

SPG-4102

Graphics Generator

The SPG-4102 is a modular graphics generator. It is used in i-MOD platform. The module can accept 2 analog audio inputs and converts them to digital audio signals, and inserts them to the 2 generated SDI outputs. 2 additional CVBS outputs are provided for monitoring.

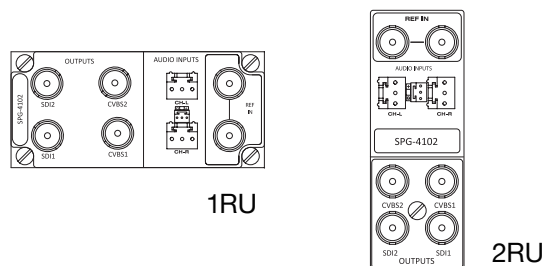
The SPG-4102 can provide static-frame image in case of emergency, for example loss of main signals or repair of main signal source. The outputs can be synchronized with the external reference video signals. The static images are stored in an independent SD card. The SD card is mounted on the module and the module can load static-frame images. Up to 16 images can be stored in the SD card for 4 pages. Each page contains 4 images. The module can upload the latest-used image when powered up.

The SPG-4102 can be controlled locally by means of an intuitive card-edge interface or remotely using i-MOD platform control software IM-MASTER.

FEATURES

- Supports SMPTE 259M-C, 270Mbps
- Supports SMPTE 272M
- Frame sync to external reference signals
- Non-volatile memory
- Hot-swappable
- IM-MASTER control supported

BACK MODULES



SPECIFICATIONS

Specifications are subject to change without notice.

REF VIDEO INPUT

Signal Format.....CVBS
Standards.....PAL, NTSC
Connector.....BNC (x2)

AUDIO INPUT

Signal Format.....Balanced analog audio
Connector.....3Pin (x2)
Level.....+20 dB (Max.)
Impedance.....>20 kΩ

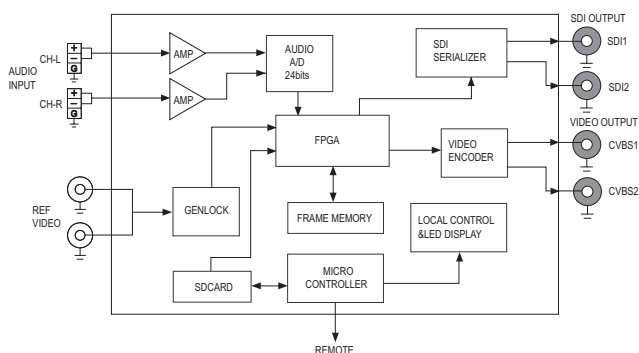
DIGITAL VIDEO OUTPUT

Signal Format.....SMPTE-259M-C, 270 Mbps,
525/625 component
Connector.....BNC (x2)
Impedance.....75 Ω
Return Loss.....>15 dB @ 270 MHz
Amplitude.....800 mVp-p ±10%
Jitter.....<0.2 UI
Rise/Fall Time.....400~1500 ps(20%~80% of amplitude)
Overshoot.....<10% of amplitude

ANALOG VIDEO OUTPUT

Signal Format.....CVBS
Standards.....PAL, NTSC
Quantization.....8 bits
Connector.....BNC (x2)
Impedance.....75 Ω

BLOCK DIAGRAM



Return Loss.....>40 dB @ 6 MHz
Chr/Lum Delay Diff.....<5 ns
S/N Ratio.....>80 dB @ 6 MHz

ELECTRICAL

Power.....3 W

ENVIRONMENTAL

Operating Temperature.....32° ~ 104° F (0° ~ 40° C)
Relative Humidity.....10% ~ 90%