

20|20

AgLeader 800/1200 GPS Setup Guide

This guide is intended for use when connecting the 20|20 to an Agleader Incommand 1200 GPS display to acquire GPS data. It can be utilized with the following configurations:

- InCommand 800/1200 with GPS 600/6500/7500
- InCommand 800/1200 with GPS 600/6500/7500 with Port B RTK signal.

The basic GPS requirements for the 20|20 monitor are:

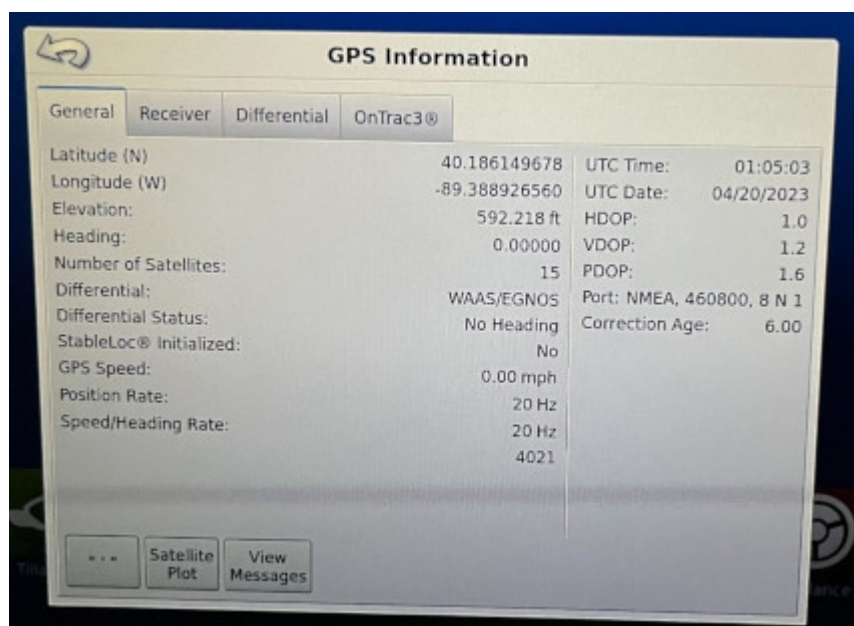
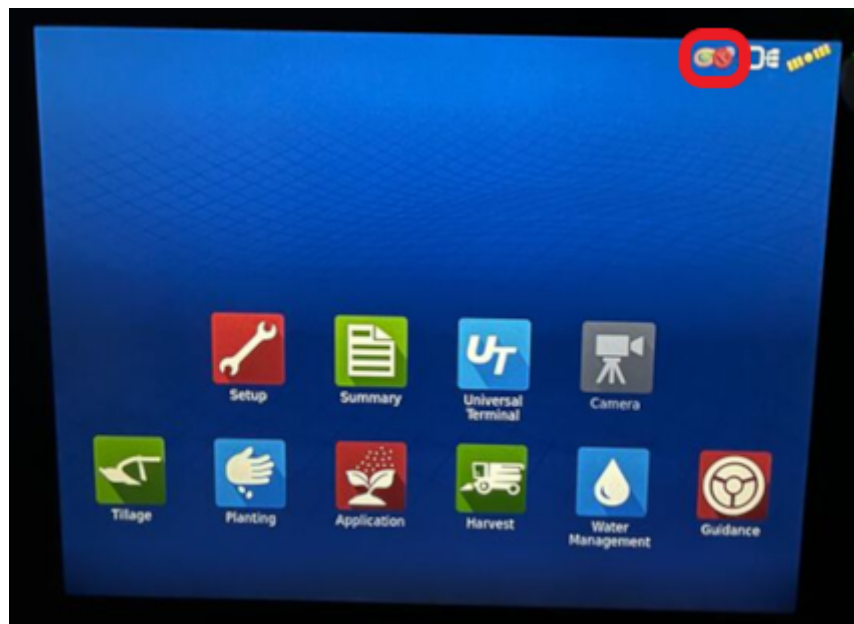
- NMEA Strings : 5hz
- Baud Rate : 19200 or 38400
- GGA : Required for time, position, and fix type data.
- RMC : Required for time, date, position, course and speed data.
- VTG : Required for course and speed information relative to the ground.

