The VIP-5000 series processor is the interface that drives video to a digital display and meets operational needs such as dimming, displaying test patterns, and adjusting gamma and color controls.

VIP-5060 accepts standard DVI inputs of 800x600 and 1280x720. VIP-5160 accepts standard DVI inputs of 800x600 and 1280x720 but has an additional input resolution allowing 1440x900 DVI input with reduced blanking. This quick guide explains basic VIP-5000 series connections and setup as shown in Figure 1.



Figure 1: VIP-5000 Series Connections

Hardware Setup

Connecting to the LED Video Display

- 1. Locate fiber-optic Port A and Port B on the processor.
- 2. Insert duplex LC fiber-optic cables into their corresponding ports. The cables will click into place when seated properly. Refer to Figure 2 and Figure 3.

Note: Remove fiber dust covers from cables and connectors prior to inserting into ports.

Connecting to the DVI Video Source

1. Insert the male plug into the female jack.





Fiber-Optic Port

Figure 3: Rack-Mount Fiber-Optic Ports

2. Turn the screws on the male plug clockwise to lock. Refer to Figure 4 and Figure 5.



Figure 4: Display-Mount DVI Video Input Jack



Figure 5: Rack-Mount DVI Video Input Jack

Note: The processor supports a refresh rate of 60Hz and has a playback window at 0,0 (upper-left) of DVI input. The playback window matches the display size in pixels.



Connecting to the Network

1. Connect one end of the RJ45 network cable to the network port. Refer to Figure 6 and Figure 7.

Note: For a display-mount system, rotate the connector 1/4 turn clockwise to lock.

2. Connect the other end of the cable to the computer or network.

Connecting Power

Display-Mount Systems (12VDC)

- 1. Connect the breakout cable to the power/sensor port. Refer to Figure 8.
- **2.** Rotate the connector 1/4 turn clockwise to lock.
- 3. Connect the breakout cable to the power cord.
- 4. Terminate the cord at the display's power panel.

Rack-Mount Systems (120/240VAC)

- 1. Connect the power cord to the power jack. Refer to Figure 9.
- 2. Plug the other end of the cord into an outlet.

Connecting Temperature/Light Sensors

Display-Mount Systems

- 1. Connect the sensor cable's M12 connector to the temperature/light port. Refer to Figure 10.
- 2. Turn the connector ring clockwise until tightened.

Rack-Mount Systems

Connect the sensor cable to the CAN port. Refer to Figure 11.

Computer-to-Processor Setup

Connecting to the Processor

- 1. Download the DisplayFind application from either the control software CD or the internet.
 - a. Navigate to dakfiles.daktronics.com.
 - b. Click venus1500>Utils>DisplayFind>DisplayFind.exe.
 - c. Click Run to download the program or Save to save the file for later use.



Figure 6: Display-Mount Network Port



Figure 7: Rack-Mount Network Port



Figure 8: Display-Mount Power/Sensor Port



Figure 9: Rack-Mount Power Jack



Figure 10: Display-Mount Sensor Port



Figure 11: Rack-Mount Sensor Port



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- 2. Launch the DisplayFind application by double-clicking the **DisplayFind** icon. Refer to **Figure 12**.
- 3. Connect to the display using the DisplayFind utility.
 - a. Select the appropriate Network Adapter.
 - b. Click Find Displays to detect displays. Refer to Figure 13.

Silverlight Version: 5.1.20913.0 Java Version: 1.7.0 15	abit Network Coor	t.	Find Displays	
Artanier blame uniel(P1875571W-Stald			r ind Dispidys	
Auapter Name Lintel(R) 82567LM-3 Gig				
Name	Dimensions	DHCP Name	IP Address	
Name VNet	Dimensions 66x110	DHCP Name OEM-V2Z53885	IP Address 10.6.74.112	
Name VNet DeNconDMP5060	Dimensions 66x110 54x108	DHCP Name OEM-V2253885 DENOONDMP8060	IP Address 10.6.74.112 10.6.74.97	
Name VNet DeNoonDMP5060 84x126 26MT VIP4060-P	Dimensions 66x110 54x108 84x126	DHCP Name OEM-V2253885 DENOONDMP8060 DMP8-98-AAAY	IP Address 10.6.74.112 10.6.74.97 10.6.74.110	
Name VNet DeNoonDMP5060 84x126 26MT VIP4060-P 72x90 DMP4060 20MM 1 Section-P	Dimensions 66x110 54x108 84x126 72x90	DHCP Name OEM-V2253885 DENCONDMP8060 DMP8-98-AAAY denoondmp4060	IP Address 10.6.74.112 10.6.74.97 10.6.74.110 10.6.74.65	

Figure 13: Daktronics DisplayFind Application

c. Click the desired display to launch the configuration utility within a web browser.

Note: If multiple displays are found, use the IP address or name to confirm the identity of the correct display.

Logging in to the Processor

- 1. Navigate to http://<IPaddress>:<Port>. The port is typically 85.
- 2. Type Dak into the User name text box. Refer to Figure 14.
- 3. Type DakPassword! into the Password text box.
- 4. Click OK.

