

## PLANTING ISSUE

### YOU CAN STILL GRAB PRE-SEASON SAVINGS.

See your local Ag Leader dealer to take advantage of our Spring-Ahead Savings Program on systems and components from Ag Leader. Offers end March 31.

### LEASE AN AG LEADER PF3000™ SYSTEM.

Contact your dealer or call Ag Leader at 515-232-5363, ext. 5.

### OUR WEB SITE

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

### INCLUDES A LIST OF OUR MASTER SERVICE DEALERS.

At those locations, you can expect on-site parts and an experienced service department. If you're not on the Web, call us for the location of the nearest Master Service Dealer.

### UPDATE: OUR NEW COTTON YIELD MONI- TOR IS READY.

We've shipped cotton units to Australia and will be sending more to the Southern states in June.

## Inside This Issue:

Application control . . . 2

Precision Farming

Experts: Pioneer . . . 3

Ask Ag Leader:

Lightbar Guidance . . . 4

SPRING 2000

## From One Ag Leader To Another: Don't stop re-inventing your operation

You and I have something in common. We're both inventors. When I was designing our first products, I wanted to offer you building blocks. Every year about this time, you start tuning up and tinkering, in your shop or at your computer screen. Like me you're busy inventing, re-inventing, and adapting all technology at your command until it fits your operation. Ag Leader wants you to keep exploring.

We are proud of a product line that evolves and grows more useful in ways even I hadn't imagined. Sometimes, experts in other ag organizations see Ag Leader Technology<sup>®</sup> products in a new light. Pioneer Hi-Bred International<sup>®</sup> has some good things to say about our technology, and we're pleased about that. On Page 3 of this newsletter, read the comments of two precision farming experts from Pioneer, Tom Doerge and Paul Dorman. We know you'll learn something useful from what they have to say.

Tom and Paul can creatively apply Ag Leader's technology because we've designed our systems with what we call "open architecture." While some companies create components that only function with their other components, we developed the PF3000™ to be compatible with as many other products as possible. We want you to be able to use what you already own and make the whole system work together. As an example of what I mean, take time to read Roger Zelke's article on application controllers. We're big on flexibility at Ag Leader.

### Your PF3000 can do more than most owners ask of it.

You'll get the most value from your PF3000 investment when you employ it as a

year-round information and management tool. Use your unit to:

- Accurately map where you plant different hybrids and use different chemicals, fertilizers, and tillage practices.
- Create an application map of how you varied plant populations, herbicide values, and fertilizer rates.
- Use a prescription map to automatically vary the application rate of chemicals, fertilizer, seed, and other inputs.
- Control our Lightbar on your sprayer and you're done with messy, unreliable foam forever. With the Lightbar to guide you, you won't need to stop spraying at dusk, just as the wind finally dies down.

### You don't have a PF3000?

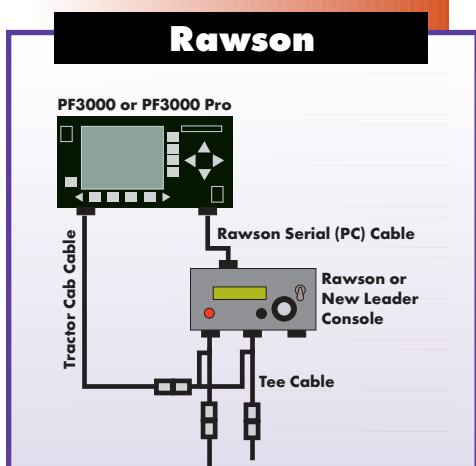
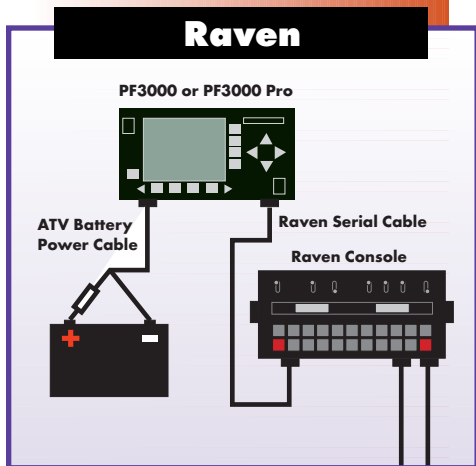
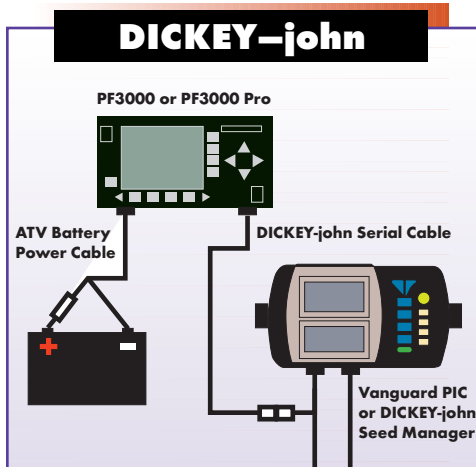
That's easy to fix. We're offering cost-effective upgrades from the Yield Monitor 2000™ to the PF3000 unit, and there's still time for you to catch the tail end of our spring promotion. There are still some special prices on several of our products.



