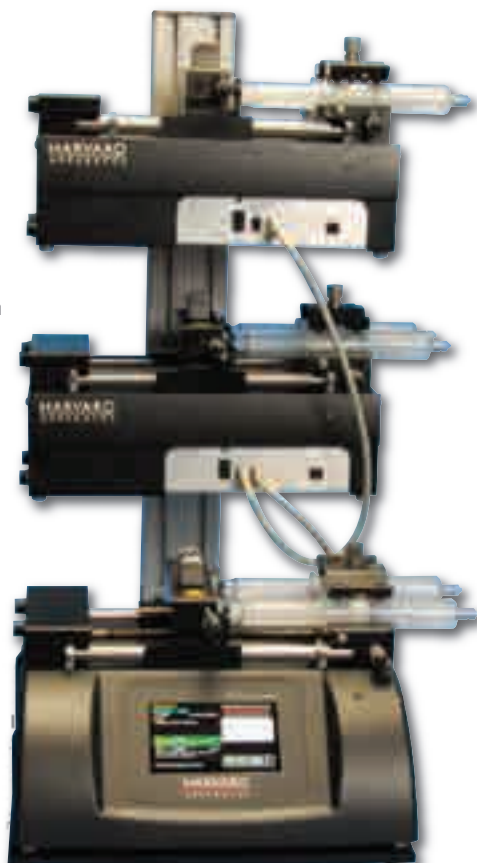


Mixture/Dose Delivery System

PC2 70-4102
PHD ULTRA™
Gradient System
with Stand



KEY FEATURES

- Easily run binary or ternary gradients without a PC
- Combine multiple flow streams into one common output
- No stopping experiment to fill syringes with different mixtures

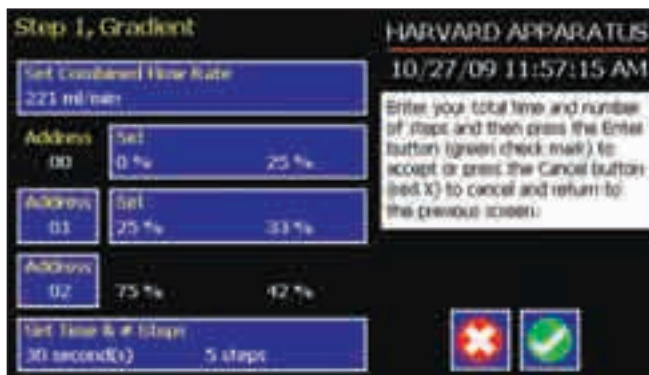
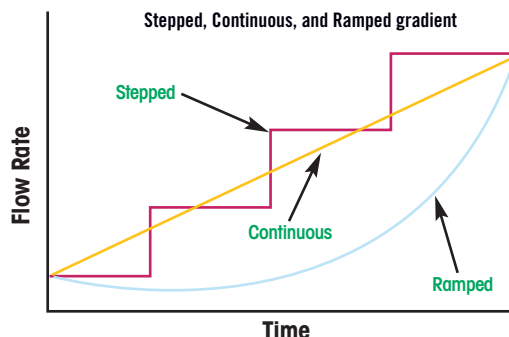
APPLICATIONS

- Serial Dilutions of reaction dosing solutions
- Serial Dilutions for drug infusion experiments
- Serial Dilutions for nutritional infusion experiments
- Serial Dilutions for mixing polymers in electrospinning
- Chromatography
- FIA systems

The PHD ULTRA™ Gradient Systems allows you to quickly and easily run binary or ternary mixtures automatically without a PC. The Method is totally programmed from a master controller pump, for easy set-up. The intuitive program interface makes simple to complex mixing easy. The Gradient Profile is used to combine multiple flow streams from different pumps into a common output stream. The flow can be smooth and continuous or stepped. No stopping the experiment, mixing different % volume mixtures and placing new syringes into the pumps. Push one button and it all happens automatically.

Binary and ternary gradient systems are available with or without a stand. Individual Satellite units are also available for purchase separately.

For more information on the PHD ULTRA™ Syringe Pumps see page 18-22. For more information on the PHD ULTRA™ Satellite units see page 21.



Mix/Dose Delivery System Specifications

| | |
|-----------------------|---|
| TYPE | Microprocessor multiple syringe, infusion only, infusion/withdrawal or infusion/withdrawal programmable |
| ACCURACY | ±0.25% |
| REPRODUCIBILITY | ±0.05% |
| SYRINGES: | |
| Type | Plastic, glass or stainless steel |
| Size Minimum | 0.5 µl |
| Size Maximum | 140 ml |
| FLOW RATE: | |
| Minimum | 1.50 µl/min |
| Maximum | 216.0 ml/min |
| DISPLAY | 4.3" WQVGA TFT Color Display with Touchpad |
| CONNECTORS: | |
| RS-232 | 9-pin D-Sub Connector |
| RS-485 | 6-position IEEE-1394 |
| USB | Type B |
| I/O & TTL | 15-pin D-Sub Connector |
| Footswitch | Phono jack |
| LINEAR FORCE | 34 kg (75 lbs) @ 100% force selection |
| STEP RESOLUTION | 0.082 µm/µstep |
| VOLTAGE RANGE | Universal input 100/240 VAC, 50/60 Hz |
| DIMENSIONS, H x W x D | 10.16 x 30.48 x 21.59 cm (4 x 12 x 8.5 in) |
| WEIGHT | 4.5 kg (10 lbs) |
| CERTIFICATIONS | CE, ETL (UL, CSA), WEEE, EU RoHS & CB Scheme |

| Order # | Product |
|-------------|--|
| PC2 70-4101 | PHD ULTRA™ Gradient System 1 Master/1 Satellite with Stand |
| PC2 70-4102 | PHD ULTRA™ Gradient System 1 Master/2 Satellites with Stand |
| PC2 70-4106 | PHD ULTRA™ Gradient System 1 Master/1 Satellite without Stand |
| PC2 70-4107 | PHD ULTRA™ Gradient System 1 Master/2 Satellites without Stand |

*High Force and Push-Pull Gradient Systems are available.