

OSCILLOSCOPES
Digital Read-out Oscilloscope CROMTECH 4325 / 4345

- High sensitivity , up to 1mV/div;
- Use digital plus switch to instead mechanical switch;
- On CRT screen display seven cursor readout parameter;
- Hold-off time adjustable, complex signal sync more stable;
- Have all features with universal oscilloscope.



MODEL	4325	4345
Vertical system		
Deflect ratio	1mV/div-0.5V/div,1-2-5 12steps, ±5% (1mV-2mV±8%)	
Band width	5mv-5V/div DC-20MHz	5mv-5V/div DC-40MHz
	1mv-2mV/div DC-10MHz	1mv-2mV/div DC-15MHz
	AC coupling: (-3dB) 10Hz	
Max input voltage	400V(DC + AC peak) Frequency≤1KHz	
Horizontal System		
Sweep rate	0.1μs/div-0.5s/div,1-2-5 21 steps, ±5% (0°C~40°C)	
Sweep hold off time	Hold off time up to 8 * min sweep stop time, continuous adjustable	
Trig system		
Trig source	CH1, CH2, Line, external	
Slope	+, -	
Trig mode	Auto, normal, single time	
Level lock /alternate trig	50Hz-20MHz 2div, 0.25V	50Hz-40MHz 2div, 0.25V
Max. Input voltage	100V(DC + AC peak)≤1KHz	
X-Y Mode		
Sensitivity	Y:CH2, X:CH1 ±5%; expand ×10±10%	
X Band width	DC-1MHz -3dB	DC-2MHz -3dB
Phrase error	≤3°(DC-5KHz)	≤3°(DC-100KHz)
Z axis		
Frequency range	DC-5MHz	
Input impedance	Approx 5KΩ	
Max. Input voltage	50V(DC + AC peak),Frequency≤1KHz	
Cursor readout		
Cursor readout	ΔV, ΔV%, ΔVdB, ΔT, 1/ΔT,	ΔV, ΔV%, ΔVdB, ΔT, 1/Δ
	DUTY, PHASE	DUTY, PHASE
Control board configuration display	V/DIV, vertical mode, inverse, alt/chop,	V/DIV, vertical mode, inverse, Alt/chop, un-calibrate
	Un-calibrate/ ADD(SUB),×10 expand, Probe (×1×10), X-Y, TIME/DIV, TV-V/H	ADD(SUB), ×10 expand, Probe (×1×10), X-Y, TIME/DIV, TV-V/H
Calibration signal		
Wave form	Rectangular	
Frequency	1KHz±2%	
Amplitude	2Vp-p±2%	
Physical Characteristics		
Power supply	AC 200V±10%	
Frequency	50Hz±4%	
Power consumption	40W	
Dimension & weight	150H×310W×440D(mm) approx 8kg	

OSCILLOSCOPES
Dual time-base Oscilloscope CROMTECH 4320G/ 4340G/ 4360G

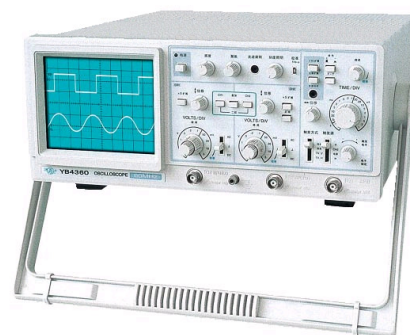
- High sensitivity , up to 1mV/div;
- Use digital code switch instead of original mechanical switch;
- B (delay) sweep can expand any time segment of A sweep (main);
- B sweep zoom display of view signal.



