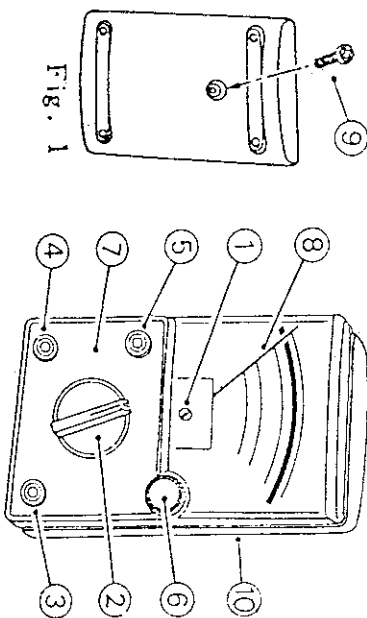




MT—832 MULTITESTER

INSTRUCTION MANUAL

Appearance and parts names



- ① Indicator zero corrector
- ② Range selector switch knob
- ③ Measuring terminal +
- ④ Measuring terminal - OCM (common)
- ⑤ Measuring terminal + 10A-DC MAX
- ⑥ 0 Adjusting knob
- ⑦ Panel
- ⑧ Indicator pointer
- ⑨ Rear case bolt
- ⑩ Rear case

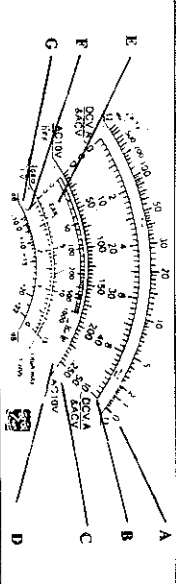
MEASURING RANGES AND PERFORMANCES

Measurement	Measuring range	Accuracy	Remarks
DCV	0-0.1V-0.5-2.5-10V-50V-250V-1000V-(25KV) 25KV with optional Probe	± 3% fs except 25KV	Input im- pedance 20KΩ/V
ACV	0-10V-50V-250V-1000V 30Hz-50Hz ± 1dB 50V or less 50Hz-20KHz ± 3%	± 4% fs	Input im- pedance 9KΩ/V
DCmA	0-50μA-2.5mA-25mA-0.25A -10A 50μA at 0.1VDC position	± 3% fs	Voltage drop 250mV (100mV for 50μA)
Ω	Range $1 \times 10 \times 100 \times 1K \times 10K$ Minimum 0.2 20 200 2K Midscale 20 200 2K 20K 200K Maximum 2K 20K 200K 2M 20M	± 3% of arc	Internal batteries UM - 3 (1.5V) R6 x 2 006P (9V) 6F22 x 1
Continuity	(. . .)		
AF output (dB)	-10dB ~ +22dB(AC 10V) ~ + 62dB ODB = 0.775V (Imthrough 600Ω)	± 4% fs	same as ACV
Leakage current (I _{le}) (1A)	0-150μA at 1K range 0-1.5mA at 100 range 0-15mA at 10 range 0-150mA at 1 range	± 5% of arc	Current flowing across terminals
DC Amp factor (HFE)	Transistor HFE: 0-1000 (in x 10, range)	± 3% of arc	With the use of op- tional probe

- Size and weight: 150 x 100 x 36mm, About 280g.
- Accessories: Test leads I pair, one copy instruction manual.
- Optional accessories: TR connector (HFE 6) HV/probe (HV 10)

REFERENCE TABLE FOR READING

Test	Range Position	Scale to read	Multiplier
DC Volt	DC 0.1V	B 10	x 0.01
	0.5V	B 50	x 0.01
	2.5V	B 250	x 0.01
	10V	B 10	x 1
	50V	B 50	x 1
AC Volt	1000V	B 10	x 100
	10V	C 10	x 1
	50V	B 50	x 1
DC Current	50μA	B 50	x 1
	2.5mA	B 250	x 0.01
	25mA	B 250	x 0.1
Resistance	10K	B 10	x 0.001
	100	A 10	x 1
	1K	A 100	x 10
Decibel	AC 10V	G 10	x 1
	50V	G 100	x 1 + 14dB
	250V	G 1000	x 1 + 28dB
I _{le}	x 1	E 10	x 1
	x 10	E 100	(for big TR)
HFE	x 10	D 10	x 1
	x 1K	E 100	(for small TR)
Diode	x 10	F 10	μA x 10
	x 1	F 100	x 1
	x 10	F 1000	mA x 1
	x 1	F 10000	x 1
	x 1	F 100000	mA x 10



