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Replacement Instructions

AlphaVision™ PC Series III Loop Back Board (pn 1234101201LF)

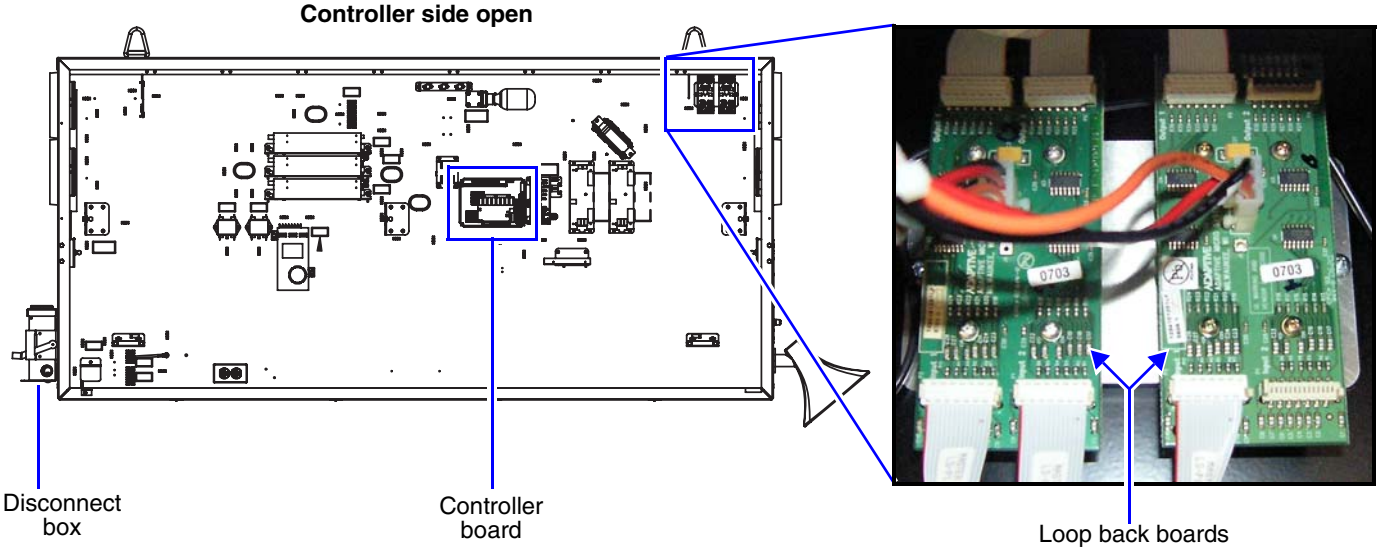
Overview

AlphaVision PC Series III signs are equipped with several loop back boards that boost the signal information from the controller board to the driver board assemblies on the LED display panel.

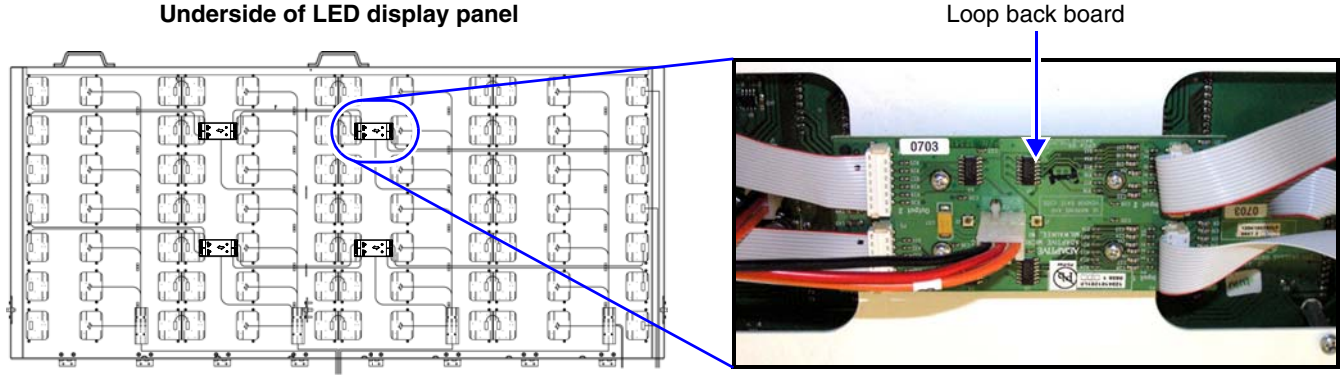
This document explains how to replace the loop back board(s) on AVPC PC Series III signs. This kit applies to model numbers that begin with AVPC320XXXT3, AVPC256XXXT3, and AVPC192XXXT3. (XXX denotes pixel height ranging from 016-128)

NOTE: The location of the loop back board varies based on the model number of the sign. Loop back boards are present on both sides of a double sided sign, and on the underside of the LED display panel.

