

# Quick Start Guide

TrueDry CV9



**AQUA<sup>®</sup>**  
**LAB**  
BY DECAGON

# Introduction



**Congratulations** on your new AquaLab TrueDry instrument. This guide will help you properly setup and begin gathering data in just a few short steps.

# What's Included?

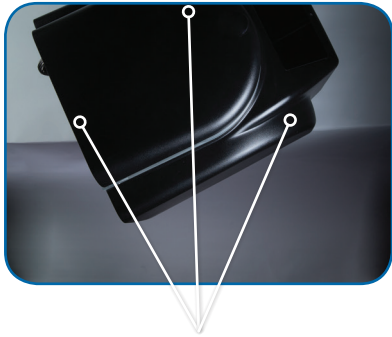


\*Periodically purchase at [store.aqualab.com](http://store.aqualab.com)

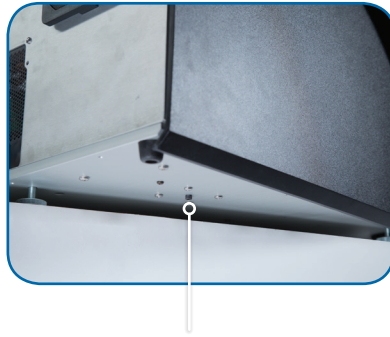
# Unpacking the TrueDry

- 1** Open the box and set aside the desiccant tubes, remove the TrueDry and place it on a table or bench top.
- 2** Slide the TrueDry to the edge of the table while keeping three metal feet on the table. Locate the black shipping screw. Using the provided hex-key, unscrew the shipping screw until it stops, it will be extended about a quarter of an inch. Refer to the photos on the next page for more detail.
- 3** Place the TrueDry on a stable surface away from any source of vibration.
- 5** Insert the desiccant tubes into the slots on the front of the TrueDry. Orient the black port on the bottom of the desiccant tube towards the front of the TrueDry.
- 6** Insert the power cord into the TrueDry and flip the switch on the back panel of the instrument.
- 7** Wait for the boot process, and the TrueDry is now ready.

## Removing the Shipping Screw:



Keep Three Feet on the Table



Locate Black Shipping Screw



Loosen Screw Until it Stops

# Running a Test



The TrueDry CV9 uses a touchscreen LCD display

- 1 Select “Run Test” from the home screen.
- 2 Choose “New Configuration” and then select “From Scratch.”
- 3 In the Configure Test screen, use the sliding controls or on screen keyboard to enter values.
- 4 Press “Enter” on the keyboard to return to the configure test screen.



The screenshot shows a 'Configure Test' interface with a dark blue background. At the top left is a 'Back' button. The title 'Configure Test' is centered at the top. Below the title, there are several input fields and sliders. The 'Name' field is empty. The 'Temperature (C)' field contains '100.0'. The 'Min Weight (mg)' field contains '10.0'. The 'Max Weight (mg)' field contains '25000.0'. The 'Timeout (min)' field contains '1440.0'. The 'Trigger (% Wt. Change/min)' field contains '0.001'. To the right of each field is a horizontal slider with a blue circular knob. The knobs for 'Min Weight', 'Max Weight', and 'Trigger' are positioned at the left end of their respective sliders. The 'Temperature' knob is positioned in the middle of its slider. The 'Timeout' knob is positioned at the right end of its slider. At the bottom of the screen, there are three buttons: 'Save Configuration', 'Export To USB', and 'Begin'.

| Parameter                  | Value   |
|----------------------------|---------|
| Name                       |         |
| Temperature (C)            | 100.0   |
| Min Weight (mg)            | 10.0    |
| Max Weight (mg)            | 25000.0 |
| Timeout (min)              | 1440.0  |
| Trigger (% Wt. Change/min) | 0.001   |

Buttons: Save Configuration, Export To USB, Begin

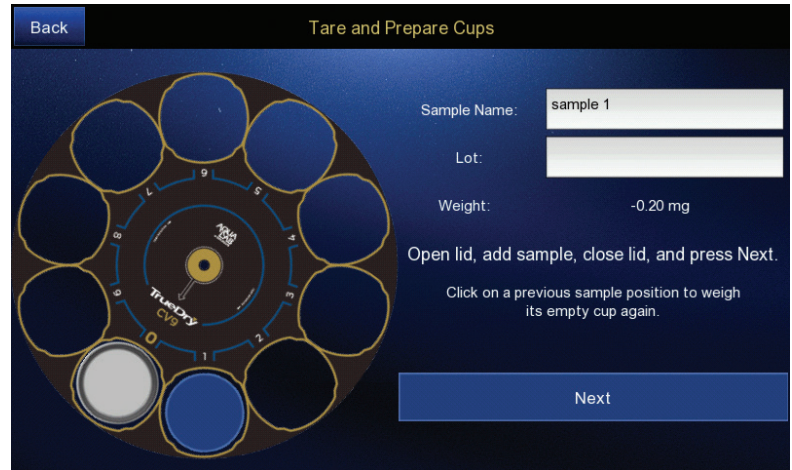
- 5 You may use sample weight minimum/maximum settings to ensure the sample weights are in the desired range.
- 6 If you want the test to run for a specific time, enter that into the "Timeout" field, and set the "Trigger" field to zero.
- 7 If you want the test to stop when the samples are dry, drag the "Timeout" slider to the right, and leave trigger value on the default setting of .001%/min.
- 8 If you want to run the same settings for future tests, select "Save Configuration" to save the settings as a template. Select "Begin" to begin loading samples.



