

## Innovadyne Instrument Accessories

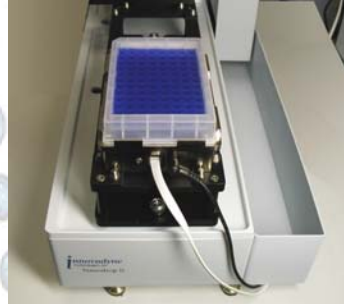
### Recirculating Reagent Refill System



The **Recirculating Reagent Refill System** is for HTS and other applications that require dispensing up to four reagents to multiple plates. The reagent refill system refills the reagent reservoir automatically from

separate reagent sources, maintaining a constant liquid level in each. This eliminates time-consuming manual pipetting and reagent level monitoring, and enables integrated automation and temperature control. The system includes an RS232 port that allows users to fill the reservoirs in a "just in time" fashion.

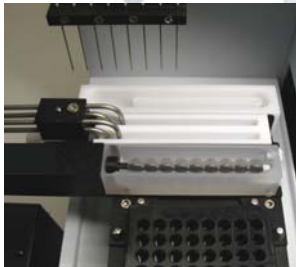
### Orbital Shaker



The **Orbital Plate Shaker** is a precision electronic shaker peripheral that provides a tight 1 mm orbital shaking pattern for all SBS plates and reagent trays. The Orbital Plate Shaker can be placed on any plate nest on

Nanodrop and Screenmaker™ instruments. It is designed with a programmable acceleration and velocity range of 60 to 3570 RPM, providing a gentle stirring motion for skin prevention, medium speeds to ensure liquids remain fully mixed and in suspension across all wells, and vortex mixing for micro tubes.

### Paddle Wheel Stirrer



Innovadyne offers a custom **Paddle Wheel Stirrer** reservoir that is designed to keep particulate reagents in solution. A variable-speed drive mechanism enables you to attain homogeneity of the solution without

damaging fragile particulates, especially cells. Reagent refill can be incorporated into the same reservoir with the paddle wheel stirrer. The system works with beads, cells, and membranes.

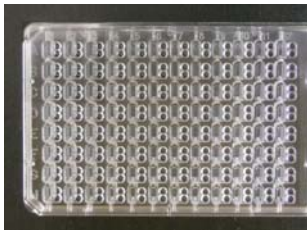
### High Pressure System



The **High Pressure System** option is available for the Nanodrop series and Screenmaker 96+8 dispensing instruments. The High Pressure System option is the system of choice for applications where you need to dispense liquids that are highly viscous, highly concentrated,

or tending to stick to surfaces. It enables pressurization of the system fluid to up to 50 psi, whereas the standard Nanodrop fluidics and pressure bottle is only for use up to 25 psi. The higher pressure range enables the more difficult reagents to move easily through the harness and out the tips, creating clean, consistent drops.

### Innovaplate™ SD-2 Crystallography Plate



The **Innovaplate SD-2** is a remarkable new 2-drop-chamber crystallography plate for performing sitting drop protein crystallography screens. Designed to meet stringent criteria specified by prestigious crystallographers,

and made of proprietary new materials that allow for better imaging of crystals, the Innovaplate SD-2 provides easier access and removal of the crystals, better mixing of precipitate and protein, and lower reaction volumes.

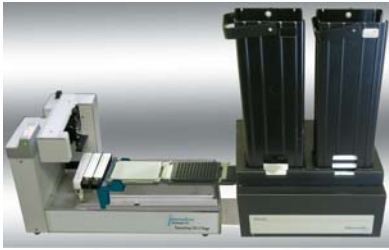
### Bead Dispensing Head



The **Bead Dispensing Head** converts any Nanodrop stage to a bead dispenser in a matter of minutes, and is just as easily removed to convert back to a conventional Nanodrop stage. Innovadyne's Nanodrop platforms equipped with the bead-dispensing-head can deliver unsurpassed bead dispensing performance, plate after plate, even with difficult beads such as Yttrium Oxide.

## Innovadyne Peripherals

### Titertek Titan Plate Stacker



**Titertek Titan plate stacker** is an integrated benchtop peripheral for use with all **Nanodrop** systems for unattended high-throughput operations.

As the Titan's telescoping arm delivers one or two plates to the Nanodrop stage, it is guided into a registered position by a docking platform, enabling the Nanodrop to aspirate from and dispense to, accurately positioned plates. After the dispense protocol the plates may be restacked or transferred to other devices.

### Thermo RapidStak Plate Stacker

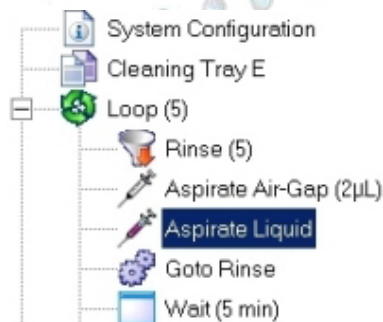


The **Thermo RapidStak plate stacker's** telescoping gripper arm sets each plate down precisely into position on the Nanodrop stage, and removes and restacks it following dispensing. The RapidStak is fully

controlled by user-configurable steps in Innovadyne's Nanobuilder© software, enabling seamless installation and eliminating the need to develop custom interfaces. While the stacker is delivering and restacking plates, the Nanodrop can perform wash and aspirate operations in parallel, reducing total cycle time.

## Innovadyne Software

### Nanobuilder©



**Nanobuilder** is an instrument control development environment for Innovadyne dispensing instruments built on the industry standard Microsoft .NET architecture. Use of the .NET architecture

provides Nanobuilder with extensive data manipulation and data sharing features useful for integration with other software. Nanobuilder enables you to create protocols or scripts -- called sequences -- that automate the operation of an instrument under the control of a connected PC. A Nanobuilder sequence can control instrument operations ranging in complexity from simple wash operations to highly complicated multiple-plate liquid transfer applications, including protein crystallography. The entire range of operations that can be performed on the instrument can be programmed into Nanobuilder sequences.

### Nanodrop™ GUI



The **Nanodrop GUI** (Graphical User Interface) is a user-friendly instrument control environment for Nanodrop dispensing instrument models. The Nanodrop GUI program is provided for entry-level users and users

with very generic dispensing requirements. The Nanodrop GUI features simple-to-create Quick Run Methods (QRM's), icon buttons for basic operations (like Wash and Start Dispense), destination plates selected from a plate library, and aspirate and dispense parameters entered in text boxes and chosen from selection lists.