Software Update

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 below can be downloaded and installed over-the-air or using a USB drive and John Deere Software Manager, available on the StellarSupport.com "Software Updates" page. If using Online Display Software Update Process, software download time will vary based on

John Deere Dealers: Service ADVISOR™ Remote can be utilized if transitioning from Software Update 17-1 to Software Update 17-2/18-1.

	Package	Version
OS	Generation 4 OS	10.10.404-390
OS	Generation 4 OS Help	10.3.26-1
	AMS Applications	10.10.404-390

Machine Application Software Updates
Machine Applications located under machine settings in the Gen 4 Display menu. A John Deere dealer will be required to install using Service ADVISOR™.

Release Notes Content

Important Notes   General Information
New Features/Improvements: Training

Important Notes

Section Control
- When using an implement GPS receiver and section control, use performance tuning to tune mechanical delay on/off times after the implement GPS receiver has been set up in the display. [4600 CommandCenter™ and 4640 Universal Display only]

Coverage Maps
- Virtual coverage will be cleared from the display during update to Software Update 17-1 or if updating directly from a version older than Software Update 17-1 to a version newer than 17-1. All other coverage will persist through the update. [4600 CommandCenter™ Only]

Work Setup
- If a Field is reassigned to a different Client/Farm, the existing field coverage is erased.

- When updating Software Update 16-2 and older software to Software Update 17-1 or newer, GRC and Implements without Controller profiles set up as Independent Frames will be deleted. Record all work setup data from each of the pages in implement profile circled in red in the screen below and product name information offline before proceeding with the update to reduce any data loss. This can be done by capturing screenshots of these pages or writing the information down. You will need to re-enter that

information in order to proceed with documenting. All other implement profiles that have controllers (i.e. SeedStar™ 2/XP/3HP Planter) will remain on the display through the update. [4100 and 4600 CommandCenter™ only]

- When exporting work data from Gen 4 Displays to Operations Center, field names that exceed 20 characters are shown fully in Operations Center. However, when re-importing this data back into Gen 4, the name will be shortened, but will be recognized by the Gen 4 Display as the same file/data. [4600 CommandCenter™ and 4640 Universal Display only]

- Gen 4 Displays support boundaries created in a GS3 2630 Display, Apex™, and John Deere Operations Center. Imported fields must include an exterior boundary, if also including interior boundary(s) (passable or impassable).
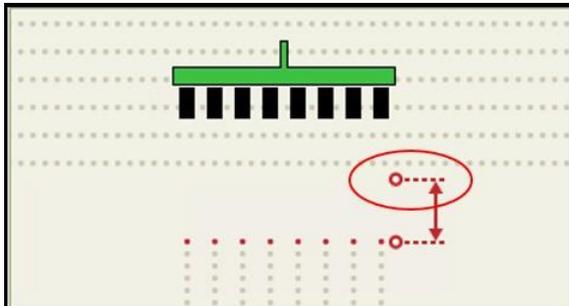
ISOBUS

- When using implements where work point is in front of the implement's axle, the implement dimensions will need to be adjusted to reflect the work point being in front of the axle. If the work point is in front of the center of rotation, the work point needs to be set to a negative value. [4600 CommandCenter™ and 4640 only]
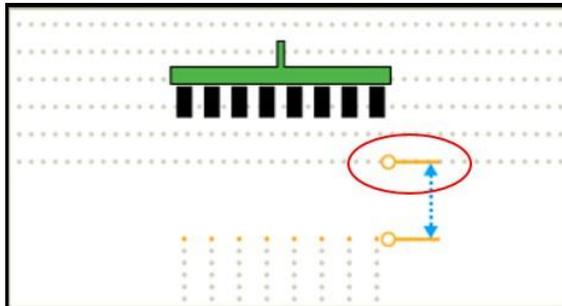
New Features and Improvements

Section Control – New with Software Update 18-1, Section Control Performance Tuning enables customers to tune planter mechanical delay on and off times to the seed in the last outer headland row. (See 18-1 Software picture below). When used with planters, the Performance Tuning system is designed to adjust mechanical delay on and off times so that seed is placed at the intersection of two perpendicular passes. Previously, performance tuning placed seed at the coverage boundary. (See Previous Software Versions picture below).

