



NEXT

TECHNICAL ARTICLE

Product:	NextLED Products and Displays
Summary:	The purpose of this article is to clarify questions regarding the use of brightness controls Next Products.
Information:	There are occasionally questions regarding the brightness control of our products for manual and automatic uses. The brightness is controlled by Next LED and shipped with standard average night time dimming features. Adjustments can be made by Next service technicians at the request of dealers and end users.

FAQ:

What measurement of light is used in calculations and determination of brightness?

Lux (lx) is a unit of measurement for the intensity of light. It's used to measure how much light is in a given area.

How does the display determine the correct brightness?

Next displays are installed with a light sensor, or photo cell, that is connected to our primary controller. This light sensor when placed correctly outside of the sign in ambient light, will read Lux values every 30 seconds.

Where are the standard automated settings configured?

Next displays are factory configured to operate at 80% maximum brightness when the light sensor receives more than 12,000 lux. At night, or in darker conditions, the brightness auto adjusts to 5% below 20 lux. If using a 9,000 NIT brightness product it will operate around 450 Nits in low or no light conditions.

How often does it change?

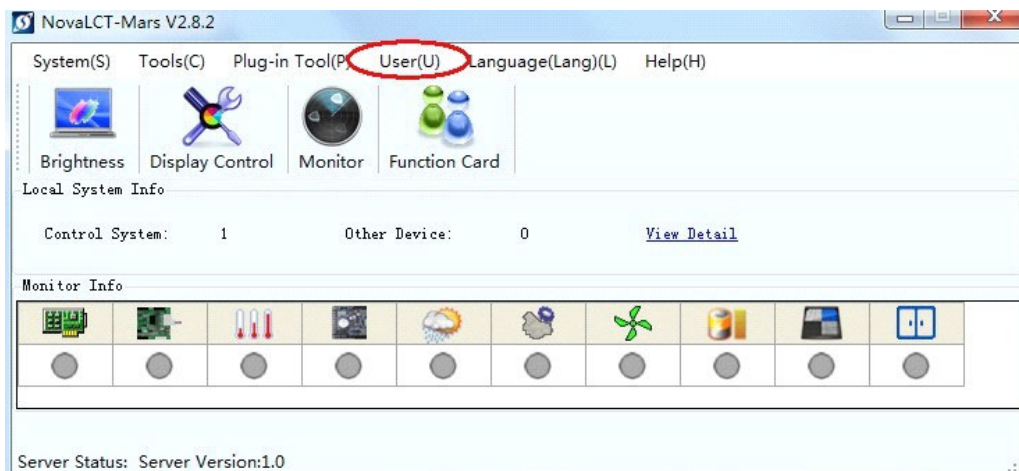
Next displays utilize a trailing five minute average of readings to determine what adjustments will automatically be applied to the current environment. This prevents independent dark clouds and intermittent flashes of light at night from forcing the display to adjust inadvertently.

Can you set a schedule?

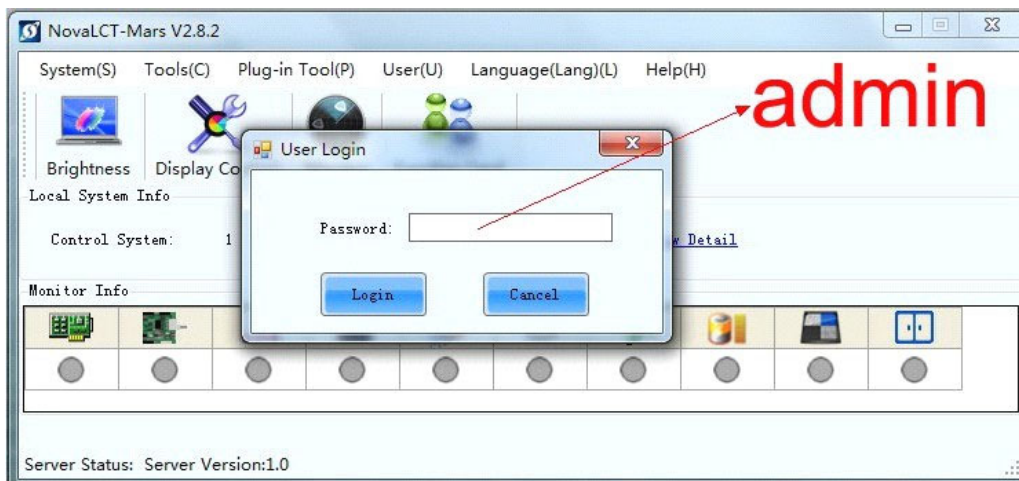
Next displays can be schedule to be certain brightnesses at different time intervals throughout the day. When the schedule is in use it overrides the automatic dimming feature. This is only used in installations where the light sensor is not available to be used in ambient light conditions.

