20**20** connect

20|20 Connect Operator's Guide

Precision Planting.

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20|20 Connect Overview

20|20 Connect is a mobile app that can connect to the 20|20 system and can control products such as vDrive, vApplyHD, and SmartDepth for system calibrations and Health Checks, as well as GPS and product setup.

20|20 Connect is compatible with any iPhone and iPad with iOS with version 11 and higher, as well as some Android phones and tablets with version 7.1 and higher.

9:41 7	¢ззим толмина ₽ Diagnose John Deere 24 Row	(3) an LTE 823 ((3)) Reset Modules ⊋ 20 20 ∢
Diagnose 20 20 ◀ John Deere 12 Row	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 1 PDM	E Legend + 7 18 19 20 21 22 23 24 BBM
Reset Modules	DettaForce SRM Seed Tube AUX Sensors	vDrive
Planter device status		
SRM		
vDrive		
vDrive Insecticide		

How to pair the 20|20 Connect App

Before starting to connect, download the 20|20 Connect application from either the Apple App Store or Google Play store.



Step 1:

When the 20|20 Connect App is opened, it will first require pairing with a 20|20 monitor. This pairing will initially be done using a QR code.

Note: Before connecting to the 20|20 screen on an Android system, the LTE data must be turned off on the device, or the WiFi based connection to the 20|20 system will not function.



Step 2:

Navigate on the 20|20 monitor to the Speed button on the top right corner, then select 20|20 Connect from the menu on the right.

Note: 20|20 Connect will require 2019.1.0 software or newer.

Constant Con	> 1	😵 7:58 AM mph	Setup > 20 20 Connect		🤡 7:59 AM
Population 	Split	Field Acres 0.0	Connect to your mobile		GPS Communication
Not Planting	۲	Skips 0.00 % Mults 0.00 %	device with the 20 20 Connect app		WiFi Connectivity
Singulation		Vacuum	Open 20/20 Connect on your phone or tablet		20 20 Connect
97.0 7 100	Ö	Good Ride 100 %	2 Allow access to your devices camera when prompted	199-19-26	DBM Connectivity
Down Force		vDrive	3 When the camera is activated, align the QR code with the box on	回口推动	GPS Corrections
Margin 0.00 lbs Ground 0 % fon		DeltaForce	your device's screen		GPS Nudge
		Not Present	mobile device will connect to the 20/20		
32.0 K			If you are unable to scan the code, a connection can also be made by entering your 20/20's network name and password	Network Name	
106-77RR		Setup 🔯	Need help? Contact our support team	SeedSense-02911	Home ద < Back

Step 3:

Scan the QR code on the 20|20 display using your mobile device. Once the scan is complete, accept the prompt to join the 20|20 WiFi network.



Step 4:

Once the mobile device has joined the network, the app will open up the Diagnose page. The 20|20 display will also display a 20|20 Connect symbol in the speed icon.



If you have previously connected to this display, the system can also be connected by selecting this display in a 'Previously Connected' list at the bottom of the screen. Each display can also be given a nickname under the Settings tab on the app.



Diagnose

The Diagnose Menu is the primary location for trouble shooting issues related to the operation of the 20|20 system itself and all products configured on the monitor. The schematic on this page shows each component including the Base Module that the display screen connects to. Each product that is configured is displayed along with a row unit showing a drawing of the product(s). Additionally, there is planter bar at the top of the screen displaying the health of each row.

Reset modules can be performed from the mobile device by pressing 'Reset Modules' at the top of the screen.



Color Legend

A legend of the diagnose page can be accessed by pressing 'Legend' in the top right corner



Green - The system is working correctly and communications are good. Select "Color Legend" to view an explanation of what each color indicates.

- Yellow A Device or sub-component is not 100%.
- Red Device has failed, or is expected, but not detected.
- White Device is detected, but is not expected.
- Black Row has been disabled in the planter configuration.

Gray - Device is being detected, updating firmware, or unreachable.

Level 2 Screens

Level 2 screens for each device can be access by pressing on any of the device buttons on the diagnose screen.

