

CRG MODEM GUIDE



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Release Notice: This is the July 2022 release of the CRG Modem Guide.

It is assumed that users of the products described herein have either system integration or technical experience, as well as an understanding of the fundamentals of agricultural machinery.

Disclaimer

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DO NOT USE THE “CRG” IF YOU DISAGREE WITH THE DISCLAIMER.

Tools Required

- Phillips screwdriver
- SIM card extraction pin (supplied with CRG)

Prior to CRG installation onto your machine, you will need to insert a SIM card.

IMPORTANT! Perform these steps in a well-lit area, and be aware that small parts can be easily lost if dropped. Installing the SIM card in the field or tractor cab is not recommended.

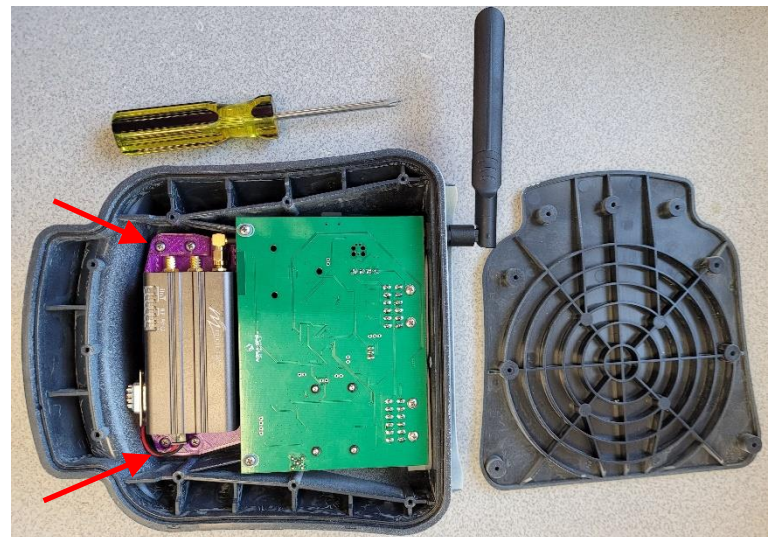
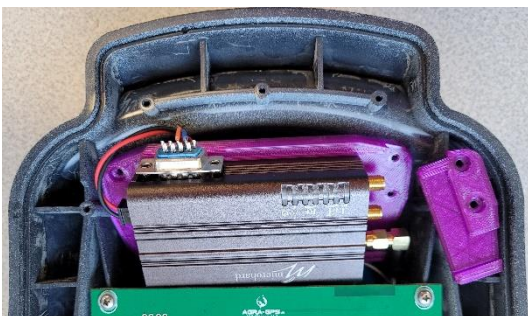
PART A) INSTALL SIM CARD

- 1) Remove 9 screws from the bottom plate as indicated. Note that the side screws are slightly longer, and the three shorter screws belong in the front.

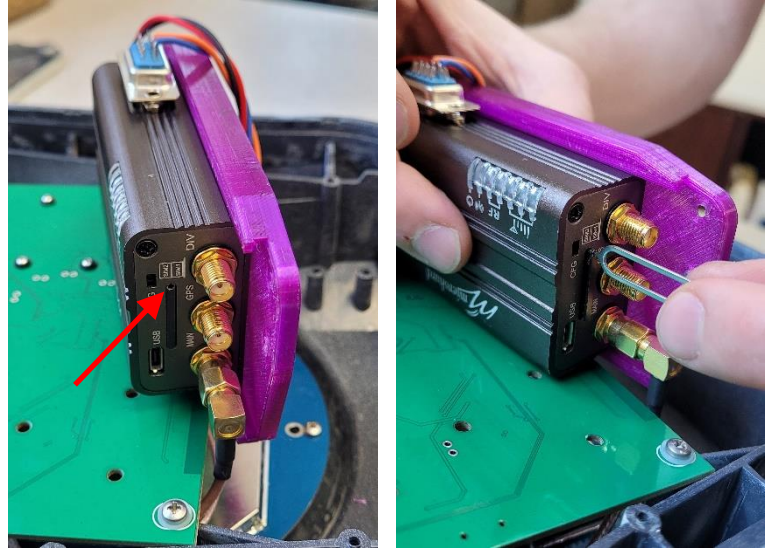


- 2) Remove the bottom cover, then remove the 4 screws holding the modem in as indicated.

Twist slightly to remove the modem.



