APPLICATION NOTE

TITLE:	**Digispense 4000 Panel Mount Guide.**	**AN-108**
		REV -
CATEGORY:	**Controller Interface**	

DESCRIPTION

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

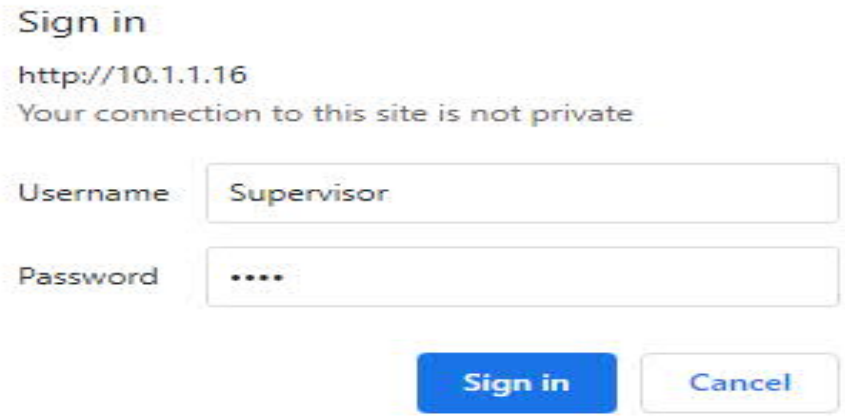
1.0 Sign in Screen.

-Navigate to your Web Browser. Use the provided IP Address, located on the Controller. (Ex. 10.1.1.16).

- Refer to Tech Bulletin TB-105 for Username and Password.

-Click on “Sign In”.

-From the main Information screen, hover over the “Setup” tab and click on “Pump”.



Step Number 2: Pump Screen

For All Systems:

#20 Pump Motor = Model number of Motor / Base, shown on serial tag. (ex. 032037-##12#).

#21 Pump Size = The size of the ceramic pump. (Ex. 3A, B, C, D).

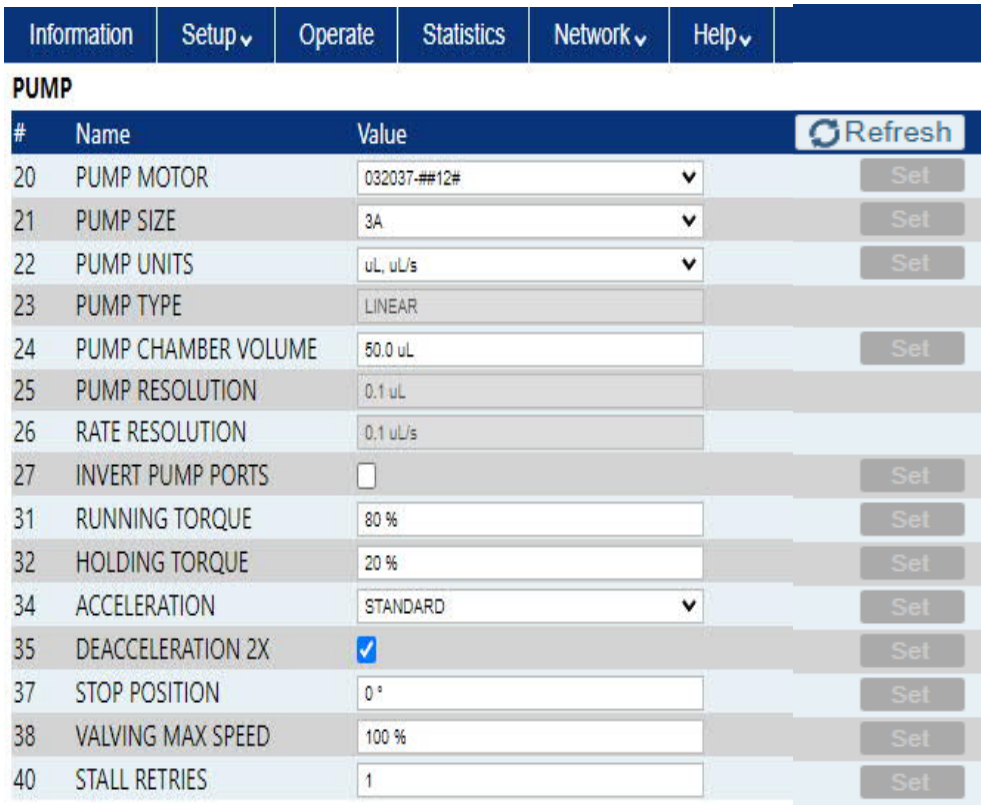
#22 Pump Units = Ex. uL, uL/Sec. / REV, RPM

NOTE: Remaining Line Items pertain to more advanced settings.

For Rotary Systems:

#22 Pump Units = REV, RPM if using a Rotary System.

