

John Deere Mobile Weather (S.N. PCXL01A or B)



JOHN DEERE

OPERATOR'S MANUAL

John Deere Mobile Weather (S.N.
PCXL01A or B)

OMPFP19011 ISSUE B4 (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.

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. 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.

Serial Number:

JS56696,0000C4C-19-03FEB17

John Deere Technical Information Bookstore

Product functionality may not be fully represented in this document due to product changes occurring after time of printing. Read the latest Operator's Manual prior to operation. To obtain a copy, see your dealer or visit techpubs.deere.com.

CZ76372,000071F-19-08OCT19

www.AirmarTechnology.com

For additional information on the weather sensor, visit www.AirmarTechnology.com

BA31779,000029A-19-06OCT11

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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.

Safety

Recognize Safety Information



T81389—UN—28JUN13

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.

DX,ALERT-19-03OCT22

Follow Safety Instructions



TS201—UN—15APR13

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.

DX,READ-19-01AUG22

Understand Signal Words



▲ WARNING

▲ CAUTION

TS187—19—30SEP88

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.

DX,SIGNAL-19-05OCT16

Practice Safe Maintenance



TS218—UN—23AUG88

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 away 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.

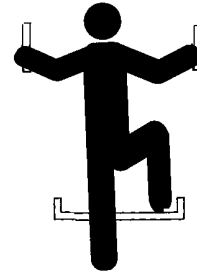
On self-propelled equipment, disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

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

Falling while cleaning or working at height can cause serious injury. Use a ladder or platform to easily reach each location. Use sturdy and secure footholds and handholds.

DX,SERV-19-28FEB17

Use Steps and Handholds Correctly



T133468—UN—15APR13

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.

DX,WW,MOUNT-19-12OCT11

Handle Electronic Components and Brackets Safely



TS249—UN—23AUG88

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.

DX,WW,RECEIVER-19-24AUG10

Use Electronic Display Properly

Electronic Displays are secondary devices intended to

aid the operator in performing field operations, increase comfort and provide entertainment. Displays can 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 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.

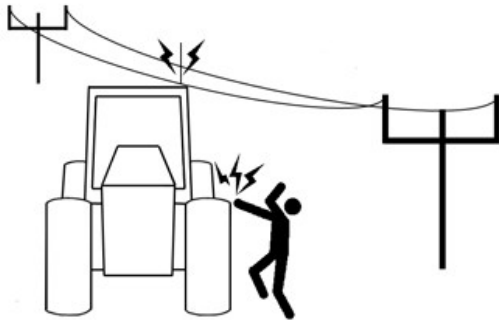
RR94114,0001FFA-19-18DEC14

enough to come in contact with low-hanging electrical cables. Avoid severe electrical shock injury:

- Keep away from all low-hanging electrical cables while operating or transporting machine.
- Always fold Mobile Weather sensor down into transport position before driving on public roads.

BA31779,0000729-19-10JAN14

Avoid Electrical Power Lines



PC13658—UN—08NOV11

Mobile Weather sensor in upright position may be high

Regulatory and Compliance Information

Federal Communications Commission (FCC) Notifications to User

FCC Notification

These devices comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) These devices may not cause harmful interference, and (2) these devices must accept any interference received, including interference that may cause undesired operation.

These devices 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 these devices.

AIRMAR® Weather Sensor

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

BA31779,0000734-19-02MAR22

Industry Canada ICES-003

CAN ICES-3 (B)/NMB-3(B)

HC94949,00004A7-19-11FEB14

System Overview

Theory of Operation

John Deere Mobile Weather is a machine-mounted weather monitoring system that works with GreenStar™ Displays. Mobile Weather monitors and documents weather conditions without needing to stop to check with a handheld device. Mobile Weather monitors and documents air temperature, Delta T, humidity, wind speed, and wind direction.

Delta T is an indicator for acceptable conditions to apply product. It indicates evaporation rate and droplet lifetime. Delta T is calculated by subtracting the wet bulb temperature from the dry bulb temperature. When applying, Delta T should be between 2°C (4°F) and 8°C (14°F), and not greater than 10°C (18°F). A higher Delta T value results in a faster evaporation rate and shorter droplet lifetime.

