APPLICATION NOTE

TITLE:	**Digispense 4000 Bench Top Quick Start Guide**	**AN-105**
		REV -
CATEGORY:	**Controller Interface**	

1. DESCRIPTION

This document is to serve as a starter reference to operating a Digispense 4000 Bench Top Controller. This guide will show how to configure the Bench Top Controller to operate in Prime and Dispense modes.

1.1 Power up screen.

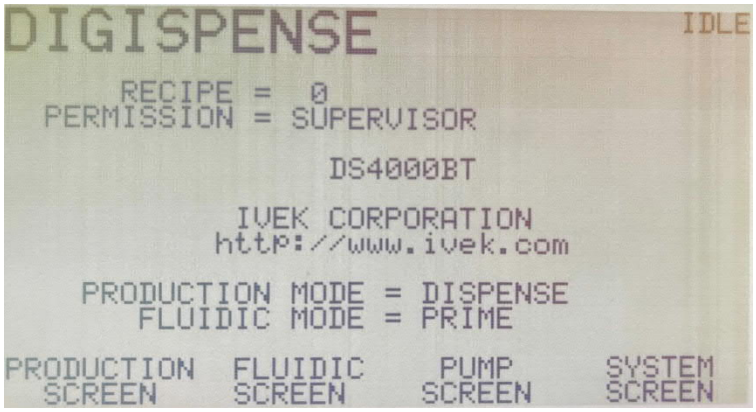
-Permission = Supervisor (Must be selected to enter parameter or change values).

-At the top green and red buttons for Start and Stop. Four function keys are located at the bottom of display. Up, Down, Left, Right arrows are used to change values. Enter button is in the middle.

-Production Mode = Dispense for discreet volumes (ex. 5uL drop).

-Choose Meter for constant flow.

-Fluidic Mode = Prime.



1.2 Pump Screen.

For All Systems:

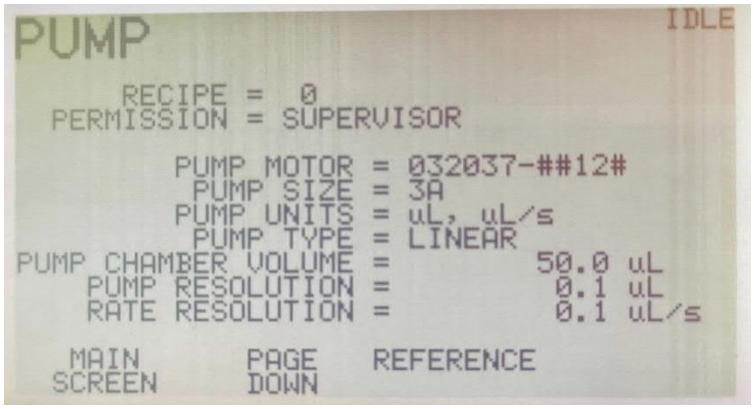
-Pump Motor = Model number of Actuator (20 Pitch or 40 Pitch) shown on serial tag. (ex. 032037-##12#).

-Pump Size = The size of the ceramic pump. (ex. 3A).

-Pump Units = uL, uL/sec. or nL, nL/sec.

For Rotary Systems:

-Pump Units = REV, RPM.



1.4 Prime.

For All Systems:

-Press the function arrow below Fluidic Screen to navigate to Prime Screen.

-Discharge Volume = The amount of fluid to fill Lines and Tip.

-Discharge Rate = Prime speed during output.

-Intake Rate = Prime speed during pump fill.

For Rotary Systems:

-Rotary Systems do not have an option to change “Intake Rate”. The Discharge Rate controls both Intake and Discharge.

-Press function arrow for Main Screen.

-Press the function arrow below Production Screen to navigate to Dispense Screen.

