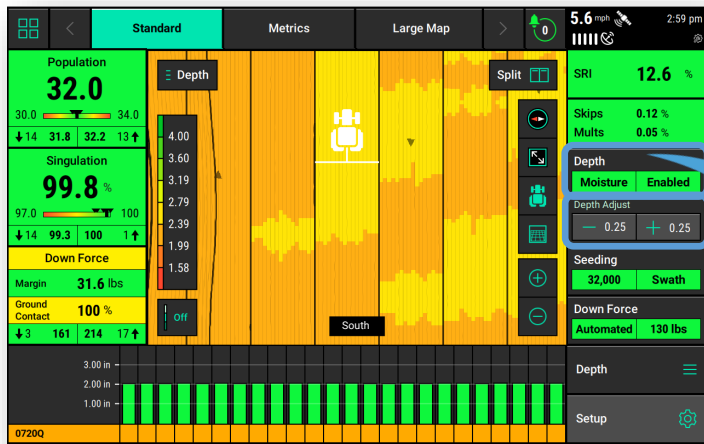
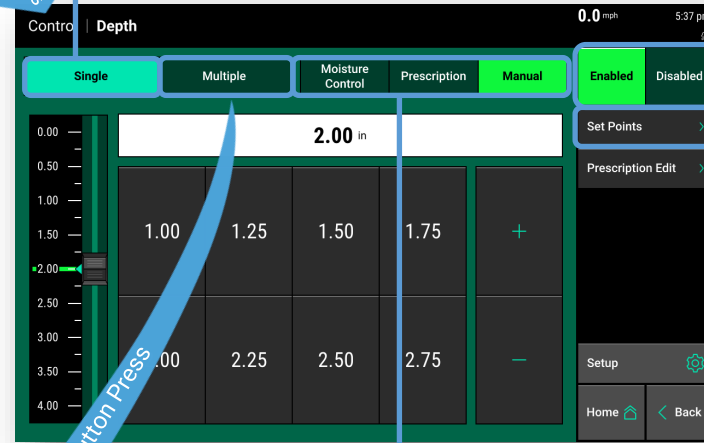


QUICK REFERENCE GUIDE—20|20 GEN 3—SMARTDEPTH CONTROL SCREEN



Single Mode controls to a single depth planter wide. Select a preset depth from the list of depth set points displayed on the screen (configure this list using the “Set Points” button on the right hand side of the screen) and use the + or - buttons to increase or decrease the depth by a 1/4” inch at a time, or tap on the white box displaying the current depth to manually enter a depth.

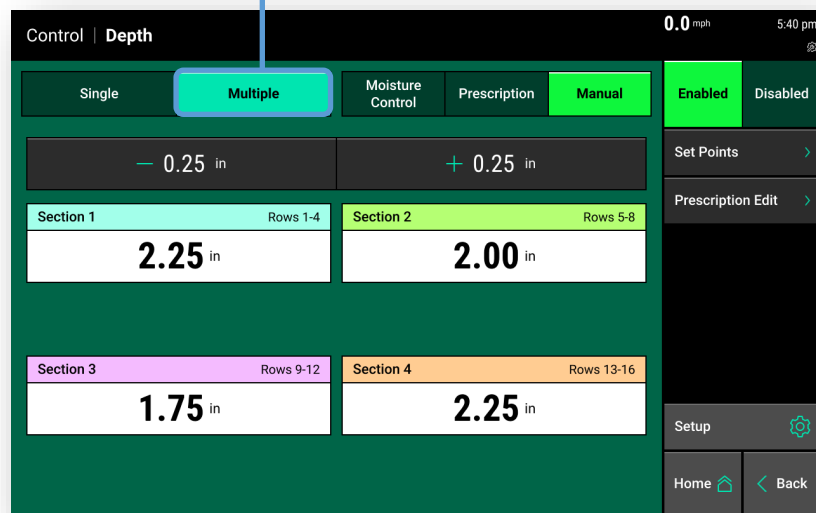


System must be **Enabled** to function.

Press **Set Points** to edit the preset buttons found in the middle of the page.

- and + buttons decrease or increase depth in .25” increments when in manual mode only.

Multiple Mode controls the **Depth** system in individual sections if there are multiple rate sections configured. Up to 4 rate sections can be configured (**Setup>Systems>Control Sections>Rate Section 1-4**).



