

The DMP-SM400 Installation Quick Guide is intended for WaWa Stores **only**.

## Required Parts

### Wi-Fi Installation

- DMP-SM400
  - Power Supply (with power cord)
  - Antenna @ 2
  - Mounting Bracket (attached)
- HDMI Cable (ordered through Daktronics or provided by customer)
- Serial Cable (ordered through Daktronics or provided by customer)

**Note:** A USB keyboard and mouse are required for Wi-Fi configuration

### Hard-wired Installation

- DMP-SM400
  - Power Supply (with power cord)
  - Mounting Bracket
- HDMI Cable (ordered through Daktronics or provided by customer)
- Ethernet Cable (ordered through Daktronics or provided by customer)
- Serial Cable (ordered through Daktronics or provided by customer)



**Figure 1:** DMP-SM400 Unboxed Components

## Standard Installation

### DMP-SM400 Mounting

The DMP-SM400 can be attached to the VESA bracket or the rack shelf. The VESA bracket can be mounted to different surfaces via direct screw holes, while the rack shelf attaches to a standard rack.

### VESA Bracket Mounting

1. Secure the VESA bracket and player to the desired surface using the four screw holes on the plate making sure the HDMI cables are pointing down toward the floor.

**Note:** Wall anchors and screws are not included.

2. Follow Steps 2-9 from the **DMP-SM400 Setup (p.3)** section to complete setup.

### Rack Mounting

1. Remove the player and power supply from the VESA bracket by removing the six screws.
2. Locate the player rack shelf, which can be ordered through Daktronics.
3. Attach the player to the rack shelf using the four direct screw mounts and screws. Refer to **Figure 2** and **Figure 3**.
4. Remove the two screws securing the power block bracket. Refer to **Figure 1**.
5. Attach the power supply with two screws to the rack using the VESA power supply mount. Refer to **Figure 2** and **Figure 3**.

**Note:** Check that the orientation of the power block has the power cord coming out the back of the rack.

**Note:** It is recommended to use the power supply bracket on the right, though either can be used.

6. Secure the rack shelf to the rack using customer-provided hardware.
7. Connect the power cable to the power supply and plug the power supply into a power outlet. The DMP-SM400 will power on.



**Figure 2:** Top View of Rack Mounting



**Figure 3:** Bottom View of Rack Mounting

### DMP-SM400 Setup

Follow these installation steps in the specified order to avoid invalidating the system configuration files. Invalid configuration can result in extended downtime.

1. Unbox components and ensure all are present. Refer to **Figure 1**.
2. Screw each antenna into the DMP-SM400 for a Wi-Fi installation.
3. Plug the EDID adaptors into the A3, A2, B2, and B3 HDMI ports on the DMP-SM400. Refer to **Figure 4** for an example.
4. Plug one end of the HDMI cables into an available HDMI port on each of the individual displays.

**Note:** Identify which HDMI ports are used on the display as it might be necessary to switch the display to the proper input for the unit to function.

5. Plug the other end of the HDMI cables into the EDID adaptors based on display position:
  - HDMI 1 - Leftmost display connects to the EDID adaptor in A3
  - HDMI 2 - Left center display connects to the EDID adaptor in A2
  - HDMI 3 - Right center display connects to the EDID adaptor in B2
  - HDMI 4 - Rightmost display connects to the EDID adaptor in B3
6. Secure the HDMI cables to the VESA plate using cable/zip ties, if using the VESA bracket.
7. Plug the serial cable-to-DB9 [Comm Port] connector on the player and RS232 connector on the display if using Display Control. Refer to **Figure 4**.
8. Connect Display 1 **RS232 Out** to Display 2 **RS232 In** using 3.5 mm cable and adapter, if needed. Refer to System Riser Drawings and General Diagrams for details of displays connected in series.
9. Plug the power supply cable into the power port on the DMP-SM400. Refer to **Figure 4**.



**Figure 4:** DMP-SM400 with All Connections

10. Connect Ethernet cable to the Ethernet port, if performing a hardwire installation.
11. Connect the power cable to the power supply and plug the power supply into a power outlet. The DMP-SM400 will power on.

## Connect DMP-SM400 to Wi-Fi

The following steps are **NOT** required if the player is connected with an Ethernet cable.

