



INSTRUMENTS OF TOMORROW



ANALOGUE OSCILLOSCOPE OS-5030



Feature:

High luminance, internal graticule CRT
Japanese electronic encoder, light, handy and reliable
Fully sealed long live vertical mode switch
ALT Triggering Function. Two independent signals simultaneous observation
30MHz Dual Channel
10 times sweep magnification
TV Synchronization-Y mode

Specification

Horizontal System

Sweep time: 0.2 μ Sec~0.5Sec/DIV, 20 steps in 1-2-5 sequence;
Sweep time accuracy: $\pm 3\%$
Vernier sweep time control: $\leq 1/2.5$ of panel-indicated value;
Sweep magnification: 10 times;
 $\times 10$ MAG sweep time accuracy: $\pm 5\%$ (20nSec~50nSec are uncalibrated);
Linearity: $\pm 5\%$, $\times 10$ MAG: $\pm 10\%$ (0.2s~1 μ s)
Position shift caused by $\times 10$ MAG: within 2DIV. At CRT screen center

X-Y MODE:

Frequency bandwidth: DC to at least 500KHz;
X-Y phase difference: $\leq 3^\circ$ at DC~50KHz
Sensitivity: Same as vertical axis. (X-axis: CH1 input signal; Y-axis: CH2 input signal.);
CALIBRATION VOLTAGE
Waveform: Positive-going square wave;
Frequency: Approx. 1KHz;

Duty ratio: Within 48:52;
Output voltage: 2Vp-p±2%;
Output impedance: Approx.1KΩ

CALIBRATION SIGNAL

Waveform: Positive-going square wave;
Frequency: Approx. 1KHz;
Duty ratio: Within 48:52;
Output voltage: 2Vp-p±2%;
Output impedance: Approx.1KΩ

CRT

Type: 6-inch rectangular type, internal graticule;
Phosphor:P31;
Acceleration voltage: Approx.2KV(20MHz)/Approx.12kv(40MHz);
Effective screen size:8×10DIV[1DIV=10mm(0.39in)];
Graticule: Internal;
Trace rotation: Provided

VERTICAL AXIS

Sensitivity:5mV~5V/DIV,10 steps in 1-2-5sequence
Sensitivity accuracy:≤3%
Vernier vertical sensitivity: Continuously variable to 1/2.5 or less of panel-indicated value
Frequency bandwidth:
DC~30MHz(x5MAG:DC~7MHz)/DC~40MHz(x5MAG:DC~15MHz)DC~50MHz(X5MAG:DC~15MHz)
AC coupling: Low limit frequency 10Hz. (With reference to 100KHz, 8DIV, Frequency response with-3dB.)
Rise time: Approx.17.5ns (x5 MAG: Approx.50nS) Approx.8.75ns (x5 MAG: Approx.25nS)
Approx.7ns (x5 MAG: Approx.23.3nS)
Input impedance: Approx.1MΩ/Approx.25pF
DC balance shift: 5mV~5V/DIV: ±0.5DIV, 1mV~2mV/DIV ±2.0DIV
Linearity:<±0.1DIV of amplitude change when waveform of 2DIV at graticule center is moved vertically
vertical modes: CH1 single channel; CH2 single channel; DUAL: CH1 and CH2 are displayed
Simultaneously. ALT or CHOP selectable at any sweep at any sweep rate; ADD: CH1+CH2 algebraic
addition
Chopping repetition frequency: Approx. 250KHz
Input coupling: AC, GND, DC
Maximum input voltage: 300Vpeak (AC: frequency 1KHz or lower);
common mode rejection ratio: 50:1 or better at 50KHz sinusoidal wave.
(When sensitivities of Ch1 and Ch2 are set equally)
Isolation between channels (At 5mV/DIV range):
>1000:1 at 50KHz; >30:1 at 15MHz/>30:1 at 35MHz/>30:1 at 45MHz
CH2 INV BAL: Balanced point variation:≤1DIV (Reference at center graticule)

TRIGGERING

Triggering source: CH1,CH2,LINE,EXT
Coupling: AC: 20Hz to full bandwidth
SLOPE:+/-
Sensitivity: 20Hz~2MHz:1DIV, TRIG-ALT:2DIV EXT:200mV; TRIG-ALT:3DIV,EXT:800mV;
2~30MHz:1.5DIV; 30MHz~40MHz:2.5DIV; 40MHz~50MHz:3DIV;
TV: Sync pulse more than 1 DIV (EXT:1V)
Triggering modes: AUTO; NORM: TV-V: TV-H: (Both TV-V and TV-H synchronize only
when the synchronizing signal is negative)
EXT triggering signal input: Input impedance/: Approx:1MΩ/approx.25pF;
Max.input voltage:300V (DC+AC peak), AC: Frequency not higher than 1KHz