

John Deere Precision Ag Technology



Innovative solutions.
Exceptional support.

John Deere Precision Ag

A profitable investment all year long

From planning to harvest, only John Deere seamlessly connects machines, people, technology, and insights to give you an advantage. And while other manufacturers bolt-on equipment that may or may not work throughout your production cycle, John Deere develops precision technology specifically for the tractors, combines, sprayers, planters, hay, and tillage products you own... all supported by a single trusted source: your John Deere dealer.

Start with automatic guidance. AutoTrac™ unlocks more efficiency and more profits throughout the year. In fact, studies show that AutoTrac guidance can pay for itself in two years or less, thanks to reduced input use.*

Next, vary the application rate of seed, fertilizer, and fungicides/herbicides where they're most effective, reducing waste – doing it automatically, based on a prescription that you or your trusted advisors create and send wirelessly to your machines.

Stay on top of your equipment, your operators, and your agronomic data from your laptop, smartphone or tablet. And use the **Operations Center** to collect all this valuable information quickly and easily, so you can analyze it to make better decisions, or share it with your trusted advisors.

The premise behind our plan is simple – to help you make more money, year after year. It's easy. It's profitable. And it's all from John Deere.

* Auburn University, 2010



FIELD PREPARATION

Control input costs, reduce waste, increase yield potential.

- Surface Water Pro™ Plus
- iTEC™ Pro
- iGrade™
- Implement Detection
- Pivot Pro
- AutoTrac
- Documentation

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See pages 16-17



PLANTING AND SEEDING

Control input costs, reduce waste, increase yield potential.

- Section Control
- iTEC™ Pro
- SeedStar Mobile™
- Active Implement Guidance
- Rate Controllers
- Implement Detection
- Pivot Pro
- AutoTrac
- Machine Sync

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See pages 18-21



CROP CARE

Take application operations to a new level of productivity.

- Section Control
- Rate Controllers
- Implement Detection
- AgLogic™
- Mobile Weather
- Pivot Pro
- AutoTrac
- Field Connect
- Machine Sync

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See pages 22-29



HARVESTING

Harvest more acres with less effort.

- AutoTrac™ RowSense™
- Harvest Doc
- HarvestLab™ Sensor
- Constituent Sensing
- Machine Sync
- Harvest ID, Cotton
- Harvest Mobile
- Active Fill Control

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John Deere Operations Center

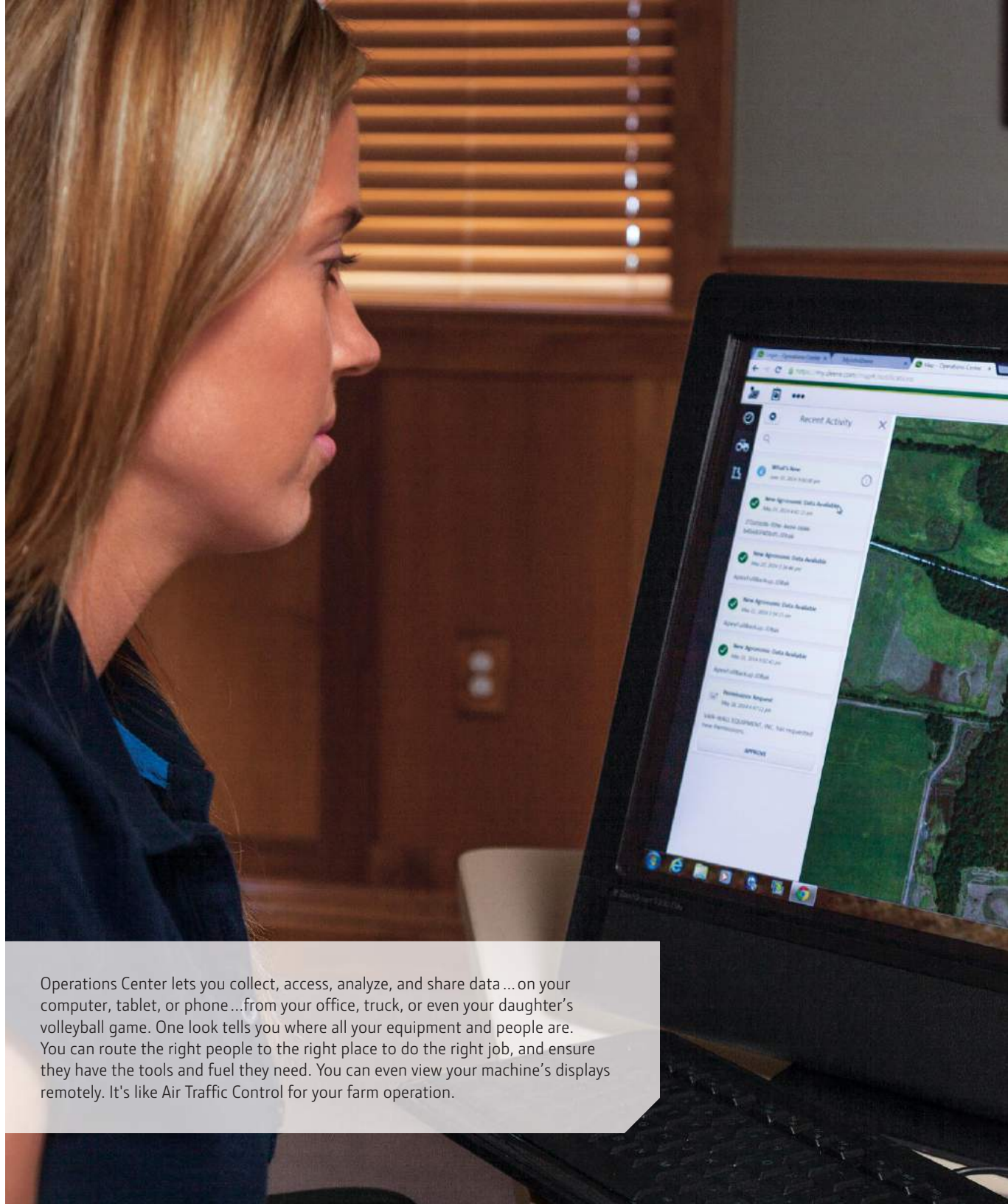
Collecting data on your operation is something you're probably already doing. But that data is of little use to you if it's difficult to access or view. John Deere Operations Center changes all that. It's a centralized online portal that lets you access, view, archive, manage, and share your operation's information.

You can see average yield, total yield, average moisture, seeding variety and rates, machine location and more. The Field Analyzer tool lets you compare these layers side by side. And you can easily share planting, application and yield data with trusted advisors and receive variable rate prescriptions from those advisors.

You can effortlessly send those to your machines in the field. Once you're done with an operation, all that information is waiting for you in the Operations Center to analyze to make improvements for next time.

