

John Deere 4640 Universal Display



OPERATOR'S MANUAL

John Deere 4640 Universal Display

OMPFP13204 ISSUE J6 (ENGLISH)

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

If this product contains a gasoline engine:

⚠ WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

The State of California requires the above two warnings.

Additional Proposition 65 Warnings can be found in this manual.

John Deere Ag Management Solutions

PRINTED IN U.S.A.

Introduction

Foreword

THANK YOU for purchasing a John Deere product.

READ THIS MANUAL carefully to learn how to operate and service your product correctly. Failure to do so could result in personal injury or equipment damage. This manual and safety signs on your product may also be available in other languages. (See your John Deere dealer to order.)

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your product and should remain with the product when you sell it.

MEASUREMENTS in this manual are given in both metric and customary U.S. unit equivalents. Use only correct replacement parts and fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

RIGHT-HAND AND LEFT-HAND sides are determined by facing in the direction the machine or implement will travel when going forward.

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I.N.) in the Operator's Manual. Accurately record all the numbers to help in tracing the product should it be stolen.

Serial Number: _____

Your dealer also needs these numbers when you order parts. File a backup of the identification numbers in a safe location off the machine or away from the product.

WARRANTY is provided as part of John Deere's support program for customers who operate and maintain their equipment as described in this manual. The warranty is explained on the warranty certificate or statement which you should have received from your dealer.

This warranty provides you the assurance that John Deere will back its products where defects appear within the warranty period. In some circumstances, John Deere also provides field improvements, often without charge to the customer, even if the product is out of warranty. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied.

If you are not the original owner of this product, it is in your interest to contact your local John Deere dealer to inform them of this unit's serial number. This will help John Deere notify you of any issues or product improvements.

JS56696,0000C4C -19-26JUN15-1/1

John Deere Technical Information Bookstore

NOTE: Product functionality may not be fully represented in this document due to product changes occurring after the time of printing. Read the latest Operator's Manual prior to operation. To obtain a copy, see your dealer or visit www.deere.com and use the 'Search for Agricultural Equipment Operator's Manuals' link to locate the John Deere Technical Information Bookstore.

CZ76372,000071F -19-20APR15-1/1

Download Software Updates

Ensure display is updated with latest software. Software updates are available for download from:

<https://my.deere.com/software-downloads/software-manager/>

CZ76372,000071E -19-17JUN14-1/1

Contents

	Page		Page
Safety			
Recognize Safety Information	05-1	Shortcut Softkeys	15-2
Understand Signal Words.....	05-1	Menu.....	15-3
Follow Safety Instructions.....	05-1	Operating System Applications Overview	15-3
Practice Safe Maintenance.....	05-2	AMS Applications Overview	15-6
Use Steps and Handholds Correctly	05-2	Basics Activation	15-7
Handle Electronic Components and		Premium Activation.....	15-7
Brackets Safely	05-3	Demo Activations.....	15-8
Use Electronic Display Properly	05-3	Display and Sound	
Operate Guidance Systems Safely	05-4	Display and Sound	01-1
Use Seat Belt Properly	05-4	Brightness.....	01-1
Operating the Tractor Safely	05-5	Sound	01-1
Operate Implement Automation		Display Calibration.....	01-2
Systems Safely	05-6	Date and Time	
Avoid High-Pressure Fluids	05-6	Date and Time	02-1
Read Operator's Manuals for ISOBUS		Change Current Date	02-1
Controllers.....	05-7	Change Current Time	02-1
Avoid Backover Accidents.....	05-7	Language and Units	
Prevent Electrical Shock and Fires.....	05-7	Language and Units	03-1
Avoid Exposure to High Radio		Language and Units Settings	03-1
Frequency Fields.....	05-8	Software Manager	
Safety Signs			
Safety Warning — AutoTrac™ Detected	10-1	Software Manager	04-1
Safety Warning — ISOBUS Controller	10-1	Update Display Software	04-1
Safety Warning — ISO Aux Improper		Activations	04-3
Operation	10-1	Users and Access	
Safety Warning — ISO Aux Configuration.....	10-2	Users and Access.....	08-1
Safety Caution — System Reboot.....	10-2	User Profiles	08-1
Safety Caution — Software Installation.....	10-2	Access Groups	08-2
Regulatory Information			
Information to User	11-1	Layout Manager	
John Deere 4640 Universal Display		Layout Manager.....	09-1
Wi-Fi® Capabilities.....	11-1	Active Set	09-1
United States—Federal		Shortcut Bar.....	09-2
Communications Commission		All Run Pages.....	09-2
(FCC) Notifications to User	11-1	Add, Edit, or Duplicate Run Pages	09-3
Canada—Industry Canada		Navigate Run Pages on Main Page	09-4
Notifications to User	11-2	Settings Manager	
Display Introduction			
Onscreen Help.....	15-1	Settings Manager	24-1
John Deere 4640 Universal Display	15-1		
Run Page Structure	15-2		
Status Center.....	15-2		

Continued on next page

Original Instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

COPYRIGHT © 2016
DEERE & COMPANY
Moline, Illinois
All rights reserved.
A John Deere ILLUSTRATION™ Manual
Previous Editions
Copyright © 2015

	Page
Equipment Manager	
Equipment Manager	20-1
Machine Profile	20-1
Implement Profile	20-2
Guidance	
AutoTrac	25-1
Manual Guidance	25-1
Operate Guidance Systems Safely	25-1
General Information	25-2
Guidance Settings	25-2
Turn Predictor	25-2
Tracking Tones	25-2
Shift Track	25-3
Lightbar Settings	25-3
Curve Track Settings	25-4
Circle Track Settings	25-5
Track Spacing	25-5
Steering Sensitivity	25-6
Set Guidance Track	25-6
Straight Track	25-7
Quick Line	25-7
Guide on a Straight Track	25-7
AB Curves	25-8
Guide on an AB Curve	25-8
Record a Straight Path or Navigate Around Obstacles	25-9
Adaptive Curves	25-10
Guide on an Adaptive Curve	25-11
Record a Straight Path Within an Adaptive Curve	25-11
Navigate Around Obstacles	25-12
Circle Track	25-13
Circle Track Edge	25-14
Guide on a Circle Track	25-14
Boundary Fill Track	25-14
Guide on a Boundary Fill Track	25-14
Swap Track (Track Set)	25-15
AutoTrac Status Pie	25-15
Enable AutoTrac™	25-16
Disable AutoTrac When Not In Use	25-17
Activate AutoTrac	25-17
Resume Switch	25-17
Reactivate AutoTrac on Next Pass	25-18
Deactivate AutoTrac™	25-18
Minimum and Maximum Speeds	25-19
AutoTrac™ Deactivation Message	25-20
Steering Optimization	25-21
Troubleshooting	25-25
Fields and Boundaries	
Fields and Boundaries	30-1
Manage Clients, Farms, and Fields	30-2
Field Boundaries	30-3
Work Setup and Mapping	
Work Setup	35-1

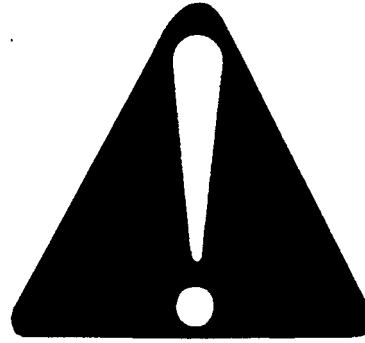
Work Totals	35-2
Mapping	35-2
Work Monitor	
Work Monitor	15-1
Work Recording	15-1
Section Control	
Section Control	40-1
Section Status Module	40-2
Overlap Settings	40-2
Performance Tuning	40-3
File Manager	
File Manager	45-1
USB Drive	45-4
Capture Screen Shots	45-4
Diagnostics Center	
Diagnostics Center	07-1
Controller Diagnostics	07-1
Diagnostic Information	07-2
Hide Diagnostic Center	07-2
Diagnostic Trouble Codes	07-2
Readings	07-3
CAN Bus Information	07-4
CAN Bus Values	07-5
Network	07-6
Maintenance and Calibrations	
Maintenance and Calibrations	16-1
Service Checks	16-1
Service Checks	16-1
Service Intervals	16-2
Calibrations	16-2
ISOBUS VT	
ISOBUS VT	18-1
StarFire Receiver	
StarFire™ GPS Receiver	50-1
StarFire™ Remote Software Updates	50-1
Video	
Video	20-1
Video Triggers	20-1
Generation 4 Display Video Harness	20-1
Service and Maintenance	
Factory Data Reset	55-1
Troubleshooting	
System Recovery	60-1

Safety

Recognize Safety Information

This is a safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.



T81389 —UN—28JUN13

DX,ALERT -19-29SEP98-1/1

Understand Signal Words

DANGER; The signal word DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING; The signal word WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION; The signal word CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. CAUTION may also be used to alert against unsafe practices associated with events which could lead to personal injury.

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards. DANGER or WARNING safety signs are located near specific hazards. General

precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.



▲ WARNING

▲ CAUTION

TS187 —19—30SEP88

DX,SIGNAL -19-05OCT16-1/1

Follow Safety Instructions

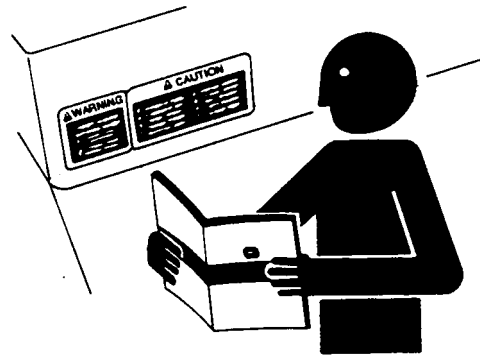
Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your John Deere dealer.



TS201 —UN—15APR13

DX,READ -19-16JUN09-1/1

Practice Safe Maintenance

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is moving. Keep hands, feet, and clothing from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

On self-propelled equipment, disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

On towed implements, disconnect wiring harnesses from tractor before servicing electrical system components or welding on machine.



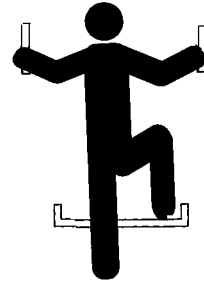
TS218 —UN—23AUG88

DX,SERV -19-17FEB99-1/1

Use Steps and Handholds Correctly

Prevent falls by facing the machine when getting on and off. Maintain 3-point contact with steps, handholds, and handrails.

Use extra care when mud, snow, or moisture present slippery conditions. Keep steps clean and free of grease or oil. Never jump when exiting machine. Never mount or dismount a moving machine.



T133468 —UN—15APR13

DX,WW,MOUNT -19-12OCT11-1/1

ROOF

Handle Electronic Components and Brackets Safely

Falling while installing or removing electronic components mounted on equipment can cause serious injury. Use a ladder or platform to easily reach each mounting location. Use sturdy and secure footholds and handholds. Do not install or remove components in wet or icy conditions.

If installing or servicing a RTK base station on a tower or other tall structure, use a certified climber.

If installing or servicing a global positioning receiver mast used on an implement, use proper lifting techniques and wear proper protective equipment. The mast is heavy and can be awkward to handle. Two people are required when mounting locations are not accessible from the ground or from a service platform.



TS249—UN—23AUG88

DX,WW,RECEIVER -19-24AUG10-1/1

Use Electronic Display Properly

Electronic displays are secondary devices intended to aid the operator in performing field operations, increase comfort and provide entertainment. Displays offer a wide range of functionality, are used in many different machine system applications and can be used with other secondary devices such as handheld electronic devices.

A secondary device is any device that is not required to operate your machine for its primary use. The operator is always responsible for safe operation and control of the machine.

To prevent injury while operating the machine:

- Position the display according to the installation instructions. Ensure that the device is secured and does not obstruct the driver's view or interfere with the machine operating controls.
- Do not become distracted by the display. Stay alert. Pay attention to the machine and surrounding environment.

- Do not change settings or access any functions that require prolonged use of the display controls while machine is moving. Stop the machine in a safe location and place in park position before attempting such operations.
- Never set the volume so high that you cannot hear outside traffic and emergency vehicles.

To promote safe operation, certain functions of displays may be disabled unless the machine movement is restricted and/or has been placed in the park position. Overriding this safety feature may violate applicable law and can result in damage, serious injury, or death.

Only use available display functionality when conditions permit you to do so safely and in accordance with instructions provided. Always observe safe driving rules, state, or local laws and traffic regulations when using any secondary device.

DX,ELEC,DISPLAY -19-13JAN15-1/1

Operate Guidance Systems Safely

Do not use guidance systems on roadways. Always turn off (disable) guidance systems before entering a roadway. Do not attempt to turn on (activate) a guidance system while transporting on a roadway.

Guidance systems are intended to aid the operator in performing field operations more efficiently. The operator is always responsible for the machine path. Guidance systems do not automatically detect or prevent collisions with obstacles or other machines.

Guidance Systems include any application that automates machine steering. This includes, but may not be limited to, AutoTrac™, iGuide™, iTEC™ Pro, AutoTrac™ Universal (ATU), RowSense™, and Machine Sync.

To prevent injury to the operator and bystanders:

- Never get on or off a moving machine.

*AutoTrac is a trademark of Deere & Company
iGuide is a trademark of Deere & Company
iTEC is a trademark of Deere & Company
RowSense is a trademark of Deere & Company*

- Verify the machine, implement, and guidance system are set up correctly.
 - If using iTEC™ Pro, verify accurate boundaries have been defined.
 - If using Machine Sync, verify the follower's home point is calibrated with sufficient space between the machines.
- Remain alert and pay attention to the surrounding environment.
- Take control of the steering wheel, when necessary, to avoid field hazards, bystanders, equipment, or other obstacles.
- Stop operation if poor visibility conditions impair your ability to operate the machine or identify people or obstacles in the machine path.
- Consider field conditions, visibility, and machine configuration when selecting machine speed.

JS56696,0000ABC -19-02DEC13-1/1

Use Seat Belt Properly

Avoid crushing injury or death during rollover.

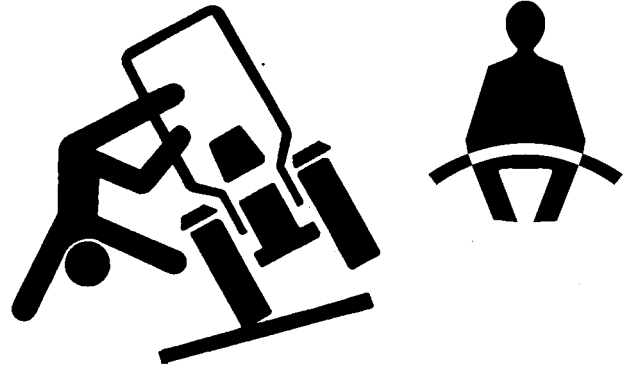
This machine is equipped with a rollover protective structure (ROPS). USE a seat belt when you operate with a ROPS.

- Hold the latch and pull the seat belt across the body.
- Insert the latch into the buckle. Listen for a click.
- Tug on the seat belt latch to make sure that the belt is securely fastened.
- Snug the seat belt across the hips.

Replace entire seat belt if mounting hardware, buckle, belt, or retractor show signs of damage.

Inspect seat belt and mounting hardware at least once a year. Look for signs of loose hardware or belt damage, such as cuts, fraying, extreme or unusual wear,

discoloration, or abrasion. Replace only with replacement parts approved for your machine. See your John Deere dealer.



TS1729—UN—24MAY13

DX,ROPS1 -19-22AUG13-1/1

Operating the Tractor Safely

You can reduce the risk of accidents by following these simple precautions:

- Use your tractor only for jobs it was designed to perform, for example, pushing, pulling, towing, actuating, and carrying a variety of interchangeable equipment designed to conduct agricultural work.
- This tractor is not intended to be used as a recreational vehicle.
- Read this operator's manual before operating the tractor and follow operating and safety instructions in the manual and on the tractor.
- Follow operation and ballasting instructions found in the operator's manual for your implements/attachments, such as front loaders
- Make sure that everyone is clear of machine, attached equipment, and work area before starting engine or operation.
- Keep hands, feet, and clothing away from power-driven parts

Driving Concerns

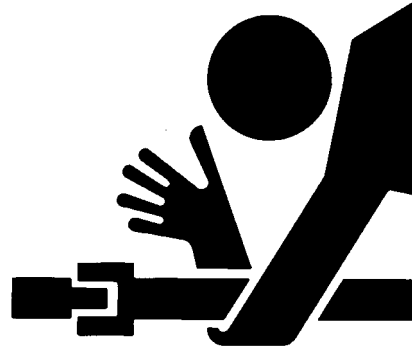
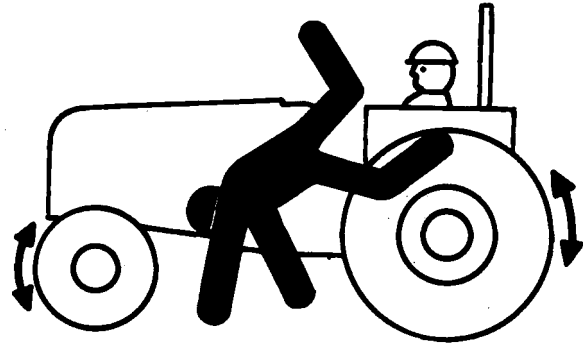
- Never get on or off a moving tractor.
- Keep all children and nonessential personnel off tractors and all equipment.
- Never ride on a tractor unless seated on a John Deere approved seat with seat belt.
- Keep all shields/guards in place.
- Use appropriate visual and audible signals when operating on public roads.
- Move to side of road before stopping.
- Reduce speed when turning, applying individual brakes, or operating around hazards on rough ground or steep slopes.
- Couple brake pedals together for road travel.
- Pump brakes when stopping on slippery surfaces.

Towing Loads

- Be careful when towing and stopping heavy loads. Stopping distance increases with speed and weight of towed loads, and on slopes. Towed loads with or without brakes that are too heavy for the tractor or are towed too fast can cause loss of control.
- Consider the total weight of the equipment and its load.
- Hitch towed loads only to approved couplings to avoid rearward upset.

Parking and Leaving the Tractor

- Before dismounting, shut off SCVs, disengage PTO, stop engine, lower implements/attachments to ground



and securely engage park mechanism, including the park pawl and park brake. In addition, if tractor is left unattended, remove key.

- Leaving transmission in gear with engine off will NOT prevent the tractor from moving.
- Never go near an operating PTO or an operating implement.
- Wait for all movement to stop before servicing machinery.

Common Accidents

Unsafe operation or misuse of the tractor can result in accidents. Be alert to hazards of tractor operation.

The most common accidents involving tractors:

- Tractor rollover
- Collisions with motor vehicles
- Improper starting procedures
- Entanglement in PTO shafts
- Falling from tractor
- Crushing and pinching during hitching

DX,WW,TRACTOR -19-21AUG09-1/1

TS290—UN—23AUG88

TS276—UN—23AUG88

Operate Implement Automation Systems Safely

Do not use implement automation systems on roadways. Always turn off (disable) implement automation systems before entering a roadway. Do not attempt to turn on (activate) an implement automation system while transporting on a roadway.

Implement automation systems are intended to aid the operator in performing field operations more efficiently. The operator is always responsible for the machine path.

Implement automation systems include any application that automates implement movement. This includes, but may not be limited to, iGrade™ and Active Implement Guidance.

To prevent injury to the operator and bystanders:

- Verify the machine, implement, and automation systems are set up correctly.
- Remain alert and pay attention to the surrounding environment.
- Take control of the machine, when necessary, to avoid field hazards, bystanders, equipment, or other obstacles.

iGrade is a trademark of Deere & Company



- Stop operation if poor visibility conditions impair your ability to operate the machine or identify people or obstacles in the machine path.

PC13793 —UN—25MAY11

CF86321,0000366 -19-19DEC13-1/1

Avoid High-Pressure Fluids

Inspect hydraulic hoses periodically – at least once per year – for leakage, kinking, cuts, cracks, abrasion, blisters, corrosion, exposed wire braid or any other signs of wear or damage.

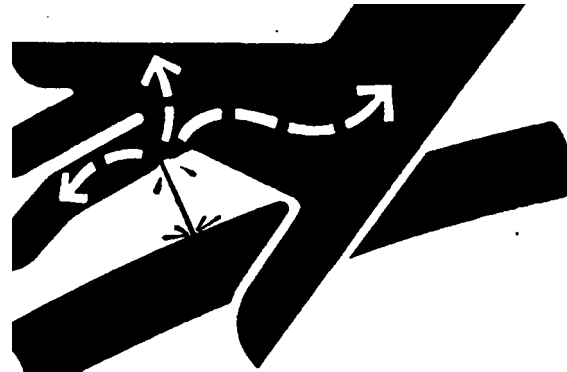
Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar



with this type of injury should reference a knowledgeable medical source. Such information is available in English from Deere & Company Medical Department in Moline, Illinois, U.S.A., by calling 1-800-822-8262 or +1 309-748-5636.

X9811 —UN—23AUG88

DX,FLUID -19-12OCT11-1/1

Read Operator's Manuals for ISOBUS Controllers

In addition to GreenStar™ Applications, this display can be used as a display device for any ISOBUS Controller that meets ISO 11783 standard. This includes capability to control ISOBUS implements. When used in this manner, information and control functions placed on the display are provided by the ISOBUS Controller and are the responsibility of the ISOBUS Controller manufacturer.

GreenStar is a trademark of Deere & Company

Some of these functions could pose a hazard to either the operator or a bystander. Read the Operator's Manual provided by the ISOBUS Controller manufacturer and observe all safety messages in manual and on ISOBUS Controller product prior to use.

NOTE: ISOBUS refers to the ISO Standard 11783

DX,WW,ISOBUS -19-15JUL15-1/1

Avoid Backover Accidents

Before moving machine, be sure that all persons are clear of machine path. Turn around and look directly for best visibility. Use a signal person when backing if view is obstructed or when in close quarters.

Do not rely on a camera to determine if personnel or obstacles are behind the machine. The system can be limited by many factors including maintenance practices, environmental conditions, and operating range.



PC10857XW —UN—15APR13

DX,AVOID,BACKOVER,ACCIDENTS -19-30AUG10-1/1

Prevent Electrical Shock and Fires

Battery-powered equipment or other electric power sources produce an electrical shock, sparks, or arcs if a short circuit occurs. Electrical short circuits can reach temperatures high enough to burn people, or ignite or melt common materials.

To prevent injury from electrical shock, burns, or potential fire hazards, always disconnect battery power or other electric power source on equipment before installing or servicing:

- Remove ground (negative terminal [-]) battery clamp.
- Detach and remove battery.
- Switch off main battery or other electric power source.
- Unplug electric power source from equipment.

Understand and follow all local codes and regulations when installing electrical equipment.



PC12631 —UN—04JUN10

HC94949,0000487 -19-27JAN14-1/1

Avoid Exposure to High Radio Frequency Fields

Prevent injury from exposure to high radio frequency fields at the antenna. Do not touch antenna while the system is transmitting. Always disconnect power to the antenna before installing or servicing.

The antenna should always be separated from the operator or nearby persons by a minimum distance of 20 cm (7.9 in.).



