

DYNEX™
TECHNOLOGIES



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Pioneering Microplate Technology for more than 50 Years



The Leader in Microplate Automation

The DSX® is a fully-automated, 4-plate processing system that is capable of performing multiple assays per plate. The DSX's modular design provides flexible configuration and was developed with ease-of-use in mind. The DSX incorporates many features that ensure the quality and security of results and has the performance to handle a wide variety of assays. Simply put, the DSX offers flexible and reliable sample-in/result-out processing for true walkaway automation.



Ease-of-Use

The DSX® is simplicity at its finest. Installation, programming, assay set-up and daily maintenance are all designed to keep you focused on your results, not on the instrument.

- **Installation** – Factory trained Dynex technicians can have your DSX up and running in just a few hours.
- **Software** – Revelation® data analysis software offers a graphical user interface with intuitive Windows®-based operation. The following advanced features facilitate assay performance:
 - The Data Reduction Wizard simplifies the programming of even the most complex assay configurations and calculations.
 - Online Help is available to assist with assay set-up and programming.
- **Worklist Set-Up** – The Worklist Load Wizard walks you through the process of setting up the DSX worklist, graphically showing where to place reagents, samples and plates at the beginning of each run.
- **Maintenance** – Daily maintenance can be completed in just a few minutes, including removal of consumables and rinsing the washer.

Dynex Certified Consumables and Service

The DSX® system's innovations include more than just the instrument – the controlled system also includes the sample and reagent tips used. ONLY Dynex Certified Consumables are specifically designed and produced for Dynex instruments, ensuring proper tip fit with superior accuracy and performance. Beware of imitators who have tried and failed to replicate Dynex's tip designs, leading to unreliable results.

Dynex is known for building robust systems built to last many years with frequent use, but regular maintenance and servicing are also essential to sustain peak performance. Dynex offers several tiers of service contracts to help



keep your DSX running like new for years to come. Contact Dynex or your authorized Dynex distributor for more details.

Modularity

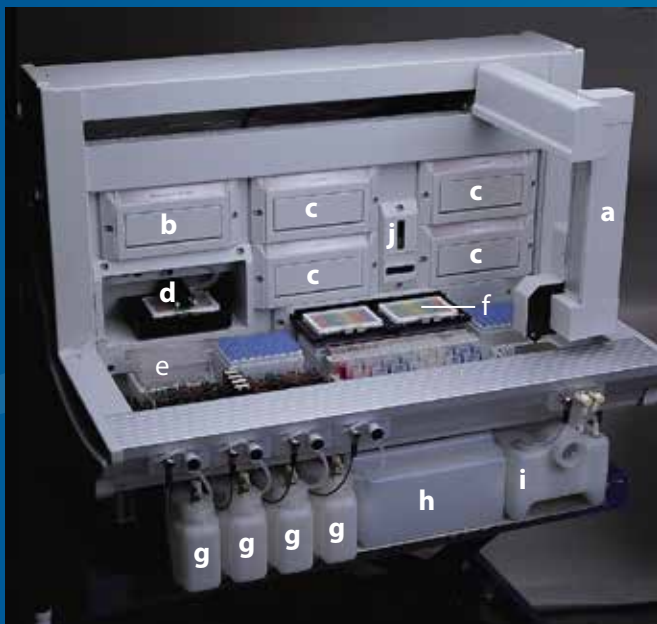
DSX's modular design facilitates upgrades, repairs and reconfiguration. The following modules, which can be quickly and easily removed and/or installed, are available for the DSX:

- Reader
- Washer
- Incubators (space for four)
- Sample ID
- Ambient Drawer
- Electronics Pod (standard)

The Benefits of Modularity:

Simple Upgrades... As your laboratory needs grow, the DSX can be easily upgraded by sliding a new module into an existing position. The DSX software automatically recognizes the new module.

Simple Repairs... Minimize the impact on your lab's operations and throughput with Dynex's rapid global delivery service of replacement modules. Most DSX repairs do not require a service technician and literally take minutes to complete, saving you both time and money. Just call Dynex and tell us what you need. We'll ship the new module to you by express.



The DSX System:

- a. Robotic arm
- b. Reader
- c. Incubators
- d. Washer
- e. Samples
- f. Ambient drawer
- g. Washer bottles
- h. Tip disposal
- i. Liquid waste disposal
- J. Sample identification

Assay Performance

Pipetting Precision. The pipette uses disposable tips to ensure zero carryover.

Pipette precision and accuracy measures:

	Precision (relative to SD)	Accuracy (delivered volume within 2% nominal)
Sample Tip	<3% above 10 µl	± 2% above 10 µl accuracy
Reagent Tip	<3% @ 50 µl	± 2% @ 50 µl accuracy

Rapid pipetting speed minimizes assay drift, ensuring consistent results across the plate and plate-to-plate.

Consistent Washing. DSX's unique washer synchronization feature ensures consistent results across the plate, eliminating plate drift issues and lowering overall CVs. Several user-definable options provide significant programming flexibility:

- Plate-specific height settings
- Super Sweep mode that aspirates liquid in both the X- and Y-axis of plate wells, leaving minimal residual volume
- Well-bottom washing lowers the dispensers to more thoroughly "clean" the base of each well
- Critical washer timing that mimics manual wash steps

Environmental Control. The dark, protective cover extends over the entire work area of the DSX, locking in place during operation. This cover:

- Protects samples, reagents and reactions from exposure to common environmental contaminants such as light, dust or alkaline phosphatase
- Eliminates assay interruptions required to place or remove light-sensitive reagents
- Contains potential washer aerosols



The DSX's robotic arm moves microplates and pipettes all samples and reagents.

QC Features/Process Security

Revelation® Software. Revelation offers powerful QC equations that monitor daily assays. Revelation incorporates Levey-Jennings statistical analysis as part of the onboard comprehensive QC monitoring of assay performance.

LIMS Interface. The LIS-Link application is an optional software package that can be installed on the DSX PC. The LIS-Link application allows the DSX to communicate with the laboratory host computer to download pending test orders and to upload completed assay results.

Learned Error Recovery. To support walkaway automation, the DSX can be trained to perform appropriate error recovery actions if an error condition is detected.

Cover Lock. The dark cover locks automatically when the DSX begins to run, protecting reagents from room light and protecting both samples and reagents from interference.

Sample Identification. An on-board barcode reader tracks samples and plates in process.

Alarms. "Wash Buffer Low" and "Waste Full" alarms.

Pipette Security. Fluid level sensing, tip detection, tip-ejection and clot detection functions protect assays as well as the DSX robotic pipette.



Dynex support is just an email or phone call away:
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press option 4