Previous Software Versions   18-1 Software
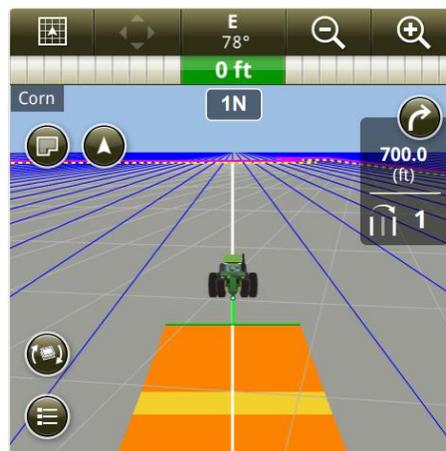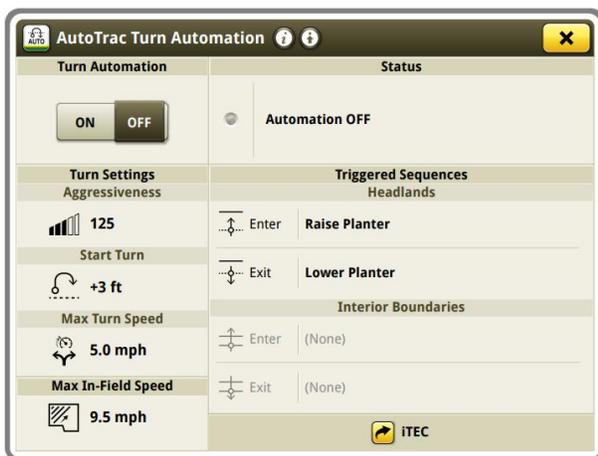
Intentional Overlap can then be used achieve desired seed placement if the "Plant to Row" seed placement tuned to with Performance Tuning is not preferred. Two options have been added to Intentional Overlap to fine tune percent overlap based on coverage and an exterior or interior boundaries. [4600 CommandCenter™ and 4640 Universal Display]

AutoTrac™ Implement Guidance - AutoTrac™ Implement Guidance (passive) is now available for the Generation 4 Displays. This new feature uses the tractor to navigate the implement to a specific GPS guidance line. The use of AutoTrac™ Implement Guidance (passive) allows increased AutoTrac™ usage on additional passes and direct input placement throughout the whole season, increasing pass to pass accuracy. [4600 CommandCenter™ and 4640 Universal Display]

AutoTrac™ Turn Automation – Use AutoTrac™ Turn Automation to generate turns in a headland based on customized sequences or steps. This functionality requires the use of boundaries, headlands and iTEC™. Automated Turns can be adjusted in the map view as the machine approaches the headland. AutoTrac™ Turn Automation is available for use with the CommandCenter™ Automation Activation or the Precision Ag Core Advanced Subscription. [4600 CommandCenter™ and 4640 Universal Display]

In Field Data Sharing – Guidance lines, coverage maps and as-applied maps are able to be shared between up to 6 machines when using In Field Data Sharing. Data is shared when client, farm, field and product or crop type are the same. CommandCenter™ Premium 3.0 activation or Precision Ag Core subscription and an active JDLink™

Connect subscription are required for In Field Data Sharing. The Sharing App can be used to turn In Field Data Sharing on and to determine if all requirements are met. [4600 CommandCenter™ and 4640 Universal Display].

John Deere Rate Controller 2000 – The Generation 4 Displays and John Deere Rate Controller 2000 can support documentation and control of up to 5 operations. ISO controllers such as SeedStar™ on John Deere Planters can be used with a John Deere Rate Controller 2000 that is documenting additional operations. Additionally, Gen 4 Displays can document shared sections with a John Deere Rate Controller 2000. An example of this would be John Deere Rate Controller 2000 used with Raven Sidekick™ ICD Direct Inject Pump. [4600 CommandCenter™ and 4640 Universal Display]
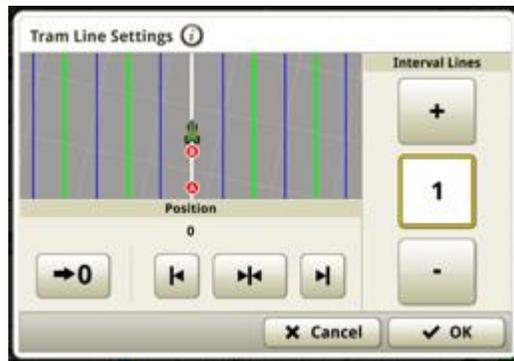
Prescription Changes – The same prescription can be imported once and then applied to multiple bins or tanks. It is also important to note that different rate columns from the same prescription can be applied to different bins or tanks. [4600 CommandCenter™ and 4640 Universal Display]