PC12632—UN—04JUN10

CZ76372,0000722 -19-26OCT16-1/1

OO
F
P
R
O
O
F

Safety Signs

Safety Warning — AutoTrac™ Detected

This message occurs during startup on machines with an automatic guidance system installed.

WARNING

Automatic Guidance System Detected.
Activating a guidance system on roadways may cause loss of vehicle control.

To avoid death or serious injury, disable the guidance system before entering roadways.

PC19768—19—07JUL14

CZ76372,0000607 -19-19MAY15-1/1

Safety Warning — ISOBUS Controller

This message occurs when the system detects an ISOBUS Controller. For more information, see READ OPERATOR MANUALS FOR ISOBUS CONTROLLERS in the Safety section.

WARNING

ISOBUS Controller Detected. Improper operation can cause unintended machine movement.

To avoid death or serious injury to a bystander, understand how this display operates the functions of the machine.

Read the ISOBUS controller's Operator Manual.

PC19760—19—07JUL14

CZ76372,0000608 -19-14JUN16-1/1

Safety Warning — ISO Aux Improper Operation

This message occurs when the operator enables ISO Aux control.

WARNING

Improper operation can cause unintended implement movement.

To avoid the risk of death or serious injury to a bystander, ensure:

- Users know which function is mapped to each control
- Controls are properly labeled

Select ACCEPT to enable ISO Aux.

PC19759—19—07JUL14

BA31779,00006E1 -19-13JUL15-1/1

Safety Warning — ISO Aux Configuration

This message occurs when the system detects an ISOBUS Controller with ISO Aux functionality, and (or) the ISO Aux control configuration has been modified during run time. For example, an additional input and (or) implement has been added.

WARNING

**ISO Aux configuration changed.
Go to the Controls Setup page to review configuration.**

**Improper operation can cause unintended implement movement.
To avoid the risk of death or serious injury to a bystander, ensure:**

- Users know which function is mapped to each control
- Controls are properly labeled

PC19758—19—07JUL14

BA31779,00006E2 -19-13JUL15-1/1

Safety Caution — System Reboot

This message occurs when the display encounters an error that requires a system reboot.

CAUTION

During system reboot:

- All applications will be shut down without notice
- No system messages will be displayed

To prevent injury, ensure the machine is in Park during the reboot process.

Select ACCEPT to initiate system reboot.

PC19762—19—07JUL14

CZ76372,0000606 -19-29MAY15-1/1

Safety Caution — Software Installation

This message occurs when a software installation is started.

CAUTION

During software installation:

- All applications will be shut down
- No system messages will be displayed

To prevent injury, ensure the machine is in Park and maintain electrical power throughout the installation process.

PC19761—19—07JUL14

CZ76372,0000605 -19-19MAY15-1/1

Regulatory Information

Information to User

This device must be operated as supplied by John Deere Ag Management Solutions. Any changes or modifications

made to these devices without the express written approval of John Deere Ag Management Solutions may void the user's authority to operate this device.

CZ76372,00003A2 -19-10DEC14-1/1

John Deere 4640 Universal Display Wi-Fi® Capabilities

The 4640 Display contains a non-enabled wireless (Wi-Fi®) transmitter. Hardware is present to enable future functionality.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Federal Communications Commission Part 15.21 Statement:

Wi-Fi is a registered trademark of Wi-Fi Alliance.

CZ76372,000075D -19-25JUL16-1/1

United States—Federal Communications Commission (FCC) Notifications to User

This device complies with FCC Part 15. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio

frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

Radio Frequency (RF) Exposure Guidance

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 2.5 cm (1 in) between the radiator and persons. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter, except in accordance with FCC multi-transmitter product procedures.

CZ76372,000076D -19-13JUL16-1/1

Canada—Industry Canada Notifications to User

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter (IC: <XXXX-XXXX>) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

PFP16576

2 omnidirectional external antennas

<XX> dBi Gain

<XX> ohms impedance

RF Exposure Guidance

This equipment complies with FCC and Industry Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 2.5 cm (1 in) between the radiator and persons. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter, except in accordance with FCC and Industry Canada multi-transmitter product procedures.

PC20424—UN—13JUL16

P
R
O
O
F

Continued on next page

CZ76372,000076E -19-13JUL16-1/2

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Le présent émetteur (IC: <XXXX-XXXX>) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

PFP16576

2 Antenne extreme omnidirectionnelle

<XX> dBi Gain

Impedance de <XX> ohms

RF L'exposition Guidance

Cet équipement est conforme aux normes FCC et les limites d'exposition aux rayonnements Industrie Canada énoncées pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimale de 2.5 cm (1 in) entre le radiateur et les personnes. Cet émetteur ne doit pas être co-localisées ou opérant en conjonction avec une autre antenne ou un autre émetteur, sauf en conformité avec la FCC et Industrie Canada Procédures de produits multi-émetteurs.

PC20425 —UN—13JUL16

CZ76372,000076E -19-13JUL16-2/2

P
R
O
O
F

Display Introduction

Onscreen Help

PC15300 —UN—19MAR13

Help Center is a supplement to the paper Operator's Manual. Read the Operator's Manuals prior to operation.

Navigate to Help Center

1. Select Menu.
2. Select System tab.
3. Select Help Center application.



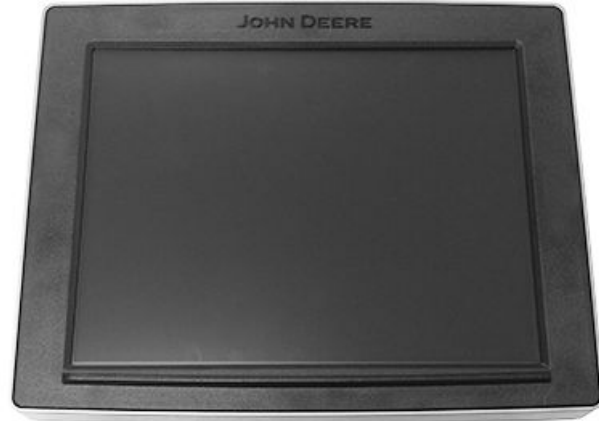
Help Center Application and Information Button

DX,PC,INTRO,HELP -19-17DEC15-1/1

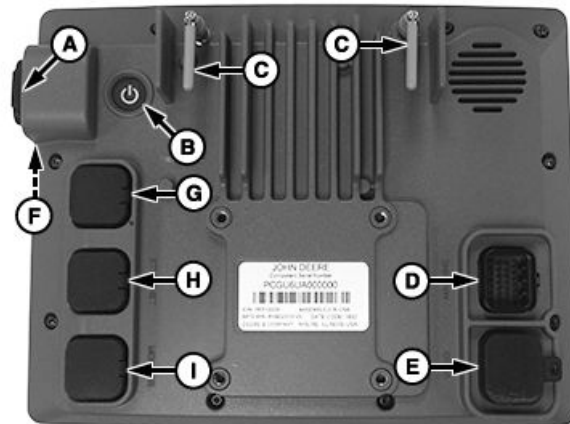
John Deere 4640 Universal Display

The 4640 Display is designed for maximum ease of use and productivity. One software system provides commonality while hardware options provide a range of price and functionality.

- | | |
|----------------------------|-----------------------------|
| A—USB Ports | F—Display Status LED |
| B—Power Button | G—External USB Adapter Port |
| C—Wireless Network Antenna | H—Ethernet Port |
| D—24 Pin Machine Connector | I—Extended Monitor Port |
| E—Video Connector | |



John Deere 4640 Universal Display



John Deere 4640 Universal Display Components

CZ76372,000075E -19-18OCT16-1/1

PC23195 —UN—18OCT16

PC23196 —UN—18OCT16

Run Page Structure

Menu (A) lists all applications installed on display and machine.

Shortcut softkeys (B) provide quick access to frequently used applications and functions.

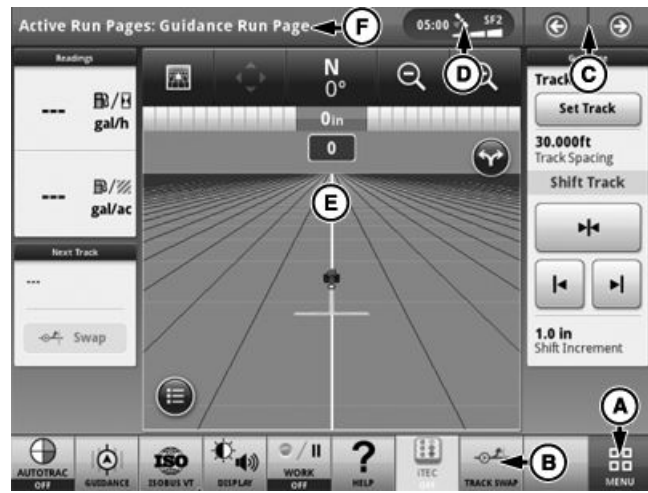
Next and Previous Run Page buttons (C) cycle through multiple run pages.

Select the area indicated (D) to display **Status Center**. Important information for display functions is highlighted, such as GPS signal strength and available data storage.

Run page (E) is configured using Layout Manager application.

Select **title bar (F)** to display **Run Page Selection** page. Choose desired run page from list of available pages.

(Refer to Layout Manager application for information about customizing the run page.)



Display Run Page

- A—Menu
- B—Shortcut Softkeys
- C—Next or Previous Run Page Buttons
- D—Status Center
- E—Run Page
- F—Title Bar/Run Page Selection

CZ76372,000075F -19-11JUL16-1/1

PC17353—UN—03DEC13

Status Center

Status Center is located in the title bar and highlights important information for display functions, such as GPS signal strength and notifications.

Select Status Center to display additional information in a drop down window. The expanded Status Center provides quick access to notifications and settings.

NOTE: Date and Time and Data Storage are always displayed in Status Center.

Additional information is displayed depending on machine configuration and notifications.



Status Center Main Page

- A—Status Center

CZ76372,0000760 -19-11JUL16-1/1

PC20422—UN—11JUL16

Shortcut Softkeys

Shortcut softkeys display status information and provide quick access to application functions.

Softkeys are always visible along the bottom of a run page.

(Refer to Layout Manager application for information about customizing the shortcut bar.)

PC17276—UN—13AUG13



- A—Shortcut Softkeys

CZ76372,0000761 -19-18OCT16-1/1

Menu

PC17269 —UN—15JUL13

Selecting Menu button lists all applications installed on display and machine. Select left-hand tabs to view different groups of applications.

NOTE: Available applications vary depending on machine configuration.



Menu Button

DX,PC,INTRO,MENU -19-21DEC15-1/1

Operating System Applications Overview

PC15302 —UN—19MAR13

Operating System applications package is installed at the factory, and is updated with periodic software updates from John Deere. These applications are used for basic functions of display.



CZ76372,0000762 -19-25JUL16-1/20

Date and Time

PC16674 —UN—18MAR13

- Information from Date and Time application is used for several important functions on system. These include error logging, activations, and data recording.
- Date and time are set automatically if a GPS receiver is connected and receiving valid signal. In this case, only set time zone.
- It is found on System tab of the display menu.



Date and Time

CZ76372,0000762 -19-25JUL16-2/20

Diagnostics Center

PC17272 —UN—17JUL13

- Diagnostics Center is the one place to find diagnostics for the entire system.
- It is found on System tab of the display menu.



Diagnostics Center

CZ76372,0000762 -19-25JUL16-3/20

Display and Sound

PC16685 —UN—18MAR13

- Along with display brightness and volume, Display and Sound is used to calibrate display and configure multiple displays.
- It is found on System tab of the display menu.



Display and Sound

CZ76372,0000762 -19-25JUL16-4/20

File Manager

PC16671 —UN—18MAR13

- Data and setup information can be transferred between displays or compatible desktop software.
- Perform a Factory Data Reset to clear display of user data.
- It is found on System tab of the display menu.



File Manager

Continued on next page

CZ76372,0000762 -19-25JUL16-5/20

Language and Units

PC16677 —UN—18MAR13



Language and Units

- Use Language and Units application to change Language, Number Format, and Units of Measurement.
- It is found on System tab of the display menu.

CZ76372.0000762 -19-25JUL16-6/20

Settings Manager

PC22543 —UN—22APR16



Settings Manager

- Use Settings Manager to load, edit, or save configurations of machine and implement settings.
- It is found on Applications tab of the display menu.

CZ76372.0000762 -19-25JUL16-7/20

Software Manager

PC15346 —UN—11JUL13



Software Manager

- Use Software Manager to update software, activate features, and install onscreen help packages.
- It is found on System tab of the display menu.

CZ76372.0000762 -19-25JUL16-8/20

Users and Access

PC17262 —UN—12JUL13



Users and Access

- Users and Access manages user profiles and locks users out of certain settings.
- It is found on System tab of the display menu.

CZ76372.0000762 -19-25JUL16-9/20

Controls Setup

PC15326 —UN—08JUL13



Controls Setup

- If machine is equipped with an ISOBUS or machine joystick, Control Setup configures it to control machine or implement functions.
- It is found on Applications tab of the display menu.

Continued on next page

CZ76372.0000762 -19-25JUL16-10/20

Equipment Manager

PC20410 —UN—22MAY15



Equipment Manager

- The Machine Profile allows operator to configure GPS offsets and machine dimensions.
- The Implement Profile allows operator to configure Implement Connection Type, Working Width, Dimensions, and Recording Triggers.
- It is found on Applications tab of the display menu.

CZ76372,0000762 -19-25JUL16-11/20

Fields and Boundaries

PC17260 —UN—11JUL13



Fields and Boundaries

- Field names are used to organize information so it is easier to find and use data, such as guidance lines.
- Use Fields application to set up clients, farms, and fields.
- Select client, farm, and field to set current location.
- It is found on Applications tab of the display menu.

CZ76372,0000762 -19-25JUL16-12/20

Help Center

PC16684 —UN—18MAR13



Help Center

- Onscreen Help about each application and more is available in Help Center.
- Not all Help languages are installed at the factory. Update display software to install Help for all supported languages.
- It is found on Applications tab of the display menu.

CZ76372,0000762 -19-25JUL16-13/20

ISOBUS VT

PC16682 —UN—18MAR13



ISOBUS VT

- Monitor and control ISOBUS 11783 compatible controllers and implements.
- It is found on Applications tab of the display menu.

NOTE: Only one ISOBUS controller can be viewed at a time. If more than one controller is connected, select Menu button within ISOBUS VT to view a list of controllers to choose from.

PC15293 —UN—18MAR13



ISOBUS VT Menu

CZ76372,0000762 -19-25JUL16-14/20

Layout Manager

PC16678 —UN—18MAR13



Layout Manager

- Use Layout Manager to create and modify run pages and shortcut bar so important information and functions can be accessed from the main page.
- It is found on Applications tab of the display menu.

Continued on next page

CZ76372,0000762 -19-25JUL16-15/20

Mapping

PC20413 —UN—11MAY15

- Mapping application is used to view spatial features, such as guidance, coverage, work data, and map based prescriptions. (Prescriptions require a Premium or Documentation activation.)
- It is found on Applications tab of the display menu.



Mapping

CZ76372,0000762 -19-25JUL16-16/20

Remote Display Access

PC17363 —UN—16DEC13

- Remote Display Access (RDA) allows someone from a remote location to view an operating display.
- It is found on Applications tab of the display menu.



Remote Display Access

CZ76372,0000762 -19-25JUL16-17/20

StarFire™

PC17388 —UN—15MAY14

- The StarFire™ application is used to view StarFire™ Receivers. If more than one receiver is connected, select the desired receiver using the application.
- It is found on Applications tab of the display menu.



StarFire

StarFire is a trademark of Deere & Company

CZ76372,0000762 -19-25JUL16-18/20

Work Monitor

PC15317 —UN—16MAY13

- Work Monitor displays averaged and totaled machine and operation-specific values.
- It is found on Applications tab of the display menu.



Work Monitor

CZ76372,0000762 -19-25JUL16-19/20

Work Setup

PC20415 —UN—11MAY15

- Use Work Setup application when changing implements, fields, crops, applying a different product, or selecting a prescription.
- It is found on Applications tab of the display menu.



Work Setup

CZ76372,0000762 -19-25JUL16-20/20

AMS Applications Overview

PC15301 —UN—19MAR13

AMS Applications package is installed at factory, but requires an activation to enable functionality. These applications are installed and updated in packages separate from the Generation 4 Operating System.



AMS Applications Package

Continued on next page

CZ76372,0000763 -19-11JUL16-1/4

Guidance

PC16676 —UN—18MAR13



Guidance

- The Guidance application is used for steering machines through the field along guidance tracks. Steering can be done manually or automatically using AutoTrac™.
- It is found on Applications tab of the display menu.

AutoTrac is a trademark of Deere & Company

CZ76372,0000763 -19-11JUL16-2/4

Section Control

PC20399 —UN—16FEB15



Section Control

- Section Control turns work point sections on and off automatically to reduce overlap and improve input management.
- Section Control application requires a Premium or Section Control activation.
- It is found on Applications tab of the display menu.

CZ76372,0000763 -19-11JUL16-3/4

Work Totals

PC21878 —UN—24NOV15



Work Totals

- Work Totals records work data, including acres worked, average product rate, and total product applied.
- Work Totals application requires a Premium or Documentation activation.
- It is found on Applications tab of the display menu.

CZ76372,0000763 -19-11JUL16-4/4

Basics Activation

Basics activation is required to operate Generation 4 Universal Display.

Contact your John Deere dealer to transfer Basics from a non-working display to a new display.

When a display does not have a Basics activation, access is limited to the following applications.

- Software Manager
- Language and Units
- File Manager
- Display and Sound
- Diagnostics Center

CZ76372,0000764 -19-11JUL16-1/1

Premium Activation

A Premium activation is required to operate certain features, such as documenting work data, and utilizing Section Control. It is also required to enable certain functions within applications, such as exporting work data in the File Manager application.

Individual activations that are included within the Premium activation are listed in Software Manager application. Premium activation is not listed on Activations tab. Select Menu button > System tab > Software Manager application > Activations tab.

Contact your John Deere dealer to purchase a Premium activation.

CZ76372,0000765 -19-11JUL16-1/1

Demo Activations

In Software Manager application, demo activations are available to try out features on the display. A blue light next to a feature indicates that demo is turned on.

AutoTrac is a trademark of Deere & Company

Demo is available from the factory for 15 hr. of use. For example, AutoTrac™ demo only counts down when it is activated.

DX,PC,INTRO,DEMO -19-21DEC15-1/1

PROOF
PROOF
PROOF

Display and Sound

Display and Sound

PC16685 —UN—18MAR13

Display and Sound application adjusts display brightness and volume level.

If multiple displays are connected, use this application to configure which functions appear on each display.

If screen touches do not register in correct location, use Touchscreen Calibration to realign screen.

Navigate to Display and Sound

1. Select Menu.

2. Select System tab.

3. Select Display and Sound application.



Display and Sound

DX,PC,DISP -19-21DEC15-1/1

Brightness

PC15319 —UN—20MAY13

Brightness and Color Mode

• Auto Mode

Auto Mode is recommended setting. This synchronizes display brightness with cab light switch. If cab lights are off, display is in Day Mode. If cab lights are on, display is in Night Mode.

• Day and Night Modes

Select either mode to prevent display brightness from synchronizing with cab light switch.



A—Day Mode



B—Night Mode

NOTE: The mode selected does not adjust brightness of a second display. Adjust brightness of that display through its settings.

DX,PC,DISP,BRIGHT -19-21DEC15-1/2

Brightness Settings

PC15320 —UN—20MAY13

Select either settings button to display a popup page for corresponding brightness mode.

Depending on mode selected with settings button, adjust display and cab brightness by using plus (+) and minus (-) buttons.



A



B

PC15321 —UN—20MAY13



C



D

A—Day Settings
B—Night Settings

C—Display Brightness
D—Cab Brightness

DX,PC,DISP,BRIGHT -19-21DEC15-2/2

Sound

PC15322 —UN—20MAY13

Change display volume by selecting increase (+) or decrease (-) buttons.



Display Volume

DX,PC,DISP,SOUND -19-21DEC15-1/1

Display Calibration

Touch Screen Calibration may be required if screen does not register a touch in a desired location. Touch screen is factory calibrated and should not need to be calibrated under normal service. If calibration does not resolve issue, contact a John Deere dealer.

1. Select Menu button > System tab > Display and Sound application > Calibration tab.

2. Select Begin Calibration.
3. A large "X" and instructions are provided to lead operators through calibration process.
4. Each time "X" is pressed, instructions change and "X" moves to another area of screen.

NOTE: If touch screen malfunctions, a USB mouse may be used. Connect mouse to display's USB port.

CZ76372,0000777 -19-27JUL16-1/1

PROOF

Date and Time

Date and Time

PC15314 —UN—15MAY13

Information from Date and Time application is used for several important functions on system. These include error logging, activations, and data recording.

Date and time are set automatically if a GPS receiver is connected and receiving valid signal. In this case, only set time zone.

Current date and time can be found at any time by selecting Status Center at top of main run page.

NOTE: Date and Time setting affects how Guidance and Documentation data are filtered on display and desktop software.



Date and Time

Navigate to Date and Time

1. Select Menu.
2. Select System tab.
3. Select Date and Time application.

DX,PC,DATE -19-21DEC15-1/1

Change Current Date

PC15315 —UN—15MAY13

Date can only be changed if GPS is not connected or GPS signal is not available. Otherwise, GPS signal determines date.

Date Format does not depend on GPS signal, and can be changed at any time.

1. Select day, month, or year.
2. Use keypad to enter correct value.
3. Select Done to apply changes or Cancel to return to previous page without applying changes.

Date Format

1. Select Date Format box.



A

A—Date Set by User



B

B—Date Determined by GPS

2. Select desired date format from list.
3. Select Done to apply changes or Cancel to return to the previous page without applying changes.

DX,PC,DATE,DATE -19-21DEC15-1/1

Change Current Time

PC15316 —UN—15MAY13

Current Time can only be changed if GPS is not connected or GPS signal is not available. Otherwise, GPS signal determines time.

Time Zone and Time Format do not depend on GPS signal, and can be changed at any time.

1. Select hour or minute.
2. Use keypad to enter correct value.
3. Select Done to apply changes or Cancel to return to previous page without applying changes.

Time Zone

1. Select a continent or ocean and select Next.
2. Select a country and select Next.

Time Format

Use radio button to select 12 Hour or 24 Hour time format.

3. Select a time zone and select Next.
4. Confirm selected time zone and select OK.



A

A—Time Set by User



B

B—Time Determined by GPS

DX,PC,DATE,TIME -19-21DEC15-1/1

Language and Units

Language and Units

PC16677 —UN—18MAR13

Language and Units is used to change Language, Number Format, and Units of Measurement.

Different settings can be created for both the display and for controllers that are displayed in ISOBUS VT. Select either tab to change settings.

Navigate to Language and Units

1. Select Menu.
2. Select System tab.



Language and Units

3. Select Language and Units application.

DX,PC,LANG -19-21DEC15-1/1

Language and Units Settings

Display

Select Language, Number Format, and Units of Measurement from list boxes.