Mobile Weather sensor uses ultrasonic sensors to measure wind speed and direction. Even though wind is turbulent and not static, sensors are capable of measuring a range of wind speeds with a high level of accuracy. Changes in wind speed are detected faster with ultrasonic sensors than propeller-type anemometers. Therefore, wind speed values can change frequently.

Mobile Weather uses global positioning system (GPS) signal to measure speed and heading, and the ultrasonic sensor to measure wind speed and direction. These measurements are important in the calculation of true wind speed and direction. If any one of these factors is misread or affected, true wind speed and direction can be inaccurate.

For best results with Mobile Weather, use a StarFire™ Receiver. It provides accurate heading and speed information even at slow speeds or when stopped. This allows the most accurate calculations throughout all speed ranges.

If a Starfire™ Receiver is not present, Mobile Weather defaults to weather sensor GPS. When weather sensor GPS is used, wind speed and heading are less accurate at slow speeds or when stopped. This is because heading is not calculated until machine is traveling faster than 6 km/h (3.5 mph).

With either GPS source, values are most accurate when traveling at a constant speed. When machine is accelerating, wind speed and heading values have some error until speed becomes steady and constant.

Application controller gathers information from weather sensors and Starfire™ Receiver (if connected) to make calculations. Data is then sent to display for monitoring and documentation.

AE77568,0000165-19-30OCT15

Navigate to Application Controller Using Generation 4 Display

NOTE: Turn key OFF and allow the display to completely power down before connecting or disconnecting ISOBUS implements.

This Operator's Manual provides instructions for using a GreenStar™ 3 2630 Display. If using a Generation 4 Display, these instructions are the same after navigating to the Application Controller 1120.



Menu Button

PC17269—UN—15JUL13

1. Select the Menu button.



Applications Tab

PC21496—UN—05OCT15

2. Select the Applications tab.



ISOBUS VT Application

PC16682—UN—18MAR13

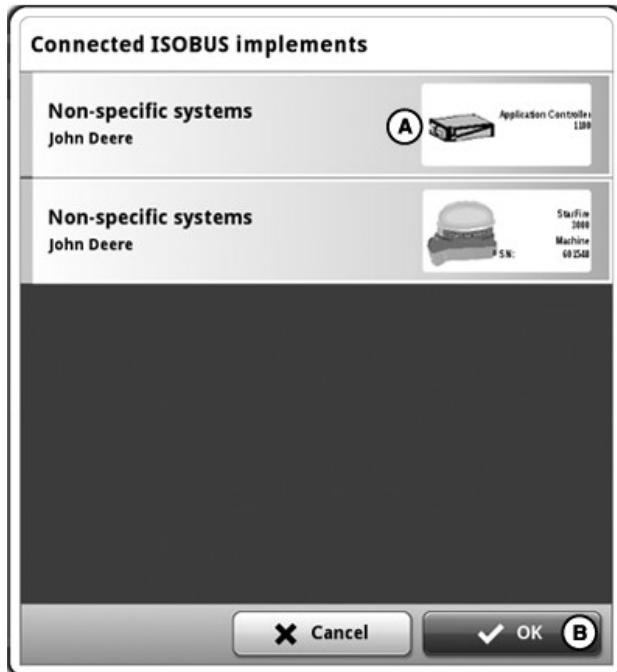
3. Select the ISOBUS VT application.



ISOBUS VT Menu Button

PC15293—UN—18MAR13

4. Select the ISOBUS VT Menu button.



PC22167—UN—23FEB16

Connected ISOBUS Implements

A—Application Controller 1120 Button
B—OK Button

5. Select the Application Controller 1120 button (A).
6. Select the OK button (B).

RW00482,00006C8-19-05JUN18

Activate John Deere Mobile Weather

To operate John Deere Mobile Weather, a 26-digit activation code is required for the Application Controller 1120. Contact your John Deere dealer and provide the Application Controller 1120 serial number.



Menu Button

PC8663—UN—29APR15

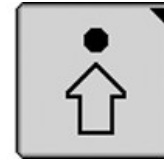
1. Select the Menu button.



