

INCOMMAND[™] IS HERE!

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AgFiniti = Infinite **11** Possibilities



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EVOLUTION CONTRACTOR C



ay back in 1992, Ag Leader introduced the Yield Monitor 2000. At first glance, it was a clunky black box with a small, monochrome display screen, 32-button keypad and a 1 MB SRAM memory card. In reality, this was the very beginning of data management in agriculture.

Since then, there have been a number of significant evolutions of precision farming displays. First, there was input data collection, allowing a farmer to record not just harvest data, but planting and application activities like hybrid location maps and application maps as well. This turned precision farming into a year-round activity integrated into a farmer's entire operation from spring to fall.

Next, machinery control emerged, which allowed farmers to use their displays to do things like auto-steer their tractor, vary planting and application rates, control planter down-force and automatically turn on/off planter row units and sprayer boom sections. This phase moved precision farming from data collection to automation. Most recently, display innovations have evolved to help farmers better manage data. Data no longer stagnantly collects on a chip within the display. Operators now have instant access to up-to-the-second field information. They can instantly see if a seed tube is plugged or watch yield variations within the field, allowing them to identify opportunities to improve yield potential within the field. Data can be sent via the internet to data servers that allow a farmer to view or share it easily with a simple click or two. This evolution has come with its own challenges – mostly related to ownership and privacy of data something Ag Leader has always sided with our farmer customers on.

Now, not to give it all away, but if you page through some of this issue of *Insights*, you'll see we've taken the next step. At the risk of overplaying a product name, our new monitors are designed to put you even more in command of your operation. Tablet-like features let you control what's on your screen – even split-screen style – so you can easily view exactly what you want to see. Data analytics technologies allow you to transfer your data to your iPad with the



touch of a button, so you can take your maps and other data with you when you leave the cab. And of course, there's much more. I just don't want to steal all the thunder.

Read on. I think you'll like what you see!

Al Myers

Al Myers

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NEW ALL-IN-ONE DISPLAY IS AG LEADER'S MOST INTUITIVE, USER-FRIENDLY & DATA-DRIVEN DISPLAY YET.

t Ag Leader, we talk to farmers from sun up to well after sundown.

So we know there's a type of farmer who seeks out technology that gives him an advantage in the field today and equips him for the future.

Technology that can do things no other system can. Technology that gives him total control over every facet of his operation – even when he's away from the cab.

This farmer wants – no, expects – access to his farm data at all times, so he can make on-the-go management decisions anytime, anywhere.

He is of the opinion that the display in his tractor should be every bit as intuitive as the smartphone in his pocket, yet built tough enough to endure the day-to-day rigors of farming.

For this farmer there is InCommand. Our most powerful display yet. Built on Ag Leader's industry leading display technology, this new family of displays provides total machine control plus realtime information to simplify crucial decisions impacting yield and profitability. view maps, reports and more on your iPad back at home or the office. This means instant access to your detailed field information anytime you need it, allowing you to make better crop management decisions.



Tablet Touch Meets Farm Tough

Everybody loves tablets. Many farmers are using them in their daily lives.

InCommand combines the best of traditional dedicated displays and your tablet.

An enhanced user interface provides tablet-like interaction, allowing you to pan, swipe and pinch to zoom – just like on your smartphone or tablet. Plus, this ruggedized display is built for the day-to-day rigors of the field and comes available in two models (InCommand 1200 and InCommand 800).

"Today's farmers rely heavily on mobile technology to conduct daily activities and business operations, so we designed a sleek and modern display that's as simple to interact with as a smartphone or tablet. At the same time, it's built rugged to take the daily bumps



The New InCommand features a tablet-like gesture-touch screen.

InCommand is the all-in-one display for the progressive farmer. And it's here at last. Let's take a look at what it can do.

A New Era of Data Management

InCommand syncs with the AgFiniti Mobile app (no Internet or cables required) so you can "Now you can leave the tractor, sprayer or combine, without having to worry about manually transferring data or forgetting your USB," said Ag Leader product specialist Jeff Dickens. "Everything syncs automatically, so when you leave the cab, you have all the information you need



and bruises that come with farming," said Dickens.

