# Hot to Set up Photo Sensor

1. Instruction

When a Photo(CdS) sensor installed, brightness of LED sign will be adjusted automatically by the sensor detecting the ambient brightness in the range of preset value(Min ~ Max).

CdS sensor is a silicon photo type using the Photoconductive effect. When it is exposed to the light, the resistance is changed.

This application makes it possible to display image clearly even at night at lower power consumption, extends the life of the LED Sign.

2. Connection
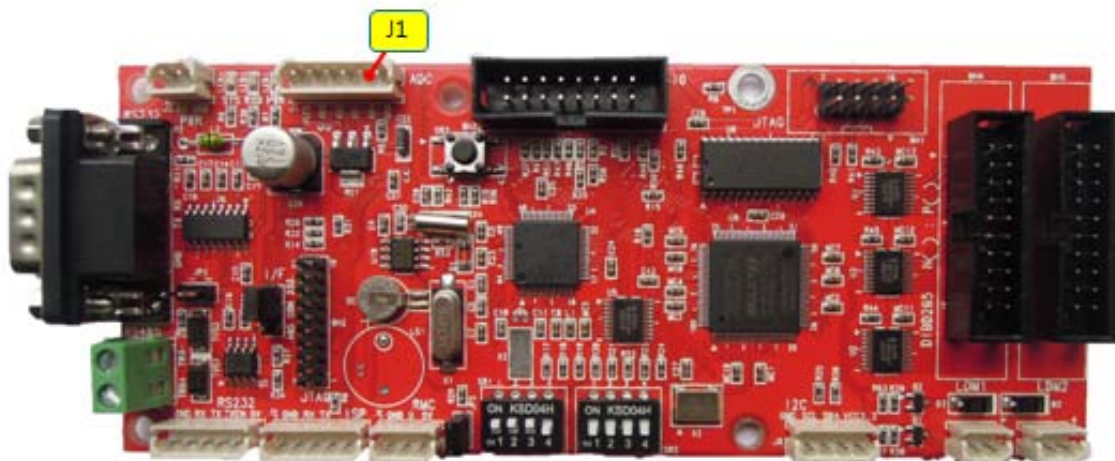
As for DIBD120/160/220/260, connect the sensor to **J1**(or **CDS**) port of DIBD.

As for DIBD500, the separate connection guidance will be provided from us.

3. Setting Procedure

Once the sensor connected, see "3.3 Brightness Setting(Auto Control Mode)" on "Software Manual" and follow the setting procedure.

[Appendix] Brightness Setting(Chapter 3.3 of Software Manual)

Maximum brightness of the LED Sign depends on the LED modules type and the scan method of manufacturers.
Set up the brightness in percentage based on the maximum brightness(100%) of the LED.

By optimizing the brightness of the LED Sign, you can prevent any blurry phenomenon of the LED and extend the life span of the LED modules.

