The VG-828D programmable video signal generator is equipped with a full range of output facilities including RGB analog outputs, 8-bit (max.) parallel RGB digital outputs, low-voltage serial digital (Panel Link or LVDS) outputs, and NTSC / PAL outputs. Distinguish signal corresponding to D-connector output is newly added. Even color difference signals and tri-level sync signal are supported for the analog outputs. The software program, which is supported by Windows and which is provided as a standard accessory, facilitates the setting and registration of timing and pattern data, and it supports functions to enable user to create the special pattern data of their choice and register natural images. Full-color bitmap displays with 16.77 million colors can be displayed. HDCP function is supported. With a large variety of output facilities, the VG-828D can provide outputs for any kind of displays whether CRT, LCD or PDP, making it ideal for a great many applications in the technology development departments which are working with video-related equipment as well as on production lines and in inspection and maintenance operations.

**Features**

**All-in-one model**
The integrated design of the generator enables a wide range of output facilities, including analog outputs, parallel digital outputs, serial digital outputs and NTSC/PAL outputs.

**Dot clock signals in a wide frequency range**
This model supports dot clock signals in a wide frequency range of 5-250 MHz for analog outputs and 5-100 MHz in the 1/1 output mode and 10-200 MHz in the 1/2 output mode for digital parallel outputs.

**Color difference signals and tri-level sync signals supported**
Analog outputs can be switched between RGB signals and color difference signals at their respective timings. The user can edit and set the preferred color difference coefficient for the color difference signals. Furthermore, the generator can output tri-level sync signals complying with the set timing as video sync signals and CS signals. The separate sync signals can be individually turned ON or OFF.

**D-connector output supported**
Distinguish signal output of effective scanning lines I/P Aspect is supported. By using optional D-connector cable, it is possible to convert video signals (color difference signals) and connector type to D-connector.

**Full-color output supported**
Full-color displays in 16.77 million colors can be provided.

**Enhanced degree of pattern setting and scroll function added**
A function for scrolling in 1-dot increments vertically and horizontally has been added to compliment the conventional basic inspection patterns. (Full-screen scrolling up to 2048 x 2048 dots is possible.) By using the software program which is supported by Windows and which is provided as a standard accessory, the program data can be edited and registered and signals can be controlled using a personal computer. A function enabling users to create the special patterns of their choice and the registration of natural image is also supported. These features are powerful tools for the development and assessment of the next-generation displays and for the generation of special patterns which are invaluable for automatic equipment.

**HDCP function is Supported**
DVI output is equipped with HDCP function for contents protection. (supports test key and product key)

**Wide range of functions**
The sync signals can be set ON or OFF manually using a panel key. Output video levels can be varied in real time. Timing data and pattern data can be independently selected. External control interfaces include RS-232C as well as a USB interface. Program data can be listed on the DUT (Display Under Test). Group display and auto display functions are supported.
Astrodesign’s VG-800 series of programmable video signal generators are very flexible video signal sources that enable users to set the video timings and create the test patterns of their choice. With complete freedom, they enable the generation of not only the video timings of existing systems such as NTSC, PAL and HDTV but also any video signals to suit the displays of personal computers and work stations with video standards whose specifications differ totally from one manufacturer to another. The model VG-828D generator can be used in a whole host of applications including the testing, adjustment and inspection of computer displays as well as experimentation, research and development, and in uses ranging from the development of such items as video equipment, multimedia devices and medical-use video equipment to their production, servicing and maintenance. It’s a product that is absolutely indispensable for workplaces with video-related equipment. Productivity can be significantly improved using just one generator.

The VG-828D proves to be invaluable:
- For conducting tests, adjustments and inspections on production lines
- As a signal source for the research and development of video equipment
- For maintenance and servicing conducted on the premises of users
- For the acceptance inspections of imported products and the performance assessments of products to be exported

With compliments
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Restrictions:
- The analog output and C5 output Tr/Tf specifications differ from the BTA and SMPTE standards for HDTV.
- The analog output and C5 output Tr/Tf specifications differ from the NTSC standards.
- The tri-level sync signal is set in 4-dot increments.
- The VS signal is output based on the vertical reference phase point.
- The level setting for the tri-level sync signal which is added to the video signals is subject to the following restriction:
  - (Video level) (Sync level). Furthermore, the amplitude level of the positive polarity sync output is coupled with the negative polarity sync output level.
- The color difference signals and RGB signals cannot be output at the same time.
- NTSC/PAL output is OFF except at the estimated timing.
- With NTSC/PAL, the 1:1 mode is fixed for the parallel output.
- Spiral output board upgrades being available in the future: 170MHz LVDS (NSDS90C387) / 260MHz DVI Dual (SiI164) / Analog + Digital DVI-I / etc...

Please ask our sales distributors for the status accordingly.