Software Configuration

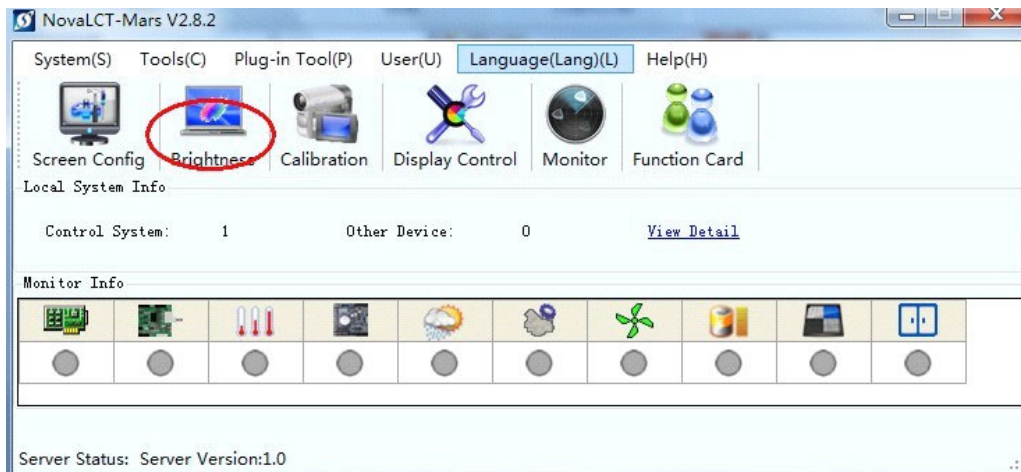
1. Run NovaLCT-Mars



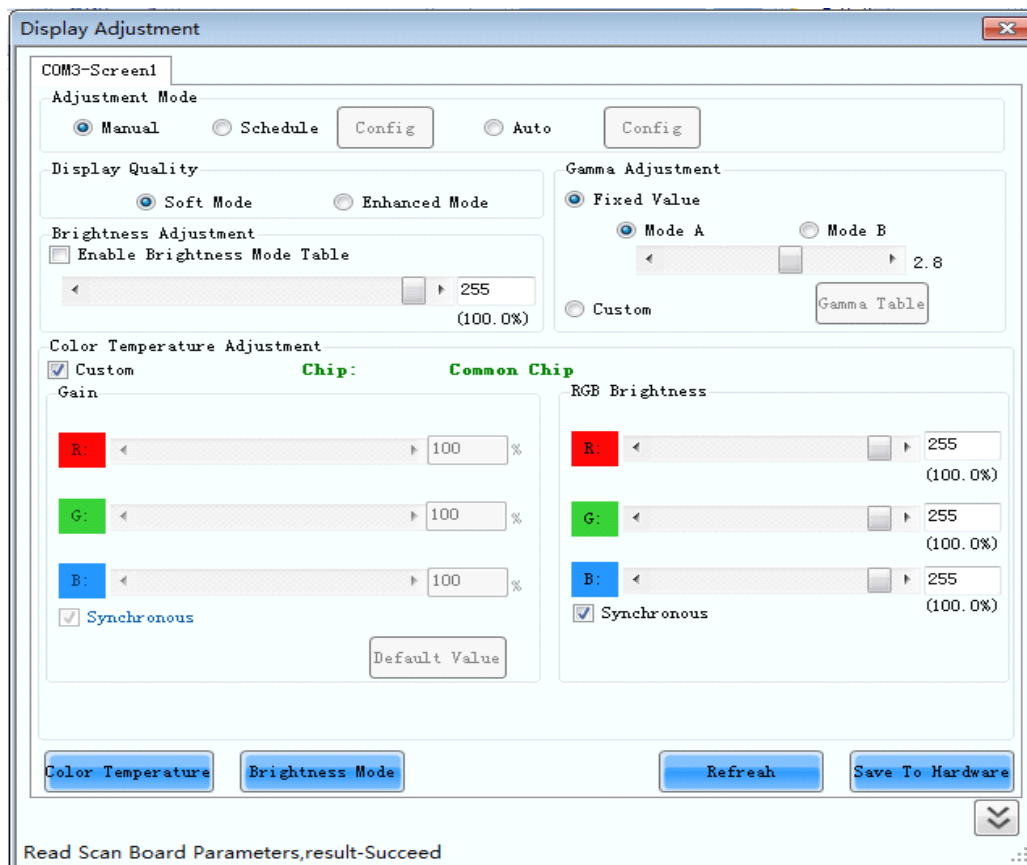
2. Login as Advanced User



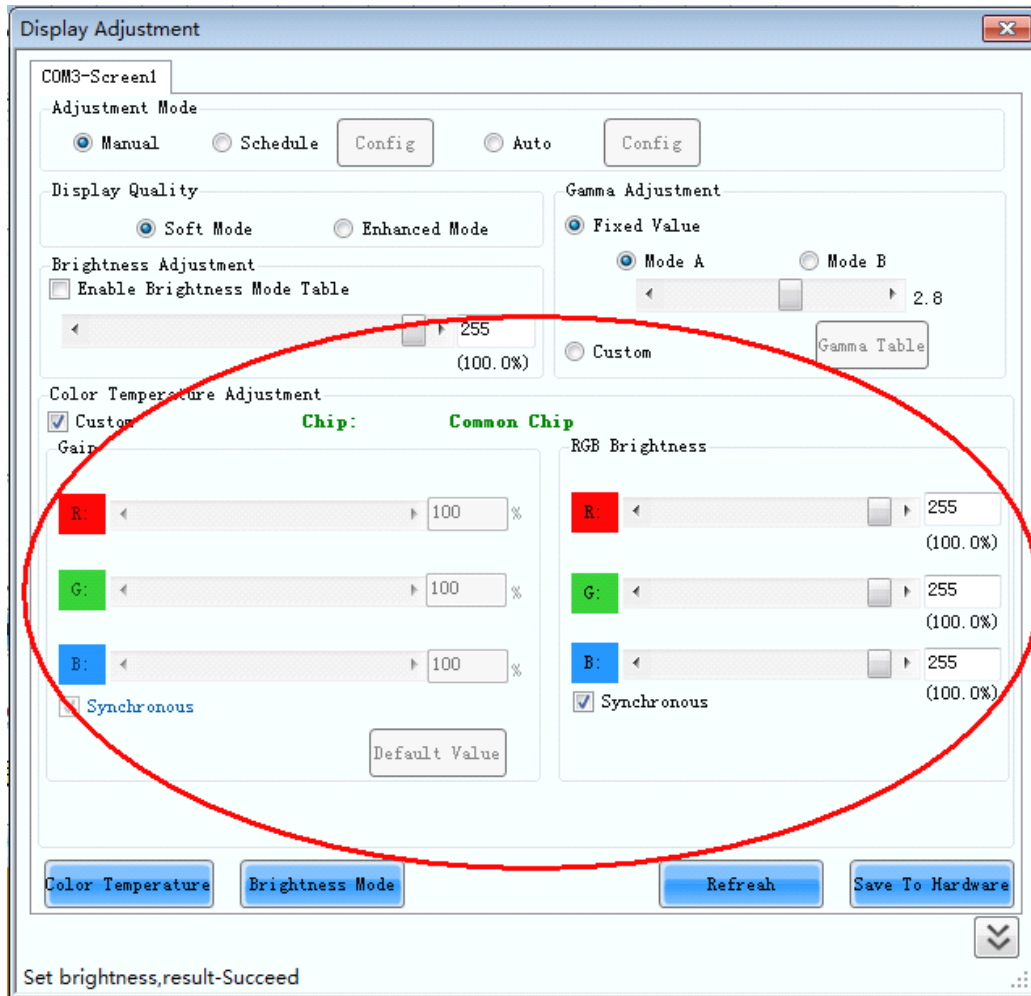
3. Press **Brightness** Icon



4. Choose brightness **Adjustment Mode: Manual, Schedule, or Auto**



