Description of Normal Operation for the Sign’s Internal Power Supply
Diagnostic LEDs are included on the internal power supply to aid in verifying that input power is present and is being transferred to the sign face through the output connectors.

+12V LED
This LED illuminates Green when 120-277VAC power is applied to the internal power supply’s input power pigtail. 
*Note: The transformer on the power supply converts 120-277VAC power to +12V.*

A Output LED
Illuminates with power applied to Black/White stripe wire on the input power pigtail

B Output LED
Illuminates with power applied to Black/Yellow stripe wire on the input power pigtail

C Output LED
Illuminates with power applied to Black/Red stripe wire on the input power pigtail

Output Connectors
These connectors transfer power from the internal power supply to the sign face to illuminate the individual message(s).
Problem: There are some LEDs out
TCL Series 120-277VAC

There are some LEDs out

< 10 LEDs Lit

YES

< 10 LEDs Lit

NO

Entire sign needs replaced

YES

Output voltage is > 10VDC?

YES

Check switches and wiring

NO

Output voltage is > 10VDC?

NO

Supply is defective and needs replaced

Contact sales with the serial number of the sign, and be prepared with other relevant information:
• Input voltage reading from multimeter.
• Output voltage of power supply.
• Photos/video showing the issue/damage.
• Photos of the inside of the sign, showing the wiring and power supplies.

Please refer to the diagrams on page 1.
A message is lit that shouldn’t be

Do the wires run parallel to other high power devices?

YES
- Run wires in separate conduit

NO

Is there incoming voltage on that channel?

YES
- Recheck all connections to switches or controlling system

NO

Replace power supply

Problem: A message is lit that shouldn’t be

TCL Series 120-277VAC

Please refer to the diagrams on page 1.

Contact sales with the serial number of the sign, and be prepared with other relevant information:
- Input voltage reading from multimeter.
- Output voltage of power supply.
- Photos/video showing the issue/damage.
- Photos of the inside of the sign, showing the wiring and power supplies.
Problem: Display is flickering
TCL Series 120-277VAC

Display is flickering

Is the +12V LED illuminated steady?

- NO
  - Check switches and wiring
- YES

Can you measure the correct incoming voltage at the sign?

- NO
  - Check switches and wiring
- YES

Is the output connector secure?

- NO
  - Re-attach connector
- YES

Supply is defective and needs replaced

Contact sales with the serial number of the sign, and be prepared with other relevant information:
- Input voltage reading from multimeter.
- Output voltage of power supply.
- Photos/video showing the issue/damage.
- Photos of the inside of the sign, showing the wiring and power supplies.
Entire display is out

Is the +12V LED illuminated? NO

Yes

Is the output LED for the affected message illuminated? NO

No

Is the output connector secure? NO

No

Are the input connectors and pigtail secure? NO

No

Re-attach connector

Supply is defective and needs replaced

Yes

Can you measure the correct incoming voltage at the sign? NO

No

Check switches and wiring

YES

Contact sales with the serial number of the sign, and be prepared with other relevant information:
- Input voltage reading from multimeter.
- Output voltage of power supply.
- Photos/video showing the issue/damage.
- Photos of the inside of the sign, showing the wiring and power supplies.