

## SLC Series Installation Instructions

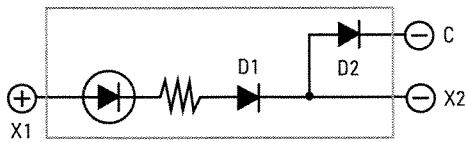
### Installation Notes

1. Since lamps generate heat, it is recommended that ventilation be provided for cooling when more than ten lamps are lit continuously.
2. A lower number of windows is specified for multiple transformer, AC adaptor, and DC-DC converter units (50 maximum, instead of 200 as for full voltage only). This is done to avoid damage which may result from excessive heat generation when all lamps are lit simultaneously.
3. When multiple units are panel mounted, determine panel thickness so that the combined weight of all units and connecting wires can be supported.
4. Multiple units are not designed for continuous, simultaneous lighting of all lamps. However, it is possible to conduct a lamp test with all lamps lit simultaneously for a period of up to 40 minutes.
5. Before removing the LED unit, turn the power supply off.
6. DC-rated voltages for LED units are complete direct current voltages. Make sure to check the measuring instruments and compensate for any error in the measured, full-wave rectified or pulsating voltages.
7. To ensure brightness and long life of LED units, keep the DC power voltage within the operating voltage range.

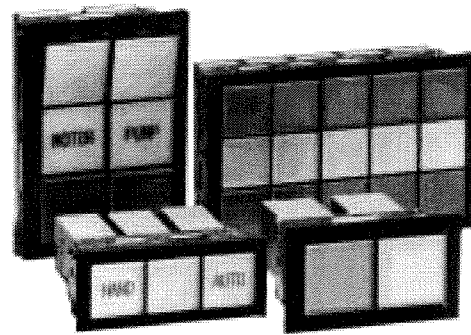
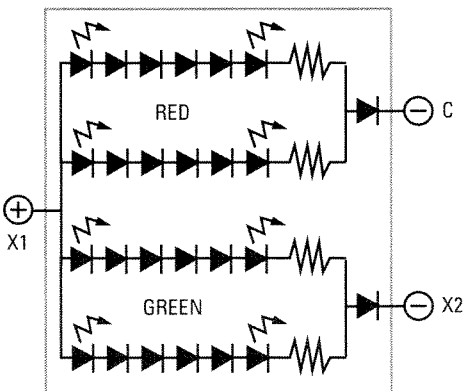
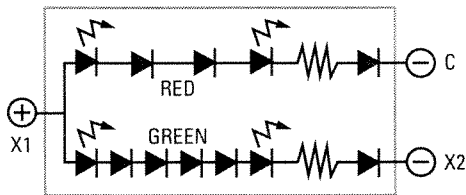
**LED Operating Voltage Range: 24V DC ± 10%**

### Terminal Arrangements (LED units)

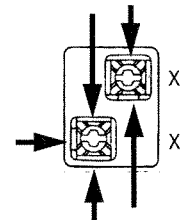
For full voltage (1- and 2-color) and DC-DC converter LED units, terminal X1 is positive and terminal X2 is negative. Make sure to observe polarity when wiring.



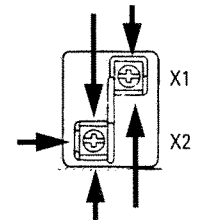
For 2-color alternate units, terminal X1 is positive, and terminals X2 and C (check terminal) are negative.



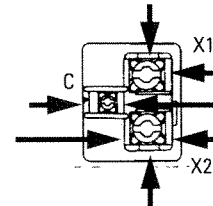
SLC30 Full Voltage DC-DC Converter



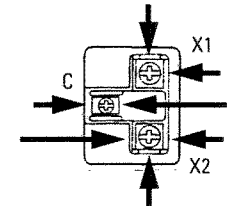
SLC30 AC Adaptor Transformer



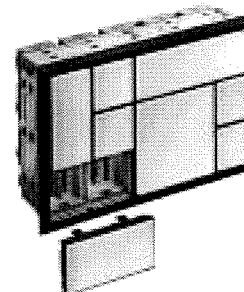
SLC40 Full Voltage DC-DC Converter



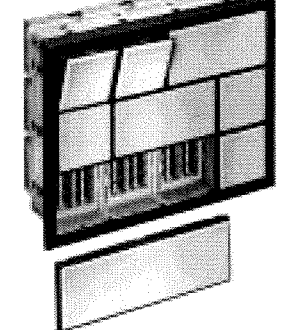
SLC30/40 2-Color LED (alternating)



SLC30



SLC40



IDEC Display Lights

**Installation Instructions, continued**

Display Lights **C**

**Removing Windows**

**SLC30:** To remove a window, insert the tip of a small screwdriver into the slot under the lens frame and gently press down on the screwdriver.

**SLC40:** To remove an extended window, pull on the top as if to extend the unit; then continue pulling until the unit comes out of the housing. All units are shipped with windows retracted. When transporting units, make sure windows are pushed in fully. After windows are installed, they can be extended as shown in *Figure 1*.

