary feature in both the AreaMax and the OmniMax lamp that monitors the state of the photocontrol and takes over operation if it fails. In Classic mode, the lamp will follow the state of the photocontrol, regardless of its operational state.

The Config screen

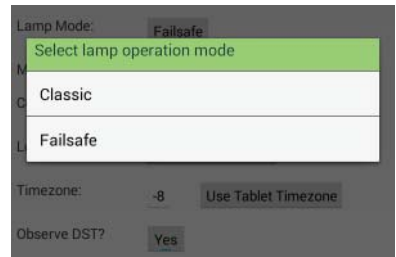Change lamp operation mode in the Config screen

Maximum Intensity

Drag to reduce default brightness level (and corresponding power level). The adjustment range is 100% to 20%.

If the Maximum Intensity is set, the light output of the lamp will never exceed this setting. This establishes the overall *maximum* brightness of the lamp. A dimming schedule may be created to further lower the lamp output,

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however, a return to 100% brightness in the dimming schedule will return the lamp to the % specified by the Maximum Intensity.

Connected? (Yes/No)

Change the default service state of the lamp. Press Yes to connect, or No to disconnect the lamp. See also the CONNECTION screen. Yes means the light will operate normally. No means the light will remain off at all times.

Location

Setting luminaire location is optional. The factory settings for latitude and longitude for the AreMax are the baseline for Photocontrol Failsafe calibration. After three weeks at the installed location Photocontrol Failsafe has received enough dusk-till-dawn data to make these refinements.

Touch the Use Tablet Location Button to use the current location of the tablet to update the location of the lamp. This is an option only if there is WiFi at your current location 150' feet from the pole. Adjustment wheels are disabled. Touch Cancel to return to the Config screen without saving your changes. Touch Done to save your changes and return to the Config screen.
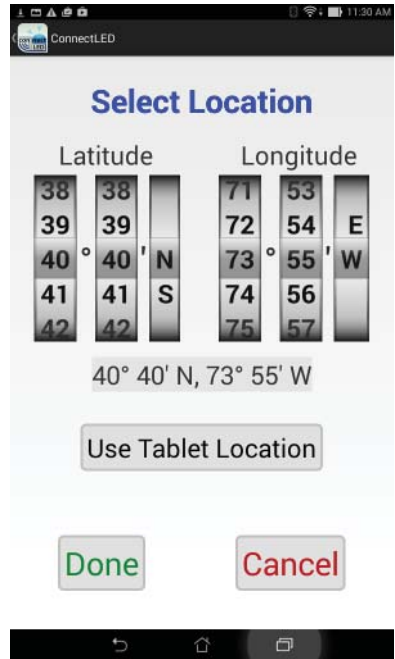
Select Location: Use Tablet Location

Time Zone

The tablet's time zone is set to the owner's location at the factory by default. Touch Use Local Time zone to update the time zone. Updating the time zone is only necessary if the tablet has traveled outside the factory set time zone and the time zone was updated by GoogleMaps, or otherwise directed by Evluma technical support. The time zone is used is used by the dimming schedule. If the time zone is incorrect, the dimming schedule may not perform accurately for the lamp's real location. See also To Initialize ConnectLED GPS - WiFi/Google Maps

Observe DST? (Yes/No)

Press Yes to enable, or No to disable DST (Daylight Savings Time). Disabling DST may effect the dimming schedule.
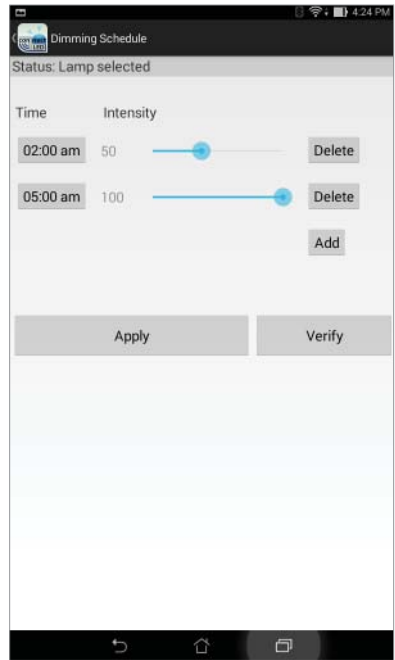
Dimming Schedule (None/Show)

Activate up to 4 separate time periods and brightness levels for the lamp to deliver. Pressing the None or Show button will bring up the Dimming Schedule screen.