John Deere gives you multiple ways to transfer data to the Operations Center: JDLink Connect is the easiest and most powerful (see page 6-7); you can also use onboard apps such as SeedStar Mobile (page 19) or Harvest Mobile (page 31). You can manually transfer data with a USB drive, or use Mobile Data Transfer (with iOS or Android) to move data from older or non-John Deere equipment.

The sooner you start using the Operations Center, the faster you can begin enjoying the benefits of the data you're already collecting. It's simple, it's user-friendly and it just makes sense. See your dealer for details or visit MyJohnDeere today.



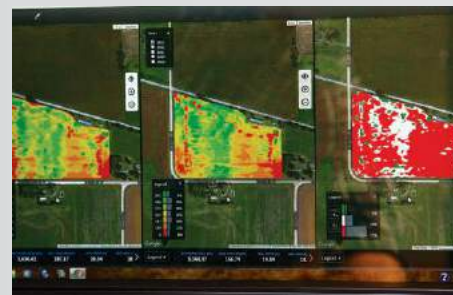
Operations Center lets you collect, access, analyze, and share data...on your computer, tablet, or phone...from your office, truck, or even your daughter's volleyball game. One look tells you where all your equipment and people are. You can route the right people to the right place to do the right job, and ensure they have the tools and fuel they need. You can even view your machine's displays remotely. It's like Air Traffic Control for your farm operation.

JDLink™ Connect*

JDLink Connect features a controller that uses cellular communication and a GPS antenna. Machine and production data are collected by the controller and wirelessly transferred to a server, so you can use the Operations Center to manage your operation without being in the cab. See pages 6-7.

Create new setup files, modify existing ones, and send to the machine via Wireless Data Transfer or manually on a USB stick.

Location History lets you view the path traveled by a machine over a 24 hour period for up to 60 days. Monitor location, ground speed, heading, and machine state information (working or idle).



Remote Display Access lets you and your trusted partners remotely view an operator's screen, to resolve issues or make changes without making a trip to the field. Your dealer can also reduce downtime by reading diagnostic codes remotely, as well as recording performance readings. See pages 34-35.

Field Analyzer makes it easy to compare all the data for your operation. Lay the maps side-by-side to evaluate yield impact, for instance – then send seeding prescriptions wirelessly to the field to vary rates on the go. Or, if you need help with analysis, you can easily share data back and forth with trusted partners you select.

Job Monitor lets you replace to-do lists and phone calls with tools in the Operations Center that sync with the MyJobsApp on your mobile device, which keeps your operators on track and you informed.

* Activation/subscription required. Some additional accessories and/or components may be required. JDLink requires a cellular connection to transfer information from machine to JDLink website. Consult your local John Deere Dealer for coverage availability.

JDLink™ Connect

The next-best thing to being in the cab

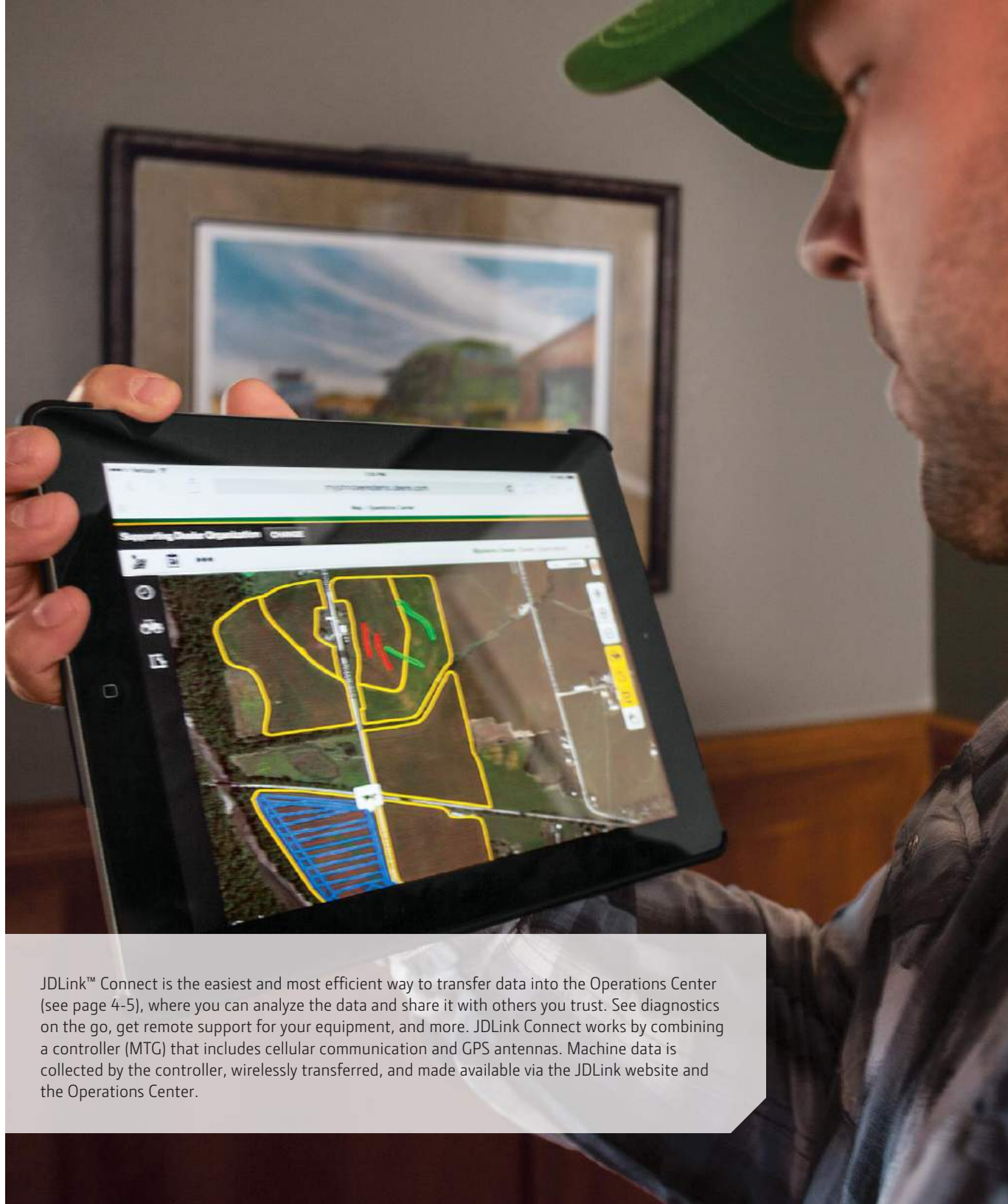
Now, you can manage your operation in real-time without being in the cab. Or, take your operation to the next level of productivity and efficiency without leaving the office.

Simply put, JDLink Connect is a connection between you and your machines. You can view what they're doing and where, including fuel usage. Protect your machines with geofence and curfew alerts. Monitor diagnostic codes remotely to identify small problems before they become big problems. Send setup files, prescription, and documentation files to your operators in the field. Share data with your trusted advisors.

