

## INSIGHTqcx

### Version 100.1.3.11

#### Introduction

This is the software release note for version 100.1.3.11 INSIGHTqcx Cordless Controller. This document details the software version, key new features, and upgrade instructions for this release.

#### 1. Release Information

**NOTE:** Please upgrade both the tool and controller with the latest versions as outlined in this section.

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

INSIGHTqcx Controller Versions		
#	Description	Version
1	Application	100.1.3.11
2	Database	1.0.0
3	Operating System	1.0.0
4	External radio Version	2.23

Tool Versions		
#	Description	Version
1	QX Series Display	200.1.1.13
2	QX Series MCE	3.6.1.47
3	QX Connect Series One Image	Display 120.4.2.5 MCE 3.6.1.47 Radio 0.0.0.2

**Note:** Please follow the upgrade instructions listed in section 3.0.

#### 2. New Features & Improvements, Known Issues

##### 2.1 Enhancements

- Ford CEC certified.
- Modify wireless settings without tool un-pair and pair.
- ETS/ Non- ETS tool direct drive Psets interoperability.
- Enhanced Tool- Controller wireless communication for MTC.
- Backup and Restore enhancement when swapping tools

- IR DIO box and Symbol barcode scanner can be auto-recognized when plugged back after a connection failure.
- IP- Aliasing is disabled as a default setting.
- Simultaneous use of DIO box and Fieldbus for I/O's
- Additional PFOP MID. Please refer latest list in section XX
- The barcode can be sent to fieldbus (e.g. Ethernet-IP) as a pass-through.

## 2.2 Known Issues

### 1. **Change channel feature**

For the offline Tools, users need to update the radio settings manually by connecting the tool over controller USB port. OR, click on pair button and click cancel immediately so that controller will rewrite the radio settings back to radio module

### 2. **Tool Backup & Restore**

Old tool backup files are not supported at current release, only new backup files taken in latest release can be restored.

### 3. **Modbus DIO device type**

(Settings → Digital IO → Source 1 → Modbus Module 8x8) is not supported in this release

## 3. Upgrade Instructions

### 3.1 Controller Firmware Update

**3.1.1** If updating from QCX version 2.x.x, you must perform a USB Image Update. Then update to version 100.1.2.23. See link:

<https://irtoolhelp.ingersollrand.com/hc/en-us/articles/4403936117139-Upgrading-to-an-MTC-Multi-Tool-Controller-controller>

**Note:** If not using multiple tools with the controller, ignore the section on Obtaining an MTC License.

**3.1.2** If updating from QCX controller version 100.x.x.x, follow below instructions.

- Go to our FTP site and copy the Application (.irb) file to your PC or USB drive.

<ftp://ftp.irco.com/InsightQCX%20MTC%20releases/Version%20100.1.3.11/IRB/>

User: asSoftwareRead

Password: 4&4erum6?a

See link for updating instructions:

<https://irtoolhelp.ingersollrand.com/hc/en-us/articles/5120119326867--How-to-Update-firmware-on-an-MTC-controller>

### 3.2 Tool Firmware Update

3.2.1 See link for updating instructions:

<https://irtoolhelp.ingersollrand.com/hc/en-us/articles/5120212430739--How-to-Update-QX-and-QX-Connect-tool-firmware-using-an-MTC-controller>