9:21 AM T	ue Mar 12						6	📕 🗤 I LTE 80% 📷	9:36 AM Tu	e Mar 12						🚺 🔐 LTE 82% 🔊
< 🖌	vDrive Jo	hn Deere 12	2 Row		-	-		20 20 <	< 🖌	Seed Tube	John Deere 2	4 Row				20 20 <
Row	Popu Actual	lation _{Cmd}	Ri Actual	PM Cmd	Stability	Supply Volts	Drive Amps	Duty Cycle	Row	Se	nsor Type	Popu	lation Cmd	Singulation	SRI	Total Seeds
1	32,015	32,000	26.9	26.9	99%	12.9	0.17	20%	1	SRM	DICKEY-john	Not Apply	32,000	100.0%		0
2	32,020	32,000	27.0	26.9	99%	12.8	0.17	20%	2	SRM	DICKEY-john	Not Apply	32,000	100.0%		0
3	32,020	32,000	26.9	26.9	100%	12.8	0.17	20%	3	SRM	DICKEY-john	Not Apply	32,000	100.0%		0
4	32,020	32,000	27.0	26.9	100%	12.8	0.17	20%	4	SRM	DICKEY-john	Not Apply	32,000	100.0%		0
5	32,030	32,000	27.0	26.9	100%	12.8	0.13	20%	5	SRM	DICKEY-john	Not Apply	32,000	100.0%		0
6	32,020	32,000	26.9	26.9	100%	12.9	0.13	19%	6	SRM	DICKEY-john	Not Apply	32,000	100.0%		0
7	32,015	32,000	27.0	26.9	100%	12.8	0.22	20%	7	SRM	DICKEY-john	Not Apply	32,000	100.0%		0
8	32,020	32,000	27.0	26.9	99%	12.9	0.20	20%	8	SRM	DICKEY-iohn	Not Apply	32,000	100.0%		0
9	32,020	32,000	27.2	26.9	99%	12.9	0.22	20%	9	SRM	DICKEY-iohn	Not Apply	32,000	100.0%		0
10	32,020	32,000	27.0	26.9	99%	12.8	0.23	20%	10	SRM	DICKEY-john	Not Apply	32,000	100.0%		0
- 11	32,015	32,000	26.9	26.9	99%	12.9	0.20	20%	11	SPM	DICKEV-john	Not Apply	32 000	100.0%		-
12	32,025	32,000	27.0	26.9	100%	12.9	0.22	20%	12	SPM	DICKEV-john	Not Apply	32,000	100.0%		0
									12	CDM	DICKEV-john	Not Apply	22,000	100.0%		0
									13	ORM	DIGKET-JOIN	Not Apply	32,000	100.0%		
									14	SKM	DICKEY-John	NOT Apply	32,000	100.0%		U
									15	SRM	DICKEY-john	Not Apply	32,000	100.0%		0

Note: On some mobile devices, it may be necessary to swipe left to view all of the metrics.

Event Log

Select the Event Log button to view a list of all event codes/error codes that have happened on the system. The Event Log is in order from the most recent event to the oldest event with the newest event codes at the top of the list. All events will have a number and a date/time when the event happened along with a description of the event. Select any event code to view additional details for that specific code

Additionally, event codes can be sorted by a system type. Select the system type on the right hand of the screen (e.g. SRM). System types will only be available for selection if there are event codes for specific systems. Otherwise, select "Entire System" to view all event logs.

9:22 AM Tue N	9-22 AM Tue Mar 12						
	e oystelli ooliin	Deere 12 Now	Description	Product			
Event #	March 12, 9:16:04	End	Description	Product	Entire System		
414	AM	-	Low Load Variation on Row 1	Load Cell	Load Cell		
901	March 12, 9:09:52 AM	-	Loss of SRM on row 16	SRM			
901	March 12, 9:09:52 AM	-	Loss of SRM on row 15	SRM	SRM		
901	March 12, 9:09:52 AM	-	Loss of SRM on row 14	SRM			
901	March 12, 9:09:52 AM	-	Loss of SRM on row 13	SRM			
905	March 12, 8:46:23 AM	-	DeltaForce Solenoid on row 1	SRM			

Health Checks

Perform health checks on the different systems configured on the monitor. Health checks will give a report card for the system after completion. Follow the on screen instructions for each health check. For more information on specific health checks, see the operation guide for each specific product.

Note: 20|20 does not support DeltaForce Health checks.