1. Complete the steps in the **DMP-SM400 Setup (p.3)** section.
2. Boot up - observe the boot screen.
3. Observe the black screen.
4. Press the **Esc** key on the keyboard.
5. Click the Network icon. Refer to **Figure 5**.
6. Right-click **Wi-Fi** and select **Go to Settings**.



Figure 5: Network Icon

7. Turn Wi-Fi **On**. Refer to **Figure 6**.



Figure 6: Turn Wi-Fi On

8. Select the desired network. Refer to **Figure 7**.
9. Enter Wi-Fi credentials and select **Connect Automatically**.

**Note:** Connect the player to a secure Wi-Fi network; avoid using public Wi-Fi networks.

10. Click **Connect** and **Decline** permission to share files on the network, if prompted.
11. Perform a system restart by selecting **Restart** from the **Start** menu. This will reset the system and conclude a regular setup.



Figure 7: Select a Network

## Troubleshooting

The DMP-SM400 was configured in the factory to either a 4x1 or 2x1 configuration based on which WaWa-specific package was purchased. See the labels on the packaging for clarification.

**STOP.** If everything has been done correctly and without issue, the DMP should be fully functional. If the DMP is not functional, refer to the configuration and troubleshooting steps. These sections may **NOT BE REQUIRED** for every installation, but can be used if needed. These sections are **NOT** used in unison and will most likely be used as a single section depending on the troubleshooting issue.

## Display Profile Configuration

1. Open web browser and navigate to the DMP-8000 UX: <http://localhost>.
2. No login is required when accessing the web page from the player.
3. Navigate to **Config Profiles**. Refer to **Figure 8**.
4. Select the desired configuration for all outputs from the available options.



Figure 8: Config Profiles

## Bezel Compensation Configuration

1. Navigate to the **Config** tab in DMP-8000.
2. Select the desired sign(s) under **Outputs**.
3. Select **Bezel Compensation** under **Display Mode**. Refer to **Figure 9**.
4. Ensure that **Width** and **Height** match the resolution of the current display(s).
5. Check that the information for **Display Resolution**, **Rotation**, **Pixel Pitch**, and **Display Count** under **Bezel Compensation** is accurate. If the display has a gap, i.e. a physical space between the two displays, enter the size in px in the **Gap Size** section. Refer to **Figure 9**.

**Note:** Use the Total Resolution Chart at <https://daktronics.widen.net/s/qgbfxdlrk5> to help answer questions regarding the resolution and size of the display(s). If Bezel compensation is required for spanning displays, the bezel compensation pixel value needs to be added to this resolution when configuring a display in VCS. Add the bezel compensation value to the Number of Pixels Wide or High.

**Note:** The **Download Mask** button downloads a file that can be used for content creation that shows where the created gap appears in the content. This compensates for the gap when making new content for the display.

6. Select **Adjust Sign Size** once the correct information has been entered.



Figure 9: Bezel Compensation

7. Record the **Total Width** and **Total Height** values from the bottom of the section for use in **Venus Display Configuration**.
8. Click **Save**.

### EDID Bios Setup

1. Restart the player and press the **Delete** key on the keyboard to open the bios.
2. Navigate to the **Advanced** tab.
3. Open **DSP Configuration**. Refer to **Figure 10**.



Figure 10: DSP Configuration



4. Select **EDID auto emulate**.
5. Change from **Disabled** to **Enabled**. Refer to **Figure 11**.



**Figure 11:** EDID Auto Emulate

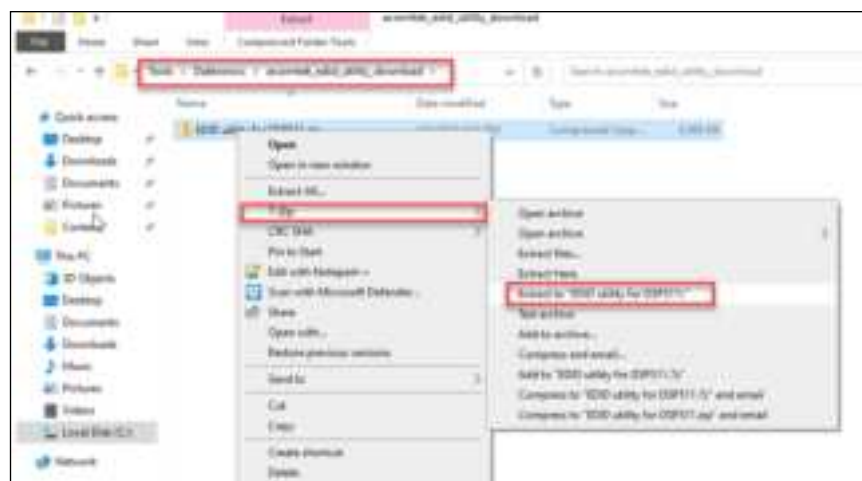
6. Press the **F4** key on the keyboard and select **Yes** to save configuration and exit. Refer to **Figure 12**.