PC25693—UN—17MAY18

Application Controller 1200 Button

2. Select the Application Controller button.



Setup Softkey

PC12961—UN—13APR15

3. Select the Setup softkey.



Activation Entry Button

PC17966—UN—07NOV13

4. Select the Activation Entry button.



Activation Entry Box

PC17967—UN—07NOV13

5. Select the Activation Entry box and enter the activation code.

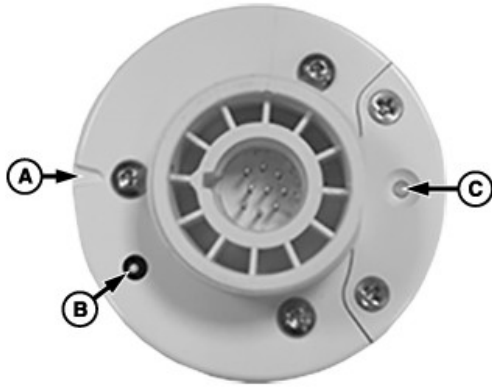


Accept Button

PC22267—UN—14MAR16

6. Select the Accept button.
7. Shut off machine, wait for display to power down, then restart machine.

RW00482,00006C9-19-05JUN18



PC22624—UN—19MAY16

A—Weather Sensor Notch
B—Air Temperature Sensor
C—Relative Humidity Sensor

NOTE: Notch (A) on weather sensor must face front of machine for accurate readings.

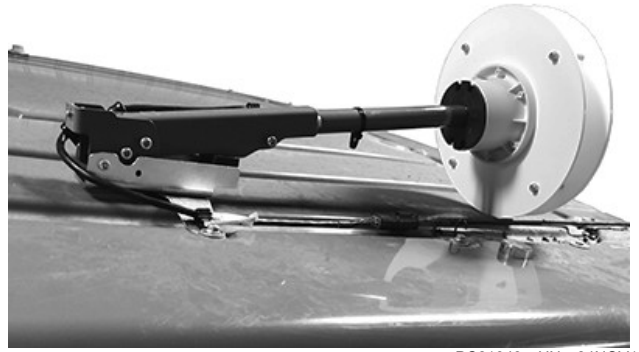
Weather sensor measures:

- Wind speed
- Wind direction
- Air temperature (B)
- Humidity (C)

Delta T is calculated using measured values.



PC21847—UN—24NOV15



PC21848—UN—24NOV15

Weather Sensor Bracket

CAUTION: Mobile Weather sensor in upright position may be high enough to come in contact with low-hanging electrical cables. Avoid severe electrical shock injury:

- Keep away from all low-hanging electrical cables while operating or transporting the machine.
- Always fold Mobile Weather Sensor down into transport position before driving on public roads.

Avoid crushing or pinching injury while folding down Mobile Weather sensor by holding mast closer to sensor.

Weather sensor is mounted on top of cab roof using a foldable bracket. Put weather sensor bracket in down position when operating machine on roadways. Weather sensor bracket must be in upright position to collect weather data.

HC94949,0000C86-19-13NOV17

Specifications

Weather Sensor System Specifications

John Deere Mobile Weather has a system accuracy of +/- 6.4 km/h (+/- 4 mph) up to a 64.3 km/h (40 mph) for apparent wind. Apparent wind is the total wind speed measured without compensation for machine speed and direction. Operating with a headwind or tailwind increases machine turbulence, and negatively impacts wind speed accuracy. For optimal performance, utilize Mobile Weather at machine operation speeds less than 32 km/h (20 mph). John Deere Mobile Weather is not recommended for use in dry-box applications.

Weather Sensor Specifications

NOTE: When the wind speed is less than 7.4 km/h (4.6 mph) and (or) air temperature is below 0 °C (32 °F), wind, temperature, and relative humidity readings are less accurate.

Specifications are for a new sensor. System performance may vary based on application.