Depth can be controlled in three modes—**Moisture Control**, **Prescription**, and **Manual**:

Moisture Control uses the **Furrow Moisture** metric from **SmartFirmers** to control the depth. A minimum of 4 **SmartFirmers** per rate section are recommended for controlling depth to **Furrow Moisture**. *See following page for more information.*

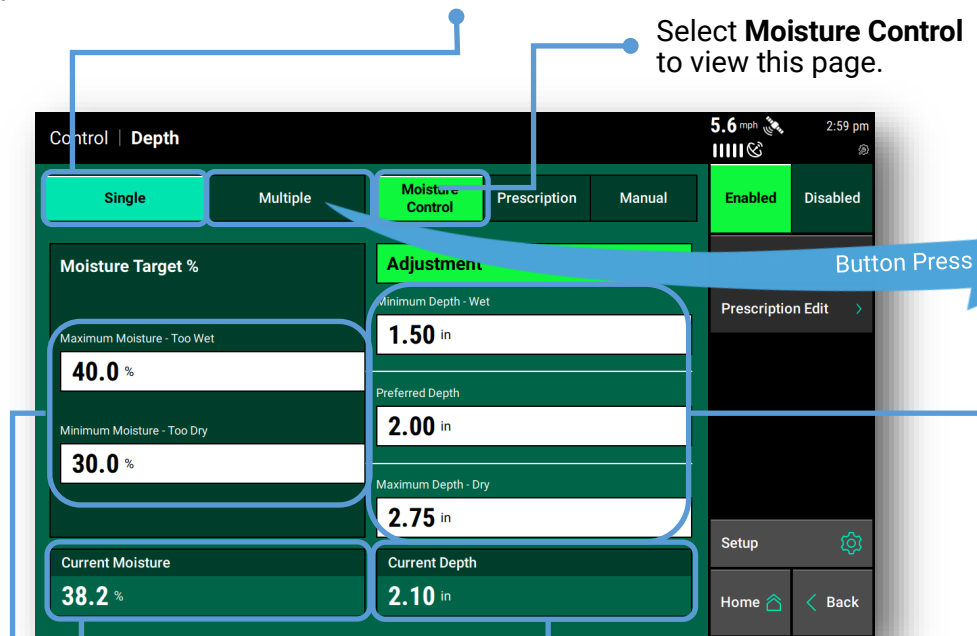
Prescriptions can control Depth by assigning it to the field (**Setup>Fields>Active Field**) and assigning an attribute for each section.

Manual mode allows for depth to be set by one of the following methods: pressing white box and entering a depth, pressing a set point button, or moving slider on left of screen.

QUICK REFERENCE GUIDE—20|20 GEN 3—SMARTDEPTH MOISTURE CONTROL MODE

Single Mode: Moisture Control mode allows the operator to use **SmartFirmer** furrow moisture percentage to automatically adjust the planting depth based on user defined settings. Moisture Control mode is section controlled defined by the number of rate sections. Up to 4 rate sections can be configured. In this example, Moisture Control is enabled as a single section where the depth control will be planter wide. Select "Multiple" if you want to utilize up to 4 sections.

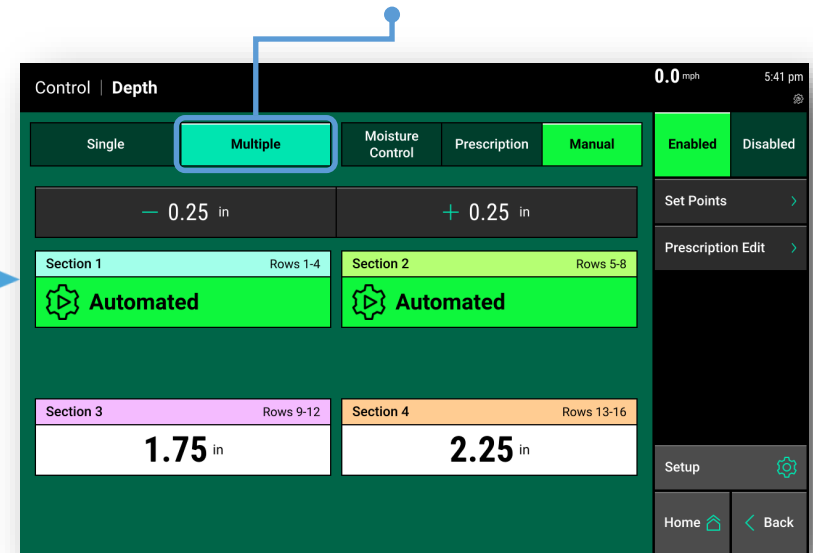
Multiple Mode: Select "Multiple" if you want to utilize up to 4 sections. In this example, Moisture Control is enabled on Section 1 and Section 2 while Sections 3 and 4 are left in a manual depth mode. The "Automated" sections can be configured with different moisture control parameters if desired or all four sections can control to the same moisture control parameters.