**Figure 12:** Save Config and Exit

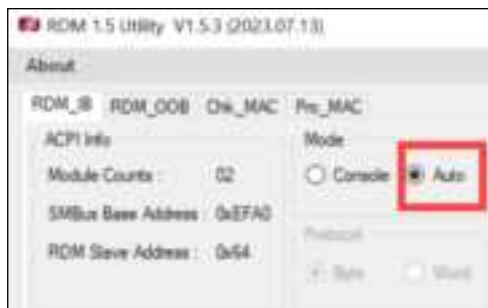
### Configuration of EDIDs Using EDID Utility

1. Open **File Explorer** and navigate to **C:/Tools/Daktronics/Axiomtek\_edid\_utility\_download**.
2. Right-click **EDID utility for DSP511.zip** and click **Extract to EDID utility for DSP511**. Refer to **Figure 13**.



**Figure 13:** Download File Location

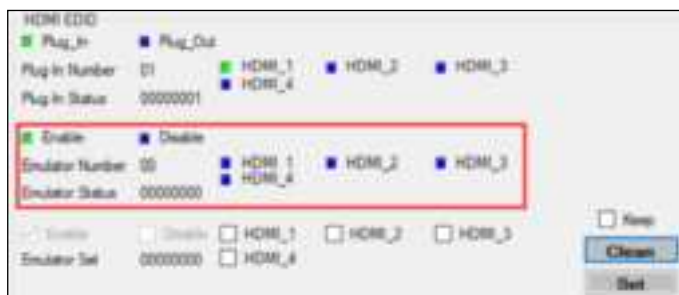
3. Open the new folder **EDID utility for DSP511**.
4. Run **RDM-utility.exe**.
5. Select **Auto** under the **Mode** setting. Refer to **Figure 14**.



**Figure 14:** RDM-Utility Mode Selection

6. Check the current state of EDID emulation. Refer to **Figure 15**.
  - Green indicates the EDID is currently configured.
  - Blue indicates the EDID is NOT configured.

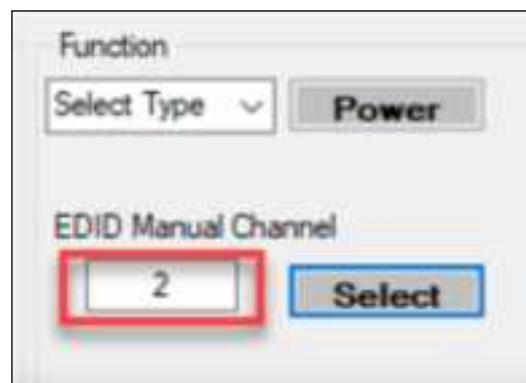
**Note:** If EDID is currently configured, click the **Clean** button to clear the current EDIDs and allow for new EDIDs.



**Figure 15:** EDID Emulation Indicators

7. Locate the **EDID Manual Channel** and enter the HDMI output for configuration. Refer to **Figure 16**.
  - HDMI 1 = 1
  - HDMI 2 = 2
  - HDMI 3 = 3
  - HDMI 4 = 4

**Note:** Each HDMI port must be configured one at a time.



**Figure 16:** EDID Port Configuration



8. Click the **Select** button after entering the HDMI number.
9. Navigate to the Daktronics Standard EDID once **File Explorer** opens. The file is located at **C:/Tools/Daktronics/Axiomtek\_edid\_utility/Download/EDID**.
10. Open the bin file named: **DAK\_1920x1080\_60\_00Hz\_DAKEDID.bin**

**Note:** The screen may go blank momentarily while the EDID is loading.

11. The EDID indicator in the EDID utility will change from blue to green once the EDID has been enabled on the HDMI port being configured. Refer to **Figure 17**.