Measurements

- Measurement Time: 10 ms
- Power: 2.5 VDC at 2 mA, to 5 VDC at 7 mA
- Output: 320–1000 mV at 3 V excitation
- Operating Temperature Range: -40–55 °C (-40–131 °F)
- Air Temperature Range: -40–55 °C (-40–131 °F)
- Air Temperature Resolution: 0.1 °C (-0.1 °F)
- Air Temperature Accuracy: ± 1 °C (± 1.8 °F), wind greater than 7.4 km/h (4.6 mph)
- Relative Humidity Range: 10–95% relative humidity (RH)
- Relative Humidity Accuracy: $\pm 4\%$ RH
- Wind Speed Range: 0–144 km/h (0–92 mph)
- Wind Speed Accuracy, Low Wind Speed: 0–18.5 km/h (0–11.5 mph), root-mean-square (RMS) of 1.8 km/h (1.1 mph) + 10% of reading
- Wind Speed Accuracy, High Wind Speed: 18.5–144.5 km/h (11.5–90 mph), RMS error of 3.7 km/h (2.3 mph) or 5% RMS, whichever is greater
- Wind Direction Range: 0°–360°
- Wind Direction Resolution: $\pm 0.1^\circ$
- Wind Direction Accuracy, Low Wind Speed: 7.4–18.5 km/h (4.6–11.5 mph), 5° RMS, typical
- Wind Direction Accuracy, High Wind Speed: Greater than 18.5 km/h (greater than 11.5 mph), 2° RMS, typical

NOTE: RMS error is a measure of the differences between values predicted by a model and the values actually observed.

Dimensions, Sensor Body

- Diameter, Top: 72 mm (2.83 in)
- Diameter, Nut Assembly, Connection With Sensor Body: 45 mm (1.77 in)
- Length, Total: 131 mm (5.16 in)
- Length, Sensor Body: 90 mm (3.54 in)

HC94949,00009D1-19-19MAY16

Setting Up

Requirements

- Weather sensor mounted in proper location and orientation.
- Application Controller 1120 hardware installation complete.
- Mobile Weather activated on application controller.
- GreenStar™ 2, GreenStar™ 3, or Generation 4 Display installed.
- Display and application controller software updated.

HC94949,0000C8B-19-27NOV17

Update Language

1. Go to StellarSupport.com.
2. Select Software Updates from side menu.
3. Select Application Controller 1120 (Mobile Weather, Harvest ID Cotton).
4. Select Download Now button.
5. Follow download instructions under Release Notes.
6. Remove USB drive or compact flash card from computer, and insert into display.

NOTE: If operator changes language after removing USB drive, Mobile Weather language reverts to English.

7. Select Main Menu button > Display > Settings > Regional > Select desired language from drop-down menu.
8. Select Keep Settings button.
9. Select Accept button.

AE77568,0000172-19-30OCT15

Set Up Baud Rate



Mobile Weather Button

PC18304—UN—09JAN14

1. Select Mobile Weather button.



Setup Softkey

PC12961—UN—13APR15

2. Select Setup softkey.



PC24971—UN—13NOV17

Baud Rate Setup

3. Select 4800 from Baud Rate drop-down menu.

HC94949,0000C80-19-13NOV17

Set Up Weather Alert Limits

Weather Alert Limits can be set up to notify operator when measurements exceed certain values.



Menu Button

PC8663—UN—29APR15

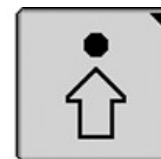
1. Select Menu button.



Mobile Weather Button

PC18304—UN—09JAN14

2. Select Mobile Weather button.



Setup Softkey

PC12961—UN—13APR15

3. Select Setup softkey.



Mobile Weather Setup Button

PC24969—UN—13NOV17

4. Select Mobile Weather Setup button.

Mobile Weather Setup		
High Temp (°F)	(A)	73.0
High DeltaT (°F)	(B)	18.0
High Wind (mi/h)	(C)	10.0
Direction Limit	NW (D)	▲▼
Wind Speed Averaging (sec)	(E)	300

PC24970—UN—13NOV17

Weather Alert Limits

- A—High Temp
B—High Delta T
C—High Wind
D—Direction Limit Drop-down Menu
E—Wind Speed Averaging

- Enter High Temp (A), High Delta T (B), and High Wind (C).
- Select Direction Limit from drop-down menu (D).
- Enter Wind Speed Averaging (E). Enter value between 1—600 seconds.

