



## SC-340

0.12 mV~60 V, 0.2 mV~100 V, 0.1 ms~2 s, 0.5 Hz~1 MHz

The SC-340 is a signal generator for checking and calibrating the deflection factor, sweep rate, pulse response, and triggering of oscilloscopes with bandwidths up to 100 MHz.

The SC-340 allows users to adjust their oscilloscope for more efficient usage. Not only that, but the SC-340 also allows major adjustments to be performed, making measurements more reliable.

It serves also as a general purpose signal generator.

Adjustment items are as follows:

1. Deflection factor and attenuator compensation (maximum output voltage: 100 V, square-wave: 1kHz)
2. Sweep rate (high accuracy by using a highly stable crystal oscillator)
3. Pulse response (square wave with low distortion)
4. Leading edge of square wave (rise time: 300 ps or less)
5. Trigger checking



## Specifications

### Voltage calibrator (calibrates deflection factor)

**Output voltage :** 0.12 mV ~ 60 V, 18 steps (1.2-3-6)  
0.2 mV ~ 100 V, 18 steps (1-2-5)  
accuracy; within  $\pm 0.5\%$  (into 1 M $\Omega$  load)

**Output waveform :** Square wave

**Polarity :** Positive going from 0 V base line

**Rise time :** 5  $\mu$ s or less

**Waveform distortion :**  $\pm 0.5\%$  or less

**Output R :** 50 $\Omega$  (0.12 mV ~ 0.2 V range)

### Time calibrator (calibrates sweep rate)

**1) Pulse train :** 0.1  $\mu$ s ~ 2s, 23 steps (1-2-5)  
accuracy; within  $\pm 0.05\%$

**Output voltage :** 0.1 V or more (into 50 $\Omega$ )

**Output waveform :** Pulse

**Polarity :** Positive going

**2) HF :** 10 ns, 20 ns  
accuracy; within  $\pm 0.05\%$

**Output voltage :** 0.2 V or more (into 50 $\Omega$ )

**Output waveform :** Sine wave (10 ns), square wave (20 ns)

### Sine-wave generator (checks triggering)

**Frequency :** Line frequency; 50/60 Hz or 1 kHz  $\pm 20\%$

### Waveform calibrator (calibrates pulse response)

**Output waveform :** Square wave

**Rise time :** 5 ns or less

**Output frequency :** 0.5 Hz ~ 1 MHz, 20 steps (1-2-5)

**Output voltage :** Approx. 50 mV (50 $\Omega$  load) min.

### High-speed rise calibrator (calibrates rise of square wave)

**Output waveform :** Oscillation of tunnel diode

**Repetitive frequency :** 10 kHz ~ 200 kHz

**Rise time :** 300 ps or less

**Waveform distortion :** 3% or less (measured with 100 MHz oscilloscope)

### Temperature range for guaranteed accuracy :

+10°C ~ +35°C

### Operating temperature range :

0°C ~ +50°C

### Power supply :

AC 100/117/217/234 V  $\pm 10\%$ , 50/60 Hz, approx. 15 W

### Weight :

Approx. 3.5 kg

### Dimensions :

Approx. 210(W) X 100(H) X 350(L)mm