

DC – 200 MHz, 3 CH, 8 traces

- Save/recall of up to 32 panel settings
- Quick auto setup
- Full NTSC, PAL (SECAM), HDTV TV triggering with field and line
- 2 mV/div high sensitivity and 1 ns/div sweep rate
- 5-digits frequency counter
- Cursor function
- 50 mV, 100 mV, 500 mV/div CH3 ranges



Specifications

■ CRT

Shape 6-inch rectangular. internal graticule, meshless CRT with scale illumination

Effective area 8 x 10 div (1 div = 10 mm)

Accelerating voltage Approx. 16 kV

■ Vertical deflection system (Y axis)

Vertical mode CH1, CH2, CH3, ADD (CH1 + CH2)
ALT, CHOP (555 kHz ±1%)

● CH1, CH2

Sensitivity 2 mV/div – 5 V/div (1-2-5 sequence in 11 steps)

Variable adjuster 2 mV/div – 12.5 V/div. continuously variable

Accuracy ±2 %

Frequency bandwidth DC – 200 MHz –3 dB
DC – 50 MHz –3 dB at 2 mV/div
Note: The lower limit frequency is 10 Hz with AC coupling

Bandwidth limiter

Rise time

DC – 20 MHz
Approx. 1.75 ns
Note: Calculated from the following formula

$$Tr = \frac{350}{\text{Bandwidth [MHz]}} \text{ [ns]}$$

Signal delay time

30 ns or more (on the screen)

Input coupling

AC, DC, GND

Input RC

1 MΩ ±1.5% // 20 pF ±2 pF

Max. input voltage

±400 V (DC + AC peak)

Polarity switching

CH2 only

Probe sense

1:1, 10:1, 100:1

● CH3

Sensitivity 50 mV, 100 mV, 500 mV/div

Accuracy

±3%

Frequency bandwidth

DC – 200 MHz, –3 dB

Input coupling

AC, DC

Input RC

1 MΩ ±1.5% // 20 pF ±3 pF

Max. input voltage

±400 V (DC + AC peak)

Probe sense

1:1, 10:1, 100:1

■ Triggering

● A triggering

Trigger mode

Source

Coupling

Slope

Sensitivity

EDGE, TV
VERT, CH1, CH2, CH3, LINE
AC, DC, HF-REJ, LF-REJ
+, –

Frequency	Amplitude
DC – 10 MHz	0.4 div
10 MHz – 100 MHz	1.0 div
100 MHz – 200 MHz	1.5 div

HF-REJ: Attenuates at 10 kHz or more
HF-REJ: Attenuates at 10 kHz or less

● B triggering

Source

Coupling

Slope

Sensitivity

CH1, CH2, CH3
AC, DC, HF-REJ, LF-REJ
+, –

Frequency	Amplitude
DC – 10 MHz	0.4 div
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100 MHz – 200 MHz	1.5 div

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● TV trigger

Format

NTSC, PAL (SECAM), HDTV

Trigger mode

TV-V (ODD, EVEN, BOTH), TV-H

NTSC

5 H – 2000 H

PAL (SECAM),HDTV

2 H – 1997 H

AUTO SETUP

Input channel

CH1, CH2

Frequency range

50 Hz – 50 MHz

■ Horizontal deflection system (X axis)

Display (HORIZ DISPLAY)

A, ALT, B, X-Y

● A sweep

Sweep mode

AUTO NORMAL SINGLE

Sweep rate

10 ns/div – 500 ms/div (1-2-5 sequence in 24 steps)

Max. sweep rate

1 ns/div

Hold-off time

Variable

● B sweep

Delay

TRIG'D DELAY, RUNS AFTER DELAY

Sweep rate

10 ns/div – 5 ms/div (1-2-5 sequence in 18 steps)

Max. sweep rate

1 ns/div

Delay time

Range

0.2 div – 10.2 div of A sweep

Delay jitter

1/20000 at 1 ms/div of A sweep, 500 ns/div of B sweep

● Sweep magnification

■ X-Y operation

● X axis

CH1

Sensitivity

Same as CH1

Accuracy

±4%

Frequency bandwidth

DC – 2 MHz –3 dB

● Y axis

CH1, CH2, CH3, ADD

Phase difference

Within 3° (DC – 200 kHz)

■ CAL (calibration signal)

Waveform

Square wave

Frequency

1 kHz ±0.1%

Duty ratio

49% – 51%

Output voltage

0.6V ±1%

■ Cursor measurement

■ Counter

Time difference (Δt), voltage difference (ΔV)

Accuracy

5-digit (A trigger source)

Frequency range

±0.01%

Save/recall

2 Hz – 100 MHz

Backup time

Max. 32 panel settings

■ Power supply

Approx. 30,000H (at 25°C)

Voltage range

AC 100 V – 120 V, 200 V – 240 V

Frequency range

50 Hz – 400 Hz

Power consumption

Max. 110 VA

Weight and dimensions

Weight

Approx. 7.5 kg (without accessories)

Dimensions

Approx. 272W x 152H x 390L mm

■ Environmental conditions

Performance guaranteed

+10 – +35°C

temperature

Operating range

Temperature

0 – +40°C

Humidity

90% RH (0 – 40°C)

Storage range

Temperature

–20 – +40°C

Humidity

80% RH –20 – +40°C

■ Accessories

Power cord (x1), probe (x2), panel cover (1), fuse (x2), operation manual (x1)