Current Moisture: planter wide average moisture when in "Single Mode" or the section average moisture when in "Multiple Mode".

Current Depth: is the planter wide average depth when in "Single Mode" or the section average depth when in "Multiple Mode".

Moisture Target Parameters: The Maximum Moisture target determines at what furrow moisture percentage do we command depth to go shallower. In other words, if we have too much moisture plant shallow. The Minimum Moisture target determines at what furrow moisture percentage do we command depth to go deeper. In other words, if we are too dry plant deeper to find moisture.



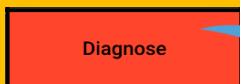
Minimum Depth — Wet: sets the shallowest depth SmartDepth will command"

Preferred Depth should be set to a depth between the minimum and maximum settings. If the furrow moisture falls between our moisture target then the depth will move towards our preferred depth set point assuming there is ample moisture at that depth.

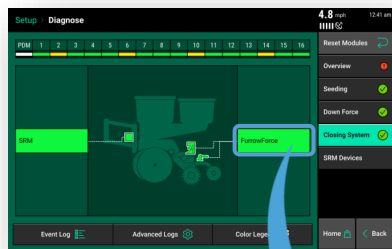
Maximum Depth — Dry: sets the deepest depth SmartDepth will command"

QUICK REFERENCE GUIDE—20|20 GEN 3—SMARTDEPTH DIAGNOSE SCREEN

START HERE

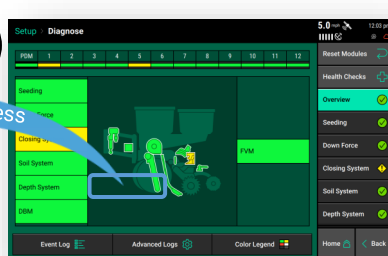


- 1 Press **Diagnose** button on **Home Screen** or **Setup > Diagnose**, press the **Depth System** button on the row unit schematic and then select **SmartDepth** to open the **SmartDepth Diagnose Page**.



2

Button Press



3

Setup > Diagnose > SmartDepth						0.0 mph	8:59 am
Row	Supply Volts	Current (mA)	Duty Cycle (%)	Depth (in)	Manual Override		
1	12.3	20	0.0	2.00	Clear		
2	12.4	20	0.0	1.89			
3	12.4	20	0.0	2.00			
4	12.3	20	0.0	2.00			
5	12.4	20	0.0	2.00			
6	12.4	20	0.0	2.00			
7	11.9	20	0.0	2.00			
8	12.1	20	0.0	2.00			
9	12.1	20	0.0	2.00			
10	12.2	20	0.0	2.00			
11	12.3	20	0.0	2.00			
12	12.2	20	0.0	2.00			
					Clear Manual Overrides		
						Home	Back

Clear manual override; can be cleared by the individual row or you can select "**Clear Manual Overrides**" at the bottom."

Light status on SmartDepth Module:

Yellow Light State	Condition
ON Solid	Calibration procedure; module does not have a saved offset
ON 1.5s; OFF 0.5s	Calibration procedure; module has an offset saved from a previous calibration procedure
OFF	Calibration procedure; module has saved an offset during the current calibration procedure
Fast Flash	Module has detected a hardware error
Flash with red LED	Normal Operation; movement in progress
OFF	Normal Operation; No movement in progress

Supply Volts – Displays the supply voltage for **SmartDepth**.

Current – Displays the amperage for **SmartDepth**.

Duty Cycle – Displays the **SmartDepth** motor output over the operating range, 0-100%.

Depth – planting depth including any calibration offset



Push button and led location.

Manual Operation of the Depth Actuators:

The actuators can be moved manually via the push buttons on each respective row. The top button moves the actuator to a shallower setting and the bottom button moves the actuator to a deeper setting. This functionality is most commonly used to move the actuator out of the way while working on the row unit.

Note: Any actuator that is moved with the buttons will not move again with any **20|20** commands until that manual movement is cleared on the **SmartDepth Diagnostics** page (see notes on **Clear** button to the left).

