

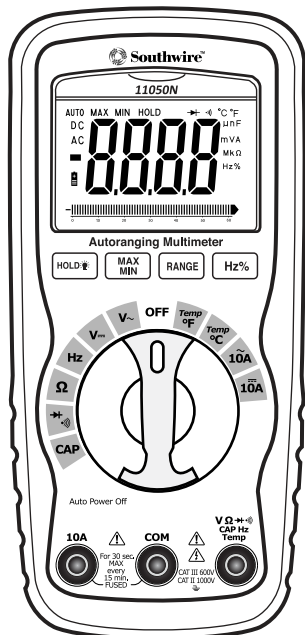


Southwire™

TOOLS & EQUIPMENT

Operating Instructions 11050N AUTORANGING MULTIMETER

Instrucciones de uso
Multímetro de Rango Automático 11050N



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Contents Made in China

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2/15 Rev. 1
11050N manual

Introduction

The Southwire 11050N autoranging multimeter measures AC/DC voltage and current, resistance, capacitance, frequency, duty cycle, and temperature. It also tests diodes, continuity, and non-contact AC voltage. This meter is fully tested and calibrated and, with proper use, will provide many years of reliable service.

WARNINGS


- Read, understand and follow the Safety Rules and Operating Instructions in this manual before using this meter.
- The meter's safety features may not protect the user if not used in accordance to the manufacturer's instructions.
- Ensure that the test leads are fully seated in the input jacks and keep fingers away from the metal probe tips when taking measurements.
- Before changing functions using the rotary function switch, always disconnect the test leads from the circuit under test.
- Use only UL listed test leads with the proper safety category rating.
- Comply with all safety codes. Use approved personal protective equipment when working near live electrical circuits - particularly with regard to arc-flash potential.
- Use caution on live circuits. Voltages above 30 V AC RMS, 42 V AC peak, or 60 V DC pose a shock hazard.
- Do not use meter or test leads if they appear damaged.
- Do not use the meter if it operates incorrectly. Protection may be compromised.
- Verify meter's operation by measuring a known voltage.
- Do not use the meter in wet or damp environments or during electrical storms.
- Do not use the meter near explosive vapors, dust or gasses.

- Do not operate meter while Low Battery warning is on. Replace batteries immediately.
- Do not apply voltage or current that exceeds the meter's maximum rated input limit.

Input Limits

Function	Maximum Input
Voltage AC, Voltage DC	600VDC, 600VAC rms
Amperage DC, Amperage AC	10ADC, 10AAC rms 600VDC, 600VAC
Frequency, Resistance, Diode Test, Continuity, Capacitance	250VDC, 250VAC
Temperature (°F/°C)	250VDC, 250VAC

General Specifications


Insulation:	Class 2, Double insulation.
Overvoltage category	CAT III 600V
Display	6000 counts LCD display with function indication.
Polarity	Automatic, (-) negative polarity indication.
Overrange	"OL" mark indication
Low battery indication	The "  " is displayed when the battery voltage drops below the operating level..
Measurement rate	2 times per second, nominal
Auto power off	Meter automatically shuts down after approx. 30 minutes of inactivity.
Operating environment	32°F to 104°F (0°C to 40°C) at < 80% relative humidity.
Storage temperature	14°F to 140°F (-10°C to 60°C) at < 80% relative humidity.
For inside use, max height	7000ft (2000m)
Pollution degree	2
Battery	One 9V battery, NEDA 1604, IEC 6F22.
Dimensions/Weight	5.9" x 2.8" x 1.9"/0.56lb (150 x 70 x 48mm/255g)
Safety	For indoor use and in accordance with Overvoltage Category III, Pollution Degree 2. Conforms to UL 61010-1 v.2

Operation

HOLD

The hold function freezes the reading in the display. Press the **HOLD**  button momentarily to activate or to exit the **HOLD** function.

DISPLAY BACKLIGHT

Press and hold the **HOLD**  button for >1 second to turn on the display backlight. The backlight will automatically turn off after 10 seconds. The display can also be turned off manually by pressing and holding the **HOLD**  button for >1 second.

MAX/MIN

Note: When using the MAX/MIN function in the Autoranging mode, the meter will “lock” onto the range that is shown on the LCD display when MAX/MIN is activated. If a MAX/MIN reading exceeds that range, an “OL” indicator will be displayed. Select the desired range BEFORE entering the MAX/MIN mode.

1. Press the **MAX/MIN** button to activate the MAX/MIN recording mode. The “**MAX**” indicator will appear on the LCD display. The meter will display and hold the maximum reading and will update only when a new “max” occurs.
2. Press the **MAX/MIN** button again and the “**MIN**” indicator will appear on the LCD display. The meter will display and hold the minimum reading and will update only when a new “min” occurs.
3. To exit MAX/MIN mode press and hold the **MAX/MIN** button for 2 seconds.

Note: MAX/MIN does not work on Capacitance, Frequency or Duty Cycle functions.

AUTORANGING/MANUAL RANGE SELECTION

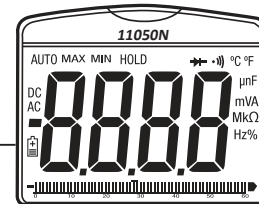
When the meter is first turned on, it automatically goes into Autoranging. This automatically selects the best range for the measurements being made and is generally the best mode for most measurements. For measurement situations requiring that a range be manually selected, perform the following:

1. Press the **RANGE** button. The “**AUTO**” display indicator will turn off.
2. Press the **RANGE** button to step through the available ranges until you select the range you want.
3. To exit the Manual Ranging mode and return to Autoranging, press and hold the **RANGE** button for 2 seconds.

Note: The Range button does not operate in Capacitance, Frequency or Duty Cycle functions.

Operation

Symbols Used on LCD Display



V	Volts
A	Amps
AC	Alternating current
DC	Direct current
-	Minus sign
Ω	Ohms
•)	Continuity
→ ←	Diode test
F	Farads (capacitance)
Hz	Hertz (frequency)
%	Percent (duty cycle)
°F	Degrees Fahrenheit
°C	Degrees Centigrade
AUTO	Autoranging
MAX	Maximum
MIN	Minimum
HOLD	Display hold
	Battery status
n	nano (10 ⁻⁹)
µ	micro (10 ⁻⁶)
m	milli (10 ⁻³)
k	kilo (10 ³)
M	mega (10 ⁶)
OL	Overload