C26061 CENTRAL FLORIDA EXPRESSWAY AUTHORITY

VF-2020-96x384-20-RGB

Site Name: 408 eastbound 20.5mm

Field Test Procedure

DD3918907 Rev: 1—11 May 2018

DAKTRONICS



DD3918907

Contract: C26061

Rev: 1-11 May 2018

DAKTRONICS, INC.

Copyright © 2018

All rights reserved. While every precaution has been taken in the preparation of this manual, the publisher assumes no responsibility for errors or omissions. No part of this book covered by the copyrights hereon may be reproduced or copied in any form or by any means—graphic, electronic, or mechanical, including photocopying, taping, or information storage and retrieval systems—without written permission of the publisher.

Vanguard® is a trademark of Daktronics, Inc. National Electrical Code® and all other trademarks are property of their respective companies

Introduction

This test procedure describes the field tests for a LED dynamic message sign site for this project. The purpose of this test is:

- 1. To check that the sign and related equipment supplied by Daktronics has been installed properly.
- **2.** To check that all sign and related equipment supplied by Daktronics is functioning. Special emphasis is placed on items that, if bad, are not expected to show up as being bad during normal operation. Example: earth grounding not connected.
- **3.** To put the sign into the state needed so that it is ready for normal operation without the need for an additional visit before beginning normal operation.
- **4.** As a record that all tests and setup tasks have been performed at each particular site so that it will not be necessary to re-visit sites later because of not being sure whether or not certain tests or setup items have been done.

Note that this is not a test of all software functions or hardware design limits; this would be very time consuming, and would be redundant, as those tests need to be done only once.

This test should be performed for every sign site at the completion of installation of the particular site.

The test messages to be used should be the test messages listed or messages such as "Testing; Message 1" or moving rows, moving columns, etc., that will not misdirect traffic.

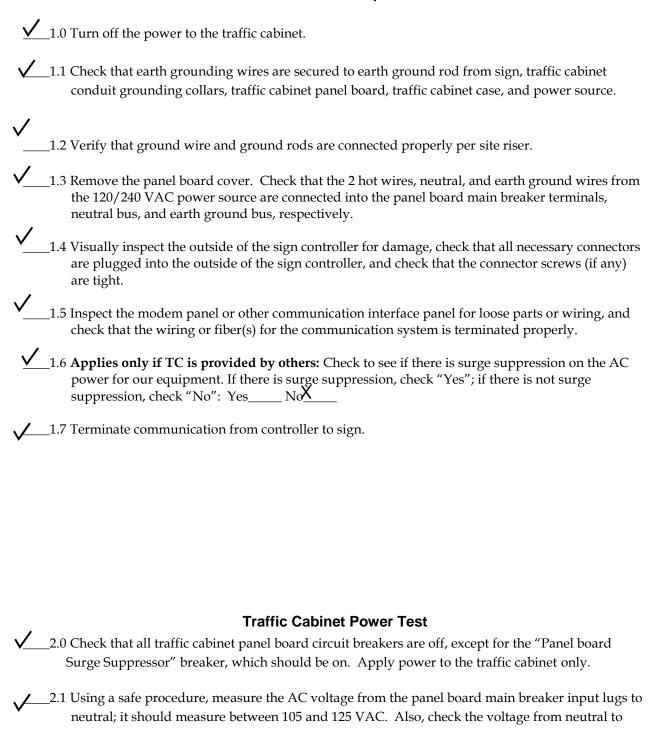
This test requires the cooperation of an operator at the central controller with personnel at the sign site. Test equipment required:

- Boom truck, or whatever is required to get up into the sign
- Digital multi-meter and Ground resistance tester
- Laptop computer, with vanguard software
- Ethernet Cable
- Common hand tools
- Flash Drive/Memory Stick

Site Information

<u>Firmware:</u>	<u>Version number:</u>
1) VFC	8.35.0.103
2) Player Image	V03
3) Video Processor	B2313
4) LCD Board	1763
5) Display Module micro	1949
6) Display Module EPLD	8800
7) ACP Micro	169B
8) ACP EPLD	16BD
9) Display interface micro	1B72
10) Display interface EPLD	1978

