How to Calibrate a QX Tool using the QCX Controller

1. From the Home screen select the desired Job.

	Home	T IR21E25005		- Calibration		-		ж	👧 👩 🙆 🖸
	Job			$ \bigcirc$	)				
	Pset	Next: calibration							
•	Wireless Tools	15 Nm							1 /1
	Accessories								 
0	Result		Step#1		Torque(Nm)		↑ 18.00	X. Angle(")	↑ 32000
	Settings	$\checkmark$			1510		© 15.00	15	
•	Tool General Setting				15.10		⊻ 12.00	45	<u>★</u> 0
0	Logs	Torque vs Time							8
	Diagnostics								
2	System Maintenance								
	User Management								
	About	0.0							

2. Go to System Maintenance and select Tool Calibration.

	Home	T IR21E25005	-	calibration		▼)		ж	🔔 🕞 (	0
	Job									$\sim$ $\sim$
	Pset	Next: calibration								
	Wireless Tools	calibration								1 /1
	Accessories				<b>4 - - 4 - - 4 - - - - - - - - - -</b>		=		=	
0	Result	× /	Step#1		Forque(Nm)		↑ 3.00	△ Angle(*)	↑ 32000	_
	Settings	$\mathbf{r}$			1 0 2		◎ 1.00	216		
	Tool General Setting				1.02		<u>↓</u> 0.80	210	<b>Ť</b> 0	
0	Logs	Torque vs Time	-							3
	Diagnostics	•								
2	System Maintenance	Backup								
	User Management	Restore								
	About	Tool Copy								
		Firmware Update								
		Update License								
		Tool Calibration								
		Preventive Maintenance Alarm								

3. The following screen will populate.

	Home			
	Job	Tool Calibration	□ None	
0	Pset	Calibration Data		€
	Wireless Tools	Calibration Result		$\bigcirc$
	Accessories			Ø
0	Result <b>•</b>			
	Settings ►			
	Tool General Setting			
0	Logs ►			
	Diagnostics			
2	System Maintenance			
	User Management			
	About			

4. Select the tool.

	Home			
	Job	Tool Calibration	T IR21E25005	_
G	Pset	Calibration Data		€
	Wireless Tools	Calibration Result		A
	Accessories			U
0	Result			
	Settings			
	Tool General Setting			
0	Logs			
	Diagnostics			
2	System Maintenance			
	User Management			
	About			

5. Select Calibration Result.

	Home						
	Job	Calibration Result					
	Pset	Calibration Settings Auto			-		
-	Wireless Tools						
	Accessories	Cycle #	From Tool	Measured Reading			
0	Result D	Click on start button to start Tool Calibration.					
•	Settings )				Remove Start		
	Tool General Setting	Popultant TR Value	nt TR Value				
0	Logs )				v		
$\mathbf{\nabla}$	Diagnostics )				(Download) Set		
2	System Maintenance						
	User Management						
	About						

6. For Manual Mode calibration select the Start button and run one cycle. The tool data will populate automatically. Enter the Measured Reading from the external device and press Enter.

	Home				
	Job				
$\bigcirc$	Pset	Calibration Settings Auto			-
-	Wireless Tools				
	Accessories	Cycle #	From Tool	Heasured Reading	
0	Result 🕨		1.0118613243103027	( 1.01	
	Settings 🕨 🕨				
	Tool General Setting				Remove Stop
0	Logs 🕨 🕨	Minimum 5 cycles required to calculate Resultant TR			
$\mathbf{\nabla}$	Diagnostics				
2	System Maintenance	Resultant TR Value			
	User Management				
	About				Download Set

7. Repeat this process for a minimum of 5 cycles (A minimum of 5 readings (30 are recommended) must be collected before a new TR will be calculated).

		Home				
	∍	Job	ⓒ Calibration Result			
6	<del>a</del>	Pset	Calibration Settings Auto			-
		Wireless Tools				
		Accessories	Cycle #	From Lool	Measured Reading	
	9	Result		1.0118613243103027	1.01	
	1	Settings				
		Tool General Setting		1.0229991674423218	1.02	
6		Logs		1.018847107887268	1.01	
		Diagnostics				
6	?	System Maintenance		1.0178258419036865		
		User Management		1 0162070989608765	1.01	
		About		1.010207030300703		
						Remove Stop
			Resultant TR Value			

8. Select Stop when the desired number of cycles has been run. A new Resultant TR Value will be populated.

	Home				
	Job	Calibration Result			
G	Pset	Calibration Settings Auto			
-	Wireless Tools				
	Accessories	Cycle #	From Tool	Measured Reading	
0	Result		1.0118613243103027	1.01	
•	Settings				
	Tool General Setting		1.0229991674423218	1.02	
$\mathbf{O}$	Logs		1.018847107887268	1.01	
	Diagnostics				
?	System Maintenance		1.0178258419036865		
	User Management		1 0162070989608765	1 01	
	About				
					Remove Start
		Resultant TR Value			45.15052
					Download Set

9. Select Download to download the calibration report.



## Calibration of Transducer Range(TR) Value

Tool Information		
Tool Serial No	IR21E25005	
Tool Model Number	QXXD2PT024E	\$06
Cycle Counter	From Tool	From ETA
1	1.01186132431	1.01
2	1.02299916744	1.02
3	1.01884710789	1.01
4	1.0178258419	1
5	1.01620709896	1.01

Current Value	45.4879493713
Resultant TR Value	45.15052

## 10. Select Set to send the Resultant TR Value to the tool.

0			() Warning	•
•			Do you want to send Resultant TR value to the tool?	
0		Cycle #		1 Reading
			Yes No	
Ð				
2				
				Remove
				(Download) Set

11. Select Yes. You will see the below banner.

	Home				
		Resultant TR value set successfully			×
	Job	Calibration Result			
	Pset	() Calibration Result			
•	Wireless Tools	Calibration Settings Auto			•
θ	Accessories				
	Result >	Cycle #	From Tool	Measured Reading	
	Settings ►	Click on start button to start Tool Calibration.			
	Tool General Setting				(Remove) Start
0	Logs >	Resultant TR Value			
	Diagnostics				
2	System Maintenance				Download Set
•	User Management				
	About				

- 12. The Manual Mode Torque Calibration is complete.
- 13. If you have access to an EXTT or EXTA Torque Analyzer, Auto Calibration Mode can be used.
- 14. For Auto Calibration Mode using and EXTT or EXTA Torque Analyzer, turn on the Calibration

Settings Auto slider.						
⊜	Home		€ Calibration Result			
$\odot$	Pset		Calibration Settings Auto			
	Accessories		Cycle #	From Tool	Measured Reading	$\mathbf{)}$
	Result Settings	▶ ▶	Click on start button to start Tool Calibration.			Remove) Start
Ŧ	Tool General Setting		Resultant TR Value			0
$\mathbf{O}$	Logs Diagnostics	•				Download Set
?	System Maintenance					
	About					

- 15. Select the Start button.
- 16. Run one cycle.
- 17. The results will be populated From Tool and from the EXTT or EXTA connected analyzer automatically after each cycle. Note: The connected Com Port must be selected.
- 18. Repeat this process for a minimum of 5 cycles (A minimum of 5 readings (30 are recommended) must be collected before a new TR will be calculated).
- 19. Continue with Steps 8, 9, 10, and 11 from above.
- 20. The Auto Calibration is complete.