

### **Powering Up the Unit**

Attach the probe to the unit.

Turn the power switch on and wait for the default screen to appear.

### **Instrument Set-Up**

#### **IOL Set-Up**

- a. From patient screen, input doctor number.
- b. Press the SETUP key (F4).
- c. In the pop-up menu, use cursor keys to highlight "IOL", and then press the SELECT key.
- d. Choose lens type by pressing the SELECT key.
- e. Choose formula by highlighting formulas using cursor keys, and pressing the SELECT key.
- f. Enter IOL Constant by highlighting constant using cursor keys and inputting data.
- g. Repeat steps **d** thru **f**, for IOL #2-#4.
- h. When completed, press OK (F2).
- i. If you wish to save configuration, press the SELECT key for "yes".

#### **Printout Format**

- a. From the patient data screen, press the SETUP key (F4).
- b. In the pop-up menu, "printout" will be highlighted. Press the SELECT key.
- c. A-Scan Waveform: Under OD, "single" will be highlighted. Choose single, all or none by pressing the SELECT key. When desired selection is made, press the ENTER key.
- d. A-Scan Meas Table: Press the SELECT key to choose yes or no to print the measurement table. When desired selection is made, press the ENTER key.
- e. A-Scan Statistics: Press the SELECT key to choose yes or no, to print the statistics. When desired selection is made, press the ENTER key.
- f. IOL Configurations: Press the SELECT key to choose all, none, or single to print configurations. When desired selection is made, press the ENTER key.
- g. IOL/Refractions: Input the number of combinations desired (odd number). When desired number is input, press the ENTER key.
- h. Repeat steps **c** through **g**, for OS.
- i. Press the OK key (F2) when completed.

#### **Patient Data Page**

- a. Input doctor number, press the ENTER key.
- b. Input operator number, press the ENTER key.
- c. Input patient number, press the ENTER key.
- d. Choose OD lens type by pressing the SELECT key. When desired lens type is selected, press the ENTER key.
- e. Input OD K1, press the ENTER key.
- f. Input OD K2, press the ENTER key.
- g. Input desired post-op refraction, press the ENTER key.
- h. Choose axial source by pressing the SELECT key.
- i. If "measure" is selected, press the ENTER key and repeat steps **d** through **h**, for OS.
- j. If "input" is selected, press the ENTER key. Input axial length, and press the ENTER key. Repeat steps **d** through **g** or **h**, for OS.
- k. Press the A-Scan key (F-2) to enter A-Scan mode.

### **Obtain A-Scan Measurements**

- a. Up to 8 measurements can be stored for each eye.
- b. Review measurements by using up and down cursor keys.
- c. Delete any unwanted measurements by pressing the delete key, when the measurement in question is displayed.
- d. When completed with OD, press the CHANGE EYE key (F1).  
Repeat the steps **a** through **d** for OS.

#### **Printing**

- a. If a "single" waveform has been selected, in printout setup, scroll through the measurements on OD until the desired measurement is displayed. Press the PRINT key. When OD printing is complete, press the CHANGE EYE key (F1). Repeat step "a" for OS.
- b. If "all" or "none" waveforms have been selected, in printout setup, press the PRINT key after measurements have been completed. Press the CHANGE EYE key (F1) and repeat for the other eye.

#### **Explanation of Audible Tones**

At the moment of applanation, the unit will start to beep at the rate of approximately two beeps per second. If the probe is in proper alignment, a measurement will be obtained and indicated by three short, successive beeps. If the probe is not in proper alignment, the repetition rate of the beeps will increase as proper alignment is achieved. If the beep rate reaches a constant tone during applanation, corneal compression may be occurring.

#### **Display Messages**

The DGH 5000e provides feedback to the operator in the form of messages on the display. These messages will appear if the operator has not been able to obtain a measurement. An audible tone of three successive beeps will prompt the operator to observe the display.

#### **Manual Gain Control**

If after several attempts, an A-Scan measurement has not been attained the unit can be switched to manual gain mode. Caution must be taken not to obtain measurements with the gain set too high. This can compromise the accuracy of the measurements, and will be displayed on the A-Scan display by an exclamation point (!).

#### **Test Mode**

The DGH 5000e must be placed into a test mode to allow measurement of the calibration block, for calibration verification.

- a. Select "Test Mode" from the pop-up menu.
- b. Apply a small drop of water to the end of the test block.
- c. Applanate the probe tip to the center of the test block.
- d. Observe axial length measurements of 24.10mm plus or minus 0.25mm.

**Corresponding Values for the A-Constant, ACD, & Surgeon Factor**

A-constant	ACD	Surgeon Factor	A-constant	ACD	Surgeon Factor	A-constant	ACD	Surgeon Factor
114.0	2.63	-1.04	116.0	3.80	0.09	118.0	4.97	1.22
114.1	2.69	-0.99	116.1	3.86	0.15	118.1	5.02	1.28
114.2	2.75	-0.93	116.2	3.91	0.20	118.2	5.08	1.34
114.3	2.81	-0.87	116.3	3.97	0.26	118.3	5.14	1.39
114.4	2.86	-0.82	116.4	4.03	0.32	118.4	5.20	1.45
114.5	2.92	-0.76	116.5	4.09	0.37	118.5	5.26	1.51
114.6	2.98	-0.70	116.6	4.15	0.43	118.6	5.32	1.56
114.7	3.04	-0.65	116.7	4.21	0.49	118.7	5.37	1.62
114.8	3.10	-0.59	116.8	4.27	0.54	118.8	5.43	1.68
114.9	3.16	-0.53	116.9	4.32	0.60	118.9	5.49	1.73
115.0	3.21	-0.48	117.0	4.38	0.66	119.0	5.55	1.79
115.1	3.27	-0.42	117.1	4.44	0.71	119.1	5.61	1.85
115.2	3.33	-0.36	117.2	4.50	0.77	119.2	5.67	1.90
115.3	3.39	-0.31	117.3	4.56	0.83	119.3	5.72	1.96
115.4	3.45	-0.25	117.4	4.62	0.88	119.4	5.78	2.02
115.5	3.51	-0.19	117.5	4.67	0.94	119.5	5.84	2.07
115.6	3.56	-0.14	117.6	4.73	1.00	119.6	5.90	2.13
115.7	3.62	-0.08	117.7	4.79	1.05	119.7	5.96	2.19
115.8	3.68	-0.02	117.8	4.85	1.11	119.8	6.02	2.24
115.9	3.74	0.03	117.9	4.91	1.17	119.9	6.07	2.30