

iControl® Integrated Control System



State-of-the-art integrated control system featuring digital flow and icon-based graphics for optimal operating ease and system performance.

The Nordson iControl® integrated control system builds on Nordson's extensive controls knowledge and technology to integrate all powder control functions into an easy-to-operate, single system. It features closed-loop digital flow modules for consistent coating quality, a built-in dual 128MB flash card unit for operating system and program storage/expandability, single board computer, and 12" LCD full-color touch screen graphic interface display with icon-based graphics in a single, dust-tight enclosure.

The iControl system can accept input from part identification sensors for gun triggering, and in/out positioning, and can accommodate up to 255 presets allowing operators to adjust various gun control parameters such as flow rate, atomizing, KV and current for various part styles. Included are five advanced coating modes – Standard, Recoat, Deep Recess, Special for dry blend metallic and mica based powders, and a User-Programmable mode that can be customized for specific part configurations or application parameters.

The system also features a "Percent Adjust" function for global adjustment to preset airflow settings to compensate for changes in the coating environment.

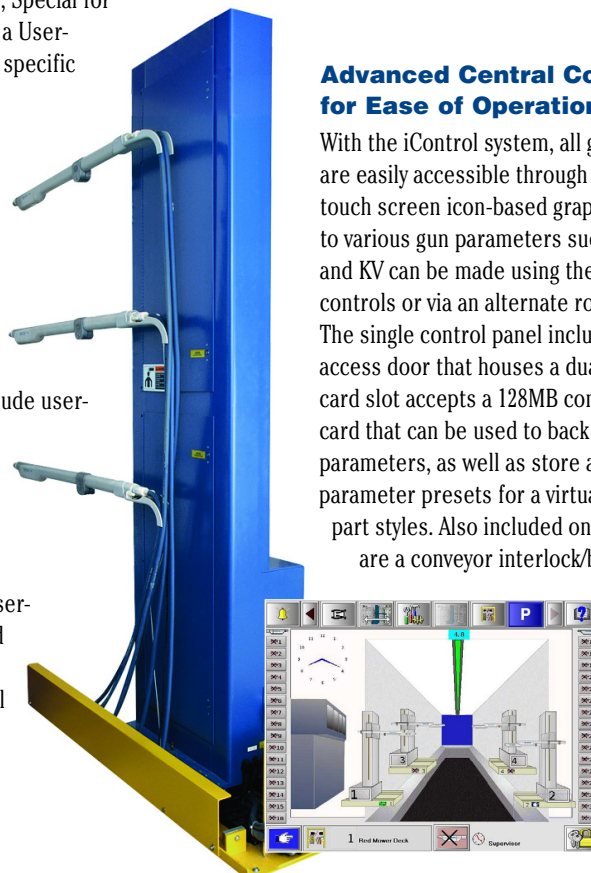
User-programmable Presets for In/Out Positioning of Gun Movers and Reciprocator Control

For in/out positioning of guns, features include user-programmable presets for lancing, contouring, and positioning based on part depth, shape and width. Automatic gun-mover control provides additional application flexibility and greater film-build control.

For reciprocator control, features include user-programmable presets for variable-stroke speed and variable-stroke length. Reciprocator control provides additional flexibility and greater control for varying part heights and part speeds.



The iControl® system gives powder coaters enhanced capabilities for optimal system performance and maximum line efficiency.



Advanced Central Controller Design for Ease of Operation

With the iControl system, all gun and system parameters are easily accessible through a single 12" LCD color touch screen icon-based graphic controller. Adjustments to various gun parameters such as atomizing, flow rate and KV can be made using the onscreen touch slide controls or via an alternate rotary adjustment knob. The single control panel includes a compact flash access door that houses a dual flash card unit. Each card slot accepts a 128MB commercially available flash card that can be used to back up system operating parameters, as well as store additional application parameter presets for a virtually infinite number of part styles. Also included on the main control panel are a conveyor interlock/bypass key switch, and a

single membrane keypad for on/off adjustment of automatic spray mode.

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Icon-based Graphics Make Set-up and Operation Easy in Any Language

Color touch screen icon-based graphics of the iControl system are easy to understand, making system set-up and operation intuitive, unlike conventional control systems that require translation into various languages. System and application set-up is made simple with easily identifiable and configurable graphics for part identification sensors, encoder or proximity sensor pulse and scaling, and lead/lag pickoff points for gun triggering.

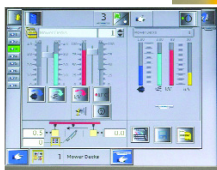
Gun control is easy in either manual or automatic mode allowing control of flow rate, atomizing, KV and current for individual guns, or all guns through use of the “copy all” function. Similarly for gun status, individual guns or all guns at one time can be viewed to display gun parameters and presets for various part styles.



Application parameters include flow and atomizing air, electrostatics settings, and settings for gun triggering.

Closed-Loop Digital Flow Technology Ensures Optimum Gun and System Performance

Closed-loop digital flow control continuously compensates for variations in air supply pressure to the console, ensuring stable air input to the pump. Closed-loop control ensures that airflow to the pump always matches operator settings for flow rate and atomizing. Constant and consistent airflow to the pump results in more stable and consistent powder flow to the gun. This translates into optimum usage of powder material and improved system efficiency.



By measuring and controlling airflow, the iControl® system provides stable air input to the pump and therefore more consistent powder flow.

Features and Benefits

- Single 12" LCD color touch screen graphical interface for single view of all system settings.
- Icon-based graphics for ease of set-up and operation in any language.
- Alternate dial for adjustment of gun parameter graphic slide controls.
- Built-in, dual-unit 128MB compact flash technology for operating system and program storage and expandability.
- Closed-loop digital flow control technology to ensure consistent air flow to the pump.
- Gun parameter settings, including in/out gun positioning, patented Select Charge® technology and Automatic Feedback Current control.
- Individual and global set-up and monitoring of all gun parameters and presets.
- Constant monitoring of all gun parameter settings and presets for various part styles.
- Compatible with all Nordson® IPS corona and tribo automatic spray guns.
- Backward and forward compatibility with customer-supplied PLC systems.
- Continuous pump atomizing purge standard. Nozzle purge optional.
- Expandable and upgradeable in the future.

Specifications

Dimensions

Height	62 in (158 cm)
Width	30 in (76 cm)
Depth	28 in (71 cm)

Input Air Pressure

Minimum	90 PSI (6.2 bar)
Maximum	110 PSI (7.6 bar)

Air Consumption (typical)

6 scfm (.17 meter³/min.)
per gun**

Filtration

Air must be clean and dry.
Maximum Oil Vapor in
Compressed Air 0.1 ppm

Maximum Water Vapor in
Compressed Air 0.48 grains/ft³

Electrical

Input voltage 100 to 230 VAC,
1 phase, 50-60 Hz, 10 A.

Output voltage 6 to 21 VDC

** This covers normal continuous gun operation as well as intermittent gun purge



Nordson reserves the right to make design changes to products to improve their function. These changes may occur between printings.

For more information, talk with your Nordson representative or contact your Nordson regional headquarters office.

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