**TCIL Series Troubleshooting Guide**

**TCIL Series 12-24VDC**

**Identify the Sign Problem:**

Follow the flowchart to diagnose the symptoms

**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: Make appropriate wiring connections per local codes.

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**Description of Normal Operation for the Signal’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 12-24VDC power is applied to the internal power supply’s input power pigtail.

*Note: The transformer on the power supply converts 12-24VDC power to +12V.*

**A Output LED**

Illuminates with power applied to Blue wire on the input power pigtail

**C Output LED**

Illuminates with power applied to Red wire on the input power pigtail

**B Output LED (Used for third message ONLY)**

Illuminates with power applied to Yellow 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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Please refer to the diagrams on page 1.

There are some LEDs out

< 10 LEDs Lit

YES

NO

Can you measure the correct incoming voltage at the sign?

YES

NO

Output voltage is > 12VDC?

YES

NO

Entire sign needs replaced

Contact sales with the serial number of the sign

NO

Check switches and wiring

NO

Supply is defective and needs replaced

YES

Contact sales with the serial number of the sign
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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Please refer to the diagrams on page 1.

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

Entire display is out

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

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

Is the output connector secure?
- NO
- YES

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

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

Is the input polarity correct?
- NO
- YES

Check switches and wiring

Re-attach connector

Supply is defective and needs replaced

Contact sales with the serial number of the sign

Last Update: 10/22/19