

CLEARPATH®

UPDATING CLEARPATH GNSS RECEIVER TO v1.202

This latest firmware version for TeeJet ClearPath receivers provides improved ability to maintain lock on SBAS correction sources including EGNOS (Western & Central Europe), WAAS (North America), MSAS (Japan), & GAGAN (India). If your ClearPath GNSS receiver is having problems alternating between 'GPS' and 'DGPS' while in the field, this firmware version should correct that condition.

If you are not operating with SBAS corrections, or you have not experienced GPS vs. DGPS instability, this update is not necessary.

This update includes all the features and changes included in previous ClearPath receiver updates.

WARNING! This update will add GLONASS to non-GLONASS GNSS receivers. A GLONASS antenna will be required after updating if you intend to use GLONASS in the position solution.

Updating is an easy process that can be done using the USB port on the Matrix Pro GS or Aeros console.

NOTE: This update is only supported for Matrix Pro GS consoles running v2.50 or later. If you intend to use GPS + GLONASS + SBAS, you must update to v4.11. If your console is running an older version, the console update can be downloaded from the Tech Support-> Software/Firmware Updates section at www.teejet.com. This update does not apply to Matrix Pro G consoles.

IMPORTANT: This update is only for Matrix Pro GS and Aeros units in the serial number ranges listed below, with ClearPath GNSS receivers running receiver versions 010102 (v1.102), 010105 (v1.105), & 010201 (v1.201). These units were shipped from TeeJet before August 2015. Units shipped from approximately August 2015 will already be running firmware 010202 (v1.202).

Serial numbers to use [ClearPathUPD1202_MatrixGS-Aeros.zip](#)

Matrix Pro 570GS w/ ClearPath GNSS	Matrix Pro 840GS w/ ClearPath GNSS	Aeros 9040
7530094xxxxx	7530097xxxxx	7530124xxxxx
7530095xxxxx	7530098xxxxx	
7530107xxxxx	7530113xxxxx	
7530109xxxxx	7530116xxxxx	
7530110xxxxx	7530117xxxxx	
7530111xxxxx		
7530112xxxxx		
7530121xxxxx		
7530123xxxxx		

Determine if update is needed

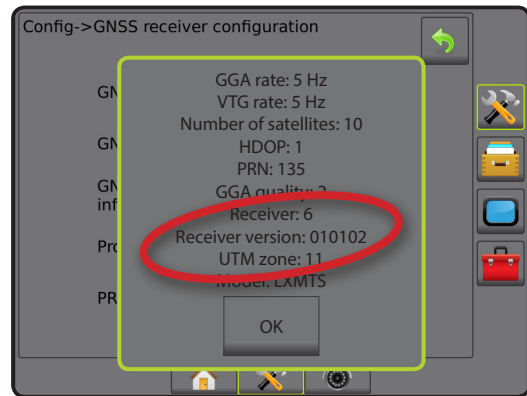
The best way to determine if your unit should be updated is to check the "Receiver" number and "Version" as shown. Go to Configuration->GNSS receiver configuration->GNSS status information and verify the values for "Receiver" and "Version".

This update should only be used when the "Receiver" is 6 or 7 and the Version is reported as 010102, 010105 or 010201. If your receiver is version 010016, you must first update to 010201 before proceeding with this latest update to 010202.

Do not proceed with this update if:

- The "Receiver" is not 6 or 7
- The "Version" is not 010102, 010105 or 010201.

If you have any questions about whether or not you should update your unit, please contact Product Support at TeeJet Technologies for assistance.



GLONASS antenna

The GNSS antenna must be GLONASS capable if you intend to use GLONASS in the position solution. TeeJet's optional RXA-30 antenna is already GLONASS capable, but most Patch antennas sold with Matrix Pro GS consoles equipped with Receiver 6 GNSS receivers are GPS only, and will have to be replaced with GLONASS capable antennas in order to receive and apply GLONASS observations. Options include the RXA-30 antenna (part number 90-02720), and the GLONASS patch antenna (part number 78-50190).

NOTE: The cost for antenna replacement is not covered by TeeJet Technologies.