Controller side open



Underside of LED display panel

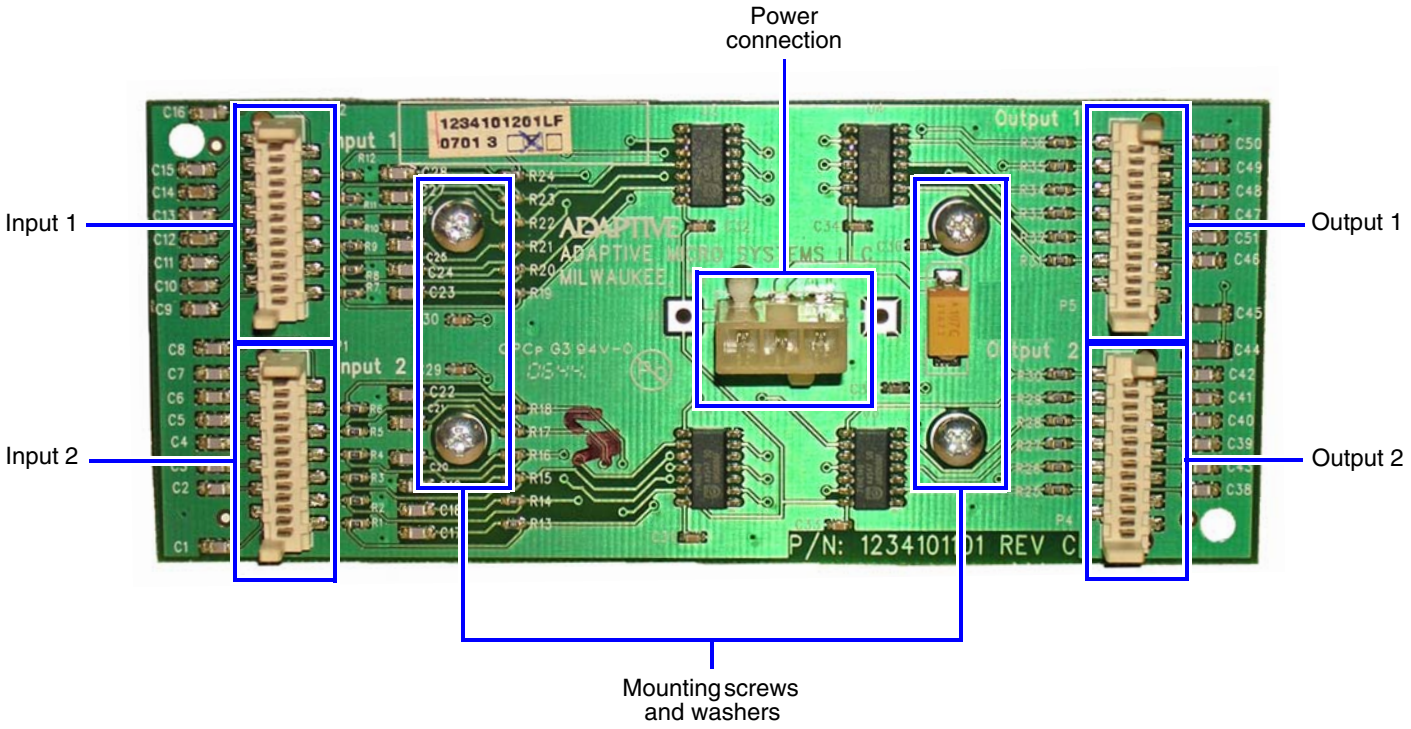


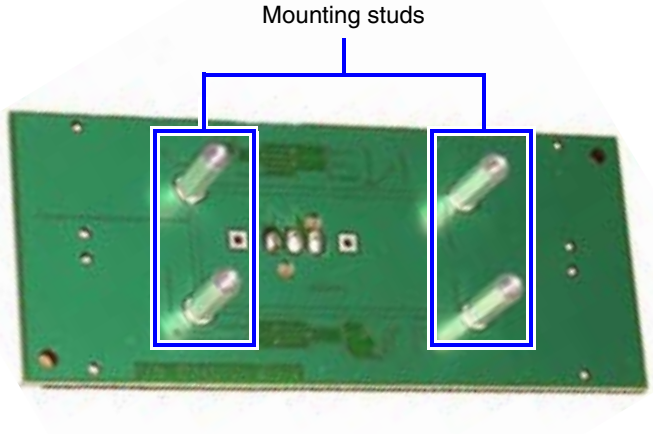
NOTE: The top panel of the sign is not shown for viewing purposes.

Adaptive Micro Systems • 7840 North 86th Street • Milwaukee, WI 53224 USA • 414-357-2020 • 414-357-2029 (fax) • http://www.adaptivedisplays.com

Loop back board components

Notice: Observe appropriate precautions to prevent electrostatic discharge (ESD) or “static” damage to the replacement part. For safe handling of ESD-sensitive parts, see TechMemo #00-0005.





