TCL Series Troubleshooting Guide
TCL Series 120-277VAC

Tools Needed:
Philips head screwdriver
Multi-meter

Always turn off the power to the sign prior to opening the cabinet. Disconnect the power wires going to the sign.

Note: Clear all metal chips created by drilling into sign cabinet.
Note: Do not overtighten fasteners or distort back panel.
Note: Make appropriate wiring connections per local codes.

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

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There are some LEDs out

< 10 LEDs Lit

YES

NO

Entire sign needs replaced

Output voltage is > 10VDC?

YES

NO

Supply is defective and needs replaced

Contact sales with the serial number of the sign

Can you measure the correct incoming voltage at the sign?

YES

NO

Check switches and wiring

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

Contact sales with the serial number of the sign

Please refer to the diagrams on page 1.
Problem: Display is flickering

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Display is flickering

Is the +12V LED illuminated steady?

NO → Check switches and wiring

YES → Is the output connector secure?

YES → Supply is defective and needs replaced

NO → Re-attach connector

Contact sales with the serial number of the sign

Please refer to the diagrams on page 1.
Problem: Entire display is out
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Entire display is out

Is the +12V LED illuminated?
- NO
- YES

Is the output LED for the affected message illuminated?
- NO
- YES

Are the input connectors and pigtail secure?
- NO
- YES

Contact sales with the serial number of the sign

Is the input polarity correct?
- NO
- YES

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

Check switches and wiring

Supply is defective and needs replaced

Re-attach connector