GNSS PATCH

REPLACE WITH



GNSS GLONASS PATCH



OR

RXA-30



Update procedure

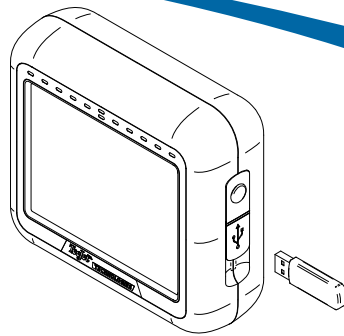
1. Verify that your GNSS receiver requires the update. (See "Determine If Update Is Needed" for more information.)
2. Download the zip file from www.teejet.com directly to your computer's Desktop or Downloads folder (see "How to download ZIP files.pdf" for details).
3. Double click the zip file (ClearPathUPD1202_MatrixGS-Aeros.zip) then select either A or B:
 - A) Copy and paste the "tjrun" folder to the root directory of an empty USB drive.
 - B) Using the "Extract all files" function, unzip/uncompress the downloaded file to the root directory of an empty USB drive (see "How to download ZIP files.pdf" for details).

RECOMMENDATION: Use an empty USB drive. Be sure there are no other automatically executable files on the drive.

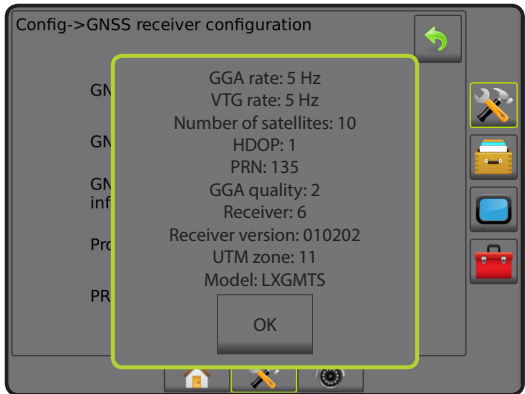
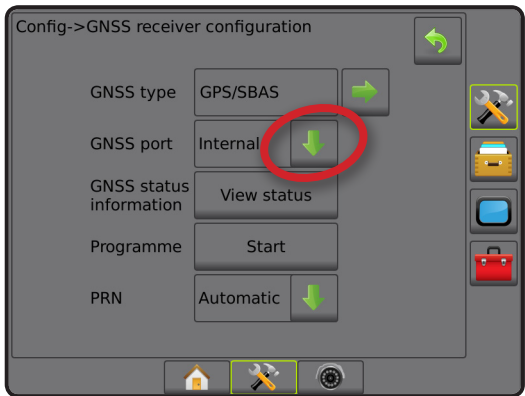
4. Properly eject the USB drive from your computer using the "Safely Remove Hardware" icon from the Task Bar or the "Eject this disk" function from the My Computer window or the "Eject Disk" option (on a MAC).
5. Power on the Matrix console and wait until the Matrix application is fully booted up.
6. Make sure that Configuration->GNSS receiver configuration->GNSS port is set to **Internal**.
7. With the console ON, lift rubber cover and insert the USB drive into the Matrix console.
8. The update process will take 5-10 minutes and will progress through the following stages as indicated by the on-screen information:
 - 1. Initializing receiver update...
 - 2. Updating receiver...
 - 3. Restoring default receiver settings...
 - 5. Receiver updated successfully! Please remove USB Drive and reboot unit.

WARNING – Do not interrupt power to the Matrix console or remove the USB Drive before the update is complete.

9. Remove the USB Drive from the console.
 10. Press and hold the POWER BUTTON  to power off the console. This can take up to 15 seconds.
 11. Press the POWER BUTTON  to power on the console again.
 12. Go to Configuration->GNSS receiver configuration->GNSS status information and verify that "Receiver" shows 6 or 7, and now the "Version" shows **010202**.
- If the "Receiver" is 1 and "Version" is blank, the update did not complete. Repeat steps 6-12.



MATRIX PRO 570GS CONSOLE



Troubleshooting failure to update

Issue	Solution
Unable to locate receiver serial number in the authorization file. Please remove USB Drive, repower console and contact TeeJet Technical Support, providing receiver serial number XXXxxxxxxx & Model yyyyyy.	Contact TeeJet Technical Support and provide them with the serial number and Model displayed on the Matrix GS screen during the failed update.
"4 Receiver update failed. Please contact TeeJet Technologies Product Support."	The GNSS receiver is not compatible with this update. Determine if the console/receiver needs to be updated.
	The update has failed – please contact TeeJet Technologies Product Support.



www.teejet.com