

iDitch™ & iGrade™

NOTE: Always start the T3RRA program first before turning tractor on. Best practice is to use Absolute base permanently fixed in its calculated position to avoid any GPS location displacement. Verify the selected SCV is in Auto.



Select Continue button to load the last project you worked on.

Select Start button to start surveying a new project.

Select Load Project button to load an existing iDitch file (idz).

Select Exit button to Exit iDitch.

iDitch™ & iGrade™

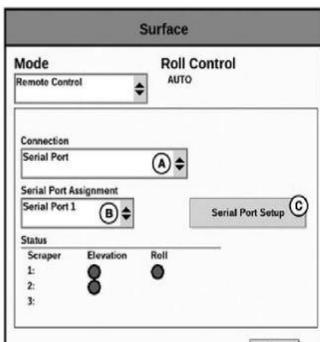
Navigate to Application Controller Pages

NOTE: Turn key OFF and allow the display to completely power down before connecting or disconnecting ISOBUS implements or sensors. After navigating to the Application Controller pages, the GreenStar™ 3 and Generation 4 Displays have the same layouts.

To navigate to the Application Controller pages using a GreenStar™ 3 Display: Select Menu button then Application Controller button

To navigate to the Application Controller pages using a Generation 4 Display: Select Menu button then Application tab. Select the ISOBUS VT application then the ISOBUS VT Menu button. Select the Application Controller button.

Surface
Select iGrade™ softkey > Setup tab > Surface Edit button.



Serial Ports

Select Controller Setup softkey > Profile tab > Serial Ports Edit button > Serial Port 1 or 2 Edit button.



Enter:

iGrade UCC2:
Baud Rate: 115200
NMEA: ALL
NMEA Rate: 5 Hz

iGrade UCC1:
Baud Rate: 38400
NMEA: GGA and GSA
NMEA Rate: 5 Hz

Note: Serial Port settings need to match in iGrade, T3RRA, & Receiver

iDitch™ & iGrade™

Verify Elevation Error remains 0.00. If not, then press the Set Zero Error Button in iGrade.

Shift offsets are useful when implement is attempting to control an elevation that machine cannot attain. Shift Offset Up to achievable cut and Shift Offset Down back to 0 over subsequent passes.

Remote Control Main	
Status	No GPS
Control Error (ft)	0.00
Offset (ft)	0.000
Command (ft)	0.00
Set Offset - Zero Error	
Shift Offset Up	
Shift Offset Down	

iGrade UCC1

Elevation
Select iGrade™ softkey > Setup tab > Elevation Edit button.

PC27120—UN—10MAY19

A—Set Zero Error Button
B—Adjustment Step Size Input Box
C—Increase Button
D—Decrease Button
E—Elevation Offset Input Box

3. Select the Set Zero Error button (A).

iGrade UCC2

Initial Set Up

Select Options button



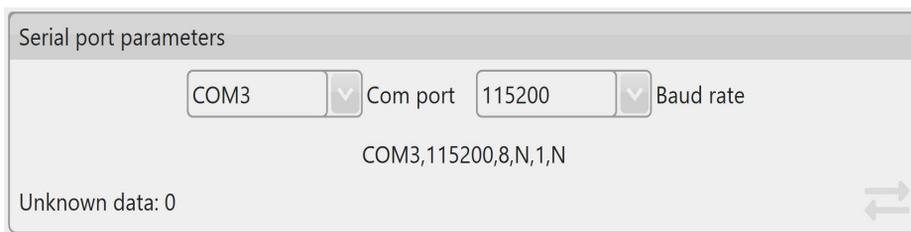
Choose Edit Settings to enter Maximum blade clearance, units, per pass cut, and/or height offset.



Choose Import/Export to import a .tci file or export guidance lines.



Choose GPS button to enter serial port settings.



Serial Port Settings tab (iGrade, T3RRA, & Receiver need identical Baud Rate):
Select Settings button and then GPS Port Settings.

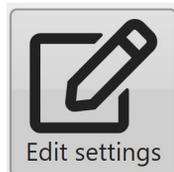
- Set 'COM Port' to the **correct** port
- Set 'Baud rate' to 115200 for iGrade UCC2 or 38400 for iGrade UCC1
- Open port
- Confirm raw data is streaming in window
- Choose 'Close'

Initial Set Up

Select Options button



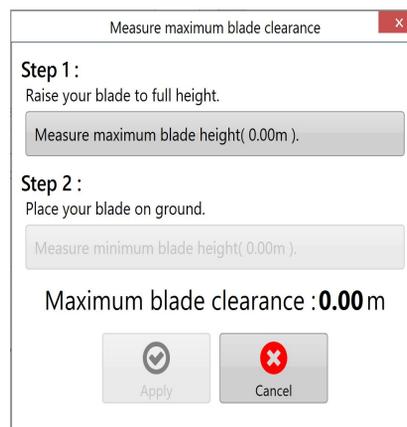
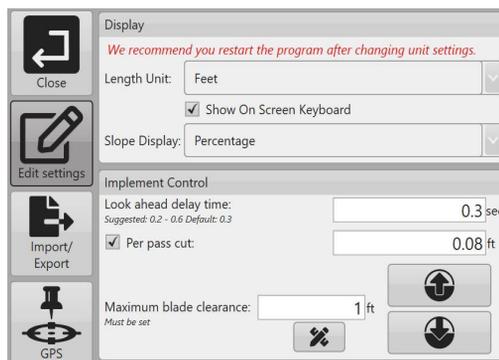
Choose Edit Settings to enter or calculate Maximum Blade Clearance.



Creating a 'Maximum blade clearance' is **required**.