**Figure 17:** Example of Correct EDID Configuration

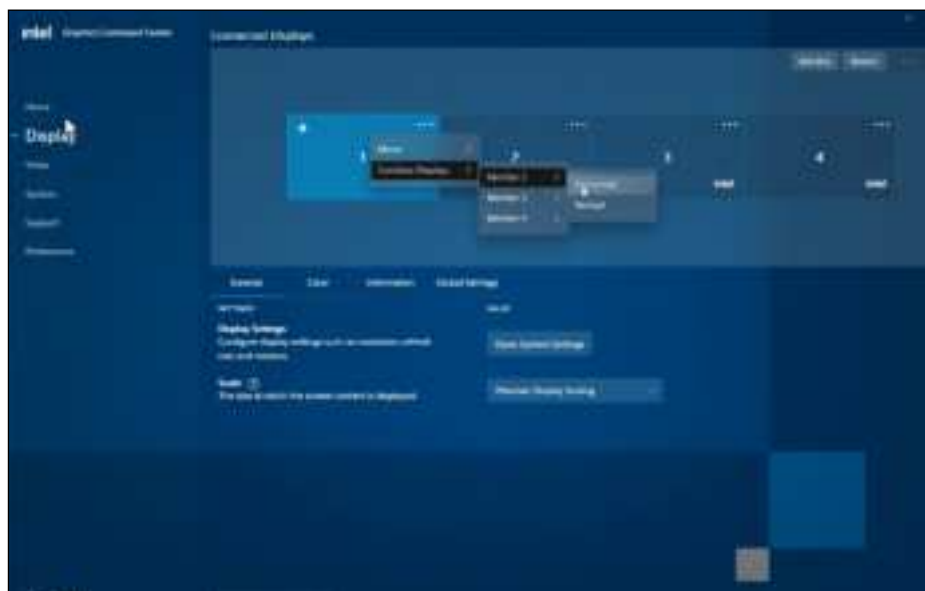
12. Repeat Steps 7-11 for each HDMI port.
13. Restart the system once all indicators are green.

### Intel Graphics Settings

Only perform these steps if using more than a single display.

1. Close the **DMP-8000** application using **DMP8000 Shutdown** in the **Start Menu**.
2. Open **Intel Graphics Command Center** from the **Start Menu** and accept any license agreements.
3. Navigate to the **Display** tab.
4. Click the ellipsis in Display 1.
5. Click **Combine Displays** and go to Display 2 (shown as **Monitor 2**). Select **Horizontal**.

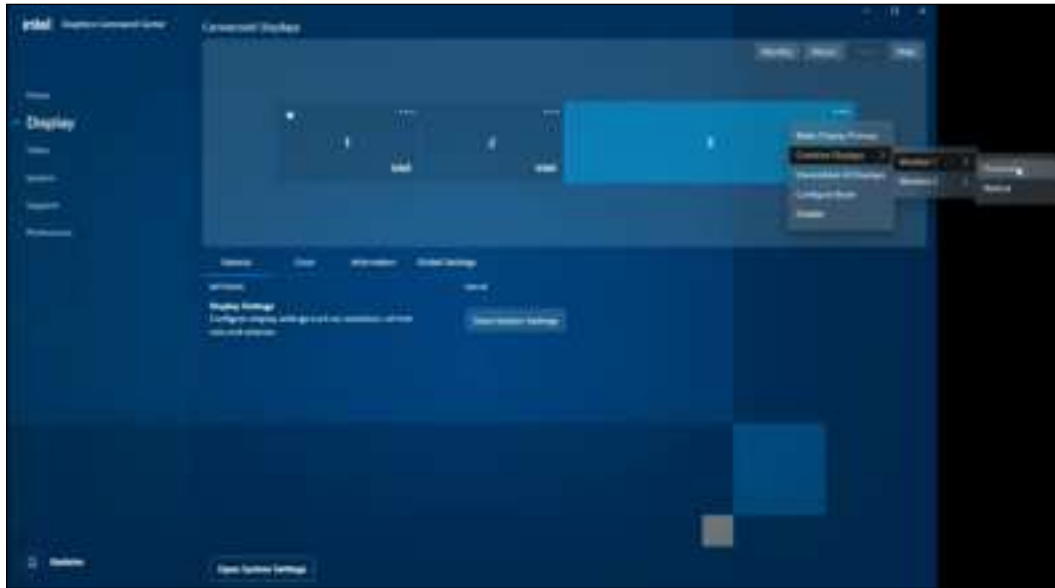
**Note:** The combined display will become Display 3. Refer to **Figure 18** and **Figure 19**.



