1. The Wireless Bit Tray comes with the Bit Tray, Controller Interface Module (connects to IR QC-DIO-8CH), Wire Harness, USB-C Charging Cable, and Screwdriver & Accessories.



- 2. Charge the Bit Tray before using.
- 3. Remove the wires from the two 10 Pin Phoenix connectors on the Wire Harness.
- 4. Connect the wires to the two 10 Pin Phoenix connectors on the IR QC-DIO- 8CH module following below diagram.

			Wireless Bit Tray					QC-DIO-8CH	
	Connector 1	Pin#	Description	Color	Size	Terminal PN	DIO Connector	Pin#	24V Power Supply
	8 CH DIO Inline	1	Input 1, +24V to DIO (From TQ Tool Controller)	WHT	22	43030-0001	DIO - Outputs	1	
	8 CH DIO Inline	2	Input 2, +24V to DIO (From TQ Tool Controller)	PNK	22	43030-0001	DIO - Outputs	2	
	8 CH DIO Inline	3	Input 3, +24V to DIO (From TQ Tool Controller)	YEL	22	43030-0001	DIO - Outputs	3	
	8 CH DIO Inline	4	Input 4, +24V to DIO (From TQ Tool Controller)	TAN	22	43030-0001	DIO - Outputs	4	
	8 CH DIO Inline	5	Input 5, +24V to DIO (From TQ Tool Controller)	ORG	22	43030-0001	DIO - Outputs	5	
	8 CH DIO Inline	6	Input 6, +24V to DIO (From TQ Tool Controller)	LT GRN	22	43030-0001	DIO - Outputs	6	
	8 CH DIO Inline	7	Input 7, +24V to DIO (From TQ Tool Controller)	DK BLU	22	43030-0001	DIO - Outputs	7	
	8 CH DIO Inline	8	Input 8, +24V to DIO (From TQ Tool Controller)	PPL	22	43030-0001	DIO - Outputs	8	
man	8 CH DIO Inline	10	Not Populated - spare 24V Supply				DIO - Outputs	Not Used	
	8 CH DIO Inline	9	24V Supply to DIO (From TQ Tool Controller)	RED	22	43030-0001	DIO - Outputs	EXT POWER	White
20									
	8 CH DIO Inline	11	Output 1, +24V to TQ Tool Controller (From DIO)	WHT/BLK	22	43030-0001	DIO - Inputs	1	
	8 CH DIO Inline	12	Output 2, +24V to TQ Tool Controller (From DIO)	PNK/BLK	22	43030-0001	DIO - Inputs	2	
	8 CH DIO Inline	13	Output 3, +24V to TQ Tool Controller (From DIO)	YEL/BLK	22	43030-0001	DIO - Inputs	3	
	8 CH DIO Inline	14	Output 4, +24V to TQ Tool Controller (From DIO)	TAN/BLK	22	43030-0001	DIO - Inputs	4	
	8 CH DIO Inline	15	Output 5, +24V to TQ Tool Controller (From DIO)	ORG/BLK	22	43030-0001	DIO - Inputs	5	
	8 CH DIO Inline	16	Output 6, +24V to TQ Tool Controller (From DIO)	LT GRN/BLK	22	43030-0001	DIO - Inputs	6	
	8 CH DIO Inline	17	Output 7, +24V to TQ Tool Controller (From DIO)	DK BLU/WHT	22	43030-0001	DIO - Inputs	7	
	8 CH DIO Inline	18	Output 8, +24V to TQ Tool Controller (From DIO)	PPL/WHT	22	43030-0001	DIO - Inputs	8	
	8 CH DIO Inline	19	Ground Reference (From TQ Tool Controller)	BLK	22	43030-0001	Not Used	Not Used	
	8 CH DIO Inline	20	Ground Reference (From TQ Tool Controller)	BLK/WHT	22	43030-0001	DIO - Inputs	EXT COM	Black
	Notes	1	The Wireless Bit Tray will come wired for connection to the PC	M controller.	Youm	nust remove th	e wires from the 2 Pho	enix Conne	tors and wire to the
		2	See the QC-DIO-8CH manual for additional information.						
		3	Above is the recommended wiring using an External 24V Powe	r Supply and So	ourci	ng Outputs.			



5. Plug the connectors into the QC-DIO-8CH.

6. Using the provided USB cable, plug the DIO box into one of the USB ports on the QCD/QCXD controller.

Programming the controller for Simple Bit Tray

7. On the controller, set the Job Selection Mode to External Discrete.

Ξ	T .	 Ingersoli Rand	
н	ome	← Global Settings	н
Jo	b 🔫	Curve Logging	All
	Job List	Job Selection	External - Discrete
	Global Settings	Boot Job	Internal External - MES
P	et	Queue BCODE / VIN	External - BCODE / VIN External - Discrete External - Discrete - Field Bus
R	sult 🗸 🗸		External - Binary External - Binary - Field Bus
s	ettings 🗸 🗸		

8. Assign the Inputs for Job selection as shown below.

Home Digital IO Settings						
IO Assignment - DIO Box (8x8)						
 Input Assignment 						
Point 1	Job 1	Normally Close	~			
Point 2	Job 2	Normally Close	~			
Point 3	Job 3	Normally Close	~			
Point 4	Job 4	Normally Close	× 1			
Point 5	Job 5	Normally Close	~			
Point 6	Job 6	Normally Close	~			
Point 7	Job 7	Normally Close	~			
Point 8	Job 8	Normally Close	~			