An optional satellite modem is available for areas where cellular signals are not available or reliable. JDLink will still connect via cellular connection unless a connection cannot be established. Then JDLink will switch over to satellite mode.

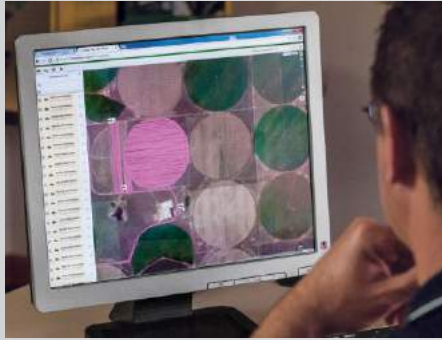
See your John Deere dealers for the long list of John Deere self-propelled machines available with JDLink Connect, including:

- 5M, 6030, 6R, 7030, 7R, 8030, 8R/RT, 9030, and 9R/RTX Tractors
- 7760, CP690, and CS690 Cotton Pickers and Strippers
- 8000 Series Self-Propelled Harvesters
- S, T, and W Series Combines
- 4630, 4730, 4830, 4940, R4030, R4038, and R4045 Sprayers
- Sugar Cane Harvesters.

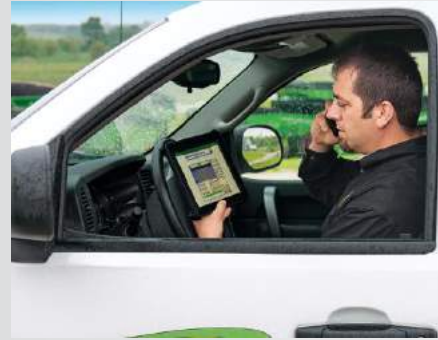


JDLink™ Connect is the easiest and most efficient way to transfer data into the Operations Center (see page 4-5), where you can analyze the data and share it with others you trust. See diagnostics on the go, get remote support for your equipment, and more. JDLink Connect works by combining a controller (MTG) that includes cellular communication and GPS antennas. Machine data is collected by the controller, wirelessly transferred, and made available via the JDLink website and the Operations Center.

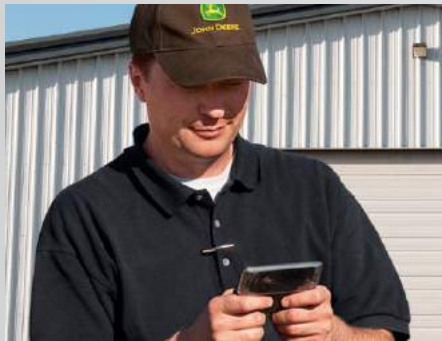
3 WAYS TO SUBSCRIBE TO JD LINK™



JDLink helps get the right employee and machine power to the right location in the operation. That can mean the difference of getting crops planted minutes before the storm comes or even impact the ability to commit to another customer about availability. JDLink helps route support vehicles such as fuel, seed, and fertilizer by showing you the last known location on the map.



By partnering with your dealer and using JDLink, remote diagnostics for your equipment is a reality. Your dealer can use JDLink to retrieve diagnostic trouble codes and maintenance data to identify problems or maintenance needs before the technician leaves the dealership. The benefits: greater efficiency and improved uptime. See pages 34-35.



Locate machines on the go with the JDLink app for iOS or Android devices. No need to start up your desktop, launching the app only takes a few seconds.



For mixed fleets and non-powered equipment, JDLink Universal Telematics can help you track and monitor a broad array of assets with the convenience of monitoring all of them in one spot on the JDLink website.

1 JD LINK CONNECT

JDLink Connect provides the most information to enhance management. Sending documentation from the GreenStar™ 3 2630 Display, Location History, remote diagnostics, machine performance, and efficiency metrics can only be found with this offering.

2 JD LINK EXPRESS

JDLink Express focuses on some of the key information that is required for daily operation like location, engine hour usage, and alerts for unexpected movement of powered equipment or asset outside of normal working hours and boundaries. JDLink Express also allows you to proactively manage equipment maintenance and repair.

3 JD LINK LOCATE

JDLink Locate allows the user to keep an eye on assets or equipment (both powered and non-powered) that could be easily misplaced during daily operation. A battery powered device reports location of the equipment or asset twice a day.

AutoTrac™ Precision Guidance

Take guidance to the next level

Add up everything you spent last year on inputs. Now divide by 10. That's what you could save each year with GPS-based guidance. That's right – university research* shows an average of **10% reduction of inputs** in planting and fertilizing. Add automated section control and save 20% or more. Have irregularly shaped fields? You'll save even more.

In fact, these studies show that automatic guidance can pay for itself in two years. Or fewer. Factor in how relaxed you'll be at the end of a long but hands-free day in the cab, and only one question remains: Why aren't you using AutoTrac?

10%
LESS INPUTS

in planting and fertilizing with GPS-based guidance

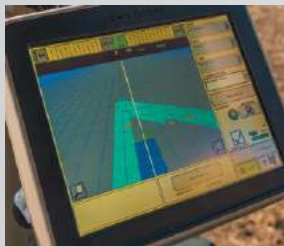


AutoTrac Guidance can save you time and money during harvest operations. Or tillage. Or seeding. Or spraying, or haying, or chopping, on your newer John Deere machines, older John Deere machines, or even some other brands. It's easy to set up and operate, and it's supported by a single trusted source: your John Deere dealer.

* Auburn University, 2010



Guidance starts with a StarFire Receiver. You can choose the accuracy you need, ranging from plus-or-minus 9 inches (recommended for many broad acre applications) down to sub-inch accuracy with RTK.



With the addition of Coverage Map Sharing and Guidance Line Sharing, Machine Sync allows you to run multiple machines in the same field at the same time with precision accuracy.

Add a GreenStar™ 2630 Display, which allows you to run AutoTrac, as well as a host of other precision farming applications. Press a button, and let AutoTrac take over the steering. Grab the wheel at any time to resume control. It's literally that easy. You can also run AutoTrac from the Gen 4 CommandCenter Display (MY2014 and newer 7R and 8R Tractors, MY2015 and newer (6R and 9R/9RT Tractors).



John Deere Machine Sync allows a combine operator to automatically control the location of a tractor and grain cart while unloading on-the-go, which is not only a time-saver, it lets you put more grain in the cart, with less spillage.



Take advantage of AutoTrac on older machines and some competitive machines with AutoTrac Universal and AutoTrac Controller. See your John Deere dealer for details and the long list of compatible machines.



AutoTrac™ RowSense™

Reap the rewards of a hands-free harvest

AutoTrac RowSense is the next step to pinpoint accuracy in corn harvesting. Fusing satellite correction data from the StarFire™ receiver with feeler data gathered from row sensors enables you to operate hands-free in corn, even in weedy conditions, curved passes, and downed corn.