Wind Speed Averaging calculates a running average based on the number of seconds entered. For example, if 300 is entered, the average wind speed for 300 seconds is displayed.

NOTE: Refer to product label and follow instructions for proper conditions to apply product.

HC94949,0000C81-19-13NOV17

Set Up Mobile Weather on Home Page

Mobile Weather run pages are available in quarter screen and softkey screen sizes.

(Reference Layout Manager section of the GreenStar™ Display Operator's Manual for more information.)



Menu Button

PC8663—UN—29APR15

- Select Menu button.



PC12869—UN—16SEP10

Layout Manager Button

- Select Layout Manager button.
- Select desired Home Page section.



PC18304—UN—09JAN14

- Select Mobile Weather button.
- Select Mobile Weather information source.



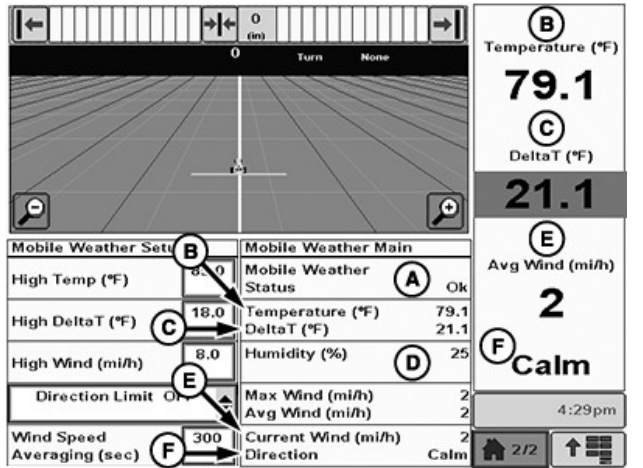
PC24966—UN—13NOV17

- Select Accept button.

HC94949,0000C82-19-13NOV17

Operating

View Mobile Weather Information



PC21750—UN—25NOV15

- A—Mobile Weather Status
- B—Temperature
- C—Delta T
- D—Humidity
- E—Wind Speed
- F—Wind Direction

Mobile Weather Status (A) displays “OK” when system is set up and working properly.

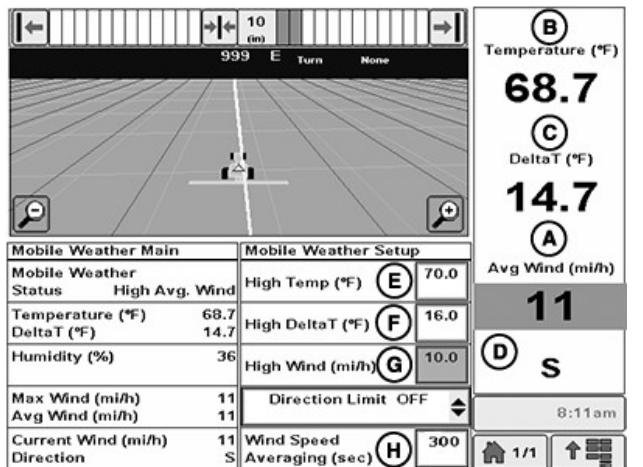
Weather information can be viewed on either the Mobile Weather Main page or on a home page section.

Mobile Weather monitors and documents Temperature (B), Delta T (C), Humidity (D), Wind Speed (E), and Wind Direction (F).

NOTE: Wind direction displays “Calm” for wind speeds less than 5 km (3 mph) based on wind speed averaging interval.

AE77568,000016B-19-01DEC15

Weather Alerts



PC22678—UN—20MAY16

- A—Average Wind
- B—Temperature
- C—Delta T

- D—Wind Direction
- E—High Temperature
- F—High Delta T
- G—High Wind
- H—Wind Speed Averaging

When Weather Limits are exceeded, weather readings are highlighted red. For example, Average Wind (A) is exceeded, but Temperature (B), Delta T (C), and Direction (D) are not.

High Temperature (E), High Delta T (F), High Wind (G), and Wind Speed Averaging (H) are user-defined values.