ISOBUS VT

It is possible for controllers that display in ISOBUS VT to have different units of measure than rest of display. Remove check from *Use Same Units of Measure as Display* to enable list boxes for:

- Number Format

- Distance
- Area
- Volume
- Mass
- Temperature
- Pressure
- Force

Saving Settings

After new settings are selected, select Save button. Display must reboot to apply changes.

DX,PC,LANG,SETTINGS -19-21DEC15-1/1

Software Manager

Software Manager

PC15346 —UN—11JUL13

Use Software Manager to update software, activate features, and find software version details.

Navigate to Software Manager

1. Select Menu.
2. Select System tab.
3. Select Software Manager application.



Software Manager

CZ76372,0000767 -19-19JUL16-1/2

Software Packages

PC20426 —UN—19JUL16

Generation 4 display software and help files are organized into packages. Each package is listed individually on Installations and Updates tab and Version Information tab.

Generation 4 Operating System (A)

- Contains display operating system and basic applications.

Generation 4 Operating System Help (B)

- Contains help files for display applications.

AMS Applications (C)

- Contains display software.

NOTE: Currently, Generation 4 display does not update connected controllers, such as StarFire™ receivers.

StarFire is a trademark of Deere & Company



A



B



C

A—Generation 4 Operating System
B—Generation 4 Operating System Help

C—AMS Applications

Onscreen Help packages include each language that the display supports.

CZ76372,0000767 -19-19JUL16-2/2

Update Display Software

PC15348 —UN—11JUL13

Determine Software Versions on Display

Version numbers for all installed software packages are available in Version Information tab in Software Manager.

Download Software Updates

Software updates are available for download from:

<https://my.deere.com/software-downloads/software-manager/>

The following items are available:

- Software release notes
- Software Manager utility used to download software to USB drive



USB Drive

- Instructions for using Software Manager utility

Once USB drive has latest software, take it to machine to install update.

Continued on next page

CZ76372,0000768 -19-28JUL16-1/3

This message occurs when a software installation is started.

⚠ CAUTION

During software installation:

- All applications will be shut down
- No system messages will be displayed

To prevent injury, ensure the machine is in Park and maintain electrical power throughout the installation process.

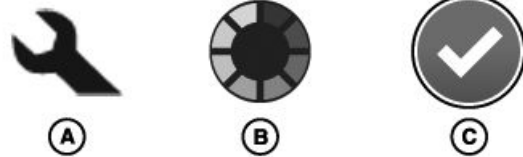
PC19761 —19—07JUL14

CZ76372.0000768 -19-28JUL16-2/3

Install Software Updates

PC15349 —UN—11JUL13

1. Insert USB drive in to display.
2. When "USB Drive Options" page is displayed, select Install Software button (A). This displays the Installations & Updates tab of Software Manager.
3. Only software packages that are newer than what is currently installed are displayed. All packages are selected by default.
4. Select Install button. If an update does not start, follow the onscreen messages to resolve conflicts.



A—Install Software Button
B—Progress Indicator

C—Install Successful

- ⚠ CAUTION: During software installation:**
- All applications will be shut down.**
 - No system messages will be displayed.**
 - To prevent injury, ensure the machine is in Park and maintain electrical power throughout the installation process.**
 - Do not remove USB drive.**

NOTE: Return files contain software version information and are used to assist dealers with supporting display and machine.

Troubleshooting

When a software package fails to install, system rolls back all software to version before update started.

Record error message if software update fails. Remove files from USB drive, and reload software update to USB drive. Repeat software installation process.

If software update continues to fail, contact a John Deere dealer.

5. A progress indicator (B) displays percentage of each package that has been installed. A green check mark (C) is displayed when package installs successfully.
6. Message displays when software update is finished. Some software packages require a reboot to finish installation. Select Reboot button to restart display.
7. Remove USB drive and take back to computer. Run Software Manager Utility to upload return files.

CZ76372.0000768 -19-28JUL16-3/3

Activations

PC15350 —UN—11JUL13

Use this tab to manage activations on the display.

StellarSupport.com requires display serial number, challenge code, and may require a confirmation code in order to generate a code. Select Details button (A) to find this information.

A single code may include multiple features, but it can perform only one type of action (activation or deactivation). For example, one code may activate three features, while a separate code would be needed to deactivate two features.

Enter Activation or Deactivation Code

1. Select Enter Code button (B).



A



B

A—Details Button

B—Enter Code Button

- Using keyboard, enter activation or deactivation code. Select OK button.
- Record confirmation code, and enter code at StellarSupport.com.

DX,PC,SOFT,ACTIVATE -19-21DEC15-1/1

PROOF

Users and Access

Users and Access

PC17262 —UN—12JUL13

Users and Access manages user profile settings to lock users out of certain features.

User Profiles tab

- Change display profile and set PIN for administrator access.

Access Groups tab

- Store display features that are locked.

Navigate to Users and Access



Users and Access

1. Select Menu.
2. Select System tab.
3. Select Users and Access application.

DX,PC,USERS -19-22DEC15-1/1

User Profiles

PC17265 —UN—15JUL13

Display can be set to one of two profiles, Administrator or Operator. The active profile is displayed above profile list.

Administrator Profile (A)

Administrator profile always set to Full Access Group. It allows unlimited access of all features, and ability to lock and unlock features in Operator Profile. A PIN can be set to lock users out of the Administrator Profile.

Operator Profile (B)

Operator profile always set to Limited Access Group. It is restricted to only features it is given access to. Operator



A

A—Administrator Profile



B

B—Operator Profile

Profile must be active profile and Administrator Profile must have a PIN for features to be locked.

DX,PC,USERS,PROFILES -19-22DEC15-1/2

Change Active Profile

PC17266 —UN—15JUL13

Select Change Profile button (A) and select profile from list.

NOTE: If a PIN has been created for the administrator profile, it must be entered when switching from Operator Profile to Administrator Profile.

Add/Change PIN

Select Edit button (B) for Administrator Profile. Select Add/Change PIN button.



A

A—Change Profile Button
B—Edit Button



B



C

C—View Button

DX,PC,USERS,PROFILES -19-22DEC15-2/2

Access Groups

PC17267 —UN—15JUL13

Access Groups store display features users have access to. Full Access group is able to use all features on display, while Limited Access group can be restricted to only certain features.

NOTE: Full Access Group can not be edited.

Limited Access groups can only be edited if Administrator Profile is Active Profile.

Select View button (A) to display Access Group Summary. Select Edit Group button (B) to make changes to Access Group.



A

A—View Button



B

B—Edit Group Button

DX,PC,USERS,GROUPS -19-22DEC15-1/2

Edit Access Group

PC17268 —UN—15JUL13

For each application listed, “None Locked” is displayed if no features are locked. When features are locked, they are listed under the application name and icon changes to locked.

Select an application to highlight it and select Edit button.

Edit Access Rights page displays a list of features that can be locked or unlocked by toggling lock/unlock switch. Save changes by closing page.



A

A—Unlock Icon



B

B—Lock Icon

DX,PC,USERS,GROUPS -19-22DEC15-2/2

P
R
O
O
F

Layout Manager

Layout Manager

PC16678 —UN—18MAR13

Use Layout Manager to create and modify run pages and shortcut bar so important information and functions can be accessed from the main page.

Run pages are made of "modules" or blocks that contain information and buttons. Modules can be added, removed, and rearranged on a run page.

Unlimited run pages can be created and saved. Only one Run Page Set with up to ten run pages can be created.

Custom run pages can be imported from another display that is the same size. Imported run pages are available in All Run Pages.



Layout Manager

Navigate to Layout Manager

1. Select Menu.
2. Select Applications tab.
3. Select Layout Manager application.

CZ76372,0000778 -19-27JUL16-1/1

Active Set

PC15336 —UN—10JUL13

Active Set is a collection of up to ten run pages that are grouped together for an operation (i.e. planting or tillage). Only pages in Active Set appear when cycling through run pages on main page.

Select Active Set to display Edit Run Page Set page.



Active Set

DX,PC,LAYOUT,ACTIVASET -19-22DEC15-1/3

Add Run Page to Active Set

PC15341 —UN—10JUL13

Select Add Run Page button to display a list of run pages that can be added to the set. Choose one of the run pages and select OK.



Add Run Page Button

DX,PC,LAYOUT,ACTIVASET -19-22DEC15-2/3

Edit Run Pages in Active Set

PC15338 —UN—10JUL13

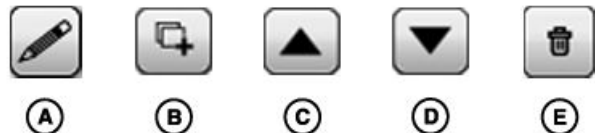
Select one of the run pages to show a row of buttons for editing that run page.

Select Edit button (A) to change the modules on run page.

Select Duplicate button (B) to create a new run page with same modules.

Select Up and Down buttons (C and D) to change order of run pages. Run page order is used when cycling through pages on main page.

Select Remove button (E) to delete run page from Active Set. Run page is still in All Run Pages list, just no longer in Active Set.



A—Edit Button
B—Duplicate Button
C—Up Button

D—Down Button
E—Remove Button

NOTE: Remove button is not shown if only one run page is in Active Set.

DX,PC,LAYOUT,ACTIVASET -19-22DEC15-3/3

Shortcut Bar

Shortcut bar is a collection of shortcut softkeys that display status information and provide quick access to application functions.

Select Default Shortcut Bar to Edit the Shortcut Bar.

PC17276 —UN—13AUG13



A—Shortcut Softkeys

DX,PC,LAYOUT,SHORTCUTBAR -19-22DEC15-1/2

Edit Shortcut Bar

Shortcuts can be added, removed, and rearranged on the shortcut bar.

NOTE: The same shortcut can only be placed on the shortcut bar once.

Select Add Shortcut button (A) and choose application with appropriate content. Applications without available shortcuts are grayed out. From list, find shortcut that performs desired function and select Add button.

Once added to shortcut bar, select shortcut to highlight it. Press and slide shortcut (B) to move it to an open area.

To remove a shortcut, select shortcut to highlight it and select Remove button (C).

PC17386 —UN—15MAY14



PC17387 —UN—15MAY14



A—Add Button
B—Move Shortcut Icon

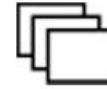
C—Remove Shortcut Button

DX,PC,LAYOUT,SHORTCUTBAR -19-22DEC15-2/2

All Run Pages

All Run Pages tab displays every run page that has been created on display. These include current run pages that are in Active Set, as well as run pages that will be used in future operations.

PC15340 —UN—10JUL13



All Run Pages

DX,PC,LAYOUT,ALLRUNPAGES -19-22DEC15-1/3

Edit Run Page

Select one of the run pages to show a row of buttons for editing that run page.

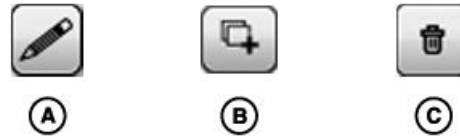
Select Edit button (A) to change the modules on run page.

Select Duplicate button (B) to create a new run page with same modules.

Select Remove button (C) to delete run page from display. This permanently removes run page from display and Active Set.

NOTE: Remove button is not shown if factory default run page is selected.

PC15339 —UN—10JUL13



A—Edit Button
B—Duplicate Button

C—Remove Button

Continued on next page

DX,PC,LAYOUT,ALLRUNPAGES -19-22DEC15-2/3

Create Run Page

PC15341 —UN—10JUL13

Select Add New button to create a new Run Page.



Add New Button

DX,PC,LAYOUT,ALLRUNPAGES -19-22DEC15-3/3

Add, Edit, or Duplicate Run Pages

PC15337 —UN—10JUL13

The same interface is displayed when adding, editing, or duplicating a run page. A new run page starts out blank, while duplicate or edited run pages have existing modules.

Run Page Name

Every run page must have a unique name. Select Edit button (A) to either name or rename run page.

Add Module

Select Add Module button (B) and choose application with appropriate content. From list, find module with desired information and select Add button.

NOTE: The same module can only be placed on a run page once.



A

A—Edit Button



B

B—Add Module Button

NOTE: Start with larger modules before adding smaller modules to fill in space.

Use grid to determine amount of space required for a module.

DX,PC,LAYOUT,ADDRUNPAGES -19-22DEC15-1/3

Rearrange Modules

PC15342 —UN—10JUL13

Once added to run page, select module to highlight it. Press and slide module to move it to an open area.



Move Module

DX,PC,LAYOUT,ADDRUNPAGES -19-22DEC15-2/3

Remove Module

PC15343 —UN—10JUL13

Select module to highlight it, and select Remove button.



Remove Module Button

DX,PC,LAYOUT,ADDRUNPAGES -19-22DEC15-3/3

Navigate Run Pages on Main Page

If more than one run page is in Active Set, there are multiple ways to choose which run page is displayed on main page.

Title Bar (A)

Select title bar at top of main page to display a list of all run pages that are in Active Set. Choose a run page to return to main page.

Next and Previous Run Page Buttons (B)

Select either right or left arrows to cycle through run pages.

Finger Swipe (C)

Swipe finger across display, left and right, to cycle through run pages.

PC17357 —UN—03DEC13



PC17358 —UN—03DEC13



A—Title Bar
B—Next and Previous Run Page Buttons

C—Finger Swipe

CZ76372,0000769 -19-13JUL16-1/1

PROOF

Settings Manager

Settings Manager

PC22543 —UN—22APR16

Use Settings Manager to load, edit, or save configurations of machine and implement settings. Saved configurations are used to easily restore the settings that a machine and implement use during an operation.



Settings Manager

Navigate to Settings Manager

1. Select Menu.
2. Select Applications tab.
3. Select Settings Manager application.

DX,PC,SETTINGS -19-10MAY16-1/1

Equipment Manager

PC20410 —UN—22MAY15

Equipment Manager

Select Equipment Manager application to enter Machine and Implement Profile settings. Profile settings are important for accurate performance of John Deere Precision Agricultural applications, such as AutoTrac™, Section Control, and work data maps.



Equipment Manager

Navigate to Equipment Manager

1. Select Menu.
2. Select Applications tab.

AutoTrac is a trademark of Deere & Company

3. Select Equipment Manager application.

DX,PC,EQUIP -19-22DEC15-1/1

Machine Profile

General Settings

If display detects machine, some information is automatically set by machine controllers. Otherwise, select list box to choose machine type.

At this time, profile settings cannot be imported or exported from the display.

Settings specific to certain machine types only appear on page when applicable.

- **Articulated Tractor Articulation Point**

Front Axle

- Distance from articulation point to center of front axle. Articulation point is pivoting point of machine when making a turn.

Rear Axle

- Distance from articulation point to center of rear axle. Articulation point is pivoting point of machine when making a turn.

- **Track Tractor Center of Rotation**

Center of Rotation

- Distance from pivot point of machine to rear axle.

GPS Offsets

- **GPS Lateral Offset**

- Lateral distance (left or right) from center line of machine to center of GPS receiver. This value is usually set to 0.0 unless GPS receiver is offset left or

right of machine center line. Guidance and Mapping applications require GPS Lateral Offset settings.

- **GPS Inline Offset**

- Inline distance from center of non-steering axle on machine to center of GPS receiver. Mapping application requires GPS Inline Offset settings.

- **GPS Height**

- Vertical distance from GPS receiver to ground.

Connection Offsets

- Inline distance from center of rear axle to connection point. Connection point is location where implement connects to machine. Mapping application requires Connection Offset settings.

Restore Profile to Factory Defaults

NOTE: Only machines detected by the display can have profile settings restored to factory default.

Default machine profile settings are stored in machine controllers. Changes to these settings are stored in the display. To reset profile to factory defaults, select settings at the top of Machine Profile page. Then, select Reset Profile button.

Use Help Center onscreen help for more information about Equipment Manager and the Machine Profile.

DX,PC,EQUIP,MACHINE -19-21OCT16-1/1

Implement Profile

Profile name is set automatically based on implement that is auto-detected and cannot be saved.

At this time, profile settings cannot be imported or exported from the display.

Saving Profile Settings

Select Save button to store settings from all tabs and close Implement Profile application. Selecting Save is not required when switching between tabs.

Implement Profile settings are saved in the display according to the following factors:

- Profile Name
- ISO name of detected implement controller

NOTE: Set up pre-operation settings in implement controller, such as drive configuration, before configuring Implement Profile settings.

ISO name changes when some implement controller settings change. This includes changing controller setup between fertilizer and seeding.

Automatic Detection of Profile Settings

NOTE: Section Control must be OFF to detect SeedStar™ 2 or SeedStar™ XP planters when first connected to tractor. After first connection, planter is detected whether Section Control is ON or OFF.

If an implement controller is connected, some Implement Profile settings are automatically set by the implement controller.

An alert stating "Implement Profile Created" is displayed the first time the controller is connected. When the implement is reconnected in the future, it is identified by its ISO name and Implement Profile settings that are saved in the display are loaded.

NOTE: The alert continues to appear if "Setup Later" is selected.

When an implement is connected that is not recognized, a profile must be created for that implement. Select Add Implement button in Equipment Manager to create an implement profile.

To view currently detected ISO Name, select Diagnostics Center > Controller Diagnostics tab > choose implement controller > Controller Info tab.

Verify all required settings before operation. Work point is not set automatically.

Connection Types

- Connection type, or hitch, describes how implement is attached to machine and controls how display determines implement movement behind machine. Coverage map, documentation, and Section Control require Connection Type settings.

• Pivoting Offset

- Some implements have a pivoting hitch that connects to machine's rear 3-point hitch. The offset for this pivoting location is required for display to determine implement movement behind machine. Option is available when rear 3-point is selected as connection type.

Working Width

- Working Width is the width of the area tilled, planted, sprayed, or harvested on each pass through the field. It is used to create work data maps and calculate area worked. Guidance, Mapping, and Area Totals applications require Working Width.

Dimensions

• Lateral Offset

- Lateral distance from center point of machine to center point of working width of implement. Guidance and Mapping applications require Lateral Offset setting.

• Center of Rotation

- Inline distance from connection point to implement's center of rotation while in working position. Usually, this is where load bearing parts of implement make contact with ground. Center of Rotation offset is important to accurately model trailing action of implement around curves. Mapping application requires Center of Rotation setting.

• Work Point

- Inline distance from connection point to point where the operation occurs. For example, where seed or product is dropped, a crop is harvested, or ground is tilled. Mapping application requires Work Point setting.

• Section Offset (ISOBUS Implements)

- Inline distance from center of rotation to point where the operation occurs. For example, where seed or product is dropped, a crop is harvested, or ground is tilled. Mapping application requires Section Offset setting.

Work Recording

- Recording Triggers determine when map recording and Work Monitor totals are turned ON and OFF. Not all recording triggers are available for all machines types.

NOTE: In Manual mode, operator must push Record or Pause button to turn work data map recording ON or OFF.

Mechanical Delay

- Mechanical delay is the average time for product to reach the ground after an ON or OFF command. It may need to change with each machine, implement, and display combination. Mapping application requires Mechanical Delay settings. Settings are critical for Section Control performance.

Use Help Center onscreen help for more information about Equipment Manager and the Implement Profile.

SeedStar is a trademark of Deere & Company

DX,PC,EQUIP,IMPLEMENT -19-21OCT16-2/2

PROOF
PROOF
PROOF

Guidance

AutoTrac

PC16676 —UN—18MAR13

AutoTrac™ is an assisted steering system that allows operators to take their hands off the steering wheel as the machine travels down the created guidance line in the field. Operators still have to turn the machine around on the end rows. By pressing the resume button, AutoTrac regains control and steers machine down the adjacent pass.

AutoTrac is a trademark of Deere & Company



Guidance

HC94949,00003AC -19-23SEP13-1/1

Manual Guidance

Information about guidance tracks and operating in each Tracking Mode is given later in SET GUIDANCE TRACK and in tracking mode sections.

After creating a guidance track, drive machine onto track. The closest track is highlighted with a thicker white line. Off Track error distance is shown in the path accuracy indicator. This number shows the distance from machine to closest track. Error number will count up until machine

reaches point halfway between two tracks. After reaching midpoint, error number will count down as machine approaches next track.

Track number is displayed below the path accuracy indicator and is automatically updated by the system as a new track is approached. Track number changes when machine is half way between two tracks. Tracking Tones alert the operator when machine is close to a track. Adaptive Curves does not display track numbers.

HC94949,00003A0 -19-25SEP13-1/1

Operate Guidance Systems Safely

Do not use guidance systems on roadways. Always turn off (disable) guidance systems before entering a roadway. Do not attempt to turn on (activate) a guidance system while transporting on a roadway.

Guidance systems are intended to aid the operator in performing field operations more efficiently. The operator is always responsible for the machine path. Guidance systems do not automatically detect or prevent collisions with obstacles or other machines.

Guidance Systems include any application that automates machine steering. This includes, but may not be limited to, AutoTrac™, iGuide™, iTEC™ Pro, AutoTrac™ Universal (ATU), RowSense™, and Machine Sync.

To prevent injury to the operator and bystanders:

- Never get on or off a moving machine.

AutoTrac is a trademark of Deere & Company
iGuide is a trademark of Deere & Company
iTEC is a trademark of Deere & Company
RowSense is a trademark of Deere & Company

- Verify the machine, implement, and guidance system are set up correctly.
 - If using iTEC™ Pro, verify accurate boundaries have been defined.
 - If using Machine Sync, verify the follower's home point is calibrated with sufficient space between the machines.
- Remain alert and pay attention to the surrounding environment.
- Take control of the steering wheel, when necessary, to avoid field hazards, bystanders, equipment, or other obstacles.
- Stop operation if poor visibility conditions impair your ability to operate the machine or identify people or obstacles in the machine path.
- Consider field conditions, visibility, and machine configuration when selecting machine speed.

JS56696,0000ABC -19-02DEC13-1/1

General Information

IMPORTANT: AutoTrac system relies on global positioning system (GPS) operated by the United States government, which is solely responsible for its accuracy and maintenance. System is subject to changes that could affect accuracy and performance of all GPS equipment.

Operator must maintain responsibility for machine and must turn at end of each track. This system will not turn at end of a track.

AutoTrac basic system is intended to be used as an assistance tool to mechanical markers. Operator must evaluate overall system accuracy to determine specific field operations where assisted steering may be used. This evaluation is necessary because accuracy required for various field operations may differ depending on farming operation. AutoTrac uses StarFire differential correction network along with GPS. Slight shifts in position may occur over time.

HC94949,000039F -19-23SEP13-1/1

Guidance Settings

Select SETTINGS icon at the top of the guidance application to configure guidance settings.

Guidance Master

Guidance Master toggle turns Guidance application ON or OFF.

PC15305 —UN—19MAR13



Settings Icon

HC94949,00003AD -19-02OCT13-1/1

Turn Predictor

Turn Predictor alerts operator by predicting the end of pass and displays the distance to the end of pass in the map view.

NOTE: Turn Predictor defaults to ON

Turn predictor is intended to predict only the turn point of a machine using Parallel Tracking or AutoTrac while in Straight Track mode. It is NOT a headland alert. Turn predictions are based solely on previous turn behavior of machine. Turn points are also defined when AutoTrac is deactivated and heading error exceeds 45 degrees. Turn predictions will not coincide with field boundary if field boundary is not linear and continuous, or if operator makes turns before or after field boundary.

