

Handheld Controller Use and Setup

The first time you use your DM-100 handheld controller you may need to set the function to GAS PRICE as described below.

LCD Screen	Action/Information Shown
	For indoor installation only: Plug the wall pack transformer into a 120 VAC power outlet, and connect it to the DM-100. This display appears briefly.
	If GAS PRICE is shown on the bottom line of the LCD during startup, do nothing. The controller automatically defaults to previous Gas Price settings. If a function other than GAS PRICE is shown on the bottom line of the LCD during startup, press the SET FUNCTION key while the second LCD prompt is displayed.
	Press the Up and Down Arrow keys until the gas price option is shown. Press the ENTER key to accept.

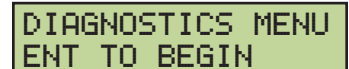
Menu Navigation

1. Press the **MENU** key.
2. Press the **Up** and **Down Arrow** keys to select between available menu options.
3. Press **ENTER** to select the desired menu option.
4. Press the **MENU** key to exit.

Menu Items	
Diagnostics Menu	Display Menu
Display Status	Price Options
Detect Displays	Configuration
Test Patterns	POS Settings
COM Diagnostics	POS Price Offset
About	Modem

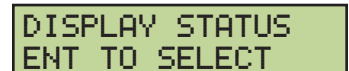
Diagnostics Menu

Press the **MENU** key followed by **ENTER** to select the **Diagnostics Menu**.



Display Status

1. Press the **MENU** key followed by **ENTER** to select the **Diagnostics Menu**.
2. Press **ENTER** to open the **Display Status** menu item.



LCD Screen	Action/Information Shown
	Press ENTER to get display status.
	Press the Up Arrow key to select another network, if applicable. Press the Down Arrow key to move to another sign and line number.
	Press ENTER to view Display Status menu items: <ul style="list-style-type: none"> • Driver Firmware Version • Dim Level • Dimming Mode (Automatic or Manual) • Light Sensor Status • Com1 Device Detection (Wired or Radio)

Detect Displays

DETECT DISPLAYS
ENT TO BEGIN

1. Press the **MENU** key followed by **ENTER** to select the **Diagnostics Menu**.
2. Press the **Down Arrow** key to reach **Display Detection**, and then press **ENTER**.

LCD Screen	Action/Information Shown
<pre>SETUP IS SAVED CLEAR & DETECT?</pre>	<p>Press ENTER twice to begin the display detection process.</p> <p>The screen will cycle through all the displays it has detected.</p>
<pre>ARE YOU SURE? ENT TO BEGIN</pre>	
<pre>X NETWORKS FOUND</pre>	
<pre>NETWORK X OF Y</pre>	
<pre>DETECTING DISPLAYS...</pre>	
<pre>DETECTED SIGN X LX,Y,Z</pre>	
<pre>SENDING CONFIGURATION</pre>	
<pre>X NETWORKS FOUND CONFIG SAVED</pre>	
<pre>LINE PRICE1 -RTX 1 + \$1.11 9/10</pre>	<p>After changing the network configuration the "RTX" message may appear in the upper-right corner of the LCD to indicate the DM-100 is attempting to (re) connect to all detected networks.</p>

Test Patterns

TEST PATTERNS
ENT TO START

1. Press the **MENU** key followed by **ENTER** to select the **Diagnostics Menu**.
2. Press the **Down Arrow** key to reach **Test Patterns**, and then press **ENTER**.

LCD Screen	Action/Information Shown
<pre>ENTER CYCLE BITS CLEAR TO EXIT</pre>	<p>Press ENTER to start the CYCLE BITS test pattern. Each digit will turn on its segments one at a time. Press the Down Arrow key to move to the next test pattern.</p>
<pre>ENTER DIAGNOSTIC CLEAR TO EXIT</pre>	<p>Press ENTER to start the DIAGNOSTIC test pattern. Press the Down Arrow key to move to the next test pattern.</p>
<pre>ENTER CYCLE NUMS CLEAR TO EXIT</pre>	<p>Press ENTER to start the CYCLE NUMS test pattern. Each digit will display numbers 1-9 then blank and repeat.</p> <p>Press CLEAR at any time to exit the test pattern menu.</p>

COM Diagnostics

COM DIAGNOSTICS
ENT TO SELECT

1. Press the **MENU** key followed by **ENTER** to select the **Diagnostics Menu**.
2. Press the **Down Arrow** key to reach **COM Diagnostics**, and then press **ENTER**.