MODEL	4320G	4340G	4360G
Vertical system			
Deflect ratio	1mV/div-5V/div 1-2-5 12 steps, error $\pm 3\%$ (1mV-2mV $\pm 5\%$)		
Bandwidth	5mV-5V/div DC-20MHz	5mV-5V/div DC-40MHz	5mV-5V/div DC-60MHz
	1mV-2mV/div DC-10MHz	1mV-2mV/div DC-15MHz	1mV-2mV/div DC-15MHz
	AC Couple: Min frequency(-3dB) 10Hz		
Max. Input voltage	400V(DC + AC peak)Freq. ≤ 1 kHz		
Horizontal system			
Display mode	A, A enlight. B, B trig		
A Sweep rate	0.1 μ s/div-0.5s/div,1-2-5 21 steps, error $\pm 3\%$		
Sweep Hold off time	up to 8 more than sweep end time, continuous adjustable		
B sweep rate	0.1 μ s/div-5ms/div,1-2-5 12 steps, error $\pm 3\%$		
Delay time	1 μ s/div-5ms/div continuous adjustable		
Trig system			
Trig source	CH1, CH2, Line, External		
Slope	+, -		
Level lock/ trig alternate	50Hz-20MHz, 2div, external 0.25V	50Hz-40MHz, 2div, external 0.25V	
Ext. input impedance	1M $\Omega \pm 2\%$ approx 35pF		
Max. input voltage	100V(DC + AC peak) Frequency ≤ 1 kHz		
B trig	Yes		
X-Y Mode			
Sensitivity	Y CH2, X CH1, error $\pm 5\%$; expand x 10 $\pm 10\%$		
X bandwidth	DC-1MHz -3dB	DC-2MHz -3dB	
Z axis			
Frequency range	DC-5MHz		
Input impedance	Approx 5M Ω		
Max. input voltage	50V(DC + AC peak)Frequency ≤ 1 kHz		
Bandwidth	DC-1MHz		
Calibration			
Wave form	Rectangular		
Frequency	1KHz $\pm 2\%$		
Amplitude	2Vp-p $\pm 2\%$		
Physical Characteristics			
Power supply	AC 220V $\pm 10\%$		
Frequency	50Hz $\pm 4\%$		
Power consumption	40W		
Dimension & weight	150H \times 310W \times 440D(mm) approx 8kg		

OSCILLOSCOPES
Dual Input Four Trace Oscilloscope CROMTECH 4320C/ 4340C/ 4360

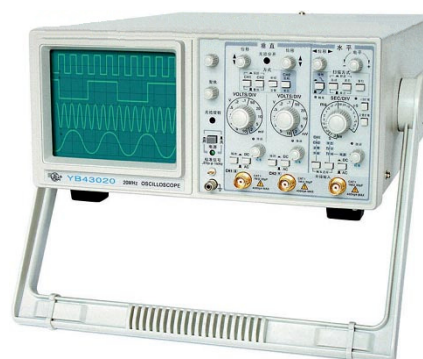
- High sensitivity, upto 1mV/div;
- high light graduation illumination ;
- Alter-mag, x1 and Mag trace can be display alternately , can see two trace per channel
- TV sync , new designed circuit can sync TV-H, TV-V signal stable;
- auto focus;
- trig level lock;
- Mark (YB4340, YB4320A only).



MODEL	4320C	4340C	4360
Vertical system			
Deflect ratio	5mV/div-5V/div, 1-2-5, 10 steps,(range)(1mV/div-1V/div, x5MAG)		
Bandwidth 5mV/div	DC:0-20MHz -3dB	DC:0-40MHz -3dB	DC:0-60MHz -3dB
	AC:10Hz-20MHz -3dB	AC:10Hz-7MHz -3dB	AC:10Hz-7MHz -3dB
Expand bandwidth	DC:0-7MHz -3dB	DC:0-7MHz -3dB	DC:0-7MHz -3dB
	AC:10Hz-7MHz -3dB	AC:10Hz-7MHz -3dB	AC:10Hz-7MHz -3dB
Input impedance	1MΩ±2%, 25pF ±3pF;via probe 10MΩ±5%, approx 17pF		
Max. Input voltage	400V(DC + AC peak)		
Horizontal System			
Display mode	x1, x5; x1, x5 alter	x1, x10; x1, x10 alter.	
Sweep rate	0.1μs/div-0.2s/div±3%,1-2-5 step,20 step		
Sweep expand	20ns/div-40ms/div	10ns-20ms/div	
Alternate Expand	Up to 4 traces		
Trigger System			
Trig source	Internal, CH2, Line, External		
Slope	+,-		
Trig mode	Auto, normal, TV-V, TV-H		
X - Y Mode			
Work mode	X-Y mode, CH1 X alex, CH2 Y alex		
Sensitivity	same as Y axis		
Input impedance	1MΩ±2%/25pF±3pF		
X axis bandwidth	DC-1MHz		
Z axis			
Input impedance	33KΩ		
Max input voltage	50V(DC + AC peak), Max frequency≤1KHz		
Bandwidth	DC-1MHz		
Calibration			
Wave form	Rectangular		
Frequency	1KHz±2%		
Amplitude	0.5Vp-p±2%		
CH1 Output			
Output voltage	≥20mV/div		
Output impedance	Approx 50Ω		
Bandwidth	50Hz-5MHz		
Physical Characteristics			
Power supply	AC 220V ±10%		
Frequency	50Hz±5%		
Power consumption	35W		
Dimension & weight	132H×321W×376D(mm) approx 7.2kg		

