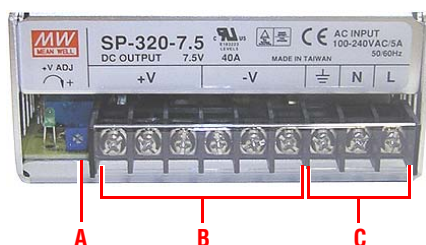# 8.75V Power Supply (pn 1180-9037SP/1179950701)

1.1   Description

In each sign cube or section there is one to two power supplies which provide power to the turbo adapter board, LED driver boards, and the controller board (if present). The power supply is connected to the AC distribution board (if present) or AC which provides line voltage to the power supply.
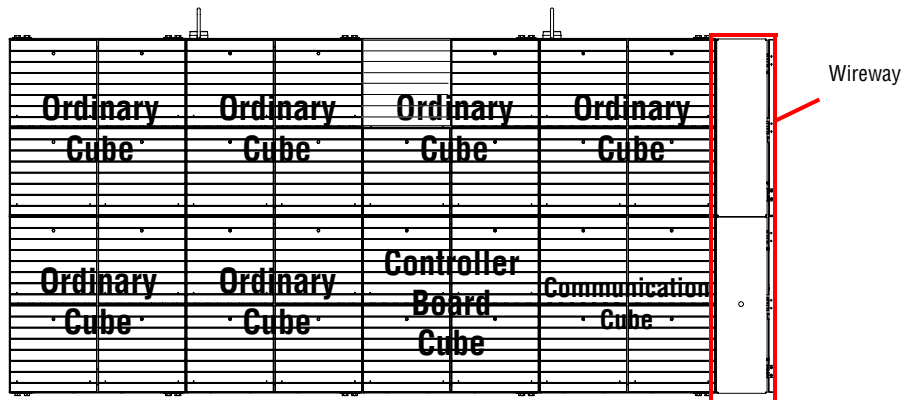

Item	Name	Description
A	Voltage adjust	Output voltage can be adjusted from 7 to 9 VDC.
B	Output	8.75 VDC to a turbo adapter board, boost regulator (if present), and controller board (if present).
C	Input	Line voltage from the AC.

1.2   Sign identification

This power supply is used with both the AlphaEclipse 3600 signs and the AlphaEclipse StreetSmart signs.

This is how to identify which type of sign you have:

- AlphaEclipse 3600 sign (see "AlphaEclipse 3600 sign installation" on page 3.) has a wireway on either the left or right side of the sign .

- AlphaEclipse StreetSmart sign (see "AlphaEclipse StreetSmart sign installation" on page 5.) does NOT have a wireway.

Wireway

AlphaEclipse 3600 sign

1.3   AlphaEclipse 3600 sign installation

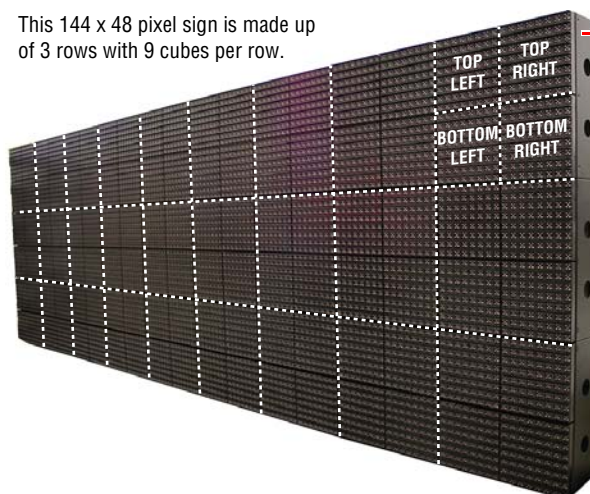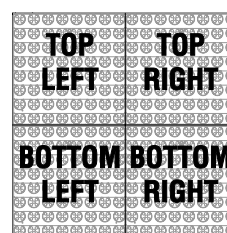|	
1	**Remove power from the sign.**

⚠ WARNING

Hazardous voltage.
Contact with high voltage may cause death or serious injury.
Always disconnect power to unit prior to servicing. SM1000A

2	**Locate the cube that contains the power supply which will be replaced.**

This 144 x 48 pixel sign is made up of 3 rows with 9 cubes per row.

Each cube has 4 LED boards, named as shown:

TOP LEFT   TOP RIGHT

BOTTOM LEFT   BOTTOM RIGHT

FRONT VIEW
LED driver board names

3	**To access the power supply, open the back of the cube:**

To open the back of a cube:
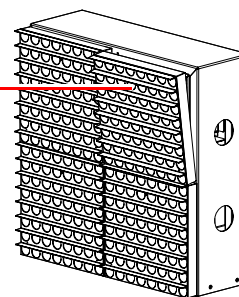• Use a 5/32-inch hex tool to loosen each of the two door screws.

If it is not possible to open the back of the cube, remove the top right and the bottom right LED driver boards from the front of the cube:

To remove an LED driver board:
• Insert a 5/32-inch hex tool into the latch at the upper center of each board.
• Turn the hex tool counterclockwise.
• Lift the board up and then pull it back.
• Remove the data and power connectors from the back of the LED driver board.