Import Implement Profile – Implement profiles can be imported from Operations Center to Generation 4 Displays or imported from one display and exported to another display. When importing in either of these ways, the following information will need to be set up after importing: connection type, work recording source, operation and rate controller attached. [4600 CommandCenter™ and 4640 Universal Display]
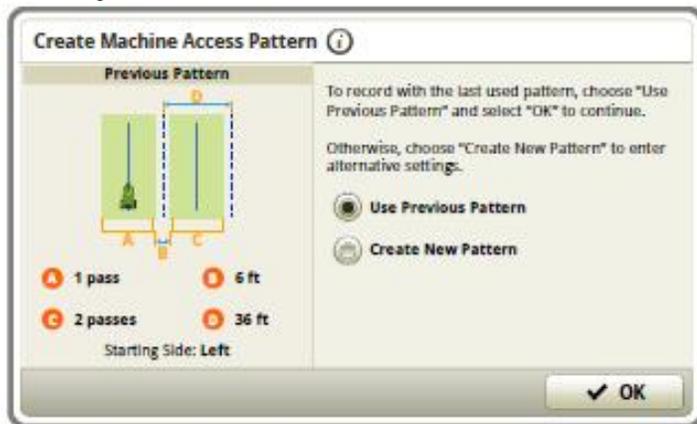
RowSense™ for Combines – RowSense™ is available for use with MY '18 Combines. It can be setup up by selecting Advanced Settings Icon (See Picture below) within the AutoTrac™ Guidance App.

Tram Lines - Tram lines (similar to GreenStar™ 3 2630 tram line capabilities) is now a feature within the Generation 4 Displays. This feature provides the possibility to set up and edit certain guidance lines as tram lines and allows operator to return to the field with another implement using a different working width. Those lines will be highlighted in a separate color in the guidance screen. Tram limes are available for both Straight Track and AB Curve.

Machine Access Patterns - Allows multi-crop producers the ability to setup guidance lines that account for access paths between crop passes and the ability to set up a predetermined pattern of 'field roads' which are inserted between a defined set of crop passes. This feature walks the user through the set up process via display screen flow for initial in-field set up. The system has the ability to reduce redundant setup by allowing the user to start with their most recently created access pattern.   Can be created via Machine Access A+B, Machine Access A+ Heading and Machine Access Lat/Lon + Heading.

Over-the-Air Activations and Subscriptions - More enhancements have been added to Over-the-Air functionality. Over-the-air capabilities require the use of either a cellular network or wireless internet connection. When Gen 4 Displays are updated to Software Update 18-1, they have the ability to accept new activations or subscriptions over-the-air from StellarSupport. When an activation or subscription is sent over-the-air to the display, no activation code is required to be entered. Displays check for updates upon machine key on. Operators can also select "Check for updates" in the Software Manager Activation Page.

Over-the-Air Controller Software Updates - When software is updated to Software Update 18-1, some Precision Ag Controllers are able to be updated over-the-air. Similar to updating display software over-the-air, operators will select "Check for updates online" in the Software Manager Installation and Updates Page to view what new software is available for each controller detected. Precision Ag Controllers capable of over-the-air software updates through the Gen 4 are: GreenStar Rate Controllers, StarFire 3000, StarFire 6000, AutoTrac Universal Steering Controller (ATU 200), and Application Controllers 1100 and 1120.

Display Software Download in the Background - When customers with Software Update 17-2 update display software over-the-air to SU2018-1, they will be able to take advantage of downloading software in the

background. Once the download button is selected, customers can close out of the download screen and come back to install software at a later time. Customers will not be able to install software in the background.

Data Management

Selecting Import Data, Export Data, or the File Manager app may result in a 5-15 second delay to load the File Manager app.

Importing

- Gen 4 CommandCenter™ does not import machine profiles.

- To import prescriptions, shapefiles must be located in "Rx" folder at root of USB drive.

- When importing field boundaries, a field must include an Exterior boundary, in order to import Interior boundary(s).

- USB files including pre-assigned Apex™ Tasks and iTEC™ Pro sequences will not import into the CommandCenter™.

Exporting

- When exporting work data, use a separate USB drive for each Gen 4 CommandCenter™. Exported Gen 4 work data cannot be placed in individual profile folders. Exported "Setup" data is placed in the "JD4600" folder. Exported "Work" Data is placed in the "JD-Data" folder.

