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# 1 Introduction

This manual provides instructions for setting up the components used to control gas prices on a Galaxy<sup>®</sup> GS6 display with a DM-100 handheld console.

Figure 1 illustrates the component setup used for this type of control.



Figure 1: Component Setup

### 2 Requirements

• Galaxy<sup>®</sup> GS6/DVX display with DMP-5XXX, or DMP-8XXX player

**Note:** Network communication option (Wire Ethernet, Fiber Ethernet, Wireless Ethernet Bridge). Cellular control options are not supported at this time.

- Terminal emulation program, such as HyperTerm or Tera Term, to set up Lantronix box. Download these programs from the Internet if not already installed on the control computer.
- Static IP address for the display on the local network
- Ethernet router
- Device with web browser to access Venus Control Suite
- Windows personal computer and Content Studio
- DM-100 handheld console with firmware version 3.7 or higher

# 3 Set the Display Static IP Address

### **Network Requirements**

- Existing Network
- Available network port, configured properly
- PC
- Internet Explorer or Firefox web browser

### Configuration Steps Using IP Address

- 1. Connect a computer to the display.
- 2. Configure the computer for DHCP
- **3.** Turn display on.
  - Both the display and the computer should timout searching for a DHCP server and fall back to auto IP addresses of 169.25x.x.x.
- 4. Observe boot sequence reconfigure computer to same in the IP address range as the display and same subnet.
- 5. Manually enter display IP address in web browser followed by :85 (for example, http://169.254.13.87:85) to identify the correct connection port. Or see the **Configuration Using DisplayFind To Discover The Display (p. 12)** section.
- 6. Enter User Name Dak and Password DakPassword! in the Windows Security window.

Windows Security	x						
The server 10.6.70.135 is asking for your user name and password. The server reports that it is from Restricted Access.							
Warning: Your user name and password will be sent using basic authentication on a connection that isn't secure.							
Dak  Dak							
OK Cancel							

- 7. Click **OK** to connect to the display (refer to the help file for additional information about the configuration utility).
- 8. Click the Network tile.
- 9. Click the Manual button under the IP Configuration heading.

10. Enter the IP address, subnet mask, default gateway, and DNS servers that you would like set on the display.



- **11.** Click the **Save** button.
- 12. Log out of the configuration utility.
- 13. Turn display off.
- 14. Disconnect the computer from the display and connect display to the network.
- **15.** Ensure the display has an established link with the network.
- **16.** Turn display on.

# 4 Lantronix UDS-1100 Configuration

This section provides instructions for configuring a Lantronix UDS-1100 Device Server for use with Daktronics DM-100 to deliver gas price information to a DMP-5050/5060-controlled display. These instructions are used, with permission, from Lantronix Users Guide.

### **Required Equipment**

- Terminal Emulation Program (IE, HyperTerminal, TeraTerm)
- PC with one open serial port DB9 connection (a USB to serial adapter can be used) installed in the previous section
- RS-232 serial cable DB9-F to DB25-M (DAK part # W-1249)
- Lantronix UDS-1100 Device Server (DAK part # A-1711)
- Wall pack supplied with UDS-1100

### Setup Procedure

- 1. Connect the serial cable to DB9-F of the PC's open serial port.
  - If a serial port is unavailable on the PC, use the USB to serial adapter cable included in this kit.
- 2. Connect the opposite end of the serial cable to DB25-F of UDS-1100. You will need to install drivers to use the adapter cable.
- **3.** Open Terminal Emulation program and set its port settings as follows:
  - Bits per second (Baud rate): 9600
  - Data bits: 8
  - Parity: None
  - Stop bits: 1
  - Flow control: None
- To enter Setup Mode, press and hold the x key while powering up the UDS-1100. Release this key within one second of the prompt \*\*\* Lantronix Universal Device Server \*\*\* displays on the monitor. The prompt appears in the UDS-1100 HyperTerminal dialog box, as shown in Figure 2.
- 5. Press Enter within 1 second after this prompt. Setup Mode appears with the prompts seen in Figure 3.
- 6. Press 0 (zero) and Enter to go to Server Configuration.