If no dimming schedules have been set, the screen will initially be blank. Press the Add button to bring up a default time and intensity. Adjust appropriately. Press Add to add more time periods. The last entry must return the lamp to 100% ensuring that when the lamp turns on at sunset, it returns it to the Maximum Intensity set for the lamp.

Press Verify to test whether a correct set of schedules has been chosen.

Press Apply to send the schedule to the lamp.

The Dimming Schedule screen

Note: The dimming schedule brightness levels are relative to the lamp's full illumination capability at 40W, 70W respectively. If the Maximum Intensity level is set, dimming settings remains a % of the lamp's full capability for all settings below the Maximum Intensity. The Maximum Intensity caps the light output. At no time will the lamp exceed the Maximum Intensity setting. Press the back arrow at the bottom of the screen to return to the Config screen or the upper left of the action bar to return to FIND LAMPS.

Remove All Dimming

Access from the Config screen on the action bar via "more actions." Touch this menu item to quickly reset and remove all dimming settings including the Dimming Schedule and the Maximum Intensity. See also Service Bulletin SB20160519.1 AreaMax Dimming Parameters and Electronic Noise.

Utility Data 1 & Utility Data 2

Utility Data 1 & Utility Data 2 are editable fields that can be used to write important data to the AreaMax. Limit 32 characters to each field. Tap the text field to open a keyboard. When you are finished typing, tap Done. Entry will save upon exiting the screen. This data will be visible in the ConnectLED. csv. See View Event History ConnectLED.csv

Miscellaneous Functions

Additional functions are available from the FIND LAMPS screen. Touch the 3 vertical squares to the right on the action bar to open menu.

Note: To return to the FIND LAMPS screen at any time, touch the ConnectLED icon on the upper left.

Miscellaneous Functions

User Agreement
Select User Agreement from the drop down menu to display the licensing terms.

Licensing
Select Licensing to display the type of license available on this configuration of ConnectLED, including the limitations on device usage count, the customer ownership identifier and license duration.

System Info
Touch to display system information that can be sent to Evluma for troubleshooting or license file issues. This includes a summary of the License information as well. See View Event History for more information.

Display Service Bulletin
Touch to display important service bulletins. See Service Bulletin SB20160519.1 AreaMax Dimming Parameter and Electronic Noise as it effects AreaMax shipped prior to 6/15/16.
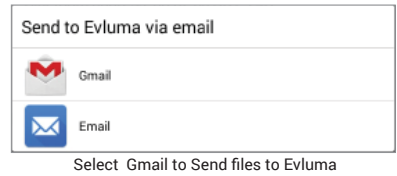

The Event History screen

View Event History

Each AreaMax maintains an event history, a tool designed to assist the RMA process. This log can be retrieved using ConnectLED. Access from the CONNECTION screen on the action bar via "more actions." This will display all of the past events that have occurred within the AreaMax or the OmniMax to which you are connected.

Pause/Resume

Retrieving all of the lamp events may take a moment or two depending of the number of events in the history of the lamp. Touch Pause/Resume at any time during retrieval to pause or resume the list of events. Once ConnectLED is Done retrieving lamp events

Select Gmail to Send files to Evluma

you may Save the event history and/or Send to Evluma. ConnectLED will prompt you for an RMA number prior to sending the event history to Evluma.