The status of GPS communications on the AgLeader display is indicated by the Satellite icon in the top right corner of the screen.

- Green — Accurate GPS communications.
- Yellow — GPS communications below 100%.
- Grey — No GPS communications.

Verifying GPS Communication

To verify good GPS signal to the AgLeader display, press the Satellite icon and select GNSS from the drop down box to open the GPS Information Page.



Setting Port B to export NMEA messages

Port B on the GPS receiver harness may be used to export to the 20|20 if it is not already being used for an external RTK signal or other third party NMEA export. This connection will utilize the Precision Planting **725599 Universal GPS Adapter Harness** and the AgLeader **4004176–18 Dual Port Cable**.

Step 1:

Connect the 4004176–18 cable to the GPS receiver.

Step 2:

Connect the 725599 harness to the Port B 9–pin serial connection on the 4004176–18 cable.

Step 3:

Connect the 725599 harness to the 20|20 GPS connection.

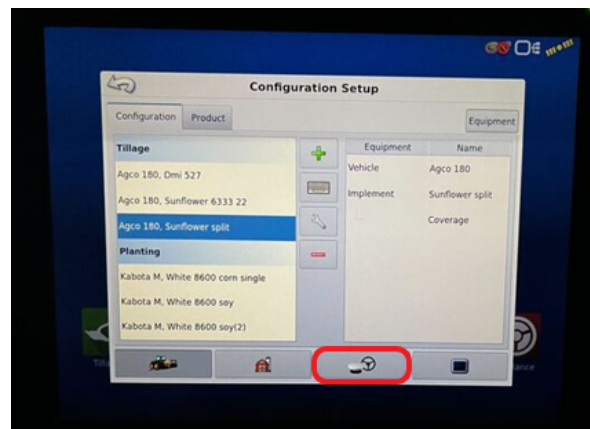
Step 4:

Press the Wrench icon on the home screen of the AgLeader display to open the Settings page.



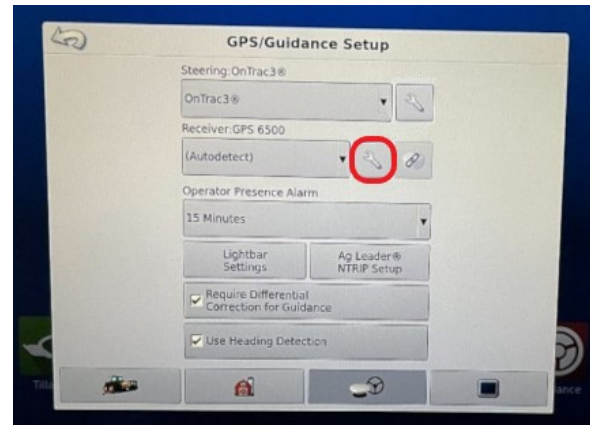
Step 5:

Press the GPS/Steering Wheel icon to open the GPS Setup page.



Step 6:

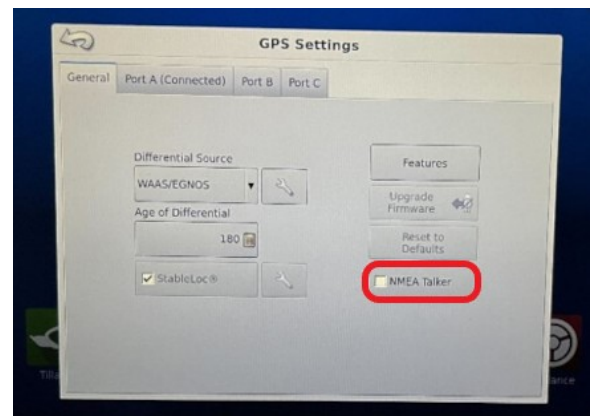
This page will display the status for GPS and Steering. Press the Wrench Button under Receiver to open the Receiver Settings page.