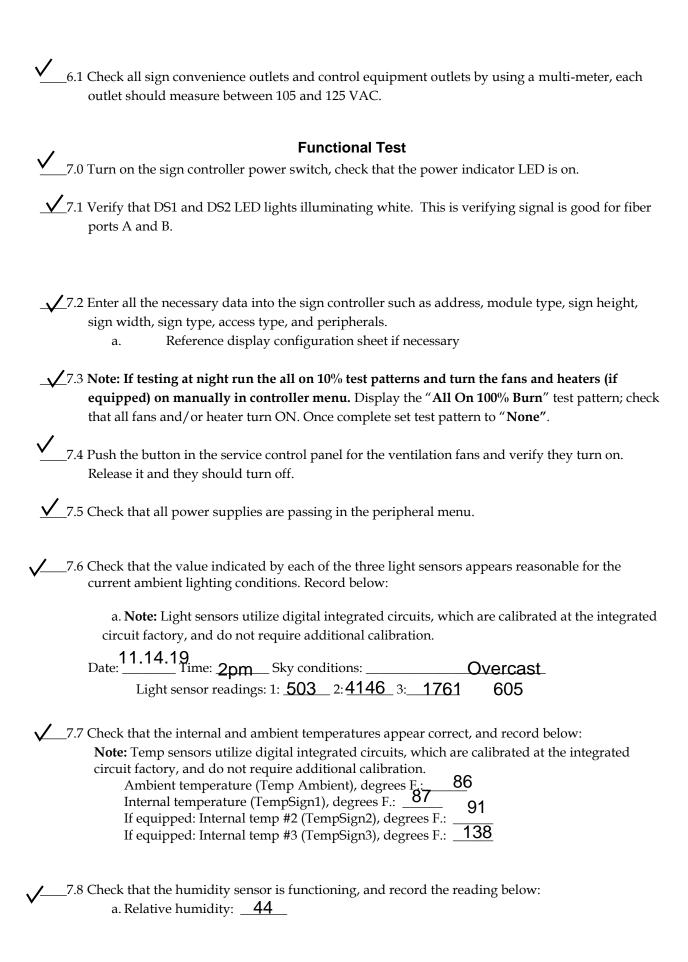
Traffic Cabinet Inspection



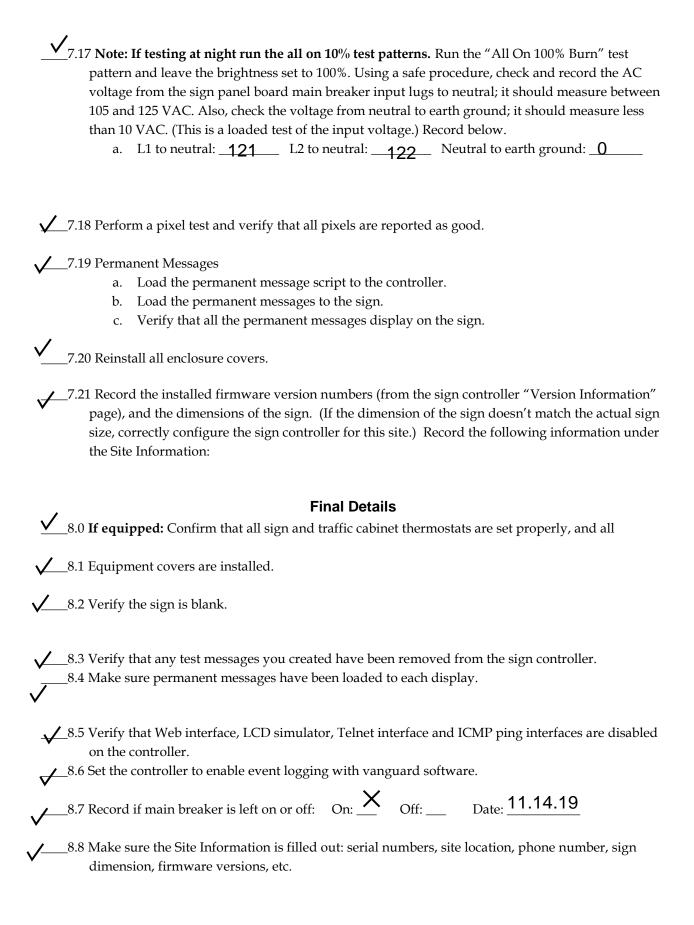
earth ground. It should measure less than 10 VAC. (This is a no-load test of the input voltage.) Record below. a. L1 to neutral:121 L2 to neutral:122 Neutral to earth ground: 0				
2.2 Re-install the panel board cover.				
✓ 2.3 Check that all control equipment is plugged into the control equipment outlet strip.				
✓ 2.4 Check that all control equipment inside the traffic cabinet is switched off, and turn on the main circuit breaker and all circuit breakers in the traffic cabinet except for the sign breaker (if equipped).				
Sign Exterior Inspection				
✓_3.0 Visually inspect the outside of the sign for damage.				
✓3.1 Check that the front, bottom, and rear light sensors are unobstructed.				
Power Connection Inspection				
4.0 Turn off the power to the sign, from outside the sign.				
4.1 Remove the panel board cover. Check that the two hot wires, neutral, and earth ground wires from the 120/240 VAC power source are connected into the panel board main breaker terminals, neutral bus, and earth ground bus, respectively				
✓4.2 Check that the earth grounding wire is secure from the case of the sign (inside or outside) to the earth ground rod(s) near the base of the sign.				
✓4.3 Check that all panel board circuit breakers are off, except for the "Panel board Surge Suppressor" breaker, which should be on. Apply power to the sign.				
✓4.4 procedure, measure the AC voltage from the panel board main breaker input lugs to neutral; it should measure between 105 and 125 VAC. Also, check the voltage from neutral to earth ground; should be less than 10 VAC. (This is a no-load test of the input voltage.) Record below. L1 to neutral: 121				