**Figure 18:** Combine Display 1 and 2

6. Click **Apply** to verify changes.
7. Click the ellipsis in Display 3.
8. Click **Combine Displays** and go to Display 1 (shown as **Monitor 1**). Select **Horizontal**.

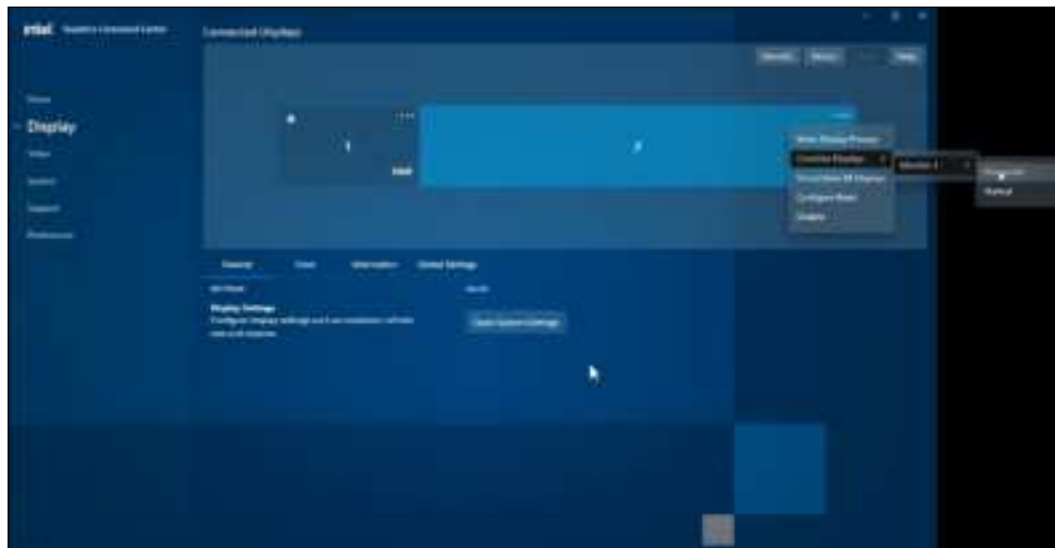
**Note:** The combined display will become Display 2. Refer to **Figure 19** and **Figure 20**.



**Figure 19:** Combine Display 3 and 1

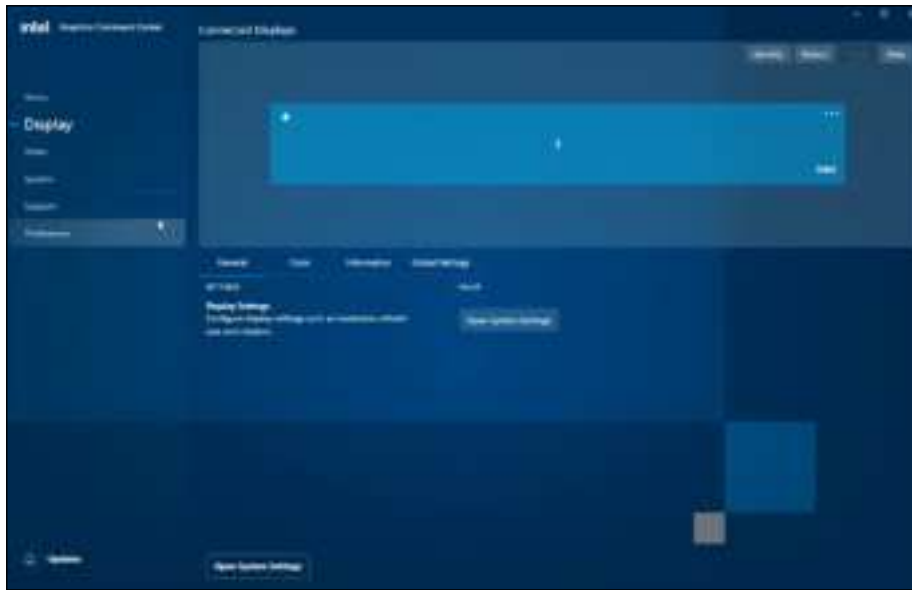
9. Click **Apply** to verify changes.
10. Click the ellipsis in Display 2.
11. Click **Combine Displays** and go to Display 1 (shown as **Monitor 3**). Select **Horizontal**.

