

SMART TWEEZERS®

MODEL: Colibri ST5C

Measuring with Colibri

- Press the control button to turn on.
- The device powers off automatically if it not operational for 60 seconds.

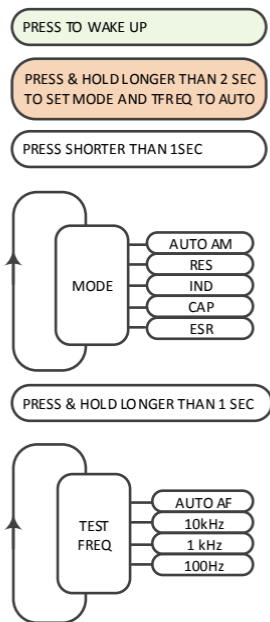
Note: If the frequency is forced to 10KHz the device might not power off automatically.

- To set both test **frequency** and **measurement function** to **AUTO** press button and hold it for about 2 seconds.
AM and AF symbols appear on the display
- To change **measurement function** press button.
- To change **test frequency** press button and hold it for about 1 second

Note: Set C mode and 100Hz to measure **large value capacitors** reliably.

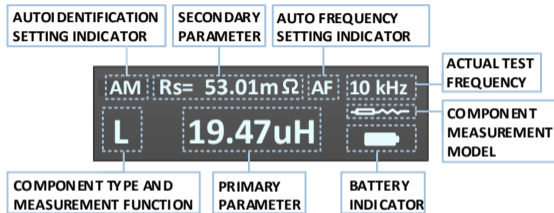
Note: Set L mode and 10KHz to measure **small value inductors** reliably.

Control Diagram



DISCHARGE CAPACITOR BEFORE MEASUREMENTS

Display Layout



Measurement Functions:

AM - auto identification of L, C or R
 L - inductance + resistance
 C - capacitance + resistance
 R - Resistance
 ESR - equivalent series resistance

Test Frequency:

AF - auto selection of the test frequency
 100Hz, 1kHz, 10kHz

Component Measurement Model:

Serial (Rs) or Parallel (Rp)

Specifications

Test frequency: 100Hz, 1kHz, 10kHz

Test signal level: 0.45Vrms, CW

Basic accuracy*: Resistors 0.5% (1% Rx < 1Ω ; 0.5% 1Ω < Rx < 5MΩ ; 1% Rx > 5MΩ)

Capacitors** 1% (5% Cx < 10pF ; 1% 10pF < Cx < 5000μF ; 5% Cx > 5000μF)

Inductance 1% (5% Lx < 10μH ; 1% 10μH < Lx < 500mH ; 5% Lx > 500mH)

Battery life: up to 20 hours of continuous operation

Charge time: up to 3 hours, DC 5V, 50mA

Physical specification: Dimensions 148x20x15 mm,

Weight 29g, Operating temperature 0 - 50C

* optimal test frequency, offset subtracted from the result.

Typical offset for resistance - 0.035 Ohm, for capacitance - 0.3pF

** capacitors with Cx < 5pF can be measured only with manual settings.