AutoTrac RowSense is available on a long list of combines and new and older John Deere and non-John Deere corn heads, as well as on select John Deere cotton pickers, cotton strippers, and self-propelled forage harvesters. See your dealer for compatibility details.

Pivot Pro

Pivot Pro allows automatic guidance in defined concentric circles in fields with center-pivot irrigation systems. Pivot Pro brings the value of AutoTrac™ to producers using center-pivot irrigation, which includes reducing overlap and operator fatigue, while increasing productivity and profitability.

John Deere Machine Sync

Increase efficiency by showing multiple machines in the field at the same time. John Deere Machine Sync allows coverage map sharing and guidance line sharing to improve planting, seeding, spraying, harvest, and nutrient application. This increases efficiency in the field, because two machines can work simultaneously with each operator having immediate access to coverage maps and guidance lines to ensure complete field coverage.

It's simple to set up and use, even for inexperienced operators. And the full-color GS3 2630 Display provides all machines in the network visibility to real-time logistics and coverage data for every machine in the network.



John Deere Machine Sync provides operators of combines and tractors logistical information never before available. From a single map view on the GreenStar™ 3 2630 Display, operators are able to view up to ten machines operating within a single network.



When you pair Section Control with Machine Sync, you can run multiple planters in the same field and save both time and seed. Section Control automatically turns sections off and on based on another machine's coverage, so you'll have peace-of-mind knowing that you didn't waste seed on headlands, or overlapping passes.



Here's how Machine Sync works during harvest:

From the combine cab, a single glance at the display shows you where all the combines and tractors are in your network. As the combine operator, you can send a "ready-to-unload signal" and the software provides the combine location and bin-fill status to the cart operator, who can determine how quickly the combine will need to unload, prioritize which combine to go to first (when multiple combines are in the field), or call in additional carts as necessary. This can reduce wait time, fuel consumption, and even ground compaction.

When the tractor and grain cart pulls alongside your combine, Machine Sync lets you control the tractor's speed and location from the combine cab, to mimic the movements of the combine as it unloads. This reduces spillage and operator stress, and ensures maximum harvesting uptime for the combine.

When used in a harvest operation, coverage map sharing allows a machine to more accurately calculate harvested area by using another machine's coverage to enable overlap control. Machines can share coverage using an MCR or modular telematics gateway (MTG) 3G solution.

iTEC™ Pro

How do you make AutoTrac™ even better? With Intelligent Total Equipment Control. iTEC Pro is an activation that coordinates tractor and implement functions with end turns. Plus, this system positions the tractor and implement correctly for the next pass, which increases both accuracy and efficiency.

Here's how it works:

1 As you approach your headland, iTEC Pro works with AutoTrac guidance through your GreenStar 3 display to automatically...



2 Slow the tractor, raise the implement, and turn the tractor...



3 And reengage the implement and resume planting speed, all hands-free.



iTEC Pro is used with the StarFire 3000 Receiver and GreenStar 3 2360 Display.

Active Implement Guidance

Precision counts – especially when planting or working potato fields, strip-till corn or cotton, or specialty crops. That's why you need Active Implement Guidance. It's an active implement guidance system that keeps your tractor and implement on the same A-B line. So not only do you get increased accuracy for input placement, but also unmatched repeatability at the implement. The benefits are clear: Reduced input costs, less disturbance of post-emerged crops, and easier operation, especially on guess rows. Active Implement Guidance works with Shared Signal when using a StarFire 3000 Receiver.



Active Fill Control

Available on 8000 Series Self-Propelled Forage Harvesters, Active Fill Control uses cameras to automatically detect the crop transport truck or trailer and fill it evenly without spillage. See page 32 for details.

The do-more display: The GreenStar™ 3 2630 Display

Get more capability, more reliability, and more visibility

The GreenStar 3 2630 Display offers a long list of high-value features, including a crisp touch-screen with lightning-fast operating speeds, video capabilities, operator lockouts, and improved field locator functionality... in a highly reliable package... all supported by your trusted John Deere dealer. Just take a look at the many features the GS3 2630 Display boasts:

GREENSTAR 3 2630 FEATURES

- Wireless Data Transfer
- Remote Display Access
- Improved touch-screen display
- Access Manager (operator lock-out)
- Video capability
- USB data port
- Stand-by mode
- Documentation
- On-screen mapping
- AEF ISOBUS capability
- Run single or multiple applications at once
- Customizable home page

DOCUMENTATION FEATURES

- As-applied maps
- Color coverage maps
- Prescription overview layers
- Visual flag indicators
- On-screen keyboard
- Dual varieties
- Variable-rate prescriptions

STANDARD GUIDANCE FEATURES

- Viewable headland boundaries
- Boundary proximity indicator
- Perspective and overhead views
- Multiple A-B lines per field, including straight track, swap track, circle track, A-B curves, adaptive curves, and row finder
- Guidance path accuracy indicator
- Parallel Tracking

Remote support is never more than a phone call away with your GS3 2630 Display and JDLink Connect. Your dealer can remotely access your display and quickly determine the problem. See pages 34-35 for details.

ENHANCE YOUR GS3 2630 DISPLAY

- **AutoTrac™**: Precision guidance
- **AutoTrac RowSense™**: Precision guidance for harvesting
- **Machine Sync Coverage Map Sharing**: Automated unloading on the go and real-time combine and grain cart location
- **John Deere Section Control™**: Automatically turn sprayer and planter sections on and off
- **iTEC™ Pro**: Automated headland turns for tractor and implement functions and headland turns
- **Surface Water Pro™ Plus**: Laser-free levees and advanced ditching capabilities
- **Remote Display Access**: Remotely access your operator's display
- **Wireless Data Transfer**: Easily move data to and from your machines to the Operations Center





Integration has never been easier than the Gen4 CommandCenter,[™] available on MY14 and newer 7R and 8R and Tractors and MY15 and newer 6R and 9RTX Tractors. The redesigned user interface works like a tablet – simple to read, and incredibly easy to navigate. The Gen4 CommandCenter AutoTrac activation includes circle track and has the best value proposition in the industry. Ask your dealer about the latest operating experience with the Gen4 CommandCenter on new tractors.



The GreenStar[™] 2 1800 Display is a 7-inch full-color display with a simple interface and smaller price tag. You can easily toggle between multiple home pages to monitor more than one in-field activity and navigate through fields with greater control and confidence.

A beacon for profit, at every level

Just as there are different agronomic practices, operators require different accuracy levels. Using our own StarFire™ network we can provide you with a reliable, accurate, and repeatable signal customized to your needs, delivering the accuracy and control you demand.

If you have heavily-treed fence lines or hilly ground, then you need the StarFire™ 3000 Receiver. It delivers outstanding reception in shaded conditions, holding a signal longer and reacquiring it faster than any previous model. That means maximum up-time and accuracy for you.