To open "Brightness Set" window as below, click on **[System] → [Brightness]** from the menu.
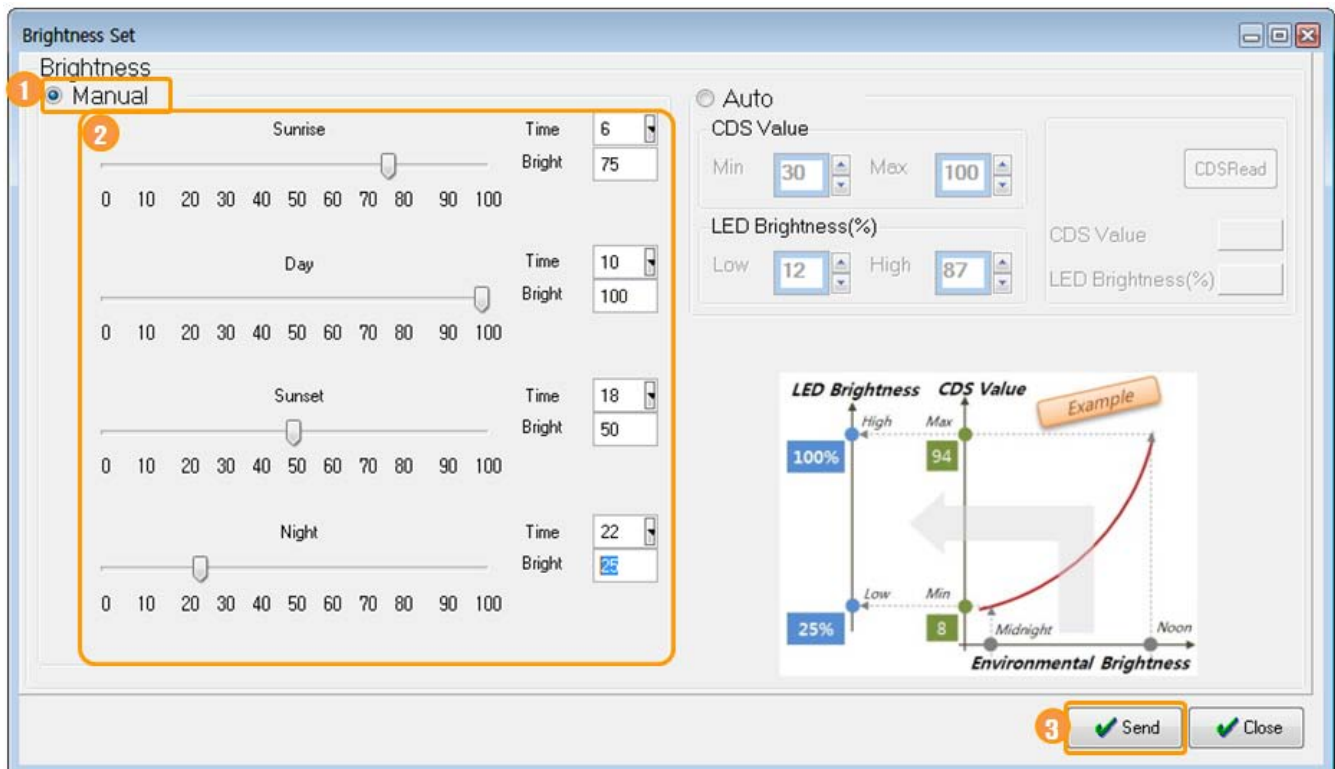
Manual Control Mode

You can set up the brightness of LED Sign in four different time bands of the day.

① Check **Manual.**

② Set up the time band and the brightness for Sunrise, Day, Sunset, Night.
Ex.) Sunrse(6:00~) : 75%, Daytime(10:00~) : 100%, Sunset(18:00~) : 50%, Night(22:00~) : 25%

③ Click on **[Send]**.

Auto Control Mode

When a Photo(CdS) sensor installed, brightness of LED sign will be adjusted automatically by the sensor detecting the ambient brightness in the range of preset value(Min ~ Max).

CdS sensor is a silicon photo type using the Photoconductive effect. When it is exposed to the light, the resistance is changed.

You can set up Auto Control Mode as follows.
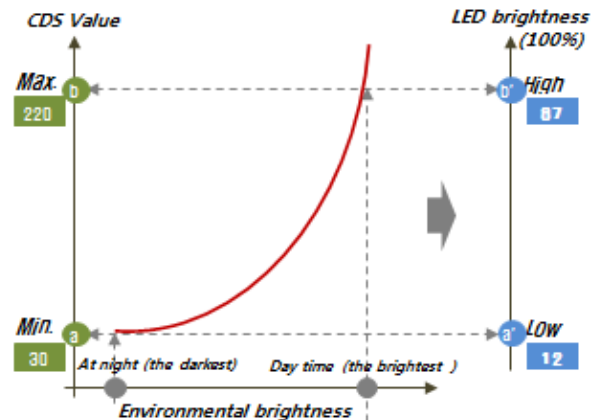
① Check **Auto** and click on **[Send]**.
By clicking on **[Send]** first, Auto Control mode will be reset.

② Measure the Min./Max. CDS value.
When you click on **[CDS Read]**, the actual value will be indicated in the blank next to CDS Value.
Measure the darkest and brightest value of the day.
Measure 3~4 times every 3~5 seconds and get the average value.

③ Input the measured Min/Max. CDS value.

④ Set up the Low/High value for LED Brightness.
Low value means the LED brightness to display when CDS measures the Min. value(at Midnight).
High value means the LED brightness to display when CDS measures the Max. value(at Noon).

⑤ Click on **[Send]** to send the settings to DIBD.