-Next, click on Setup, then Fluidic, to navigate to the Fluidic screen.



Step Number 3: Fluidic Screen

For All Systems:

#80 Fluidic Mode = Prime (Can be change to “Prime Reverse” to empty the lines.

#82 Discharge Volume = The volume to Prime the lines. Ex. 1000.0 uL

#83 Discharge Rate = The rate at which the fluid moves out of the discharge port during the Prime. Ex. 400.0 uL/s (Linear and Rotary Systems)

#84 Intake Rate = Ex. 400.0 uL/s (Linear Systems Only)

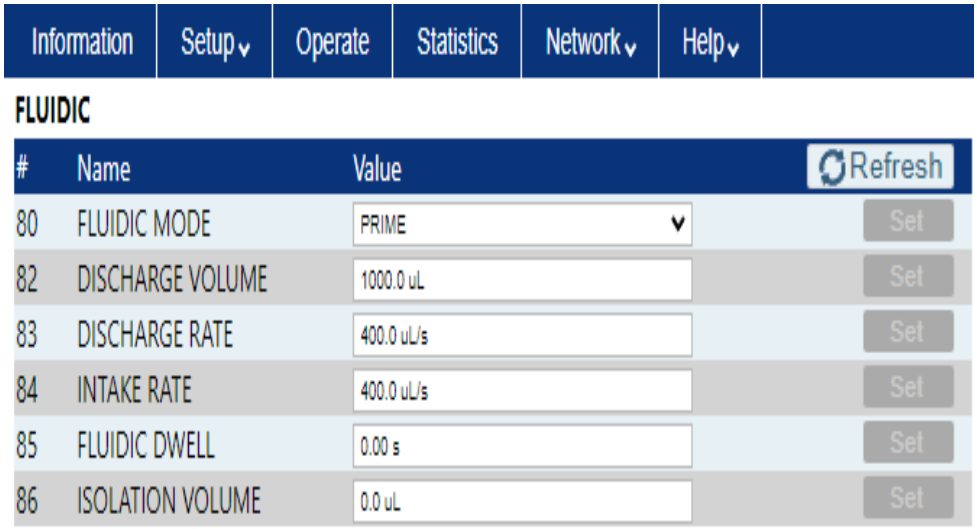
NOTE: Remaining parameters pertain to more advanced settings.

For Rotary Systems:

-Pump Units = REV, RPM if using a Rotary System.

-Discharge Rates / Intake Rates are the same. Only change #83 Discharge Rate.

-Next, click “Setup”, then “Production”, to navigate to the Production screen.



Step Number 4: Production Screen

For All Systems:

#50 Production Mode = Dispense

#52 Dispense Volume = Desired Volume dispensed. (Ex. 200.0 uL / 1 REV)

#53 Dispense Rate = Dispense output speed. (Ex. 400.0 uL/s / 150 RPM)

#54 Load Rate = Pump speed during reload. **Linear Only**. (Ex. 400.0 uL/s)

#58 Load Mode = Optional empty or manual. **Linear Only**. (Ex. "Every")

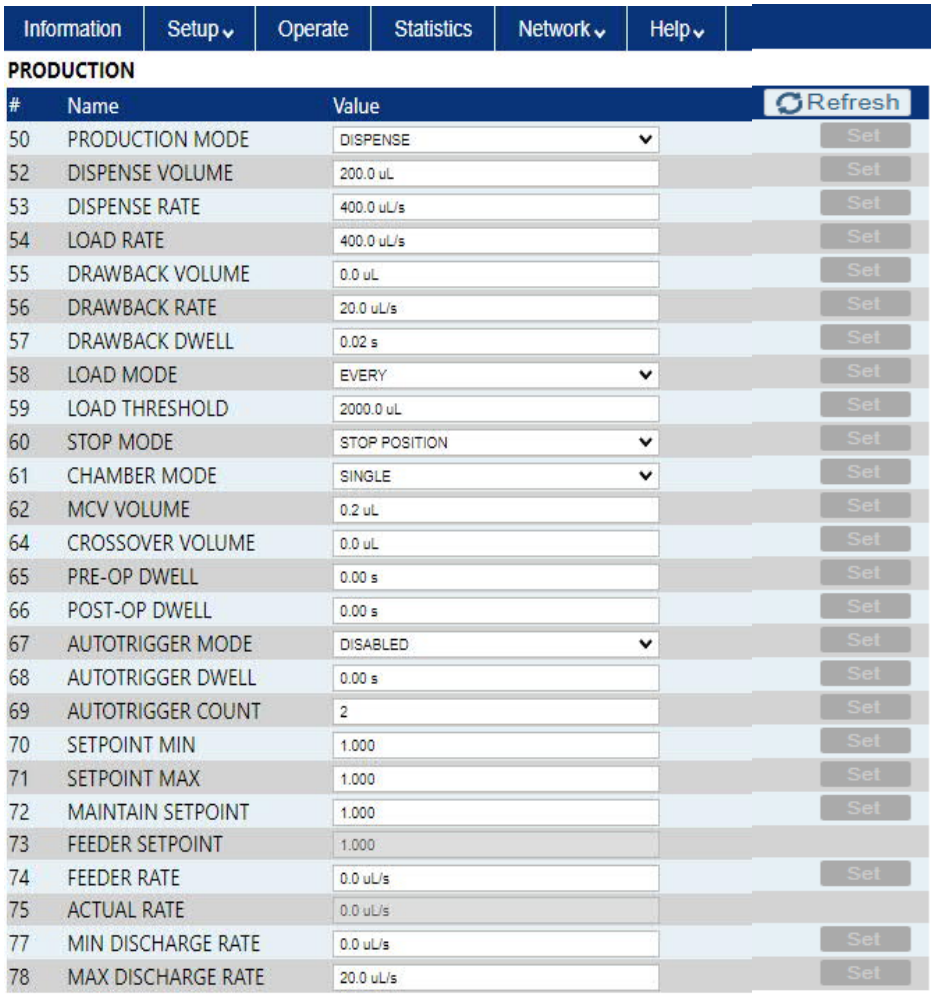
NOTE: Remaining parameters pertain to more advanced settings.

