

# Upgrade Options

## Higher Pressure, Speed & Power Upgrade Options

Contact us, for information on higher pressure, speed or power models available.

## FirmWare (X & X2) Upgrade Options

\* Available in all family of BS Syringe Pumps

### X Upgrade (LinearGradientPumping)

#### MODEL: X1-FIRM-FW-1

(for all syringe pumps except the BS-300 & BS-500 Series Models)

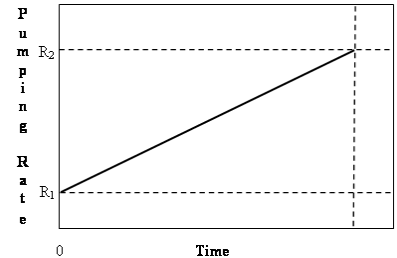
#### MODEL: X1-FIRM-FW-5

(for BS-500 series models only)

#### Description:

- Smooth linear increasing or decreasing gradient
- Set the starting rate, ending rate, and the time
- Pre-program multiple gradients plus any other BS-Series programming feature
- When X Upgrade is in both pumps in a dual system, Continuous Pumping Mode is able to provide a precise continuous flow without any drop-offs or pauses.

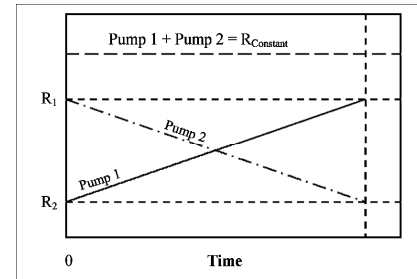
### Linear Gradient



#### Constant Flow Rate Gradient Pumping Upgrade:

- Maintains constant total flow rate using two pumps
- 2X upgrades put in a two pump system, one upgrade for each pump
- Set Pump 1 to linearly increase pumping rate
- Set Pump 2 to linearly decrease pumping rate
- Sum of Pump 1 and Pump 2's flow rates remain a constant
- Can be used with any Dual System

### Constant Flow Rate



### X2 Upgrade (Gradient Pumping with increased program memory)

#### Description:

- Contains all of the features of the X Upgrade
- Increases the number of possible programmable phases from 41 to 340
- Smooth linear increasing or decreasing gradient
- Set the starting rate, ending rate, and the time
- Pre-program multiple gradients plus any other BS-8000/9000 series programming feature
- Can easily upgrade already purchased pumps yourself
- All pumps except for the BS-300 can be upgraded

#### MODEL: X2-FIRM-FW-1

(for all syringe pumps except the BS-300 & BS-500 Series Models)

#### MODEL: X2-FIRM-FW-5

(for BS-500 series models only)