## For Your Information:

- Depending on availability your device can look different than the one shown in our online-shop or in our YouTube-videos about the Fish8840
- Yet your model has all the features as described in our online-shop and in the YouTube-videos about our modified version with 3 mini-grabber test-leads, 1% precision reference, customized firmware (version 1.12k ATM) for high-precision measurement routines et cetera.
- There normally is still a protective film on the LCD. The LCD becomes more contrasty if you peel it off. Nevertheless the hardware lacks a trimmer for contrast setting. Thereby the LCD is usually well readable only at a certain viewing-angle.
- Connect a 9V alkaline battery to the battery terminals. You can leave the battery permanently attached because the leakage current in power-down mode is negligible.
- You can connect a DUT in 3 different ways:
  - 1. with the mini-grabber test-leads
  - 2. with the ZIF-socket (insert with the little lever down, then put the lever up for contacting the DUT)
  - 3. by connecting it directly with the tinned pads (designed for SMD components)

All connections are labelled with "1", "2" and "3" (the ZIF-socket has of course multiple "1", "2" and "3" connections).

This is important to identify the different terminals of a DUT (like base, emitter, collector at a transistor) which are assigned to the graphic component-symbol in the display.

- The component-tester is already calibrated from us (with the mini-grabber test-leads used to connect the test capacitors and the resistance of the shorted leads).

If you want to recalibrate it by your own you find an explanation in the following YouTube video: <a href="https://youtu.be/rrlWArboxpA">https://youtu.be/rrlWArboxpA</a>

You need one (plastic-film) capacitor with >100nF and one (plastic-film or high-quality ceramic) capacitor from 10...30 nF. The exact values are not important.

Calibration mode is entered by having all three test-leads connected together and pushing the rotary-encoder knob <u>immediately</u> after you are asked if you want to enter calibration-mode.

- To implement the high-precision routines for measuring passive components we had to omit the functionality of the rotary encoder.

(The size of firmware that fits into the used ATMega 328 microcontroller is limited :-)

So only the push-button functionality of the rotary encoder is used as a general switch.

We also had to omit frequency-measurement and square-wave generation for the same reason.

We have concentrated on the best usage of this device as a component-tester.

- The display cyclically flips through 2 (or more) "pages" if not all measured component-values can be displayed on a single page. This is especially true with transistors.
- Turn-On: Push shortly the knob of the rotary encoder. The device makes a short self-test and displays the value of the supply and reference-voltage and then goes automatically into auto-component-identification mode. So you should have connected your DUT before Turn-On.

You can also restart the automatic-identification-routine by shortly pushing the knob again.

- Turn-Off: Auto-Power-Off functionality after some time without any new measurement or manual Turn-Off by pushing the knob for more than 2s.