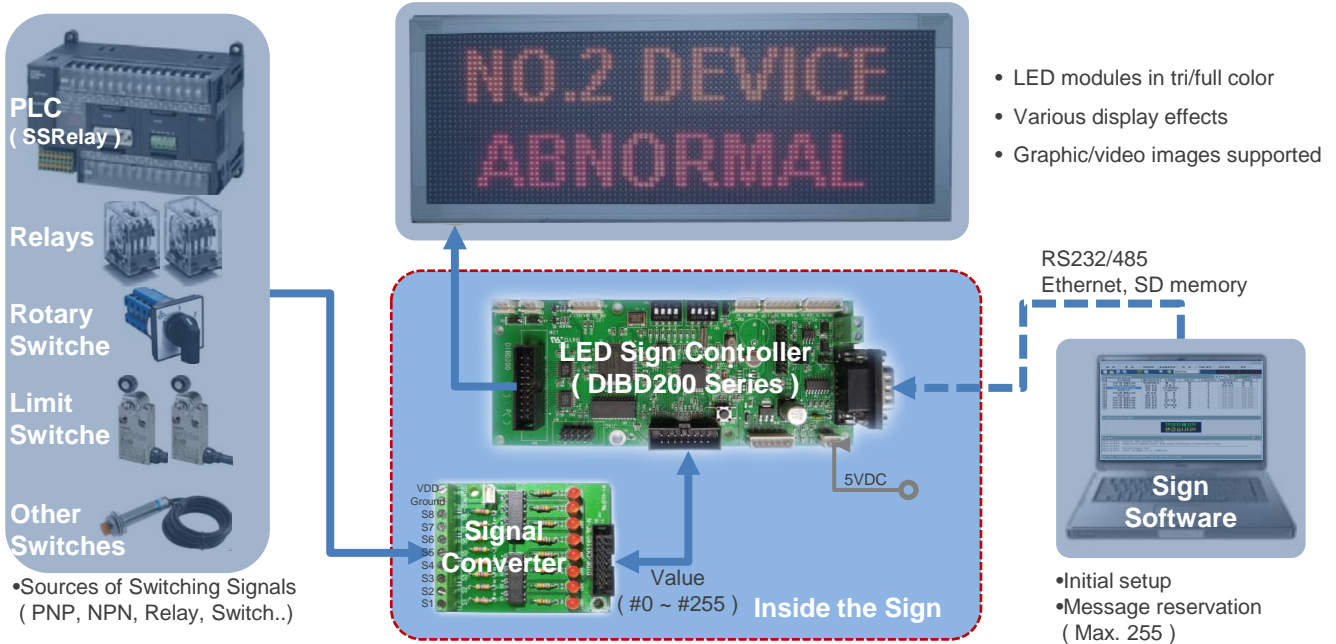


LED Sign for Displaying Reserved Messages For Switching Signals

This is to display the reserved messages corresponding to the specific signal generated by switching devices. A specially-designed sign controller and a signal converter inside the LED sign make it possible to do that with the following features:

- ✓ Direct input of switching signals(Max. 255) from any SSRelay of PLC, relays, switches, etc.
- ✓ Easy to edit the messages(Max. 255) in various formats(text/graphic/video) with various display effects by the sign software.
- ✓ When receiving no signal, general messages(information/notices, date/time, temp..) can be displayed sequentially, repeatedly.



External(Customer) System

- To send the switching(ON/OFF) signal from PLC(12/24VDC), relays, switches, etc.
- In case of PLC, it is possible to make up to 255 of signals by the combination of 8 pieces of SSRelays as follows.

Switching signal by NPN/PNP/Relays of PLC								Signal Value	Message on the LED sign (example)
SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8		
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	0	General messages(if necessary)
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	1	NO.1 DEVICE ABNORMAL
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	2	NO.2 DEVICE ABNORMAL
ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	3	NO.3 DEVICE ABNORMAL
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	4	NO.4 DEVICE ABNORMAL
...
ON	ON	ON	ON	ON	ON	ON	ON	255	The 255 th message you want to display

Sign Software

- To setup the initial system environment.
- To create the messages, register them in a Playlist and transmit them to the controller(flash emory).

Signal Converter

- To receive "12/24VDC" of switching signal and relay it to the controller.

DIBD Controller

- To display the reserved message corresponding to the specific signal value as the example above.
- You can set the display effect, stay time, etc.
- There are several models of controllers depending on the LED sign manufacturer/resolution/color...

