

## XCN-2050 Display 4.2.1 Release Notes

Rev 1 - September 2016

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### RELEASE SUMMARY:

This release was created to address reported field, as well as, known quality issues around both the Precision-IQ app and the Fm-1000 plus app. App Central has also been updated by this release to allow individual Trimble Work App updates to occur between system updates (Allowing future reported field issue to be resolved as published point releases through App Central in the future).

Trimble's "On Swath" advanced line acquisition guidance functionality is now supported in the Precision-IQ app with this release.

Note: Display Specific builds were introduced with firmware release version 4.0.1. The XCN-2050 will not recognize builds that are not tagged for this specific display. Users that are updating from versions lower than version 4.0.1 should go to Partners and use the file labeled "v4.2.0-XCN-2050 Firmware (upg file)"; all other users should use App Central or download the file labeled "v4.2.0-XCN-2050 Firmware (zip file)" from Partners.

Note: It is recommended that all users of the XCN-2050 Display update to this release version.

### VERSION COMPATIBILITY:

	Minimum Version Requirements
<b>TM-200</b>	
GNSS build	5.00.010.4
<b>Autopilot</b>	
NavController	12.50 or Newer
<b>EZ Pilot</b>	
IMD-600	2.00 or New 2.01 for WM users
SAM-200	1.04
<b>EZ Steer</b>	
SCM T2	4.01.00
<b>Modem</b>	
DCM-300	7.0.3
<b>EXP-100</b>	
	2.50
<b>Field IQ</b>	
Master Switch Box	3.06
12 Section Switch Box	3.06
Section Only Module	3.05
Rate and Section Module	3.20 or New 4.13 pressure limiting build
Rate and Section Module (Planting)	3.20
Signal Input Module	3.05
Seed Monitor Module	2.06
<b>Yield Monitoring</b>	
Yield Monitoring Module	New 1.23
Moisture Sensor Module	1.14

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### WHAT IS NEW IN THIS VERSION?

#### System Changes

Version 4.2.1.xx

- Camera Support for the PAL ag. Camera video format
  - External Camera app now supports both NTSC and PAL image formats
    - Camera 1 on Port A: DTM 12-pin on 7,8,9 (Vid-In, Vid-Gnd, 12v Power-out)
    - Camera 2 on Ethernet 8-pin: Trimble part 100905 required when a Port Expanders-100 is in use, or Ethernet Pins 4,6,2 (Vid-In, Vid Gnd, 12v Power-Out)
  - Camera images are non-integrated with Fm-1000 plus and Precision-IQ apps at this time
- TM-200 GNSS Engines updated
  - Update will take place after the instillation of this firmware version
- Autopilot Firmware Upgrade App Introduced as a Beta Feature
  - In “System Apps” a new Autopilot Firmware Upgrade app is listed and can be used for updating connected Trimble AutoPilot Navigation Modules
    - Trimble work apps must be closed before Nav updates, and the Nav must be connected and powered on Port A of the TM-200
    - Upgrade App will not work for Nav Controllers connected to Exp-100’s

#### Fm-1000 Plus app Changes

Version 4.21.x

- Problems Addressed
  - System:
    - App closing issues have been addressed and several system changes have been made, as well as, added additional diagnostics logging to capture field reported application run time behavior
    - Single Client behavior changed from v3.50 in the C/F/F/E selector to reflect the previous versions behavior
    - Full Language Support for:
      - English, Danish, Dutch, French, German, Italian, Portuguese, Spanish
    - Partial Language Support for:
      - Bulgarian, Czechoslovakian, Finnish, Hungarian, Polish, Romanian, Serbian, Swedish, Turkish
  - Application Control:
    - Field-IQ:
      - Minimum Response parameter for PWM drives returned to the Field IQ Drive Calibration tab
      - New Field-IQ Rate and Section module firmware update to address Servo auto calibration non-responsiveness
        - Rate and Section version 4.13 has been added to the Module updater
        - Not for use with Precision IQ app