See Twice as Much

The split screen feature (available on InCommand 1200) shows you multiple pieces of information at the same time. Whereas other displays require the use of a tablet for displaying on-the-go information and

"It's like taking the display with you, without having to take the display out of the cab."

- Jeff Dickens. Ag Leader Product Specialist

mapping, the InCommand can do it all in one.

"The split screen feature is about simplicity and convenience," said Dickens. "The ability to view two maps together means you can see planting activities next to your spraying or harvesting maps. You can view your location in your current pass in relation to the entire field. You can view Universal Terminal information at the same time you are viewing your map screen. All without having to flip between menus and screens."

Row-by-Row Detail

Row-by-row mapping provides a detailed view of current and historical row performance. View row-by-row activity on a single display (row-by-row population with guidance on the map) and be alerted to planter performance issues faster and avoid costly mistakes like poor singulation and spacing.

"With row level information. you're able to zoom in and pinpoint any issues. For example, if you zoom in and see that row five on your planter is giving a different color compared to the rest of the rows, you can resolve the issue before it impacts your yield," said Dickens.

Now You're InCommand

With the new InCommand displays and AqFiniti Mobile, you are in control of your entire operation at all times and in all seasons. Tablet-like interaction on a rugged dedicated display. Solutions-based features for visualizing what is happening in each row with precision detail. And instant data access on your iPad for scouting or meeting with your consultant to make seed or fertilizer decisions. Everything you want in a display today, equipped for the future. InCommand is here to stay.

INCOMMAND HIGHLIGHTS

- Split-screen view (InCommand 1200)
- Integrated lightbar
- Year-round functionality
- Advanced planter control (InCommand 1200)
- Variable rate, multiproduct control
- Intellislope tile plow control (InCommand 1200)
- Yield monitoring
- ISOBUS/Universal Terminal/Task Controller
- Camera support
- SmartReport (InCommand 1200)
- Wireless connectivity through AgFiniti Wi-Fi adapter
- See display comparison at Agleader.com for complete list of features

TAKE COMMAND OF YOUR PLANTING OPERATION WITH INCOMMAND

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View row-by-row planting activity with guidance right on your precision farming display - no iPad required to view a map. That's the power of InCommand.

Pair InCommand 1200 with SeedCommand for section control, variable rate drives, Hydraulic Down Force, planter monitoring, and more.

Easily identify planter issues.

Spacing 5.5 in

Ag Leader

TWO MAPS AT ONCE WITH ROW-BY-ROW DETAIL

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100 9

80 %

120 % Population 35100 sds/ac

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Legend

d Monitor

Population % 105 + 195 - 105 170 - 95 10 - 70

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Planter Drives (rpm)

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 View planter monitoring and down force simultaneously. Or guidance and planted varieties... the choice is yours.

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- Be alerted to planter performance issues faster and avoid costly mistakes at the row level.
- Track singulation for skips doubles and spacing on a row-byrow basis.



ROW-LEVEL CONTROL WITH NEW ELECTRIC DRIVES

The new electric drives not only offer the benefits of the time-tested SureStop and SureVac clutches, but also pair with most seed meters to provide additional features such as:

Precise Population Control - Instantly adjust population rates to maintain consistent spacing. Perfect for variable rate populations.

Row-by-Row Turn Compensation - Maintain precise seed-to-seed spacing on each individual row while navigating contours.

Low Maintenance - Eliminate chain and bearing maintenance and lost yield opportunities due to stiff chain links, worn out bearings, and off-target plant populations.

Improved Singulation and Spacing - Instantly improve existing meter singulation and spacing quality with high torque, low power consumption electric motor.



Available Summer 2016





AgFiniti Mobile: Know exactly what the planter applied row-by-row across your entire operation. Take this information with you to verify stand counts and variety performance.

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IN-CAB DISPLAY TRENDS FOR 2016

Maybe your cab looks like a video arcade or NASA's Mission Control. Maybe you have a whole desk drawer filled with a decade's worth of CDs, flash drives, printed field maps and computer discs used to archive your field data. Maybe you've formed callouses on your fingers from pushing buttons to scroll through your display screens. Or maybe you've resorted to wearing your glasses so you can view the small details. If so, perhaps it's time to trade your old display in for the latest model. Here are six trends you should be aware of as you start your search.

