EVOM3 Epithelial Volt/Ohm Meter
Quick Start Guide

WORLD PRECISION INSTRUMENTS

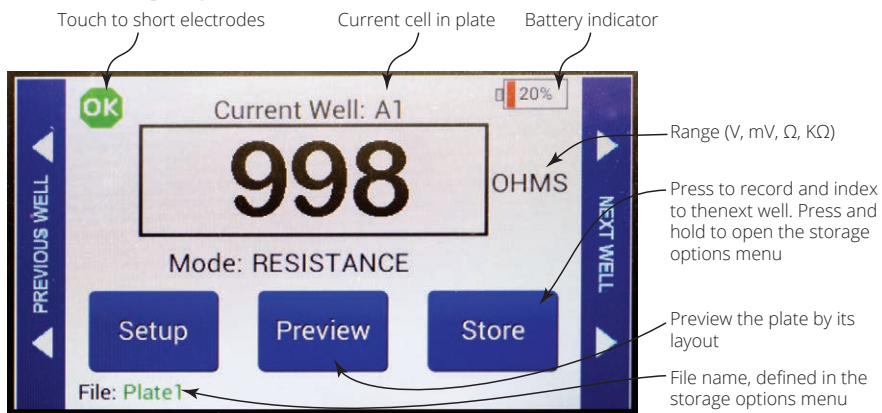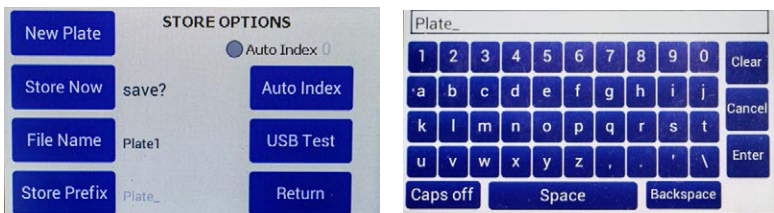*(ABOVE) Back panel showing the foot switch connection on the far left and the power switch on the far right.*

(Right) Side view showing the USB port and the electrode port.

Main Display

Touch to short electrodes　　Current cell in plate　　Battery indicator

Range (V, mV, Ω, KΩ)

Press to record and index to thenext well. Press and hold to open the storage options menu

Preview the plate by its layout

File name, defined in the storage options menu
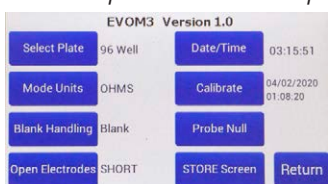
Making Resistance Measurements

1. Power on the **EVOM3** using the power switch on the rear panel.
2. If a filename other than the default (plate1) is required, choose whether you will use a prefix and auto-indexing or a unique file name:
   - Press and hold the *Store* button on the main screen for 2 seconds or press *Store Screen* on the *Setting* screen to configure your stored data files.

   - To use a prefix and auto-indexing, activate the *Auto Index* radio button. Then, press *Store Prefix* to enter a file name. Or, to use a unique file name, deactivate the *Auto Index* radio button. Then, select *File Name* to enter a new name. Press *Clear*.
   - Use the on screen keypad to enter a new name.
   - Press *Enter*.

   NOTE: Auto indexing changes the name to a numeric sequence formatted with the name, a prefix and a sequential number (name_prefixN).

3. Press *Setup* to access the *Setup* menu.

   - **Select Plate**–Choose the plate size.
   - **Select Mode Units** – Choose OHMS or KOHMS for making resistance measurements. Select the resistance range (auto or 10,000 ohms).
   - **Calibrate**–Press Calibrate to calibrate the electrode. (This uses a 10 KΩ and a 50K Ω 0.1% resistor). See "Instrument Diagnostics and Calibration" on page 21.
   - **Blank Handling** – To subtract a blank well (including the fluid and electrode resistances), place the electrode in a blank well and press *Reading*. Press the *Blank Enable* radio button to subtract the blank value.
   - Press *Return* to navigate back to the main menu.
4. Insert a USB drive into the USB port on the side of the **EVOM3** and begin measuring by pressing the foot switch or touching the *Store* button on the screen. Tap the *Next Well* area on the right side of the screen to advance to the next well. Repeat the sampling process.
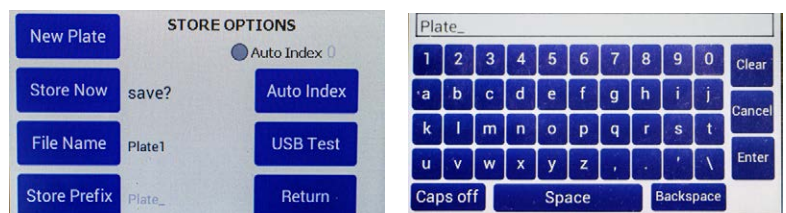5. Once the last well has been recorded, the file storing selection notification appears.

