



# Tecan D300e

# Digital Dispenser.

MINIATURIZE YOUR ASSAY



# Simplify your assay set-up.

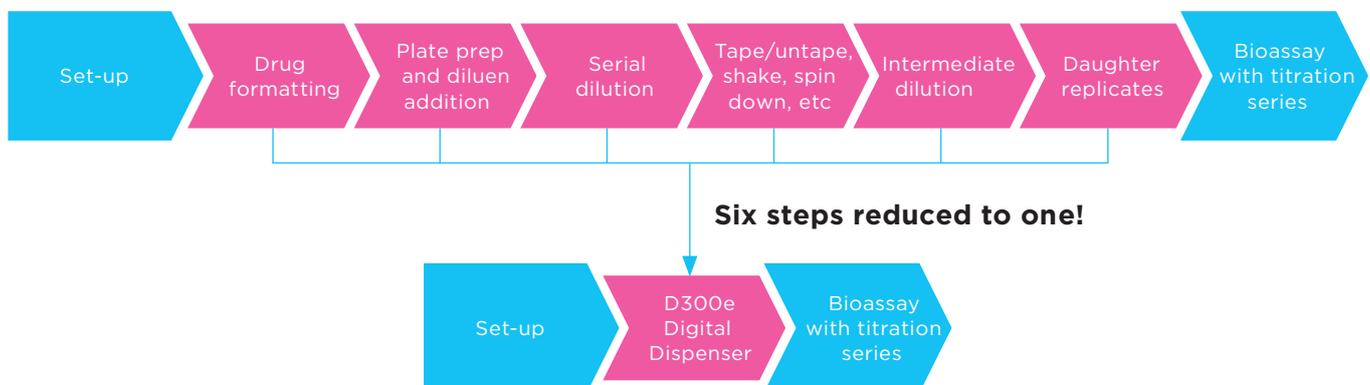
**Repetitive manual pipetting and tedious serial dilutions for drug discovery assays just became a thing of the past. With Tecan's D300e Digital Dispenser, you can automatically dispense any volume into any well of any assay plate, quickly and easily. Simply add your liquid to the Dispensehead and let the instrument do the rest.**

## UP TO 90% TIME SAVINGS

- Eliminates multiple steps from your workflow, allowing you to set up and run assays in a fraction of the time.
- Minimizes manual pipetting, enabling scientists to focus on more important tasks and reducing repetitive strain injuries.
- Enhances throughput with simple yet sophisticated software and application-focused wizards.
- Automatically calculates all concentrations and volumes for faster, simpler plate set-up.
- Dispense your reagents directly into your assay plate and onto your cells.

**A true innovation in picoliter dispensing, the D300e eliminates up to six steps from your workflow, for unparalleled speed, simplicity, efficiency and productivity.**

Streamlining a traditional titration method with the D300e:





**Save  
time and  
reagents**

### **SIMPLICITY OF OPERATION**

- Clear, intuitive software guides users through every operation, minimizing training times and increasing accessibility.
- Built-in wizards simplify the creation and execution of complex plate layouts.
- Highlighted loading guide identifies the correct pipetting location for faster, simpler and more accurate operation.

### **AMAZING FLEXIBILITY**

- Dispenses DMSO, aqueous fluids (with a surfactant) and PCR master mixes, ideal for applications with large or small molecules.
- Provides accurate dispensing across an extremely wide working range, from 11 pl to 10  $\mu$ l.
- Offers complete assay flexibility by dispensing any volume into any well of any microplate.

### **Outstanding dynamic range**

With an exceptional dynamic range, the D300e outperforms other dispensing systems and avoids tedious serial dilutions by allowing you to dispense directly into assay plates.



### **UNPARALLELED CONFIDENCE**

- Delivers high quality, reproducible dispensing across multiple users – and even multiple sites – for excellent data quality and fewer repeat experiments.
- Eliminates carry-over and contamination by using non-contact dispensing with disposable Dispenseheads.
- Saves precious samples and reduces costs by minimizing dead volumes.



# The perfect tool for reaction set-up.

**With DMSO and aqueous\* dispensing capabilities, the D300e answers the needs of a broad array of applications across multiple laboratory types. What can it do for you?**

Application Area	Task	Description
<b>Proteomics/biopharmaceutical drug discovery</b>	Assay set-up	Dose-response curve preparation for evaluation of new biologics
<b>Genomics</b>	(q)PCR set-up	Low volume dispensing of nucleic acids and master mixes
	Assay set-up	Low volume dispensing of oligonucleotides
<b>Enzymology</b>	Enzyme profiling	Independent titration of enzymes, substrates and inhibitors
<b>Small molecule drug discovery</b>	ADME/mass spec	Adding calibration standards and quality controls
	Cell-based assays	Dose-response set-up directly onto cells
	Biochemical assays	Dose-response set-up directly into assay plates
	Biochemical assays	Low volume dispensing of compounds or antibiotics for synergy experiments
<b>Cosmetics</b>	Ingredient testing	Dose-response set-up for active ingredients

