



## Base Station

*Precision Fluid Delivery made easy.*

The Base Station is a complete fluid management system that does not require flow meters, valves, regulators, or user calibration. The Base Station combines the exceptionally accurate, fluid-handling Travcyl™ System with a user-friendly keypad and backlit display. Step-by-step menus guide the user through metering or dispensing modes for accurate fluid delivery every time.

As a dynamic lab instrument or powerful process development tool, the Base Station can accelerate the pace of discovery in your lab.

The Travcyl™ Base Station is different from a basic pump because it does the work of an entire fluid management system. In addition to pumping fluid, the Travcyl™ system has fluid measurement and flow control capabilities incorporated into its design.



Model 2-4 Base Station

*Dispense and meter with one compact, easy-to-use instrument.*

Mode of Operation	Description	Model 2-4 Range	Model 16-4 Range	Data Entry units
<b>Metering</b>	Constant flow of fluid	200 nl/min - 200 ml/min	1 ul/min - 1.28 L/min	ul/sec, ul/min, ul/hr, ml/min
<b>NovaFlow Metering</b>	Constant flow of fluid that is nearly-pulseless	100 nl/min - <b>50</b> ml/min	1 ul/min - <b>500</b> ml/min	ul/min
<b>NovaSpense™ Dispensing</b>	Very precise volume delivered on-demand	1 ul - 10 L	1 ul - 10 L	vol: ul time: 0.1 sec, sec, min, hr

### **Versatile communications**

No programming (code writing) is required to operate the Base Station from the keypad. Menu prompts guide the user through each data entry step.

If your application requires fluid control that is not available through our standard programs, you can easily adapt the Base Station, Satellites, or Travcyl™ System Modules to suit your needs. Use a PC, PLC, or any other source that can generate 8-bit ASCII commands to bypass the Base Station's keypad and directly control the Travcyl™ System. RS-485 communication capability and a ready-made command set allow versatile control over your fluid delivery. LabVIEW™, C++ and Visual Basic compatibility give you even more flexibility for simple and effective integration into your process.



## Base Station (continued)



This configuration of 16-4 Satellites with Controller is being used to make the transition from a laboratory process to pilot plant operations. The wide range of programmable flow rates made it the perfect choice for this scale-up application.

### **Multiple systems, Central command**

Satellite units can be used with the Base Station. Up to 3 Satellites can be controlled from one Base Station, for a total of four Travcyl™ Systems operating independently or in unison. Satellite units can also be controlled independently of the Base Station.

### **Wetted Materials**

Standard Travcyl™ Systems are made from chemically-resistant materials and will handle a range of chemicals. For aggressive fluids such as strong acids, a more robust combination of wetted materials is available in the Inert configuration, described on page 6 of this catalog. Please consult us about harsh chemical use before ordering.

### **Need more than a few Travcyl™ Systems?**

For projects that require multiple fluid handling channels, Panel systems are ideal. Any of our Travcyl™ System Modules can be mounted in a standard 19-inch rack. This configuration is convenient and compact for multi-pump applications. Control options for Panel systems vary- please contact us to discuss your application.



A leading pharmaceutical company recently used a Panel system like this one to build a custom automated affinity chromatography apparatus for production-scale protein purification. Encynova's Travcyl Systems were chosen for their cost-effectiveness and reliable performance.

#### **User-Friendly**

Multi-functional  
Easy to control  
No extra equipment  
Portable

#### **Lab-Friendly**

Chemically-resistant  
Compact footprint  
Non-skid feet  
Durable exterior

#### **Results-Oriented**

Exceptionally Repeatable  
Near-Pulseless metering  
Accuracy up to 0.1% Cv  
Piston life 5-10 million cycles +

### **Digitally-controlled, Internally sealed.**

The Base Station's fluid handling system is a Nova System Module. A Nova System is a four-piston Travcyl™ System Module equipped with an intelligent servo motor. Encynova's proprietary software algorithms, NovaSpense™ and NovaFlow, are programmed into the intelligent motor to provide exceptionally accurate dispensing and near-pulseless metering. All Travcyl™ Systems are digitally-controlled and have internally-sealed fluid paths which result in unmatched repeatability and accuracy for your applications.



2-4 Base Station and Satellite