But that's not all. The StarFire 3000 also provides improved performance in sloping terrain, as well as increased satellite availability through GLONASS, the Russian satellite constellation. Finally, the StarFire 3000 offers the ease of over-the-air receiver activation. Add it all up, and you have a receiver that's made not just for the shade, but for any conditions you can throw at it.

SIGNAL ACCURACY LEVEL

SF1†: +/- 9-in.

SF2†: +/- 2-in.

RTK: +/- 1-in.

†SF1 and SF2 accuracy levels are described on a pass to pass basis measured at the receiver, within 15 minutes, 95% of the time.



StarFire 3000 Receiver

With this receiver you can get started into precision guidance at the accuracy level you need at the time. From SF1 to the one-inch, repeatable accuracy of RTK, the StarFire 3000 Receiver grows with you.





Customized signal accuracy

John Deere offers its own differential corrections through the StarFire network. Developed in 1998, the StarFire network was the world's first Global Satellite-Based Augmentation System (GSBAS) capable of decimeter real-time accuracy.

Everyone uses the same raw satellite signals, but differential corrections are another story. Because John Deere owns its own network of reference stations and processing hubs, users do not have to rely on Wide Area Application Services/European Geostationary Navigation Overlay Service (WAAS/EGNOS) or go to a third-party differential corrections service.

SF1. The John Deere-exclusive SF1 differential correction signal delivers +/- 9-inch pass-to-pass accuracy, allowing you to take your hands off the wheel and increase performance in many farming operations. Ideal for tillage, seeding, and broad-acre spraying.

SF2. If you need higher accuracy, you can upgrade to SF2, which delivers +/- 2-inch pass-to-pass accuracy, to help you stay productive and focus on needed tasks while traveling down the field. Ideal for tillage, row-crop planting, seeding, self-propelled spraying, and broad-acre harvesting.

RTK. Use cropping practices that require the ultimate in accuracy? Then go with RTK. It provides +/- 1-inch accuracy and repeatability pass to pass. Take advantage of a John Deere dealer-owned RTK network, or set up your own. Ideal for sub-surface irrigation lines, high-value crops on beds and narrow strip-tilled furrows.

Two John Deere RTK Radios. The John Deere 450 RTK Radio (FCC or Industry Canada license required) improves your signal coverage and maintains RTK's one-inch accuracy, even in challenging terrain or dense foliage conditions. The John Deere 900 RTK Radio is still the ideal choice for normal conditions.



Dealer-owned RTK Networks

Hundreds of millions of acres are covered and supported by John Deere dealer-owned RTK networks. And because the towers are supported by your local dealer, you can operate with the confidence that someone you know and trust will be there to answer your call when you need help.

Prepare the soil for next year's planting season

No matter what soil conservation practice you follow, your John Deere dealer can help you be more efficient in meeting your goals to size and distribute residue, fracture the soil, and level the soil profile to achieve an optimum seedbed.

Your dealer will start by recommending tillage tools to meet your goals, but it takes more than just having the right tool. They can make sure the right tool is properly set up and leveled for operation. They can also diagnose a trouble area left behind the tool, whether that was due to the machine or operator.

Your John Deere dealer can go to the next level of support by managing machine health by proactively monitoring JDLink alerts and with Remote Display Access they can remotely diagnose potential concerns by reviewing settings on the GreenStar 3 2630 display – all in an effort to keep you up and running, allowing you to be more productive at the end of the day.

If you're running a 2730 Combination Ripper, TruSet™ technology lets you easily dial in accuracy to 1/10th of an inch and adjust pressure up to 900 psi ... all from the comfort of your cab. And do it within seconds, rather than minutes.



Reduce operator errors and ensure implements are set up exactly the same from year to year. Add Implement Detection to your equipment and your operators will no longer have to remember their last settings and offsets.

When a piece of equipment with Implement Detection is connected to a tractor using the GreenStar™ 2630 Display, you get a notification on the screen indicating the implement's name, connection type, and other settings you've made previously. You can simply accept the settings and start working ... or make adjustments as necessary.

The next time you hook up your tillage equipment, the system remembers the last settings you used, saving you valuable time and letting you get to work faster.



The GS™ 2630 Display makes it easy to document all your tillage practices for later analysis. For instance, you can easily compare different practices to yield maps to see which had the best result.

iGrade™ – Automated Water Management

For an advanced approach to leveling, ditching, grading, and plane generation, choose iGrade. This application automates the hydraulic commands of a scraper blade or pan, making your water management practices hassle-free. iGrade also automates Surface Water Pro™ Plus, so ditching is even easier. Talk to your John Deere dealer to learn how iGrade can create cut-fill maps for your operators, ensuring dirt-moving efficiency.

The Distance Trip feature lets you engage the tractor's hydraulics based on distance traveled – a real advantage when creating furrows in headlands.

Surface Water Pro™ Plus

Build levees and ditches easily – no lasers required. This software lets you see everything on your GreenStar™ 3 2630 Display. One person can work a field in less time, reducing fuel and labor costs.

The Surface Water Pro Plus screen allows you to steer the tractor left or right to keep elevation consistent. The levee track is recorded so you can use AutoTrac to automatically follow the correct path the next time you're in the field.



Be ready for any kind of planting season

Whether you have a perfect window for planting or the shortest one yet, you can get it done with John Deere. Your dealer can verify that last year's data is cleared, that fields, crop varieties, and prescriptions are loaded, that seed meters and variable rate drives are calibrated, and that data is being accurately collected. Talk to your dealer about coordinating your planting setup information from your machines to the Operations Center.

If you have operators who need a refresher course on equipment operation, ask your dealer about a start-up assistance plan. With remote support, your dealer can also see what's going on in the cab.

Spend less time setting up your implements or trying to remember what adjustments were made last time. Implement Detection automatically populates implement and task settings from the last time the implement was used.



ExactEmerge row units let you plant accurately at speeds up to 10 mph (16 km/h) in corn or soybeans... and transfer critical seeding data to your home office even faster, with Wireless Data Transfer. The GS3 2630 Display makes it easy to document all your seeding data, including prescriptions, for later analysis. For instance, compare different rates or varieties to yield maps to see which had the highest impact. You can also create variety locator maps to use at harvest.



SeedStar Mobile™

Planting windows are getting shorter, and seed costs aren't going down... so it's vital to make every seed count. SeedStar Mobile makes it a whole lot easier.

One glance from your tractor seat gives you a wealth of information on a row-by-row basis. You can see skips or doubles instantly. You'll have confidence that your planter is performing at optimum levels, and if it isn't, you'll know which row unit needs attention. You can see fluctuations in singulation as they occur. And, most important, you'll have the information you need to correct these and other issues, quickly, which is a lot better than running 30 or 40 minutes and covering a big chunk of acreage before you notice something's wrong, or jumping out of the cab and digging in the row to make sure everything is well.