1.5 Dispense.

For All Systems:

-Dispense Volume = Desired volume. (ex. 10uL)

-Dispense Rate = Dispense speed during output. (ex. 50uL/s)

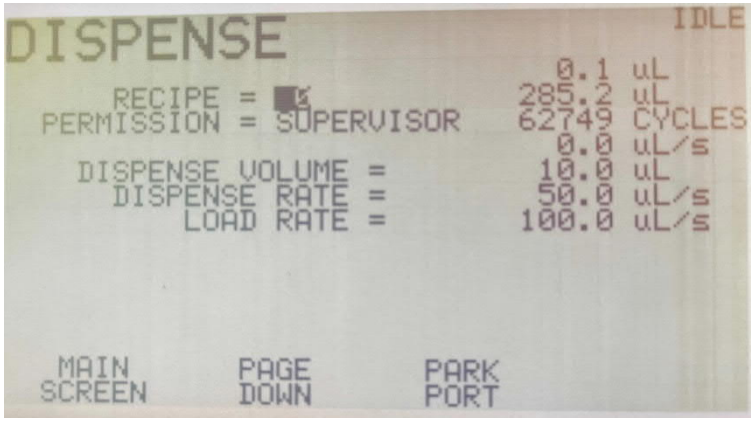
-Load Rate = Pump speed during reload. (ex. 100 uL/s)

For Rotary Systems:

-Load Rate does not apply to Rotary Systems

-Dispense Volume = Desired volume (ex. 1 REV).

-Dispense Rate = Dispense speed during output (RPM).



1.8 Begin Prime Cycle.

For All Systems:

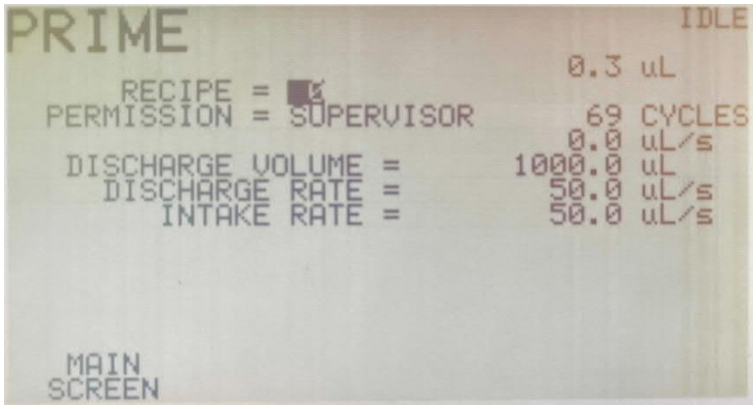
-Press the function arrow under Fluidic Screen, from the Main Menu.

-Press green start button to fill lines with fluid.

-Once lines are filled, press function button to navigate to Main Screen.

For Rotary Systems:

Intake Rate does not apply.



1.9 Begin Dispense Cycle.

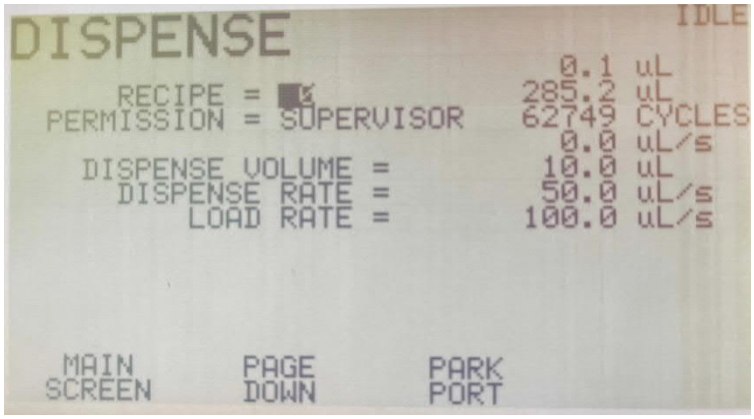
For All Systems:

-Press the function arrow under Production Screen, from the Main Menu.

-Press green start button to begin dispensing.

For Rotary Systems:

Same parameters apply for Rotary Systems.



1.0.1 Reverse Prime After Production.

For All Systems:

-Press function arrow under Main Screen.

-Use directional arrow Down to highlight Fluidic Mode. Press Enter button.

-Arrow down to Prim Reverse, then Enter.

-Press green start button to begin Reverse Cycle to reservoir.

For Rotary Systems:

Same parameters apply for Rotary Systems.