



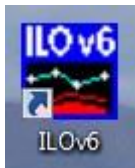
Verification of Echoport function using *USB Echoport Test* application

The USB Echoport Test application runs functional tests to check the performance of a connected Echoport is within the expected range. Instructions for running this test follow:

1. Locate the file USBechoportTest.exe.
This is installed as part of Otodynamics V6 software and so can be found in the directory similar to this:

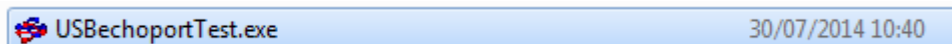
C:\Program Files (x86)\Otodynamics\ILO4win

A shortcut to the directory is to right click on the EZ Screen/V6 icon on the Windows desktop and select 'Open file location'.

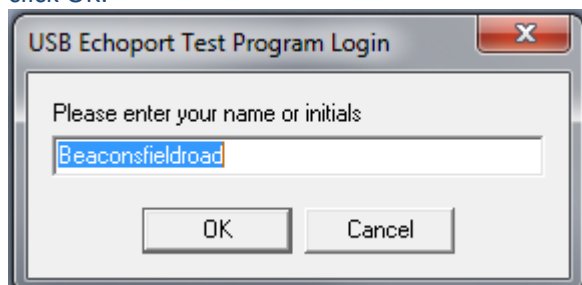


If the application has been distributed to you separately from V6 copy the file *USBechoportTest.exe* to your desktop.

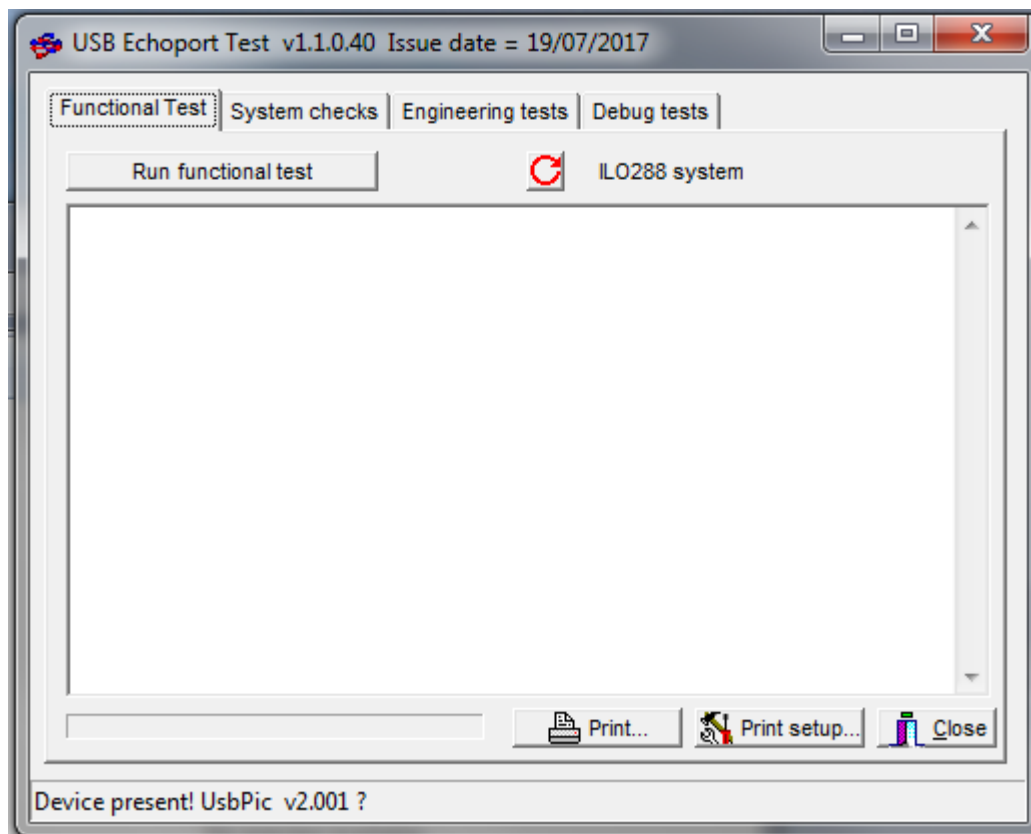
2. Connect your Echoport to a PC on which V6 software has been installed using the cable provided. See the Echoport and V6 user manual for details of installation if your PC does not have V6 already installed.
3. Click on 'USBechoportTest.exe'



