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Replacement Instructions

AlphaVision™ PC Series III Ribbon Cable Kit (pn 72281411, 72281412, 72281413, and 72281417)

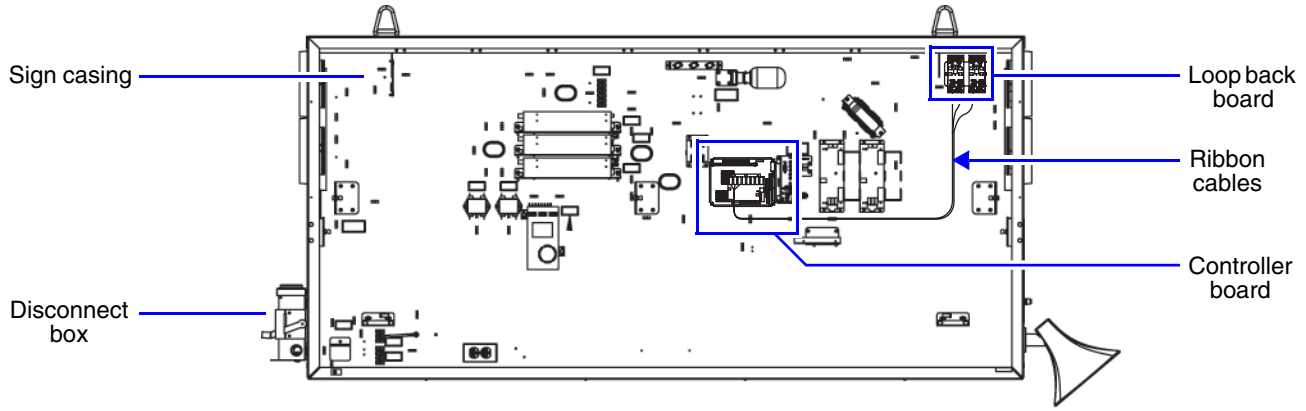
Overview

AlphaVision PC Series III signs have multiple ribbon cables that transfer information between several combinations of loop back board(s), driver board(s), and the controller board.

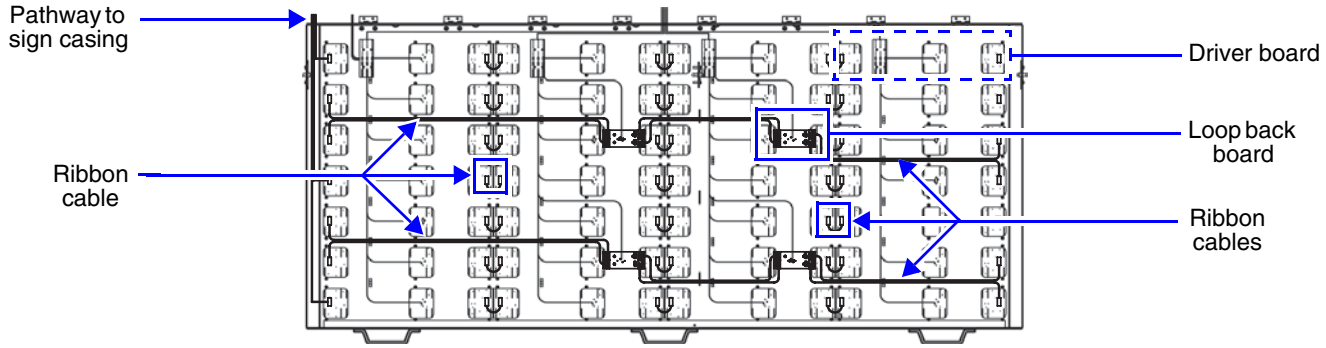
This document explains how to replace the ribbon cables on AVPC PC Series III signs. This kit applies to model numbers that begin with AVPC320XXXT3, AVPC256XXXT3, and AVPC192XXXT3 (XXX denotes pixel height ranging from 016-128).

NOTE: The ribbon cables are located throughout the entire sign connecting several different sign components. Ribbon cables are present on both sides of double sided signs, and on the underside of LED display panels.

Controller side open view



Underside of LED display panel



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

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Contents of kit

Part #	Quantity	Description
72281411	2	2FT Ribbon cable assembly, 14 conductor, 28AWG. The 2ft ribbon cable connects the following components: • Controller board to loop back board. • Loop back board to loop back board. • Loop back board to driver board.
72281412	1	4FT Ribbon cable assembly, 14 conductor, 28AWG. The 4ft ribbon cable connects the following components: • Controller board to loop back board. • Loop back board to loop back board. • Loop back board to driver board. • Driver board to driver board.
72281413	1	6FT Ribbon cable assembly, 14 conductor, 28AWG. The 6ft ribbon cable connects the following components: • Controller board to loop back board. • Loop back board to loop back board. • Loop back board to driver board. • Driver board to driver board.
72281417	3	5in Ribbon cable assembly, 14 conductor, 28AWG. The 5in ribbon cable connects the following components: • Driver board to driver board.

Tools Required

Adaptive recommends the use of a ribbon cable extraction tool (pn T3000 or 62600003)

Replacing AlphaVision PC series III ribbon cable

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

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.

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

2 Open both panels on the side of the sign with the ribbon cable(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 Disconnect defective ribbon cable from sign components.

A. Carefully cut and remove all tie wraps holding the defective ribbon cable.

B. Disconnect and dispose of defective ribbon cable. The use of the ribbon cable extraction tool will reduce the possible damage of the connector pins on the sign component(s).

4 Connect ribbon cable to the sign components.

Notice: Do not overtighten tie wraps this may damage the cables or cause the sign to malfunction.

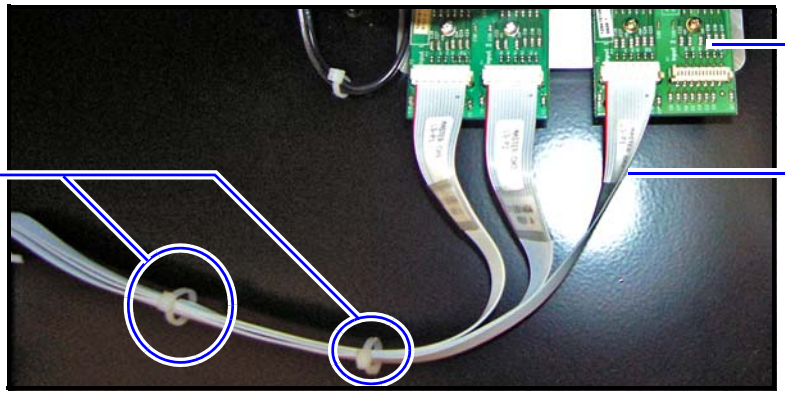
Do not pull or overextend cables, damage to sign components or sign malfunction may occur.

Do not allow excess cable to hang unsupported, damage to cables may occur.

A. Use the shortest ribbon cable possible to eliminate unnecessary slack and tightly seat each ribbon cable end onto the sign component ports.

B. Secure the ribbon cable with tie wraps (not supplied). When possible secure the ribbon cable to the sign's tie wrap mounts, or with other ribbon cables.

C. Verify ribbon cable connections are tightly seated.



5 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.

6 Apply power to the sign at the power source.

7 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)