DAKTRONICS INSTALLATION SITE READINESS

This worksheet is designed to help ensure a successful display fire up, a reliable finished product, a validated warranty, and credibility to your customer.

How Can I Prepare for the New Display?

1. Determine IT person available to assist during installation.

A. IT Contact: _____ Phone: _____

B. Provide the following document to the customer's IT individual to prep their system:
Daktronics Galaxy GS6 Installation Guidelines

2. If software will be cloud-based (Daktronics hosted) follow steps 2A or if downloaded (Customer hosted) to a local computer, follow steps 2B.

A. CLOUD-BASED (DAKTRONICS HOSTED)

- Verify the system and network requirements below are met.
  - Installed browser:
    - Google Chrome (Preferred)
    - Internet Explorer (IE) 11 or higher
    - Firefox
    - Safari (mobile)
- Ensure Internet connection is established.
- Computer is connected to router/hub and not directly to the display.
- Display is connected to the router/hub and not directly to the computer.
- Ensure ports :80 and :443 are available.
- Daktronics displays ship out DHCP enabled.
  - DHCP Name: _____
- *** If a Static IP address is required, change IP address using Daktronics configuration utility.
  - Static IP Address: _____
- Have end user log into venus.daktronics.com to view their account dashboard and display status. (The end user will receive credentials from softwareactivation@daktronics.com).
  - **Display shows green**: Everything is connected and running.
  - **Display shows red**: There is a communication error, and the display isn't connected to the software. Please review network setup, ensure ports :80 and :443 are available, or refer to Daktronics Online Knowledgebase articles for help with troubleshooting.
  - Encourage end user to begin learning the software and creating content. Send them for Daktronics.com/venuslearning for more tutorials.

B. LOCAL INSTALLATION

- Verify the system and network requirements below are met.
  - Make sure the computer meets the following system requirements:
  - Windows 7, 8, 10, or server 2012 or higher – with 64 bit and current updates applied.
  - 1.6+ GHz processor
  - 1.5+ GB RAM
  - 1GB of free hard drive space
  - Ports 8810, 8811, and 44300 need to be open for locally hosted
  - Static IP address available for the computer.
    - Static IP Address: _____

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3. Ensure communication networking is ready to go

- Internet connection type (i.e. ethernet bridge radios, wire ethernet, etc.): _____
- Everything is in place for installation of communication (refer to system riser diagram)
- Determine locations for signal converters, boxes, radios, etc.
- Fiber Optic cable is 62.5 micron multimode with a minimum of 2 conductors and uses ST style connectors
- 120 VAC outlet to supply the power is available (certain communication systems Ethernet Bridge Radio and Fiber Ethernet will require a DC injector inside the building)

4. Prepare power at the sign installation site

- Dedicated circuit of 120 VAC or 120/240 VAC electrical service for Galaxy displays
- Ample power available, consult the shop drawings for the power needed for the particular display purchased
    - *NOTE: Most standard displays are sold as multiple lines of 120 VAC*
    - *The term "120/240" refers to two lines, one neutral, plus service ground.*
    - *When sizing the proper amperage for a circuit, multiply the listed power requirement by 125% in order to avoid nuisance trips. Consult a qualified electrician and local codes.*
    - *Power requirements are given in amps and only apply to one face; if the display is a 2V, another circuit or multiple circuits, is required for the second face.*
    - *Electrical service cannot be on a power management system.*
- Name of person supplying site power hookup: _____ Phone: _____

NOTE:
It is necessary to be familiar with basic Windows operation.
Downloadable Venus Control Suite is not available for Apple computers or mobile operation.
Networks and/or firewalls may complicate installation.

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INSTALLATION SITE GUIDELINES
Is the Display Installed Properly?

Here are some guidelines to keep in mind while installing a Daktronics digital display. Please refer to the Daktronics shop drawing before any final design plans are made. Also, please remember to follow the local installation codes.

PHYSICAL INSTALLATION:

- Sign structure can support the weight and wind load of the digital display as detailed in the shop drawings
- All clip angles were used when attaching to the sign structure (bolt or weld)
- 4 inches of clearance was left behind the display for power communication connections
- Fan hoods are intact (if any)
- Adequate openings were allowed to facilitate ventilation (where applicable)
- Temperature sensor is installed upright and in shade
- Sign is operational: display is running a message and communicating with the computer

ELECTRICAL REQUIREMENTS:

- Power is not shared with any other applications (backlit signs, parking lot lights, etc.)
- *Typically four wires are needed per face: two hot lines, a neutral and a service ground (refer to shop drawing to ensure the number of wires needed).*
- Earth grounding is complete for each face and communications
- Test read at less than 10 ohms resistance between each face and the earth ground
- Ground rods are at least 8 feet from the concrete footings of the structure
- Ground rods are at least 8 feet from other ground rods
- *The service ground will not suffice*
- *The sign structure or pole is not an acceptable earth ground*

COMMUNICATION REQUIREMENTS:

- Distance requirements were followed (1500 feet for Ethernet Bridge Radio, 1.2 miles for Fiber Ethernet, etc.)
- Ethernet Bridge Radios have a clear line of sight between antennas (There can be NO obstructions between the antennas)
- Radios are installed upright
    - Communication boxes that came with ground wire ARE GROUNDED to the earth ground rod

Top 10 Do's and Don'ts when Installing a Digital Display:

DO:

1. Fire up the sign in your shop before taking it to the site. Take the time to load content to the display.
2. Install a ground rod and test that your earth ground measures 10 ohms or less.
3. Use a dedicated circuit for each display face.
4. Maintain the integrity of the display.
5. Make sure modules are fully latched and ribbon cables are not pinched.
6. Allow adequate ventilation.
7. Install the temperature sensor properly.
8. Install antennas with a clear line of sight.
9. Figure out power responsibility ahead of time.
10. Involve company IT representative for network communication conversations.

DON'T:

1. Install the display without turning it on before leaving to ensure it is working properly.
2. Use the sign pole as a ground measurement at the circuit box.
3. Share power with other devices.
4. Drill holes in the display cabinet when attaching shrouding.
5. Remove modules unless it is necessary for installation purposes.
6. Block ventilation with shrouding.
7. Install the temperature sensor at an angle or upside down.
8. Install radios upside down.
9. Assume someone else is responsible for power.
10. Install communication without verifying it will work.

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