

QC20-W COM port profile for Windows 8

Overview

The purpose of this application note is to configure Ballbar 20 software to connect to QC20-W via a Bluetooth device set up as a COM port. This process should only be considered when it is not possible to get a PC to communicate with the QC20-W ballbar using the Microsoft Bluetooth stack, either by the PC's on-board Bluetooth or using a Bluetooth dongle.

If it has not been possible to get the QC20-W to communicate through the Microsoft Bluetooth stack, activate either the internal Bluetooth or connect a Bluetooth dongle before continuing with the following steps.

Note: If using an external Bluetooth dongle, ensure the internal Bluetooth is switched off so that they do not conflict.

Step 1 - Pair the QC20-W with Windows

- 1. Turn on the QC20-W device
- 2. Right click the Bluetooth icon () in the bottom right corner of the taskbar
- 3. Click 'Add a Device'
- 4. The 'Select a Device' screen will be presented.
- 5. Select the QC20-W device (identified by the serial number).



6. An option to enter a 'pairing code' will appear. Enter '0000' and click 'Next'.



7. Return to the Windows desktop.

Step 2 - Configure Renishaw Ballbar 20 software

1. In the bottom right of the task bar, right click the Bluetooth icon ()) and click 'Open settings'.

2. Click the box saying 'Allow bluetooth devices to find this computer', then select 'Apply'.

8	Bluetooth Settings	
Options	COM Ports Hardware	
	overy	
•	Allow Bluetooth devices to find this computer	
4	To protect your privacy, select this check box only when you want a Bluetooth device to find this computer.	
Not	ifications	
-	Alert me when a new Bluetooth device <u>w</u> ants to connect	
	Restore Defaults	
	<u>R</u> estore Defaults	



3. Select the 'COM Ports' tab and make a note of the 'Outgoing' COM port, which in this example is COM9.

8		Blu	etooth Settings	
Options	COM Ports	Hardware	2	
detern		r you need	COM (serial) ports listed below. To I a COM port, read the documentation th device.	
Port	Dir	ection	Name	
COM	110 Inc	oming	9U2614	
CON	19 Ou	Itgoing	9U2614 'QC20-W'	
			A <u>d</u> d <u>R</u> emove	

4. Open the BallbarCatalog.xml file which can be found using the following steps:

 Start > My Computer > System C: > Users > Public > Documents > Renishaw Ballbar 5 > Application

(On some network PC's you may need to subsitute 'Public' for your user name)

- 5. Right click on 'BallbarCatalog.xml' and click 'Edit'.
- 6. Type the following as it appears below after the <BALLBAR_CATALOG> tag:

<BALLBAR ID="QC20-W_NOTSET">

<MODEL>QC20-W</MODEL>

<SERIAL_NUMBER>NOTSET</SERIAL_NUMBER>

<BALLBAR_ADDRESS>COM9</BALLBAR_ADDRESS>

</BALLBAR>

Replacing COM9 in <BALLBAR_ADDRESS> with the outgoing COM port noted previously.

7. Save the .xml file which is produced.

- 8. Start Renishaw Ballbar 20 in Advanced mode and navigate to the Connection screen.
- 9. Select QC20-W from the 'Port' drop down.

X	Renishaw Ballbar 20 Adva	inced	- 🗆 🗙
🚮 Set-up and run a b	oallbar test		ا% @ -
		Radius	CONNECT BALLBAR
Ballbar not connected	Port : COM1 🗸	mm Nominal	Connect the ballbar to the PC. The display will show the ballbar reading, length and serial number.
			If you are using a QC20-W, check that the serial number on the screen matches the one on the unit itself.
			If you are using a QC10, check that the scale factor and serial number are correct before proceeding.
			If the test needs a calibrated length ballbar, fit the ballbar to the length calibrator, as shown. Check the serial number and
			length, and click 🎔 to calibrate.
			If the calibrator serial number is wrong, select the correct one from the drop-down list.
			To continue, click 🔷.
			TIPS

10. Select 'NOTSET' and click 'OK'. A connection to the QC20-W should be established.

1	Renishaw	Ballbar 20	
Select a Ballba	r device		
Known	Ballbars		
NOTSE	T		
Search	. <u>R</u> emove		
		<u>O</u> K	Cancel



11. Select QC20-W from the 'Port' drop down again

×	Renishaw Ballbar 2	0 Advanced	- 🗆 🗙
🚮 Set-up and	run a ballbar test		بي 🕲 -
Ballbar connected	L51.0000	Radius mm Nominal	CONNECT BALLBAR Connect the ballbar to the PC. The display will show the ballbar reading, length and serial number.
Ballbar details Manufacturer Model Serial number	Renishaw QC20-W 9U2614 2012-12-03		If you are using a QC20-W, check that the serial number on the screen matches the one on the unit itself. If you are using a QC10, check that the scale factor and serial number are correct before proceeding. If the test needs a calibrated length ballbar, fit the ballbar to the length calibrator, as shown. Check the serial number and length, and click to calibrate. If the calibrator serial number is
Certificate Numb		\	wrong, select the correct one from the drop-down list. To continue, click . TIPS

12. Select 'NOTSET' and click 'Remove'

•		Renishaw E	Ballbar 20	×
Select a Bal	lbar <mark>dev</mark> i	ce		
Know	/n Ballba	ars		
NOT	SET	9U2614		
Searc	h	<u>R</u> emove		
		Townsho		
			<u>O</u> K	Cancel

13. Select the correct QC20-W by serial number and click 'OK'.

1	Renishaw E	Ballbar 20	×
Select a Ballbar de	evice		
Known Bal 9U2614	lbars		
Search	<u>R</u> emove	QK	Cancel

- 14. The QC20-W should now always connect via COM port.
- 15. To add another QC20-W to Ballbar 20, repeat all steps from the beginning.



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