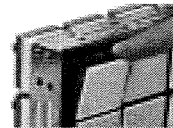


Figure 1: SLC40

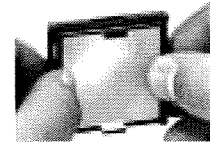


Figure 2: SLC30 and SLC40

**Removing Lens, Color Screen, and Marking Plate**

The lens has two retaining projections on the right and two on the left. To remove the lens, color screen, and marking plate from the lens frame, push open the lens frame with both hands as shown in *Figure 2*.

The lens can also be removed by inserting a screwdriver into one of the sides with recesses. Since the lens has an orientation, be sure to insert the screwdriver in the direction shown in *Figures 3 and 4*.

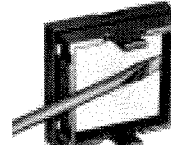


Figure 3: SLC30

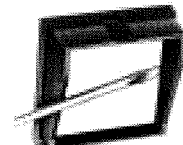


Figure 4: SLC40

**Installing Lens, Color Screen, and Marking Plate**

First, install the marking plate and color screen into the lens frame. To install the lens, insert its retaining projections into the recesses inside the lens frame, and press the lens into the lens frame as shown in *Figure 5*.

**Replacing the LED Unit**

**To remove:** Insert the tip of a screwdriver into one of the two slots inside the LED unit. Pull the LED unit straight out without pressing on the LED terminals, as shown in *Figure 6*.

**To install:** Make sure that the junction inside the LED unit is aligned in the same direction as the junction of the LED housing. Push the LED unit into the LED housing as shown in *Figure 7*.

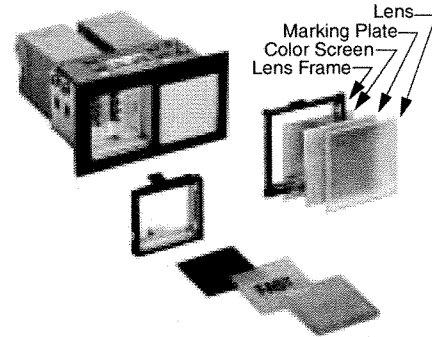


Figure 5: SLC30 and SLC40

**Installing Units into a Panel**

**Single units:** With leaf springs installed, push the SLC housing from the front of the panel. Secure the SLC housing with two mounting clips. Tighten the mounting clip screws to a torque of 4 to 5 kgf-cm as shown in *Figure 8*.

**Multiple combination units:** Insert the units into the panel cut-out from the front. Install the attached mounting clips into the openings on the frame, and tighten the screws as shown in *Figure 9*. After tightening, use Loctite to prevent loosening. The number of mounting clips included with each multiple unit varies with the number of windows as shown in the table below.

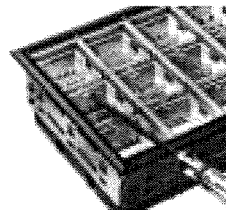


Figure 6: Remove LED

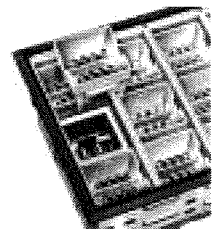


Figure 7: Install LED

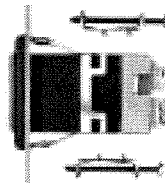


Figure 8: Single Unit

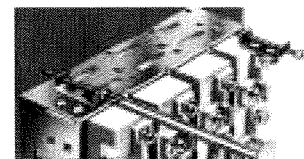


Figure 9: Multiple Combination

## SLC Series Installation Instructions, continued

### Number of Mounting Clips Included

Columns	1 or 2		3 to 8		9 to 15	16 to 20*
Rows	Full Voltage	Others	Full Voltage	Others	All Types	All Types
1 or 2	2		4		6	8
3 to 6	4	6	6	8	8	10
7 to 10 (SLC30 only)	6	8	8		10	12



\* SLC30 series only.

### Recommended Mounting Clip Positions

Columns	1 or 2		3 to 8		9 to 15	16 to 20*
Rows	Full Voltage	Others	Full Voltage	Others	All Types	All Types
	2 Clips		4 Clips		6 Clips	8 Clips
1 or 2						
	4 Clips	6 Clips	6 Clips	8 Clips	8 Clips	10 Clips
3 to 6						
	6 Clips	8 Clips	8 Clips		10 Clips	12 Clips
7 to 10 (SLC30 only)						

### Assembly Order for Lamp On/Lamp Off Colors

Lamp On: Amber, Blue, Green, Red, Yellow		Lamp On: White	Lamp On: Red/Green
Lamp Off: Desired Color	Lamp Off: White	Lamp Off: White	Lamp Off: White
<p>Matte Surface (non-shiny)</p> <p>Lens    Color Screen: Any Color    Marking Plate: White</p>	<p>Matte Surface (non-shiny)</p> <p>Lens    Marking Plate: White    Color Screen: Any Color</p>	<p>Matte Surface (non-shiny)</p> <p>Lens    Marking Plate: White    Color Screen: White</p>	<p>Matte Surface (non-shiny)</p> <p>Lens    Marking Plate: White    Color Screen: White</p> <p>Light Source (LED only)</p>