

INSIGHTqcx

Version 1.1.6

February 20th, 2020

1. Introduction

This is a software release note for **version 1.1.6** of **INSIGHTqcx** Cordless Controller. This document details the software versions, key new features, and upgrade instruction for the version 1.1.6 release package.

2. Release Information

The following software releases are launched as part of this release package:

Controller Software		
#	Description	Version
1	Application	1.1.6
2	Database	0.0.4
3	OS	0.0.1

Tool Software		
#	Description	Version
1	Tool Display	100.1.0.6
2	Tool MCE	2.4.0.20

Note:

1. Users are highly recommended to upgrade both the controller and tool software. Please follow the upgrade instruction listed in the section below.

3. New Features & Improvements

3.1 NEW Key Features

3.1.1 Ford Open Protocol (FOP) – compatible with specification version 4.65 (2014).

3.1.2 Additional Open Protocol MID commands. Please see the table below for the full list of MID commands supported by this release.

MID	Description	INSIGHTqcx 1.1.6	MID	Description	INSIGHTqcx 1.1.6
1	Communication start	●	50	Vehicle Id Number download request	●
2	Communication start acknowledge	●	51	Vehicle Id Number upload subscribe	●
3	Communication stop	●	52	Vehicle Id Number upload	●
4	Command error	●	53	Vehicle Id Number upload acknowledge	●
5	Command accepted	●	54	Vehicle Id Number upload unsubscribe	●
6	Spindle Connect Status	●	60	Last tightening result data subscribe	●
7	Spindle Connect Status Ack	●	61	Last tightening result data upload	●
8	Spindle Connect Status Subscribe	●	62	Last tightening result data acknowledge	●
9	Spindle Connect Status Unsubscribe	●	63	Last tightening result data unsubscribe	●
10	Parameter set numbers upload request	●	64	Old tightening result upload request	●
11	Parameter set numbers upload reply	●	65	Old tightening result reply	●
12	Parameter set data upload request	●	70	Alarm subscribe	●
13	Parameter set data upload reply	●	71	Alarm Upload	●
14	Parameter set "selected" subscribe	●	72	Alarm Upload acknowledge	●
15	Parameter set "selected"	●	73	Alarm Unsubscribe	●
16	Parameter set "selected" acknowledge	●	74	Alarm Acknowledged on torque controller	●
17	Parameter set "selected" unsubscribe	●	75	Alarm Acknowledged Ack	●
18	Select Parameter set	●	76	Alarm Status	●
19	Set Parameter set batch size	●	77	Alarm Status acknowledge	●
20	Reset Parameter set batch size	●	80	Read time upload request	●
30	Job numbers upload request	●	81	Time upload reply	●
31	Job numbers upload reply	●	82	Set Time in the Torque Controller	●
32	Job data upload request	●	127	Abort job	●
33	Job data upload reply	●	128	Job batch increment	●
34	Job "info" subscribe	●	129	Job batch decrement	●
35	Job "info"	●	150	Identifier download request / reply	●
36	Job "info" acknowledge	●	250	Selector socket info subscribe	●
37	Job "info" unsubscribe	●	251	Selector socket info	●
38	Select Job	●	252	Selector socket info acknowledge	●
39	Job restart	●	253	Selector socket info unsubscribe	●
40	Tool data upload request	●	410	AutoDisable settings request	●
41	Tool data upload reply	●	411	AutoDisable settings reply	●
42	Disable tool	●	900	Trace	●
43	Enable tool	●	9,999	Keep alive message	●

3.2 Enhancements

3.2.1 Enhanced *Reverse Step* settings to allow user to select *Standard* or *Custom* reverse steps. For the Standard option, the controller will apply default settings for reverse step based on the tool's torque and speed limits.

3.2.2 Fixed an issue related to programming of PSET for QXM Angle Tool using 40V battery.

3.2.3 Addressed issues related to interlock and barcode.

3.2.4 Fixed the issue of Job not updated correctly in the Main screen when user changes jobs while the tool is in active cycle.

3.2.5 Resolved an issue related to decimal places for ASC and TR values.

3.2.6 Fixed issue of MAC ID reset to 0 after rebooting the controller.

3.2.7 Enabled restoring of Ethernet Fieldbus settings that were previously backed up.

3.3 Language Supported

#	Language	Native name
1	Chinese (Simplified)	中文(简体)
2	Spanish	Español
3	French	Français
4	German	Deutsch
5	Italian	Italiana
6	English	English
7	Korean	한국어
8	Japanese	日本語
9	Russian	Русский
10	Polish	Polskie
11	Portuguese	Português
12	Czech	Čeština

4. Upgrade Instruction

4.1 Controller Firmware Upgrades

Follow the instruction outlined in the *How-To Update INSIGHTqcx Firmware* article (see link below) on our customer portal to update the firmware for the INSIGHTqcx controller. **Please note that the Controller may take up to 60s to reboot and multiple reboot may be required during the full firmware upgrade process.**

- <https://irtoolhelp.ingersollrand.com/hc/en-us/articles/360039603114-How-To-Update-INSIGHTqcx-Firmware>

4.2 Tool Firmware Upgrades

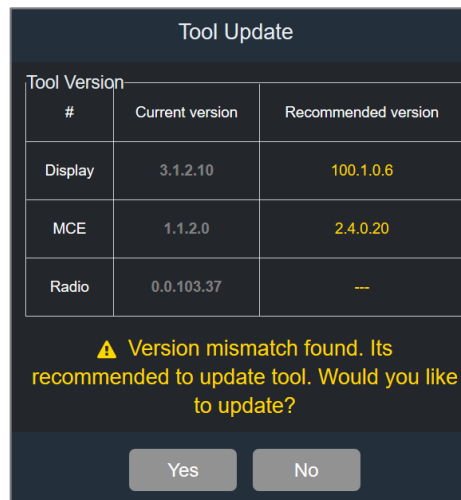
Tool firmware upgrades can be done directly using the INSIGHTqcx controller. The required latest firmware files are already included with the controller.

Prerequisite:

- To use the INSIGHTqcx to upgrade tool firmware, the display firmware version on the tool has to be 3.x.x or higher. For older tool display firmware (V1.x.x or 2.x.x) it is necessary to first update to version 3.x.x or higher using ICS.

Steps:

1. Connect the QX tool into the controller using a USB cable.
2. Once connected, an Update screen will appear to highlight the current vs recommended software versions (see sample screen shot below).



3. Follow the instruction on the screen to update the MCE and Display firmware. In some cases, the tool may need to be recycled power to complete the update process.
4. After the tool is updated, please perform a Factory Reset on the tool using Tool Settings → Factory Reset. Please note that the tool may take up to 8s to fully perform the factory reset.

5. Revision History

Revision History

Version	Date	Summary of Changes	Author
0.1	02/20/2020	Initial draft for version 1.1.6	Eng-Hua Yap