G5 Displays

Software Update 24-1

Release Notes for G5 Universal, G5 CommandCenter™, G5^{Plus} Universal, G5^{Plus} CommandCenter™

10.28.3314-74

JD Display 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 G5 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.

Machine Application Software Updates

Machine applications are located under Machine Settings in the G5 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 G5 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:

- Export error when attempting to export Setup Data using Current Systems format

- "Operations Center Organization must be found" continues even with good cell coverage

- Seed Volumetric A Apps version 11.8.29-20 causes display error state when connected to N500 Air Drill

- Unable to properly load ISOBUS implements with 23-3 software

- Incorrect Distance being displayed on Implement Light Bar

- AutoPath™ (rows) improved guidance line planning where field passes would occasionally merge into headland passes

- This release contains important software security enhancements.

Software Changes Affecting Older Hardware:

- **2G and 3G MTGs**

  Upgrading to JD Display OS version 24-1 will disable several communication functions on displays for machine configurations with a 2G or 3G JDLink™ (MTG), such as RDA, Data Sync, and Wireless Data Transfers. To retain these functions with a 2G or 3G MTG, it is advised to stay on the latest version of 23-3 JD Display OS, specifically 10.27.3135-114. If customers wish to upgrade to the latest JD Display OS version, they should switch to a 4G LTE MTG, R Modem, or M Modem.

New Features and Improvements:

- **Limited Memory Space Reprogramming Check**

    With the JD Display OS update to version 24-1 software, customers will receive assistance during the reprogramming process. Updating the G5 display requires a significant amount of storage space. If there is insufficient space and a reprogramming event is initiated, the display may encounter challenges in completing the update or may crash. To address this issue, version 24-1 and newer G5 software will include an internal memory space check to compare the required memory with the available space on the display. If the available memory is less than what is needed, an automatic reprogramming kickout will occur, and a pop-up window will notify the operator. Operators can then navigate to File Manager where they can export and delete data as they see fit to make room for the software update.

- **Implement Receiver Height**

    Before JD Display OS version 24-1 customers had to input their implement receiver height in two places: the Implement Profile app and the ISOBUS VT app. With display software 24-1, customers only need to enter this dimension in the Implement Profile app. Any dimension input to this app will automatically update or override any manual input in the ISOBUS VT location. This update will not affect any machine configurations that automatically load the Implement Receiver Height dimension to the display.

- **Application Product Selection Update**

When starting a Work Plan, customers selecting a Product or Tank Mix for their application will now experience a streamlined selection process. Prior to the 24-1 JD Display OS update, operators had to switch between the Product and Tank Mix tabs to choose their desired configuration. With the update, these two tabs have been merged into a single list, where items will be categorized by tank mix or product type for easier selection.

- **Idle Reasons**

  With 24-1 JD Display OS a new app will be available for customers on their G5 displays, with the appropriate license*. This app allows customers to log the various reasons for why their machine is sitting idle. The app will prompt on the display when the machine has been stationary at 0 mph (0 kph) for a specific duration. Customers can customize the duration of idle time before the app prompts within their Operations Center account. Data collected from the app will be sent to the customer's Operations Center account for analysis and future reference.

  * The specific license required will depend on your country of sale. Please consult the John Deere Sales Manual and your John Deere Dealer for more information.

- **In Field Data Sharing – Crop Alignment**

  Previous versions of the JD Display OS have allowed members of a shared work group to have mismatched crops when planting or harvesting. With the 24-1 update, machines must choose the same crop as the rest of the group to join their desired work group.

- **In Field Data Sharing – Maintain Coverage**

The 24-1 JD Display OS update enhances In Field Data Sharing workflows by introducing a new prompt. When a customer chooses to create a new group or selects an existing group with existing coverage, a pop-up window will appear. This window offers the operator the choice to either continue with the current coverage or start fresh by creating a new group. Opting for "New Work" will establish a new group for the current Client, Farm, and Field. Additionally, the prompt will appear when a product change occurs. This allows the operator to either continue with the new product in the current work group or start fresh with clear coverage in new work. Operators can also initiate a New Group by selecting the New Work button in Work Setup, which will automatically create a new group and clear previous coverage associated with the machine.