Split Screen. The practice of using your display to view one thing and a tablet to display another is coming to an end. Even scrolling back and forth on your display is becoming a thing of the past. New display technologies allow you to display two different screens at once, making it easier to track all the data you need at one time.



Row-by-Row. Newer displays like the InCommand 1200 allow you to view row-by-row data like spacing and singulation from your planter, so you can identify problems at the row unit level in the field and make adjustments before it affects yield.

Simplified Data Management. Imagine being able to transfer the data and maps from your display directly to your iPad securely without wires to plug in, cards to install or Internet connections to worry about. That capability is here now.



Secure Data Storage and Sharing. It seems everyone is offering some form of cloud-based data management. But direct, secure transfer from the cab with the capability to access or share the data from anywhere you have internet access? It's here. And you own and control your own data.

A Single, Multi-Season Display. Hate the idea of installing and relearning a different display for planting, application, harvest, tiling and more? Ag Leader has offered the best-of-breed multi-season display for years. So maybe it's not a new trend for everyone, but it might be for you.

Tablet-Like Interaction. Swipe, pan, zoom just like you do with your favorite mobile devices.

THE PRESSIENCES ON FOR HIGHER YIELDS

As part of his own trial, this Nebraska farmer installed Ag Leader's Hydraulic Down Force system on half his planter, while leaving springs on the other half.

magine being able to gain eight to 12 bushels of corn per acre by making just one modification to the planter. For Scott Ringland, who farms around 1,500 acres near Bennett, Nebraska, with his father, Leonard, it's not wishful thinking. It's a reality. And Ringland has 750 acres of proof.

As a part-time salesman for Miller Sales, a Kinze and Ag Leader dealer in Clatonia,

Nebraska, Ringland modified the family's 12-row Kinze[®] 3200 model planter last spring by fitting one half of the planter with the Ag Leader Hydraulic Down Force system. The original springs were utilized on the other six rows.

"The system costs around \$1,000 to \$1,200 a row," Rigland said. "So we decided we could spread the cost over a couple years, and at the same time do a test of our own, rather than looking at a university study, to see how much difference it made in our soils and how long it would take to pay off in our no-till conditions."

"As a result, rows one through six had the original springs for down pressure, while rows seven through 12 had hydraulic down pressure controlled by the Ag Leader controller and Ag Leader Integra display," he added, noting that he also uses the Ag Leader Integra and a GeoSteer system for guidance. "In all cases, I used the same hybrid and plant population throughout the field. However, I did use different hybrids and different brands in nearly every field."

Because he has a six row corn head, Ringland says he was able to harvest each six rows separately and record the results for closer analysis this winter. The only challenge, he said, was listening to the beep each time he turned around as the monitor shifted from one variety to the other.

"What I did was give each side its own identification within the data logging function of the display," he explained. "So if the hybrid number was 213, for example, I'd put 213 on the left side and 213HD on the right side. In effect, the system thinks that it is two different varieties, even though it is the same one. Of course, the Ag Leader Integra monitor makes that fairly easy, since you don't have to run the planting data through the software, like you do with some precision farming systems, to get the variety locations out of it at harvest. In fact, you don't have to create any extra files; you just pull the Ag Leader Integra out of the planter tractor and put it in the combine and you're ready to go."

Ringland said that even though he has followed the crops all through the spring and summer, he has been continually surprised by the results.

"From the start, we saw quicker and more uniform emergence on the side planted with the Hydraulic Down Force," he said. "I've got all kinds of maps that show the springs did what they were supposed to and we regularly checked them for proper tension as well. Yet we still saw all the variability that comes with planting turn rows, compacted areas, etc. I have one map I put together that has all the corn planted with springs in one color, and there's only about eight pounds difference from one area to another. In the meantime, the Hydraulic Down Force side had a range of about 135 pounds from the low end to the high end, which was evident in a whole range of colors."

Ringland said he and Nick Dittmer, a good friend who's an agronomist for

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Rob-See-Co Seed Company, had the most fun with a Rob-See-Co test plot that they put in.