Distance will count down to predicted turn, and tones will sound when machine is 10 seconds from intersecting turn point. This happens again when predicted turn point has been reached.

Visual indicator will change to yellow within 10 seconds of predicted turn, and then red after passing the predicted turn location. A white intersection line marks turning location.

PC17238 —UN—11JUL13



AutoTrac

Turn Predictor will default to ON after every power cycle or after every seat switch time-out. Turn Predictor cannot be turned off on machine without an operator presence switch tied to CANBUS. Once turned OFF, it will remain off only until next power cycle, seat switch time-out, or if manually turned back on by operator.

Whenever Turn Predictor resets back to ON after a seat switch time-out (operator out of seat for 7 seconds on tractors), it will display an alert indicating Turn Predictor has been reset to ON due to operator leaving seat. An option will be available to turn it OFF again from the turn predictor symbol on the map.

HC94949,000038B -19-23SEP13-1/1

Tracking Tones

Tracking tones can be used as an audible indication of steering direction. If the track is right of machine, two low beeps sound. If left of machine, a single high beep

sounds. The alarm repeats while off-track error between machine and guidance track is 10—40 cm (4—16 in.).

NOTE: Tracking Tones default to ON.

HC94949,00003AE -19-23SEP13-1/1

Shift Track

Shift track adjusts position of machine left, center, or right of set track. Use shift track to compensate for global positioning system (GPS) drift.

Shift track adjusts track 0 and all guidance lines associated with the track. Guidance lines are shifted right or left to the pre-specified distance. An operator can also center a guidance line on machine.

To center line on current machine location, select Shift Track Center (A). To move line to left, select Shift Track Left (B). To move line to right, select Shift Track Right (C).

NOTE: Shift track master defaults to ON.

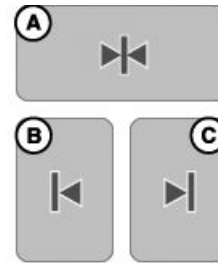
Shift track is disabled while adaptive curves recording is active.

The maximum value allowed with AutoTrac™ active is 30 cm (12 in). Inactive AutoTrac™ allows operator to shift up to 914 cm (360 in).

NOTE: Drift is inherent to any satellite based, differentially corrected GPS system.

When using SF1 or SF2 differential correction (or when using RTK Quick Survey Mode) the track may drift over time or at power cycles. Shift track can be used to compensate for GPS drift.

AutoTrac is a trademark of Deere & Company



A—Shift Track Center
B—Shift Track Left

C—Shift Track Right

Shift track is not recommended with Adaptive Curves. Shift is based on the current heading on the track, not the geometry of the entire track. Shift track can cause some portions of the track to shift closer or further away from the desired shift. Shift Track does not compensate for inherent GPS drift when using Adaptive Curves.

The shift track center button is disabled with AB Curves. Use left and right shift buttons to move and regenerate the AB Curve tracks.

Total shifts are visible when editing a straight track or circle track guidance line only. Clear shifts are eligible for all tracks.

CZ76372,000077D -19-28JUL16-1/1

PC16665—UN—18MAR13

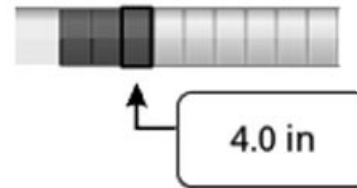
Lightbar Settings

NOTE: Lightbar is also referred to as Path Accuracy Indicator.

Step Size — Used to set the value of off-track distance each box on the lightbar represents.

Steer Towards Direction — When this option is selected, lights illuminated to the left on the lightbar mean the machine must be steered to the left to align with the guidance track.

Off Track Direction — When this option is selected, lights illuminated to the left on the lightbar mean the machine must be steered to the right to align with the guidance track.

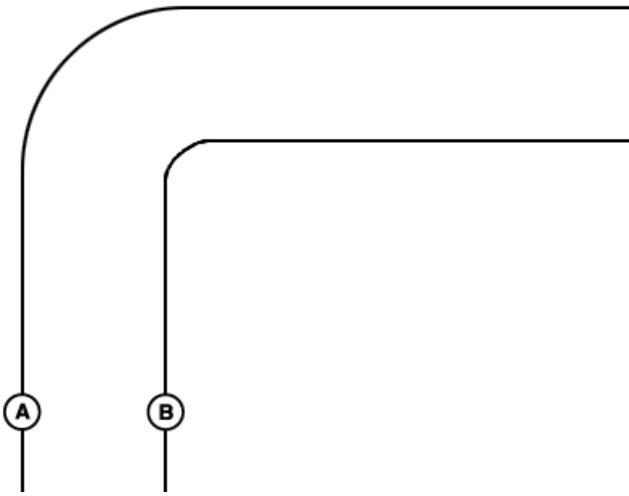


Lightbar Step Size

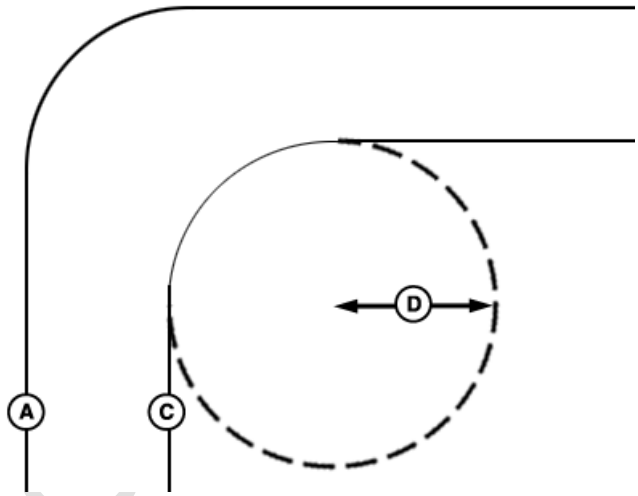
HC94949,000038F -19-23SEP13-1/1

PC15309—UN—04APR13

Curve Track Settings



Smoothing Tight Turns OFF



Smoothing Tight Turns ON

- A—Previous Pass
- B—Next Pass—Smoothing Tight Turns Off
- C—Next Pass—Smoothing Tight Turns On
- D—In-Ground Turn Radius

Smooth Tight Turns — When enabled, system automatically smooths a propagated path that is too tight.

Curve Recording Trigger — Adaptive Curve Track recording may be triggered manually or based on AutoTrac™. Manual setting only records when record button is pressed. AutoTrac™ setting records when AutoTrac™ is activated on a projected line, and then stops recording when AutoTrac™ is deactivated. If AutoTrac™ setting is selected, the record button can still be used.

AB Curve Recorded Extensions — Straight line extensions can be added to the beginning and end of AB

AutoTrac is a trademark of Deere & Company

curve paths. Extensions are generated for 90 m (300 ft.). Turning setting ON does not add extensions to previously recorded AB curves.

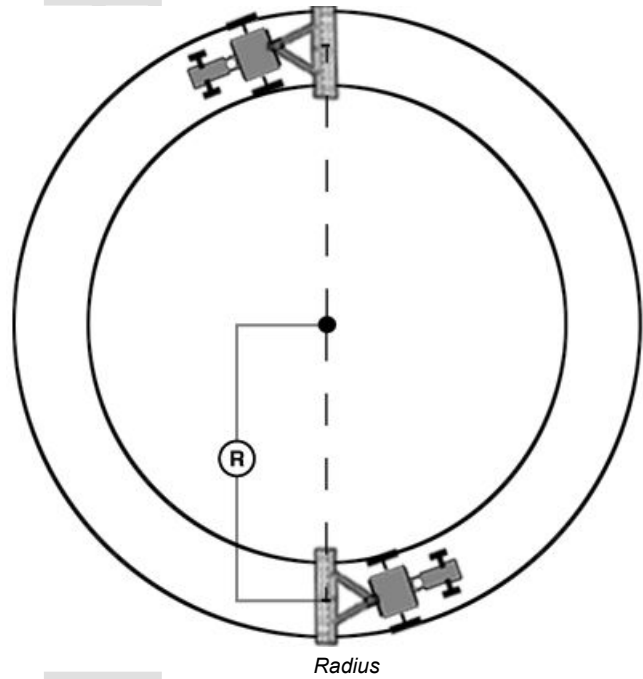
NOTE: Extensions may need to be turned off to prevent lines from crossing each other. If lines cross, the remaining curves may fail to generate.

Continued on next page

HC94949,0000390 -19-23NOV15-1/2

Implement In-Ground Turn Radius — The smallest turn radius the implement can turn while in the ground.

R—Implement Turn Radius



PC9805—UN—05FEB07

HC94949,0000390 -19-23NOV15-2/2

Circle Track Settings

PC20395 —UN—08DEC14

Distance to Center of Pivot — Distance from center of circle to current location. The distance only shows to 1609 m (5280 ft.). Turn on to show button on guidance map.



Distance to Center Point

CZ76372,0000739 -19-08DEC14-1/1

Track Spacing

Track Spacing is used in the Guidance application to determine how far each pass is from the last pass. Track Spacing is similar to Working Width, but Track Spacing is only used for guidance and the two values are independent of each other.

To maintain row width between passes, set Track Spacing the same as Working Width. To ensure some overlap for tillage or spraying, or to account for some GPS drift, make the Track Spacing less than the Working Width.

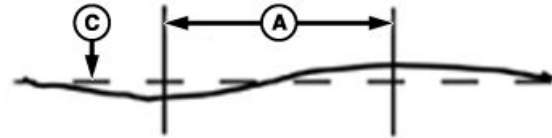
HC94949,0000265 -19-23NOV15-1/1

Steering Sensitivity

Steering sensitivity adjusts aggressiveness of AutoTrac™ steering system. A high steering sensitivity setting is more aggressive. This setting allows system to handle tough manual steering conditions, such as integral implements with a heavy draft load. A low steering sensitivity setting is less aggressive, and allows system to handle lighter draft loads and higher speeds.

Enter a number from 50 through 200. Value may change based on steering controller

- **Too Low:** If steering sensitivity is too low, a slow wandering track error pattern can be observed on display. This track error pattern (C) takes approximately 10 seconds (A) to go from side to side. If excessive track error is occurring, increase steering sensitivity by small increments until desired accuracy is achieved.
- **Too High:** Setting steering sensitivity to highest level will not result in maximum tracking accuracy. If steering sensitivity is too high, excessive front wheel motion will be observed which reduces accuracy and causes unnecessary front axle component wear. At extreme high levels, machine motion will become large enough to cause steering sensitivity to be momentarily changed to default level. Wheel motion to watch for when determining if aggressiveness is too high occurs at an interval of approximately 1 second (B) from side to side. If excessive wheel motion is observed, lower steering sensitivity by small increments until desired performance is achieved.



PC17129 —UN—18JUN13



A—10 Second Interval
B—1 Second Interval

C—Track Error Pattern

NOTE: It is normal to see a momentary track error when encountering a large rut, furrow, or implement load change. Proper steering sensitivity adjustment will help minimize track error.

Use Help Center onscreen help for more information about steering sensitivity.

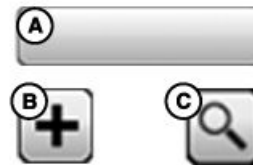
AutoTrac is a trademark of Deere & Company

CZ76372,000076A -19-13JUL16-1/1

Set Guidance Track

1. Select SET TRACK on the main guidance page.
2. On the Guidance Track List, either select an existing guidance line, or create a guidance line.

Use Help Center onscreen help for information about creating different guidance tracks.



A—SET TRACK Button
B—Add Guidance Track

C—Filter/Sort Guidance Tracks

PC17427 —UN—17JUL13

HC94949,00003B0 -19-23SEP13-1/1

Straight Track

PC16661 —UN—06MAR13

Straight Track mode assists operator in driving straight parallel paths by using display and audible tones to alert operator when machine is off track.

Straight Track allows the operator to create an initial straight track for the field using a variety of Track 0 options. Once the Track 0 (reference path) has been defined, all passes for the field are generated. Each pass is identical to the original driven pass to ensure that steering errors are not propagated through the entire field. Generated passes can be used to operate Parallel Tracking or AutoTrac.

The methods of defining Track 0:

- A + B - Define Track 0 by driving it with the vehicle.
- A + Auto B - Define Track 0 by driving it with the vehicle.
- A + Heading - Define Track 0 by driving the vehicle to point A and entering a predefined Heading value.
- Lat/Long - Define Track 0 by entering predefined Latitude and Longitude coordinate values for the A and B points.



Straight Track

- Lat/Long + Heading - Define Track 0 by entering predefined Latitude and Longitude value for the A point and entering a predefined Heading value.

NOTE: Track 0 may be defined during an operation (for example, planting), but some buttons are not available while it is being created.

Use Help Center onscreen help for more information about creating straight tracks.

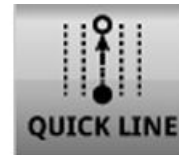
HC94949,00003D2 -19-23SEP13-1/1

Quick Line

PC17394 —UN—16JUN14

A Quick Line softkey can be added to the shortcut bar using the Layout Manager application.

Select the Quick Line softkey to create a guidance line using Auto B method without setup information. Track is automatically named. Use softkey again to overwrite existing Quick Line. To save Quick Line, open guidance track list, select edit button, and rename track.



Quick Line Softkey

CZ76372,000071D -19-15JUL14-1/1

Guide on a Straight Track

When operating straight track, it is not necessary to drive tracks in a specific order. The closest track is highlighted with a thicker white line.

Track number is displayed under path accuracy indicator, and automatically updates when new track is approached. Track number indicates number of lines away, and direction from Track 0. Track direction is shown relative to Track 0 (North, South, East, or West). Track number changes when machine is halfway between two tracks.

Path accuracy indicator shows off-track error distance. Off-track error shows distance from closest track to machine. Error counts up until machine reaches point halfway between two tracks. After reaching mid-point, error counts down as machine approaches next track.

Turn predictor displays distance to end of pass in the top right portion of the guidance view. Distance counts down to predicted turn and tones sound when machine is 10 seconds from intersecting turn point, and again when predicted turn point has been reached.

CZ76372,0000737 -19-08DEC14-1/1

AB Curves

AB Curves allows an operator to drive a curved line in the field with two end points (beginning and end). Passes parallel to track in either direction are generated based on original driven track. Each pass is generated from original driven pass to ensure steering errors are not propagated through entire field.

NOTE: See *CURVE TRACK SETTINGS* for information about adjusting your system for optimal performance.

The initially recorded AB curve must be at least 3 m (10 ft) in length to be a valid AB Curve to use for guidance.

Once AB Curve (Track 0) is recorded, ten additional tracks are generated (five passes on both sides of Track 0). When the machine drives past the fifth track from Track 0, ten additional tracks are generated in that direction. The system continues to generate additional passes when the machine drives past the last pass displayed on screen. The machine must be within 400 m (0.25 mi.) of the last generated line for the system to continue to generate curve paths. If the machine is at outer limit, it may take several minutes to generate a path that shows up on the screen near the machine. During this time, "Calculating Curves" will be displayed on the screen.

NOTE: Skip pass is available in AB Curves mode.

Passes are not identical copies of the original pass. Curvature of the pass changes to maintain pass-to-pass error. With each subsequent pass, curvature of the passes get more convex or concave.

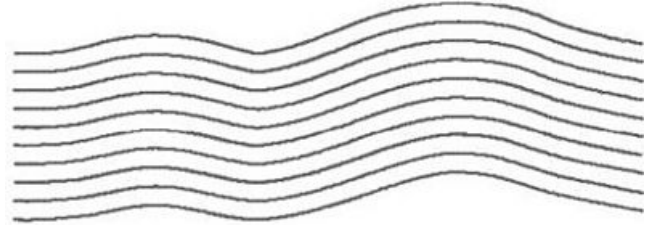
NOTE: Sharp Curve and End of Path messages might appear when in AB curve track mode.

PC16662 —UN—06MAR13



AB Curves

PC9028 —UN—16APR06



AB Curve paths are generated with a 91 m (300 ft.) straight-line extensions attached to the end of the actual recorded paths. In addition to the 91 m (300 ft.) automatically added, line extensions will extend before and after the recorded line to line up the machine or continue the path.

When shift track is selected, current track is adjusted and five passes on both sides of track are regenerated. AB curve can be used after initial tracks are generated. Additional tracks are generated while operating. The shift track center button is disabled with AB Curves. Use left and right shift buttons to move and regenerate the AB Curve tracks.

Use Help Center onscreen help for more information about creating AB curve tracks.

CZ76372,000077E -19-29JUL16-1/1

Guide on an AB Curve

The closest track is highlighted with a thicker white line.

Track number is displayed under path accuracy indicator, and automatically updates when new track is approached. Track number indicates number of lines away, and direction from Track 0. Track direction is shown relative to Track 0 (North, South, East, or West). Track number changes when machine is halfway between two tracks.

Path accuracy indicator shows off-track error distance. Off-track error shows distance from closest track to machine. Error counts up until machine reaches point halfway between two tracks. After reaching mid-point, error counts down as machine approaches next track.

CZ76372,0000736 -19-08DEC14-1/1

Record a Straight Path or Navigate Around Obstacles

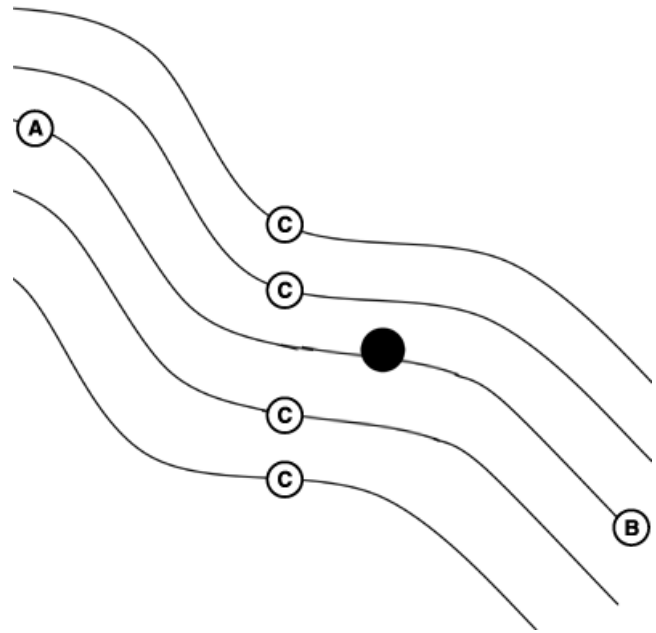
1. Start AB Curves Recording
2. When you would like to record a straight path, select Straight Segment button.

NOTE: A straight segment will “snap” from when the Straight Segment button is pressed until the Curve Segment button is pressed or Done button is pressed to complete the track.

3. Select the Curved Line button to finish recording the straight line and resume curved path recording.

This procedure can be helpful when there is a long straight section of path or when navigating around obstacles.

Curve and straight segment buttons can be switched as needed while recording.



Navigating Around Obstacles

A—A Point
 B—B Point
 C—Paths Generated from Track 0

D—Curved Segment
 E—Straight Segment



Curved Line and Straight Line Buttons

PC9030C —UN—27OCT06

PC15310 —UN—09APR13

HC94949,00003C3 -19-13SEP13-1/1

PROOF

PC16660 —UN—06MAR13

Adaptive Curves

Adaptive Curve track allows operator to record a manually driven curved path. Once the first curved pass has been recorded and machine is turned around, operator can Parallel Track or activate AutoTrac once the propagated path appears.

NOTE: See *CURVE TRACK SETTINGS* for information about adjusting your system for optimal performance.

The machine will be guided along subsequent passes based on the previous recorded pass. Each pass is generated from the previous pass to ensure steering errors are not propagated through the entire field.

NOTE: A *Skip Pass* allows operator to drive past or skip over the track next to the current track. *Skip Pass* is not available in *Adaptive Curves'* recording session.

Generated passes are not identical copies of the original pass. The curvature of pass changes maintains pass-to-pass accuracy. With each subsequent pass, curvature of the passes get more convex or concave. When necessary, operator can change curve path anywhere in the field by steering machine off the propagated path.



Adaptive Curves

NOTE: *Sharp Curve* and *End Path* messages might appear when in *Adaptive Curve* track mode.

If not in a curve recording session, line will not project and can only AutoTrac on available lines. When in a recording session, lines will project off of the previous line. This session can be used to record another line manually, or an operator can select AutoTrac in the Curve Recording Triggers and AutoTracking on the projected line.

NOTE: *Shift track* is not recommended when using *Adaptive Curves*. When in *Adaptive Curve* mode, *shift track* will not compensate for GPS drift.

Use Help Center onscreen help for more information about creating adaptive curve tracks.

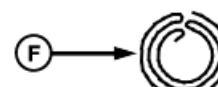
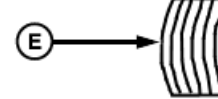
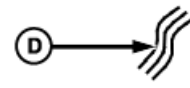
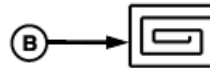
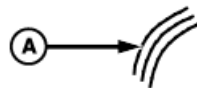
HC94949,0000394 -19-08DEC14-1/2

Adaptive Curve Track Mode allows an operator to drive and be guided along various field patterns.

- Simple Curve
- S-Curve
- Boxed
- Race Track
- Spiral
- Circle

A—Simple Curve
B—Boxed
C—Spiral

D—S-Curve
E—Race Track
F—Circle



PC9032 —UN—17APR06

HC94949,0000394 -19-08DEC14-2/2

Guide on an Adaptive Curve

IMPORTANT: If repeatability is needed with saved Adaptive Curve Track data, it is required that the initial track data and subsequent trips across the field be created using StarFire RTK accuracy. RTK base station should be operating in Absolute Base mode.

NOTE: Track spacing for Adaptive Curve Track data is constant. If a different implement width is used when returning to the field, new data must be recorded.

The closest track is highlighted with a thicker white line. Path accuracy indicator shows off-track error distance.

AutoTrac is a trademark of Deere & Company

Off-track error shows distance from closest track to machine. Error counts up until machine reaches point halfway between two tracks. After reaching mid-point, error counts down as machine approaches next track.

If a curve is not being recorded, lines are not projected and operator is only able to AutoTrac™ on available lines. When recording, lines project off of previous line. This session can be used to record another line manually, or an operator can select AutoTrac™ in Curve Recording Triggers and AutoTrac™ on the projected line.