9. Assign the Outputs for Job indicator as shown below.

PointsBelaviorPointyTimout (sec)Point 1Image: Second Secon	Output Assignment					
Point 1Normally Open0Point 2Alob 2Normally Open0Point 3Image: Alob 3Normally Open0Point 4Image: Alob 3Normally Open0Point 5Image: Alob 5Normally Open0Point 6Image: Alob 5Normally Open0Point 7Image: Alob 5Normally Open0Point 7Image: Alob 5Normally Open0Point 8Image: Alob 5Normally Open0Point 8Image: Alob 5Normally Open0	Points					
Point 2Normally Open0Point 3Job 3Normally Open0Point 4Image: State S	Point 1	Job 1	Normally Open 🗸 🗸	0		
Point 3Job 3Normally Open0Point 4Job 4Normally Open0Point 5Job 5Normally Open0Point 6Job 6Normally Open0Point 7Job 7Normally Open0Point 8Job 6 8Normally Open0	Point 2	Job 2	Normally Open 🗸 🗸 🗸	0		
Point 4Normally Open0Point 5Job 5Normally Open0Point 6Job 6Normally Open0Point 7Job 7Normally Open0Point 8Job 6Normally Open0	Point 3	Job 3	Normally Open 🗸 🗸 🗸	0		
Point 5Normally Open0Point 6Sobi 6Normally Open0Point 7Jobb 7Normally Open0Point 8Jobb 7Normally Open0	Point 4	Job 4	Normally Open 🗸 🗸 🗸	0		
Point 6 Normally Open 0 Point 7 Job 7 Normally Open 0 Point 8 Job 8 Normally Open 0	Point 5	Job 5	Normally Open 🗸 🗸	0		
Point 7 Normally Open 0 Point 8 Job 8 Normally Open 0	Point 6	Job 6	Normally Open 🗸 🗸	0		
Point 8 Job 8 Normally Open V 0	Point 7	Job 7	Normally Open 🗸 🗸	0		
	Point 8	Job 8	Normally Open 🗸 🗸	0		

10. Selecting a bit from the bit tray will select the corresponding Job on the controller.

Programming the Controller for Smart Bit selection

Note: In this mode, the LEDs guide the operator in which bit to pick. This requires Job selection from some other external device, such as discrete inputs, barcode reader, open protocol, fieldbus, etc.

11. On the controller, select the appropriate Job Selection Mode.

r 🐥	(III) Ingersoll kand			
	← Global Settings	н		
	Curve Logging	All		
	Job Selection	External - BCODE / VIN		
	Boot Job	Internal External - MES		
	Queue BCODE / VIN	External - Discrete External - Discrete External - Discrete - Field Bus External - Binary External - Binary - Field Bus		

12. Enable Smart Socket Interlock for each Job.

₹.			
ne		← Edit Job	
•		Job Name	
b List		ID	
Global Settings	_	Interlocks	
		Valid Job	C
-		IIII BCODE / VIN	
s •		Tool Enable	
•		* Smart Socket	

13. Assign a Socket Assignment for each Job.

= ▼ ♣		I hagarsoli Hand	
Home		Edit Job	æ
Job 🔻	dot	Name	test
Job List			1
Global Settings	Inte	rlocks	-
Pset	Psei	rt(s)	÷
Result 🗸		1 test	•
Settings 🗸 🗸		Strategy: Torque Target: 2 Total Steps: 1	
Logs 🗸 🗸		Batch Count	0
Diagnostics 🗸 🗸		Socket Assignment	1 None
Statistics		Kules	1 2 3
System Maintenance 🗸 🗸			4 5
Licer Management			6 7

14. Assign the Inputs for Socket Selection as shown below.

Point 1	Socket 1	Normally Close 🗸 🗸	
Point 2	Socket 2	Normally Close V	
Point 3	Socket 3	Normally Close 🗸	
Point 4	Socket 4	Normally Close 🗸 🗸	
Point 5	Socket 5	Normally Close 🗸	
Point 6	Socket 6	Normally Close 🗸 🗸	
Point 7	Socket 7	Normally Close V	
Point 8	Socket 8	Normally Close	

15. Assign the Outputs for Socket indicators as shown below.

Output Assignment						
Points						
Point 1	Socket 1	Normally Open 🗸 🗸 🗸	0			
Point 2	Socket 2	Normally Open 🗸 🗸 🗸	0			
Point 3	Socket 3	Normally Open 🗸 🗸 🗸	0			
Point 4	Socket 4	Normally Open 🗸 🗸 🗸	0			
Point 5	Socket 5	Normally Open 🗸 🗸	0			
Point 6	Socket 6	Normally Open 🗸 🗸	0			
Point 7	Socket 7	Normally Open 🗸 🗸 🗸	0			
Point 8	Socket 8	Normally Open 🗸 🗸	0			

16. For this case, the Barcode scan selects the Job. The corresponding LED will light on the Bit Tray. The operator will pull the corresponding Bit from the Bit Tray and the tool will run the correct Job.