Customize the screen's dashboard to see the variables most important to you. You can choose from actual population, singulation, seed spacing COV, applied downforce, ride quality, gauge wheel margin, variety, and more.

Get more out of your investment in seed and time. SeedStar Mobile makes it easy. See your dealer for details, today.

Don't leave yield in the field

As input costs continue to increase, minimizing passes through the field and overlaps has become more important. John Deere offers tools to keep you in control of your costs.

Section Control lets you reduce input costs by turning sections on and off. Whether on sprayers or planters, by shutting off sections where product has already been applied or planted or when crossing over waterways, Section Control helps to reduce input costs and environmental impact. Paired with AutoTrac™, you can eliminate skips and overlaps, reducing your seed or input costs and increasing yield potential.

On planters, add **RowCommand** to place seed only where you want it, saving 2-8% in seed usage.

SectionCommand, available on all tow-behind and tow-between 1910 Air Carts, controls output from all meters on the cart in up to eight sections.



John Deere makes it easy to vary seed and fertilizer rates based on field types and conditions, or to set up management zones to test rates or hybrids. Equip your planter with RowCommand™ to reduce overlap and save seeding costs.



Machine Sync allows coverage map sharing and guidance line sharing to improve planting, seeding, spraying and nutrient application. This increases efficiency in the field, because two machines can work simultaneously with each operator having immediate access to coverage maps and guidance lines to ensure complete field coverage. Use Machine Sync in tandem with Section Control to ensure you're not overlapping at any point, which wastes seed (and money).



Section Control is versatile and adaptable. It can be used to provide producers with the benefits of John Deere Section Control throughout multiple operations and seasons. In addition to letting you control planter units to deliver seed only where you want it (top left), you can also control sprayer boom sections to reduce inputs on waterways or turnrows, and to minimize drift (top right), control implement sections when applying nitrogen or other inputs (bottom left); and even control product bins (bottom right).

Take control of your input costs with John Deere Section Control and AutoTrac™ John Deere Section Control provides automatic section control for both air carts and CCS™ planters and turns individual sections on and off.

GreenStar™ Rate Controllers

Add new capabilities and better in-field performance to your GreenStar 3 2630 Display, without the cab clutter. Rate Controllers allow your display to integrate with many implements, such as nutrient applicators, sprayers, manure applicators, liquid fertilizer applicators and planters. They also help you accomplish rate control and map-based prescriptions.

The GS Rate Controller is a component that allows the GreenStar display to integrate with many implements, such as non-John Deere pull-type sprayers, anhydrous ammonia applicators, liquid manure spreaders, liquid fertilizer systems, and some planters.

Rate Controller Dry is a component that allows the GreenStar 3 2630 Display to integrate with non-John Deere self-propelled and pull-type dry box spinner spreaders and multi-tank air carts.

The GS3 2630 Display lets you capture where you applied nutrients and pesticides, plus the rate, and even the time. This improved record keeping is a real plus at planning time, as well as helping you comply with regulations.





Equip your 2510H Applicator with the AccuFlow Vortex Cooler Kit and apply anhydrous and dry simultaneously. See page 25 for more information on Raven products.



Liquid or Dry: John Deere Delivers

As input costs have increased, minimizing the number of passes taken through the field has become more important. GS™ Rate Controller helps you accomplish rate control and map-based prescriptions; Rate Controller Dry has the capability of operating a dry box with up to four product bins and spinners.

John Deere Mobile Weather

Mobile Weather uses a sensor to display and document real-time weather on the GreenStar™ 2630 Display, including, wind speed and direction, Delta T,* temperature, and relative humidity.

Unlike other systems, which force you to stop spraying, climb out of cab, and use a hand-held device to check prevailing weather conditions, Mobile Weather lets you make in-cab product application decisions based on location-specific data.

You can also input your own spraying parameters into the system, and receive notifications when the present conditions are outside these preset parameters.

*Delta T is an important indicator for determining acceptable spraying conditions. It indicates evaporation rate and droplet lifetime, and is calculated by subtracting the wet bulb temperature from the dry bulb temperature.





Joining forces to bring you more precision

Sometimes, in doing business, you find an opportunity to work with another company to carry products that complement John Deere equipment. Your John Deere dealership now carries a select group of **Raven Industries** precision products to help you improve the efficiency of your nutrient and chemical application.

1

Raven **AccuFlow™ Vortex or AccuFlow Single Cooler** is a trusted NH₃ application system that delivers superior accuracy, ease of operation and reliable results. AccuFlow is an intricate part of the John Deere NH₃ system that ensures your crops get the NH₃ they need where they need it. AccuFlow Vortex cooler allows more application of anhydrous at faster speeds and cooler temperatures.



2

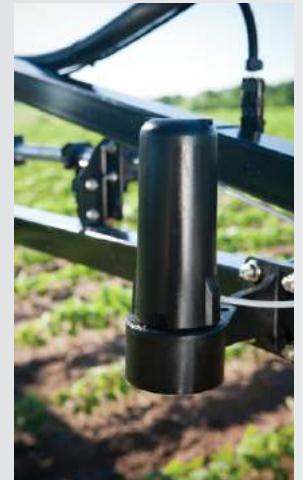
Raven **Sidekick™ Pro™** is an ISOBUS direct-injection system that improves efficiency when spraying chemicals or applying nitrogen stabilizers with anhydrous ammonia (NH₃). With this system, you can spend more time in the field and cover more acres per day, ultimately saving money, effort, and time.



3

Raven **AutoBoom™ PowerGlide Plus™** and **UltraGlide™** control the height of your boom to maintain a more uniform spray coverage and put less wear and tear on the boom. PowerGlide Plus uses wheel sensors to control boom height. UltraGlide uses ultra-sonic sensors to control boom height.

4



Raven Industries, AccuFlow, Sidekick Pro, AutoBoom PowerGlide Plus, and UltraGlide are third-party trademarks. Used with permission.

John Deere Field Connect™

You already know that moisture levels vary from field to field and plot to plot, but knowing when yield-robbing variances occur isn't as easy to predict. Now it is with John Deere Field Connect in-field monitoring. This straightforward solution helps you pinpoint where crops thrive, resources are protected, and profits soar.

Intuitive and easy to use, John Deere Field Connect comes with the full support of your John Deere dealer. Field Connect uses field-installed probes to monitor moisture levels at various depths. It then sends the information to the web-based interface where you can see the data on your computer or mobile device.

Additional environmental sensors are available to monitor temperature, humidity, wind speed and direction, and also to measure rain and leaf wetness. At the office or in the field, you and your John Deere dealer can instantly see if your soil moisture levels are balanced and decide what measures need to be taken. Without delay or guesswork, you can advise your crew to make the adjustments needed to protect your yields and reduce costs.





When timely decisions matter, quick issue resolution and support for the decision-making process are key. The John Deere Field Connect™ solution is supported by an organization no one else in the industry can rival: the John Deere dealer. Armed with the resources to resolve any support need and backed by the expertise of a company admired around the world, John Deere dealers can provide local, customized decision support to meet the needs of their producers.