For Rotary Systems:

Pump Units = REV, RPM if using a Rotary System.

#54 Load Rate does not apply to Rotary Systems.

#58 Load Mode does not apply to Rotary Systems.



Step Number 5: Prime

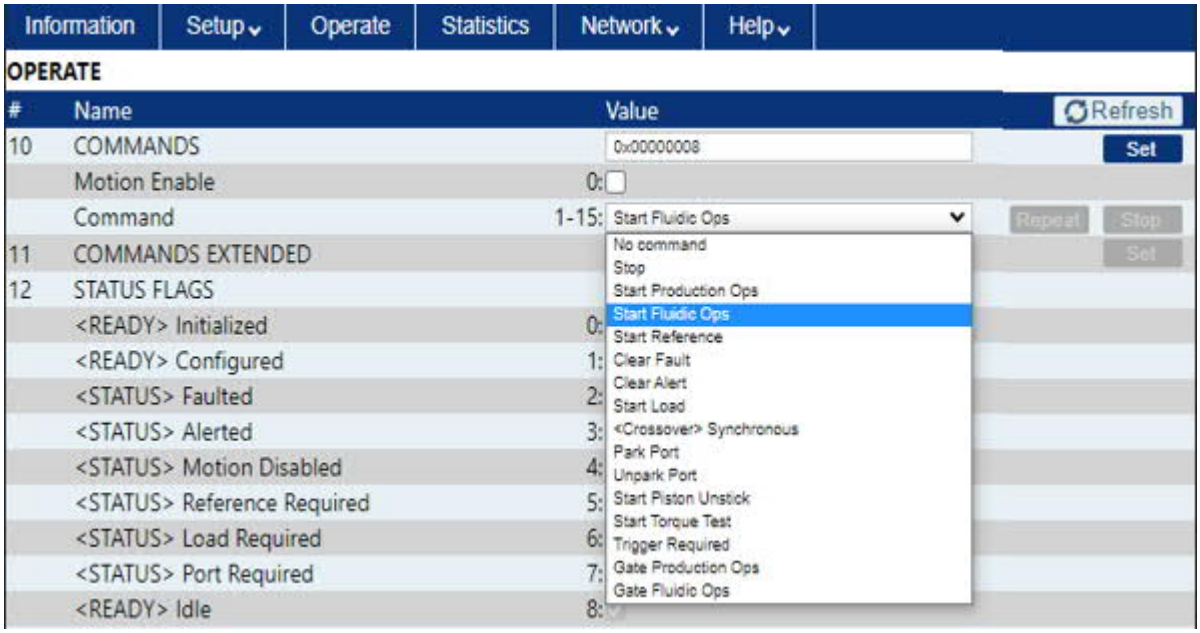
-Once all parameters are in place, navigate to the “Operate” Screen.

-Click on the Command drop down and select “Start Fluidic Ops”.

-To begin the Prime, click “Set”

-To repeat the Prime, or any “Command” from the Drop down, click “Repeat”.

“Prime” and “Dispense” functions are controlled from the same “Operate” screen.