LCD Screen	Action/Information Shown
<p>DIAGNOSTICS POS PORT MONITOR</p> <p>DIAGNOSTICS COM PORT TESTS</p> <p>DIAGNOSTICS POS STATUS</p>	<p>There are three menu choices described below:</p> <ul style="list-style-type: none"> • PoS Port Monitor • COM Port Tests • PoS Status <p>Press the Up and Down Arrow keys to select the appropriate menu choice.</p>
<p>DIAGNOSTICS POS PORT MONITOR</p> <p>USE POS DEFAULTS? 1-YES 2-NO</p> <p>INCOMING DATA...</p>	<p>Press ENTER to begin the PoS Port Monitor.</p> <p>Press 1 to use the PoS default settings, or press 2 to enter the settings.</p> <p>Note: If 2 is pressed, see below for settings to select.</p> <p>Press ENTER to exit.</p>
<p>SELECT BAUD RATE 9600 ↑↑</p> <p>SELECT STOP BITS 1 ↑</p>	<p>Consult the PoS system manual for specific Baud Rate and Stop Bits as needed.</p> <p>Press the Up and Down Arrow keys to select the appropriate Baud Rate, and then press ENTER. Default Baud Rate = 9600</p> <p>Press the Up and Down Arrow keys to select the appropriate Stop Bits, and then press ENTER. Default Stop Bits = 1</p>
<p>DIAGNOSTICS COM PORT TESTS</p> <p>SELECT TEST ↓ RS232 COM0</p> <p>SELECT TEST ↑↓ RS232 COM0→COM1</p> <p>SELECT TEST ↑↓ RS232 COM1</p> <p>SELECT TEST ↑ CURRENT LOOP</p>	<p>Press ENTER to test the operation of the DM-100 COM ports and/or cables. These tests are useful for determining if the ports themselves are operational and if cables are good.</p> <p>Press the Up and Down Arrow keys to select the appropriate test, and then press ENTER.</p> <ul style="list-style-type: none"> • RS232 COM0 – Checks for a “loopback” jumper on pins 2 & 3 of the top-left connector (FAIL if a loopback is not detected). • RS232 COM0→COM1 – Checks for transmit and receive connections between the top-left and top-right connectors (FAIL if the ports are not connected together). • RS232 COM1 – Checks for a “loopback” jumper on pins 2 & 3 of the top-right connector (FAIL if a loopback is not detected). • CURRENT LOOP – Checks for “loopback” jumpers on the left connector between pins 6 & 8 and 5 & 9 (FAIL if jumpers not detected). <p>Press ENTER to exit.</p>
<p>DIAGNOSTICS POS STATUS</p>	<p>This menu is only used for internal Daktronics testing purposes.</p>

About



1. Press the **MENU** key followed by **ENTER** to select the **Diagnostics Menu**.
2. Press the **Down Arrow** key to reach **About**, and then press **ENTER**.

LCD Screen	Action/Information Shown
	Press ENTER to view the About menu.
	The DM-100 toggles between Firmware and Function information.
	Press ENTER at any time to exit the About menu.

Display Menu



1. Press the **MENU** key.
2. Press the **Down Arrow** key to reach **Display Menu**.
3. Press **ENTER** to select the **Display Menu**.

Price Options



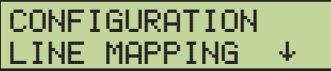



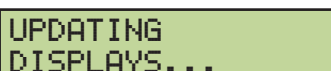
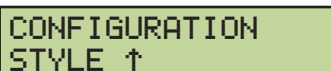

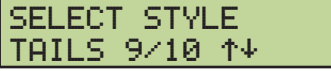
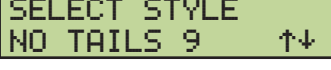
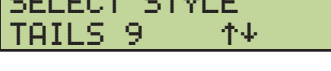
1. Press the **MENU** key.
2. Press the **Down Arrow** key to reach **Display Menu**, and then press **ENTER**.
3. Press **ENTER** to open the **Price Options** menu item.

LCD Screen	Action/Information Shown
	The ACTIVE PRICES menu is used to select the active price states (Cash, Credit, and/or Debit) to show on the display along with a hold time for each active price.
	Note: If there is no CASH/CREDIT display, the ACTIVE PRICES menu selection should be set to "1" to only show one price.
	This menu works with the PoS Price Offset (p.6) menu. VAL1, VAL2, and VAL3 are the adjustments to be applied when showing price 1, 2, and 3, respectively.
	Press the Up and Down Arrow keys to cycle between active price choices: 123, _23, 1_3, _ _3, 12_, _2_, 1_ _
	Press ENTER , and then use the number keypad to enter the HOLD TIME in seconds for each active price to be displayed. Press ENTER to save the active prices and hold time.
	Note: The default hold time is 3 seconds.