OSCILLOSCOPES
Dual Trace Oscilloscope CROMTECH 43020/ 4320B/ 4320D

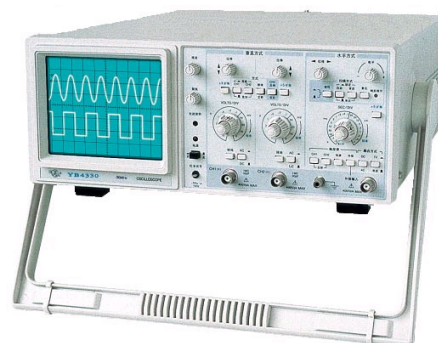
- SMT to improve integration, stabilization and reliability;
- Digital coding switch used in vertical and sweep system;
- Trig auto-sweep in full scale;
- Abundant trig function, ALT trig, Single trig, TV-H, TV-V;
- Trig output, sine 50Hz line signal and Z axis input, non-cal and trig indication and trig lock.



MODEL	43020	4320B	4320D
Vertical system			
Deflect ratio	2mV/div~10V/div	5mV/div~5V/div	2mV/div~10V/div
Band width	DC:0~20MHz -3dB; AC:10Hz~20MHz -3dB		
Input impedance	1±3%MQ//30±5pF(directly) 10±5%MQ//23pF(via probe)		
Max input voltage	400V(DC + AC p-p)		
Horizontal system			
Display mode	Auto, Trig, lock, single time		
Sweep rate	0.1μs/div~0.2s/div	0.1μs/div~0.2s/div	0.1μs/div~10s/div 1-2(2.5)-5
	1-2-5 20 steps ±3%	1-2-5 20steps, ±3%	29 steps, accuracy±3%, "slow"±8%
Expand	× ±5%		
Alternate expand	× ±5%	none	×5 ±5%
Trig system			
Trig source	CH1, CH2, alter, Line, external		
Couple	AC/DC(Ext)Normal/TV-V, TV-H		
Slope	+, -		
Max input voltage	400V(DC + AC p-p)		
X-Y Mode			
Input signal	X axis:CH1 Y axis:CH2		
Deflect ratio	CH1		
Frequency response	AC:10Hz~1MHz -3dB; DC:0~1MHz -3dB		
Z axis			
Max input voltage	50V(DC + AC p-p)		
Input impedance	10kΩ		
Input slope	Lower level to enlight		
Frequency range	DC~5Mz		
Calibration Signal			
Wave form	Rectangular		
Frequency	1KHz±1%		
Amplitude	0.5Vpp±1%		
Physical Characteristics			
Power supply	AC220V±10% or 110V±10% 50Hz±5%		
Power consumption	Approx 35VA		
Dimension & weight	130H×285W×385D(mm) 约6.5kg		

OSCILLOSCOPES
Dual Trace Oscilloscope CROMTECH 4328 / 4330

- Auto sweep circuit in full frequency bandwidth in trigger system;
- Flexible trig mode to select one signal or external input signal trig;
- Alt trig function to observe two different signal synchronized;
- Trig output and output the signal of CH1 or CH2 ;
- TV-V, TV-H (Only for YB43280)



