

AF-670X & AF-680X Series
Field Test Procedure
Instructions

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Introduction

This instructions document describes how to complete the field tests for a LED dynamic message sign site for Daktronics Vanguard Displays.

Sign Inspection

S1 Transport-

- A. Visually inspect the outside of the sign for damage from transport and installation. Ensure light sensor is unobstructed.
- B. Inspect the inside of the sign for damage and signs of water intrusion. Check for loose parts, connections and wiring, inside of the sign.
- C. Ensure all is mounted properly with approved mounting hardware.
- D. Check that all conduits that enter the sign are sealed inside at the end that enters the sign.

S2 Sign Power Termination-

- A. Check that hot (black), neutral (white), and ground (green) wires from 120 VAC power source are properly secured on the main termination block within the display.

S3 Sign Power-

- A. AC Power testing:
 - a. Check that all sign Termination Block circuit breakers are off.
 - b. Using a safe procedure, measure the AC voltage from the 120 VAC power source at termination block. Also, check the voltage from neutral to earth ground. It should measure less than 10 VAC. Record values.
 - c. Apply power to the sign by switching the circuit breaker(s) on at the terminal block.

S4 Peripheral Testing Procedure-

- A. Perform test pattern using DMS Code Utility.
<https://www.daktronics.com/support/kb/Pages/SearchResults.aspx?k=dd4558171>
 - a. Connect laptop to VLinx.
 - b. Launch DMS Code Utility.
 - c. Type TEST in Location Field.
 - d. Click on Add Displays.
 - e. Click on Add Display in lower left of Add Displays window.
 - f. Set display width and height values, then click Done.
 - g. Click on Add => button, then right-click on the display and select Edit.
 - h. Set the address to 0A, enter the IP address, and click Connect. *NOTE: Your laptop's IP must be within range of the display's IP.
 - i. Click on the wrench icon.
 - j. Click on the Now button to sync the date and time.
 - k. Click on a test pattern and verify the test pattern displays properly and there are no visual issues.
 - l. Click on the Test Pattern Off button to deactivate the test pattern.
 - m. LEAVE DMS Code Utility launched and connected for the next step.

- B. Perform a pixel test. <https://www.daktronics.com/support/kb/Pages/DD4558190.aspx>
 - a. From DMS Code Utility Display Control (wrench icon) click on LED Test.
 - b. Click on the Done button to exit Display Control, then right-click on Display and select Diagnostics. It will query the display and return information including any pixel errors.
 - c. Alternatively, cycle power to the display from the breakers at the TB. The display will perform a pixel test and display results upon initial power-up.

S5 Communications-

- A. If applicable, configure VLinx Ethernet to Serial converter.
 - a. <https://www.daktronics.com/support/kb/Pages/DD3223160.aspx>

S6 Display a test message using DVS Software-

<https://www.daktronics.com/support/kb/Pages/DD4558199.aspx>

- A. Connect laptop to VLinx in display with network (Ethernet) cable.
- B. Ensure laptop's IP is within range of the display's IP.
- C. Launch DVS server as administrator, then launch DVS GUI.
- D. Add a display in DVS software.
- E. Create and activate a test message in DVS software.
- F. Verify test message is displaying.
- G. Leave test message playing for next step.

S7 Display Brightness-

- A. Verify display's brightness level is appropriate for ambient light conditions.
- B. Blank display.

Final check

F1 Reinstall all enclosure covers.

F2 Record firmware and site information.

- A. Record the installed firmware version numbers (from the sign controller "Version Information" page), and the dimensions of the sign. Record the information in the Site Information section:
- B. Make sure site information filled is filled out: serial numbers, site location, phone number, sign dimension, firmware versions, etc.

F3 Verify all test messages are deleted.

- A. Verify that any test messages you created have been deactivated and the sign is blank.