

Programmable Video Pattern Generator



Programmable Video Pattern Generator

MODEL: 2226/2326

(For LCD & Digital CRT Monitor)

Compact in design and fully field-tested, Chroma Model 2226 / 2326 meets the trend of extremely demanding CRT monitor industry where every pixel of monitor is critical in the Hi-Tech word. Chroma Model 2226/ 2326 offers the most cost-effective solution in production test, repair, service and application for CRT and LCD monitor industry.

The Chroma Model 2226 / 2326 series are programmable, microprocessor-based instrument for testing high resolution CRT or monitor, display monitor, projectors, and video printers. The instrument is capable of generating sophisticated video graphic display with 256 colors selection on every pixel. All horizontal and vertical timing parameters are fully programmable in one-pixel resolution. It supports the analog RGB and TMDS video outputs for the testing need of both LCD and CRT monitor. Manufacturers of monitors, projectors, and video printers can use the video pattern generators for design characterization, engineering, incoming inspection, production testing, and product demonstration.

The instrument provides a high integration digital CRT or LCD monitor testing. With a full DVI single link bandwidth of 25-165 MHz, the instrument supports resolutions up to SXGA (1280 x 1024) at 85Hz refresh, or UXGA (1600 x 1200) at 60Hz refresh.

The Chroma Model 2226 has built-in software to let the user recall and edit test application of different video frequencies, video levels, timing parameters, patterns, and colors. In test application, the user can program and display various timing/pattern combinations on the monitor in an automatic sequencing mode or in a manual control mode. The screen drawing, including blinking function and motion picture, makes you operate more easily and friendly. The instrument can be operated using the front panel keypad or from the remote controller via RS-232C.

The Chroma Model 2326 is designed to generate video graphic patterns and timing formats which has been programmed into a memory card from PC or any Chroma 2226 series video pattern generators. Also, the operation can be programmed and controlled from PC through RS-232C interface.

MODEL 2226/2326

Analog 250 MHz

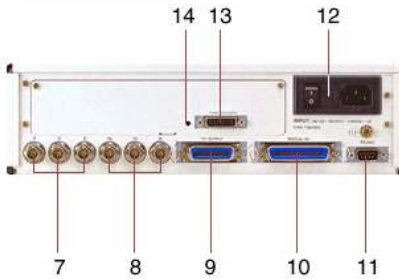
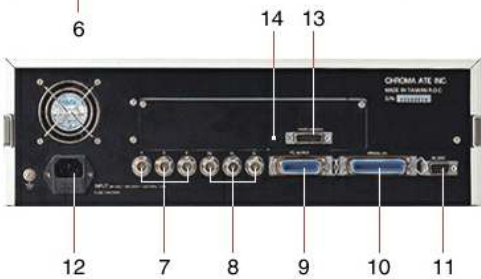
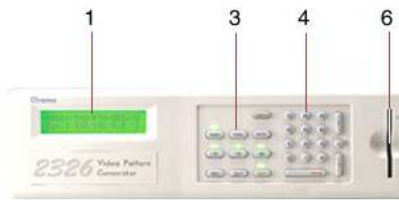
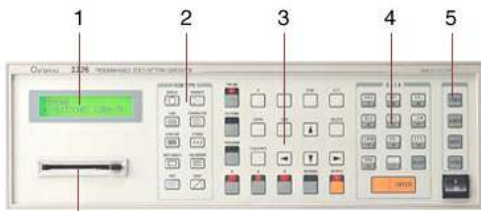
Digital 165 MHz

Key Features :

- Analog video pixel rate up to 250 MHz
- Support DFP interface standards up to 165 MHz
- Large graphic display size up to 4096x 2048 (option)
- All timing parameters are fully programmable in one-pixel resolution
- Satisfactory color display performance up to 256 colors
- Natural picture for total color balance check
- Factory-installed standard pattern and timing library
- Screen drawing includes blinking and motion picture function
- DDC2B communication pin embedded in DVI connector
- Power saving mode test capability
- Optional memory card expansion for unlimited data storage
- RS-232C interface
- ESD protection circuit
- 16-bit TTL output ports for external control
- CE marking