"Nick and I had been seeing the difference all season," Ringland said. "In fact, the hydraulic down pressure side was almost a full V stage ahead of the spring side from the time the crop emerged. In other words, when the hydraulic side was at V3 to V4, the spring side was still at V2 to V3. Later, when the ears developed, we saw more kernels per ear on the Hydraulic Down Force side."

"You could tell right to the row on every pass which rows were planted with the Ag Leader Hydraulic Down Force system," Dittmer recalled. "It was a better even stand, which I attribute to better seed-to-soil contact, more uniform seed depth and less sidewall compaction. And it all starts with better down pressure."

Ringland and Dittmer even had a little fun with one of Dittmer's colleagues when he stopped by one day to look at the plot.

"Another agronomist at Rob-See-Co came out with Nick one day to look at the plot, along with a few of the other fields," Ringland said. "And we didn't tell him how we had planted everything with the split planter. Well, one of the hybrids we had was supposed to be known for quick emergence.

"He probably looked at the plot for 15 minutes before he finally asked Nick, 'So, what's going on here? Did somebody write down the wrong numbers or did you put starter fertilizer on half of the rows as part of the trial?' After we told him about the difference in the down pressure system, his comment was, 'Well if I was the agronomist for this customer, I'd recommend he put hydraulic down pressure on the other half of the planter."

"I could envision as much as 20 or 30 bushels per acre difference between the Hydraulic Down Pressure and the springs on certain parts of a field, such as on the turn rows, had we not gotten as much rain this spring as we did," Dittmer added. "We pulled up a few plants on Scott's fields and even the roots from the side planted with the Hydraulic Down Force system were three times larger than those from the spring side."

Despite the heavy rains early in the season, which kind of leveled the playing field," Dittmer said. The corn planted with the Hydraulic Down Pressure system yielded an average of six to 10 bushels better than the rows planted with spring pressure. He noted that any rows next to a waterway took a loss, regardless of the system.

"The test plot did even better, averaging about eight bushels better," Dittmer said. "I could tell right to the row which rows were planted with springs, as those rows were goose-necked pretty bad. One hybrid, which I didn't plant much of, yielded about 12 bushels better on the Hydraulic Down Pressure rows.

Ringland is still looking at some of the data, particularly on areas that have typically been compacted. However based on what he has seen, Ringland said he is already planning on putting the Ag Leader Hydraulic Down Force system on the other six rows, if not on all 12 rows of a new planter.

"Despite the price, I know the system will pay for itself possibly in as little as one year," he concluded. "However, I want to run the data this winter just to get an idea of how many acres it takes to pay for it. But even with three-dollar corn, we know it will pay off."



"I can envision as much as 40 bushels per acre difference between the hydraulic down pressure and the springs on certain parts of a field, such as on the turn rows."

- Scott Ringland, Nebraska

AGFINITI = INFINITE POSSIBILITIES

Today's agriculture is increasingly data centric. The AgFiniti cloud based platform keeps you connected to your operation, your trusted advisors and your data at all times. Manage all of your data, maps and reports on your laptop or favorite mobile device. Anytime, anywhere.

AgFiniti Mobile

When you leave the field, take

your data, maps and reports with you on your iPad with AgFiniti Mobile. Download the free AgFiniti Mobile app to access your planting, application and harvest information from anywhere.

Plus, AgFiniti Mobile syncs with the new InCommand display (no cables, Internet or USB required), so maps are automatically available on your iPad as soon as you leave the field. Access them anytime, anywhere, for easy on-the-go data management.

Data has never been more crucial to your farming operation. And data management has never been more convenient than with AgFiniti and the new AgFiniti Mobile app. The possibilities are truly infinite.



YOUR WHERE YOU GO.

Introducing InCommand.™

Our smartest, simplest, most flexible display ever. This tablet-like display gives you multiple viewing options and connects to the AgFiniti[®] Mobile app to easily take your maps and data with you on your iPad[®]. Accessible at all times, without Internet or USB drives for improved on-the-go management decisions. Go beyond good enough at **AgLeader.com/InCommand.**











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Tablet-like Touchscreen Innovative Dual Map View Row by Row Mapping On-The-Go Data Management