Configuration

CONFIGURATION
ENT TO SELECT

1. Press the **MENU** key.
2. Press the **Down Arrow** key to reach **Display Menu**, and then press **ENTER**.
3. Press the **Down Arrow** key to reach **Configuration**, and then press **ENTER**.

LCD Screen	Action/Information Shown
	<p>Press ENTER to begin editing line information.</p> <p>Note: The line in Edit mode flashes and shows its line information (L01, L02, etc.)</p>
	<p>Press the Up Arrow key to select another network, if applicable, and then press ENTER.</p>
	<p>Press the Up and Down Arrow keys to select a sign address, and then press ENTER.</p>
	<p>Press the Up and Down Arrow keys to change the Line Number. Press ENTER to accept the Address and Line assignments.</p>
	<p>Press CLEAR/SET FUNCTION to map lines in the next network. Continue pressing CLEAR/SET FUNCTION to exit to the main screen.</p>
	<p>Press ENTER to change the appearance of numbers six and nine (6 and 9). Figure 1 shows examples.</p> <p>Note: For Domestic displays with a 9/10 digit, the number "3" must show in the first column for the desired format. For International displays, make sure the number "4" appears in the first column for the desired format.</p>
	<p>Press the Up and Down Arrow keys to toggle through the choices:</p> <ul style="list-style-type: none"> • Remove tails on sixes and nines, and show 9/10 on the display. • Show tails on sixes and nines, and show 9/10 on the display. • Remove tails from sixes and nines and show only a 9 on the display. • Show tails on sixes and nines, and show only a 9 on the display.
	
	
	
	<p>Press the ENTER key to view the change.</p> <p>Press CLEAR/SET FUNCTION to save the selection.</p>

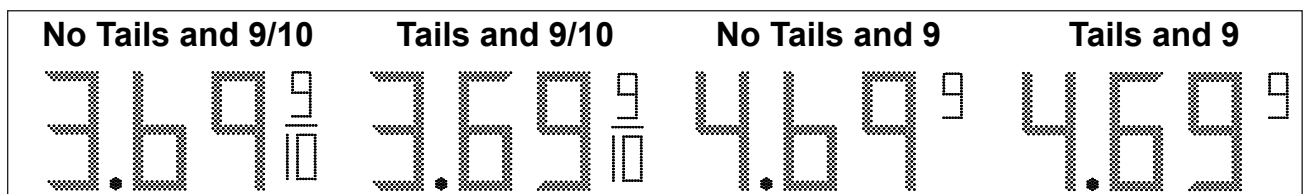


Figure 1: Digit Configuration Styles

PoS Settings



1. Press the **MENU** key.
2. Press the **Down Arrow** key to reach **Display Menu**, and then press **ENTER**.
3. Press the **Down Arrow** key to reach **PoS Settings**, and then press **ENTER**.

LCD Screen	Action/Information Shown
	<p>Use the Up and Down Arrow keys to select GSITE/PASSPORT, and then press ENTER.</p>
	<p>Each price in the Gilbarco G-Site/Passport interface is identified by price category which corresponds to the price assigned to a particular grade/service level/price level.</p> <p>Use the Up and Down Arrow keys to select a price category for line 1, and then press ENTER.</p> <p>Pressing ENTER when the price category displayed is NONE causes the price sign to ignore PoS data for the line. This may be useful for configuring some lines of a display to receive manual price changes only.</p> <p>Complete the steps above for each display line.</p>

PoS Price Offset



1. Press the **MENU** key.
2. Press the **Down Arrow** key to reach **Display Menu**, and then press **ENTER**.
3. Press the **Down Arrow** key to reach **PoS Price Offset**, and then press **ENTER**.

LCD Screen	Action/Information Shown
	<p>Use the Up and Down Arrow keys to select the amount to offset the price (in cents).</p> <p>Press ENTER to move to the next value to offset.</p> <p>Complete the steps above for each value of every line. Up to three offset values (VAL1, VAL2, VAL3) may be configured. The adjustments are applied when showing price 1, 2, and/or 3 as described in Price Options (p.4).</p> <p>Note: This is for use with CASH/CREDIT displays. If there is no CASH/CREDIT display, "VAL1" should be set to "+.00".</p>
	<p>If this message appears, a PoS interface has not been properly configured. Refer to PoS Settings (p.6) to ensure the correct PoS interface is selected.</p>

Modem

MODEM
ENT TO SELECT

1. Press the **MENU** key.
2. Press the **Down Arrow** key to reach **Display Menu**, and then press **ENTER**.
3. Press the **Down Arrow** key to reach **Modem**, and then press **ENTER**.