- 9 Place empty sample cups in the quantity and places you desire. Include a cup in the zero position that remains empty. Close the lid and select “Next.” The TrueDry will detect sample cups and take precise weight measurements.<sup>1</sup>
- 10 When prompted add sample to sample cups. You may enter a sample name and lot information before selecting “Next.” If you do not, default sample names will be used. After selecting “Next” the TrueDry takes a precise weight measurement<sup>1</sup> of the loaded sample cup.



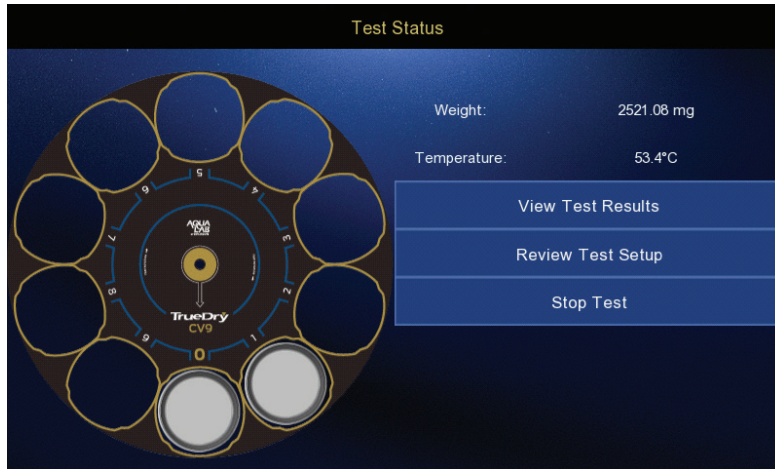
Selecting a blue sample cup allows you to remeasure that particular sample at any time during the setup process.



<sup>1</sup> Do not touch or move the TrueDry or table during these weight measurements. Movement contributes to inaccurate results. Also, make sure to prepare samples outside of the instrument to prevent dirtying the drying chamber.



Need Sample Cups? Go to [store.aqualab.com](http://store.aqualab.com)



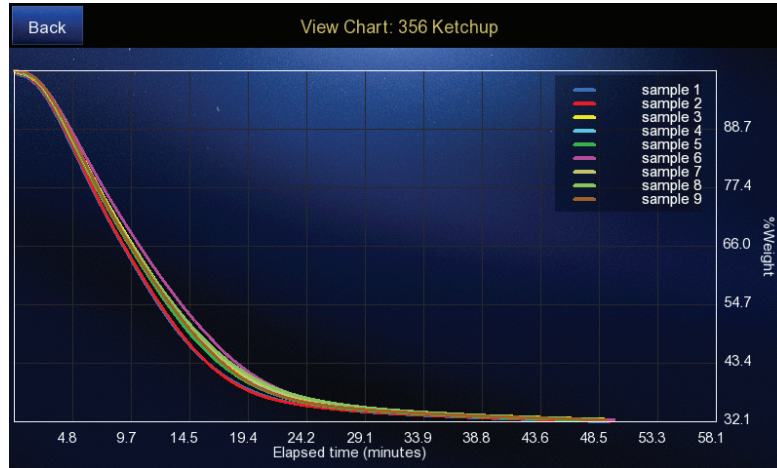
- 11 After you have loaded your last sample, airflow and heating will begin.
- 12 On the screen you can see what is happening in the chamber during the test. If you wish to view the progress of the test, select "View Results."
- 13 Select "View Chart" for a graphical representation of the data.
- 14 Select "View Table" to see numeric details of each sample. Select the magnifying glass icon to view details for a specific sample.

Please see the following pages for a more detailed view of your tables and charts.

# Viewing Results

## View Chart

Displays the dry down curves for all samples in real time.