Select a Health Check to run it. To begin the health check, you will need to swipe the arrow from left to right.

Once the health check is complete, the results will be displayed.

Note: On some mobile devices it will be necessary to swipe left to view all of the result data.



< 谷 Health Checks John Deere 12 Row									
vDrive Voltage/Current: No Load									
Step 1	Step 2	Step 3	Summary						
Begin test									
To begin the health cheo	k, slide the switch below from	n left to right.							
→				\odot					
WARNING! vDrive Mot	ors will spin! Maintain a safe	distance from the planter.							
× Cancel									
× cancel									

9:26 AM 1	26 AM Tue Mar 12 🧭 🔐 LTE 81% 🌚										
< 公	< 合 Health Checks John Deere 12 Row 2012										20 20 (
	Deces (Tell	Vo	olts		Speed Tes	t at 30 RPS	t at 30 RPS Speed Test at 80 RPS				
Row	Pass/Pan	Min	Avg	Amps	DC Min	DC Max	Stability	Amps	DC Min	DC Max	Stability
1	Pass	12.5	12.8	0.14	16.1	16.3	99.3	0.40	40.0	40.3	99.5
2	Pass	12.4	12.7	0.13	16.3	16.5	99.3	0.37	40.2	40.6	99.5
3	Pass	12.4	12.8	0.13	16.6	16.8	99.3	0.35	40.6	40.9	99.8
4	Pass	12.4	12.8	0.13	16.6	16.7	99.3	0.37	41.7	41.9	99.8
5	Pass	12.4	12.7	0.10	16.8	17.0	99.3	0.26	40.9	41.4	99.8
6	Pass	12.6	12.8	0.11	15.4	15.5	99.3	0.26	38.2	38.5	99.8
7	Pass	12.4	12.8	0.17	16.3	16.5	99.3	0.47	39.7	40.1	99.8
8	Pass	12.5	12.8	0.16	16.3	16.5	99.3	0.45	40.3	40.5	99.8
9	Pass	12.6	12.8	0.18	16.7	17.2	98.7	0.50	40.8	41.3	99.5
10	Pass	12.5	12.8	0.18	16.4	16.6	99.3	0.51	40.4	40.7	99.8
- 11	Pass	12.5	12.8	0.16	16.5	16.6	99.3	0.46	41.1	41.5	99.8
12	Pass	12.6	12.9	0.18	16.8	16.9	99.3	0.50	42.3	42.6	99.8
× Retest Done >											

System Commands

System Commands includes functions such as Meter Load, Meter Spin, and Zero Load Cells.

For some system commands, it will be necessary to hold up the auto-load switches, similar to the 20|20 display.



GPS Setup

GPS offset measurements must be setup prior to planting in order for the monitor to correctly control and model the planter. These measurements can also be entered into the 20|20 Connect App. For details on step by step instructions for GPS offsets, refer to the 20|20 Operator's Guide for Planters.



Product Setup

The Products menu in the Navigation Pane is used for assigning seeding (hybrids/varieties), liquid, and insecticide product names that are being applied. Seeding hybrids/varieties can always be assigned, while Liquid and Insecticide product names can only be assigned if control products for these are configured on the monitor.

To add products, follow the same process as would be used on the 20|20 screen. Refer to the 20|20 Operator's Guide for Planter for more details.



Settings

The settings page displays information on the system. This includes the below items:

9/24 AM Tue Mar 12	- 11 LTE 80% 🔊
ঞ্চি Settings John Deere 12 Row	20 20 <
20 20 Connect Version	1.0.1
20 20 Gen 3 Version	2019.1.1
Send Log File	Ð
Previous Connections	
Nickname	Network Name
	SeedSense-
Joshs planter	SeedSense-01334
Tap to edit	SeedSense-02911

20|20 Gen3 Version — This displays the 20|20 monitor version the system is paired with.

20|20 Connect Version — This displays the current 20|20 Connect app version.

Send Log Files — Send this log file to the Precision Planting support team upon request. This will include a log of communication between the 20|20 Connect app and the 20|20 display.

Previous connections — Nicknames can be entered for any previously connected 20|20 system. This will populate on the initial connection screen. Selecting a previous connection will bypass the need to use the QR code to connect.