- When exporting data, Gen 4 CommandCenter™ may pause for ~15-20 seconds before progressing with export functions. Do not remove power or USB drive during this time.

- An operator cannot export a field boundary to a USB drive which already contains that boundary, even if it's within a different profile.

Exporting for use with a GreenStar™ 3 2630 Display

- Gen 4 CommandCenter™ setup profiles do not include Implement Profiles, which are needed by a GS3 2630 Display. Before exporting Gen 4 CommandCenter™ profiles for use in a GS3 2630:

   1. Export data from the GS3 2630 Display with the profile name "JD4600".

   2. Using the same USB, export Setup Data from the Gen 4 CommandCenter™. All data will be merged into the JD4600 profile folder.

   3. Import "JD4600" profile into the GS3 2630 Display.

- The 4640 Universal Display also includes machine profiles.

Within John Deere Operations Center

- The following implements without controllers appear in John Deere Operations Center: tillage, product application and planting/seeding.

- If planning to manage data in John Deere Operations Center, properly document Client, Farm, and Field information when performing work.

- Gen 4 Display work data such as seeding, application, harvest and boundary information, can be directly imported into John Deere Operations Center.

   - "Automatically Sync Work Data" is enabled on Gen 4 Display through Data Sync. It sends Work Data files to "Field Analyzer" in Operations Center.

- "Manually export to Operations Center" is enabled on the Gen 4 Display through Wireless Data Transfer. It sends Work Data to "Files" in Operations Center.

Compatibility with Farm Management Information Software

- Gen 4 Display Work Data is not compatible with, and cannot be viewed in Apex™.

- Prescriptions created in Apex™ must be exported in the shapefile format.

- If sharing files for use in other third party FMIS solutions, export data from John Deere Operations Center as point-based shapefiles. Most third-party FMIS solutions support point-based shapefiles.

General Information

- Software activations are non-transferrable, in the event of lost, stolen, or destroyed equipment. It is recommended to insure machines with a Generation 4 CommandCenter™ at full value, including software activations.

Software Updates

- Before updating software, it is recommended to export all existing data to USB drive when updating Gen 4 CommandCenter™ software from Software Update 15-2 (8.12.2500-17) and prior. All existing map coverage on CommandCenter™ will be erased when updating from these versions. Work Monitor values will not be reset.

- If updating from Generation 4 OS version Software Update 14-2 (8.11.2456-13) or prior, Machine and Work Monitor page modules may appear blank. To restore values, access Layout Manager App, edit the run page, delete the Machine and Work Monitor modules, and re-add the desired modules. For default run pages, copy the page, and repeat these steps.

Section Control

- While applying/seeding, it is recommended that mechanical delay settings not be adjusted on-the-go to reduce potential instances of gaps in coverage. [4600 CommandCenter™ and 4640 only]

Dual Display Configuration

- Enable Precision Ag (GreenStar™ or AMS) Applications on one display only. Guidance and other applications will not function properly when multiple displays have AMS Applications enabled.

Variable-Rate Prescriptions

- Variable-rate prescriptions can be assigned to a Field. This will make them appear in the "Current Location" tab when selecting a prescription to use.

AB Curve Radial Shift Functionality

- Center Shift was disabled to ensure consistent placement of the re-generated AB Curves. Use Left/Right Shift Track and track spacing to adjust the location of your track in the field. [4100/4600 CommandCenter™].

ISOBUS

- Gen 4 CommandCenter™ supports 1 AEF certified ISOBUS Control Unit. When selecting ISOBUS VT Split Screen Modules in the Layout Manager for run page creation, some modules may show "Initializing" instead of the preview with the module content.

- Creating a run page with a full-size and vertical split screen ISOBUS VT module for the same implement or controller is not recommended. The vertical split screen module may not properly react to user inputs when both are on the same run page.

- Cycle machine key power and allow CommandCenter™ to completely power down when connecting/disconnecting ISOBUS implements.

Training

Onscreen Help - Onscreen help supplements the information found in the Operator's Manual. Press the Information icon at the top of any page to view relevant help information for that page. When viewing help, press the Book icon under Table of Contents to view all other available content related to the given page. Gen 4 CommandCenter™ Onscreen Help is now available on displaysimulator.deere.com.

Training Simulators - To learn more about the Generation 4 Displays, there is an online Training Simulator available for download under the Parts & Service Menu in the Manuals & Training Page in 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.