Figure 2: UDS-1100 HyperTerminal Dialog Box

2 UDS-1100 - HyperTerminal						
Ele Edit Yew Gall Iransfer Help						
*** Lantronix UDS1100 Device Server *** MAC address 00204A9B6A4C Software version V6.1.0.3 (060811) Press Enter for Setup Mode	*					
*** basic parameters Hardware: Ethernet TPI IP addr 172.16.192.24, no gateway set,netmask 255.255.0.0						
*** Channel 1 Baudrate 19200, I/F Mode 4C, Flow 00 Port 03001						
Connect Mode : C0 Send '+++' in Modem Mode enabled Auto increment source port disabled Remote IP Adr: none, Port 00000 Disconn Mode : 00 Flush Mode : 00						
Change Setup: 0 Server 1 Channel 1 5 Expert 6 Security 7 Defaults						
8 Exit without save 9 Save and exit          Your choice ? _	-1					
onnected 0:03:03 Auto detect 9600 8-N-1 SCROLL CAPS NUM Capture Print echo	- //.					

Figure 3: Setup Mode

### Lantronix UDS-1100 Configuration

- 7. Type the **Static IP address** for the **UDS-1100 000.000.000** or the address assigned by the local network administrator and press **Enter**. Enter the address in the following format (xxx.xxx.xxx). All 0s sets the UDS to use DHCP.
- 8. Press Enter to disable the Gateway IP Address. If a Gateway Address is needed, enter N and press Enter. A prompt asks for the address. Enter the address in x.x.x.x format.
- Enter the Subnet Mask for the IP Address entered. For example, if a Class B address (255.255.0.0) is used, type 16 and then press Enter to set the Netmask to 16. Refer to the Netmask/Bits table.

Netmask	Bits	Ele Edit Yeen Cal Jannier Help D Gel Go S II D D D D Gel Go S II D D D D
255.0.0.0	24	IP Address : (172) 172. (166) 016. (192) 192. (024) 024 Set Gateway IP Address (N) N Netwask: Number of Bits for Host Part (0-default) (16) 16 Chance taleat copic a asserged (N) N
255.128.0.0	23	Hardisen: Ethernet Stateletert
255.255.0.0	16	IP addr 172.016.192.024, no gateway set, netwask 255.255.000.000
255.255.254.0	9	Rent 83001200, IP Note 42, FLW 00 Renote 19 Adr none, Port 00000 Connect Node: C0 Disconn Mode: 00
255.255.255.0	8	Change Setup : 0 Server configuration
255.255.255.224	5	7 Factory defaults 8 Exit without save 9 Save and exit Your choice ?
255.255.255.252	2	Figure 4: Channel Configuration

- **10.** Press **Enter** to set the DNS Server IP addr <N>.
- 11. Press Enter to set No telnet config password. To enable a telnet password accessed through a telnet connection to port 9999, enter Y. The password is limited to four characters. Setting a password here does not affect operation via the serial port other than configuration.
- 12. Press Enter to make no change to the DHCP Device Name.
- 13. Press the 1 (one) key and then Enter to enter Channel 1 Configuration, shown in Figure 4.
- 14. Follow these guidelines:
  - DM-100 To DMP-5050/5060
  - Baud Rate: 19200
  - I/F Mode: 4C
- Type 00 (zeros) and press Enter to set Flow Control to None. Flow Control must be set to 00 for proper display communication.
- 16. Type 03001 and press Enter to set the Port Number to 3001.

This is the default and preferred port used by Daktronics. Others may be used.

17. Type **c5** and press **Enter** to set the Connect Mode.



Figure 5: New Settings

- 18. Press N to send +++ in Modem Mode.
- 19. IP Address after 'RING' <Y> appears. Press N.
- **20.** Press **Y** to disable Auto Increment at the Source Port.
- 21. Enter the Static IP Address assigned to the display and press Enter. Enter the address in this format xxx.xxx.xxx. This address will be assigned to the display in a later section.
- 22. Type 21500 and press Enter to set the Remote Port.
- 23. Press Enter to set DisconnMode to 00.
- 24. Press Enter to set FlushMode to 80.
- 25. Type 02 and press Enter to set the Pack Ctrl.
- 26. Press Enter twice to set DisconnTime to 00:00.
- 27. Press Enter to set SendChar1 to 00.
- 28. Press Enter to set SendChar2 to 00.
- 29. Press 9 and Enter to save and exit Setup Mode. The prompt says Parameters Stored....