Save/Send

The Event History will be saved as a text (.txt) file to *UniqueDeviceName* Internal storage\Evluma. Connect the tablet to a PC using a USB cable to view this file. This event log file can be emailed to Evluma should you require troubleshooting assistance. An RMA number must accompany the event log.
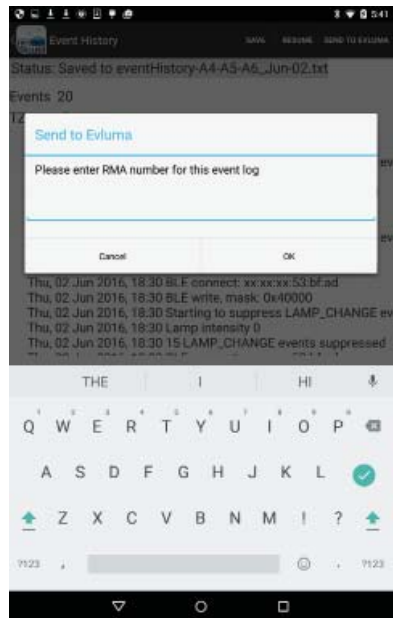
ConnectLED.csv

The ConnectLED.csv file contains a record of all program parameters sent to each AreaMax to which you have connected, listed by mac address. A record is created whenever a parameter is changed. There may be multiple records for a lamp depending on the actions that have been taken. Connect the tablet to a PC using a USB cable to view this file in Excel as a spreadsheet.

Enter an RMA to send an Event History.

Send to Evluma

ConnectLED is designed to make communication with Evluma Technical Support and Service easy. There are two different ways to send information about your license or your AreaMax to Evluma. An RMA (Return Material Authorization) number is required prior to sending an Event History to Evluma.

System Info

Find the Model number, ConnectLED version number, License Type and more in the System Window. From the main, or FIND LAMPS screen, touch

the 3 vertical squares to the right. From the drop down menu, touch System Info to open the System Info window. Touch Send to Evluma to send the system info to Evluma. From the pop-up window, select the Gmail icon.

Event History
The AreaMax Event History is stored in a text (.txt) file that may be sent to Evluma for analysis if there are conditions to diagnose. This file is unique to the AreaMax to which you are currently connected. The event history should not be sent to Evluma unless an RMA number has been assigned specifically to the lamp. From the Event History screen, touch Save and then Send to Evluma to send the event history log to Evluma. From the pop-up window, select the Gmail icon. See also View Event History.

Common Tasks
The following section outlines the most common tasks performed in ConnectLED.

How to Connect to WiFi on your Android Tablet
Connect to WiFi to receive emails containing license renewals, software updates, send emails for RMA/event histories, or to set lamp location (optional). See also To Initialize ConnectLED GPS - WiFi/Google Maps.

1. Touch the Settings icon to open the Settings screen.
2. Under "Wireless & Networks," touch WiFi.
3. Touch the WiFi switch to turn it to the On position. You'll see a list of saved and available networks.
4. Select the account you wish to use and follow the password prompt.
5. Once connected, your device will say "Connected" under the network name and it will show up in your saved networks list. Your device will automatically connect when in range. Touch the Home button to return to the Home screen

How To Disconnect an AreaMax or OmniMax
When connecting to an AreaMax or OmniMax for the first time it will always be in a Connected state. By default, all Evluma lamps are in a Connected state and ready to install when they are shipped from the factory.

1. Tap the logo on the Home screen to launch ConnectLED.
2. ConnectLED will automatically search for lamps. Any AreaMax or OmniMax found within range will be displayed. If no lamp is found, move closer to the AreaMax, or point the tablet in the direction of the AreaMax you wish to connect to and touch Find Lamps to prompt ConnectLED to search again.

3. Select the lamp you wish to disconnect from service. A pop-up will appear as Connecting to: mac address if connecting to an AreaMax. If connecting to an OmniMax the serial number will appear. The lamp will flash 3x.
4. Press the Disconnect button to disconnect the lamp from service. A warning message will pop up.
5. Press Disconnect to confirm that you wish to disconnect the lamp from service. The lamp will flash 3x. The Disconnect button will change to a Connect button to facilitate future re-connection.
6. Press the Return button or tap the logo to return to the FIND LAMPS screen.