CZ76372.0000735 -19-08DEC14-1/1

Record a Straight Path Within an Adaptive Curve

1. Start recording an Adaptive Curve.
2. When you would like to record a straight path, select Straight Line button.

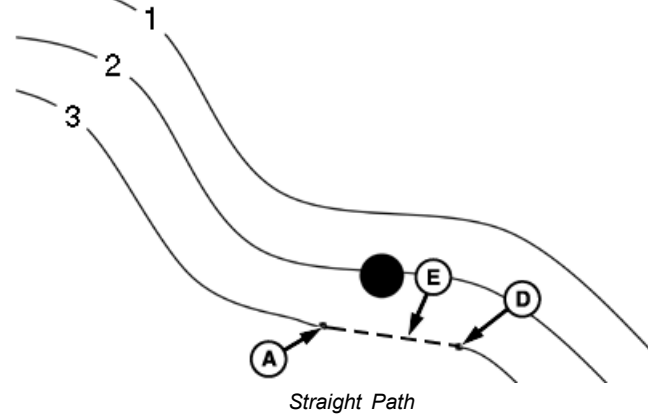
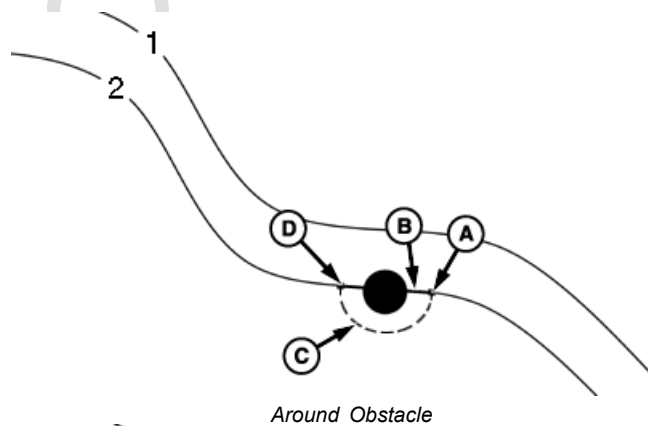
NOTE: A straight segment will “snap” from when the Straight Segment button is pressed until the Curve Segment button is pressed or Done button is pressed to complete the track.

3. Select the Curved Line button to finish recording the straight line and resume curved path recording.

This procedure can be helpful when there is a long straight section of path or when navigating around obstacles.

Curve and straight segment buttons can be switched as needed while recording.

NOTE: The longest straight segment that can be created is a distance of 0.8 km (0.5 mi.) (2,640 ft.). For a greater distance, line segment will not connect resulting in a gap in the path.



Curved Line and Straight Line Buttons

HC94949.0000395 -19-13SEP13-1/1

PC9284—UN—29JUL06

PC9285—UN—08AUG06

PC15311—UN—09APR13

Navigate Around Obstacles

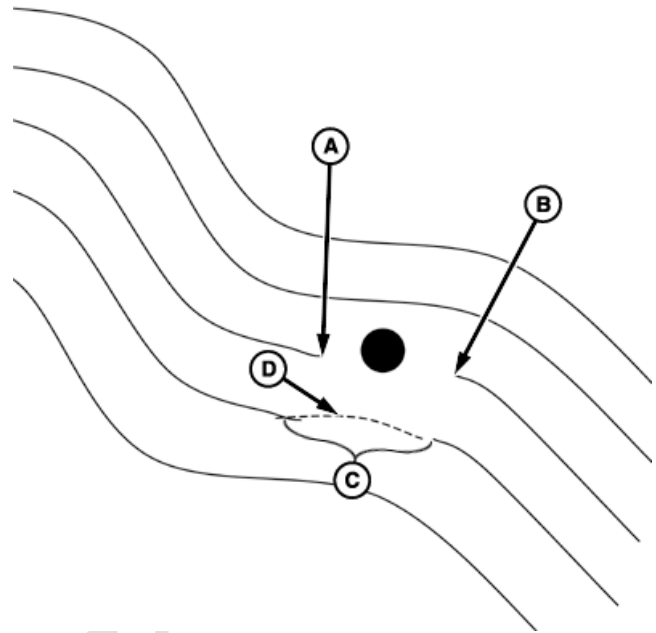
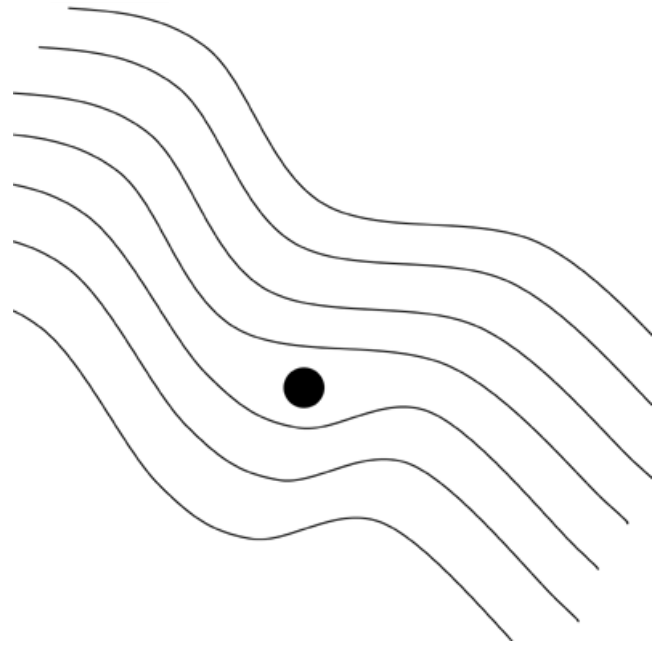
When operating Adaptive Curves in a field and an obstacle is encountered, such as a well head, telephone pole, or power line, the operator must drive around these obstacles.

NOTE: Use the straight button to record a straight line around the obstacle. This button avoids a gap in the path.

Recording ON: If recording is left on while driving around an obstacle that deviation to the propagated path will be recorded and become a part of the path. On the next pass that approaches the area in the field, the propagated path for the pass the machine is on will have incorporated the deviation. The machine will steer along the deviation. To straighten out that deviation, the operator must take over manual steering of the machine and straighten out that deviation. Once the operator has driven past the deviation in the field and reacquired the intended path the resume switch may be activated and AutoTrac will take over machine steering.

Recording OFF: If recording is turned off when the obstacle is approached and steered around and then recording turned back on once the obstacle has been navigated around and AutoTrac activated to finish the pass, there will be a gap in the recorded path where the obstacle is. On the next path when the machine approaches the gap, the operator must take over manual steering of machine and navigate through the gap. Once the gap has been navigated and the propagated path is reacquired, AutoTrac can be activated and the gap will not appear in subsequent passes as long as recording is turned on for the next pass.

- | | |
|------------------------|--|
| A—Turned Recording Off | C—Gaps Results in Next Pass |
| B—Turned Recording On | D—Manually Driven to Re-establish Path |



PC9029 —UN—17APR06

PC9030 —UN—17APR06

HC94949,0000396 -19-13SEP13-1/1

ROOF

Circle Track

PC17400 —UN—08DEC14

Circle track allows operator to create concentric circle guidance lines. It is designed to be used in fields with a center pivot.

A circle track is based on latitude and longitude coordinates at center of a pivot. Concentric guidance lines are created based on track spacing out to 1.6 km (1 mi.) from center of pivot.

Circle track is designed for center pivot operation on ground with less than 2% slope. Since circle track creates circle spacing on a level plane, guidance line spacing and center pivot track do not match as tracks get farther away from center pivot in sloped conditions. This spacing is due to difference between distance traveled on a hill and on a level plane. The difference in distance increases as slope increases.

Use shift track to move tracks radially closer or further from center point. Shift track does not move center point.



Circle Track

Shift track allows operator to use various implement widths, account for different lengths of center pivot towers, or to account for stretching or shrinking of center pivot irrigation sections. If a circle track edge is added, modified or deleted, existing shifts for that track are deleted. Using shift track with an edge causes the implement not to align with the edge.

CZ76372,0000730 -19-15DEC14-1/3

Distance to Center Point displays distance from center of circle to current location. The distance only shows to 1609 m (5280 ft.). Feature must be turned on in circle track settings to show button on guidance map. Once button is on guidance map, select button to show or hide distance.

PC20395 —UN—08DEC14



Distance to Center Point

CZ76372,0000730 -19-15DEC14-2/3

There are two methods to create a circle track:

PC20396 —UN—08DEC14

Lat/Lon Circle

- If latitude and longitude coordinates at center of a pivot are known, enter location to create a circle track.

Drive Circle

- Latitude and longitude coordinates at center of a pivot are calculated from path driven. Concentric circle guidance lines are created from coordinates.
- It is recommended that entire circle is driven for optimum circle center calculation. Driving more than a complete circle does not increase accuracy of calculation.

PC20397 —UN—08DEC14



Lat/Lon Circle



Drive Circle

Use Help Center onscreen help for more information about creating circle tracks.

CZ76372,0000730 -19-15DEC14-3/3

Circle Track Edge

PC17399 —UN—08DEC14

NOTE: Circle Track Edge can only be used on Generation 4 Displays. Edge information cannot be used on GreenStar™ 3 Displays.

Circle Track Edge represents outer boundary of a center pivot. It is displayed as an orange line on guidance map.

Creating a circle track edge allows guidance lines to be generated starting from edge. Otherwise, guidance lines are generated starting from center of pivot.

NOTE: Track spacing and working width must be equal for end of implement to line up against the edge.

When guidance lines are created, the edge is the reference point, instead of the circle center. This can

GreenStar is a trademark of Deere & Company



be useful if implements with different track spacings are used in the same field. Just enter a new track spacing, and guidance lines are adjusted starting at the edge. Guidance lines are generated based on the edge using track spacing and shifts. If edge is deleted, guidance lines are created from center outward.

CZ76372,0000738 -19-15DEC14-1/1

Guide on a Circle Track

When operating circle track, it is not necessary to drive tracks in a specific order. The closest track is highlighted with a thicker white line.

Track number is displayed under path accuracy indicator, and automatically updates when new track is approached. Track number indicates number of lines away, and

direction from Track 0. Track direction is shown relative to Track 0 (North, South, East, or West). Track number changes when machine is halfway between two tracks.

Path accuracy indicator shows off-track error distance. Off-track error shows distance from closest track to machine. Error counts up until machine reaches point halfway between two tracks. After reaching mid-point, error counts down as machine approaches next track.

CZ76372,0000734 -19-08DEC14-1/1

Boundary Fill Track

PC23147 —UN—05OCT16

NOTE: Boundary Fill Track does not utilize slope compensation. If operating in a sloped field, it is recommended to use Adaptive Curves.

When shift track is selected, all tracks are adjusted and regenerated.

Boundary Fill Track creates guidance lines from the dimensions of the exterior boundary and the track spacing.

The display creates up to ten guidance lines based on boundary shape and track spacing. Boundary fill track



Boundary Fill Track

cannot be exported to another display. If the boundary fill track is needed on another display, the same track can be generated using the same exterior boundary.

AL70325,000039A -19-07OCT16-1/1

Guide on a Boundary Fill Track

The closest track is highlighted with a thicker white line.

Track number is displayed under path accuracy indicator, and automatically updates when new track is approached. Track number indicates number of lines away, and direction from Track 0. Track direction is shown relative

to Track 0 (North, South, East, or West). Track number changes when machine is halfway between two tracks.

Path accuracy indicator shows off-track error distance. Off-track error shows distance from closest track to machine. Error counts up until machine reaches point halfway between two tracks. After reaching mid-point, error counts down as machine approaches next track.

AL70325,000039B -19-07OCT16-1/1

Swap Track (Track Set)

PC17412 —UN—15JUL13

Swap Track, or Track Set, allows operators to switch between guidance lines. A Track Set (group of guidance lines) must be created before using Swap Track. When selected, Swap Track changes the guidance track based on the order of guidance lines in the Track Set.

NOTE: Swap Track works with existing guidance lines. Lines must be created and added to Track Set before using Swap Track.

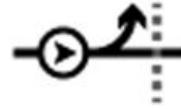
Swap Track is enabled when a Track Set is selected in the Guidance Track List.

Swap To Next Track

To select the next guidance track, use the following methods:

- Select Swap button in Next Track module.

NOTE: Swap Track button is grayed out when a Track Set is not selected.



- Select Swap Track in the shortcut bar.

Select a Track Set

1. Select Set Track button or select Next Track module.
2. Select a Track Set from Guidance Track List page.

NOTE: Removing a line from a Track Set does not delete it from the display. Deleting a Track Set does not delete the lines in the Track Set from the display.

More information can be found in the onscreen help files.

HC94949,00003A2 -19-02OCT13-1/1

AutoTrac Status Pie

PC16645 —UN—26FEB13

AutoTrac icon has four stages represented by the AutoTrac Status Pie:

1. Installed

Steering controller and all other hardware necessary for use are installed.

- Steering controller is detected.
- AutoTrac activation detected.



Installed

HC94949,0000397 -19-30AUG13-1/4

2. Configured

PC16646 —UN—26FEB13

Tracking Mode has been determined, and a valid Track 0 has been established. Correct StarFire signal level for AutoTrac activation is selected. The following machine conditions need to be met:

- Guidance system turned ON.
- Guidance Track 0 defined.
- StarFire signal is present.
- Steering controller has no active faults.
- Speed is in range.
- TCM message is currently available and valid.



Configured

- Machine in proper operating gear.

Continued on next page

HC94949,0000397 -19-30AUG13-2/4

3. Enabled

PC16647 —UN—26FEB13

AutoTrac ON/OFF button has been pressed. All conditions are met for AutoTrac to operate and system is ready to be activated.

- Select STEER ON/OFF button to turn “Steer On”.



Enabled

HC94949,0000397 -19-30AUG13-3/4

4. Activated

PC16648 —UN—26FEB13

Resume switch has been pressed and AutoTrac is steering the machine.

- Press Resume switch to activate AutoTrac.

Last Exit Code: Indicates why AutoTrac is deactivated or will not activate. Exit codes show up in a new window shade at top of page.



Activated

HC94949,0000397 -19-30AUG13-4/4

Enable AutoTrac™

PC15304 —UN—19MAR13

The following criteria must be met for AutoTrac™ to be enabled:

- Machine has an AutoTrac™ capable steering controller.
- Valid AutoTrac™ Activation.
- A guidance track has been created. See CREATE GUIDANCE TRACK later in this section.
- Correct StarFire™ signal level for AutoTrac™ activation is selected (SF1, SF2, or RTK) and a valid GPS signal is acquired.
- AutoTrac™ with valid GPS signals, including SF1, SF2, or RTK.
- Steering controller has no active faults.

NOTE: Machine type and software version of steering controller determines minimum and maximum speeds allowed.

*AutoTrac is a trademark of Deere & Company
StarFire is a trademark of Deere & Company*



Steer ON/OFF Toggle

A—Steer On

B—Steer Off

To enable AutoTrac™, select Steer ON/OFF toggle. This button disables AutoTrac™ if selected again.

CZ76372,000076B -19-13JUL16-1/1

Disable AutoTrac When Not In Use

PC15305 —UN—19MAR13

CAUTION: Always turn off (Deactivate and Disable) AutoTrac system before entering a roadway.



Settings Icon

Guidance Master ON/OFF controls the Guidance Application. ON/OFF button on Run Pages only enables or disables AutoTrac, and does not turn off Guidance Application.

NOTE: Guidance application is disabled when Guidance Master is turned off. This includes all display guidance functionality.

Guidance Master can be found in guidance settings. Select SETTINGS icon at the top of the guidance application.

HC94949,0000399 -19-15JUL14-1/1

Activate AutoTrac

CAUTION: While AutoTrac is activated, operator is responsible for steering at end of path and collision avoidance.

Do not attempt to turn on (Activate) AutoTrac system while transporting on a roadway.

1. Select STEER ON/OFF button to turn "Steer On".

2. Drive the vehicle onto a guidance track and a highlighted navigation line will appear in front of the machine icon.
3. Manually ACTIVATE AutoTrac when steering assistance is desired by pressing the Resume Switch. This will initiate assisted steering.

HC94949,00003D6 -19-13SEP13-1/1

Resume Switch

PC20427 —UN—28JUL16

Press the Resume Switch to move AutoTrac™ from the ENABLED stage to the ACTIVATED stage.

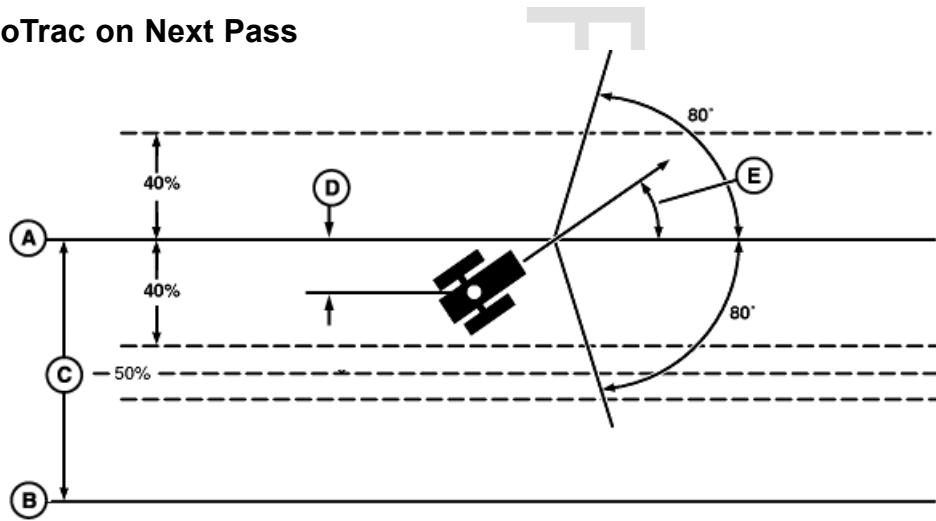


AutoTrac™ Resume Icon

AutoTrac is a trademark of Deere & Company

CZ76372,000077B -19-28JUL16-1/1

Reactivate AutoTrac on Next Pass



PC8866—UN—02NOV05

A—Track 0
B—Track 1 South

C—Track Spacing
D—Off-Track Lateral Error

Tracking

E—Track Heading Error

Once the end of the row is reached, the operator must turn system to next pass. By turning steering wheel, AutoTrac is deactivated.

AutoTrac can be activated again by pressing Resume Switch only after following conditions are met:

- Steering Controller determines highest speed while AutoTracking.
- Forward machine speed is less than 30 km/h (18.6 mph).
- Reverse speed is less than 10 km/h (6 mph).

- In reverse AutoTrac will remain activated for 45 seconds. After 45 seconds, the machine must be put in a forward gear before reverse will activate again.
- Machine heading is within 80° of desired track.
- The machine is within 40% of track spacing.
- Operator is seated.
- TCM is on.

NOTE: The Track Number that is displayed on the map at half the distance between two guidance tracks.

HC94949,000039A -19-02OCT13-1/1

Deactivate AutoTrac™

PC15304 —UN—19MAR13

CAUTION: Always turn off (Deactivate and Disable) AutoTrac™ system before entering a roadway.

AutoTrac™ system may deactivate by the following methods:

- Turning steering wheel.
- Exceeding speed of 30 km/h (18.6 mph). This number is based on steering controller. Some machines can go faster than this speed. (For more information, see Minimum and Maximum Speeds.)
- Degradation of differential correction signal from SF2 or RTK to WAAS/ EGNOS for longer than 3 minutes.
- Selecting STEER ON/OFF toggle.
- Operator out of seat for more than 7 seconds.

AutoTrac is a trademark of Deere & Company



STEER ON/OFF Toggle

A—Steer On

B—Steer Off

- Activated in neutral longer than 30 seconds.
- In reverse for longer than 45 seconds.
- Reverse speed exceeds 9.6 km/h (6 mph).

To turn off AutoTrac™, toggle STEER ON/OFF button.

CZ76372,000076C -19-13JUL16-1/1

Minimum and Maximum Speeds

Machine and software version of Steering Controller determine minimum and maximum speeds.

Feature	Row Crop (Wheels)	Articulated	Tracks
Forward High Speed Limit	30 km/h (18.6 mph) – 6R, 7R, 8R, 9R	30 km/h (18.6 mph)	30 km/h (18.6 mph)
Reverse High Speed Limit	10 km/h (6 mph)	10 km/h (6 mph)	10 km/h (6 mph)
Low Speed Limit (Activate)	0.5 km/h (0.3 mph) – 7R, 8R, 9R 0.1 km/h (0.06 mph) - 6R	0.5 km/h (0.3 mph) 1.5 km/h (0.9 mph) – MST	0.5 km/h (0.3 mph)
Low Speed Limit (Deactivate)	0.5 km/h (0.3 mph)	0.5 km/h (0.3 mph) 1.5 km/h (0.9 mph) – MST	0.5 km/h (0.3 mph)
Neutral Allowable Time	Yes, < 30 Sec.	Yes, < 30 Sec. – PST only	Yes, < 30 Sec.
Reverse and Allowable Time	Yes, 45 Sec.	No	Yes, 45 Sec.

HC94949.00003A5 -19-02OCT13-1/1

AutoTrac™ Deactivation Message

AutoTrac™ deactivation message – Each time AutoTrac™ is deactivated, two tones are followed by an

alert explaining why it was deactivated. Messages are also displayed as to why AutoTrac™ did not activate. Deactivation messages display for 7 seconds and then disappear.

AutoTrac™ Deactivation Message	
Code	Message
702752.00	Nothing Checked Yet
702752.01	Steering Wheel Moved
702752.02	Wheel Speed Too Slow
702752.03	Wheel Speed Too Fast
702752.04	Gear Invalid
702752.05	Track Number Changed
702752.06	No Dual Frequency GPS
702752.07	SSU Has Active DTCs
702752.08	Last Transition Okay
702752.09	GSD Messages Bad
702752.10	No Parallel Tracking
702752.11	Keycard Not Present
702752.12	Heading Error Too Large
702752.13	Lateral Error Too Large
702752.14	Seat Switch Open
702752.15	Oil Temperature Too Low
702752.16	TCM Not Present
702752.17	Activation Code Invalid
702752.18	Diagnostic Mode Controls Valve
702752.19	Combine Header Switch Off
702752.20	Combine Road/Field Switch On
702752.21	Voltage Not Stable
702752.22	AutoTrac™ Active In Reverse Too Long
702752.23	AutoTrac™ Active Below Low Speed Threshold Too Long
702752.24	Curvature Too High
702752.25	Vehicle Not Traveling In Forward Direction
702752.26	ELX Line Low (Shutdown)
702752.27	Gear Data Bad
702752.28	Resume Switch Data Bad
702752.29	Key Switch Message Invalid
702752.30	SPFH AutoTrac™/Row Guidance Switch Off
702752.31	SPFH Quick Stop Switch On
702752.32	ATU Not Enabled
702752.33	Acquiring Line
702752.34	Tracking On Line
702752.35	Unknown Direction
702752.36	Transition to GPS too large
702752.37	Out of row
702752.38	Sensor coast timed out
702752.39	Bad message sequence
702752.40	Vehicle cannot achieve commanded track curvature
702752.41	GPS vehicle speed does not mtch Wheel based vehicle speed
702752.42	Present curvature mis-match
702752.43	Vehicle is in park
702752.44	Auxiliary steering commands message timed out
702752.45	Auxiliary steering status message timed out
702752.46	Seat switch data bad

Continued on next page

CZ76372.0000773 -19-15JUL16-1/2

702752.47	VIN data bad
702752.48	Wheel base data bad
702752.49	TCM info message timed out
702752.50	Vehicle automation message timed out
702752.51	Vehicle roll/yaw rate message timed out
702752.52	Wheel based speed/direction message timed out
702752.53	Track data timed out
702752.54	Unknown steering controller failure
702752.55	ATU temperature out of range
702752.56	AutoTrac™ Active In Four Wheel Steer Too Long
702752.57	Vehicle in Crab Steer
702752.58	Authorization Not Permitted
702752.62	Reserved
702752.63	Take No Action

AutoTrac is a trademark of Deere & Company

CZ76372,0000773 -19-15JUL16-2/2

Steering Optimization

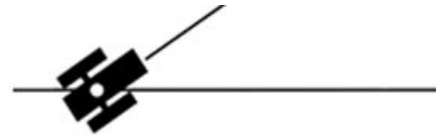
PC16972 —UN—22MAY13

Monitor Performance

Monitor performance shows heading error and tracking error. It is designed to aid in tuning of Advanced AutoTrac Settings. Heading error indicates relationship of machine's direction relative to current track. Tracking error displays machine's lateral error or offset relative to current track.

