Programmable Video Signal Generator

VG-849C / VG-849C-A

Further evolutionary changes unveil a new generation of video signal generators. HDMI TV dedicated VG-849C arrives!

Arrival of the latest TV system equipped with HDMI 1.3a (not including SACD) output.
VG-849C is the most significant analog/digital output type programmable video signal generator. Supports analog RGB/YPbPr signal switching and conforms to HDTV system timing. SDTV standard signals like NTSC/PAL/SECAM are also supported. Standard unit offers TMDS signal digital output with added HDCP function. Dual link output (to 300MHz) is possible with custom modification. Can support an ultra-high-density display surpassing QXGA (2048 × 1536). Internal 450 sample programs are easy to be recalled. HDMI (High-Definition Multimedia Interface:EIA/CEA-861D, interface standards for next generation TV).

Features

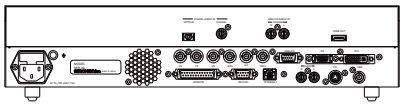
- **Wideband Dot Clock**
  A Dot clock with 5 - 300 MHz analog output, 25 - 300 MHz (DVI dual link) * 25-225MHz HDMI output supports a wide range including broadband. 1KHz accuracy allows more precise settings.
- **HDMI 1.3a supported**
  HDMI function is provided for transmitting high-resolution (HDTV) video and multi-channel audio without compression that could result in quality deterioration.
  Complies with "HDCP (High-bandwidth Digital Contents Protection), " with AV-MUTE ON/OFF function.
  The latest HDM1 standard 1.3a supported.
- **Ethernet adopted for outside interface**
  Ethernet and RS-232C have been adopted for external interface. By supporting Ethernet, the signal generator is now capable of performing batch control of multiple VG units.
- **CEC control function**
  CEC (Consumer Electronics Control) command simulation function supported.
- **Equipped with scroll and simple animation imaging functions**
  Equipped with a 1-dot level horizontal and vertical display pattern scroll function. It can also be used to store multiple animation images with respect to resolution and display them by moving a display start coordinate control.
- **Editing via PC Card is possible**
- **Corresponding full color output**
- **It corresponds to closed caption, teletext, V chip, and macro vision as an option.**
- **Supports next generation audio (standard for VG-849C-A)**
  Capable of generating test signals for the following: next generation audio (Blu-Ray disc and HD-DVD applications) Dolby TrueHD, Dolby Digital Plus, DTS-HD Master Audio, and DTS-HD High Resolution Audio, as well as DSD (One Bit Audio) applied in SACD.
- **Next generation audio digital input (option for VG-849C-A)**
  Using 12S × 4ch input, this option can output Dolby TrueHD, Dolby Digital Plus, DTS-HD Master Audio, DTS-HD High Resolution Audio in HDMI.
- **HDMI 1.3a Deep color(10/12 bit) mode supported 1024/4096 level ramp pattern for testing 10/12 bit supported as an option.**
- **HDMI 1.3a xvYcc, Lipsync test function**

specifications

Output specifications	**Dot clock frequency/step**	Analog : 5 to 300MHz / 1KHz steps
		DIgital DVI : 25 to 165MHz (pixel clock : 25 to 165MHz) / 1KHz steps
		Digital HDMI : 25 to 165MHz / 1KHz steps (Transmission rate 225MHz)
	Horizontal frequency / dot	10 to 300KHz (Max. 8192 dot) 1 dot accuracy for full range (Analog output only)
	Vertical frequency / line	15.6 to 200Hz (Max. 8192 lines)
	Video memory	HDMI : 4k × 4k × 36 bits (RGB 12 bit each) Analog / DVI : 4k × 4k × 24 bits (RGB 8 bit each)
Analog output (BNC, Dsub-15, D5-terminal, DVI-I)	**Output signal**	R • G • B/Y • R-Y • B-Y • HS • VS • CS
	Video peak level	0.3 to 1.2V (75Ω)
	Setup level	0 to 0.25V (75Ω)
	Video On Sync Level	0 to 0.6V (75Ω) (0 to ±0.6V at trilevel output)
	Sync Level(HS, VS, CS)	HS.VS : More than 2V (75Ω) CS : 0.3V (±0.3V at trilevel output) (75Ω)
	Scan Mode	Interlace, Non-interlace
	NTSC/PAL/SECAM	Composite, S-Video(S1, S2), SCART(Optional) (Timing and Level are fixed)
		Vchip, Closed Caption, Teletext, Macro vision(optional)
	Output	Video : OFF/R • G • B/Y • R-Y • B-Y Sync : OFF/bilevel/trilevel
HDMI output	**Output Mode**	RGB/YCbCr4:4:4 8, 10, 12bit YCbCr4:2:2 8, 10, 12bit
	Internal Audio	8ch(Sinusoidal mono-sound, Sweep)
	External input audio	Digital : COAX, TOSLINK Analog : 2ch
	Audio Sampling Frequency	32 to 192KHz (max, 8ch)
	Version	HDMI Ver.1.3a
	Optional Audio	Dolby TrueHD, Dolby Digital Plus, Dolby Digital, DTS-HD Master Audio, DTS-HD High Resolution Audio, DTS Digital Surround, DSD (max8ch)
DVI Digital Output		Single Link RGB 8-bit each, HDCP supporting
Analog Audio Output		RCA connector × 2ch 0 to 20KHz (Sinusoidal mono-sound, Sweep)
Optional Audio Output		I2S × 4ch (TTLlevel)
Data Storage Device	**PC card(ATA)**	Compact Flash
Control Interface		RS232C, 10/100BASE-T/TX, Remote BOX
General specifications	**Voltage**	AC100 to 120V / AC200 to 240V 50/60Hz
	Power consumption	Max. 80W
	Operating temperature range	+5 to 40°C
	Operating humidity range	30 to 80% RH (no condensation)
	Dimensions	430(W) × 88(H) × 350(D) mm (excluding projected parts)
	Weight	Approx. 4kg

* DVI output supports up to 300 MHz by purpose-built modification. However, no HDCP function is available.

Rear View **VG-849C**



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