ECHOSON

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PINIT - CALIBRATION [*]

The manufacturer recommends to perform calibration process within 12 months. Calibration can be performed any time as you need to be sure that displayed values are correct. Also, it is recommended to carry out the self-test procedure, when a other probe (e.g. after servicing) to the scanner is connected.

The PINIT offers two methods of calibration :

➢ **ECS method -** the **E**cho-Son **C**alibration **S**et model ECS 02 is needed. *(delivered by Echo-Son).*

➢ **SELF-TEST method -** don`t need any additional equipment. This method electronically simulates the spherical object and checks the probe, all electronic systems and software algorithms.

Calibration: ECS method

1. Prepare the Echo-son Calibration Set model ECS 02

   ✓ Wash the container under tap water.

   ✓ Fill the container by distilled or boiled water at room temperature

   ✓ Wait about 30 minutes (venting the water).

   ✓ After calibration remove water from the container, then dry the container

2. Put the ultrasound probe into the hole like on the *Photo1.* Pay attention on green indicators compliance.

Photo1

3. Turn on the system. Press successively : ***Menu => Service => Calibration ECS-02***.

Calibration ECS-02

4. The *Calibration screen* will appear. Press ***Start*** button.

5. Adjust the probe position (rotate the probe) to obtain valid measurement (green line - see *Photo2*)

6. Press ***SCAN*** button on the screen or ***Run/Freeze*** button on the probe

7. Wait until test will be finished.

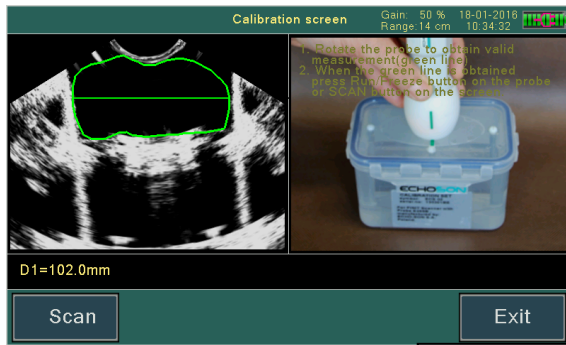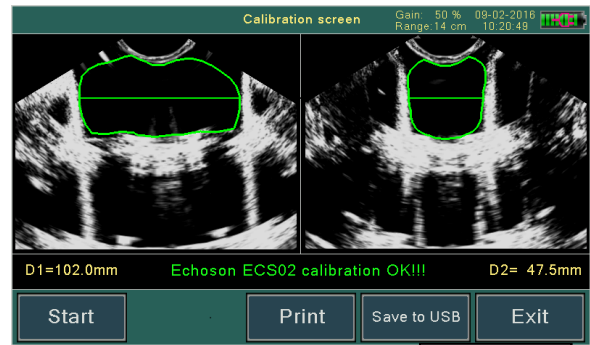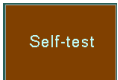[*] calibration means checking correctness of the device's main parameters

Photo2.

Photo3.

8. If the measurements' results are in the allowable range, the message " *Echo-son –ECS02 calibration OK* " appears on the screen. (*Photo 3*). If calibration error is occurred, press the **Start** button on the screen or **Run/Freeze** button on the probe and repeat calibration procedure again. If calibration error still exist, please contact with manufacturer or distributor.

9. You can print calibration results on the printer (**PRINT** button) or save image – calib.bmp, on the external memory (**Save to USB** button).

Calibration: SELF - TEST method

1. Turn on the PINIT. Press successively: **Menu => Service => Self-test** button

2. The image of the test object should appear (*Photo 4*)

3. Wait until test will be finished (green progress bars).

4. If all internal electronic systems work correctly, the message *" Self - test OK "* should appear on the screen. If self-test error is occurred, please contact with manufacturer or distributor.

5. Now, you can print self-test result on the printer (**Print** button) or save image (selftest.bmp) on the external memory (**Save to USB** button).

Photo 4.

Note:

*At the beginning of **Self test** procedure, the probe test procedure is performed. The progress bar on the screen is displayed. The probe test procedure should end up after about 30 seconds*