# 5 Display Configuration

The display and Venus Control Suite should be configured at the factory. See the <u>Venus Control Suite Manual</u> for display configuration information if needed.

# Display Configuration 8

# 6 Using Venus Control Suite and Content Studio With DM-100 Data Profile

### Creating Media Files with Content Studio

Daktronics Content Studio application enables users to create media files called presentations. Once it has been downloaded, Content Studio is launched through Venus<sup>®</sup> Control Suite. To download the Content Studio software, visit <u>www.daktronics.com/contentstudio</u>.

To create a media file in Content Studio, complete the following steps:

- Select Media from the main menu. The Media Library opens.
- 2. Select New Content Studio Presentation from the Upload drop-down list. Launch Content Studio opens. Refer to Figure 6.
- 3. Log in to Content Studio with the same User Name and Password used for Venus<sup>®</sup> Control Suite. Content Studio opens in a separate window with the New Presentation Wizard.



Figure 6: Launching Content Studio



Figure 7: Content Studio Canvas

- 4. Click **Display** to open the list of all configured displays available in Venus<sup>®</sup> Control Suite.
- Select the desired display from the list. The New Presentation opens with a black workspace or canvas that represents the selected display size. Refer to Figure 7.
- Use Content Studio to create a new presentation. Online help is available at <u>www.daktronics.com/</u><u>venuslearning</u>.
- 7. Click the Content Studio Options button.
- 8. Click Plug-ins, as shown in Figure 8.
- 9. Ensure the **Dynamic Data Library** check box is selected.
- 10. Click OK.
- Click the Dynamic Data Library tab on the left side of the Content Studio Editor window, as shown in Figure 9.
- Click the Category down-pointing arrow, as shown in Figure 9.
- 13. Select DM-100 Gas Price.



Figure 8: Content Studio Plug-In Options



Figure 9: Open Dynamic Data Library

### Using Venus Control Suite and Content Studio With DM-100 Data Profile

14. Click the right-pointing arrow next to the DM-100 Gas Price folder in the Dynamic Data Library, as shown in Figure 10. You should see the following fields.

- Blank Header
- Line 1 2 Decimal
- Line 2 2 Decimal
- Line 3 2 Decimal
- Line 4 2 Decimal
- Line 5 2 Decimal
- Line 1 3 Decimal
- Line 2 3 Decimal
- Line 3 3 Decimal
- Line 4 3 Decimal
- Line 5 3 Decimal

**Note:** These lines correspond to the line numbers from the DM-100 handheld console.

**Note:** Two decimal options show the price as \$X.XX. Three decimal options show the price as \$X.XX9.

Dynamic Data Library											
Category:	•										
Fields: Search											
🚺 🖻 DM	-100 Gas Price										
Bla	ank Header										
Line 1 - 2 Decimal Line 2 - 2 Decimal Line 3 - 2 Decimal											
						Line 4 - 2 Decimal					
						Line 5 - 2 Decimal					
Line 1 - 3 Decimal											
Line 2 - 3 Decimal											
Line 3 - 3 Decimal											

Figure 10: DM-100 Gas Price Options

💽 <u>I P</u> T N C			Daktronics Content Studio - New Presentati				tation
Ho	ne Insert	Format	Layout	View			
6		Add	Arial	•	24 - 🕈 🛊	EOD F.	1
		Insert	8 / 11	🔺 🕻 a 🛝 a 🗖 a Al			Media
aste v 🗸 i	ormat Painter	Delete	D, A	<b>*</b> = = <b>6</b> = <b>0</b> = 6			Item
Op	scard	Laryout	_	Fonts		Paragraph	Qu
_	Dynamic Data	Library					
Categorys	DM-100 Gas F	Price	•				
Fields:	Search						
4 🖿 DM	100 Gas Price		-				
Bla	nk Header						
Lin	e 1 - 2 Decima	4		×			
Lin	2 - 2 Decima	4					
Lin	a 3 - 2 Decima		1				
Lin	4 - 2 Decima		- 110				
Lin	5 - 2 Decima		- 110				
1.0	1 - 3 Decima		- 100				

Figure 11: Place Price Field in Layout

- Drag these fields onto the layout, as shown in Figure 11.
- 16. Place the fields for petroleum prices and their headings in the appropriate position in the layout, as shown in Figure 12.