OPERATION

MEASURING RESISTANCE

- ① Plug the test leads into - COM and + sockets.
- ② Place the range selector to a Prescribed range position.
- ③ Short the test leads and turn 0Ω ADJ to set pointer to zero position.
- ④ Make sure that there is no voltage across the circuit to be tested.
- ⑤ Connect the test leads to the tested resistor and read the scale in accordance with the reference table.

MEASURING DCV

- ① Plug the red test lead into the + socket and the black one into the - COM.
- ② Set the range selector to a selected DCV range position.
- ③ Connect the red test lead to the positive polarity of the circuit tested and the black one to the negative.
- ④ Read the DCV A scale referring to the reference table.

MEASURING ACV

- ① Plug the red test lead into the + socket and the black into the - COM socket.
- ② Set the range selector to a chosen ACV range position.
- ③ Connect the test leads to the circuit being tested regardless of the polarities.
- ④ Read ACV scale with reference table.

MEASURING DCA

- Place the red test lead into the + socket and the black into the - COM. Set the range selector at a selected DCA range position.
- Connect the red test lead to the positive polarity of the circuit tested and the black into the negative.
- Read the DCV A scale converted with the reference table.

MEASURING ACV WITH OUTPUT TERMINAL

Plug the red test lead into the OUTPUT socket and the black one into - COM.

Set the range selector at the selected range position. Connect the test leads to the circuit to be tested and read the scale in the same manner as ACV test. Such a measurement is made to block the DC voltage which presents in the same circuit and must be cut out so that AC voltage can be read alone.

CHECKING CONTINUITY WITH BUZZER

Rotate the range selector to ())) position, the meter will actuating as a continuity open - short circuit tester by means of audible signals provided with self contained BUZZER.

When the test probes are connected across any conductors or circuits which has less than 30Ω, the BUZZER generates audible signal, so you can make CONTINUITY CHECK without observing meter scale.

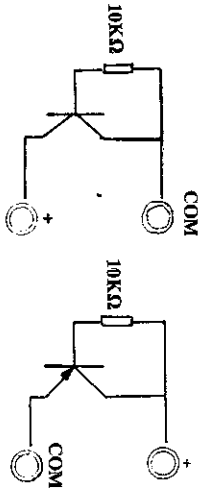
TRANSISTOR TEST

1. Icco (leakage current) TEST.

- ① Plug the test leads into + and - COM sockets.
- ② Set the test leads into + and - COM sockets.
- ③ Adjust 0Ω ADJ to set the pointer to zero position of the Ω scale.
- ④ Connect the transistor with the tester:
For NPN transistor, the "N" terminal of the tester is connected with the COLLECTOR (C) of the transistor and the "P" terminal with the EMITTER (E) of the transistor.
For PNP transistor, reverse the NPN transistor connection.
- 5) Read Icco range. If the pointer is within the LEAK zone or the pointer moves up near to the full scale, the transistor tested is no good. Otherwise, it is a good transistor.

2. hFE (DC amplification) TEST

- (1) Set the range selector to X 10.
- (2) Adjust 0ΩRADJ to adjust the pointer to zero position.
- (3) hFE (DC amplification) test.



For NPN transistor

For PNP transistor.

- (4) Read the hFE scale. The value of the reading is I_c/I_b , which is the DC amplification degree of the transistor tested.

3. DIODE TEST

- (1) Set the range selector at selected range position - X 1K for 0 - 150μA, X 100 for 0 - 1.5mA, X 10 for 0 - 15mA, X 1 for 0 - 150mA test.

- (2) Connect the diode to the tester.

For I_f (forward current) test connect the "N" terminal of the tester to the positive polarity of the diode and the "P" terminal to the negative polarity of the diode. For I_r (reverse current) test, reverse the connection.

- (3) Read I_f or I_r one the LI scale provided.

- (4) Read the linear (forward) voltage of the diode on the LV scale while testing I_f or I_r .

Schematic diagram