Heading Error Meter

Heading Error indicates relationship of machine's direction relative to current track. Heading Error should be within +/- 1 degree.



Adjustments may be needed if they are outside of this range.

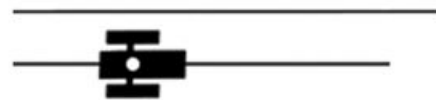
AL70325,00003A0 -19-12OCT16-1/8

Tracking Error Meter

PC16969 —UN—22MAY13

Tracking Error displays machine's lateral error or offset relative to current track. Arched bar graph value will update minimum and maximum Heading Error changes live during last 10 seconds.

NOTE: Steering Controller values are based on steering controls of machine.



Continued on next page

AL70325,00003A0 -19-12OCT16-2/8

Forward Steering Adjustments

Line Sensitivity Tracking

Determines how aggressively AutoTrac responds to off-track (lateral) error.

- Higher settings: Result in more aggressive response to machine off-track error.
- Lower settings: Result in less aggressive response to machine off-track error.

PC16969 —UN—22MAY13



Tracking Error

PC16971 —UN—22MAY13



Forward High Setting Icon

PC16970 —UN—22MAY13



Forward Low Setting Icon

AL70325,00003A0 -19-12OCT16-3/8

Heading Lead

Determines impact of yaw rate (machine rate of turn) on tracking performance. Heading lead acts as a look-ahead parameter and can be used to minimize over steering. Large adjustments may result in poor performance.

- Higher settings: Result in more aggressive response to yaw rate.
- Lower settings: Result in less aggressive response to yaw rate.

PC16976 —UN—22MAY13



High Heading Lead

PC16977 —UN—22MAY13



Low Heading Lead

Continued on next page

AL70325,00003A0 -19-12OCT16-4/8

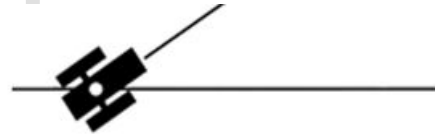
DRAFT

Line Sensitivity Heading

Determines how aggressively AutoTrac responds to Heading Errors.

- Higher settings: Result in more aggressive response to machine heading error.
- Lower settings: Result in less aggressive response to machine heading error.

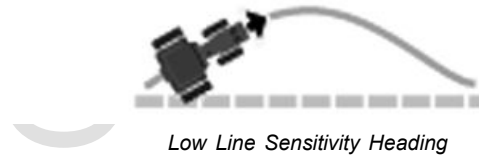
PC16972 —UN—22MAY13



PC16974 —UN—22MAY13



PC16973 —UN—22MAY13



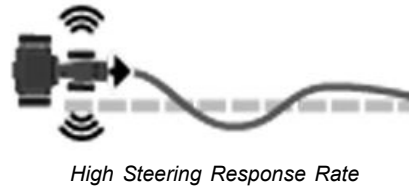
AL70325,00003A0 -19-12OCT16-5/8

Steering Response Rate

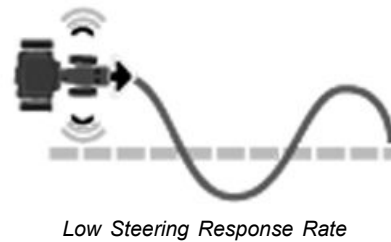
Adjusts rate of machine steering to maintain tracking performance. Increasing steering responsiveness generally results in better tracking performance.

- Higher settings: Result in better tracking performance, but may also cause increased wheel motion or jittery behavior.
- Lower settings: Result in decreased wheel motion, but may also result in worse tracking performance.

PC16980 —UN—22MAY13



PC16979 —UN—22MAY13



Continued on next page

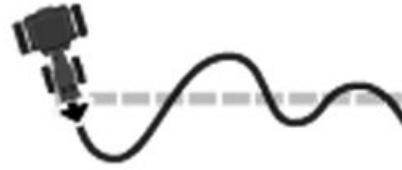
AL70325,00003A0 -19-12OCT16-6/8

Acquire Sensitivity

Determines how aggressively machine acquires track. This setting only affects performance while acquiring track.

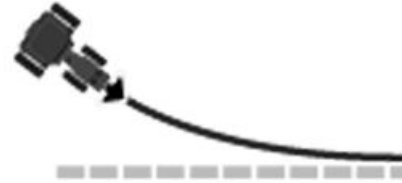
- Higher settings: Result in aggressive line acquisitions.
- Lower settings: Result in smoother line acquisitions.

PC16983 —UN—22MAY13



High Acquire Sensitivity

PC16982 —UN—22MAY13



Low Acquire Sensitivity

AL70325,00003A0 -19-12OCT16-7/8

Curve Sensitivity

Determines how aggressively AutoTrac responds to a curve in track. This setting affects performance in curve track guidance only.

- Higher settings: Turn machine in a smaller radius (tighter) around curve.
- Lower settings: Turn machine in a larger radius around curve.

PC16986 —UN—22MAY13



High Curve Sensitivity

PC16985 —UN—22MAY13



Low Curve Sensitivity

AL70325,00003A0 -19-12OCT16-8/8

Troubleshooting

NOTE: AutoTrac has been tuned to perform successfully in most field conditions using a variety of implements. For abnormal conditions, Advanced Settings allow the operator to fine tune systems for specific field conditions and implements. Adjusting steering sensitivity should be tried before using the steps in the following scenarios.

Check and fix other problems before tuning. Perform necessary mechanical checks and calibrations through associated machine. If this step is not performed, machine faults may occur or operator wastes time tuning a system that cannot be tuned.

Excessive Wheel Motion: Overall AutoTrac Performance is acceptable, but wheels quickly twitch back and forth.

Aggressive S-ing Motion: Continual back and forth motion is observed by looking over front nose of machine. Motion is observed, but off-track error shown on display (distance away from A–B line) is often relatively small.

Lazy S-ing Motion: Performance of AutoTrac seems sluggish when trying to stay on line and slowly wanders from side to side.

Lazy Line Acquisition: AutoTrac appears sluggish during line acquisition. Tractor remains off to one side of line for a long time before getting lined up.

Aggressive Line Acquisition: AutoTrac overshoots line and continues to overcompensate during acquisition. Results in high frequency, tight S-ing pattern during acquisitions.

Tracking Outside of Curve: AutoTrac is sluggish in curve track, resulting in slow, wandering S-ing about the desired line. This line often tracks to the outside of the desired path.

Tracking Inside of a Curve: AutoTrac exhibits rapid and high frequency corrections in Curve Track Mode, resulting in a tight S-ing pattern, or tracking to the inside of the desired path.

NOTE: For troubleshooting techniques, refer to the onscreen help files.

General Tuning

Adjustment recommendations:

- Steering Sensitivity: Set at 100 before making other adjustments. Adjust in increments of 10.
- Line Sensitivity Tracking: Adjust in increments of 20.
- Line Sensitivity Heading: Adjust in increments of 10.
- Heading Lead: Adjust in increments of 10.
- Steering Response Rate: Adjust in increments of 10.
- Acquire Sensitivity: Adjust in increments of 20.
- Curve Sensitivity: Adjust in increments of 20.

One Value at a Time: Attempt to adjust settings in problem field conditions while AutoTrac is active by performing the following steps:

1. Start with factory default settings. Steering Sensitivity value will correlate to value on Guidance View Tap. Attempt to use a value for this setting that is like running conditions (70 for concrete, 100 most conditions, and 120 for soft ground). This number may still need to be modified beyond suggested settings.
2. While AutoTrac is active in problem conditions (such as speeds, ground, and tire setup), increase or reduce Line Sensitivity Heading by a factor of 10.
3. If change in Line Sensitivity Heading is ineffective at addressing issue, reset Line Sensitivity Heading parameter. Increase or reduce Heading Lead in same manner as previous step.
4. If none of the previous steps were effective, reset Heading Lead and increase or reduce Steering Response Rate in a similar fashion to the previous steps.

Combining Settings: If above procedure does not give satisfactory performance and once operator becomes more comfortable with how parameters change AutoTrac performance, try different combinations of parameters while AutoTrac is active.

HC94949.00003C4 -19-02OCT13-1/1

Fields and Boundaries

Fields and Boundaries

PC17260 —UN—11JUL13



Fields and Boundaries Application

Field names organize information so it is easier to find and use data, such as guidance lines. Using field names is optional, and a “---“ appears for undefined names.

Use Fields and Boundaries application to:

- Select field location name used for all other applications.
- Create a client, farm, or field name.
- Change the name of a client, farm, or field.
- Associate a field to a different farm or client.
- Delete a client, farm, or field.
- Create boundaries.

Select Client, Farm, and Field box to set current location and choose field name used for all other applications.

Integration with Guidance

- A field can be associated to a guidance track when the track is created, or by editing the track.
- Guidance track list can be filtered by field name.

Run Page Module

A Location module for the Fields application is available in Layout Manager application. It is available on the default Guidance Run Page, and it can be added to any run page.

Select a field in Location module to:

- Filter guidance track list.
- Associate new tracks to the field when they are created.
- Begin new or continue previous work data.

Navigate to Fields

1. Select Menu
2. Select Applications tab.
3. Select Fields application.

DX,PC,FIELDS -19-22DEC15-1/1

P
R
O
O
F

Manage Clients, Farms, and Fields

Field Organization

Use the following hierarchy to help organize data:

- Clients (A) are the highest level of organization.
- Farms (B) are the middle level of organization. A farm can be associated with a client.
- Fields (C) are the basic level of organization. A field can be associated with a farm and a client.

A strict hierarchy is not necessary, though it is possible to use only field names, and leave farm and client names blank. It is even possible not to use field names at all.

These decisions depend on amount of data being kept. More data requires structure to find fields.

NOTE: In previous John Deere displays, maps and guidance lines were saved based on field names. In the Generation 4 display, data is saved as latitude and longitude points. The field name is only needed as a way to filter data.

Select and Filter Names

In the Client, Farm, and Field hierarchy, select clients and farms to find fields.

1. Select Client tab.
2. From list, select client. Client name is displayed on Client tab.
3. Farm tab is automatically displayed. Only farms associated with the client are listed.
4. From list, select farm. Farm name is displayed on Farm tab.
5. Field tab is automatically displayed. Only fields associated with the client and farm are listed. Select field.

Remove Filter

Remove filter by selecting Clear Selections button.

Create and Edit Names

PC17389 —UN—15MAY14

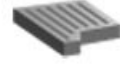


A

A—Client
B—Farm



B



C

C—Field

NOTE: Clients, farms, or fields should not be renamed after data is recorded. If renamed, change name in other locations, such as John Deere Operations Center.

Client, Farm, and Field names cannot be duplicated. Names associated with different clients and farms must be unique.

Client and Farm Tabs

When Client or Farm tabs are selected, select Edit button at bottom of page to display Edit Client or Edit Farm list.

On either list, select one of the client or farm names to edit it, or select New button at bottom of page to create a name.

Field Tab

When Field tab is selected, highlight field name and select edit button to edit a field. Select New button at bottom of the page to create a name.

Delete Names

To delete a name, edit the client, farm, or field, and select the delete button on the edit page.

- Deleting a client also deletes all farms, fields, and guidance tracks associated with client.
- Deleting a farm also deletes all fields and guidance tracks associated with farm.
- Deleting a field also deletes all guidance tracks associated with field.

DX,PC,FIELDS,MANAGE -19-21OCT16-1/1

Field Boundaries

The exterior boundary (A) marks the perimeter of a field.

Interior boundaries mark important areas of field. These can either be impassable (pink) (B) or passable (yellow) (C). An example of an impassable boundary is a well, while an example of a passable boundary is a waterway.

Headland boundaries (yellow dashes) (D) mark areas in the field where there are end rows or turn rows. They are created inside the exterior boundary and around impassable interior boundaries.

When used with Section Control, boundaries prevent application of product inside marked areas of the field and outside of the field.

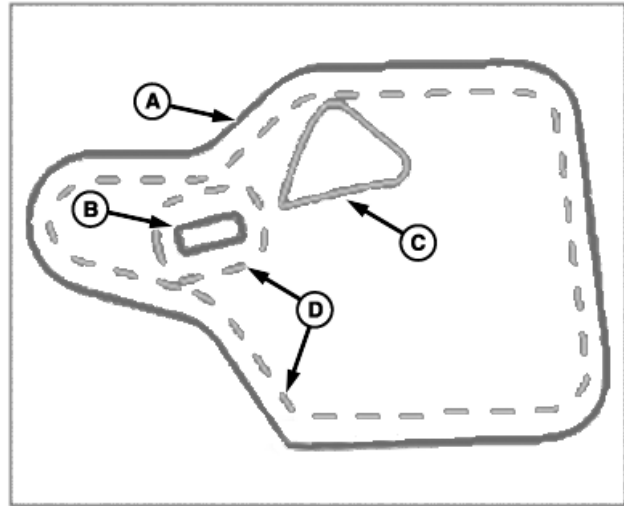
Area Calculation

An estimated boundary area is calculated on a flat two-dimensional plane. All active interior boundary areas are subtracted from exterior boundary area. Elevation changes are not used in boundary area calculation.

Work Totals include elevation changes in area worked totals. Due to calculation differences, boundary and work totals vary.

Creating a boundary requires the following:

- Field name.



A—Exterior Boundary (Pink)
B—Interior Impassable Boundary (Pink)

C—Interior Passable Boundary (Yellow)
D—Headland Boundary (Yellow)

- Coverage map with no coverage gaps around the exterior of the field.

PC21838 —UN—19NOV/15

DX,PC,FIELDS,BOUNDARIES -19-22DEC15-1/1

PROOF

Work Setup and Mapping

Work Setup

PC20415 —UN—11MAY15

Use Work Setup when changing implements, fields, or applying a different product. Settings available in Work Setup change based on the operation.

Use Layout Manager application to add Work Setup shortcut softkey to the shortcut bar.

Work Setup application requires a Documentation or Premium activation.

Navigate to Work Setup

1. Select Menu



Work Setup

2. Select Applications tab.
3. Select Work Setup application.

CZ76372,0000771 -19-13JUL16-1/3

Work Summary

PC20414 —UN—11MAY15

Use Work Summary to select operational details, such as product and target rate / prescription.

New Work

Select New Work button to clear work data from map for the selected field. If a field name is not selected, all work data recorded with no field name is cleared.

NOTE: With a Documentation or Premium activation, work data remains in display memory and can be exported.



New Work Button

Without a Documentation or Premium activation, work data for selected field cannot be restored or exported.

CZ76372,0000771 -19-13JUL16-2/3

Target Rate / Prescription

PC21892 —UN—01DEC15

Display only supports ArcGIS Shapefile format.

An unlimited number of prescriptions can be imported from a single USB drive.

Each prescription has an unlimited number of rate zones.

There is no measurable minimum to rate zone size.



Prescription

CZ76372,0000771 -19-13JUL16-3/3

Work Totals

PC21878 —UN—24NOV15

Totals are displayed for the active field and work operation. To change fields, go to Fields application and set current location. Use Layout Manager application to add Work Totals modules to the run page.



Work Totals

Work Operation

If multiple work operations are recorded, select toggle to choose an operation type.

If multiple varieties or products are recorded for an operation, separate totals for each are listed after the field totals.

Area

Area is the total area that was worked while work recording was turned on. The calculation is based on implement working width, ground speed, and time worked.

Rate

Rate is the total number of seeds or product applied divided by area worked.

Total Applied

Total Applied is the total amount of seeds or product applied.

Navigate to Work Totals

1. Select Menu.
2. Select Applications tab.
3. Select Work Totals application.

AL70325.000036D -19-24NOV15-1/1

Mapping

PC20413 —UN—11MAY15

Mapping application is used to view spatial features, such as:

- Guidance
- Coverage and Work Data
- Map Based Prescriptions



Mapping

The map view can be added to run pages using several different size modules in Layout Manager.

Navigate to Mapping

1. Select Menu

2. Select Applications tab.
3. Select Mapping application.

Continued on next page

CZ76372.000076F -19-13JUL16-1/2

Work Data Maps

Work data includes rate, product, and coverage (work state) information. It is recorded based on global positioning system (GPS) location and time.

Work data files include the following information:

- Time
- Latitude and longitude
- Elevation
- Field name (if set by operator)
- Coverage
- Documentation

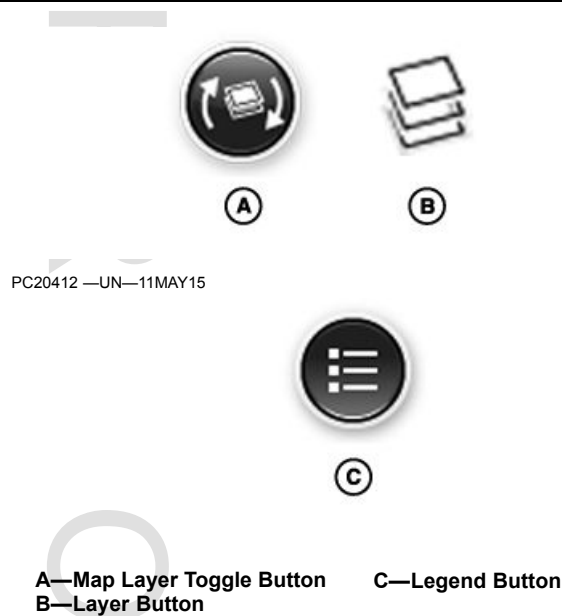
There is no size limit for recording work data for each field name. The only limit is the memory capacity of display. Available display memory is found in Status Center on the run page.

Select map layer toggle button (A) to switch between map types. Information displayed in legend changes based on the type of map selected. Select layer button (B) to change between operational map layers. Select legend button (C) to show the legend.

Coverage Map

Coverage data displays where work has been done. On the map, area that has been worked once displays as light blue, and area that has been worked more than once is displayed as dark blue. Coverage map aligns with area worked total in Work Monitor.

StarFire is a trademark of Deere & Company



Work data is displayed in map view for 0.64 km (0.4 mi) in each direction from GPS location.

Coverage map is available with all Generation 4 Displays. A StarFire™ Receiver is required to record coverage data.

P
R
O
O
F

Work Monitor

Work Monitor

PC15317 —UN—16MAY13

Work Monitor displays averaged and totaled machine and operation-specific values. Select a value on the page to view a popup window of just that value. Every one of these values can be placed on the main run page.

Use the Reset button at the bottom of the page to clear all values, except instant values. Date and time of the last reset will be indicated next to the button.

To the right of the Reset button, Work Recording indicates whether the Work Monitor is active and currently counting. A pulsing light shows it is active.



Work Monitor

Navigate to Work Monitor

1. Select Menu.
2. Select Applications tab.
3. Select Work Monitor application.

DX,PC,WORKMON -19-23DEC15-1/1

Work Recording

When Work Recording is ON, map recording and counters that require a recording trigger accumulate. Counters requiring Work Recording include:

- Area Worked
- Time Worked
- Productivity
- Average Fuel Per Area
- Average Working Speed

Select Work Recording in the bottom right hand corner to view a popup window with recording settings.

Recording status is based on the current recording trigger selected in Implement Profile. If the recording trigger does not fit the current operations, press Edit button to change the selected recording trigger. For more information, see Implement Profile section.

NOTE: If recording trigger is set to manual, work recording can be switched on or off by pressing the recording button.

DX,PC,WORKMON,REC -19-23DEC15-1/1

P
R
O
O
F

Section Control

Section Control

PC20399 —UN—16FEB15

John Deere Section Control turns machine or implement sections ON and OFF automatically to reduce overlap and improve input management. Section Control requires the following components:

- Documentation or Premium activation.
- StarFire™ Receiver

Navigate to Section Control

1. Select Menu.

StarFire is a trademark of Deere & Company



2. Select Applications tab.
3. Select Section Control application.

CZ76372.0000770 -19-27JUL16-1/2

Section Control automatically controls machine or implement sections when entering and exiting previously covered areas. Sections are turned off when entering coverage and are turned back on when entering areas without coverage. The coverage map shows the previous covered areas by recording where the machine or implement has been in the field. Light blue coverage indicates a single pass through the field. Any overlap is indicated by dark blue coverage.

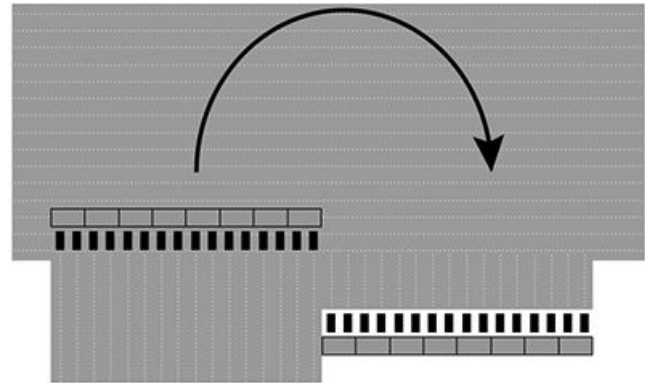
Section Control determines when to turn on or turn off a section based on the following factors:

- GPS position
- Coverage map
- Machine and implement offsets
- Section status
- Overlap settings
- Mechanical delay
- Field boundaries
- Headland boundaries

Section Control sends a CAN bus message to the machine or implement controller to change section status. Section is turned ON to apply product to an area. It is turned OFF to prevent reapplication of product in the same area. There is no distance limit from where operation started in field.

IMPORTANT: Some operators connect two separate fields into one using a “land bridge” between them. Product may still be applied over this strip of land if Section Control is left on. To prevent unexpected coverage, always turn Section Control or the master switch OFF while transporting between fields.

Section Control Accuracy



PC20400 —UN—16FEB15

The following factors impact Section Control performance:

- GPS accuracy of previous coverage map.
- Current GPS accuracy.
- Machine Profile and Implement Profile settings.
- Operator must drive at a constant speed when entering and exiting coverage.

Compatibility

See Generation 4 Display Release Notes for more information on implement compatibility.

Multiple Displays

Section Control requires task controller communication with the controller, and the task controller cannot run on two connected displays. Status of task controller can be viewed in multiple display settings.

CZ76372.0000770 -19-27JUL16-2/2

Section Status Module

Section status module is used to determine if Section Control has commanded each section on or off. The module can be added to a run page using Layout Manager. The following section states are possible:

NOTE: Section status does not change based on section seed rate. If rows in section are out of seed, green is displayed unless all sections across a drive motor have a rate of zero. Check seed populations using SeedStar™.