And now you can stay connected on your mobile device with Field Connect Mobile. Available on the App Store in iTunes or from supported web browsers, Field Connect Mobile lets you quickly monitor soil moisture levels and view environmental sensor measurements. You can also add notes to a management zone, and get hardware status for your Field Connect monitoring equipment.



Wireless radio kits let you install up to eight different probes in different parts of your field, tied to a single gateway. Not only does this significantly reduce overall costs, it gives you a much clearer picture of your field, including different soil types that may require different irrigation strategies. With 3G coverage, you can install up to eight probes within a mile of a gateway; with satellite coverage, up to 3 probes within a mile.

The John Deere Field Connect™ solution offers optional environmental sensors to enable producers to make decisions with site-specific information pertaining to the environment.

Available sensors collect information on air temperature, soil temperature, solar radiation levels, and precipitation. This information can be used to calculate many measurements that aid in determining depletion rates of soil moisture, timing for field applications, and field preparedness for various activities. One calculation is reference evapotranspiration. Calculated from environmental sensor values, reference evapotranspiration (ET) has been shown as a daily value on the landing page. This value can be viewed as a data layer on the graph, allowing for trending and historical data display.

Choose from three probe lengths: For shallow-rooted crops, the 0.5-m (1.6-ft) probe is available, offering a four-sensor configuration. Utilized for most row-crop solutions, the 1-m (3.3-ft) probe provides a five-sensor configuration. Designed for deep-rooted crop types, our 1.5-m (4.9-ft) probe can be used in orchards and vineyards and has a six-sensor configuration. The sensors are located in the probe to match the key areas of a plant's root structure.

Leaf wetness sensors are also available to aid in disease modeling and prevention activities. When paired with a John Deere Field Connect Gateway and its reliable communication systems, these environmental sensors can provide key information to optimize a producer's operation.

AgLogic™

The AgLogic system is a proven software solution helping Ag Retailers deliver the right resources to the right place at the right time. Combining GPS, cellular technology, and web-based software, AgLogic helps you graphically manage your fleet and improve the productivity of all your John Deere equipment, other brands of application equipment, and your tender fleet.

Work orders from select agronomic work order systems seamlessly flow into the AgLogic web application. From there you can schedule work to machines and tender equipment with a mouse click. The work order information and associated prescription application files are delivered wirelessly to the vehicle. Within the application you can easily see what work is being done by any vehicle in your fleet, how close they are to being finished with their current job, and how many scheduled jobs and acres they have left for the day.

Once the operator finishes and signs off on the application job, the completed work order flows back to the web application wirelessly and is available for billing within minutes. Optional text messages or email notifications of completion can be automatically sent to growers saving you the effort of trying to get in touch with them to let them know the work is finished.





The schedule and dispatch feature enables the scheduling and re-prioritization of work orders to an applicator and its supporting tenders. It shows all work orders georeferenced, using field boundary information; Allows assigning work orders to equipment, including the application and tender; Optimizes the routes for selected equipment; and Improves office efficiency by scheduling with a Web-based system that automatically sends work order information to the operator in the field.

File transfer enables two-way file transfer between the office and the field. The AgLogic™ system can wirelessly send a prescription file to the mobile device in the applicator, or directly to the GS3 2630 Display using Wireless Data Transfer (John Deere equipment). When the file is received, the operator is prompted that a file is attached to the work order information. The file can then move from the mobile device to a jump drive or card and then into any controller.

Fleet Management made easy

Harvest can be a stressful time of year. There's a lot to do and only so much time. But with John Deere, you can harvest smarter than ever. For example, with an S-Series Combine and Machine Sync, you can control the location of the tractor and grain cart from the cab for on-the-go unloading. This helps reduce wait time, operator stress, spillage, fuel consumption and even soil compaction. And with JDLink Connect, you'll know the hours and location of your equipment, track fuel usage, plus receive machine health alerts.





During harvest, JDLink can also help you analyze combine settings such as how much time the operator spends turning on the headland, unloading, or waiting to be unloaded with a full grain tank. And JDLink will provide machine specific setting information for your machines. You can log into JDLink and view the set point of your machine to know how the operator has it set.



Harvest Mobile works directly with your iPad to deliver in-cab visuals of mapping layers such as ground speed, wet yield, dry yield, and moisture. You can see exactly what's going on in the field. It also displays machine settings at a glance. Harvest Mobile simplifies the Interactive Combine Adjustment (ICA) capabilities of your combine. With ICA, machine setting adjustments can be quickly and easily made, helping the operator go from novice to know-it-all in far less time. Combines equipped with Harvest Mobile can also take advantage of Job Monitor. Data gets streamed through your tablet to the Operations Center. There, a job will be created where a manager/dealer can view the job monitor.

