

## **Duo-React Nozzle Control**

Many applicators are very satisfied with the combination of drift control and coverage they get from air induction nozzles. Hills, sloughs, & rough ground can force spray speed to vary a great deal and force operational compromises. As the rate controller compensates for speed changes nozzle pressure changes as a side effect. This can lead to undesired spray quality, forcing the operator to under/overdrive the unit or use up valuable time changing nozzles manually. The Duo React System from Hypro, supported by Nozzle Ninja addresses the applicator's need for operational flexibility and consistent spray quality combined with the use of air induction nozzles for overall superior spray performance and drift control.



The Duo React utilizes a "DUO" nozzle body with a primary position (single) and a secondary (quad) turret position. The system can switch from primary to secondary nozzles instantly at a programmed setpoint, as well as spraying with both nozzles A+B at the same time. The operator can also manually select the nozzle(s) in operation allowing for total operator control when desired.

The Duo React is a low-cost high value nozzle control option costing roughly 75% less than Exact Apply and 30% to 60% less than various aftermarket PWM systems. It is a good fit for applicators that desire the proven benefits of air-filled spray droplets combined with the consistency and ease of use of a PWM system.

Each Duo React System consists of a control unit in the cab, a vehicle wiring harness, control nodes, and leader + follower Duo React nozzle bodies on the boom. The nozzle bodies are affordable if damaged and have proven durable and reliable. This includes standing up well to abrasive chemicals and liquid fertilizer. Each leader is controlled by the rate controller as if it were a boom section valve. The electric leader then controls air flow to the followers DCV using compressed air to instantly start and stop flow and to switch the nozzle being used. Systems are straightforward to configure and can be installed on any make or model of sprayer with adequate nozzle body clearance. The system can also be used with John Deere high flow stainless steel plumbing utilizing an adaptor.

Nozzle Ninja has over 20 years experience in the self-propelled sprayer/commercial application business. Nozzle Ninja provides competitively priced solutions for increased efficiency, efficacy, and safety for crop protection applications, putting more money in your pocket. Give us a call today to discuss your application challenges. **1-877-387-2636**

[www.nozzleninja.com](http://www.nozzleninja.com)



## Duo-React Will Improve Your Spray Operations



- **Increase Productivity with improved application timing and machine utilization**
  - Less time wasted changing nozzles between rates and conditions
  - Consistent Spray Coverage and drift control at a wider range of Speeds
  - Better operator productivity due to reduced stress of over or under driving the machine in challenging field conditions
  
- **More precise application and greater efficacy for cleaner fields and greater yields**
  - Air Induction Nozzles Control Drift AND Provide Excellent Coverage
  - Automatically maintain optimal droplet size throughout a wider speed range
  - Spray with two different droplet sizes at once in A+B mode for greater coverage of different target areas
  - Wide application range for VR Nutrient or fungicide applications
  
- **Manage Environmental risks more easily**
  - Control off target application in sensitive situations by manually switching to a more drift resistant droplet size.
  - Instant Nozzle on off times keep product on target and off sensitive areas.
  - Maintain spray quality while reducing drift potential or damage to sensitive areas

Duo React promotes cleaner fields, which will lead to greater revenues. Less stress on the operator reduces their mistakes & reduces operator turnover. Landowners and neighbours without drift complaints are easier to get along with. The Duo-React will make a difference in your operation!

Duo-React was designed to use air induction nozzles and enhance their flexibility and consistency over a wider range of pressures and spray rates without manual nozzle changes.

**Duo-React is the most cost-effective way to get Quality Coverage on More Acres Per Day**

### Contact Nozzle Pairs

Droplets: M to C

Pressure Range: 40 to 90 psi

Nozzle B	Nozzle A	Setpoints (mph)	20" Spacing							
			Application Rate (gpa)							
			5	7.5	10	12.5	15	17.5	20	22.5
 FC-GA110-025 FC-GA110-015		Min Speed	8.9	5.9	4.5	3.6	3.0	2.5	2.2	2.0
		Max Speed	35.6	23.8	17.8	14.3	11.9	10.2	8.9	7.9
		Setpoint 1 (A to B)	13.4	8.9	6.7	5.3	4.5	3.8	3.3	3.0
		Setpoint 2 (B to A+B)	22.3	14.9	11.1	8.9	7.4	6.4	5.6	5.0

### Systemic Nozzle Pairs

Droplets: C or Greater

Pressure Range: 20 to 60 psi

Nozzle B	Nozzle A	Setpoints (mph)	20" Spacing							
			Application Rate (gpa)							
			5	7.5	10	12.5	15	17.5	20	22.5
 FC-ULD120-025 FC-ULD120-015		Min Speed	6.3	4.2	3.2	2.5	2.1	1.8	1.6	1.4
		Max Speed	29.1	19.4	14.5	11.6	9.7	8.3	7.3	6.5
		Setpoint 1 (A to B)	10.9	7.3	5.5	4.4	3.6	3.1	2.7	2.4
		Setpoint 2 (B to A+B)	18.2	12.1	9.1	7.3	6.1	5.2	4.5	4.0

**Spray Faster & Cover More Acres  
With Duo React**

30%

FASTER



Duo React

Standard

# HYPRO®