Chroma



Chroma Model 2226

Chroma Model 2326

1. LCD Display
2. Icon Keys : For icon type selection
3. Function Key : Timing & pattern
4. Alphanumeric Keys : For data input
5. Config key : General information setting
6. Memory Card : For storage memory expansion
7. Analog Signal Output R.G.B.
8. Sync Output
9. TTL Output
10. I / O Port
11. RS-232C Interface
12. AC Input
13. DVI Output
14. TMDS Output Voltage Swing Adjust

SPECIFICATIONS

Model	2226 / 2326	
	PIXEL RATE	
Range	(Analog) 3.126-250 MHz (Digital) 25-165 MHz	
Resolution	1Hz	
Ferquency accuracy	25ppm(typical), 1ppm(after calibration)	
	GRAPHIC DISPLAY	
	2048 X 2048,4096 X 2048 (optional)	
Scan Mode	Non-interlace / Interlace Video & Sync	
	ANALOG OUTPUT	
VideoOutput		
Color	256 colors (1- pixel resolution)	
Video	R 、 G 、 B (75 ohms loading) Level 0 ~ 1.0 V programmable Resolution 0.37 mV	
Sync on Green	On / Off programmable Level 0 ~ 0.5 V programmable Resolution 0.156 mV	
White	Level 0 ~ 1.2 V programmable Resolution 0.66 mV	
Black Level	7.5/0 IRE programmable	
Rise/Fall time	1.6 nS (typical), 2.0nS (maximun)	
Video & Sync Phase Shift	(0pixel-8nS)	
Separate Sync		
	Hs , Vs , Xs (Xs can be Hs , Vs , composite Sync) (TTL level)	
	HORIZONTAL TIMING	
Total Pixels	Width	128 - 8192 pixels
	Resolution	1 pixel
Sync	Width	16 - 8191 pixels
	Resolution	1 pixel
	Position	Leading edge in blanking period
	VERTICAL TIMING	
Total Pixels	Width	6-4096 lines(non-interlace) 6- 2047 lines(interlace)
	Resolution	1 line
Sync	Width	1-4095 lines(non-interlace) 1-2046 lines(interlace)
	Resolution	1 line
	Position	Leading edge in blanking period
	TTL OUTPUT	
Pixel Rate Range	3.126-80.000MHz	
Video	RGBrgb, RGB,MONO	
Color	64 colors	
Video & Syna Phase Shift	+4nS	
Sync	Hs , Vs , Xs (Xs can be Hs , Vs , composite Sync)	

DVI Output

Pixel Rate Range : 25-165MHz (TMDS)
3.126-250MHz (Analog)

DDC2B: Read and Write to smart monitor

Composite Sync

H+V, H Exclusive OR V, RS-343A

Waveform with Equalization & Serration Pulse

Data Storage Device

Flash Memory (Read only)	100 timings +100 patterns
NVRAM (R / W)	300 timings +100 patterns +100 programs
Memory Card (R / W)	Unlimited data storage
Disk on PC (R / W)	Unlimited data storage

User interface

LCD, Keypad, Remote (optional), 16 output bits, RS232C

AC INPUT

90-132 V / 180-250 V, 47-63Hz, Auto Range

Temperature

Operation +5~+40 deg .C
Storage -20~+60 deg . C

HUMIDITY

20-90%

DIMENSION (W x H x D)

2226	2326
430 x 133 x 380 mm	318 x 100 x 320 mm
16.9 x 5.2 x 15 inch	12.5 x 3.9 x 12.6 inch

WHIGHT

2226	2326
8.3Kg / 18.29 lbs	4.5Kg / 9.92 lbs

All specifications are subject to change without notice.

Developed and Manufactured by:

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