GUIDANCE
STEER ASSIST PROGRAM

Follow through this guide to set up your Guidance in the X20

Throughout this instruction any selections that are crossed out only apply to customer using the Topcon ProSteer system. The settings for the ProSteer are located in the Guidance installation manual that came with the X20 monitor.
Double tap the X20 product selector to get started.
Ensure that you have the guidance steer assist selected in the start up window.
DGPS details window. Pressing this button opens window.
The GPS details window gives the speed, direction traveled, altitude, Number of satellites that are being received, the HDOP of the satellite signal, the Status of the DGPS signal (8 is required for good signal). You also have the ability to check distance, see how much has been seeded and the time spent seeding and the differential is the quality of the GPS.
Pressing the General set up button will open another window for settings.
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General set up window. Boxes crossed out do not apply
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This bar gives you the version of software.
The **GRIDS** box allows you to turn a grid on/off on the coverage map. You can also set the size of the grids and change the background color of the coverage map.
The **UNITS** box allows you to select between metric and imperial units of measurements and you can choose to have your position displayed in Latitude/Longitude or Eastern/Northing.
GPS box allows the correct port which should match the Y cable’s long lead input into the back of the X20 monitor and the baud rate has to match the signal from the antenna. Non-diff has to be checked of if you are using an antenna not capable of DGPS. 10Hz paint should be used if you are using a receiver with 10 times per second refresh.
The **OFFSETS** box allows for variance in the location of the antenna. The Antenna offset needs to be used if the antenna is offset from the center of the cab. The flow is the distance from the antenna to the front row of openers. When using an articulating tractor steer and implement should be left at a value of 0.
Selecting **Flag settings** brings up this box that allows you to pre name your flags to be placed in the field. You can select the box that will show the flags in the field, show the text for the flag and also to play an audible sound as you approach the flag.
The Working path displays the location of the folder on the X20 hard drive where the fields are saved. The working path must be C:\Lynx\Field_Data and should not be changed as this is where the 9 field screens are saved. If the working path is changed the X20 Guidance will not be able to display and load the 9 field screens.
Automatic Section Control uses the DGPS to control the switching of tank clutches on and off before entering and exiting headlands and overlapping.

- Selecting the Disabled turns off the automatic section control.
- Enabling the automatic section control gives you 3 options:
  1. Avoid gaps - there will be no gaps - even the smallest area will be covered.
  2. Avoid overlap – the tank will shut off when any part of the drill is overlapping.
  3. Ignore small gaps - the gives you the ability to set the gap size for when the tank will shut off. A small gap size can be entered into this window. (the recommended size for small gap setting is 1.5 feet
- Limit to boundary – allows the tank to automatically turn off when it travels outside the boundary. The boundary needs to be completed in order for this to work.
The end of row option is used as a warning as the end of a row is approaching after the headlands have been completed. As it approaches an audible alarm will sound. Have a check in the box beside Use to have enabled. The only when engaged check box only applies to Topcon steering (if not using Topcon steering ensure there is no check mark in the box). You can set the Detection distance, Repeat time and the # of alarms by touching the grey box beside each setting.
Touching the GUIDE function button will expand the guide buttons

- The crossed out buttons are used with TOPCON auto steer and don’t apply unless tractor is properly equipped.
- The FLAG button can be used to mark points of interest in the field
- The OVERRIDE button when activated in the GENERAL SETUP allows the operator to drive over and treat areas that have already been covered
- BACK button takes you back to the default function buttons
When the FIELD function button is touched it will expand to the FIELD and RESTART SWATH buttons
- When the FIELD button is touched it will open the field menu on the screen. The field menu gives you access to nine fields screens
- RESTART/SWATH button – can clear the field and/or set a new swath value
- BACK button – returns to the default function buttons
In the field menu you have the ability to recall or store nine separate fields, at anytime. Additionally you have the ability to save an infinite number, by using the SAVE button. You can then access the saved files by using the LOAD button. (it is not recommended that you create large field files. As the field is finished either delete the field or use the SAVE button to save the field to the console)

To select any of your fields that are loaded into the nine field’s touch on that field and it will highlight Field 1.

• If we touch the OK button it will open this field in the guidance screen.
• If all 9 fields are full and we want to save the information from that field so we can load previously saved field or if we want to start a new field we have to save the data in the highlighted field box. This is done by touching the save button and the GDX viewer will open. (Refer to the GDX viewer PDF in the FAQ’s on the website for directions on using this feature)
• Once you have the field saved you can now either load a new field by touching the load button which open a selection file on the screen. From this screen you can select the field that you want to load and it will then be loaded into the field that you had highlighted (it will give you a warning asking if you want to clear all previous data on that field. If you want to start a new blank field, after you have touched the OK button and it has loaded the GDX coverage file use the RESTART SWATH button to clear the data that was in the field you loaded.

File:

2 SECTION 65_24Feb2010_134941.GDX
2 SECTION 65_27Jan2010_105942.GDX
2 SECTION 65_27Jan2010_170333.GDX
3 SECTION 65_21Jul2009_091104.GDX
Demovrc.GDX
When you touch on the RESTART SWATH button it will bring this window up. It is going to ask you if you want to clear the current field, it is going to ask if want to clear the current guidelines and flag points if you had any in the coverage map (have a check box in the small box at the right by touching on the Delete Guidelines or Delete Flag Points). Once you press the OK button it will clear all previous data.
Touching the view function button expands the view buttons

- VIEW IN button – zooms in on the Coverage Map
- VIEW OUT button – zooms out of the coverage map
- VIEW ALL button – sizes the coverage map to fit within the coverage map screen (VIEW ALL button is only accessible when the VIEW MODE button is selected)
- VIEW MODE button – switches the coverage map screen from live mode to view mode (VIEW MODE allows the operator to view the coverage map without DGPS updating the vehicle position)
- LIVE MODE button – switches the coverage map screen from VIEW MODE to LIVE MODE (LIVE MODE is the default mode, which means the vehicle position is being updated by the DGPS receiver)
- HEADS UP button – selects HEADS UP mode, this is the default mode (the screen is constantly being redrawn with every DGPS update)
- NORTH UP button – selects NORTH UP mode (the screen is only redrawn about every 10 seconds)
- BACK button – displays the default function buttons again
Touching the CAMERA button brings up the camera options

- You have the option to flip the orientation of the camera’s.
- Adjust the image quality. When the image quality is changed it affects all the camera’s.
- Number of camera’s is going to be 4 (maximum number that the camera hub can support)
- You can set up a scan interval that will automatically scan through the camera’s at the selected interval.
- SCAN button allows the camera’s to automatically scan through the camera’s. When the monitor is scanning, the next button becomes inaccessible.
- The SCAN button will have a green check in when disabled (touch to enable), there will be an X on the SCAN button when enabled.
- The next button allows you to manually scan camera’s when the SCAN button is disabled.