

# Dispense Mode

## Batch Delivery with Teledyne Isco Syringe Pumps

### Overview

For applications such as reactant feed and batch delivery where a specified volume is pumped, Dispense Mode is an option available with Teledyne Isco syringe pumps. Older pump controllers require custom software to run in dispense mode; newer controllers include dispense mode as a standard feature.

To determine which controller your system has, refer to technical bulletin [TB28 D-Series Pump Controller Versions](#).

**Current Controller** – If your pump controller has a dispense mode key on the control panel DISP ( **DISP** ) it does not require custom software for dispense mode.

**Older Controller** – If your pump controller does not have the DISP key, it requires custom software for dispense mode. Software versions are listed by pump model below:

1000D	Custom 517
260/500/100D	Custom 521
65D	Custom 528

Contact Teledyne Isco to obtain the correct custom software. For software installation information, refer to Technical Bulletin [TB09 Flash Memory Upgrade](#) on the Isco public web site.

Dispense mode flow rate begins at zero, ramps up to level out at the programmed flow rate, then ramps back down to zero, delivering a precise specified volume. The slope rate and run time are dependent upon the pump model being used.

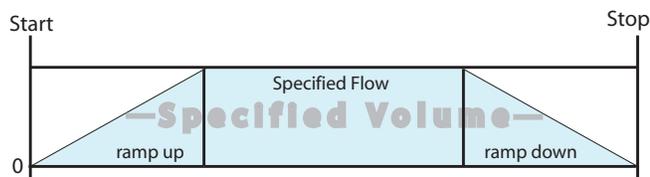


Figure 1: Depiction of dispense mode sequence

#### Note

For time-controlled delivery, you must run the pump in standard gradient mode, as described in Section 7 of the D-Series Pump user manual.

### Running in Dispense Mode

In order to access Dispense Mode control, first press CONST FLOW ( **CONST FLOW** ). The run screen will display the Dispense Mode ON or OFF status, as in the example below:

CFa	0.000mL/MIN	14PSI	264.36ml
STOPPED			00:00:06
	20.000mL/MIN		002.000ml
FLOWRATE	<b>DMODE ON</b>		VOLUME

Figure 2: Run screen with Dispense Mode on

Toggle Dispense Mode off or on by pressing DISP ( **DISP** ) (or DMODE ( **B** ) for older pump controllers). Note that pressing the DISP key while in Constant Pressure mode will have no effect.

To adjust the flow rate, press FLOWRATE ( **A** ), enter the desired rate using the number keys, and press ( **ENTER** ).

To specify the volume of the batch delivered, press VOLUME ( **C** ), enter the desired volume using the number keys, and press ( **ENTER** ).

To dispense the batch, press ( **RUN** ). The sequence runs once, then stops. To repeat the sequence, press ( **RUN** ) again.

#### Note

When the system is in Dispense Mode (DMODE ON), all gradient modes, constant pressure mode, and auto-refill, as well as serial control, are unavailable until Dispense Mode is turned off (DMODE OFF).

Last modified November 2, 2012

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