To Connect an AreaMax or OmniMax

You may wish to connect or re-connect an AreaMax or OmniMax to service if it has previously been disconnected.

1. Tap the logo on the Home screen to launch ConnectLED.
2. ConnectLED will automatically search for lamps. Any AreaMax or OmniMax found within range will be displayed. If no lamp is found, move closer to the AreaMax, or point the tablet in the direction of the AreaMax you wish to connect to and touch Find Lamps to prompt ConnectLED to search again.
3. Select the lamp you wish to connect to service. A pop-up will appear as Connecting to: mac address if connecting to an AreaMax. If connecting to an OmniMax the serial number will appear. The lamp will flash 3x.
4. Press the Connect button to connect the lamp to service. ConnectLED should connect the lamp to service immediately and the will light come on. The lamp is currently connected.

   If it is daytime the light will come on for 10 minutes then turn off. If it is nighttime the light will come on and stay on.

5. Press the Return button or tap the logo to return to the FIND LAMPS window.

How to View Lamp Configuration

Veiw the serial number, set Maxium Intensity, set a dimming schedule and check table location and timezone in the Config screen.

1. Tap the logo on the Home screen to launch ConnectLED. ConnectLED will automatically search for lamps. Any AreaMax or OmniMax found within range will be displayed. If no lamp is found, move closer to the

AreaMax, or point the tablet in the direction of the AreaMax you wish to connect to and touch Find Lamps to prompt ConnectLED to search again.

2. Select the lamp you wish view. A popup will appear as Connecting to: mac address if connecting to an AreaMax. The serial number will appear if connecting to an OmniMax.

3. Tap CONFIG on the left of the action bar. The Configuration screen will open. See Config Screen (ENTERPRISE and PROMO licenses only) for details.

How to Set the Maximum Intensity Setting

For details on the Maximum Intensity setting see Config screen (ENTERPRISE and PROMO licenses only) Maximum Intensity.

1. Follow the steps to View Lamp Configuration. Midway down the screen is a blue slider to set Maximum Intensity. By default this is set to 100.

2. Drag the blue set point from right to left along the slider. The number to the left of the slider will change to reflect the new setting. Adjust to preference and leave. Setting automatically saves.

3. Press the return button or tap the logo to return to the FIND LAMPS screen.

How to Set a Dimming Schedule

For more details on the Dimming Schedule see Config screen (ENTERPRISE and PROMO licenses only) Dimming Schedule. Follow the steps to View Lamp Configuration. Towards the bottom of the screen you will see the button to Show the Dimming Schedule.

1. Press the Show button. The Dimming Schedule screen will open.

2. Press the Add button to activate the first entry. You may create up to 4 entries or choose to just use one.

    Note: The Dimming Schedule may not consist of a single entry. The last setting must return the lamp to 100%.

3. Tap the time to open a popup window where you may set the time for the first dimming period to period to begin.

4. Roll the wheels forward or backward to set hour, minute and AM or PM.

5. Tap Done when you are finished.

6. Slide the blue set point along the slider from right to left to set the

dimming level for this first time period.
7.   Repeat steps 3 through 7 to add two more dimming periods. The fourth and final setting must return the lamp to 100%.
8.   Press the Verify button to verify that your dimming schedule is valid.
9.   Tap Apply to apply the dimming schedule to the lamp.
10.   Press the Return button or the Back button to return to the Config screen, or tap the logo to return to the FIND LAMPS window.

For More Information

For More Information, or for Technical Support please contact your regional Evluma salesperson, or call:

425-336-5800, Option 2.
http://www.evluma.com/contact.html

Troubleshooting
If you experience any trouble with the application, or the application freezes try restarting the application. To turn off ConnectLED, touch the Active Programs button and swipe the ConnectLED application to the right. You may also tap the Clear All button. Tap the ConnectLED logo on the Home screen to start ConnectLED again.

How to Upgrade your License
Please contact your Evluma Customer Service to purchase an upgrade to your license.

Warranty: Tablet warranty will be 6 months from date of shipment.

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