Tools Required

- #1 Phillips head screwdriver
- Pliers or adjustable wrench
- Adaptive recommends the use of a ribbon cable extraction tool (pn T3000 or 62600003)

Replacing AlphaVision PC series III loop back board

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

1 Disconnect all power to the sign at the power source.

2 Open both panels on the side of the sign with the loop back board(s) you are replacing.

WARNING! Possible fall or crush hazard. Remain clear of panel when opening.

A. Turn the top panel latches counter-clockwise and carefully open panel. Guide the panel until it is fully opened. **Do not** allow panel to swing open freely.

B. Carefully open the LED display panel. Guide the panel until the support latch engages. **Do not** allow panel to swing open freely.

3 Remove defective loop back board.

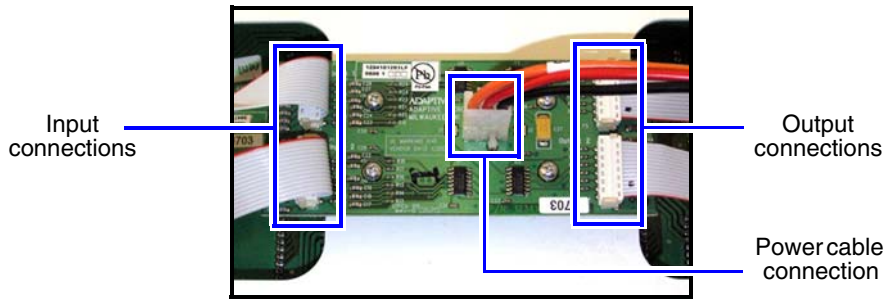
A. Disconnect cables from defective loop back board. The use of the ribbon cable extraction tool will reduce the possible damage of the connector pins on the existing ribbon cable.

B. Take note of the loop back board alignment (input/output connections) before removing it from the sign.

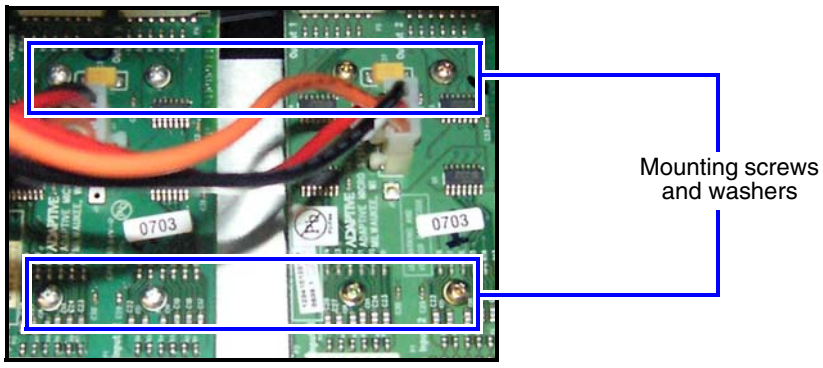
C. Remove the four mounting screws and washers located on the loop back board.

D. Dispose of the defective loop back board.

Underside of LED display panel

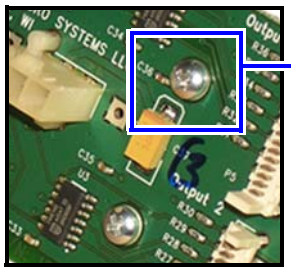


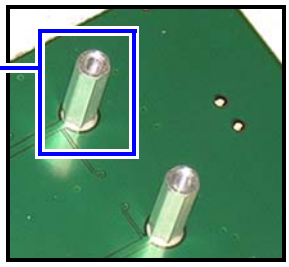
Loop back board bracket



4 Remove mounting studs from replacement loop back board.

- Retain the screws and washers for the installation of the loop back board.
- Dispose of mounting studs.





5 Attach the new loop back board.

Notice: Do not overtighten screw connections this may damage sign component.

A. Align the loop back board in the same position as the previously removed board. Attach the new loop back board to the mounting studs with the previously removed screws and washers.
B. Connect the ribbon and power cables to the replacement loop back board.

6 To replace additional loop back board(s) repeat STEPS 2 - 5.

7 Close both panels on sign.

A. Disengage the support latch and carefully close the LED display panel. Guide the panel by the handle until it is fully closed. Do not allow to slam shut.
B. Disengage the support latch and carefully close the top panel until it is fully closed. Turn the top panel latches clockwise to secure panel to sign.

8 Apply power to the sign at the power source.

9 Test and verify sign operation.

At the computer, click **AVPC Settings** in the system tray, or select **Start > All Programs > Adaptive Micro Systems > AVPC Settings**.

- Click **Test Mode** and select **Grid Pattern** to run tests.
  - Click the **Start LED Test** button to display the grid pattern (see diagram).
  - Click the **Stop LED Test** button to remove the grid pattern.

If the test fails, disconnect power from the sign, open sign panels, and verify all cable connections are seated tightly. Close sign panels, apply power to the sign, and repeat testing procedure.

NOTE: Grid pattern numbers are based on the size of your sign. Green numbers horizontally increase by increments of 1 and red numbers downwardly increase by increments of 1. (AVPC320096T3 grid pattern shown)