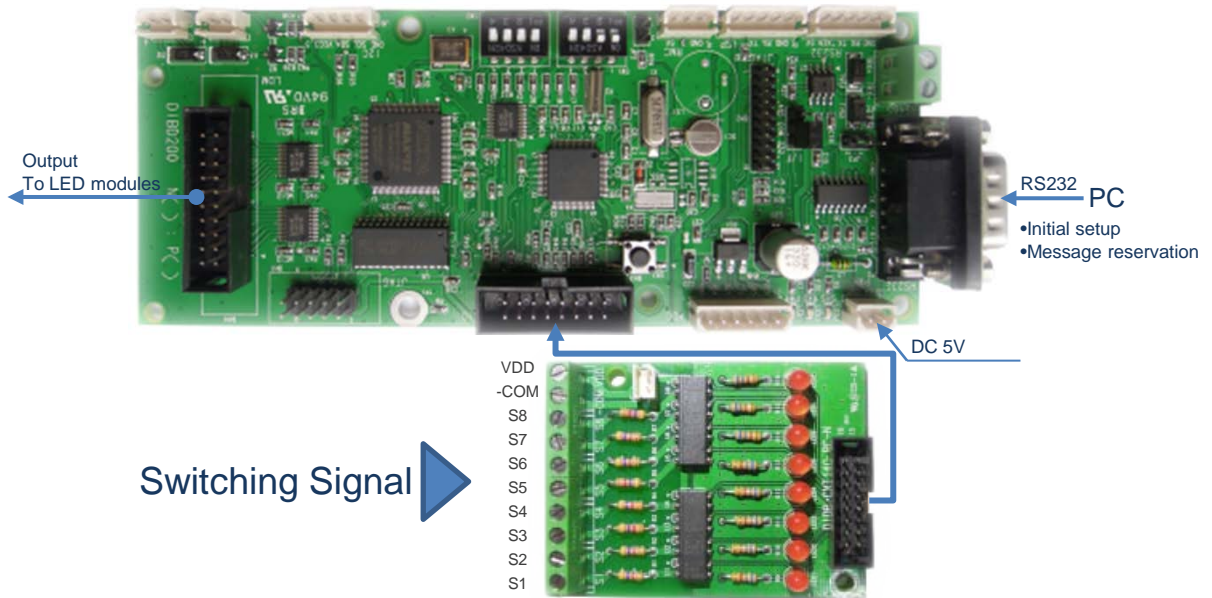
LED modules

- You can use your own or preferred LED modules with our technical support, or simply use our recommended ones compatible with our controller.

Necessary Information For Your Application

Section	Information required
Customer System/Device	<ul style="list-style-type: none"> ✓Type of system/device : PLC output(NPN/PNP/Relay), Relay, Rotary switch, limit switch, proximity switch, etc. ✓The number of signal and the voltage
Sign Software	<ul style="list-style-type: none"> ✓Sample messages(image or text) to be displayed on the sign ✓Language, preferred font type and size(Width x Height in Pixel)
LED Module	<ul style="list-style-type: none"> ✓LED module manufacturer & Specification, Screen size/resolution, color
Options	<ul style="list-style-type: none"> ✓Analog/digital clock display, temp./humidity display, auto dimmer, SD memory, etc.

Product Specification (ex. DIBD220P- and a signal converter)



- Main Process : 32Bit ARM7 Microcontroller, 256Kbit on chip static RAM, 4Mbit on chip flash program
- Display Processor : CPLD, 570LEs
- Max. size to control : 3 Color LED sign up to "40 modules(2Rx20C, 16x16 dot matrix)"
- Scan mode(Duty Ratio) : 1/16D, 1/8D, 1/4D
- Display Image format : Text/Bitmap/Animation in 3 Color
- Image number to display by built-in memory : Max. 115 images
- Communication method : RS-232/485 (basic), RS-422 or LAN (Option)
- Multi-communication supported(up to 32 signs)
- Communication Speed : 9,600 / 38,400 / 57,600 /115,200 bps
- Extended interface : Built-in clock, Two ports for relays(Cooling fan, Heater, lamp, buzzer), etc.
- Options : Auto dimmer sensor, temperature/humidity sensor, GPS time receiver, SD memory
- Environments : Industrial at -20℃~80℃
- Power sources : DC 5V, Max. 200mA

Application in Reference

LED signs for displaying working status of the machine/equipment, warning message under any condition in the industrial field.

Technical Materials (when requested)

- Quick guidance
- Sign Software file and the manual