

DM510 Quick Guide

Start-Up:

Start the dryer as you normally would.

Select **Manual Mode** at the DM510 panel and set desired discharge speed.

Select **Automatic Mode** when **Ready**. Double check to see that the rate suggested by the DM510 is reasonable.

Changing Modes:

Press **Mode**.

Use arrow keys to highlight new mode.

Press **Enter** to accept.

For **Manual** mode press **Cancel** to accept the current discharge **rate** or type in a new value and press **Enter**.

For **Automatic** mode press **Cancel** to accept the **moisture setpoint** OR type in a new value and press **Enter**.

Note: "Auto First Load" is used if the dryer has been off for a time and conditions are stable. The DM510 uses the existing model & inlet moisture for the first dryer load. The model doesn't update until the first dryer load has gone through the dryer.

Modes of Operation:

Local: The rate is set from the dryer panel. The **Remote** light is **OFF**

Manual: The rate is set manually from the DM510 Panel. The **Remote** light is **ON**.

Automatic: The rate is set automatically by the DM510 Panel. The **Remote** light is **ON**.

*Note: The **Learn** light is always on when the dryer is running and the DM510 is receiving valid data.*

Changing the Rate: (Manual)

Press **Setpoint**.

Use arrow keys to select **rate setpoint**.

Press **Enter** to accept.

Enter a new discharge rate.

Press **Enter** to accept.

Changing the Moisture Setpoint: (Automatic)

Press **Setpoint**.

Use arrow keys to select a **moisture setpoint** (target moisture).

Press **Enter** to accept.

Enter a new moisture setpoint (target).

Press **Enter** to accept.

Outlet Sensor Calibration:

Tips: 1. After start-up, wait at least a dryer load before calibrating. 2. Do not calibrate if you are far from your normal operating moisture range.

Press calibration button at the sensor.

Take a gradual sample while the green light is flashing. Mix the sample and test using your bench top tester. Use an average of three tests from the sample for the most accurate result.

Press **Calibrate** on the DM510 panel.

Use the arrow keys to highlight sensor.

Press **Enter** to select.

Type in the bench top value.

Press **Enter**.

Once the new value has been entered you may notice a slight change in the outlet moisture reading on the main screen. Readings that have been entered can not be removed so always take care when doing calibrations

To cancel a test already in progress:

Press **Calibrate** then use the arrow keys to highlight the sensor with the sample waiting message.

Press **Enter**.

Press **Cancel** to accept the 0 value.
(Entering a "0" value cancels the calibration.)



**If you have any questions:
please call us at 1-888-318-0009**

Inlet Sensor Calibration

The inlet sensor calibration does not need to be as precise as the outlet sensor calibration. As long as the inlet sensor is reading within 1-2% of the actual moisture, then it does not need calibration. This is because the DM510 uses the change in the inlet moisture value from minute to minute, not the actual moisture value.

Take a moisture sample.

Estimate the time for product to reach the inlet sensor from where you took the sample. Do your bench top test.

Press **Calibrate** when you think the product has reached the sensor.

Use arrows to highlight "inlet sensor."

Press **Enter** to accept.

Press **Enter** to start the calibration.

When the bench top icon appears on screen enter your manual test result:

Press **Calibrate** and use arrows to highlight the sensor with the "sample waiting" message.

Press **Enter** to select.

Enter your bench top test value and press **Enter** to accept.

Once the new value has been entered you may notice a slight change in the inlet moisture reading on the main screen. The maximum change the DM510 will make with each calibration is 0.5%. If there is still a large difference after the calibration it may be necessary to do additional samples to bring the moisture readings into line.

Conditions to go Ready

1. No alarms.
2. Less than 2% difference between actual moisture and target moisture.
3. Less than 2% difference between expected moisture and actual moisture.

Alarms & Alarm Limits

Alarms provide an indication of something requiring attention. Critical alarms will cause Automatic Operation to be disabled immediately or after a period of time. Some alarm conditions will place the system into Local mode for safety reasons. Select alarm limits carefully.

Press **Alarms** and then "1" to **Set Limits**

Use the arrow keys to highlight the item

Press **Enter** to accept

Use the arrow keys to highlight the limit to change

Type in the new value

Press **Enter** to accept.

REPEAT as needed for all alarm limits

Press **Alarms** from the main screen, then "2" to **View Alarms**

Use the arrow keys to scroll through the alarm history.

Press **Cancel** to cancel the alarm sound

Changing the Bin number

The use of the bin number is optional, but many sites find it a useful way to track what goes into their storage bins.

Press **Bin**

If the dry bin you have been sending product to is full, press **1** to print the **Bin Report** and then choose a new bin.

Note: This is the final report for this bin. You will not be able to reprint it. Once chosen it can not be cancelled. Be sure the printer is ON and working before selecting it.

If the Bin you are sending dry product to is NOT full and you will be adding product later, press **2** and choose a new bin. The DM510 will remember the information in the bin, until you use it again.

Pressing **3** will print the interim bin report for the current bin.

End of Season Checklist

Unplug the printer cable, turn off the printer, and unplug the cord (place in a clean location).

Turn off the DM510 (switch at bottom)

Leave the DM510 plugged in to provide a continued connection to ground.



Full training videos are on the **Dryer Master Media** channel