# quantumdata

# VIDEO TEST GENERATORS

# Mobile. Versatile. Affordable.

If you're testing digital or analog computer monitors, video projectors, multi-media monitors, broadcast displays or TVs, the 700A Series video test generators provide the signals, test p atterns, and audio to do your job, easily and accurately.

Field technicians and factory people on the move will appreciate the convenience of battery power and small size. The 700A Series is designed to go where you go.





## KEY FEATURES + BENEFITS

analog and digital video signals Output VESA, NTSC, PAL, HDTV, DVI, and SDI/HDSDI (701A) signals.

custom formats Create your own video formats.

compact size The 700A series units are truly handhelds.

**battery operation** Use rechargeable batteries or AC power.

HDCP (optional) HDCP production keys available

service center patterns The patterns used by most service centers are built-in.

circles Use circle patterns to test linearity.

learn monitor Read the supported formats from the monitor, without guessing formats.

**built-in audio** Test audio channels of video projectors and multimedia monitors.

video generator manager MS Windows-based user interface for creating formats and test sequences.

custom test sequence Define sequences of images and video formats for repetitive testing.

affordable Low-cost and versatile test solution.

easy firmware updates Install product updates yourself in the field.

intuitive user interface Easy to navigate drill-down menus.

**leverage existing formats** Use formats created for QD's 80x and 882 generators.

user calibration Calibrate the 700A Series yourself to save time and money.

700A/701

# **APPLICATION TESTS**

Storage	126 total
Built-in	VESA, DVI, NTSC/PAL, HDTV/SDTV-
	RGB, HDTV/SDTV-YPbPr
Edit method	MS Windows-based Video
	Generator Manager (VGM)
Compatibility	QD 801, 802, 60x formats
Images	
<b>Images</b> Standard	
	Flat_Wht, Flat_Red, Flat_Grm, Flat_
	Flat_Wht, Flat_Red, Flat_Grn, Flat_ Blu, Grid, Rev_Grid, Overscan (with
	_ / _ / _ / _
	Blu, Grid, Rev_Grid, Overscan (with
	Blu, Grid, Rev_Grid, Overscan (with circles), Raster (no video), Cutoff,

	-			
Test	Se	an	en	ce

Colors displayed

Gray levels

lear dequeille	
Storage	100 steps
Edit method	VGM
Parameters	Format, image, duration (0.1 sec. to 24 hours)

16

16

#### **Horizontal Timing**

Frequency	1 KHz - 250 KHz
Total pixels	144 to 4096
Active range	16 to 4096 pixels

#### **Vertical Timing**

Frequency	1 Hz - 650 Hz
Active lines	1 - 4096
Sync types	Separate, digital/analog composite
Scan types	Progressive, interlace, HDTV

# SPECIFICATION

Video	Outputs
ועם	

DVI	
Connector	DVI-I dual link
Links	Single link 25MHz-85MHz
Encoding	RGB (4:4:4 with 8-bits/component)
TMDS differential swing	150–1560 mVp-p (programmable)

### **Analog Component**

Connector	DVI-I
Color encoding	RGB, YPbPr
Pixel rate	13.5–148.5 MHz

# **Analog Composite**

Connectors	BNC, Mini DIN-4
Interface	CVBS (BNC) and S-Video
Encoding	NTSC and PAL
Sample rate	24.55–29.50 MHz
Pixel rate	12.27–14.75 MHz
Pixel aspect ratio	Standard or square
Swing	1000 mVp-p fixed w/programmable
	calibration
Calibration	Self-calibration with internal reference

#### SDI / HD-SDI (Optional)

Connector	BNC 75 ohm
Links	Single
Bit stream	1.485 Gb/s and 1.485/1.001 Gb/s
Encoding	4:2:2
Bits/component	10-bits/component
Sampling mode	YCbCr
Signal swing	800mV
Standards	SDI - SMPTE 259M;
	HD-SDI - SMPTE 292M-C

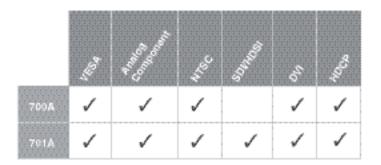
## Audio Output

Signals	Two channels
Frequency	1 KHz (left), 2 KHz (right) tone
Connector	Mini phone jack, stereo

# 700A/701A

Disalari	00 4 4 4 4 00
Display	20 x 4 character LCD
	with backlight
Controls	Intuitive drill-down menus
Computer Port	
Туре	RS-232C, 9 pin D-Sub receptacle
Purpose	Copy formats and firmware
	updates from PC
Color Sensor Support	
Description	Display data from a QD CS-1
	color sensor for white
	balance adjustment.
	and display the manufacturer's
	supported formate
Version	supported formats DDC-2B (read only)
Version Power	
Power	DDC-2B (read only)
Power DC	6 AA NiMh batteries included 8 hours between charges
<b>Power</b> DC Battery life	6 AA NiMh batteries included 8 hours between charges with NiMh
Power DC Battery life AC	6 AA NiMh batteries included 8 hours between charges with NiMh Charger/generator power sup-
Power DC Battery life AC Charge time	6 AA NiMh batteries included 8 hours between charges with NiMh Charger/generator power sup- ply
Power DC Battery life AC Charge time Frequency	6 AA NiMh batteries included 8 hours between charges with NiMh Charger/generator power sup- ply 8 hours
Power DC Battery life AC Charge time Frequency	6 AA NiMh batteries included 8 hours between charges with NiMh Charger/generator power sup- ply 8 hours 50 to 60 Hz
Power DC Battery life AC Charge time Frequency Voltage	6 AA NiMh batteries included 8 hours between charges with NiMh Charger/generator power sup- ply 8 hours 50 to 60 Hz

0120		
Unpacked	6 x 8.25 x 2 in.	



Size

Specifications are based on hardware and firmware revisions available as of March 2014, and are subject to change without notice.

Revised 03/24/14