- **AutoPath™ (Boundaries)**

With 24-1 JD Display OS, a G5 Advanced License and an Advanced driven boundary, a user will be able to create an AutoPath™ (boundaries) guidance plan for their field on the display. Primary uses will be when operating in non-row crops, such as open field tillage, and when planting new row-crops when not following previously recorded source data. The user will also be able to create AutoPath™ (boundaries) plans using the John Deere Operations Center™ and send that information to the display for use in the field. If a user would like to adjust the guidance plan created in Operation Center, they can quickly update the plan on the display in the field. More information is available in John Deere Operations Center™.

The headland guidance tracks follow the field boundary and are spaced to fill the headland as efficiently as possible and to minimize overlap and keep the equipment inside the field boundary. Guidance track spacing is based on (machine/implement width) input by the user. It is critical that boundaries are accurately created using SF3, SF-RTK, or RTK signal driving the outermost points of the workable field area, and account for complete implement widths.


There are three methods for generating field guidance tracks for AutoPath™ (Boundaries).

o **Heading Angle** – The user inputs a desired heading angle, and the system will automatically generate a full field of guidance tracks using that specific angle.
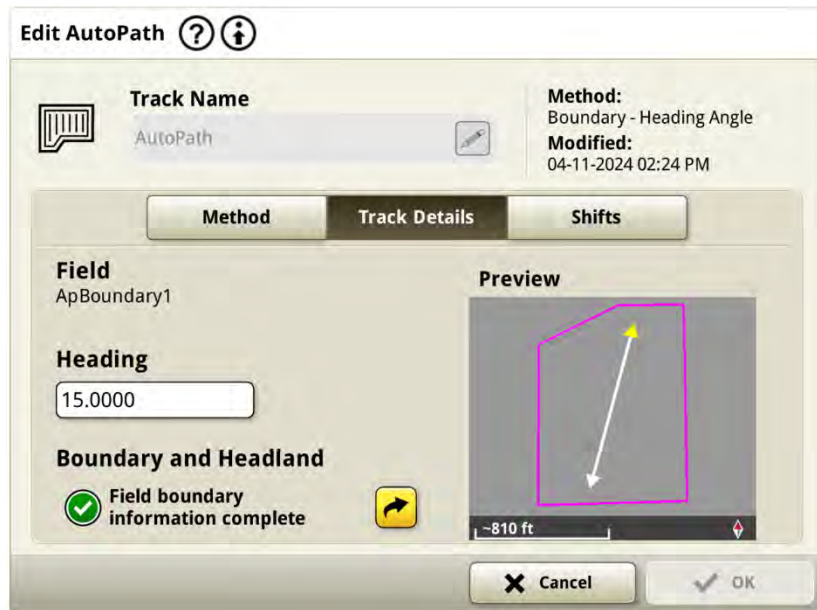