Note: If the AgLeader display is communicating with the GPS receiver, the model number will be displayed next to the heading “Receiver” (ex. Receiver: *GPS 6500*). If no model number is shown, the Display is not communicating with the receiver.

Step 7:

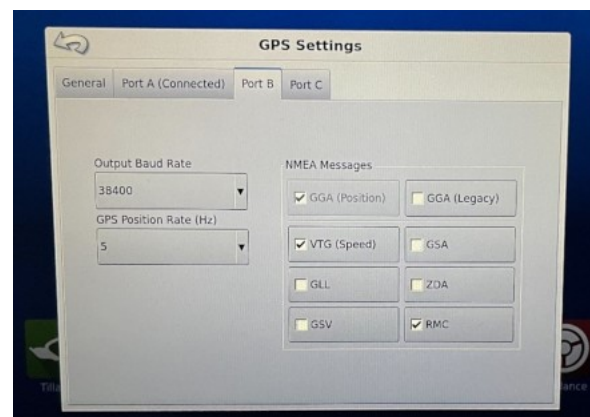
Ensure that the NMEA Talker option in the General Tab of the GPS settings is *unchecked*.



Step 8:

Press the Port B button at the top of the screen to open the Port B Tab. Input the following settings.

- Baud Rate: 38400
- GPS Position Rate (Hz): 5
- GGA (Position), VTG (Speed), and RMC: Active
- GGA (Legacy), GSA, GLL, ZDA, and GSV: Inactive



Step 9:

Navigate to the Home Screen by using the back arrow in the top left corner. Confirm that the 20|20 is now receiving GPS data. It may be necessary to press Reacquire GPS on the GPS Setup Screen in the 20|20.

Setting Port C to export NMEA messages

Port C on the GPS receiver harness may be used to export to the 20|20 if Port B is already being used for an external RTK signal or other third party GPS connection. This connection will utilize the Precision Planting **725599 Universal GPS Adapter Harness** and the AgLeader **4006779–18 Triple Port Cable**.

Step 1:

Connect the 4006779–18 cable to the GPS receiver.

Step 2:

Connect the 725599 harness to the Port C 9–pin serial connection on the 4006779–18 cable.

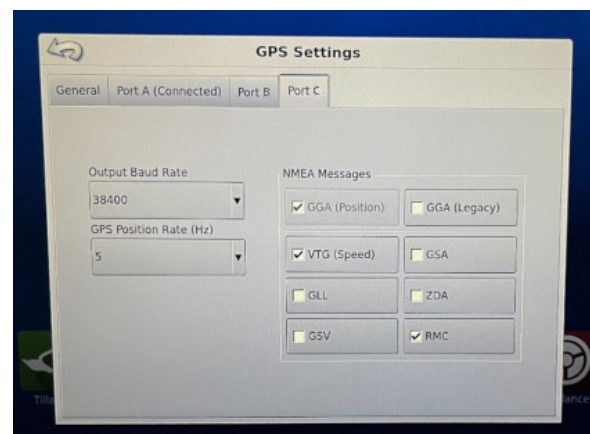
Step 3:

Follow Steps 3–6 from the *Setting Port B to export NMEA messages* section of this guide.

Step 4:

Press the Port C button at the top of the screen to open the Port C Tab. Input the following settings.

- Baud Rate: 38400
- GPS Position Rate (Hz): 5
- GGA (Position), VTG (Speed), and RMC: Active
- GGA (Legacy), GSA, GLL, ZDA, and GSV: Inactive



Step 5:

Navigate to the Home Screen by using the back arrow in the top left corner. Confirm that the 20|20 is now receiving GPS data. It may be necessary to press Reacquire GPS on the GPS Setup Screen in the 20|20.