5. Manual brightness adjustment



Display Quality

There are two modes for display quality, **Soft Mode** and **Enhanced Mode**. Use soft mode for the situation that the environment brightness is not very high, usually for indoor display. Enhanced mode is better when the background is very bright, usually for outdoor display.

Gamma Adjustment

Gray scale level starts earlier in Mode A than Mode B.

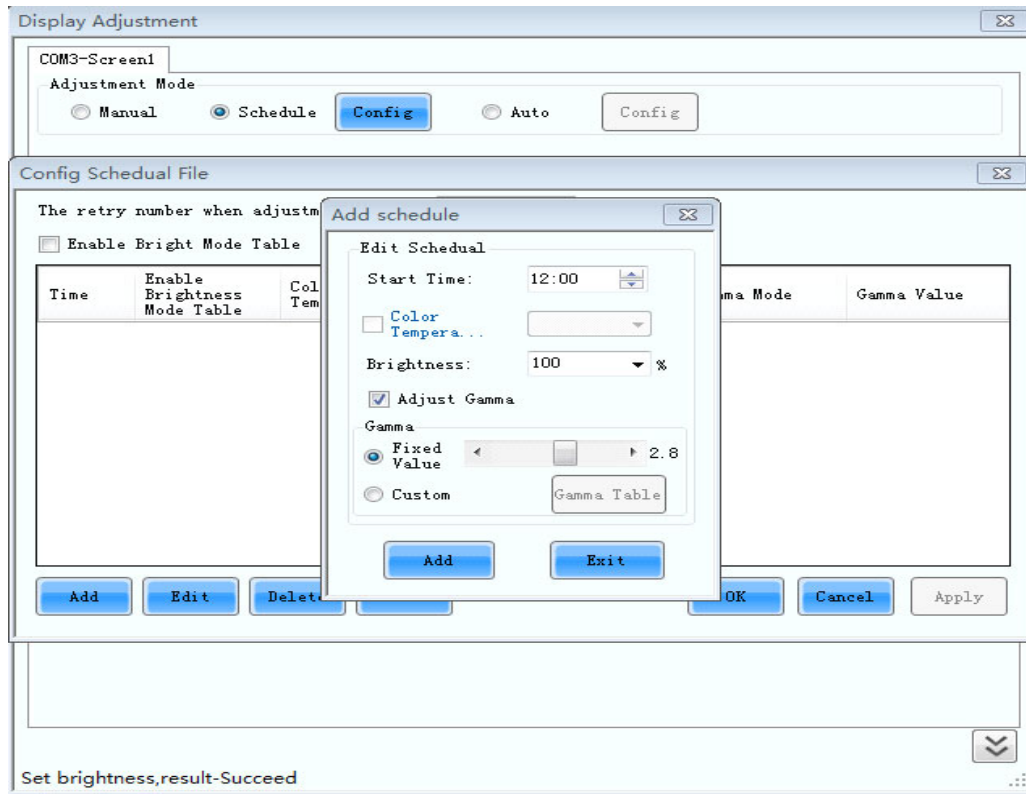
Gain

For drive IC with current gain function, adjusting gain will increase drive IC's current output.