**Note:** The display will now show as one display. Refer to **Figure 20** and **Figure 21**.



**Figure 20:** Combine Display 2 and 1

**12.** Click **Apply** to verify changes.



**Figure 21: Combined Display**

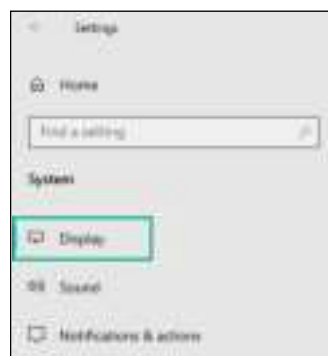
**13.** Open the **Settings App** from the **Start Menu** and accept any license agreements.

**14.** Select **System**. Refer to **Figure 22**.



**Figure 22:** Windows Settings App

**15.** Navigate to **Display**. Refer to **Figure 23**.



**Figure 23:** Display Settings

16. Open **Advanced Display Settings**.

17. Select **60Hz** from the **Refresh Rate** drop-down menu and click **Keep**. Refer to **Figure 24**.



**Figure 24:** Refresh Rate

18. Close the application to automatically save the settings.

19. Reopen **DMP-8000** through the **Start Menu** to finish.

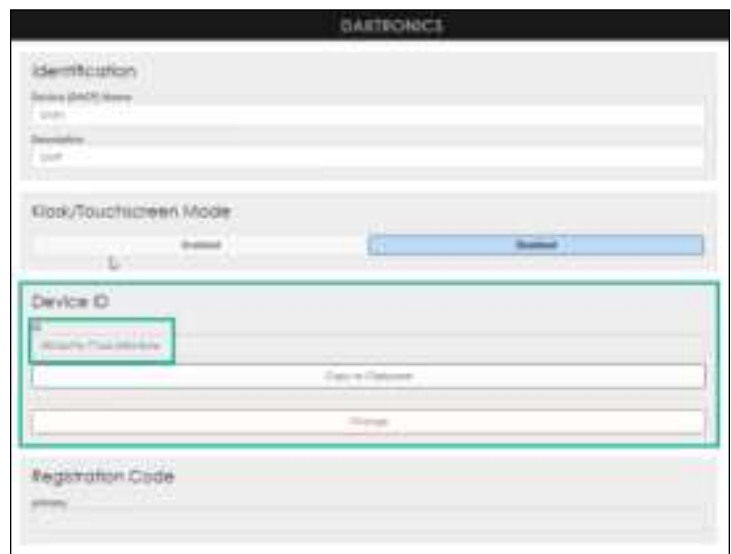
20. Log in to the web page and verify output resolution settings are correct.

### DMP Device Replacement

1. Open web browser and navigate to the DMP-8000 UX: <http://localhost>.
2. Select **Config**.
3. Select **Identification**. Refer to **Figure 25**.
4. Locate **Device ID** and save the **ID** for later use. Refer to **Figure 26**.



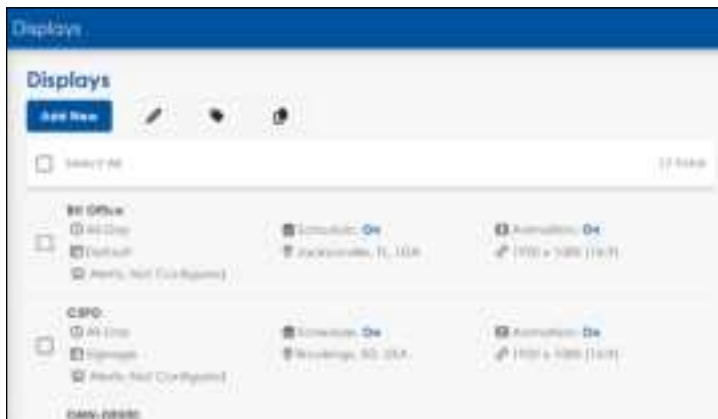
**Figure 25:** DMP Config and Identification



**Figure 26:** Device ID

5. Log in to VCS and access the **Displays** app.

6. Select the display. Refer to **Figure 27**.



**Figure 27:** Displays

7. Click **Replace Device**  .
8. Select **Old Device**. Refer to **Figure 28**.



**Figure 28:** Select Old Device

9. Select **New Device**.
10. Enter the saved **ID** from Step 4 into the search bar, and select the populated device. Refer to **Figure 29**.