Exporting NMEA messages from a SteerCommand/OnTrac 3 ECU module

The SteerCommand/OnTrac 3 ECU module may be used to export to the 20|20 if Port B is already being used for an external RTK signal or other third party GPS connection. This connection will utilize the Precision Planting **725599 Universal GPS Adapter Harness** and the AgLeader **201-0605-02 / 201-0614-01 Main ECU Harness** and **4003263-6 Geosteer Adapter Cable**.

Step 1:

Connect the 201-0605-02 / 201-0614-01 Main ECU Harness to the SteerCommand/OnTrac 3 Module. Connect the 4003263-6 Geosteer Adapter Cable to the Deutsch connection labeled “serial” on the Main ECU Harness.

Step 2:

Connect the 725599 Universal GPS Harness to the 9-pin serial connection on the 4003263-6 Geosteer Adapter Cable.

Step 3:

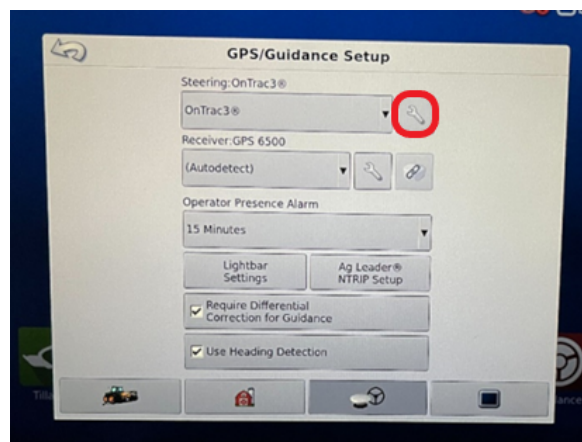
Connect the 725599 Universal GPS Harness to the 20|20 GPS connection.

Step 4:

Follow steps 4 and 5 from the *Setting Port B to export NMEA messages* section of this guide.

Step 5:

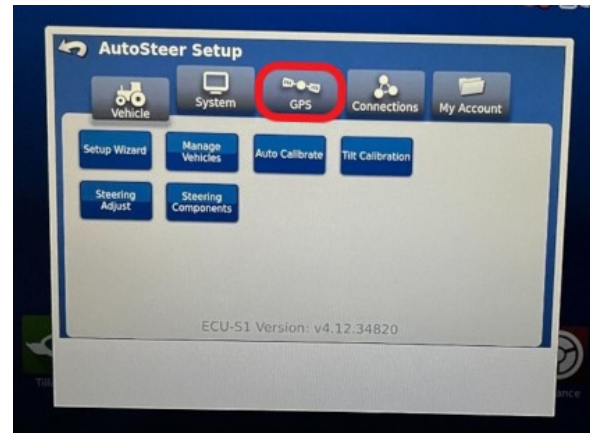
This page will display the status for GPS and Steering. Press the Wrench button under Steering to open the SteerCommand/OnTrac 3 Settings page.



Note: If the Agleader display is communicating with the Steering Module, the module name will be displayed next to the heading “Steering” (ex. Steering: *OnTrac 3®*). If no module name is shown, the Display is not communicating with the Steering Module.

Step 6:

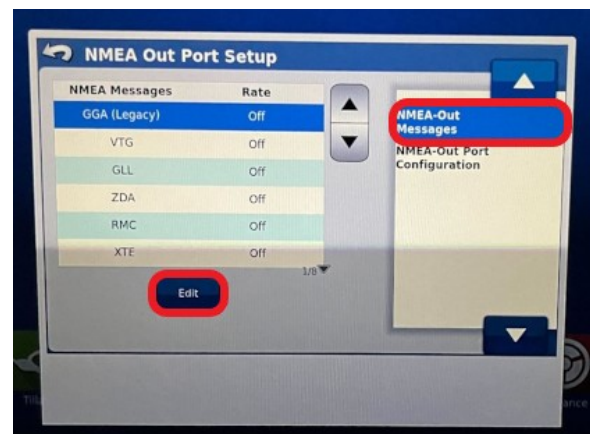
Press the GPS button on the SteerCommand/
OnTrac 3 menu.