NOTE: Each LED driver board must be put back in its *original* location. *LED driver boards are not interchangeable.*

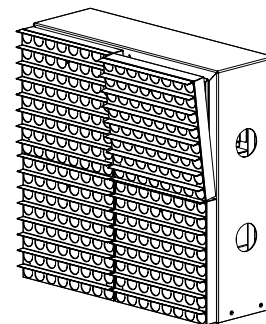| **4**	**Disconnect the power supply.** • Disconnect the cable from the AC adapter board. • Disconnect the cable from the turbo adapter board. • Disconnect the cable from the controller board (if present).
5	**Loosen, but do *not* remove, the two screws (circled below) on the power supply. Push the power supply up and lift it from the sign.** Replacement power supply includes all necessary cables (not shown).
6	**Place the new power supply over the two screws and pull the power supply down. Then tighten each screw.**
7	**Reattach all connectors to the new power supply.**
8	**If you opened the back of the sign, close the door and tighten each latch.** **If you removed LED driver boards, reattach each driver board:** To reattach an LED driver board: NOTE: *Remember to put the each LED driver board back where it was originally.* • Place the bottom of the LED driver board in the cube opening so that the board can swing freely. • Reattach the data and power cables. • Press down on the LED driver board and swing the board up into the cube until it snaps in place. • Insert a 5/32-inch hex tool into the latch at the upper center of the board. • Turn the hex tool clockwise.
9	**Apply power to the sign.**

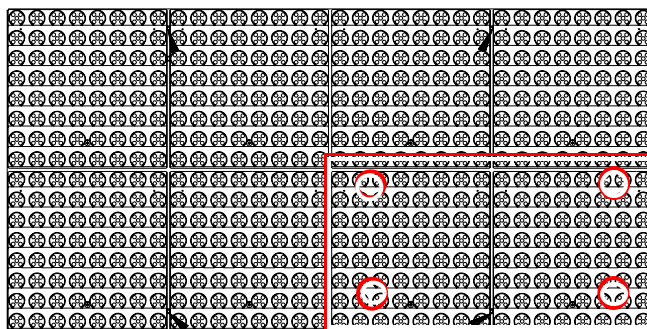## 1.4   AlphaEclipse StreetSmart sign installation

1	**Remove power from the sign.**

⚠ **WARNING**

Hazardous voltage.
Contact with high voltage may cause death or serious injury.
Always disconnect power to unit prior to servicing. SM1000A

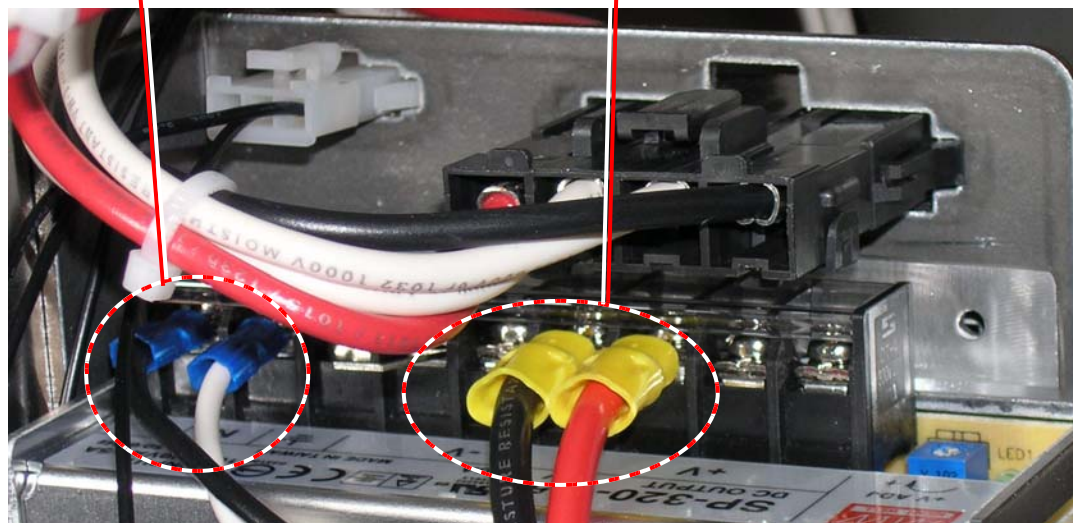|	
2	**Locate the section that contains the power supply which will be replaced. To access the power supply, open section door:**

To open the section door:
- Use a 5/32-inch hex tool to loosen each of the two door screws.

3	**Disconnect the power supply.**

Disconnect the 115AC input cable

Disconnect the turbo adapter board cable

4	**Remove the screw (circled below) on the power supply bracket. Pull the power supply towards you to remove.**
	Bracket screw
5	**Reattach all connectors to the new power supply.**
6	**Place the new power supply in the bracket, then tighten the screw.**
7	**Close the section door and tighten each latch.**
8	**Apply power to the sign.**