**Figure 29:** Select New Device

11. Select or upload a working configuration backup. Refer to **Figure 30**.



Figure 30: Select Configuration Backup

12. Select **Overwrite network configuration** to overwrite current network settings or leave unselected to keep current network settings. Refer to **Figure 31**.



Figure 31: Overwrite Network Configuration

13. Click **Next**.

14. Review the summary. Refer to **Figure 32**.



Figure 32: Review the Summary



15. Click **Confirm** and wait for the Configuration Restore Progress to complete. Refer to **Figure 33**.

**Note:** This process takes a few minutes.



**Figure 33:** Configuration Restore Progress

16. Click **Finish** to complete the device replacement.

### Log in to Venus® Control Suite

Before first-time login, ensure that the Venus computer uses either the Google Chrome® browser or Edge® browser. Also, review the properties of the Venus computer and note the computer name.

#### Log In – Local Server

1. Navigate to **https://ComputerName:44300** (entering the actual computer name for ComputerName).
2. Enter the **User Name** and **Password** into the **Email** and **Password** text boxes.
3. Change the password in the **Update Password** text boxes.
4. Update the account information in the **User Information** and **Additional Information** sections.

#### Log In – Hosted Server

1. Navigate to **https://venus.daktronics.com**.
2. Follow Steps 2-4 in **Log In - Local Server (p.15)**.

### Connecting a Display

The Displays app houses all display and device setup and management. It is accessed via Venus® Control Suite. Use the following instructions to connect or edit a display:

1. Navigate to the **Displays** app using the **My Apps** menu. Refer to **Figure 34**.
2. If the current display exists, edit the display and move to Step 4. If the current display does not exist, click **Add New** from the **Displays** app dashboard.
3. Use the various **Display Configuration** tabs to configure the display. Refer to **Figure 35**.
4. Enter the previously recorded **Total Width** in **Width** and **Total Height** in **Height** to configure the size correctly. Refer to **Figure 35**.
5. Select the **Devices**. Refer to **Figure 36**.
6. Click **+**.
7. Enter the six digit registration code. Refer to **Figure 37**.
8. Click **Save**.
9. Confirm the changes.



Figure 34: Displays App



Figure 35: Display Configuration



Figure 36: Add a Device



Figure 37: Enter Registration Code

## Daktronics Network Configuration

For a digital display system to communicate with Daktronics cloud-based service and support offerings, configure the firewalls to allow traffic from the below-listed IP addresses and ports.

### VCS

IP Addresses and Ports Necessary to Communicate with the Venus® Control Suite

DNS	IP Addresses	Port #	Description
venus.daktronics.com	104.40.57.123	443/80	Venus® User Interface - Prod WestUS
venus.daktronics.com	168.62.167.57	443/80	Venus® User Interface - Prod EastUS
venus.daktronics.com	52.176.166.132	443/80	Reserved for Future Use
vcs.tv	104.40.57.123	443/80	Venus® DWP Software Installation

### Daktronics Time Servers

DNS	Port #
0.daktronics.pool.ntp.org	UDP 123
1.daktronics.pool.ntp.org	UDP 123
2.daktronics.pool.ntp.org	UDP 123
3.daktronics.pool.ntp.org	UDP 123

### BeyondTrust Remote Support

DNS and Ports Necessary to Permit Communication with BOMGAR™ Remote Support Software

DNS	Port #	Description
remotehelp.daktronics.com	443/80	Beyond Remote Support (BOMGAR™)

## Venus Assistance

- First visit the MySupport customer portal to set up an account on the Daktronics website:  
[www.daktronics.com/mysupport/help](http://www.daktronics.com/mysupport/help)
- Call customer service if there are issues with the MySupport portal:
  - United States and Canada: 1-800-DAK-TRON (325-8766)
  - Outside the United States and Canada: +1-605-275-1040

## Supplementary Documentation

Display Control App Quick Guide - [Display Control App Quick Guide \(DD4948224\)](#)

Daktronics LCD Networks Resources Page - Use QR code or click below