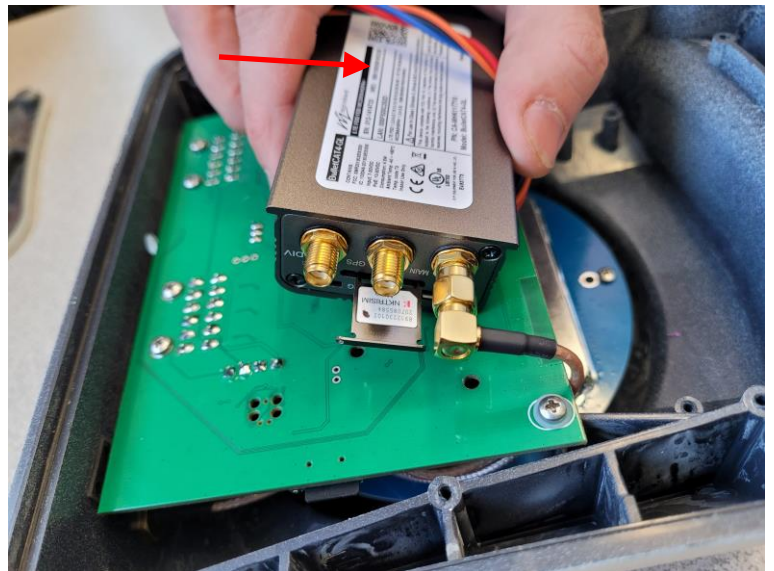
- 3) Locate and extract the SIM card by pushing the extraction tool into the small hole indicated until the tray pops out.



Hold the modem upside-down as shown before removing the tray, so that the SIM card won't fall out (if one was previously installed).

Be careful not to damage the antenna cable by twisting the modem too forcefully.

Make note of the IMEI number shown on the bottom of the modem, as your wireless provider may need this in order to activate your SIM card.



- 4) Install the new SIM card into the tray and insert the tray back into the modem.

Note that the SIM tray contains two frames for SIM cards. Only install the SIM card into the frame as shown.

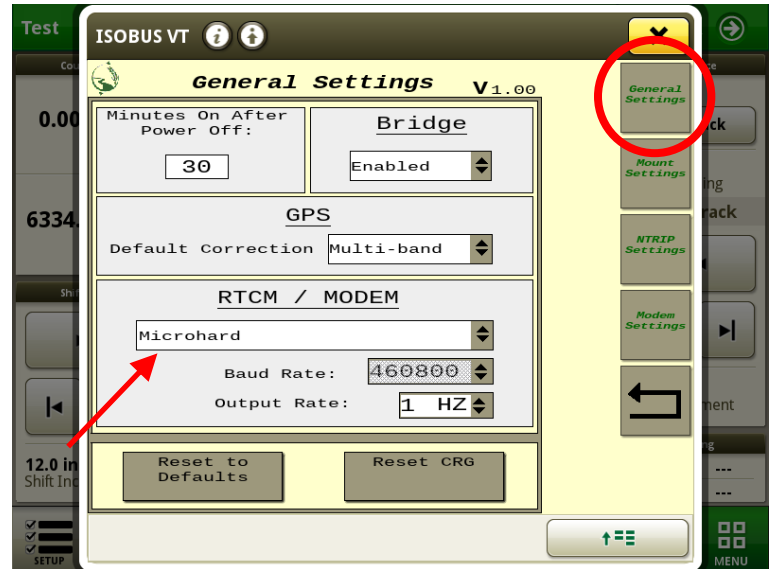


PART B) CONFIGURE CRG ISO APP

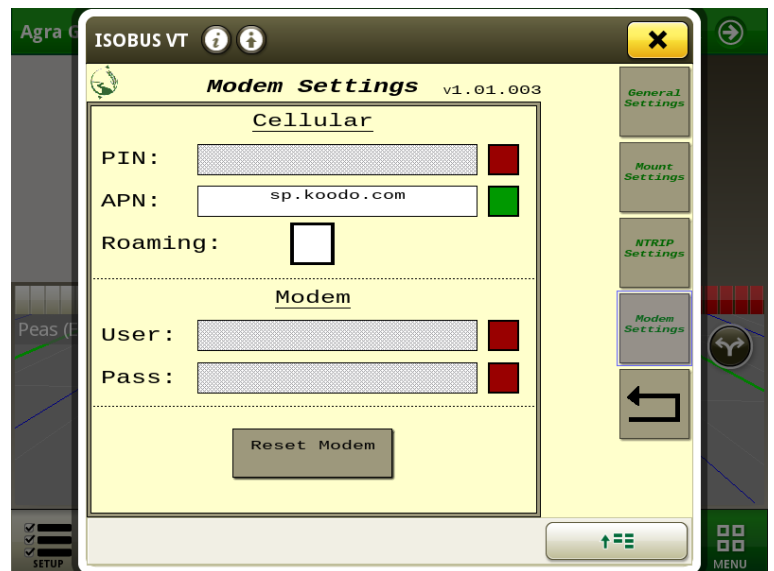
Once your CRG is installed into your machine, the modem settings and NTRIP settings must be configured using your John Deere Monitor. (Refer to the CRG User Manual for information on basic access to the CRG ISO app.)

- 1) Access the “General Settings” screen. Select the appropriate Modem Type.

After modem type is selected, the CRG will begin automatic configuration of the modem. This includes contacting your cellular service provider and registering the modem on their network. This process can take 10 minutes or more even if cellular signal strength is good. Please be patient.



