Pocket multimeter on the ICL7106 - wiring sheet (base circuit: datasheet Fig. 1; ranges, switch and ohms circuit: ours)

Pin	Connect	Part (datasheet Fig. 1)
40, 39, 38	OSC 1 - 100 kohm - OSC 2; OSC 2 - 100 pF - OSC 3	R3, C4: about 45 kHz
36 REF HI	to switch pole B common	normally the wiper of R4
35 REF LO	to switch pole C common	normally COMMON
34, 33	0.1 uF between CREF+ and CREF-	C1
32 COMMON	to IN LO (30), the COM lead, the bottom of the divider	
31 IN HI	1 Mohm from switch pole A common; 0.02 uF from pin 31 to COMMON	R5, C5
29 A-Z	0.47 uF from pin 29 to node X	C2 (auto-zero)
28 BUFF	47 kohm from pin 28 to node X	R2 (integrating resistor)
27 INT	0.22 uF from pin 27 to node X	C3 (integrating capacitor)
1 V+, 26 V-	9 V battery + (through the ON-OFF toggle switch) and -	
V+ to COMMON	24 kohm then the 1 kohm trimmer to COMMON; wiper = 100 mV reference	R1, R4
2-25, 21 BP	to the LCD segments and backplane, by your LCD's pinout	

RANGE SWITCH (3 poles, 4 positions)

Position	Pole A -> IN HI	Pole B -> REF HI	Pole C -> REF LO
1: 2 V	divider tap 1 Mohm (9 M | 0.902 M + 0.1 M)	R4 wiper (100 mV)	COMMON
2: 20 V	divider tap 0.1 Mohm	R4 wiper	COMMON
3: 200 mA	top of the 1 ohm shunt (mA lead, 250 mA fuse)	R4 wiper	COMMON
4: 2 kohm	the ohm lead (junction of Rref and Rx)	top of Rref 1 kohm (fed by 22 kohm from V+)	the ohm lead

Four leads: COM (to COMMON), V (top of the 10 Mohm divider), mA (shunt top, through the fuse), ohm (Rref junction, used only on range 4).

Low voltage only: up to 20 V DC and 200 mA. Never connect it to mains or to anything above 20 V.

The decimal point is not wired: read it from the range (2 V: 1.999, 20 V: 19.99, 200 mA: 199.9, 2 kohm: 1.999).