**Step 7:**

Press the NMEA Out Button.

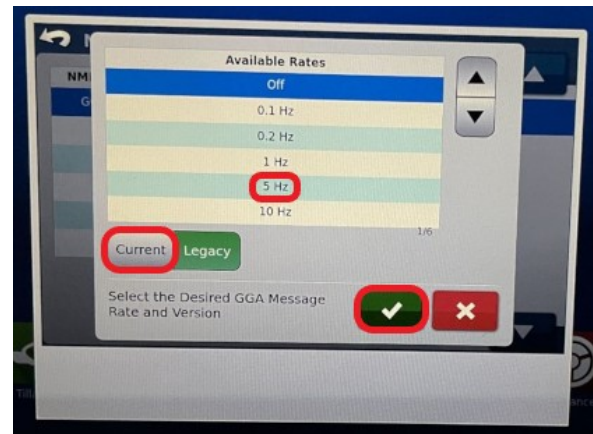
**Step 8:**

NMEA-Out Messages will be highlighted by default on the right side of the screen. If it is not highlighted, press on it until it is highlighted in blue. Then press the Edit Button in the center of the screen.



Step 9:

Press VTG in the center of the screen, then select 5 Hz and the Current option on the following screen. Press the Green Checkmark Button to save the changes.

**Step 10:**

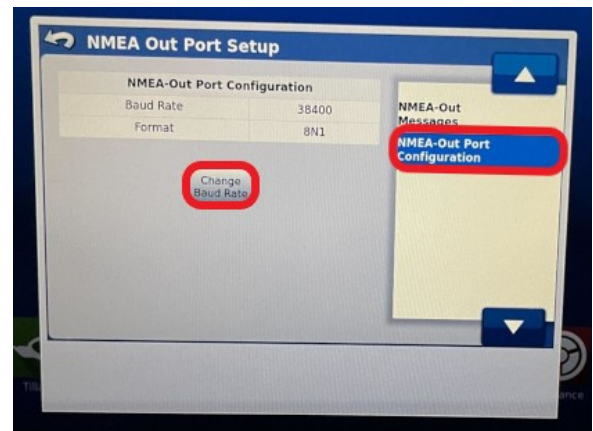
Repeat the Step 9 for GGA and RMC.

Step 11:

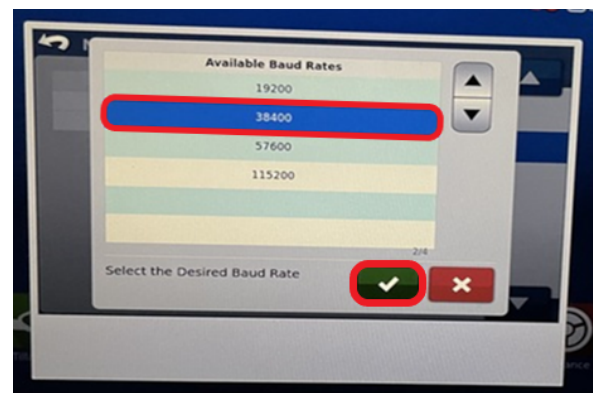
Set all other NMEA Messages to off.

Step 12:

Select NMEA-Out Port Configuration. Press the Change Baud Rate Button in the center of the screen.

**Step 13:**

Select 38400 and press the Green Checkmark Button to save changes.

**Step 14:**

Navigate to the Home Screen by using the back arrow in the top left corner. Confirm that the 20|20 is now receiving GPS data. It may be necessary to press “Reacquire GPS” on the GPS Setup Screen in the 20|20.