

RAVEN



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The New Age of Field Displays for the Farm

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Increasing input costs has raised interest level for precision ag products

- Guidance and auto steering products save fuel and crop inputs by minimizing skips and overlaps in the field.
- Variable rate applications help place inputs in the proper places for the most benefit.
- Automatic boom section control reduces chemical costs by 8% on average.
- Automatic boom height control reduces operator fatigue and maintains a consistent boom height for better performance of pesticide treatments.

The history of Precision Ag equipment

- Single function applications with dedicated control boxes
 - GPS guidance lightbars
 - Spray controller
 - VRA mapping systems
- Forces users to crowd the cab with many control boxes
- Added expense due to redundancy
- No similarity between systems
 - Re-learn how to operate each of them
 - Cumbersome

.... On the other hand

- There were high-end field computers that “did-it-all”
- Packed with many features and promise upgradeability
- High cost of entry
- Complicated to use

Surveying the Guidance Landscape

- Recent market study revealed 65% have yet to adopt guidance technology! (Ohio State, 2007)
- Why?
 - Price resistance
 - Perceived complexity
 - Not convinced of price-benefit ratio
 - Complicated installation/training
- A majority of growers have been forced to sit on the sidelines to wait for a better solution.

Example - Raven of 2007



Envizio Plus



Viper

A New Trend has Emerged

- *Modular Applications*

Huh?

- Single applications, such as guidance, can be run from multiple platforms
- Maintains similar look-and-feel
- Allows multiple entry points for precision ag
- Basically, it gives the customer more options to tailor-fit the right tool for the right job.

Raven of 2008



Raven Cruiser



Envizio Pro



Viper Pro

Raven Cruizer

- Simple
 - Installation, setup and use
- 5.7" color touch screen
- Sub-Meter Accuracy (9" pass-to-pass)
- 3-D guidance display
- Bird's eye view
- Patterns: A-B, Last Pass, Pivot
- Path history (whole implement only)
- Compatible with steering assist (Smartrax, Quicktrax)



Envizio Pro

- Uses similar guidance application found in Raven Cruizer
- Brilliant 6.4 in. color touch screen
- 2 product control
- 1 product VRA
- Automatic boom section control (Accuboom)
- Automatic boom height control (Autoboom)
- Compatible with steering assist (Smartrax, Quicktrax)



Viper PRO

- Uses similar guidance functionality found in Raven Cruizer & Envizio Pro
- Similar features found in Envizio Pro on 10.4" color touch screen.
- 5 product, single & VRA Control
- Wireless
- Greenseeker
- Watchdog Sprayer Station Interface
- FarmPRO upgrade for RTK auto steering



Multiple choices for different needs

- All use similar user-interface, so look stays familiar from one to the other
- Does not force the customer to re-learn
- Allows the ability to have different displays on the farm, based on cost and need, yet stay consistent on operation.

New field displays help achieve the benefits precision ag can offer.

- Save time and money using the various applications
- Avoid the “cab clutter” of the past
- Enter into precision ag at the right price and the right functionality without sacrificing expandability.

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PRECISION
Solutions

QUESTIONS?