LCD Screen	Action/Information Shown
Modem Select: Enabled	Use the Up and Down Arrow keys to select whether to enable or disable the modem. Press ENTER . Press ENTER again to save the selection or press CLEAR to cancel.
Modem Select: Disabled	
Save? ENTER: YES CLEAR: NO	

Dimming

1. Press **DIMMING** on the keypad. The current setting is shown on the bottom line of the LCD. The dimming level of the display is adjusted in one of two ways:
 - Automatic Dimming uses a light sensor inside each display to detect the level of ambient light at the display location and dim the LED brightness accordingly.
 - Manual Dimming retains the same LED brightness level regardless of the level of light detected at the display.
2. Refer to the following tables to set the dimming level:

LCD Screen	Action/Information Shown
DIMMING AUTOMATIC ↓	Press the Down Arrow key to toggle through dimming settings: <ul style="list-style-type: none"> • Automatic – The display automatically dims based on the light detected at the display. • Manual – The display dimming level is set manually. Once set, this value remains the same regardless of the light level detected at the display. • Blank Sign – Briefly clears all content from display.

When **MANUAL** dimming is selected, the following prompt appears:

LCD Screen	Action/Information Shown
INTENSITY XX↑↓* ENTER TO SET	Press the Up and Down Arrow keys to modify the display's current intensity. Note: The DM-100 must be communicating with the display.
XX – Current intensity (01-63) Max Intensity – 63	Press ENTER to accept this intensity.

When **BLANK SIGN** is selected, the following prompt appears:

LCD Screen	Action/Information Shown
<pre>BLANK THE SIGN? <ENT> YES</pre>	Press ENTER to blank the sign.
<pre>BLANK THE SIGN? <CLR> NO</pre>	Press CLEAR to leave the sign on.
<pre>RESTART SIGN? <ENT> YES</pre>	When in Blank Mode, the digits on all of the displays will turn off and only the decimal will be lit.
<pre>RESTART SIGN? <CLR> NO</pre>	To turn the sign back on, first press the DIMMING key, and then press ENTER . To leave the sign blank, press CLEAR .

Set Petroleum Prices

Each line automatically updates when the price is changed in the PoS system. The following error appears when attempting to edit prices that are configured for PoS control:

LCD Screen	Action/Information Shown
<pre>THIS PRICE POS CTRLD. OVERRIDE?</pre>	To manually edit the price, press ENTER . To cancel, press CLEAR .

Update the Display

After connecting to the display with the handheld controller, press **UPDATE DISPLAY** to show the new sequence on the display. This button also allows for a preview of the new sequence on the LCD.

Multi-Pylon Troubleshooting Steps

Complete the following steps – that may correct communication errors – before calling service/support:

1. Locate the breaker panel for each pylon.
2. Power down each pylon (in no particular order).
3. Power down control equipment.
4. Verify all equipment is powered off.
5. Power up all pylons while DM-100 remains off.

Note: To ensure proper addressing, the pylon with communications tied to it (Host) should be powered up **last**. The additional pylons (Clients) are to be powered up **first** and in any order.

6. Allow about 30 seconds for the pylons to boot up.
7. Power up the DM-100 handheld controller.

Note: Do not press any buttons on the DM-100 while displays and controller are booting up.

8. Allow time for DM-100 to boot up and initialize all pylons.
 - a. About 1 minute for each wirelessly connected pylon
 - b. About 1 minute total for a direct-wired pylon system
9. Press **Menu** and go to **Diagnostics > Detect Displays** to verify all networks and displays are detected.
10. Verify all displays and lines are detected.
11. Manually send the current prices to the display(s) from the DM-100.
12. Verify that the DM-100 states "Sequence Sent" then "Display Response".

Use the following as a guide for some Point of Sales Systems:

1. Verify the ICON on the PoS register does not say, "Price sign is off-line"; if it does, connect the PoS to the DM-100.
2. Manually send the current prices to the display(s) from the DM-100. (Override the PoS)
3. Press the **UPDATE DISPLAY** button on the DM-100.
4. Verify DM-100 states "Sending Sequence" then "Display Response".
5. Re-send current prices from PoS system.
6. Verify price change with PoS.
7. The price on the display should change within one minute.

Notes:

Some states only allow one price change per day. The procedure above allows system verification without actually changing the display's price. If allowed, test the entire system by sending a penny increase to one of the displays and verify change. Return to correct price.

To retain price updates, you must wait 3 minutes before powering down the displays. Any changes made to the displays require a 3-minute power on time to commit to memory.

For More Information

Contact Daktronics Customer Service:

United States & Canada:
1-800-DAK-TRON (325-8766)

Outside the U.S. & Canada:
+1-605-275-1040

For additional information and assistance, contact Gilbarco at 336-547-5000.