Weather Alert Ranges

- High Temperature: 0–66 °C (0–150 °F)
- High Delta T: 0–16.7 °C (0–30 °F)
- High Wind: 0–32 km/h (0–20 mph)
- Wind Speed Averaging: 1–600 s

NOTE: Recommended starting value for Wind Speed Averaging is 300 seconds.

HC94949,00009D2-19-20MAY16

Record Mobile Weather Data

The screenshot shows the 'Record Mobile Weather Data' screen. At the top, there's a navigation bar with icons for back, home, and search. Below it is a large display area with two sections: 'Weather' and 'Field'. The 'Weather' section has input fields for: Temperature (0.0°F), Wind Speed (0.0 mi/h), Wind Direction (a dropdown menu), Sky Condition (a dropdown menu), and Humidity (0.0%). The 'Field' section has input fields for: Crop Growth Stage (a text field), Soil Moisture (a dropdown menu), and Soil Temperature (0.0°F). Labels A through E point to specific input fields: A points to 'Temperature', B points to 'Wind Speed', C points to 'Wind Direction', D points to 'Humidity', and E points to the 'Conditions' tab.

PC21810—UN—30OCT15

- A—Temperature
- B—Wind Speed
- C—Wind Direction
- D—Humidity
- E—Conditions Tab

NOTE: GreenStar™ 3 2630 Display and Generation 4 Display are able to document weather data.

Update display software to the newest version.

GreenStar is a trademark of Deere & Company

Mobile Weather is recorded automatically when documentation data is recorded on the display. Mobile Weather records wind speed, wind direction, air temperature, humidity, and Delta T. Data is saved to display and must be transferred into Apex™. Minimum, maximum, and average readings for each weather value recorded are displayed in Apex™.

Since Mobile Weather measures and records weather data, certain values (A—D) do not need to be entered on the GreenStar™ Conditions tab. When Mobile Weather is detected, entry boxes display 0.0 and are grayed out. To view Conditions tab (E), select Menu button > GreenStar™ button > Resources softkey.

HC94949,0000C8C-19-07DEC17

Troubleshooting

Troubleshoot Mobile Weather

Mobile Weather Main

Mobile Weather Main		
Mobile Weather Status	(A)	Ok
Temperature (°F)	(B)	75.3
DeltaT (°F)	(B)	15.8
Humidity (%)	(B)	37
Max Wind (mi/h)	(B)	20
Avg Wind (mi/h)	(B)	6
Current Wind (mi/h)	(B)	2
Direction	(B)	S

PC21886—UN—25NOV15

A—Mobile Weather Status
B—Weather Value

Mobile Weather Main page displays Mobile Weather Status (A):

- OK—Weather sensor is communicating and has valid global positioning system (GPS) signal.
- Not Activated—Application controller not activated. (Reference Activate John Deere Mobile Weather for more information.)
- GPS Not Ready—No GPS signal available.
- Bracket Down—Bracket is folded in down position.
- No Weather Data—No communication with weather sensor.

If “No Weather Data” is displayed, check:

- Pin Assignment in AMPSEAL 16™ connector.
- Pin Assignment in DEUTSCH® connectors.
- Baud Rate is set to 4800.

If weather values (B) are not displayed, ensure sensor is not cracked or damaged. If sensor has visible damage, sensor may require replacement. If there is no visible damage, verify:

- Weather sensor has power.
- Connections are correct and tight.
- Wiring harness is not pinched or damaged.

IMPORTANT: Do not puncture blue waterproof film or scratch silver plate when cleaning weather sensor.

- Weather sensor wind channel is clear of obstructions. Keep wind channel free of spider webs, insects, dirt, and other debris.

If humidity values are not changing or reading zero,

humidity sensor contained within weather sensor may require replacement.

NOTE: John Deere recommends replacing humidity sensor every two years.