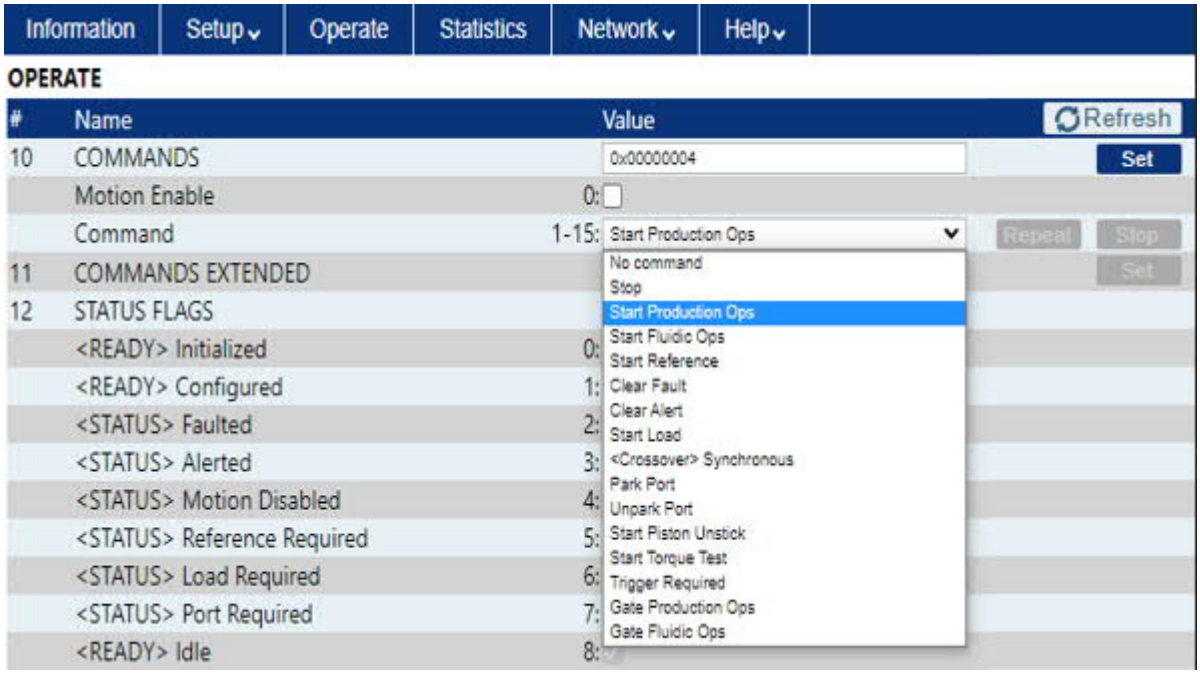
.**Step Number 6: Dispense**

-Once the system is Primed, navigate to the “Operate” Screen.

-Click on the “Command” drop down and select “Start Production Ops”.

-To begin the Dispense, click “Set”

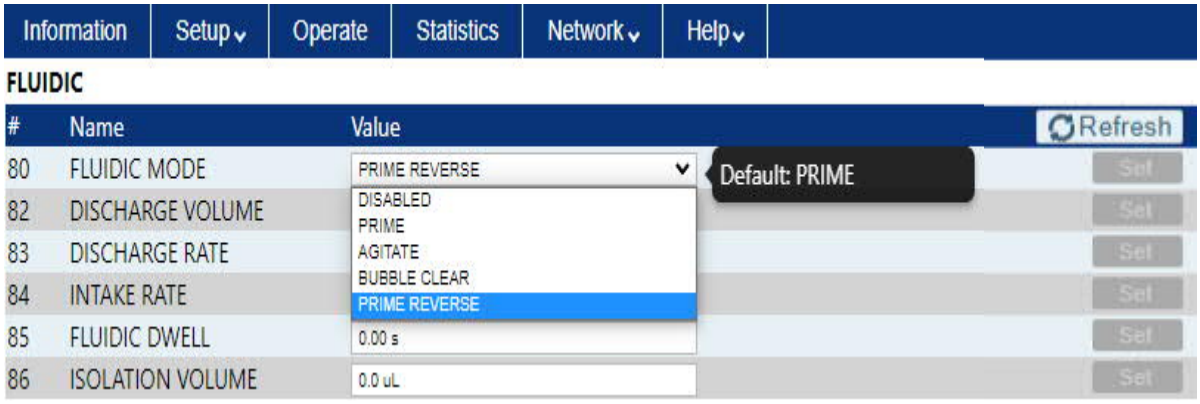
-To repeat the Dispense, or any “Command” from the Drop down, click “Repeat”



Step Number 7: Prime Reverse

-Hover over the “Setup” tab and click on “Fluidic”.

-In the #80 Fluidic Mode line, change the drop-down option to “Prime Reverse”, then click “Set”.



Step Number 7: Prime Reverse - Continued

-Navigate back to the “Operate” screen.

-Click on the Command drop down and select “Start Fluidic Ops”.

-To begin “Reverse Prime”, click “Set”.