Note: Place an outline around text and numbers so they are easier for viewers to read.

Click the Venus<sup>®</sup> icon in the upper-left corner of the screen and click Save As to save the new presentation to the Media Library in Venus<sup>®</sup> Control Suite.

# VINIC 1.11 REG 2.22 DIES 3.33

### **Content Scheduling**

Use playlists to schedule content to play on a single display or multiple

Figure 12: Petroleum Prices on Layout

displays. Playlists organize media files to play in a specified order. Create playlist overrides to interrupt a running playlist and show an emergency message. For customers with displays in multiple accounts, playlists can only be created for displays located within the current account. For systems with Advanced Scheduling, playlists must be associated with an account, and advertising time slots must be scheduled in the **Sales** menu.

### Using Venus Control Suite and Content Studio With DM-100 Data Profile

### Creating a Standard Playlist

To create a standard playlist:

- 1. Select Playlists is from the main menu. Playlists opens.
- 2. Click Add New. The playlist creation window opens. Refer to Figure 13.

Unititied Playlist (a Adm) (B Balan and all (30) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B								
Displays	+	Media Files		+				
Add Display	-		Add Media Ries					

Figure 13: Creating a Playlist

**Note:** With the Advanced Scheduling mode, **Playlist Association** opens first; choose an account from the drop-down list to associate with the playlist.

### **Configuring a Standard Playlist**

To configure a playlist:

- 1. Click Edit under Playlist Details. Playlist Details opens.
- 2. Enter a descriptive playlist name in the **Title** field to help identify the contents from other playlists in the system.
- 3. Enter the start and end dates the playlist will run in the **Initial Start Date** and **Final End Date** fields. For the playlist to run continuously, leave the **Final End Date** field blank.
- 4. Select the **Days of Week** that the playlist will run. The option button indicates that the day is selected.
- 5. Enter the start and end times the playlist will run in the **Daily Start Time** and **Daily End Time** fields.

**Note:** For the playlist to run 24 hours, set both the start and end times as 12:00 AM.

- 6. Select the **Playlist Mode**. The default is set to play all media files in the playlist before moving on to the next playlist. Refer to **Figure 14**.
- Playlist Mode

  Play All Files
  Play all of the media files from this playlist before moving
  on to another playlist.

  Play one media file from this playlist and then move on to
  another playlist.

7. Click Save.

Figure 14: Playlist Mode Options

# 7 DM-100 Handheld Console Use and Setup

Use the DM-100 handheld controller to change prices on the display.

Complete the following steps during the initial installation. Once complete, these steps should not be needed again.

- 1. Disconnect the cable from the serial port on the computer that was used to configure the UDS-1100.
- 2. Connect the short DB9 null modem cable (W-2060) to the left port on the DM-100, as shown in Figure 15.
- **3.** Connect the null modem cable to the DB25 cable attached to the Lantronix box.
- **4.** Plug the DM-100 power cord into an outlet and connect the other end to the DM-100 handheld controller.
- 5. If a function other than ERTD is shown on the controller during start up, press the **SET FUNCTION** key.



**Figure 15:** DM-100 Handheld Console Connected for GS6 Display Control

6. Press the Up and Down Arrow keys until the ERTD option is shown. Press the ENTER key to accept.

### Send Prices to the Display

- 1. Press the Up and Down Arrow keys to scroll to the line you want to change. Press the ENTER/EDIT key.
- 2. Using the number key pads on the controller, make price changes. Press the ENTER/ EDIT key to accept changes.
- 3. Complete Steps 1 and 2 for each line you want to change.
- 4. When finished editing, press the UPDATE DISPLAY key to send new prices to the display.