Sign Power Test

✓6.0 Turn on all circuit breakers.



<u>✓</u> 7.9 Pa	rallel surge suppressor with remote reporting: Display the "View Peripherals" screen on the
	CD, and check that the Surge Suppressor entry indicates "Pass".
✓7.10 N	ote: If testing at night turn the fans on manually in controller menu. RPM Sensors with
ele	ctronically controlled fans.
	a. Display the "All On 100% Burn" test pattern to turn on the ventilation fans. Checks that a
	RPM sensors report values other than 0 on the sign controller; check that the same quantities
	RPM sensors that exist in the sign are indicated on the sign controller.
	b. Blank the sign to turn off the "All On 100% Burn" test pattern, and check that the fans turn off Check that all RPM appears in dicate "green"
	off. Check that all RPM sensors indicate "pass"
an sci	ote: If testing at night do the all on 10% test patterns . Display the "All On 100%" test patter d check that it is displaying. Turn off one power supply. Check in the "View Peripherals" reen that all power supplies (isolation boards) that are on indicate 24.1 to 25.2 VDC. Repeat the ove step for each remaining power supply. Turn on all power supplies.
✓7.12 R	un the following test patterns and verify that all the test patterns display properly.
	a. Alphabet
	b. Line ID
	c. Module ID
	d. Note if testing at night don't do this test pattern. Auto Test Patterns
✓7.13 Se	et to "Normal Mode" to exit the test pattern mode.
	gn door signal switches: Display the View Peripherals Menu on the LCD. Close all sign door d check that the LCD indicates that the doors are closed.
No	ote: It may take up to 10 seconds after the door position is changed to indicate the change
	sing Vanguard software display a message that will not misdirect traffic and that has
	aracters that butt up to the top, bottom, left, and right edges of the sign and verify that it
dis	splays correctly. This verifies proper message display capability for this sign size. a. Using a test message check visually that the dimming level of the display appears
	reasonable for the light conditions with automatic dimming set and record the level. Dimmi
	Level%100
	BCVC1/0
7.16 S	et the time, date, and correct time zone.



It is acknowledged that the following field test procedure has been completed for this site and the display is operational.

Daktronics Technician
Gerry Krieger

Printed Name
Signature

Customer
Anna Iskender
Printed Name
Signature

Signature
Date

DAKTRONICS PERSONNEL MUST RETURN THIS COMPLETED DOCUMENT AND QUALITY FEED BACK FORM TO THE DAKTRONICS CONTRACT PROJECT MANAGER.

Transportation Quality Feedback form

For Internal Daktronics use only. This is not part of the field Test Procedure. This form needs field out and sent back to Daktronics with the Field Test Procedures

Gerry Krie		C26061	
Submitted By		Contract#	
Display Type (i.e. VF2400_27x10		96x384-20-F	RGB
	8 EB/20.5 mm	Orlando Fl	
Display Serial # 1452871	nearest City and State	Onando Fi	
Commissioning Date	11.14.19 Project Manager_		Clint Barber
Did you experience any issues o no skip to additional comments,		ommission of thi	s display? Yes/No (if
Failed Part Description	Part Number	I	Part Serial #
Describe the issues and or unpl	lanned work		
,			
Updated firmwa	ıre		
Additional Comments /Punch 1	ist Items		
FTP completed / No			
Site Complete / No (if no	documents punch list items abo	ove)	