Section Enabled (Not Applying)

- Planter or Air Seeder tool is raised.
- Planter or Air Seeder clutches are turned OFF.
- A rate of zero is reported from all sections across a drive motor.

Section Applying

- Section is receiving a command to apply product.

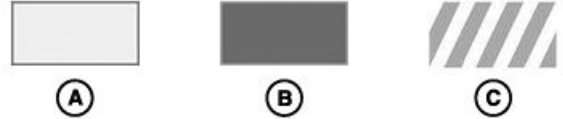
Section Commanded Off (Not Applying)

- Section is over existing coverage.
- Section is commanded off by a boundary.
- Air Seeder or GreenStar™ Rate Controller is below minimum Section Control speed.
- Driving over a zero rate prescription zone.

Sprayer Only

SeedStar is a trademark of Deere & Company
GreenStar is a trademark of Deere & Company

PC22546 —UN—22APR16



PC23148 —UN—06OCT16



- A—Section Enabled - Gray with Green Outline
- B—Section Applying - Solid Green
- C—Section Commanded Off - Green and White Stripes
- D—Section Disabled - Solid Gray
- E—Section Indexed Off - Solid Black

Section Disabled (Not Applying)

- Section Control is disabled.
- Section is manually controlled.

Section Indexed Off (Not Applying)

- Section indexed off by controller.

CZ76372,0000745 -19-06OCT16-1/1

Overlap Settings

Overlap occurs when crossing previous coverage at a diagonal. Amount of overlap is an operator preference.

Configure overlap settings for intentional overlap. Use Performance Tuning to compensate for unintentional skips and overlap. For more information, refer to the section control onscreen help.

NOTE: 100% Overlap is most common setting when planting.

100% Overlap + Additional

Additional overlap ensures product coverage up to previous applied area, eliminated skips. Additional overlap results in over application

100% Overlap - Minimize Skip

Minimize skip ensures product coverage up to previous applied area, reducing skips. Minimize skip can result in over application.

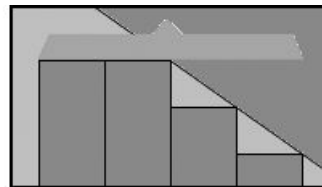
0% Overlap - Minimize Overlap

PC20402 —UN—16FEB15



100% Overlap - Minimize Skips

PC20403 —UN—16FEB15



0% Overlap - Minimize Overlap

Minimize overlap ensures that product coverage does not extend over previous applied area. Minimize overlap can result in under application.

Percentages between 0-100% ensure product coverage into previous covered area based on individual section widths.

CZ76372,0000746 -19-06OCT16-1/1

Performance Tuning

Performance Tuning is used to correct skips and overlaps in product applied on the ground. It uses distance and speed to adjust mechanical delay settings.

Ensure that the following factors are correct before attempting Performance Tuning:

- GPS accuracy of previous coverage map.

- Current GPS accuracy.
- Machine Profile and Implement Profile settings.
- Operator must drive at a constant speed when entering and exiting coverage.

Use Help Center onscreen help for performance tuning instructions.

AL70325,0000370 -19-09DEC15-1/1

PROOF
PROOF
PROOF

File Manager

File Manager

PC16671 —UN—18MAR13

File Manager application is used to transfer data to and from the display. Data can either be transferred wirelessly with John Deere Operations Center, or use a USB drive to transfer data between displays or compatible desktop software.

It is important to backup data to a USB drive periodically.

Display internal memory is intended to have enough capacity to store all data from a machine per season. A message appears when 95% of memory is used. Data should be exported and deleted before memory used exceeds 95%.

Navigate to File Manager

1. Select Menu.
2. Select System tab.
3. Select File Manager Application.



File Manager

CZ76372,0000775 -19-15JUL16-1/7

Factory Data Reset

PC17398 —UN—22OCT14

Select settings at the top of File Manager application to open Factory Data Reset.

Process removes all user data from display and cannot be undone. User data includes setup and documentation data, guidance information, totals, and custom run page layouts. Language and regional settings and activations are not reset. A reboot is required after reset.



Settings

Factory Data Reset should be performed prior to selling machine.

Continued on next page

CZ76372,0000775 -19-15JUL16-2/7

PROOF

Data Types

- Guidance tracks (A) include guidance lines and associated client, farm, and field names.
- Custom run pages (B) can be transferred between Generation 4 Displays that are the same size. Run pages can be shared between 7 inch displays, or between 10 inch displays.

NOTE: Imported run pages are available on the All Run Pages tab in Layout Manager.

Some run page modules reset to default settings when imported.

Run page modules created for ISOBUS VT implement controllers appear as unavailable if controller is not connected to machine.

- Work data (C) includes mapping and totals data. It can be uploaded to John Deere Operations Center, or unloaded into compatible desktop software. Work data cannot be imported into the Generation 4 Display.

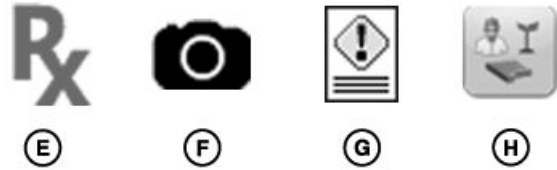
NOTE: Exporting work data requires a Documentation or Premium activation.

- Boundaries (D) are configured using Fields application.
- Prescriptions (E) are configured using Work Setup application.
- Screenshots (F) copy the image displayed on the screen. (Refer to Capture Screenshots for instructions.)

PC21839 —UN—16NOV15



PC21840 —UN—30NOV15



- A—Guidance Tracks
- B—Custom Run Pages
- C—Work Data
- D—Boundaries
- E—Prescriptions
- F—Screenshots
- G—Error Logs
- H—Setup Data

- Error Logs (G) are automatically generated by the display and can be used by John Deere to troubleshoot issues.
- Setup Data (H) includes client, farm, and field names, crop varieties, and products.

CZ76372.0000775 -19-15JUL16-3/7

Data Sync

Data Sync is used to manually or automatically send work data directly to John Deere Operations Center. Data is transferred using cellular signal through the modular telematics gateway (MTG).

Data Sync Preference

To automatically send work data, select “Automatically Sync Work Data” checkbox. Data is sent to John Deere Operations Center when MTG is in cellular coverage. If cellular coverage is not available, work data is stored on the display. Data is sent when cellular signal is reacquired and MTG is able to make a call.

Data Triggers

Even though work data is automatically sent from the display to John Deere Operations Center periodically, files

PC21844 —UN—16NOV15



Data Sync

cannot be viewed in the Operations Center until one of these triggers occur:

- Start New Work, or change client, farm, or field.
- Lose cellular communication between display and John Deere Operations Center for more than 30 minutes.
- Turn key off, and then turn key on within 30 minutes.
- Turn key off for more than 30 minutes.

Continued on next page

CZ76372.0000775 -19-15JUL16-4/7

Import Data

PC20405 —UN—30APR15

Select import method:



Import Data

- Import from USB Drive – Select folders on USB drive that contain data to be imported.
- Import Received Files – Import setup and prescription files from John Deere Operations Center.

After setup files and prescriptions are imported to the display, use Work Setup to apply the file. Reference help files on John Deere Operations Center for how to create and send setup files to the Generation 4 Display.

Compatibility

Data can be transferred from another Generation 4 Display, GreenStar™ 3 2630 Display, compatible desktop software, or John Deere Operations Center.

John Deere Operations Center does not support the ability to view, send, or receive run pages. If a setup file only contains run pages, the file displays as invalid in John Deere Operations Center. If a setup file contains guidance lines or boundaries, and run pages, the setup file loads correctly, though run pages are not viewable.

NOTE: Update Apex™ or third-party desktop application if there are issues with transferring data.

Choose GS3 2630 card format when exporting from Apex™. To use guidance lines from other GreenStar™ displays, unload guidance lines into Apex™ and then export in GS3 2630 card format.

*GreenStar is a trademark of Deere & Company
Apex is a trademark of Deere & Company*

Data Conflicts

When necessary, imported client, farm, and field names are changed. For example, "Field1" is renamed "Field1(1)".

If guidance lines are in the same field and created with the same tracking method, the display handles the following conflicts.

Different Name, Same Line

- If lines are the same, name of guidance line on display is replaced by name on USB drive.

Same Name, Different Line

- If there are two different lines with the same name, line on USB drive is renamed when imported. For example, "Track1" is renamed "Track1(1)".

NOTE: A file may fail to import for multiple reasons. To determine which file is causing problems, remove individual files from USB drive and attempt to import remaining files.

CZ76372,0000775 -19-15JUL16-5/7

Export Data

PC20406 —UN—30APR15

Select export method to transfer desired data types.



Export Data

- Select Custom Export to transfer run pages and field-specific work data and guidance lines.
- Select Export All Data to quickly transfer all work data, guidance lines, and run pages using default settings.
- Select Diagnostic Data to transfer screenshots and error log files.

CZ76372,0000775 -19-15JUL16-6/7

Delete Data

PC20407 —UN—30APR15

Delete data removes selected data types from the display.



Delete Data

- Select Custom Delete to remove work data, guidance lines, and run pages.
- Select Clear Diagnostic Data to remove screenshots and error log files.

CZ76372,0000775 -19-15JUL16-7/7

USB Drive

USB Drive Requirements for John Deere Displays

- Format - Windows FAT or FAT32. This display does not recognize NTFS format.
- Capacity - There is no maximum limit to the memory capacity of the drive.
- Connectivity - USB 2.0
- Maximum Dimensions - 9.2 mm (3/8 in) thick by 21.7 mm (7/8 in) wide

Best Practices

- After inserting USB drive, wait 10 seconds. Large USB drives may take time to be recognized.
- Use a USB drive that is 4 GB or larger, so multiple backups can be stored.
- Clean all files off the USB drive that are not associated with John Deere displays.

Check Readings tab in Diagnostics Center application to determine if display recognizes USB drive.

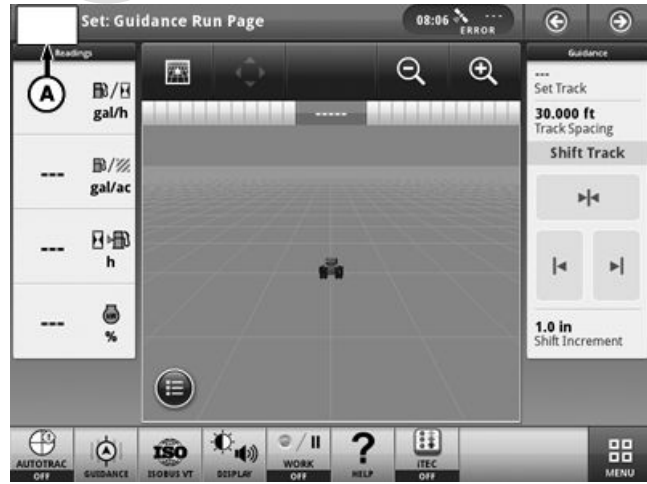
DX,PC,FILE,USB -19-21DEC15-1/1

Capture Screen Shots

Select area highlighted in top left corner of screen. Press and hold until screen flashes and display makes camera shutter sound.

Insert USB drive and select Export Data to transfer screen shots to drive.

A—Screen Shot Area



PC17263—UN—15JUL13

DX,PC,FILE,SCREENSHOT -19-22DEC15-1/1

Diagnostics Center

PC17272 —UN—17JUL13

Diagnostics Center

Diagnostics Center is the one place to find diagnostics for the entire system. Select one of the tabs for more information.

System Diagnostics

- View diagnostics information for machine, implement, and display applications.

Controller Diagnostics

- Access diagnostic addresses, diagnostic trouble codes, and information specific to each device connected on CAN Bus.

Diagnostic Trouble Codes

- View all active or stored diagnostic trouble codes.

Readings

- View diagnostic readings for processor, monitor, and display.



Diagnostics Center

CAN Bus Info

- View diagnostic information for each CAN Bus.

Network

- View MTG diagnostic readings.

Navigate to Diagnostics Center

1. Select Menu.
2. Select System tab.
3. Select Diagnostics Center application.

DX,PC,DIAG -19-21OCT16-1/1

Controller Diagnostics

Controller Diagnostics displays the following information for controllers connected on CAN Bus.

Device

- Each device in list is identified by Device ID, CAN Address, and CAN Network location.

Codes

- Indicates if device has diagnostic trouble codes.

Message Count

- Number of CAN messages display has received from controller. Use zero button at bottom of page to reset message count for all devices.

Viewing and Sorting

Select button next to **View by** to change way controllers are displayed. Available views are:

All Devices

- All controllers connected to display are shown.

Implement Bus Devices

- Only controllers on Implement CAN Bus are displayed.

Vehicle Bus Devices

- Only controllers on Vehicle CAN Bus are displayed.

Select button next to **Sort by** to arrange list according to these filters.

Device

- List sorted by device ID.

Has Codes

- List sorted by if device has diagnostic trouble codes.

DX,PC,DIAG,CONTROLLER -19-22DEC15-1/1

Diagnostic Information

Select a controller from Controller Diagnostics list for more detailed information.

NOTE: Display is set to Diagnostic Mode when a controller is selected. Diagnostic Mode is removed when controller page is closed.

Diagnostic Addresses

IMPORTANT: Changing settings in Diagnostic Addresses may damage machine or implement controllers. Follow instructions, and use caution when changing address values.

Controllers have addresses that store values for different settings. Each Address is identified by an Address

Number and Type. Data addresses can only be viewed (for example, software version information) while Input addresses can be edited (for example, calibration settings).

Diagnostic Trouble Codes

Current and stored codes for the selected controller are displayed. Select a code from list to view code details.

Controller Information

Controller Information displays detailed specifications and identification information from controller. This information is useful for ISOBUS diagnostics.

DX,PC,DIAG,INFO -19-22DEC15-1/1

Hide Diagnostic Center

PC15331 —UN—08JUL13

Display is set to Diagnostic Mode once a controller is selected. Select Hide Diagnostic Center to minimize application and return to main page.

Hide button is useful for accessing another part of display during a calibration procedure. To return to the same diagnostic page, select Diagnostic Center application from menu.

NOTE: Leaving display in Diagnostic Mode is not recommended, because it can negatively affect performance.



Hide Diagnostics Center

Remove Diagnostic Mode by closing controller page.

DX,PC,DIAG,HIDE -19-22DEC15-1/1

Diagnostic Trouble Codes

PC15332 —UN—08JUL13

Diagnostic Trouble Codes tab displays all current and stored codes that have occurred on the system.

Select Refresh button (A) to clear, and then retrieve all codes.

Select Clear Codes button (B) to remove all codes from display.



A

A—Refresh Button



B

B—Clear Codes Button

Continued on next page

DX,PC,DIAG,DTC -19-22DEC15-1/3

Viewing and Sorting

Select button next to **View by** to change the way codes are displayed. Available views are:

Code

- View by “Code” lists all codes on display. Code Type (A—C), Details, Status, and Count are all displayed. Select a code from list to view Code Details.

Device

- View by “Device” lists all controllers on CAN Bus. Device ID, CAN Network, and if device has codes are all displayed. Select a controller in list to view Device Codes.

PC15333 —UN—09JUL13



A



B



C

Code Types

A—Stop Alert
B—Service Alert

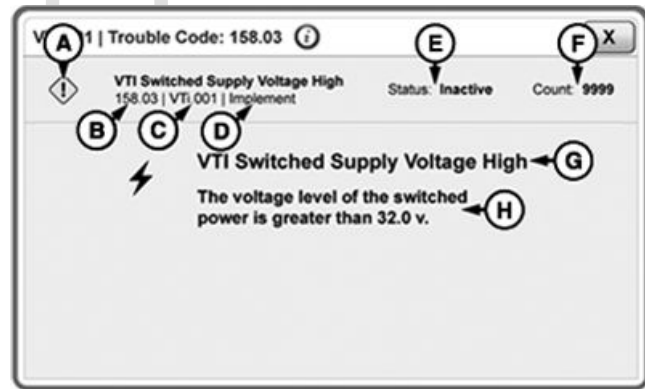
C—Info Alert

DX,PC,DIAG,DTC -19-22DEC15-2/3

Code Details

Select a diagnostic trouble code to view code details.

- | | |
|----------------------------------|---------------------------------------|
| A—Diagnostic Trouble Code Type | E—Code Status |
| B—Diagnostic Trouble Code Number | F—Count |
| C—Device ID | G—Diagnostic Trouble Code Description |
| D—CAN Bus Network | |



Code Details

PC15334 —UN—09JUL13

DX,PC,DIAG,DTC -19-22DEC15-3/3

Readings

The following information is available in Readings:

Hardware

- Displays and Processor
 - Part Numbers
 - Serial Numbers
 - Operational Hours
- USB Presence

Electrical

- Unswitched Voltage
- Switched Voltage

- Implement and Vehicle CAN
 - CAN High
 - CAN Low

NOTE: Instantaneous CAN Bus voltage averaged each second.

Other

NOTE: Machine must be equipped to receive certain information.

- Radar Input Status
- Radar Frequency
- Implement Switch Status

DX,PC,DIAG,READINGS -19-22DEC15-1/1

CAN Bus Information

PC15335 —UN—09JUL13

CAN Bus Information tab displays status of communication between the controllers on CAN Bus. Vehicle CAN Bus connects controllers such as engine, hydraulics, and transmission. Implement CAN Bus connects controllers such as StarFire™ receiver, second ISOBUS display, and ISOBUS implements.

Some values display a green indicator or a yellow indicator with an exclamation point. Depending on machine and implement configuration, yellow might be expected.

- Green Indicator (A) — Value within normal range.

StarFire is a trademark of Deere & Company



A—Green Indicator, Normal Range

B—Yellow Indicator, Out of Range

- Yellow Indicator (B) — Value out of normal range.

DX,PC,DIAG,CANINFO -19-22DEC15-1/1

PROOF
OF
PROOF

CAN Bus Values

Network Status

Active

- System is working as expected. In addition to display, at least one controller is connected and communicating on CAN Bus.

Inactive

- Display is not communicating with any other controllers on CAN Bus. If display is only controller on CAN Bus, Total Message Count increases, but Network Status is inactive.

Total Message Count

Total message count is number of messages sent over CAN Bus. When machine is running, this value counts up continuously since there are always messages sent on CAN Bus.

CAN High and CAN Low Voltage

Peak voltage is highest average voltage that has occurred since last cold boot. Voltage measurements are averaged for each second. Peak CAN High and Peak CAN Low voltages normally range between 1.8 and 3.3 Volts.

NOTE: A cold boot occurs after display has been off for 24 hours or after unswitched power has been disconnected from display.

Bus Utilization

Information on CAN Bus is sent in messages between controllers. The John Deere implement CAN Bus is running at a baud rate of 250 kbd, meaning it can switch power up to 256,000 times per second to transmit messages. This is a Bus utilization of 100%.

If a controller, such as an implement, is not running as expected, a Bus utilization of 45% or higher could be a reason for the issue. Some devices cannot send and receive all necessary messages due to high Bus load.

NOTE: Some ISOBUS implements do not work with Bus loads higher than 25%.

A working StarFire™ Receiver causes a Bus load of about 5—7%.

StarFire is a trademark of Deere & Company

Unplugging implements or GPS receivers can reduce Bus utilization.

Baud Rate

Baud Rate indicates how fast the Bus is working. ISOBUS and John Deere implement Bus are running at a rate of 250 kbd. Any controller connected to this system must work at 250 kbd, otherwise it will not function properly.

CAN Bus State and Error Counts

Four CAN Bus states are possible:

- Active – CAN Bus is running without any problems.
- Passive – Passive errors have occurred.
- Warn – Bus Warn errors have occurred.
- Off – Bus Off errors have occurred.

If one of these errors occurs, display records number of times it happens.

Passive Error Count

- If value counts up higher than zero, a controller on CAN Bus did not receive all messages. Important information might have been lost. This is most likely due to high CAN Bus Utilization.

BUS Warn Count

- If value counts up higher than zero, a controller on CAN Bus has issues.

BUS Off Count

- If value counts up higher than zero, a controller on CAN Bus has issues. It missed a certain number of messages and does not receive messages anymore. Important information has been lost. It most likely occurs in combination with high CAN Bus Utilization.

Overrun Error Count

- Overrun Error Count indicates that applications or controllers on CAN Bus receive messages faster than they can process them. This results in missing messages and malfunction of the system. It most likely occurs in combination with high CAN Bus Utilization.

Network

Network tab displays diagnostic readings for machines that have a modular telematics gateway (MTG). MTG is one of the main components that enable John Deere telematics solutions, such as JDLINK™, Service ADVISOR™ Remote, and John Deere Remote Display Access (RDA).

MTG contains firmware, a cellular modem, and SIM device. It sends and receives data and messages over cellular networks.

JDLINK is a trademark of Deere & Company
Service ADVISOR is a trademark of Deere & Company

RDA requires an uninterrupted cellular connection to function. JDLINK™ does not require an uninterrupted cellular connection because the MTG can store up to 1000 hours of data.

DX,PC,DIAG,NETWORK -19-21OCT16-1/1

PROOF
PROOF
PROOF

Maintenance and Calibrations

Maintenance and Calibrations

PC15324 —UN—21MAY13

Maintenance and Calibrations application allows the operator to set up service intervals and perform calibrations on machine components.



Maintenance and Calibrations

Navigate to Maintenance and Calibrations

1. Select Menu.
2. Select Tractor Settings tab.
3. Select Maintenance and Calibrations application.

DX,PC,MAINT -19-23DEC15-1/1

Service Checks

PC17385 —UN—15MAY14

NOTE: Availability of the Service Checks feature depends on purchase options.

Perform service checks with machine on level ground and engine off. For accurate readings, wait at least 40 minutes after engine shut down before checking fluid levels.

A light indicates the status of a machine service checkpoint.

- Green light — Normal level
- Red light — High level or low level

The following checkpoints are available:



A

A—Engine Oil Level



B

B—Engine Coolant Level

- Engine Oil Level (A)
- Engine Coolant Level (B)

DX,PC,MAINT,SERVCHECK -19-21OCT16-1/1

Service Checks

PC17385 —UN—15MAY14

NOTE: Availability of the Service Checks feature depends on purchase options.

Perform service checks with machine on level ground and engine off. For accurate readings, wait at least 40 minutes after engine shut down before checking fluid levels.

A light indicates the status of a machine service checkpoint.

- Green light — Normal level
- Red light — High level or low level

The following checkpoints are available:



A

A—Engine Oil Level



B

B—Engine Coolant Level

- Engine Oil Level (A)
- Engine Coolant Level (B)

CZ76372,0000779 -19-27JUL16-1/1

Service Intervals

Service Intervals are reminders of when regular maintenance needs to be performed on a machine.

Select Add Service Interval button to create a new service interval. An unlimited number of service intervals can be added.

Once a service interval is created, it is added to the list and displayed with the name, elapsed time, and interval amount.

- The operator selects the name to identify the specific service interval.
- Elapsed indicates the number of hours since the service interval was reset.