## 4. Appendix A – Languages and Open Protocol MIDs

### 4.1 INSIGHTqcx supports the following languages

#	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

## 4.2 List of supported Open Protocol MID Commands

PFOP MID List			Supported by MTC	PFOP MID List			Supported by MTC
MIDs	Rev Version	Description		MIDs	Rev Version	Description	
MID 0001	Rev 000 - 0005	Communication start	✓	MID 0063		Last tightening result data unsubscribe	✓
MID 0002	Rev 000 - 0005	Communication start acknowledge	✓	MID 0064		Old tightening result upload request	✓
MID 0003		Communication stop	✓	MID 0065	Rev 1 - 5	Old tightening result reply	✓
MID 0004		Command error	✓	MID 0070	Rev 1 - 2	Alarm subscribe	✓
MID 0005		Command accepted	✓	MID 0071		Alarm Upload reply	✓
MID 0010		Parameter set number upload request	✓	MID 0072		Alarm upload acknowledge	✓
MID 0011	Rev 1 - 2	Parameter set numbers upload reply	✓	MID 0073		Alarm unsubscribe	✓
MID 0012		Parameter set data upload request	✓	MID 0074		Alarm Acknowledged on Torque Controller	✓
MID 0013	Rev 1 - 4	Parameter set data upload reply	✓	MID 0075		Alarm Acknowledged ACK	✓
MID 0014		Parameter set "selected" subscribe	✓	MID 0076		Alarm Status	✓
MID 0015		Parameter set selected	✓	MID 0077		Alarm Status Acknowledge	✓
MID 0016		Parameter set selected acknowledge	✓	MID 0078	Rev 000 - 001	ACK Alarm on Controller	x
MID 0017		Parameter set "selected" unsubscribe	✓	MID 0080		Read time upload request	✓
MID 0018		Select Parameter set	✓	MID 0081		Read time upload reply	✓
MID 0019		Set Parameter Set batch size	✓	MID 0082		Set Time in Torque Controller	✓
MID 0020		Reset Parameter Set batch size	✓	MID 0127	Rev 1	Abort Job	✓
MID 0030	Rev 1 - 2	Job numbers upload request	✓	MID 0128	Rev 1	Job Batch Increment	✓
MID 0031		Job numbers upload reply	✓	MID 0129	Rev 1-2	Job Batch Decrement	✓
MID 0032	Rev 1 - 3	Job data upload request	✓	MID 0130	Rev1	Job Off	✓
MID 0033	Rev 1 - 3	Job data upload reply	✓	MID 0200		Set externally controlled relays	✓
MID 0034	Rev 1 - 4	Job info subscribe	✓	MID 0210		Status externally monitored inputs subscribe	✓
MID 0035	Rev 1 - 4	Job info	✓	MID 0211		Status externally monitored inputs	✓
MID 0036	Rev 1 - 4	Job info acknowledge	✓	MID 0212		Status externally monitored inputs acknowledge	✓
MID 0037	Rev 1 - 4	Job info unsubscribe	✓	MID 0213		Status externally monitored inputs unsubscribe	✓
MID 0038	Rev 1	Select Job	✓	MID 0214		IO device status request	✓
MID 0039	Rev 1 - 2	Job restart	✓	MID 0215		IO device status reply	✓
MID 0040		Tool data upload request	✓	MID 0250		Selector socket info subscribe	✓
MID 0041	Rev 1 - 5	Tool data upload reply	✓	MID 0251		Selector socket info	✓
MID 0042		Disable tool	✓	MID 0252		Selector socket info acknowledge	✓
MID 0043		Enable tool	✓	MID 0253		Selector socket info unsubscribe	✓
MID 0044		Disconnect Tool Request	✓	MID 0410		Auto Disable settings request	✓
MID 0050		Vehicle Id Number download request	✓	MID 0411		Auto Disable settings reply	✓
MID 0051	Rev 1 - 2	Vehicle Id Number upload subscribe	✓	MID 0008		Trace data Subscribe	✓
MID 0052	Rev 1 - 2	Vehicle Id Number	✓	MID 0009		Trace data unsubscribe	✓
MID 0053	Rev 1 - 2	Vehicle Id Number upload acknowledge	✓	MID 0900	Rev 1	Trace	✓
MID 0054	Rev 1 - 2	Vehicle Id Number upload unsubscribe	✓	MID 9999		Keep alive message	✓
MID 0060	Rev 1 - 7 & Rev 998 & F	Last tightening result data subscribe	✓	Allow 5 Connections at a time with QCX			✓
MID 0061	Rev 1 - 7 & Rev 998 & F	Last tightening result data upload reply	✓	Tool Enable On Power Up			✓
MID 0062		Last tightening result data acknowledge	✓	Port Aliasing Support			✓