Harvest Lab and Constituent Sensing

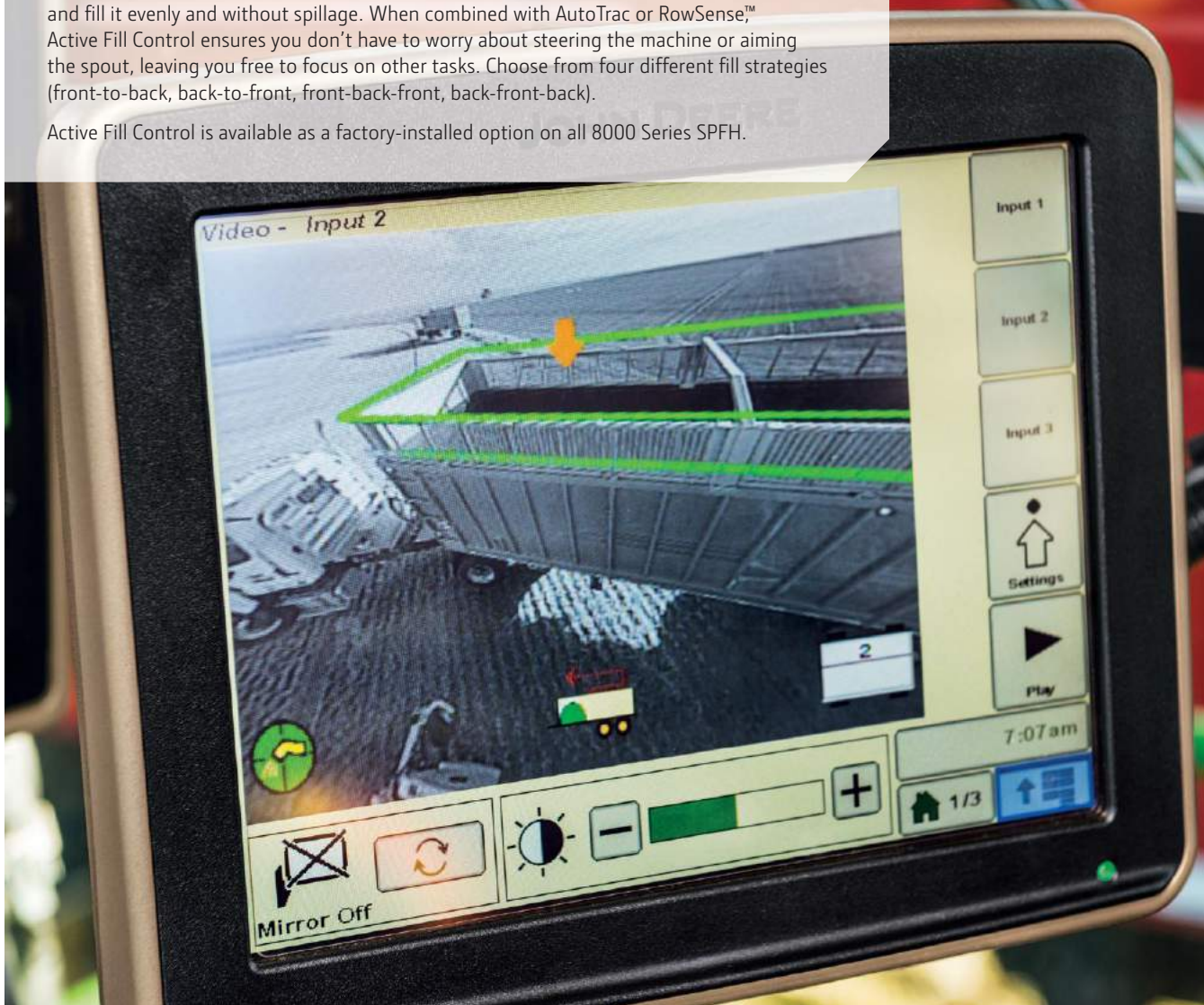
Beef and dairy producers can now determine (and improve) nutrient quality of corn silage, alfalfa, and other crops using John Deere HarvestLab. In addition to dry matter content, which HarvestLab has traditionally been used to measure, the expanded Constituent Sensing capabilities will be able to predict crude protein, starch and fiber (ADF/NDF), which are important nutrient factors in livestock feed. These constituent sensing calibrations have been developed for John Deere in partnership with DairyLand Labs, a recognized expert in forage analysis.

With real-time nutrient analysis, producers and nutritionists can more easily and quickly analyze feed rations for crude protein, fiber and other factors and make adjustments on a daily basis to improve nutrition and reduce feed variability.

The Constituent Sensing enhancement for corn and alfalfa also enables more precise application of silage inoculants at harvest because rates can be adjusted according to crop and dry matter readings. The result is higher quality silage with greater feed value and less spoilage.

Active Fill Control uses cameras to automatically detect the crop transport truck or trailer and fill it evenly and without spillage. When combined with AutoTrac or RowSense,[™] Active Fill Control ensures you don't have to worry about steering the machine or aiming the spout, leaving you free to focus on other tasks. Choose from four different fill strategies (front-to-back, back-to-front, front-back-front, back-front-back).

Active Fill Control is available as a factory-installed option on all 8000 Series SPFH.



The HarvestLab moisture sensor uses Near-Infrared Technology (NIR) for accurate readings that aren't affected by humidity or atmospheric conditions. You'll get instantaneous moisture data, as well as yield data, that can be used in the cab to make informed decisions during harvest. The information can also be stored for later analysis and reporting.



John Deere Harvest Identification, Cotton

Module identification and manual tagging at the gin are a thing of the past...as are the extra resources needed to conduct these functions. Using the RFID reader on board the CP690 Cotton Picker or CS690 Cotton Stripper, the system reads the RFID serial numbers embedded in the module wrap, documents 18 of the most important data points during module formation to improve traceability of cotton modules as they move from the field to gin yard and through the ginning process, and sends the information to the Controller. The controller collects the information and simultaneously displays the module count and serial number, and stores the information as a .txt file on the GreenStar™ 3 2630 Display. Once the information is collected it can be easily pulled off the Display via data card or USB drive or sent to the Operations Center via Wireless Data Transfer, where it can be shared with the gin.



Harvest Identification, Cotton makes the traceability of cotton modules easier. At the gin, the system tracks modules back to the field to help understand lint yield, and validate varieties of cotton planted – especially important to gins that process specialty cotton.

AutoTrac Row Sense keeps your attention on picking or stripping cotton more efficiently, instead of driving down the rows. The system uses feeler data gathered from the sensors to operate the steering, keeping you on the row at all times, letting you focus your attention on machine performance.

Remote, but still in control

Whether you manage employees and an entire fleet or own and operate your own equipment, your challenges are similar: keeping the equipment in prime condition, managing costs, and protecting your investment. With JDLink Connect features like Wireless Data Transfer and Remote Display Access, accomplishing these tasks is simpler than ever. No matter whether you're at home or in the office, you also can be in the field actually seeing your operator's screen on your computer, smartphone, or tablet.

And now, by partnering with your dealer and using JDLink Connect, remote diagnostics for your equipment is a reality. Your dealer can use JDLink to retrieve diagnostic trouble codes and maintenance data to identify problems or maintenance needs before the technician leaves the dealership.

The benefits: greater efficiency and improved uptime. JDLink Connect is available for all makes, all models with a 12-volt hook-up to complement your fleet. For mixed fleets and non-powered equipment, JDLink Universal Telematics can help you track and monitor a broad array of assets with the convenience of monitoring all of them in one spot on the JDLink website and at the Operations Center.



Service ADVISOR Remote

Service ADVISOR Remote allows your dealer to make sure your equipment is running at peak performance. It saves you time on repairs as your dealer doesn't have to make a visit to carry out diagnosis and then a follow up visit with the appropriate parts. Instead they can remotely identify any issues, diagnose the problem and bring out the right parts – all in a single visit.

Remote Display Access

Remote Display Access (only available with JDLink Connect) gives you, your farm manager or your dealer, with your permission, the ability to view an operator's screen remotely. Operator training, implement setup or troubleshooting a problem can be accomplished without waiting on a service call while in the field.



With John Deere's remote support tools, real-time information is as close as your tablet, smartphone, or laptop, putting you in control, from almost any location.



Your John Deere dealer has many services designed to make you more productive. They have pre-season, in-season, and post-season offerings for solving your challenges throughout the year.

While you're used to your dealer making equipment recommendations, they can also help with inspections, parts management, software updates or calibrations, field mapping and data management. This allows you to be more insightful about making decisions.

Your John Deere dealer stands ready to help you reduce your risk, increase your profitability and make your job easier.

You have a loyal sidekick. So should your operation.



As you face the demands of your day, it's good to have company you can count on. You can rely on us when you need financing for your operation. With John Deere Financial, you have a trusted resource that gives you many options to choose from.

At the end of the day — and every day forward — we'll be there at your side.



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