These are the factory-configured login credentials. Daktronics strongly recommends changing the password after initial configuration.

After setting a new password, this new password must be entered into the **Password** text box during login.

Note: Do not lose the password; losing it may require a service call.

Newer display-mount VIP-5160s have an internal reset switch that can be used to reset the password and/or configuration. Remove the switch cover to access the reset switch and press down for 5-15 seconds. The user name and password will revert to the factory-configured login credentials.

Note: Use caution when using an internal reset switch. Pressing the switch for longer than 15 seconds can reset the configuration.



User name Password Remember my credentials		
[ОК	Cancel

Figure 14: VIP-5000 Series Login



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guie	12.	Displayi ina icoi	1

Processor Menu Overview

After initial login, the **Dashboard** window opens showing status tiles for various aspects of the device. Click the **Show Menu** icon in the upper-left corner to expand the main menu. Refer to the table below. For more information, refer to the **VIP-5000 Series Operation Manual (DD2773153)**.

Menu	Item	Description
	Dashboard	Shows status tiles for various aspects of the processor; most tiles trigger operational windows but some tiles only provide information
JC.	Configuration	Lists all available configuration settings and tools including setting the input, output, brightness levels, local time, and location
Ļ	Monitor	Opens a window showing a video feed of the display content
	Stored Content	Shows existing stored content files and allows images to be added or removed
A	Troubleshooting	Lists troubleshooting options including testing, resetting power, and resetting the processor
¢	Calibration	Lists calibration tools used to adjust individual modules to blend with surrounding modules
•)))	System Backup	Lists system backup options including creating a system backup and restoring a system backup

System Configuration

Configuring Input

Select the processor's type of input including selecting a DVI video source, choosing a built-in test pattern, loading static images, or blanking the display. Refer to **Figure 15**. To configure the processor for a DVI video source, follow the steps below:

1. Select **Configuration** from the main menu or click the **Input** tile on the dashboard.

Input	
Display Mode	
DVI	
Test Pattern	

Stored Content

Blank

- 2. Click Input.
- 3. Choose DVI from the Display Mode drop-down list.
- 4. Change the Color Adjustment settings of the DVI video signal with the Brightness, Contrast, Saturation, and Hue slider bars if desired.
- 5. Set the Source Dimensions as either Automatic or Manual to define what portion of the incoming video signal is shown on the display. This setting is normally determined at the factory.
 - Automatic the controller positions the content and the dimensions will match the configured display size.
 - Manual the operator manually defines the visible area.



Figure 15: Input Display Mode

- 6. Set the Target Dimensions as either Automatic or Manual to position the incoming video signal on the display. This feature should not be used unless instructed to do so by Daktronics technicians.
 - Automatic the controller positions the content and the dimensions will match the configured display size.
 - Manual the operator manually defines the content placement and positioning.
- 7. Click Save.

Configuring Output

Set the display output as either **Active** or **Inactive**. If the processor system is the primary system, the **Output State** should be set as **Active**. If the processor system is the backup system, the **Output State** should be set as **Inactive**. Refer to **Figure 16**. To configure the output, follow the steps below:

- 1. Select Configuration from the main menu.
- 2. Click Output.
- 3. Choose the Output State as Active or Inactive. If Inactive is selected, proceed to Step 8.
- 4. Select the **Boot Sequence** from the drop-down list to choose what is shown during display startup.
 - **Full** shows full display information (description, dimensions, time zone etc.)
 - **Compact** shows product and version information
 - **None** shows no information, playback starts immediately
- 5. Adjust the **Green Mode** percentage to set a threshold for dimming the display content.
- 6. Adjust the **Gamma** number to adjust the middle ranges of color.
- 7. Choose the Color Space setting from the drop-down list.
- 8. Click Save.

Configuring Brightness

To adjust display brightness, refer to **Figure 17** and follow the steps below:

- 1. Select Configuration from the main menu.
- 2. Click Brightness.
- 3. Select the Mode from the drop-down list.
 - Automatic brightness values adjust according to data received from a light sensor.
 - **Manual** brightness values are set at a constant level using a slider bar.
 - Remote dimming values are determined by a host processor in a multi-VIP host-client system.

Brightness	
Mode	
Automatic	~
Brightness Limits Set Brightness Settings	
All Day	Day and Night

Figure 17: Configuring Brightness

Output Output State Active Inactive Boot Sequence None Green Mode (%) 100 Gamma 2.2 Color Space Disabled



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4. Choose either All Day or Day and Night under Set Brightness Settings.

- All Day sets display minimum and maximum brightness for a 24-hour period.
- Day and Night sets display minimum and maximum brightness based on the time of day.

Contact Info and Where to Get Help

Click Help under the User icon in the upper-right corner of the screen to access the VIP-5000 Series Video Image Processor Operation Manual (DD2773152).

Click **About** under the **User** icon **a** in the upper-right corner of the screen to access the Daktronics website. Refer to **Figure 18**.

If further assistance is required, Daktronics Customer Service is available 24/7 via phone or online.

Telephone

- Domestic (U.S. and Canada): 1-800-325-8766
- International: +1-605-697-4000

Online

www.daktronics.com/support



Figure 18: Contact Information

