

Insolation

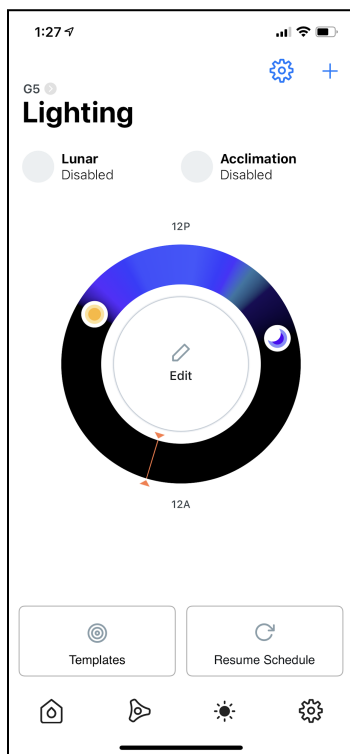
The Insolation feature is an advanced feature that allows for dynamic daily adjustment of the schedule. You can import a table that specifies the sunrise, sunset, sun intensity, moonrise, moonset, and moon intensity. The device will then adjust your base schedule to match your imported parameters.

For a concrete example, suppose you create a daytime schedule that starts at 8am, peaks at noon, and is off by 4pm. And you create a nighttime schedule that starts at 4pm, peaks at 6pm, and is off by 8pm. And you upload the following Insolation data:

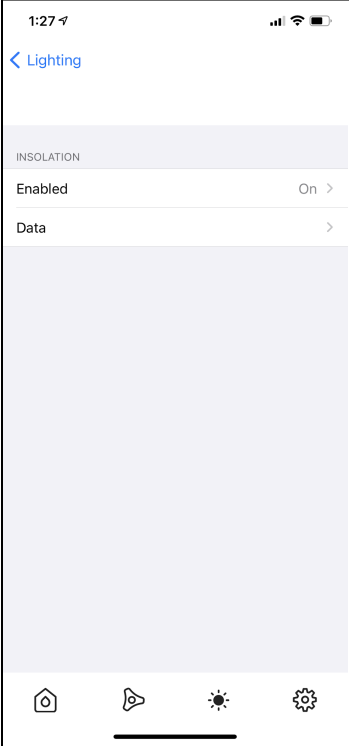
Month	Day	Sunrise	Sunset	Sun Intensity	Moonrise	Moonset	Moon Intensity
1	1	07:06	17:43	66	13:07	00:02	35

Then on January 1st, the daytime schedule will start at 7:06am, peak at 12:20pm, and end at 5:43pm, at only 66% of your original schedule. And the nighttime schedule will start at 1:07pm, peak at 6:34pm, and end at 12:02am, at only 35% of your original schedule.

This is the normal light schedule editor. To access the Insolation features, tap the gear icon in the upper right of the screen.



To enable the Insolation feature, tap "Enabled". To edit the Insolation data, tap "Data".



The Insolation data can be edited in the app, however, the process would be tedious. Instead, you can upload a CSV file with the Insolation data.

A table like this:

Month	Day	Sunrise	Sunset	Sun Intensity	Moonrise	Moonset	Moon Intensity
1	1	07:06	17:43	66	13:07	00:02	35
1	2	07:06	17:44	66	13:56	00:51	42

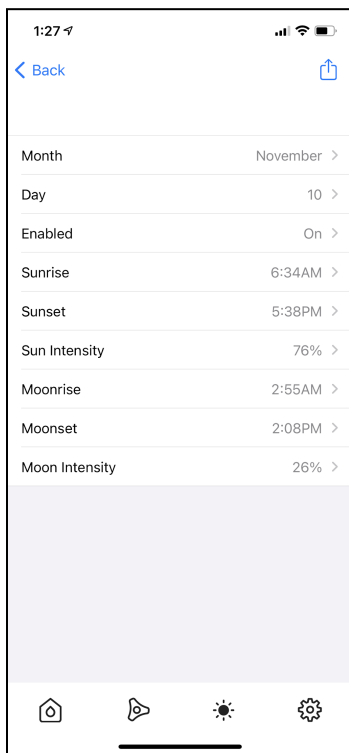
With ranges of values of:

Month	Day	Sunrise	Sunset	Sun Intensity	Moonrise	Moonset	Moon Intensity
1-12	1-31	00:00-23:59	00:00-23:59	0-100	00:00-23:59	00:00-23:59	0-100

Can be exported to a CSV file that looks like this:

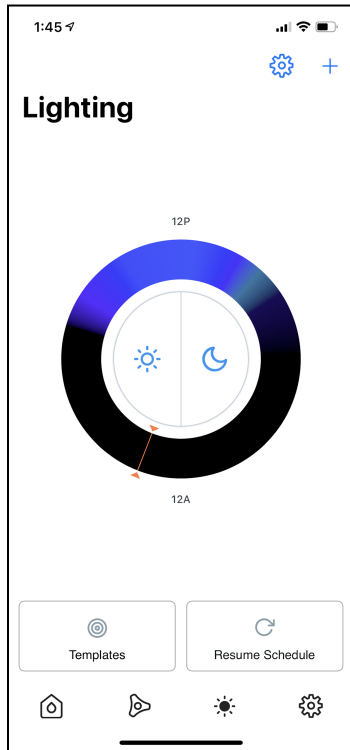
```
Month,Day,Sunrise,Sunset,Sun Intensity,Moonrise,Moonset,Moon Intensity
1,1,07:06,17:43,66,13:07,00:02,35
1,2,07:06,17:44,66,13:56,00:51,42
```

This CSV file can then be chosen by clicking the button in the upper right of the screen. The app will indicate how many days worth of data you have uploaded. Once the data is uploaded, tap "Save" to save the data.



Once Insolation is enabled, the schedule screen will look like this. To edit the points between sunrise and sunset, click on the sun icon. To edit the points between moonrise and moonset, click on the moon icon.

The schedule shown in the ring is the computed schedule based on the Insolation table, the current date, and the day/night schedules.



Below is the schedule editor for the day and night points. You can only add new points between the rise and set points of each schedule.

The specific times on both of these schedules is irrelevant. The important part is the proportional relationship between the points and setting the desired spectrum. The times will be modified to reflect the rise/set times specified in the Insolation table.