\* Aqueous fluids with a surfactant

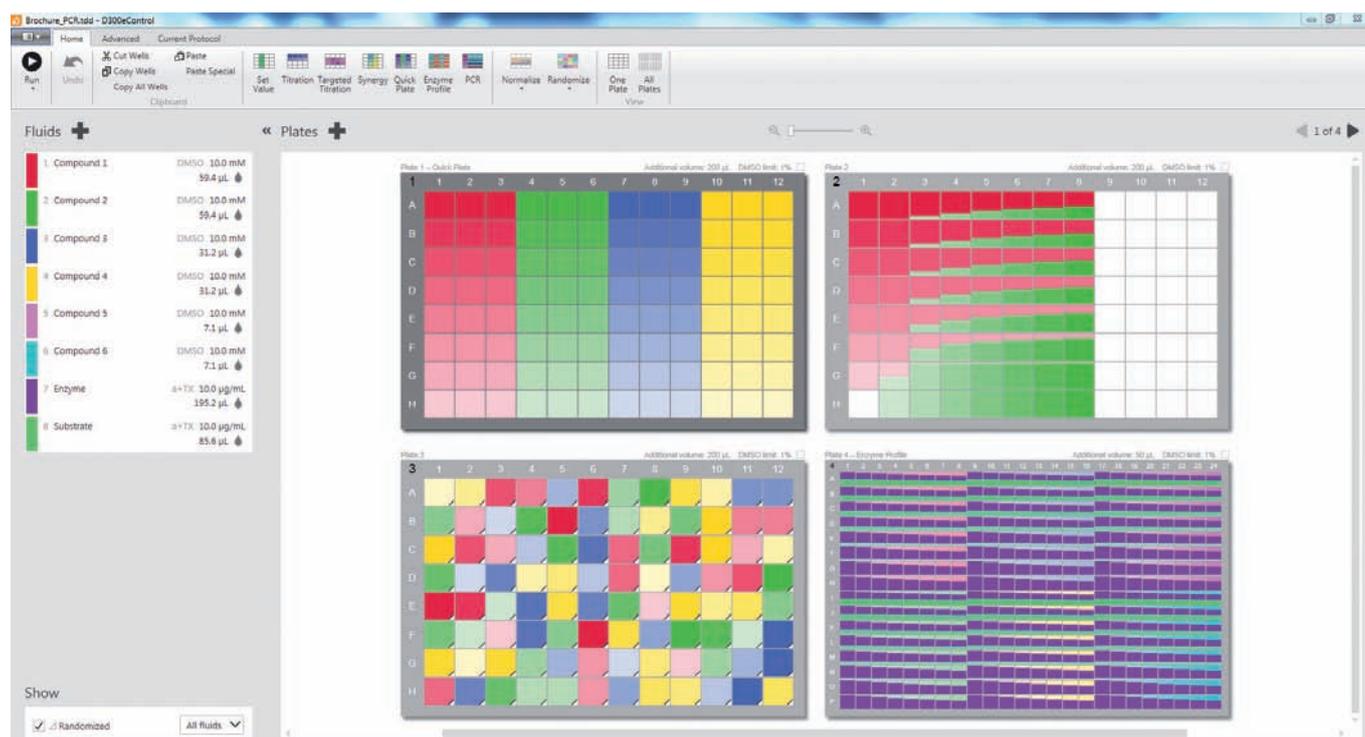


**Minimize  
set-up  
times**

**From programming to running, D300eControl software has been designed to streamline every step of the dispensing process for faster, simpler operation and more reliable, reproducible assays.**

#### **PROGRAMMING/SET-UP**

- Colorful graphics make it easy to design and specify plate layouts.
- Quickly configure your assay format for 12- to 1,536-well microplates.
- Simply enter your desired concentrations, and the software will automatically calculate appropriate volumes – no more manual calculations.
- Avoid edge effects with one-click plate randomization, plus automatic derandomization for analysis.
- Backfill DMSO or other fluids with a single click, for easy normalization across all wells.



Dispense any volume into any well for complete assay flexibility and infinite plate layout options.

# Added speed and efficiency - dispensed daily.

The D300eControl Wizards make programming of even complex assays easy for everyone and eliminate the need for super-users.

## APPLICATION WIZARDS

- **Titration Wizard** for fast and convenient set-up of dilution curves.
- **Synergy Wizard** for combination screening of two or more compounds.
- **Enzyme Wizard** makes even the most complex experiments routine.
- **PCR Wizard** to miniaturize your (q)PCR reactions, saving samples and reagents.
- **Predefined fluid classes** eliminate set-up work and ensure precise, accurate results every time.

## RUN TIME

- **Summary Review** allows you to double-check your run before it starts.
- **Simulation Mode** helps to identify any programming errors prior to a run, eliminating wasted time and materials.
- **Real-time display** of actual load volumes ensures greater accuracy and confidence.

**Loading guide** identifies the correct pipetting location, walking users through the loading process for faster, simpler, more accurate operation.



③ Fluid 3 (DMSO 10.0 mM) 3.1  $\mu$ L

# PCR set-up made easy

**PCR Wizard for easy and intuitive set up of (q)PCR reactions.  
Create your plate layout in just 4 guided steps.**

## 1. Specify Fluids Master Mix Primers Samples

PCR Wizard Step 1: Specify Fluids Master Mix Primers Samples. The interface shows checkboxes for Master Mix, Primers, and Samples. Under Master Mix, two sets are selected. Under Primers, four sets are selected. Under Samples, four individual samples are selected.

## 2. Enter Volumes or Concentrations

PCR Wizard Step 2: Enter Volumes or Concentrations. The interface shows input fields for volumes and concentrations for Master Mixes, Primers, and Samples. Replicates per combination is set to 6.

## 3. Specify Standard Curve if needed

PCR Wizard Step 3: Specify Standard Curve if needed. The interface shows checkboxes for standard curves and titration levels. A standard curve is selected for one primer set.

## 4. Determine Layout clicking through several options allows the user to select the desired set up

PCR Wizard Step 4: Determine Layout. The interface shows a grid layout for the PCR plate with options for standard curves and orientation.

## 5. Run your experiment

# Small Volumes Great Results.



For research use only - not for use in diagnostic procedures.

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