- Interval is the number of hours between each service.

The intervals are sorted from least amount of time due to the most amount of time due. They are then sorted by name, in alpha-numerical order, with priority given to numbers.

Twenty hours before the service interval is due, the system will inform the operator that the machine will need to be serviced soon. Once the message has been acknowledged, the system will inform the operator about the upcoming service at every startup until service interval is reset.

DX,PC,MAINT,SERVINTERVAL -19-23DEC15-1/1

Calibrations

PC15325 —UN—01JUL13

Use this application to perform machine calibrations, such as wheel slip calibration and radar calibration.

Radar Calibration (A)

A radar device needs to be calibrated when it is first installed on the machine or there is a difference between radar speed and actual ground speed when operating unloaded on a hard surface. Currently, the system supports John Deere dual beam radars.

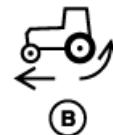
NOTE: In windy conditions, moving parts such as leaves, dust, or gravel can cause inaccurate radar speed.

Wheel Slip Calibration (B)

Calibrate wheel slip if there is a mismatch between radar speed and wheel speed when operating unloaded on a hard surface. For more information, see Machine Monitor .



A—Radar Calibration



B—Wheel Slip Calibration

Perform calibration while driving with an unloaded machine on a hard, dry, clean, and level surface.

NOTE: Wheel slip calibration is only available on a connected and calibrated radar device.

Make sure radar speed is accurate before performing wheel slip calibration.

CZ76372,000077A -19-27JUL16-1/1

ISOBUS VT

ISOBUS VT

PC16682 —UN—18MAR13

This John Deere display supports ISOBUS compatible controllers according to ISO 11783. These controllers can be viewed and operated within the ISOBUS Virtual Terminal (VT).

When an ISOBUS controller is connected, graphic files for the user interface are loaded into ISOBUS VT. Then ISOBUS VT provides a means for the operator to navigate through and operate all available functions of ISOBUS controller.

Navigate to ISOBUS VT



ISOBUS VT

1. Select Menu.
2. Select Applications tab.
3. Select ISOBUS VT application.

DX,PC,ISOBUSVT -19-10MAY16-1/2

Connected ISOBUS Implements and Controllers

PC15293 —UN—18MAR13

The Generation 4 display loads and communicates with different ISOBUS controllers at the same time. A list of all connected ISOBUS controllers is displayed after selecting menu button.

Select desired ISOBUS controller and press OK button to view the user interface.

Troubleshooting

If the interface for an ISOBUS controller does not display correctly:

- View the ISOBUS controller in Status Center, and follow troubleshooting steps for the status indicated. For more information, view ISOBUS controllers in Diagnostic Center.

If the interface still does not display correctly:

1. Select settings at the top of ISOBUS VT application.
2. Select Clean Up ISOBUS VT in advanced settings to clear stored ISOBUS controller user interface files.



Menu Button

The user interface is reloaded the next time the controller is connected.

Run Page Module

ISOBUS VT modules can be added to a run page using the Layout Manager application.

Modules are loaded from implement controller and are only available while controller is connected. The types of modules available are dependent on controller manufacturer. This display is capable of displaying ISOBUS VT version 3.

DX,PC,ISOBUSVT -19-10MAY16-2/2

StarFire Receiver

StarFire™ GPS Receiver

PC17388 —UN—15MAY14

The StarFire™ GPS receiver acquires global positioning and differential correction signal through a single receiver.

A Terrain Compensation Module (TCM) is integrated into the receiver and corrects for machine dynamics, such as roll and pitch on side-slopes, rough terrain, or varying soil conditions. An accurate TCM calibration is necessary for proper operation.

See the StarFire™ Receiver operator's manual for setup and calibration instructions.

Navigate to StarFire™ GPS Receiver

StarFire is a trademark of Deere & Company



StarFire Receiver

1. Select Menu.
2. Select Applications tab.
3. Select StarFire™ application.

DX,PC,STARFIRE -19-23DEC15-1/1

StarFire™ Remote Software Updates

PC16682 —UN—18MAR13

Remote Software Updates enables John Deere to remotely deliver updated software using the modular telematics gateway (MTG) on the machine. Once the software is downloaded to the machine, the operator must initiate the software installation.

Updates are available in the ISOBUS VT application. To access, select ISOBUS VT button > ISOBUS VT Menu button > Remote Software Updates button.



ISOBUS VT

PC15293 —UN—18MAR13



ISOBUS VT Menu

PC21254 —UN—08JUN15



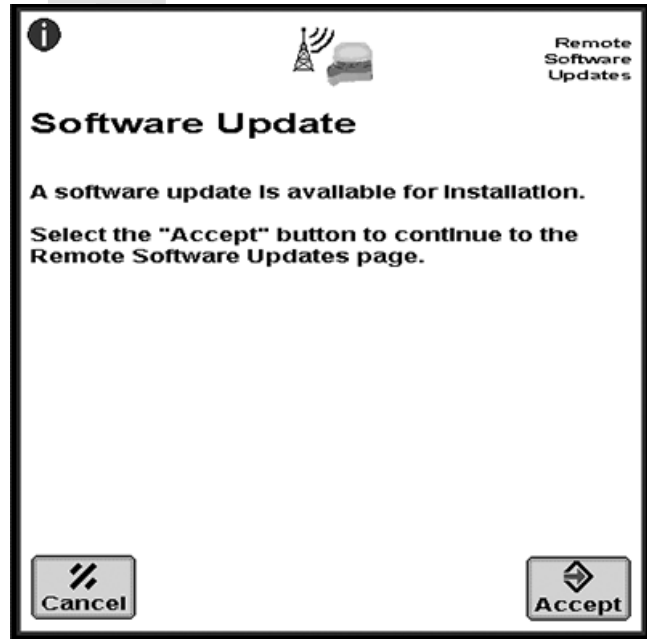
Continued on next page

AL70325,000032B -19-06JUL15-1/6

Software Update message appears when an update is available.

Select Accept to continue to Remote Software Updates. Select Cancel to ignore message.

If software is not installed after first message, the message will repeat in 14 days. Otherwise, go to Remote Software Updates to install software at any time.

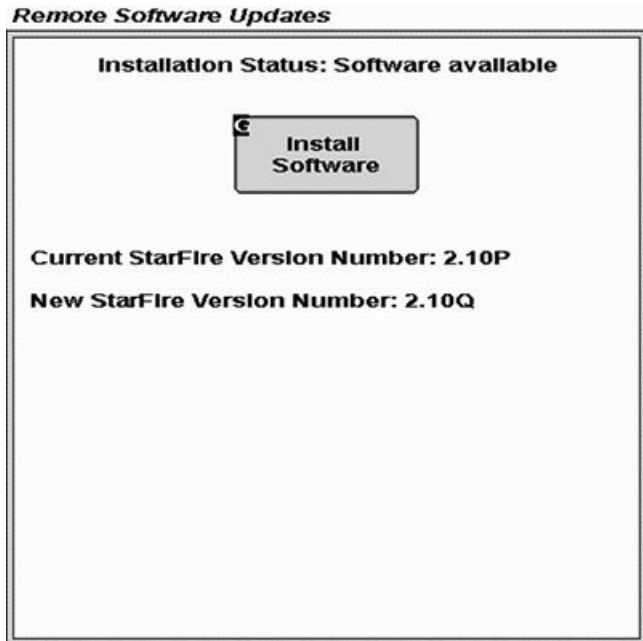


PC21248 —UN—08JUN15

AL70325,000032B -19-06JUL15-2/6

Select Install Software button to begin the installation process.

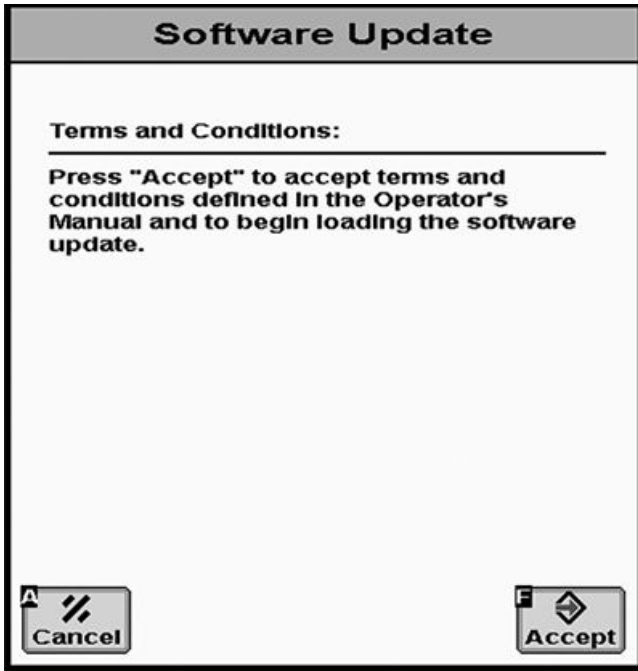
NOTE: Version numbers shown in image may be different than version numbers on machine.



PC21249 —UN—08JUN15

Continued on next page

AL70325,000032B -19-06JUL15-3/6



PC21250 —UN—08JUN15



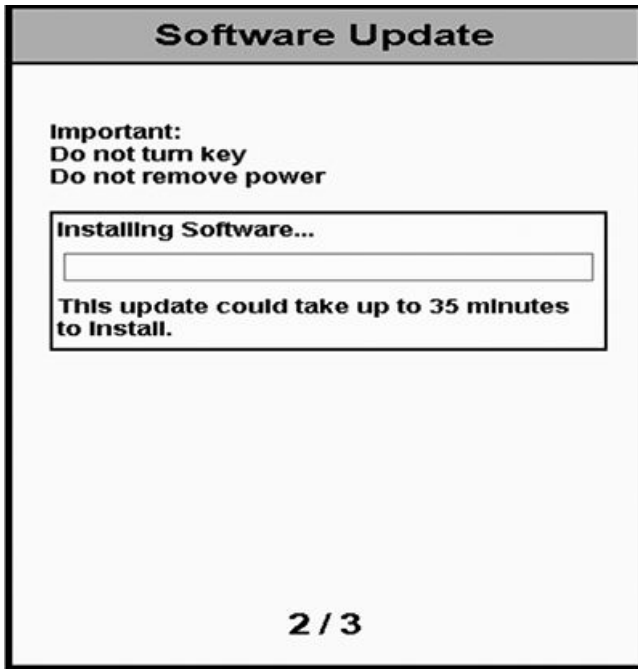
PC21251 —UN—08JUN15

Once prompted, accept the terms and conditions and then follow the on-screen instructions.

CAUTION: Some machine functions, including lights, may become inoperable during

reprogramming. To avoid injury, ensure the machine is in a safe location and configuration before reprogramming. Do not reprogram near public roadways or in active work sites.

AL70325,000032B -19-06JUL15-4/6



PC21252 —UN—08JUN15



PC21253 —UN—08JUN15

When installation is complete, installation completed successfully message appears.

Continued on next page

AL70325,000032B -19-06JUL15-5/6

Software Update Failed

Message appears when remote software update fails. Navigate to remote software updates to begin process again. If installation fails a second time, contact your John Deere dealer.



PC21263 —UN—11JUN15

AL70325,000032B -19-06JUL15-6/6

F
P
R
O
O
F

Video

Video

PC15312 —UN—15MAY13

CAUTION: Do not rely on a camera for collision avoidance or bystander detection. To avoid possible injury or death to operator or others, always remain alert and aware of surroundings when operating the machine. Read and understand **AVOID BACKOVER ACCIDENTS** in the safety section.



Video

The Video application is used to observe areas around the machine. Only one video can be viewed at a time.

Display can support up to four camera inputs.

Navigate to Video

1. Select Menu.
2. Select Applications tab.
3. Select Video application.

CZ76372,0000774 -19-15JUL16-1/2

Switching Cameras

If more than one camera is connected, choose between video inputs by selecting different camera numbers (A).

Mirror Video

Select Mirror Video button (B) to simulate a rear view mirror. This swaps left and right sides of video image.

Contrast

Adjust video contrast (C) using plus (+) and minus (-) buttons. Brighten video by selecting the plus button, and darken video by selecting minus button.

PC15313 —UN—16MAY13



A



B



C

A—Camera Icon
B—Mirror Icon

C—Contrast Icon

IMPORTANT: Determine if camera image or video application is mirrored before using Video application.

CZ76372,0000774 -19-15JUL16-2/2

Video Triggers

Video can be displayed when certain machine functions are performed (For example: Reversing, PTO engage).

1. Select Edit Triggers to configure settings.
2. Select a trigger.

3. Select camera input for the current trigger. This camera is displayed when trigger is activated.

NOTE: To prevent video from displaying for a trigger, select No Camera.

4. Enter video Timeout length. This is the amount of time video is shown after the trigger becomes inactive.

DX,PC,VIDEO,TRIGGERS -19-23DEC15-1/1

Generation 4 Display Video Harness

An adapter harness is available that connects to the 26 pin connector on the back of the display.

NOTE: This Operator's Manual does not cover camera and harness installation. Refer to the camera Installation Instructions.

The video pins on the V2 connector are:

Pin Number	Description
8	Video 1 Signal
14	Video 1 Ground
20	Video 2 Signal
21	Video 2 Ground
22	Video 3 Signal
11	Video 3 Ground

CZ76372,000077C -19-28JUL16-1/1

Service and Maintenance

Factory Data Reset

PC20398 —UN—09DEC14



File Manager Settings

When transferring display between users, perform a Factory Data Reset. Process removes all user data from display and cannot be undone. User data includes setup and documentation data, guidance information, totals, and custom run page layouts. Language and regional settings and activations are not reset. A reboot is required after reset.

Select settings at the top of File Manager application.

CZ76372,000073C -19-06JUL15-1/1

PROOF
PROOF
PROOF

Troubleshooting

System Recovery

SYSTEM RECOVERY - 1.1

ENGLISH - Your system has entered System Recovery. Please contact your John Deere Dealer to attempt data recovery and software reinstallation.

ESPAÑOL - Su sistema ha entrado en modo de Recuperación. Por favor comuníquese con el concesionario John Deere para intentar la recuperación de datos y la reinstalación del software.

FRANÇAIS - Votre système a démarré une récupération du système. Veuillez contacter votre concessionnaire John Deere pour tenter une récupération de données et une réinstallation du logiciel.

DEUTSCH - Ihr System befindet sich im Systemwiederherstellungsmodus. Bitte wenden Sie sich an Ihren John Deere-Händler, um eine Datenwiederherstellung und Neuinstallation der Software zu versuchen.

PORTUGUÊS - Seu sistema iniciou a Recuperação do Sistema. Entre em contato com o seu distribuidor John Deere para tentar efetuar a recuperação dos dados e a reinstalação do software.

ITALIANO - Il sistema in uso è entrato in fase Recupero sistema. Rivolgersi al concessionario John Deere di zona per procedere al recupero dei dati ed alla reinstallazione del software.

Follow instructions if system recovery message is displayed.

Your system has entered System Recovery. Please contact your John Deere Dealer to attempt data recovery and software reinstallation.

CZ76372,0000747 -19-08MAY15-1/1

PC20404—UN—08MAY15

P
R
O
O
F

PROOF PROOF

Index

	Page		Page
A			
AB Curves	25-8	Circle Track	
Obstacles	25-9	Edge	25-14
Operating	25-8	Methods	25-13
Settings	25-4	Operating	25-14
Straight Path	25-9	Settings	25-5
Activation	04-3	Circle Track Settings	25-5
Demonstration	15-8	CommandCenter™	
Adaptive Curves	25-10	Display Models	15-1
Obstacles	25-12	Create Guidance Track	25-6
Operating	25-11	Curve Track Settings	25-4
Settings	25-4		
Straight Path	25-11	D	
AMS Applications	15-6	Date	02-1
Applications		Deactivation	04-3
Boundaries	30-1	Demo Activation	15-8
Date and Time	02-1	Diagnostics Center	
Diagnostics Center	07-1	CAN Bus Information	07-4
Display and Sound	01-1	Controller Diagnostics	07-1
Equipment Manager	20-1	Controller Information	07-2
Fields	30-1	Diagnostic Addresses	07-2
File Manager	45-1	Diagnostic Trouble Codes	07-2
Guidance	25-1	Diagnostic Trouble Codes	07-2
Implement Profile	20-2	Diagnostics Mode	07-2
ISOBUS VT	18-1	Hide Diagnostics Center	07-2
Language and Units	03-1	Network	07-6
Layout Manager	09-1	Readings	07-3
Machine Profile	20-1	Dimensions	
Maintenance and Calibrations	16-1	Implement	20-2
Settings Manager	24-1	Machine	20-1
Software Manager	04-1	Display and Sound	
StarFire™ Receiver	50-1	Brightness	01-1
Users and Access	08-1	Sound	01-1
Video	20-1	Volume	01-1
Work Monitor	15-1	Display Calibration	01-2
AutoTrac	25-1		
Activate	25-17	E	
Deactivate	25-18	Electronic display, use properly	05-3
Deactivation Messages	25-20	Equipment Manager	20-1
Disable	25-17		
Enable	25-16	F	
Reactivate on Next Pass	25-18	Federal Communications Commission	
Resume Switch	25-17	Notifications to User	11-1
Status Pie	25-15	Fields	
Steering Sensitivity	25-6	Boundaries	30-3
Turn Predictor	25-2	Create	30-2
		Edit	30-2
B			
Brightness	01-1	Filter	30-2
		Manage	30-2
C			
Calibrations		File Manager	45-1
Radar	16-2	Export	45-1
Wheel Slip	16-2	Screenshots	45-4
		Import	45-1
		Find Guidance Track	25-6

Continued on next page

	Page		Page
G		L	
Generation 4 Display		Language	03-1
Operating System	15-3	Layout Manager	
GPS Receiver	50-1	Active Set	09-1
Guidance		All Run Pages	09-2
AB Curves	25-8	Run Pages	09-3
Obstacles	25-9	Lightbar Settings	25-3
Operating	25-8		
Straight Path	25-9	M	
Adaptive Curves	25-10	Machine Profile	20-1
Obstacles	25-12	Machine Status	16-1
Operating	25-11	Maintenance and Calibrations	16-1
Straight Path	25-11	Maintenance Intervals	16-2
AutoTrac	25-1	Manual Guidance	25-1
Activate	25-17	Menu	15-3
Deactivate	25-18		
Deactivation Messages	25-20	N	
Disable	25-17	Navigate	
Enable	25-16	Run Pages	09-4
Resume Switch	25-17	Notifications to User	
Status Pie	25-15	Federal Communications Commission	11-1
Circle Track			
Methods	25-13	O	
Operating	25-14	Offsets	
Circle Track Edge	25-14	Implement	20-2
Create Track	25-6	Machine	20-1
Find Track	25-6	Onscreen Help	15-1
Manual	25-1	Operating System	
Maximum Speeds	25-19	Applications	15-3
Minimum Speeds	25-19		
Quick Line	25-7	Q	
Settings		Quick Line	25-7
Circle Track	25-5		
Curve Track	25-4	R	
Lightbar	25-3	Radar Calibration	16-2
Master On/Off	25-2	Regulatory Notification	11-1
Shift Track	25-3	Resume Switch	25-17
Tracking Tones	25-2	Run Page	15-2
Turn Predictor	25-2	Change	09-4
Steering Optimization	25-21		
Steering Sensitivity	25-6	S	
Straight Track		Safety, Avoid High-Pressure Fluids	
Methods	25-7	Avoid High-Pressure Fluids	05-6
Operating	25-7	Safety, Steps and Handholds	
Quick Line	25-7	Use Steps and Handholds Correctly	05-2
Swap Track	25-15	Screenshots	45-4
Track Set	25-15	Service Checks	16-1
Track Spacing	25-5	Service Intervals	16-2
Troubleshooting	25-25		
I			
Implement Profile	20-2		
ISOBUS VT	18-1		

Continued on next page

PROOF PROOF

John Deere Service Literature Available

Technical Information

Technical information can be purchased from John Deere. Publications are available in print or CD-ROM format.

Orders can be made using one of the following:

- John Deere Technical Information Store:
www.JohnDeere.com/TechInfoStore
- Call 1-800-522-7448
- Contact your John Deere dealer

Available information includes:

- PARTS CATALOGS list service parts available for your machine with exploded view illustrations to help you identify the correct parts. It is also useful in assembling and disassembling.
- OPERATOR'S MANUALS providing safety, operating, maintenance, and service information.
- TECHNICAL MANUALS outlining service information for your machine. Included are specifications, illustrated assembly and disassembly procedures, hydraulic oil flow diagrams, and wiring diagrams. Some products have separate manuals for repair and diagnostic information. Some components, such as engines, are available in a separate component technical manual.
- EDUCATIONAL CURRICULUM including five comprehensive series of books detailing basic information regardless of manufacturer:
 - Agricultural Primer series covers technology in farming and ranching.
 - Farm Business Management series examines "real-world" problems and offers practical solutions in the areas of marketing, financing, equipment selection, and compliance.
 - Fundamentals of Services manuals show you how to repair and maintain off-road equipment.
 - Fundamentals of Machine Operation manuals explain machine capacities and adjustments, how to improve machine performance, and how to eliminate unnecessary field operations.
 - Fundamentals of Compact Equipment manuals provide instruction in servicing and maintaining equipment up to 40 PTO horsepower.



TS189—UN—17JAN89



TS191—UN—02DEC88



TS224—UN—17JAN89



TS1663—UN—10OCT97

DX.SERVLIT -19-21APR16-1/1

PROOF PROOF

John Deere Service Keeps You On The Job

John Deere Is At Your Service

CUSTOMER SATISFACTION is important to John Deere.

Our dealers strive to provide you with prompt, efficient parts and service:

- Maintenance and service parts to support your equipment.
- Trained service technicians and the necessary diagnostic and repair tools to service your equipment.

CUSTOMER SATISFACTION PROBLEM RESOLUTION PROCESS

Your John Deere dealer is dedicated to supporting your equipment and resolving any problem you may experience.

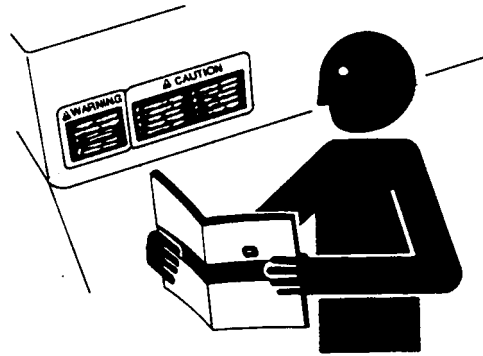
1. When contacting your dealer, be prepared with the following information:

- Machine model and product identification number
- Date of purchase
- Nature of problem

2. Discuss problem with dealer service manager.

3. If unable to resolve, explain problem to dealership manager and request assistance.

4. If you have a persistent problem your dealership is unable to resolve, ask your dealer to contact John Deere for assistance. Or contact the Ag Customer Assistance Center at 1-866-99DEERE (866-993-3373) or e-mail us at www.deere.com/en_US/ag/contactus/.



TS201—UN—15APR13

DX,IBC,2 -19-02APR02-1/1

PROOF

PROOF PROOF