Cable assembler Matt Muessigmann shows Ag Leader president Al Myers a sample from the crimper. Our products are built to be tough and stand up to a variety of uses on your farm.

# Ag Leader Advantages: Take these simple steps to control and record application rates

Your Ag Leader PF3000™ enables you to selectively apply or record the actual application rate of crop inputs. You'll find using your PF3000 is much handier than carrying a laptop in the cab with you. The PF3000 is also a lot more durable. (Who wants to replace a \$2,000 laptop every year?)



In the past, I've said that all you need are a few cables, available through us. However, you also need a little information to rig the whole thing together.

I've chosen three popular units from other manufacturers and developed some diagrams to show you how to make the connections.

If you hook up to a DICKEY-john Seed Manager (also sold as the Vanguard PIC planter monitor), you'll be able to use your PF3000 to record actual population rates. To make the connection, you'll need a battery power cable for the PF3000 and a serial cable to attach the PF3000 to the Seed Manager.

## Here's how the connections work:

1) Connect one end of the serial cable to Port 3 of the PF3000.

2) Now attach the other end of the cable to the 9-pin port of the Vanguard or DICKEY-john console. That's easy, right?

3) Insert one end of the battery power cable into the rectangular 25-pin port on the PF3000 and attach the other end to your vehicle's battery.

You're all set to record the population rate, area, swath width, and ground speed as the data flows from the Seed Manager to the PF3000.

Once planting is done, you may want to use your PF3000 with a Raven sprayer monitor. Let's consider the Raven connections first.

Check to see whether your Raven monitor has a serial port. If it does, we can make the connection shown in this diagram.

1) Insert one end of the serial cable into Port 3 of the PF3000. The other end of the cable connects to the 9-pin port of the Raven console.

2) Connect the ATV battery power cable to the rectangular 25-pin port on the PF3000 and then to your vehicle's battery.

Using this serial port connection, the PF3000 can control and record the application rate all with one serial cable connection. The PF3000 automatically reduces its swath width when boom sections are shut off. When the master switch is thrown on the Raven, the PF3000 automatically stops counting area.

If your Raven unit isn't equipped with a serial port, you'll need a T-cable to go from the back of the Raven controller to the main wiring harness of the Raven. That T-cable also plugs into the tractor cab cable, which connects to the PF3000. This connection will let the



Roger Zielke  
Customer Support Manager

PF3000 record the actual rate at which the Raven applies. It won't allow you to control the Raven unit (serial port connection required).

The Rawson controller, as you can see, requires a slightly different connection procedure. You'll need a tractor cab cable and T-cable that connects between the back of the Rawson console and the wiring harness, as shown in the diagram.

Plug the Rawson serial cable into Port 3 of the PF3000. Connect the other end of the cable to the 9-pin port on the back of the Rawson console. Once you've made those connections, you'll be able to control and record the application rate of the Rawson.

The three systems described above—the DICKEY-john Seed Manager and the Rawson and Raven controllers—aren't the only ones on the market, nor are these the only units that can be used with the PF3000. We can show you how to connect your PF3000 to many other units. Just call our Technical Support line.

# Ag Leader Advantages: Precision farming experts from Pioneer employ Ag Leader's Products

*Editor's Note: Recently, we at Ag Leader were privileged to see our technology through the eyes of Tom Doerge, Ph.D., and Paul Dorman, both of Pioneer Hi-Bred International. Paul is the precision farming sales manager for Pioneer and Tom is a precision farming agronomist.*

"We're a data-driven company and we like our farmers to have plenty of data." That's how Pioneer agronomist Tom Doerge clarifies how Ag Leader's products relate to his work with precision farmers planting Pioneer brand seed.

Why choose Ag Leader technology? From his knowledge of both precision farming techniques and seed sales, Paul Dorman presents a clear answer. "Ag Leader constantly works to increase the value of its equipment to Ag Leader customers who are Pioneer seed customers, as well," Paul explains. "We're pleased any time farmers can learn more about their operations, thanks to Ag Leader."

"Besides, when the yield monitor is the report card, we have confidence Pioneer products will get good marks," Tom adds. "But we prefer to see producers using this technology all season long, so we're trying to show Pioneer users the value of moving their Ag Leader PF3000™ out of the combine, where it's just gathering dust."

"We're promoting the as-planted map as a good first step," says Paul. "Yes, the Ag Leader is another gadget in your planter tractor, but it takes no real effort to install it there. Just hook up the unit to your implement switch and away you go."

What is the as-planted map? Tom and Paul favor setting up loads on your PF3000 in the spring so that you can do your job better all through the crop season. "That way, when you get to the combine, you won't have to remember how you set up loads and where you

planted what," Paul explains. "At the time you make your seed choices for the new season, your Pioneer rep recommends you put certain hybrids in certain fields to solve problems and meet challenges."

Having been a farmer himself, Paul knows that once spring fever hits, you're likely to grab the seed stacked closest to the shed door, then race out to put it in the ground. He and Tom would rather you install the PF3000 in your planter tractor, set with pre-determined loads. This information will remind you of the variety you intended to plant in each section of each field.

As your spring work progresses, you'll be using Ag Leader's products to create what these Pioneer specialists call an "as-planted" map. Paul feels there is a good reason to create electronic records of your daily progress. "For years, seed companies have done an excellent job of handing out those little notebooks farmers like to use. But just think for a minute about your local convenience store," he says. "The place where you buy gas and doughnuts probably has an average net worth of \$1 million—about the same as an average farm. But that convenience store doesn't keep daily records in a little spiral notebook stuffed in the manager's shirt pocket."

Tom continues on this theme. "With an as-planted map and an as-applied map, you reap both short- and long-term benefits. You know where you planted certain varieties and applied specific treatments. When you combine, you'll be able to accurately measure the outcome of each step you took this year. Then you'll warehouse that info and, over time, recognize long-term trends in your fields. Using the data from as-planted maps, as-applied maps, and your yield monitor, you'll accumulate a supply of valuable information. And frankly, we believe

once you have more information you'll see more value in our products.

"Ag Leader designs its products to be adaptable to so many practices," says Tom. We like to see our growers use it for split planting, sprayer monitoring, and the newest one—identity preservation."

"It's obvious we're moving from raising and selling a commodity to raising and selling traits," Paul points out. "Fifteen years ago, who would have paid a premium for bottled water? The attraction is the container, which displays a list of the ingredients in that water."

Tom expands on that idea. "Specialty grains are actually nothing more than another familiar product, in a virtual container. The information you can compile with your Ag Leader system will create that virtual container to accompany each load of grain and make your product more attractive to potential buyers."

"As a company, Pioneer is very excited that farmers using Ag Leader products can put together that kind of data," Tom concludes.

Paul offers this final observation: "You see, this technology is about how much money a farmer can make and how many mistakes a farmer can prevent."



Tom Doerge

Paul Dorman

# Ask Ag Leader: Questions and answers about the Lightbar Guidance Option



**Q. How does the Lightbar work?**

**A.** Basically, operating a Lightbar is no more difficult than turning a spray boom on and off. The unit can be used with a PF3000™ Pro, or a GPS3100 or a GPS3050 connected to the PF3000™. The Lightbar can be mounted on the dash or the ceiling. Three green lights in the middle of the bar will tell you when you're on course. If red lights appear on either side, you've steered too far to one side.

**Q. I'm accustomed to foam that marks my spot when I leave the field to refill. Will the Lightbar enable me to find my way back just as easily?**

**A.** The Ag Leader Guidance System can be paused if you have to leave the field, and it will allow you to navigate back to the place where you left off and start again. The Lightbar also lets you know when you enter headlands, so you can shut off your sprayer. You can even leave the field in mid-swath and find your way back using the Lightbar.

**Q. If I buy this unit, will I be able to find other uses for it?**

**A.** The Ag Leader Lightbar can be used for spraying, spreading, tilling, and during seedbed preparation and seeding. You can use it for any activity that requires the creation of parallel swaths, either straight-line or curved.



*Reid Hester*

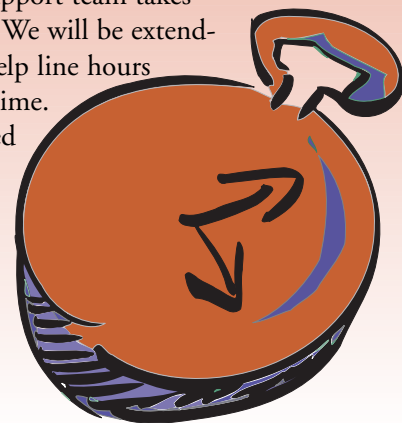
*Technical Support Supervisor*

**Q. Can I use an Ag Leader Guidance System to log and display field coverage and application rates?**

**A.** Yes, using the PF3000 or the PF3000 Pro, you can see an on-screen map of the field you're in, showing the area you've covered. If you're varying application rate, either monitor can also log as-applied maps.

## TIMING IS EVERYTHING

That's why our Technical Support team takes planting season so seriously. We will be extending the Technical Support help line hours to coincide with your busy time. We'll be there when you need us, from 7 a.m. to 7 p.m. CST, Monday through Friday. On Saturdays, you can call between the hours of 8 a.m. and 5 p.m. Central Time at 515-232-5363, ext. 1.



**Ag Leader**®  
**Technology**

P.O. Box 2348  
Ames, IA 50010

Address Service Requested

Presort Standard  
U.S. Postage  
PAID  
Permit #7674  
Sioux Falls, SD 57104