6. Press *Store*. A system message will report if the USB thumb drive is usable, or it will display an error. If the USB thumb drive is not plugged in or it is not recognized, a warning message will appear. Press *Cancel* and try another drive. The *Store* function cannot be used on an unrecognized drive. **EVOM3** should respond with "File saved" within 15 seconds. If "Saving file..." is still seen after 20 seconds, press the *Return* key and use another USB drive. Once a file has been saved, open the file on a computer to verify the contents.

   NOTE: The file saving routine can take up to 15 seconds to complete. See the USB cautions on page 5.

7. Remove the USB thumb drive to transfer the data file to your computer as a CSV file (Excel).
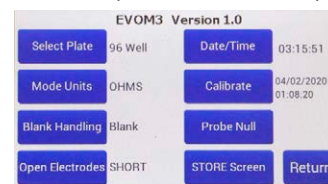
Making Voltage Measurements

1. Power on the **EVOM3** using the power switch on the rear panel.
2. If a filename other than the default (plate1) is required:
   - Press and hold the *Store* button on the main screen for 2 seconds or press *Store Screen* on the *Setting* screen to configure your stored data files.
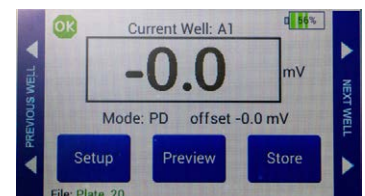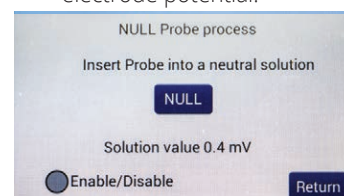

   - To use a prefix and auto-indexing, activate the *Auto Index* radio button. Then, press *Store Prefix* to enter a file name. Or, to use a unique file name, deactivate the *Auto Index* radio button. Then, select *File Name* to enter a new name.
   - Press *Clear*.
   - Use the on screen keypad to enter a new name.
   - Press *Enter*.

   NOTE: Auto indexing changes the name to a numeric sequence formatted with the name, a prefix and a sequential number (name_prefixN).

3. Press *Setup* to access the *Setup* menu.

   - **Select Plate**–Choose the plate size.
   - **Select Mode Units** – Choose volts or millivolts (the normal mode is millivolts).
   - **Electrode Equilibration** – Zero the electrodes' galvanic charge in saline.
   - Press the *Probe Null* button. Push the *NULL* button. Wait for the second message stating "Solution value 0.0" before returning. This action removes any voltage offsets on the electrodes. Then activate the *Enable/Disable* radio button to offset the electrode potential.

4. Insert a USB drive into the USB port on the side of the **EVOM3** and begin measuring by pressing the foot switch or touching the *Store* button on the screen. Tap the *Next Well* area on the right side of the screen to advance to the next well. Repeat the sampling process.
5. Once the last well has been recorded, the file storing selection notification appears.

6. Press *Store*. A system message will report if the USB thumb drive is usable, or it will display an error. If the USB thumb drive is not plugged in or it is not recognized, a warning message will appear. Press *Cancel* and try another drive. The *Store* function cannot be used on an unrecognized drive. **EVOM3** should respond with "File saved" within 15 seconds. If "Saving file..." is still seen after 20 seconds, press the *Return* key and use another USB drive. Once a file has been saved, open the file on a computer to verify the contents.

   NOTE: The file saving routine can take up to 15 seconds to complete. See the USB cautions on page 5.

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Get EVOM3 details!