5½ digit Multi-Function Calibrator

Features

- Pure Sine wave with variable frequency
- Input supply, Under Voltage and Over Voltage Protection
- Overload and short circuit protection
- Frequency setting by potentiometer
- Separate output ports for V(Hi), mA(Hi), 10A(Hi) & Com
- Parameter & range selection by inbuilt micro-controller based unit and relays.
- Separate output ports for Resistance, Inductance & Capacitance
- Bar of LEDs to indicate parameter & range.
- Calibration of Non-Contact type Tachometer through optical output upto 60,000RPM
- Setting by Decade switches for V/A in 5½ digit

The Multi-Function Calibrator is useful for the calibration of Digital Multimeters, Clamp Meters, Digital Panel Meters, Analog Panel Meters, LCR Meters & Non-Contact Type Tachometers. It is a variable source with different ranges of DC Voltage, AC Voltage, DC Current, AC Current, Frequency, Resistance, Capacitance, Inductance & RPM (Non-Contact Type). It has been designed to calibrate the maximum ranges of a variety of models of multimeters available in the market.

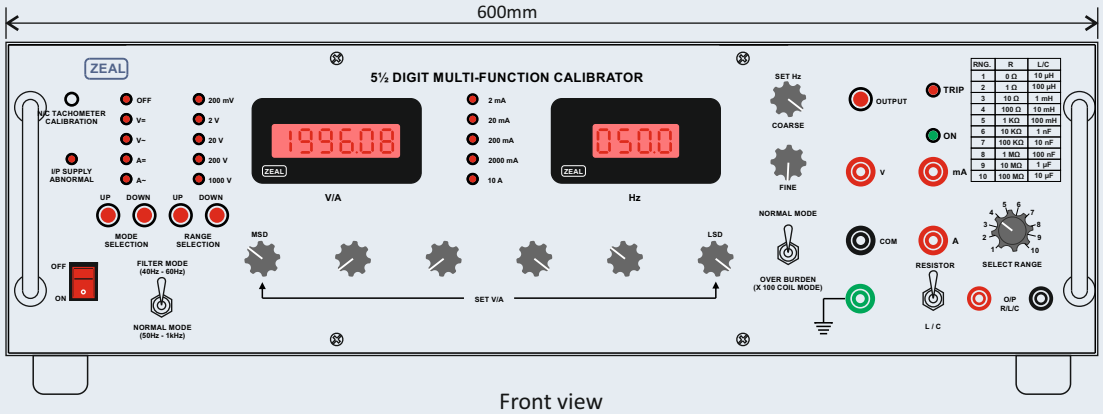
The calibrator gives very stable Output. Stability is suitable enough to calibrate 4½ and 4¾ DMM and Clamp-on Meters. By using this source along with a high-resolution standard Multimeters user can calibrate even 5½ DMM. Calibrator has a micro controller unit, which handles all the parameter selection and range selection logic. Micro controller drives to the set of relays as per the logic program.

Technical Specifications

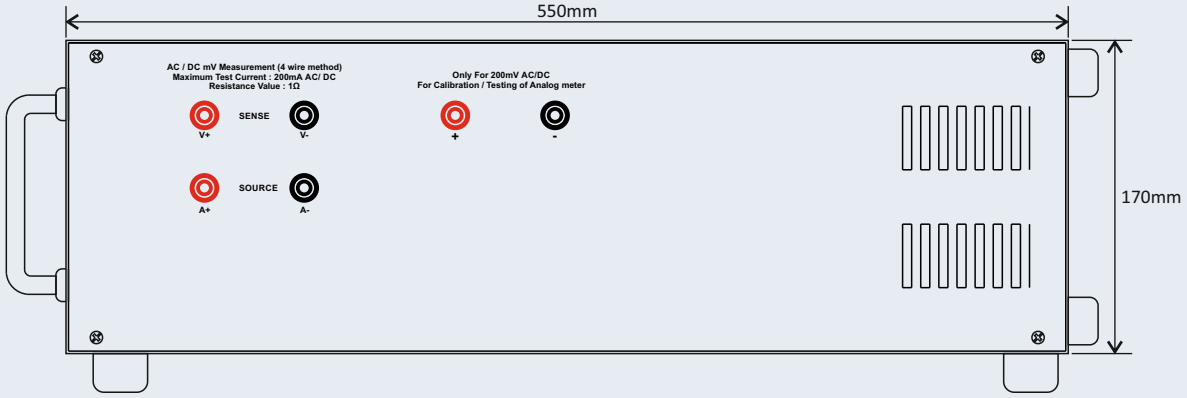
Model	ZMMFC 5.5.2	
Input Power Supply	230 V AC ±5% @ 50 Hz.	
Input Protection	Calibrator is Protected by I/P OV (Over Voltage) & I/P UV (Under Voltage)	
DC Voltage Ranges	200mV, 2V, 20V, 200V, 1000V	
AC Voltage (45Hz to 1kHz) Ranges	200mV, 2V, 20V, 200V, 1000V	
DC Current Ranges	2mA, 20mA, 200mA, 2000mA, 10A	
AC Current (45Hz to 1kHz) Ranges	2mA, 20mA, 200mA, 2000mA, 10A	
Frequency Range	45Hz to 1kHz	
Fixed Resistance	1Ω, 10Ω, 100Ω, 1kΩ, 10kΩ, 100kΩ, 1MΩ, 10Ω, 100MΩ	
Fixed Inductance	10µH, 100µH, 1mH, 10mH, 100mH	
Fixed Capacitance	1nF, 10nF, 100nF, 1µF, 10µF	
RPM Range (Non-Contact Type)	2700 to 60000 RPM	
Accuracy @ 20°C to 28°C, RH <75%	AC Voltage & Current : ± 0.15 % of reading ± 15 digit	
	DC Voltage & Current : ± 0.1 % of reading ± 5 digit	
	Frequency: ± 0.1 Hz	Resistance: ± 0.2 %
	Inductance: ± 2%	Capacitance: ± 2 %
	RPM (Non Contact Type): ± 0.1 % of Reading ± 5 Digit	
Temperature Coefficient/°C above 28°C	+0.01% per °C	

Operating Temperature	15°C to 50°C	
Power OFF Storage Temperature	10°C to 70°C	
Required Earth to Neutral	Less than 1 V AC	
Drift due to ageing	50 PPM per year.	
Short term stability of the set value	350 PPM	
Display	5½ Digit 7 segment red LED display for Voltage & Current	
	4 Digit 7 segment red LED display for Frequency	
Selection of AC/DC Parameters	By up and down keys and bar of LED to indicate selected parameter	
Selection of Ranges	By up and down keys and bar of LED to indicate selected range	
Setting of Voltage & Current	By decade switch	
Setting of Frequency	By multi turn potentiometer	
Frequency Range Selection	By Toggle Switch for Normal Mode: 50Hz to 1 kHz & Filter Mode: 45 Hz to 60 Hz	
R/L/C Mode Seection	By Toggle switch	
Selection of Mode	By Toggle Switch for Normal Mode & Over Burden (X 100 Coil mode)	
Dimension & Weight	600mm(W) X 550mm(D) X 170mm(H)	29kg Approx.

Assembly Overview



Front view



Side view

ZEAL
MANUFACTURING AND CALIBRATION SERVICES PRIVATE LIMITED
(An ISO 9001 : 2015 Company)
MFG OF TEST & MEASURING INSTRUMENTS

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Web: www.zealmfg.com
NABL (ISO/IEC 17025 : 2017) Accredited Lab

TÜV INDIA ISO 9001 Certified
CC - 3385