RGB brightness

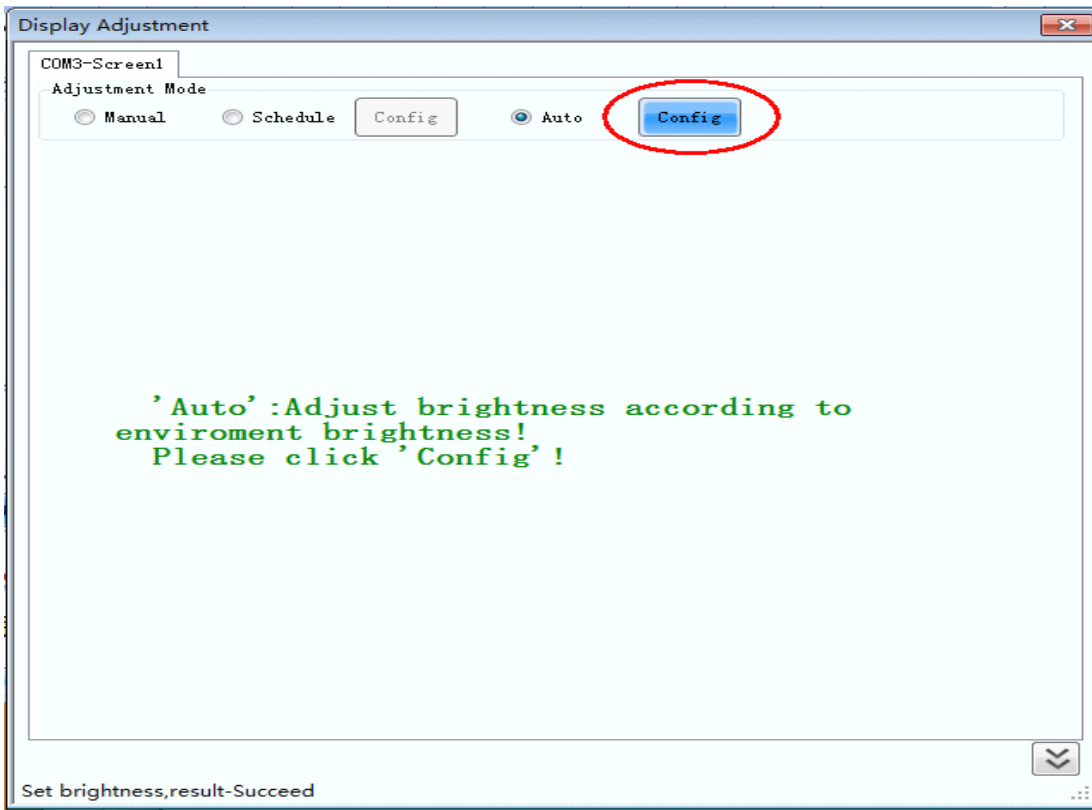
Adjust R/G/B brightness respectively.


6. Schedule Brightness Adjustment



6. Auto brightness adjustment


Select Auto, press Config Button






Press  to search and add Light Sensor, set environment brightness and screen brightness according to installation application.

Auto Brightness

Light Sensor for Auto Brightness

Status	Index	Address
	1	COM7-Sending Board 1-Light Sensor

The retry number when adjustment failed:

2

Caculate Type of Lux

☒ Average of all light sensor
 ☐ Average after remove maximum and minimum

Adjustive Relationship of Auto Brightness

☐ Enable Br...
 ☐ Fixed Color Temperature

9600

Environment Brightness

Screen Brightness

Above

12000

 lux
 —>

80

 %

Linear adjustment between minimum and maximum

Numbers of Segments:

10

Below

20

 lux
 —>

40

 %

OK

Cancel

After successfully add Light Sensor, press  to read environment brightness:

