Generation 4 Displays
23-2 Software

Software Update

Package	Version
Generation 4 OS	10.26.2927-120
AMS Applications	10.26.2927-120

Generation 4 OS installation time: Approximately 20 minutes, with no existing data. Installation time will vary depending on the amount of existing data and the software version currently on the display. The latest packages for the Generation 4 Displays can be downloaded and installed over-the-air or using a USB drive and John Deere Software Manager. Reference "Software Installation Instructions" in the Software Updates section of the StellarSupport™ website for more information.

Over-the-air reprogramming -
https://youtu.be/XSG7O3_9KGI?list=PL1KGsSJ4CWk4fhvFOaBZz261XGwPfXvqk

Machine Application Software Updates

Machine applications are located under Machine Settings in the Generation 4 Display menu. A John Deere dealer will be required to install any required updates to machine application software using Service ADVISOR™.

Other Controller Software Updates

Software for the controllers listed below can be updated using the Generation 4 Display.

Controller
Application Controller 1100
Application Controller 1100 (S.N. PCXL01C201000-)
Application Controller 1120
Application Controller 1120 (S.N. PCXL02C201000-)
AutoTrac™ Universal 100
AutoTrac™ Universal 200
AutoTrac™ Universal 300
GreenStar™ Rate Controller Dry
GreenStar™ Rate Controller
StarFire™ 3000 Receiver
StarFire™ 6000 Receiver
StarFire™ 7000 Receiver
AutoTrac™ Vision Guidance Camera

Resolved Issues

The following issues are fixed in software update 10.26.2927-120:

General (May Apply to Multiple Field Operations)

- AutoPath™ taking a long time to generate
- RowSense™ not shifting center line automatically once crop has been entered
- 4240 unresponsive crash during road transport
- Display crash upon startup
- Poor performance on multiple Valeo cameras – combine field kit
- This release contains important software security enhancements.

New Features and Improvements

HarvestLab™ 3000 - Manure Sensing

With Generation 4 Display 23-2 software update a breaking change with Manure Sensing and the MCS will happen for communication and documentation purpose. For that the correct combination of Generation 4 Display software and MCS software needs to be installed to be compatible. See combinations and new features below:

Documentation of all 6 parameters

- With the new software all 6 parameters nitrogen, phosphorus, ammonium, potassium, dry matter, and volume will be documented and sent to Operations Center. For that it is needed to setup Operation to "Manure Application" and select the used Manure Type (Cattle, Hog or Biogas manure). The target and limit parameter of the application will be setup in the MCS VT.

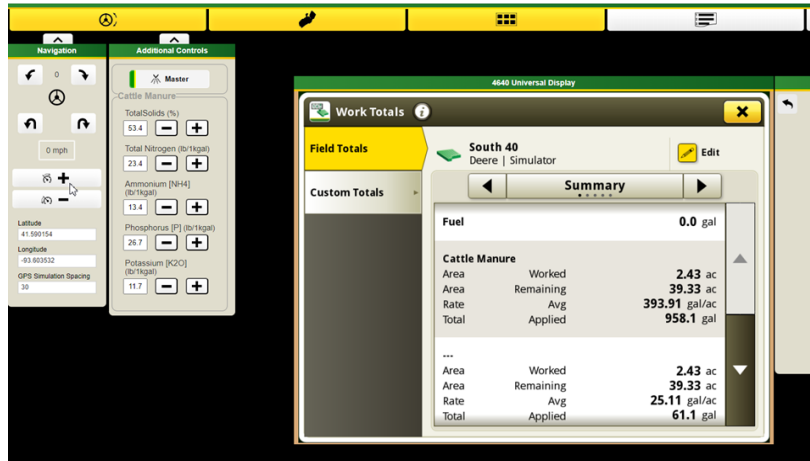### Volume documentation of non HarvestLab™ 3000 supported manure types

- With Generation 4 23-2 Software it will be possible to use the manure sensing system with other manure types besides cattle, hog, and biogas. For that within the product type selection press new product and add the name of the manure type. For added manure type no calibrations for the HarvestLab™ 3000 are available. Due to that the manure sensing system is working with volume only.

Work Planner for Manure Sensing

- With Generation 4 23-2 software, it will be possible to receive application work plans created with Work Planner in Operations Center. If you create a plan with the three onboard manure calibrations, then the display will automatically select the correct calibration due to the plan.
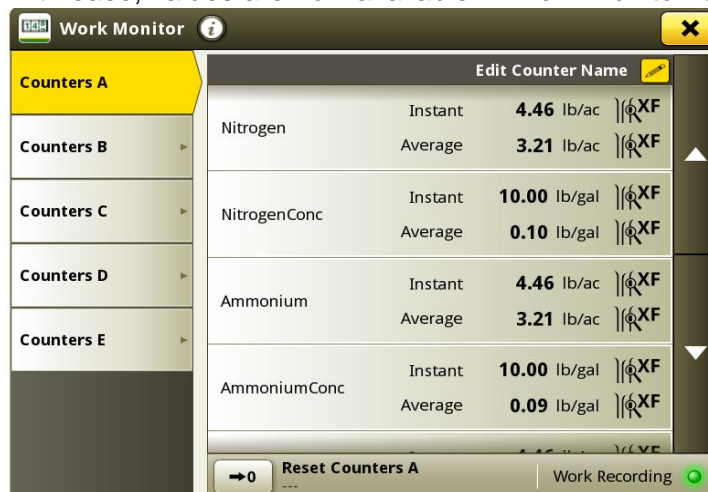
Work Total

- Work totals will show average values and concentrations now for the different HarvestLab™ 3000 constituents.

Work Monitor

- Monitor constituents with ease, values are now available in Work Monitor for the first time.

MCS Controller improvement

- Flow meter calibration: For the flowmeter calibration it is now possible to store up to four different flowmeter calibrations. After a flowmeter is calibrated and selected it is possible to fine tune the recorded flow with a plus and minus button.
- Sampling feature: With the new sampling button a sampling process will be supported. The button could be used if results are in question or if performance to local laboratory wants to be compared. The sampling button allows you to see the sampling history of the last sample or to start a new sampling. After the sampling is finalized, the tool will show you if the manure was homogeneous enough to collect a representative sample.

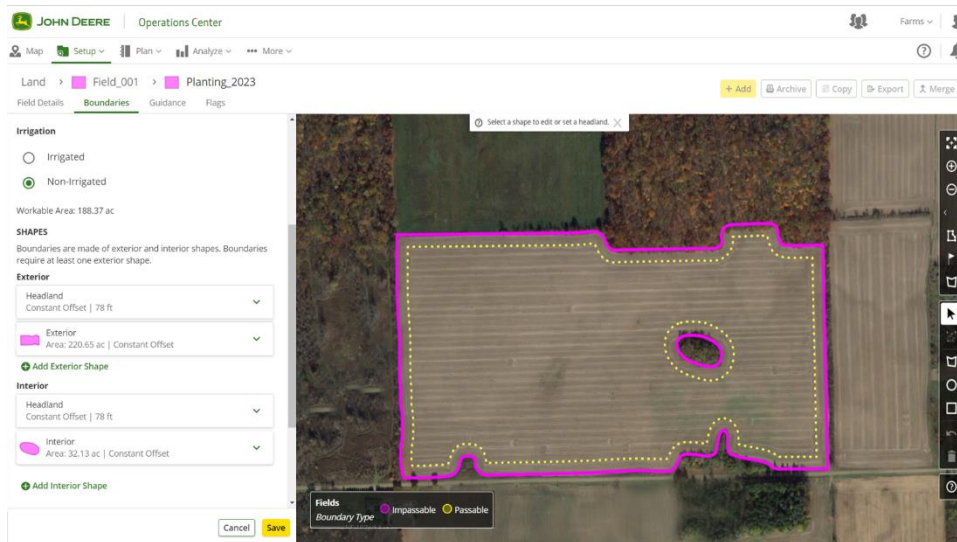# 10.26.2927-110 New Features and Improvements

The following features and improvements were originally included in the 10.26.2927-110 production release of the Gen OS bundle from September of 2023.

Enhanced Headland Management for more Automation and Guidance Solutions

Headlands are needed to use many of the advanced guidance and automation features that are currently available on much of the John Deere equipment today. And now it is easier than ever to set up. Use the new headland functions in Land and the Generation 4 OS version 23-2 to get more from your equipment's automation and advanced guidance features.

Manage headlands and share them across you fleet so you can:

- Reduce strain and fatigue on operators with AutoTrac™ Turn Automation
- Lower input costs with Section Control
- And much more

Seamlessly create, edit, view, and manage your headlands directly within Operations Center. There is no need to recreate them every time you head to the field. Automate in-cab processes by sending headlands to your machines with Work Planner, Data Sync Setup, and Setup File Creator. Start the field faster and take a load off the shoulders of your operators. Send your Land data and headlands wirelessly to your machines and with Work Planner the display will load the settings automatically.

Dry Blends

Dry Box Spreaders and Floaters operating with Generation 4 OS version 23-2 or newer will now be able to create a blend for dry product applications. This feature will operate similar to the tank mix feature in liquid applications.

Grain Cart Enhancements
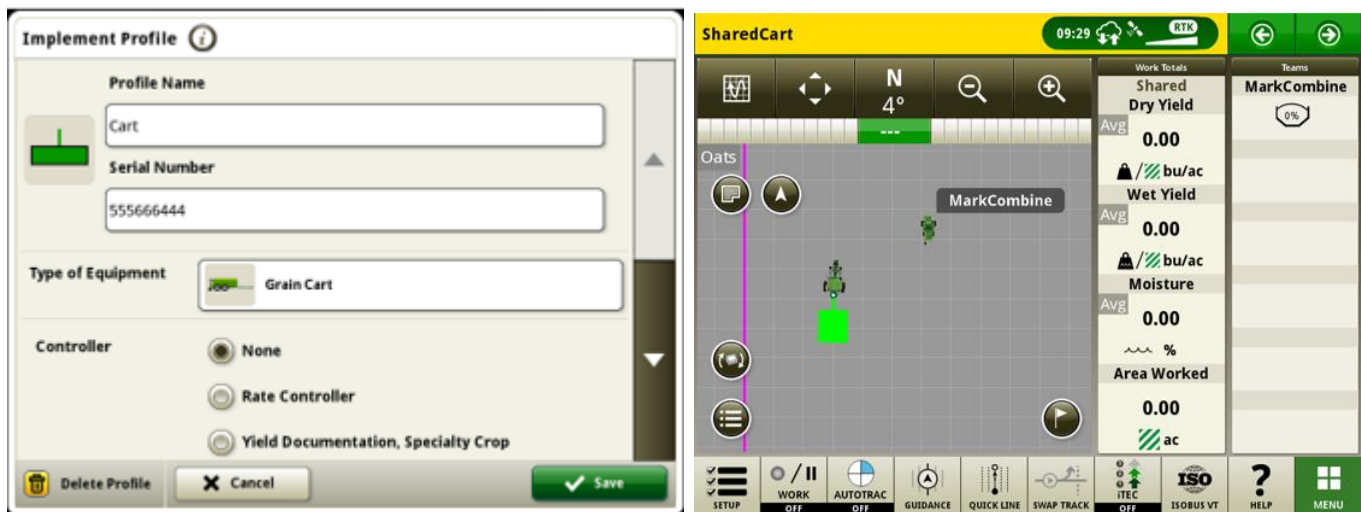
Aligned Harvest Units

With Generation 4 OS version 23-2 software customers will experience new Grain Cart enhancements as part of a sharing group while harvesting. Until version 23-2 shared unit values within the tractor pulling the grain cart would show as Tons/Acre regardless of the units being Imperial or Metric on the display. One of these enhancements is to allow that shared value to now be shown in Bushels/Acre or Tons/Acre depending on the unit setting of the display.

Auger Status and Grain Bin Levels

Whitin the sharing team run page members will be able to see the current auger status and grain bin levels for the combines within the group. There will be no need to have an active Machine Sync activation or license for either of the paired machines to obtain these shared statuses.

Grain Cart Setup

Within the 23-2 Gen 4 OS display operators can now choose the Cart profile within the Implement Profile page. Numerous items and fields within the Implement Profile page may automatically populate to decrease setup time. The overhead view of the operation also includes an updated depiction of the grain cart and its size and location in the field.
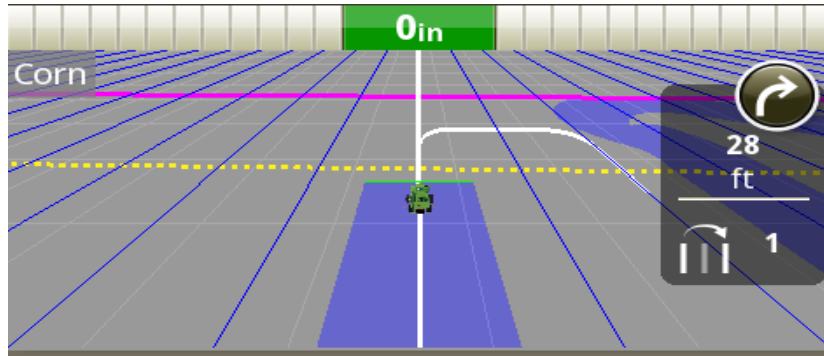

Data Sync Setup – Variety Locator

Displays operating on the Generation 4 OS version 23-2 and newer will have an expanded offering of file types that are capable of being sent through Data Sync Setup. Along with the current offerings of Boundaries, Guidance tracks, Flags, etc. enabled Generation 4 displays running 23-2 or newer will also be able to automatically share variety locator files through Data Sync Setup.

Combine AutoTrac™ Turn Automation

23-2 and newer software will now support AutoTrac™ Turn Automation on compatible John Deere combines. This technology will require an exterior field boundary created with SF3 or higher correction signal and will support automated turns in a customer-defined, internal headland boundary. The system will follow the contour of the headland to navigate long turn passes without intersecting the field. With this simple introductory solution, users will manually control speed and additional functions at the end of a turn. Additional functions include such items as raising and lowering the combine header. This harvest technology is compatible with AutoTrac™ (straight tracks), AutoPath™, Machine Sync, In-Field Data Sharing, and RowSense™.
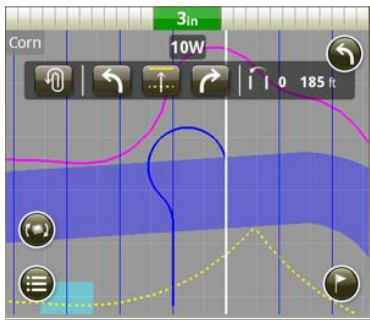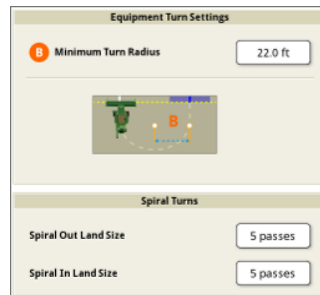

Note: Combine Software Updates will be needed to support AutoTrac™ Turn Automation.

Combine ATTA Supported Turn Patterns

Combine ATTA will support U-Turns, Spiral In, and Spiral Out turn patterns, as well as straight through/turn cancellation. These turn methods will allow the unloading auger to always be over previously harvested rows for seamless unloading into a grain cart.