o **Align to Boundary –** The system will default select the longest side of the exterior field boundary, and automatically generate a full field of guidance tracks using that boundary line. The user can adjust the A and B points of the line segment to adjust the field track placements as desired, or they can choose a different boundary line to create field guidance tracks from.
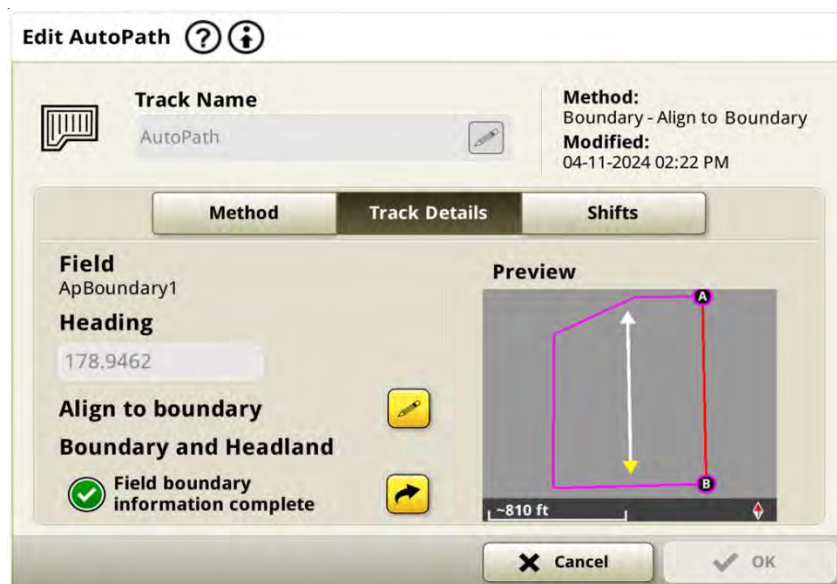
o **From Existing Track –** The user selects an existing A+B straight track from their display, and the system will automatically generate a full field of guidance tracks using that existing track.
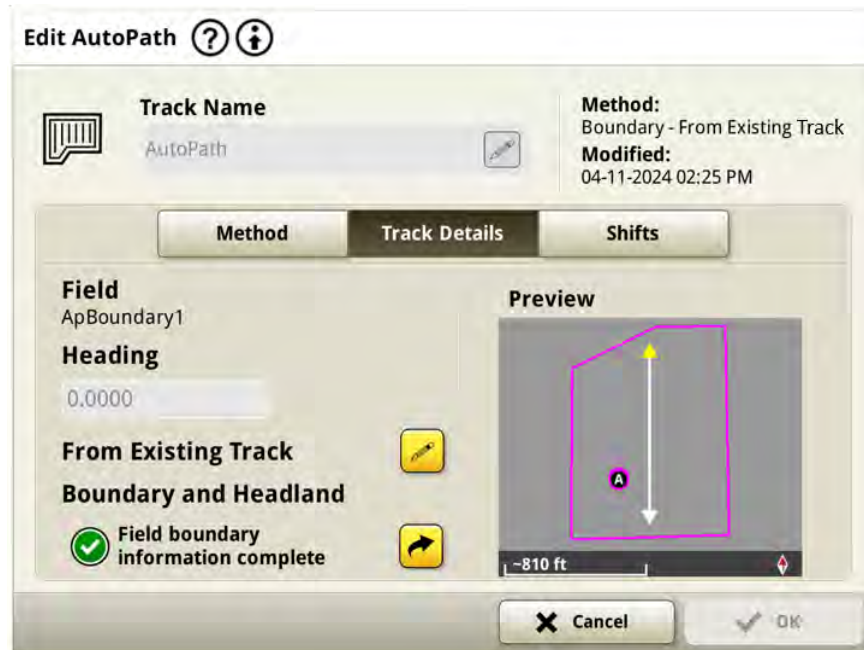
- **AutoPath™ (Boundaries) – Track Visibility**

AutoPath™ (boundaries) has an advanced setting for 'Track Visibility' which allows users to select which tracks to show for the field as they complete work. Users can choose to show all tracks, just field tracks, or just headland tracks.
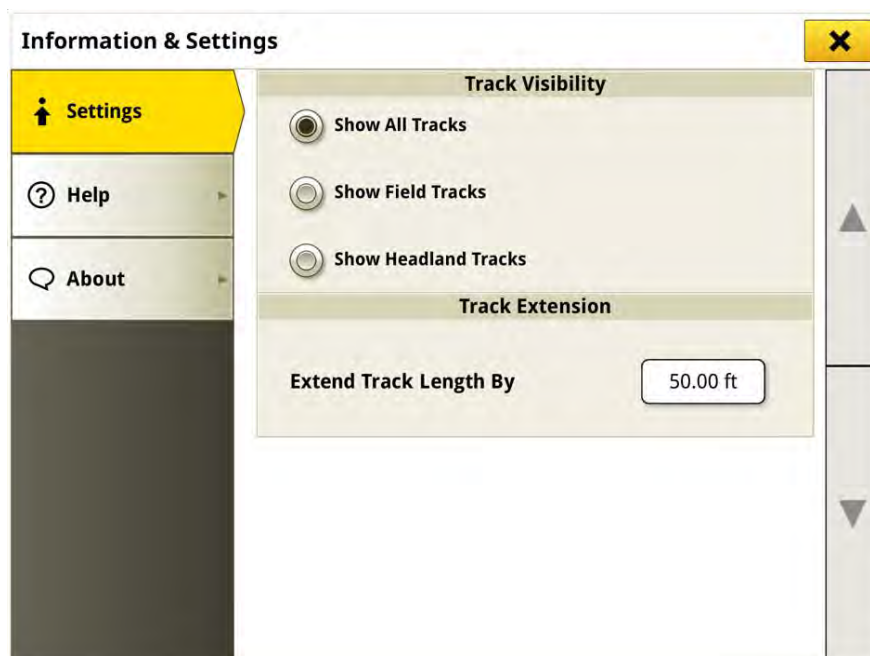
- **AutoPath™ (Boundaries) – Track Shifts**

  Track Shifts can be set for the headland and/or the field tracks separately, in the Edit AutoPath™ Page under the 'Shifts' tab. This allows a user to shift their headland guidance tracks In or Out a desired dimension from the field boundary and field tracks in the desired direction from the active path (North, South, East, West). Shifts will force the guidance plan to regenerate, so this can only be done prior to actively tracking on a line. AutoPath (boundaries) plans have a 150' shift limit.