Mobile Weather Diagnostics

Mobile Weather Diag		
(A)	Status	OK - StarFire
(B)	Bracket	Up
(C)	Meas Wind Spd (mi/h)	3.1
(D)	Meas Wind Dir (deg)	185
(E)	GPS Speed (mi/h)	0.0
(F)	GPS Course (deg)	0.0
(G)	True Wind Spd (mi/h)	3.1
(H)	True Wind Dir (deg)	219
(I)	Diag. CAN Off	

PC18308—UN—09JAN14

Diag. CAN Off	(I)
Diag. CAN Off	(J)
Diag. CAN On	(K)

PC18345—UN—09JAN14

Diag. CAN On and Off Drop-down Menu

A—Status
B—Bracket
C—Meas Wind Spd
D—Meas Wind Dir (deg)
E—GPS Speed
F—GPS Course (deg)
G—True Wind Spd
H—True Wind Dir (deg)
I—Diagnostic CAN Drop-down Menu
J—Diagnostic CAN Off
K—Diagnostic CAN On

- **Status (A)**
 - Bracket Down—Bracket is folded in down position.
 - OK - StarFire™—Weather sensor is communicating and has valid GPS signal from Starfire™ Receiver.
 - OK - Airmar®—Weather sensor is communicating and has valid GPS signal from weather sensor.
 - High Wind—Average wind speed exceeds user-defined maximum.
- **Bracket (B)**
 - Up—Bracket is in up position.
 - Down—Bracket is in down position.
- **Meas Wind Spd (C)**—Wind speed without compensation for machine speed and direction.

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DEUTSCH is a trademark of Deutsch Co.

StarFire is a trademark of Deere & Company

- **Meas Wind Dir (deg) (D)**—Wind direction without compensation for machine speed and direction.
- **GPS Speed (E)**—Speed of machine detected by GPS sensor.
- **GPS Course (deg) (F)**—Direction of travel of machine detected by GPS sensor.
- **True Wind Spd (G)**—Actual wind speed.
- **True Wind Dir (deg) (H)**—Actual wind direction.
- **Diagnostic CAN Drop-down Menu (I)**
 - **Diagnostic CAN Off (J)**—Disables broadcasting of diagnostic values and statuses for CAN recording (default).
 - **Diagnostic CAN On (K)**—Enables broadcasting of diagnostic values and statuses for CAN recording.

A loose mounting bracket affects orientation of sensor. Periodically check that mounting bracket assembly is tight.

Degraded Weather Measurements

Do not expose sensor to temperatures greater than 65° C (149°F). If sensor has been exposed to temperatures greater than 65°C (149°F), calibration of sensor may no longer be accurate.

Check for Software Updates

Update all software to the newest version.

HC94949,00009D3-19-16MAY16

Communication Error



PC14095—UN—05OCT11

No weather values are displayed or documented until connection to Application Controller 1120 is restored.

Communication with an application's electronic control unit has been unexpectedly lost. If reprogramming is not in process, check the harness connections - disconnect and reconnect the controller. If the problem persists, consult the dealer for this controller. The controller can be identified by the following manufacturer information:

Sensor Orientation Incorrect

Periodically check that nut is tight and alignment of sensor is correct.

Hand tighten plastic nut assembly. A damaged nut assembly affects orientation of sensor and may prevent it from facing front of machine. Replace plastic nut assembly if any part is cracked or broken.

Folding mounting bracket sensor may loosen over time.

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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:



TS189—UN—17JAN89

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.



TS191—UN—02DEC88

OPERATOR'S MANUALS providing safety, operating, maintenance, and service information.



TS224—UN—17JAN89

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.



TS1663—UN—10OCT97

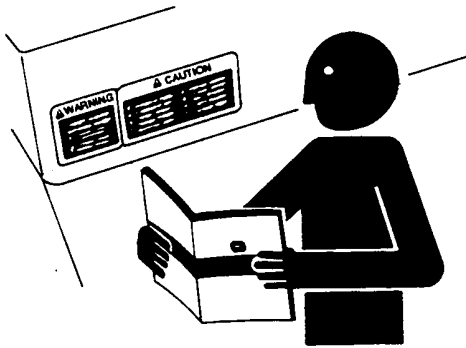
EDUCATIONAL CURRICULUM including five comprehensive series of books detailing basic information regardless of manufacturer:

- 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.

DX,SERVIT-19-07DEC16

John Deere Service Keeps You on The Job

John Deere Is At Your Service



TS201—UN—15APR13

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/.

DX,IBC,2-19-02APR02