MODEL	4328	4330
Vertical System		
Deflect ratio	5mV/div-10V/div 1-2-5 11steps,±5%	
Expand multiple	×5±10%	
Work mode	Y1, Y2, alt, chop, ADD, X-Y	
Band width	AC:10Hz-20MHz -3dB	AC:10Hz-30MHz -3dB
	DC:0-20MHz -3dB	DC:0-30MHz -3dB
Band width(expanded)	AC:10Hz-5MHz, -3dB;	
	DC:0-5MHz, -3dB	
Input impedance	1±2%MΩ//≤30pF(direct);10±5%MΩ//≤23pF(via probe)	
Max input voltage	400V(DC + AC p-p)	
Horizontal System		
Display mode	Auto, Trig, Lock, Single	
Sweep rate	0.1μs/div~0.2s/div 1-2-5 20setup, ±5%	
Expand	×5 ±10%	
Trig System		
Trig source	Y1, Y2, alternate, Line, External	
Coupling	AC/DC(external), Normal/TV	
Slope	+, -	
Sync frequency	Auto:50Hz~20MHz	Auto:50Hz~30MHz
XY Mode		
Input signal	X: Y1 Y: Y2	
Deflect ratio	Same as Y1	
Frequency response	AC:10Hz-1MHz -3dB; DC:0~1MHz -3dB	
Z Axis System		
Input impedance	Same as Y1	
Max input	Same as Y1	
Max. input	50V(DC + AC p-p)	
Input impedance	10KΩ	
Frequency range	DC~5MHz	
Calibrate Signal		
Wave form	Rectangular	
Amplitude	0.5Vp-p±2%	
Frequency	1KHz±2%	
Physical Characteristics		
Power supply	AC 200V±10%	
Frequency	50Hz±5%	
Power consumption	Approx 35VA	
Dimension & weight	130H×320W×400D(mm) approx 7.2kg	

OSCILLOSCOPES
Dual Trace Oscilloscope – CROMTECH 43020F / 43020BF / 4328F


MODEL	43020F	43020BF	4328F
Vertical system			
Deflect ratio	2mV/div~10V/div	5mV/div~5V/div	5mV/div~10V/div 1-2-5, 11 steps, ±3%, ×5 ±5%
Bandwidth	DC:0~20MHz -3dB; AC:10Hz~20MHz -3dB		
Bandwidth (Expanded)			AC:10Hz~5MHz -3dB, DC:0~5MHz -3dB
Input impedance	1±3%MΩ//30±5pF(direct)	1±5%MΩ//≤30pF(direct)	
	10±5%MΩ//23pF(via probe)	10±5%MΩ//≤23pF(via probe)	
Max voltage	400V(DC + AC p-p)		
Horizontal system			
Display mode	Auto, trig, lock, single time		
Sweep rate	0.1μs/div~0.2s/div, 1-2-5 20 steps, ±3%	0.1μs/div~0.2s/div, 1-2-5 20 steps, ±3%	
Expand	×5 ±5%		
Alternate expand	×5 ±5%	None	
Trig system			
Trig source	CH1, CH2, alternate, Line, External		
Couple	AC/DC(Ext)Normal/TV-V, TV-H		
Slope	+, -		
Max input voltage	400V(DC + AC p-p)		
Sync. frequency	Auto: 50Hz~20MHz		
X-Y Mode			
Signal input	X axis: CH1 Y axis: CH2		
Deflect ratio	Same as CH1		
Frequency response	AC:10Hz~1MHz -3dB DC:0~1MHz -3dB		
Z axis			
Max input voltage	50V(DC + AC p-p)		
Input impedance	10KΩ		
Input slope	Low level to enlight		
Frequency	DC~5MHz		
Calibration signal			
Wave form	Rectangular		
Frequency	1KHz±1%		
Amplitude	0.5Vp-p±1%		
Physical Characteristics			
Power supply	AC 220V ±10% or 100V±10%		
Frequency	50Hz±5%		
Power consumption	Approx 35VA		
Dimension & weight	130H×285W×385D(mm) approx 6.5kg		

CROMTECH INDIA

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