- **AutoPath™ (Rows) – Track Shifts**

  Track Shifts have been increased to allow a total of 30" of shift for guidance tracks. The shift is based on the current heading of the track at the point of the shift and is not a radial line shift like AB curves. This can lead to some portions of the track shifting closer to the desired shift location.
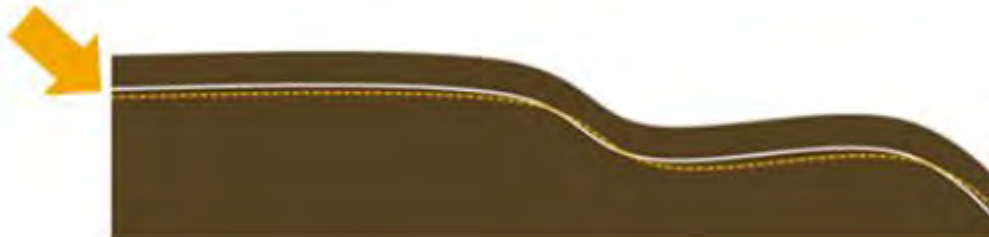
- **AutoTrac™ Turn Automation – Turn Size Settings**

  The 'Turn Aggressiveness' setting has been renamed to 'Turn Size.' This setting allows users to make their planned turns smaller or larger to create the most efficient turn based on the field headland size, the machine's turn radius and equipment width. A small number on the turn size scale will result in a tighter turn and a larger number will result in a looser turn, as illustrated on the run page below.
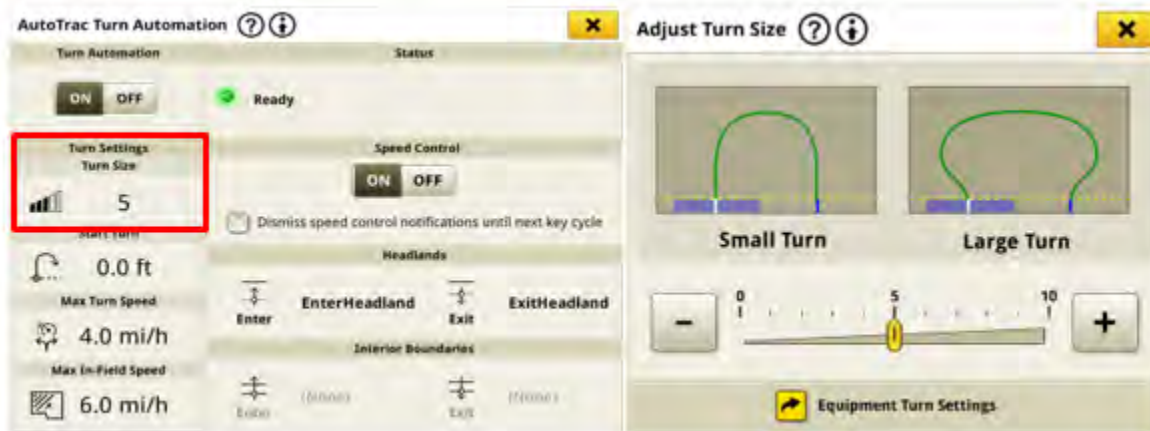

- **AutoTrac™ Turn Automation – Skip Turn Recommendations**

  This new Turn Automation feature provides users with the recommendation to use a skip turn to complete a more efficient maneuver if they cannot complete a perfect U-turn. A pop-up window, illustrated below, allows an operator to accept or decline the suggested skip turn. This recommendation only applies to the U-turn, turn type option.
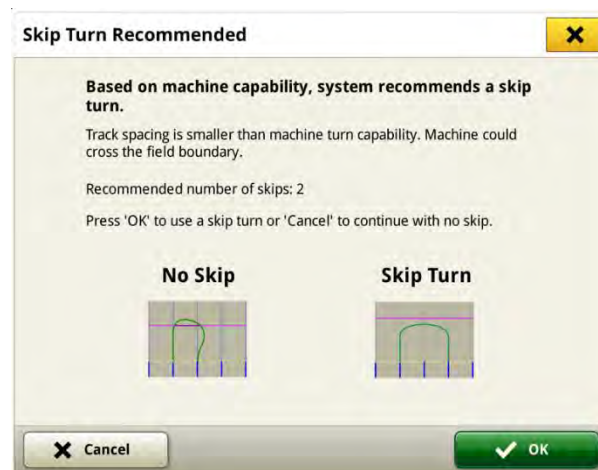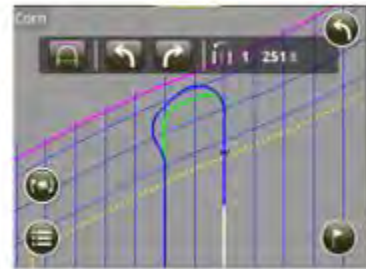

