

ANALOG 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 magnificationTV Synchronization-Y mode

Specifications

Horizontal System:

Sweep time: 0.2uSec~0.5Sec/DIV,20steps in 1-2-5 sequence;

Sweep time accuracy: ±3%

Vernier sweep time control: ≤1/2.5 of panel-indicated value;

Sweep magnification: 10 times;

×10MAG sweep time accuracy: ±5% (20nSec~50nSec are uncalibrated);

Linearity: $\pm 5\%$, $\times 10$ MAG: $\pm 10\%$ (0.2s ~ 1 us)

Position shift caused by ×10MAG: within 2DIV. At CRT screen center.

X-Y MODE:

Frequency bandwidth: DC to at least 500KHz;

X-Y phase difference: ≤3°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: 8×10 DIV[1DIV=10mm(0.39in)];

Graticule: Internal; Trace rotation: Provided

Vertical Axis

Sensitivity:5mV~5V/DIV,10 steps in 1-2-5 sequence

Sensitivity accuracy: ≤3%

Vernier vertical sensitivity: Continuously variable to 1/2.5 or less of panel-indicated & #118alue 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. $1M\Omega/Approx.25pF$

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: $1M\Omega$ /approx.25pF; Max.input

voltage:300V (DC+AC peak), AC: Frequency not higher than 1KHz