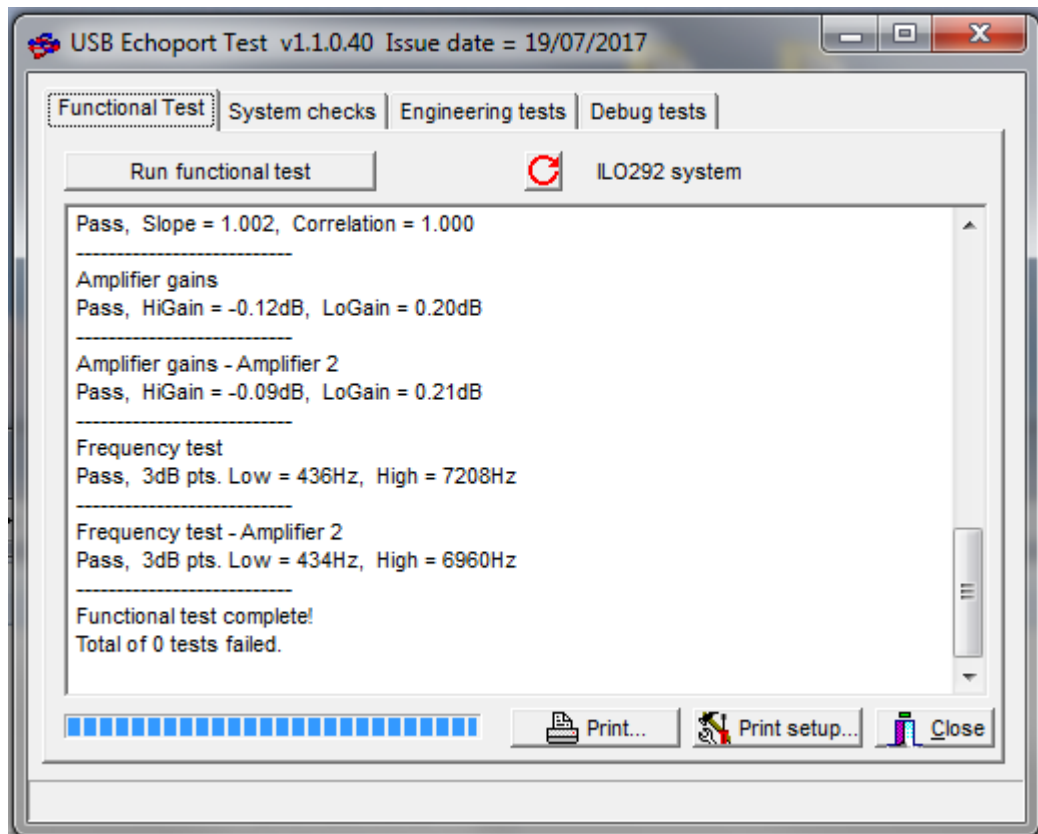
4. Type your name into the login window ('Beaconsfieldroad' is used in the example below), then click OK.



5. Check that the version number displayed at the top of the window is v1.1.0.40 or greater and that the text at the bottom of the window reads *Device present!*



6. From the 'Functional Test' tab, Click on 'Run functional test' (you will be prompted to remove the probe at this point).
7. Allow the test to run, this will take around one minute.



8. Check that the text at the bottom of the test report reads:

Total of 0 tests failed.

9. If any other result is shown copy and paste the results into a document and repeat the test. If the same functional test fails again and contact Otodynamics with the copied test report.

Appendix 1

Example test report:

Functional Test @ 19/07/2017 10:31:25

User = Beaconsfieldroad

ROM ID = 00000019F5D4, EEPROM ID = 00000019F5D4 ManufactureDate = 14/01/2003

TE = Enabled, DP = Enabled, V6=yes, AmpSerialNum = 2074031, PcbSerialNum = 2079014

AssemblersInitials = KG, TestersInitials = SA, PcbIssueNum = 5, EP3/Ser. no. =l@33-----

TEUsageCount = 30, DPUUsageCount = 15, OSType = WinNT, OSVersion = 6.1

ADC noise floor

Pass, peak level = -112.2dB

Amplifier1 noise floor

Pass, peak level = -83.9dB

Amplifier2 noise floor

Pass, peak level = -82.7dB

Amplifier 2 present.

Harmonic distortion measurement

Pass, 2nd Harmonic = -89.7dB, 3rd Harmonic = -85.9dB

Harmonic distortion measurement - Amplifier 2

Pass, 2nd Harmonic = -95.0dB, 3rd Harmonic = -89.7dB

Intermodulation distortion

Pass, 2F1-F2 = -106.2dB

Intermodulation distortion - Amplifier 2

Pass, 2F1-F2 = -97.8dB

Attenuator test

Pass, Slope = 1.001, Correlation = 1.000

Attenuator test - Amplifier 2

Pass, Slope = 1.002, Correlation = 1.000

Amplifier gains

Pass, HiGain = -0.12dB, LoGain = 0.20dB

Amplifier gains - Amplifier 2

Pass, HiGain = -0.10dB, LoGain = 0.21dB

Frequency test

Pass, 3dB pts. Low = 436Hz, High = 7208Hz

Frequency test - Amplifier 2

Pass, 3dB pts. Low = 434Hz, High = 6970Hz

Functional test complete!

Total of 0 tests failed.

DS028 (issue 1)

Otodynamics Ltd

July 2017



0120



Otodynamics Ltd

30-38 Beaconsfield Rd Hatfield Herts AL10 8BB UK

+44 1707 267540 sales@otodynamics.com www.otodynamics.com