  The system will make this skip turn recommendation when the machine's track spacing is less than the machine's minimum turn diameter, or when a planned turn will leave the field boundary because the headland is not large enough to successfully make the turn using the current settings.
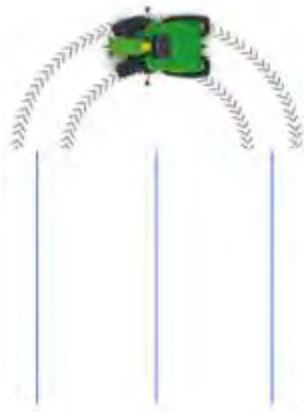
Example: 20 foot track spacing + 40 foot turn diameter
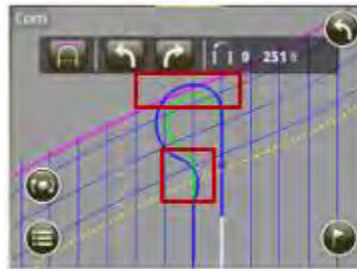
No skip left turn   1 skip left turn

- **Machine Sync – U Shaped Op Zone Mirroring of Multiple Home Points**

  The home point(s) set on one side of the U-shaped operational zone will automatically be mirrored to the other side of the zone when the follower has moved to the other side of the leader machine. The following conditions must be met for this to happen:

  - U-shaped Zone Enabled

  - Multipoint ON

  - Controlled Traffic ON
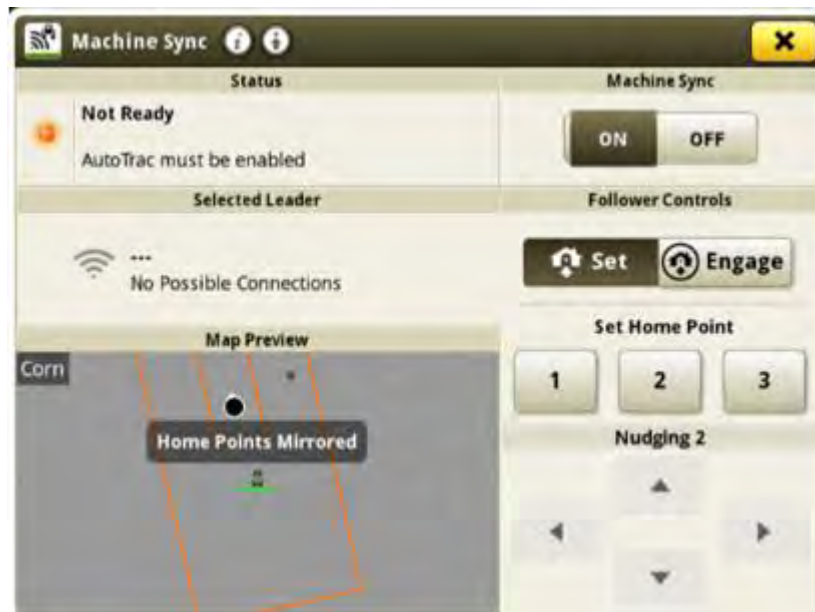
Additional Information and Training Resources

Operator's Manual

A copy of the G5 Operator's Manual is available within the Help Center application on the display with JD Display 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. G5 Display Onscreen Help is also available for reference at displaysimulator.deere.com.

Training Simulators

To learn more about the G5 Displays, there is an online training simulator available at displaysimulator.deere.com

Release Notice

These are the JD Display OS and AMS Applications software update release notes for the G5 Displays. Release notes can be found on http://www.stellarsupport.com/. Note: Your use of the software is governed by the End User License Agreement included with the software.