Maximum blade clearance is the difference in the blade/bucket height between it being fully raised and on the ground. By saving this setting you will not need to zero during implementation. This value can be manually entered, or automatically calculated by pressing the 'Measure' button and following the instructions in the calculator window.

NOTE: You must be connected to iGrade and be receiving the implement's GPS data for this to work.



Up and Down arrows can be utilized to offset the blade height if needed.

Initial Set Up

Select Design button



Choose Linear or Best Fit and enter design parameters.

Drain Design	
Name:	Drain 1
<input checked="" type="radio"/> Linear	<input type="radio"/> Best fit
Slope:	0.247%
Offset:	-0.5 ft
Min. Guide:	0.08 ft
Max. Guide:	2 ft

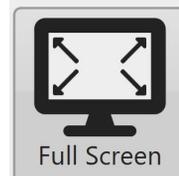
Drain Design	
Name:	Drain 1
<input type="radio"/> Linear	<input checked="" type="radio"/> Best fit
Min. Slope:	0.1%
Max. Slope:	10%
Min. Cut:	0.08 ft
Max. Cut:	2 ft

Optional:



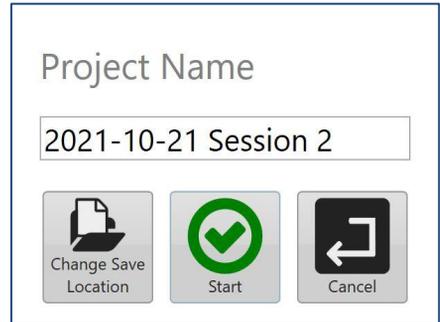
Select Edit View button to:

- Load a georeferenced background image (kml, kmx, tif, bmp, gif file types).
- Minimize screen.
- Change Tracking option.



Chose Close when finished.

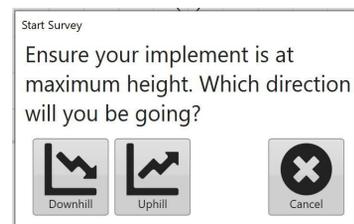
Selecting Start will open the window to name and save the new project. Use the default location or choose where you want to Save.



You will receive a **WARNING** in iDitch to remind you that if you are not collecting elevation data, you are implementing.



1. Select the Survey Drain Button to begin surveying. Choose if you are surveying Downhill or Uphill.



2. Choose Stop button when finished Surveying.

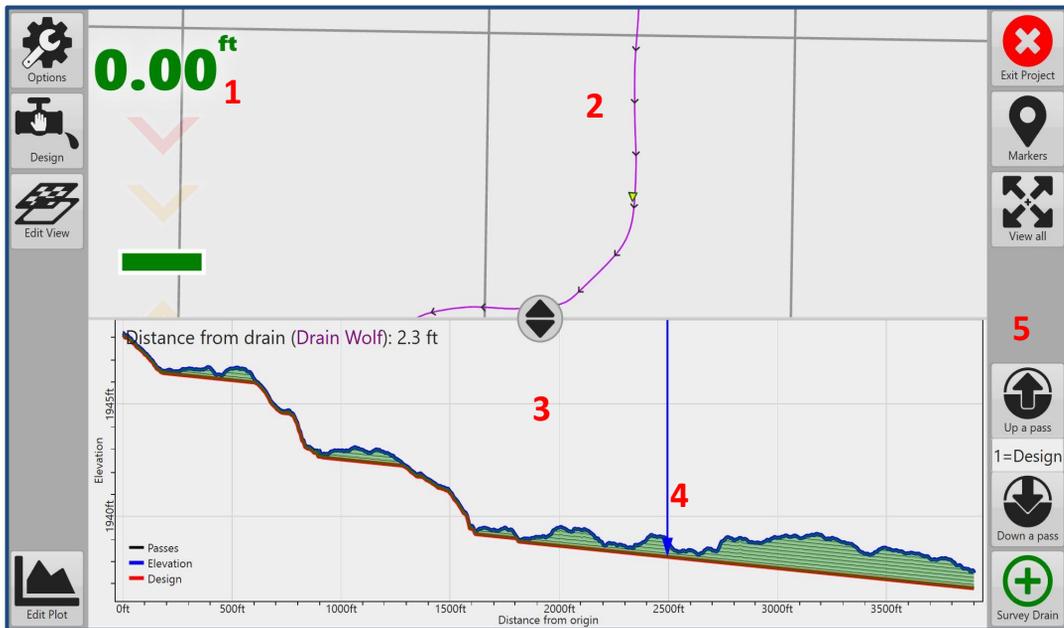


3. Design is automatically created using parameters entered in Design Settings and you are automatically in Apply mode.

Drive forward and place the SCV1 used in Detent position, not float, for automatic control.



1. On-Grade Indicator shows chevrons of current blade height relative to target design height. They show how far the blade needs to move and in what direction for the blade to be “on grade”.
2. Map display. Drain line is present with arrows indicating direction of flow. Touch the drain line to choose which drain to implement.
3. Drain profile. A small circular drag handle can be found at top. Dragging this handle will resize this screen. Per pass cuts are represented with black lines along green shaded cut area.
4. The blue arrow points to your current location and indicates the height of the blade.
5. ‘Per pass cut’ up and down buttons to change depth of cut per pass. Pass ‘1’ is design height.



The drain profile view shows design heights and original heights for the drain’s full length. The red line in the diagram is the designed drain, the blue line shows the pre-implementation level of the ground and the green shading is area that will either be cut or filled. Min and Max cut are represented by dashed lines in Designing.

Edit drain line by selecting start point and end point. Choose either to delete end points or bridge points.