- 2) Inspect the Modem Settings page. When the modem has successfully registered, you should see the APN fill in automatically. If this is not the case, your cellular provider may have given you a special APN, which you can fill in here.



- 3) Fill in your NTRIP profile(s). Different profiles may be required for different physical locations, since the receiver providing RTCM corrections should be located within 35 km (22 miles) of the work location.

a) First, select the profile number.

If a previous profile has been saved under this number, press the Load button to fill in the information.

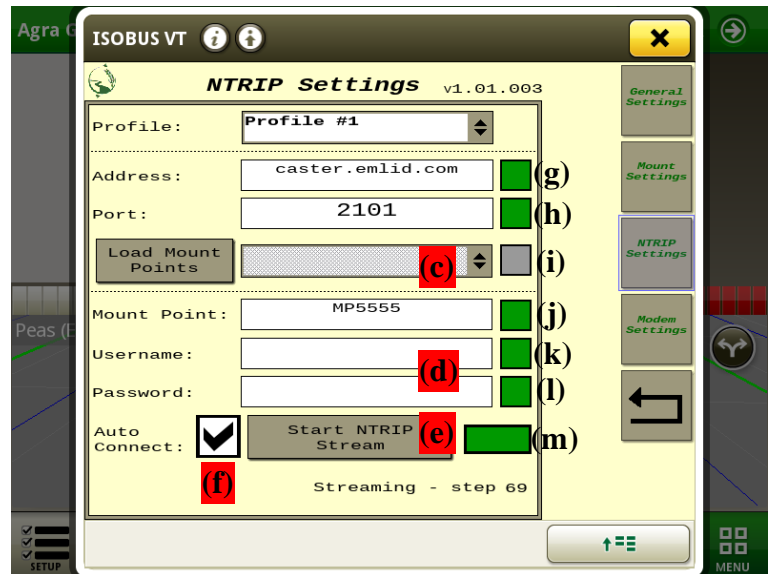
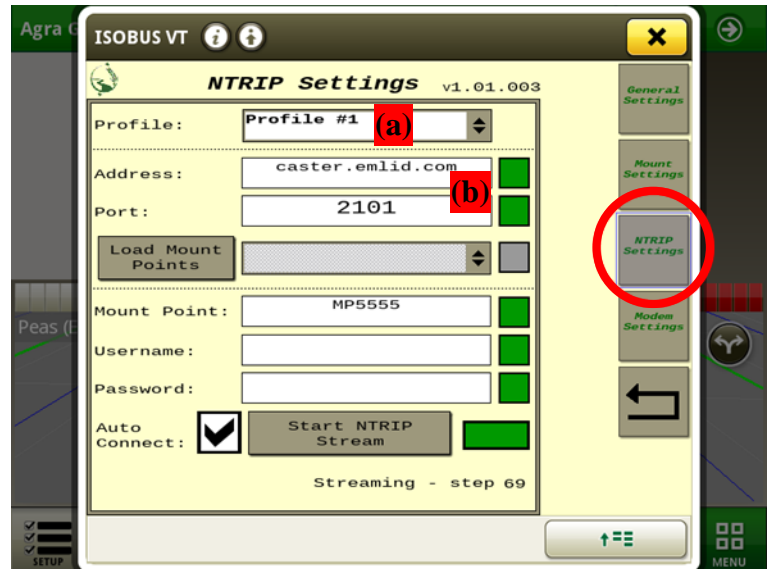
b) Fill in the IP address and port number of the NTRIP caster.

c) Press the “Load Mount Points” button. This populates the adjacent drop-down list. 100 different possible mount points are supported. Choose the appropriate mount point from the drop list.

d) Fill in your user name and password

e) Press “Start NTRIP Stream” to begin streaming if it doesn’t start automatically.

f) Choose Auto Connect if you wish to stream from this mount point each time you start the machine. (Note: only the selected profile will auto-connect, so other profiles that have it selected will be ignored.)



COLOR INDICATORS

Colors indicate the NTRIP connection stage using the cellular modem, and green is displayed when a stage is complete. Grey means “incomplete”.

- g) Initialization
 - Blinking yellow: while initializing modem
 - Red: if modem is not found or the wrong modem type is specified in General Settings
- h) Configuration
 - Blinking yellow: while configuring the modem
 - Red: incomplete

- i) APN acquisition
 - Blinking yellow: while contacting the cellular network
 - Red:
 - missing SIM card
 - APN invalid or not received
 - Bad IP or port settings

- j) Mount Point
 - Blinking yellow: while obtaining mount point list from NTRIP caster
 - Red: incomplete

- k) Login
 - Red:
 - Bad username or password

- l) Same as (k)

- m) Connecting to RTCM correction stream
 - Blinking yellow: attempting to connect
 - Red:
 - Invalid Mount Point
 - Bad username or password
 - If any previous step is not completed