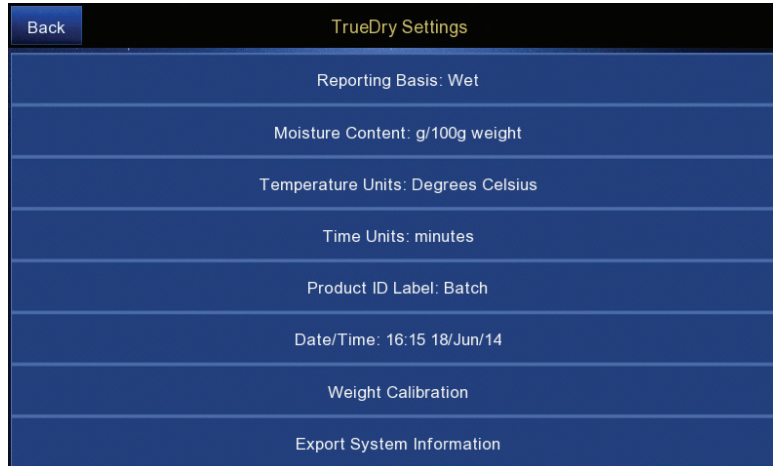
| Back |          | View Table: 356 Ketchup |              |              |               |              |
|------|----------|-------------------------|--------------|--------------|---------------|--------------|
|      | Name     | Batch                   | Elapsed time | Init Wt (mg) | Final Wt (mg) | % Dry Solids |
| 1    | sample 1 |                         | 49.2         | 3995         | 1281          | 32.1         |
| 2    | sample 2 |                         | 49.3         | 3976         | 1278          | 32.1         |
| 3    | sample 3 |                         | 49.4         | 4015         | 1304          | 32.5         |
| 4    | sample 4 |                         | 49.5         | 4054         | 1313          | 32.4         |
| 5    | sample 5 |                         | 49.6         | 4007         | 1291          | 32.2         |
| 6    | sample 6 |                         | 49.7         | 3950         | 1280          | 32.4         |
| 7    | sample 7 |                         | 48.8         | 3990         | 1294          | 32.5         |
| 8    | sample 8 |                         | 48.9         | 3971         | 1291          | 32.5         |
| 9    | sample 9 |                         | 49.0         | 3964         | 1284          | 32.4         |

### View Table

Shows summary results for all samples.

Select the magnifying glass icon on the right to view data for a specific sample.

# Settings Overview



The image shows a screenshot of a settings menu for a device named 'TrueDry'. The menu is displayed on a dark blue background with white text. At the top left, there is a 'Back' button. The title 'TrueDry Settings' is centered at the top. Below the title, there are eight menu items, each on a separate line:

| Setting Name              | Value           |
|---------------------------|-----------------|
| Reporting Basis           | Wet             |
| Moisture Content          | g/100g weight   |
| Temperature Units         | Degrees Celsius |
| Time Units                | minutes         |
| Product ID Label          | Batch           |
| Date/Time                 | 16:15 18/Jun/14 |
| Weight Calibration        |                 |
| Export System Information |                 |

## Reporting Basis

This changes the moisture content calculation in relation to either the initial (wet) weight or the final (dry) weight. The basis parameter allows the reporting of moisture content in three different ways, percent moisture on a wet basis, percent moisture on a dry basis, and percent moisture on dry solids.

## Moisture Content

Report moisture content in decimal (g/g weight) or percent (g/100g weight) format.

## Temperature Units

Report in degrees Celsius (°C) or Fahrenheit (°F).

## Time Units

Report elapsed time in hours, minutes or seconds.

## Product ID Label

This setting allows you to enter a "Sample" name when loading samples and a second text field allows additional sample information. These fields allow you to set a custom identifier for individual samples. Readings always show up with a Sample label and then by default a blank Lot field. You may change the term lot to any terminology you like with this setting.

## Date/Time

The time and date must be set manually, and do not automatically adjust for daylight savings.

## Weight Calibration

Runs a calibration routine for the scale. You will be required to use an empty sample cup and the supplied 2.0000 gram standard.

# Water Activity Education

Learn more about using water activity for your specific application.



Get everyone on your team certified for this instrument.  
Explore several free courses from Microbial Growth to Moisture Sorption Isotherms.  
[aqualab.com/university](http://aqualab.com/university)

Complete moisture analysis with these AquaLab products:



### TDL

Moisture Analyzer.  
Water Activity.  
Moisture Content.



### VSA

Vapor Sorption Analyzer.  
Dynamic & Static Moisture  
Sorption Isotherm generation.



### TrueDry

Loss on Drying Moisture  
Content Analyzer.  
Multiple Samples.  
Primary Method.



### Sample Cups

100ct. TrueDry Specific  
Sample Cups.



### AquaLink 4

Data Management Software.  
Backup, graph, and share your data.



### Complete Moisture Analysis Toolkit

Need supplies? Go to [store.aqualab.com](http://store.aqualab.com)



# Moisture Content Analyzer



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USA AquaLab Customer Support 509-332-5601  
Service outside USA, contact your local distributor

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