Note the travel location of the harvester during the turn patterns in the illustrations below; *the turns* always occur in harvested rows within the internal headland boundary.
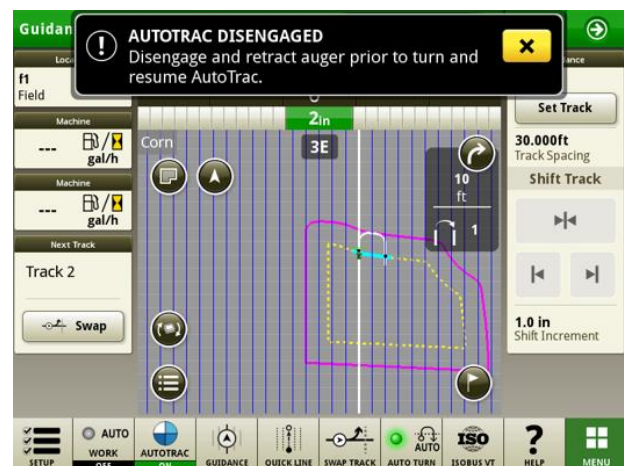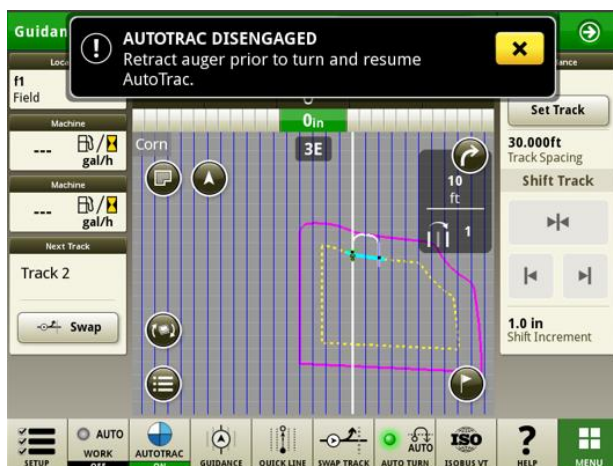

Spiral-Out

Spiral-In

Combine ATTA Unloading Turn Block

When ATTA is being utilized in conjunction with Machine Sync technology, the system will disengage and block the automated turn if the auger is extended and engaged when approaching the headland area where the automated turn is triggered.

Combine ATTA Machine Compatibility

ATTA is compatible with the following John Deere combines with an updated steering controller. ATTA is NOT compatible with competitor combines.

John Deere Combines	Model Year	4600 V2	4640	G5 CC	G5 UNI	G5^{Plus} CC	G5^{Plus} UNI
X Series	2021 & Newer	X		X		X	
S700 Series	2018 & Newer	X		X		X	
S430 and S440 Series	2017 & Newer	X		X		X	
S600 Series	2012 - 2017		X		X		X
S540 and S550 Series	2012 & Newer		X		X		X
T Series	2012 & Current		X		X		X
W Series	2012 & Newer		X		X		X

Machine Sync:

Machine Sync has undergone a machine control redesign with model navigation and speed changes to enhance the user experience and ride quality, specifically in the follower machine. These changes address customer dissatisfiers like the need to reduce AutoTrac™ gains to reduce 'wheel hunt' or adjust sensitivities to achieve acceptable performance. These control performance improvements require all users in the work group to update to the 23-2 software bundle for best performance. It is also recommended to have all vehicle software within the same work group updated to ensure the latest performance improvements are enabled.

Crop Type Documentation with ISOBUS Sprayers

With Generation 4 OS version 23-2, customers will be able to enter the crop type while running a product application with an ISOBUS Sprayer.

Note: Crop Type will not yet be visible in OpsCenter but in future OpsCenter release

Additional Information and Training Resources

Operator's Manual

A copy of the Generation 4 display Operator's Manual is available within the Help Center application on the display with Generation 4 OS software version 10.16.1400-85 and newer. This content is updated with software updates as needed. Always read the latest Operator's Manual prior to operation. To obtain a copy of the Operator's Manual, see your dealer or visit techpubs.deere.com.

Onscreen Help

Onscreen help supplements the information found in the Operator's Manual. The onscreen help can be referenced by opening the Help Center application on the display or by pressing the Information icon at the top of any page to view relevant help information for that page. Generation 4 Display Onscreen Help is also available for reference at displaysimulator.deere.com.

Training Simulators

To learn more about the Generation 4 Displays, there is an online training simulator available at displaysimulator.deere.com

Release Notice

These are Generation 4 OS and AMS Applications software update release notes for the Generation 4 Displays. Release notes can be found on www.stellarsupport.com. Note: Your use of the software is governed by the End User License Agreement included with the software.

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