### 4.3 List of Ford Open Protocol MID Commands

FORD OPEN MID List			Supported by MTC	FORD OPEN MID List			Supported by MTC
MIDs	Software Rev Version	Description		MIDs	Software Rev Version	Description	
MID 0001	Rev 000 - 002	Communication start	✓	MID 0041	Rev 000 -002	Tool data upload reply	✓
MID 0002	Rev 000 - 002	Communication start acknowledge	✓	MID 0042	Rev 000 - 001	Disable tool	✓
MID 0003	Rev 000 - 001	Communication stop	✓	MID 0043	Rev 000 - 001	Enable tool	✓
MID 0004	Rev 000 - 001	Command error	✓	MID 0050	Rev 000 - 001	Vehicle Id Number download request	✓
MID 0005	Rev 000 - 001	Command accepted	✓	MID 0051	Rev 000 - 001	Vehicle Id Number upload subscribe	✓
MID 0006	Rev 000 - 001	Spindle Connect Status	✓	MID 0052	Rev 000 - 001	Vehicle Id Number upload	✓
MID 0007	Rev 000 - 001	Spindle Connect Status ACK	✓	MID 0053	Rev 000 - 001	Vehicle Id Number upload acknowledge	✓
MID 0008	Rev 000 - 001	Spindle Connect Status Subscribe	✓	MID 0054	Rev 000 - 001	Vehicle Id Number upload unsubscribe	✓
MID 0009	Rev 000 - 001	Spindle Connect Status Unsubscribe	✓	MID 0060	Rev 000 - 001	Last tightening result data Subscribe	✓
MID 0010	Rev 000 - 001	Parameter set number upload request	✓	MID 0061	Rev 000 - 001	Last tightening result data upload reply	✓
MID 0011	Rev 000 - 001	Parameter set numbers upload reply	✓	MID 0062	Rev 000 - 001	Last tightening result data acknowledge	✓
MID 0012	Rev 000 - 001	Parameter set data upload request	✓	MID 0063	Rev 000 - 001	Last tightening result data unsubscribe	✓
MID 0013	Rev 000 - 001	Parameter set data upload reply	✓	MID 0064	Rev 000 - 001	Old tightening result upload request	✓
MID 0014	Rev 000 - 001	Parameter set "selected" subscribe	✓	MID 0065	Rev 000 - 001	Old tightening result reply	✓
MID 0015	Rev 000 - 001	Parameter set selected	✓	MID 0070	Rev 000 - 001	Alarm subscribe	✓
MID 0016	Rev 000 - 001	Parameter set selected acknowledge	✓	MID 0071	Rev 000 - 001	Alarm Upload reply	✓
MID 0017	Rev 000 - 001	Parameter set "selected" unsubscribe	✓	MID 0072	Rev 000 - 001	Alarm upload acknowledge	✓
MID 0018	Rev 000 - 001	Select Parameter set	✓	MID 0073	Rev 000 - 001	Alarm unsubscribe	✓
MID 0019	Rev 000 - 001	Set Parameter Set batch size	✓	MID 0074	Rev 000 - 001	Alarm Acknowledged on Torque Controller	✓
MID 0020	Rev 000 - 001	Reset Parameter Set batch size	✓	MID 0075	Rev 000 - 001	Alarm Acknowledged ACK	✓
MID 0030	Rev 000 - 001	Job numbers upload request	✓	MID 0076	Rev 000 - 001	Alarm Status	✓
MID 0031	Rev 000 - 001	Job numbers upload reply	✓	MID 0077	Rev 000 - 001	Alarm Status Acknowledge	✓
MID 0034	Rev 000 - 001	Job "selected" subscribe	✓	MID 0080	Rev 000 - 001	Read time upload request	✓
MID 0035	Rev 000 - 001	Job "selected"	✓	MID 0081	Rev 000 - 001	Time upload reply	✓
MID 0036	Rev 000 - 001	Job "selected" acknowledge	✓	MID 0082	Rev 000 - 001	Set Time in Torque Controller	✓
MID 0037	Rev 000 - 001	Job "selected" unsubscribe	✓	MID 0410	Rev 000 - 001	Auto Disable settings request	✓
MID 0038	Rev 000 - 001	Select Job	✓	MID 0411	Rev 000 - 001	Auto Disable settings reply	✓
MID 0039	Rev 000 - 001	Job restart	✓	MID 9999	Rev 000 - 001	Keep alive message	✓
MID 0040	Rev 000 -002	Tool data upload request	✓	Port Aliasing Support			✓
				FOP Default Settings			✓

## 5. Revision History

### Revision History

Version	Date	Summary of Changes	Prepared by	Validated By
0.01	10/7/2022	Final	Kartik Sahu	Habib & Mike Zalot