VG51C

FLAT PANEL DISPLAY INSTRUMENTS

FPD TEST SIGNAL GENERATOR

General

The VG51C is a digital signal generator designed for flat panel displays (FPDs). It is equipped with parallel RGB output and low-voltage digital serial output (as an option) for digital interfaces used in display equipment such as LCDs and PDPs, and supports high resolution of UXGA and above.

Features

● Supports a wealth of timings as well as parallel RGB output and digital serial output formats (TMDS, LVDS, GVIF).
● Outputs a large number of signal patterns provided as standard. In addition, user-created natural pictures and patterns can be read from a Compact Flash (CF) card and output.
● Parallel output of RGB at 8 bits per signal from 5 to 200 MHz (5 to 100 MHz during single link, 10 to 200 MHz during dual link) supports dot clock.
● Equipped with marker display, screen scrolling, text character superimposition functions, and flicker functions.

Specifications

● Type of outputs
・Parallel output
　Standards conformance
　　　　　　　Shibasoku original
　Dot clock frequency
　　　　　　　5 to 100 MHz (single link)
　　　　　　　10 to 200 MHz (dual link)
　Data format　　　R/G/B, 8 bits each
　Transmission sync signals
　　　　　　　HS, VS, DE, CLK
　Outputs level　　3.3, 5 V (selectable)
　Connector type　Half-pitch 68 pins
　Number of outputs
　　　　　　　1(2)
　Other features　HS/VS/DE polarity reversal, CLK phase adjustment, bit shift, DE control

・TMDS format (options)
　Standards conformance
　　　　　　　DDWG DVI Revision 1.0
　Dot clock frequency
　　　　　　　25 to 165 MHz
　Data format　　　R/G/B, 8 bits each
　Outputs level　　500 mV differential output
　Connector type　DVI 29 pins (analog output not supported)
　Number of outputs
　　　　　　　1
　Other features　Bit shift
・LVDS format (options)
　Standards conformance
　　　　　　　JEIDA digital monitor interface standards Ver.1.0
　Dot clock frequency
　　　　　　　32.5 to 112 MHz (single link)
　　　　　　　65 to 224 MHz (dual link)
　Data format　　　R/G/B, 8 bits each
　Outputs level　　345 mV differential output
　Connector type　MDR 36 pins
　Number of outputs
　　　　　　　1
　Other features　Bit shift
・GVIF format (options)
　Standards conformance
　　　　　　　Shibasoku original
　Dot clock frequency
　　　　　　　8 to 42 MHz (signal link)
　Data format　　　R/G/B, 8 bits each
　Outputs level　　400 mV differential output
　Connector type　VG51A0D02:MX-U8-2PH × 1
　　　　　　　VG51A0D03:MX-U8-2PH × 1
　　　　　　　　　　C2956-MX-U5-7PL-B5 × 1
　Number of outputs
　　　　　　　2
　Other features　Output ON/OFF, bit shift,DE control

●Other Features
・Marker cursor function

Marker cursor can be displayed at any position within the effective screen (while control box is in use, can be moved using arrow keys).

・Scrolling function
  Scroll directions Up, Down, Right, Left, Up+Right, Up+Left, Down+Right, Down+Left
  Frame steps 1, 2, 4, 8, 16, 32, 64 frames selectable
  Amount of scroll movement
  0 to 16 dots/line in both H and V directions
・Character function Characters can be displayed in ASCII code
・Flicker function
  Flicker mode POSI/NEGA, BLACK, WHITE, USER
  Flicker frame rate 1 to 128 frame (1 frame step)
・Memory function Main unit status can be stored in 4 groups of 100 items.
  100 statuses can be saved to or loaded from memory card as 1 sequence (SEQ). High-speed status switching is possible in sequence units using high-speed memory card.

●Image memory
・Total image memory
  4 k x 8 k x 24 bits
  (Max. display size: 4096 dots x 4000 lines)

●Others
・Card interface For Type I CF memory card
・RS-232C interface D-sub 9 pins female
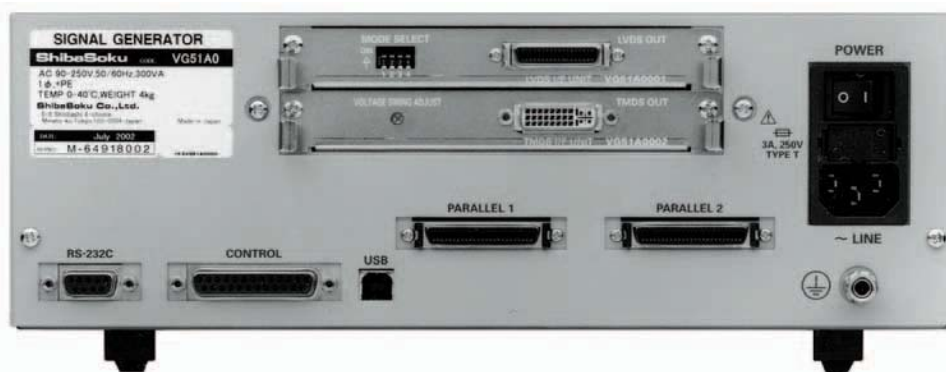・Control / remote box interface
  D-sub 25 pins female

●Test signals

Color	Raster	Stair step
Window	Check	Crosshatch
Dot	Circle	Burst
ROM	CF	Block

●Options
  VG51A0001 LVDS output unit
  VG51A0002 TMDS output unit
  VG51A0D02 GVIF output unit
  VG51A0D03 GVIF output unit
  VG51A0004 Control box
  VG51A0005 Remote box

●General specifications
  Power supply AC 90 to 250 V, 50/60 Hz
  Operating temperature range
    0℃ to 40℃
  Relative humidity 25% to 90%RH (non-dewing)
  Dimensions 300 (W) x 100 (H) x 270 (D) mm
  Weight Approx. 4 kg
  Accessories Power cord   x 1
    3P-2P adapter   x 1
    User's manual   x 1
    Remote control software (CD-R)   x 1
    Cable with D-sub 9 pins connector x 1

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