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- ISOBUS: UT and TC connectivity and reporting issues improved through updated ISOBUS integration
  - Horsh ECU v10.03 firmware connectivity resolved
  - John Deere 1990 seeder ECU's connectivity resolved
  - Kverneland Spreaders section presentation resolved
  - Horsh Pronto Applied Rate now reported properly by the system
  - TC application rates must be defined before entering the run screen
- GreenSeeker: Sensors now report in the System Diagnostics, and sensor connectivity sequencing was improved
- Yield Monitoring: Improved Roll /Slope calibration curve for increased accuracy before applying a calibration curve, as well as, improved flow volume reporting on slopes
  - Yield Monitoring Module version 1.23 has been added to the Module updater
  - New Tare and Calibration curve is required to use this update
  - Backup all yield data before applying this update
- Guidance and GNSS:
  - Guidance:
    - A+ guidance lines now show 3 decimal places in their line headings
    - Headland guidance definition now triggers a verification dialog to prevent accidental cancellation of active headland recordings
    - Auto Pilot automated Dead Zone Cal improved to address completion inconsistencies
    - Ez-Pilot and WM Drain warnings added to inform users of an update available to the systems IMD-600 firmware if it is found to be below the current release v2.01 (Firmware is bundled in the Module Updater)
      - EZ-Pilot plugin must be active, and IMD-600 must be plugged into Port A to initiate IMD-600 update
  - GNSS: 450 Mhz radio frequencies now correctly stored and accessed resolving the field issue of frequencies changing automatically upon entering a field
- WM-Drain and Field Level:
  - WM Survey: Corrected a system rule to allow Classic Autopilot to use a correction source below high accuracy RTK
  - Field Level: "Plane (Flat) Mode" has been returned to Field Level settings
  - WM-Drain:
    - ability has been added to hide interior survey points within the setup "Survey" tab
    - Boot Slope consistently updating in the run screen
  - Addition of System warnings to help users select proper guidance Nav and IMD-600 versions

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### Precision IQ app

Version 4.2.1.x

- New Features
  - “OnSwath” Advanced Line Acquisition Support added:
    - Supported vehicle database now supports the use of Trimble’s “OnSwath” advanced line acquisition guidance technology
    - Functionality only available with the use of Autopilot Navigation systems
  - SBAS plus added for GNSS positioning support
    - SBAS + allows for uncorrected positioning satellites to be used when determining the vehicles position
  
- Problems Addressed
  - System:
    - App closing issues have been addressed and several system changes have been made, as well as, added additional diagnostics logging to capture field reported application run time behavior
    - New Map Provider has been implemented for connected displays
    - Field Manager:
      - Newly Created Fields are now automatically defaulted as the “selected” field by the Field Manager
      - Imported areas are properly calculated when brought from Fm-1000 plus
      - Imported headlands are properly shown when brought from Fm-1000 plus
    - Full Language Support for:
      - English, Bulgarian, Czechoslovakian, Danish, Dutch, French, German, Hungarian, Italian, Polish, Portuguese, Romanian, Russian, Spanish, Swedish, Turkish
    - Partial Language Support for:
      - Finnish, Hebrew, Serbian, Swedish
  - Application Control:
    - ISOBUS: UT and TC connectivity and reporting issues improved through updated ISOBUS integration
      - Improved UT widget behavior for: language selection, text legibility, parameter entry validation, and UT app responsiveness
      - “ACK” button added to UT widget for acknowledging warnings
      - Improved audio notification and warning handling
      - “Select” button has been added to address when multiple ECU’s are present during Implement Setup
      - UT screen shows more than 4 ISO ECU’s by creating a scrollable ECU selector
      - Amazone section switching resolved

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- Horsh ECU v10.03 firmware connectivity resolved
- Case Air Seeder 500T ECU's connectivity and logging resolved
- Guidance and GNSS:
  - Guidance:
    - Auto Pilot configurations that have been imported now retain proper roll calibration sign assignment
    - Headland Guidance Pattern now defaults to creating 2 headland circuits after completed recordings
    - Pivot Guidance Pattern now creates and activates a pivot boundary by default after completed recordings
  - GNSS:
    - RTX frequencies have been updated in the provided GNSS library
    - Secure RTK status has been updated to show the users expiration data
    - Omni Star status has been updated in system diagnostics to show user details

### App Central Changes

Version 2.1.1.xx

#### ➤ Improvements

- Firmware Updates using the "My Apps" Category:
  - Connected displays will receive automated Trimble work app update notices for downloading Precision-IQ and Fm-1000 plus when builds become available on the network
    - To Load: Accept the notification in the notification bar, or Go To App Central > "My Apps" and select the update that is desired in the "Update" Tab
  - Non-Connected Displays will require loading the "firmware\_update.zip" from Partners onto a USB and loading it onto the display
    - To Load: Insert the USB with proper files; Go To App Central > "My Apps" and select the "+" icon. Select the "SD" icon; then navigating to the proper Drive and File and initiate the download
- Licensing:
  - License Syncing with Connected Farm accounts is now available using the "+" icon; then selecting the "Cloud Download" icon
    - Display must be assigned to an active Connected Farm account and have connectivity to the internet
    - Selecting the "Cloud Download" icon is a "sync now" function; Licenses will sync automatically on a periodic schedule without using the "Cloud Download" icon if the display remains powered and maintains connectivity
  - Licenses that are about to expire will now post informational warnings upon powering up the display; App Central License tiles will also show the user that a license is about to expire