

MicroVideo

SBG 300 side bar generator

Features

The SBG 300 is a dedicated side bar generator which is designed for use where 4:3 feeds are transmitted in a 16:9 signal path, but the original aspect ratio is required. For instance; sports feeds, regional traffic and weather reports (which often rely on external camera feeds).

The SBG 300 can be used in conjunction with other Microvideo products such as Logo generators, to insert advertising and information into the side bars or seamless switches to switch between multiple 4:3 streams (i.e. Weather/Traffic remote feeds)

The SBG 300 has the ability to provide side bars (left, right or split left and right) and has Key and Fill inputs to use with external graphics generator.

Microvideo propriety algorithms provides smooth, tear free, continuous horizontal compression, the unit also passes embedded audio and VBI/VANC/HANC data.

The SBG 300 has a built in WSS decoder so changes between 16:9 and 4:3 feeds can be automatically accommodated.

As with all Microvideo equipment the SBG 200 is relay protected to ensure the signal path is maintained even in the event of power loss.



At a glance

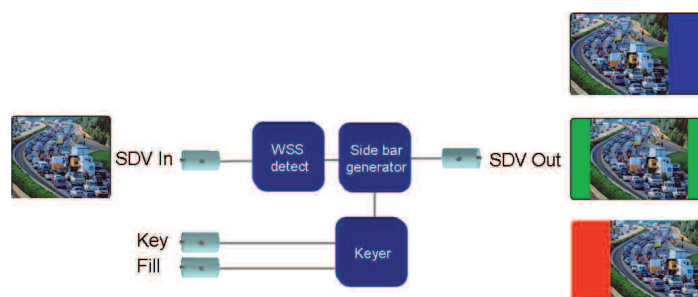
- HD-SDI or SD-SDI input
- 1 program input
- Key/Fill input for external graphics
- User adjustable bar width
- Automatic reading of incoming WSS
- Relay bypass maintains primary feed on loss of power
- Full control and status monitoring through card edge LED's
- Remote control and monitoring



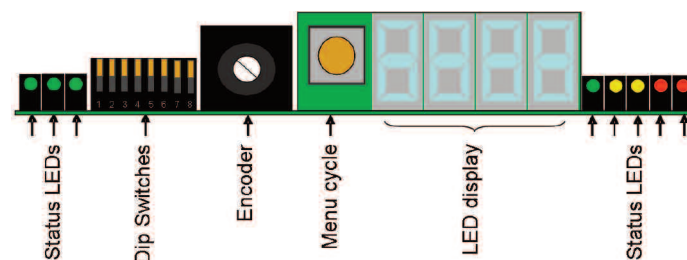
Applications

- 4:3 sports transmission
- Weather/Traffic feeds

Block Diagram



Card-edge Controls



Rear module



Input

| | |
|-----------------------------|---|
| SD/HD Serial Video Standard | SMPTE 425M (3Gb/s) SMPTE 259M (270Mb/s) SMPTE 292M (1.5Gb/s) up to 1080p/60 |
| Number of Inputs | 3, Program, Key, Fill |
| Equalization | Automatic to 75m @ 1.5Gb/s with Belden 1694A or equivalent cable. |
| Return Loss | > 10dB up to 3Gb/s, >15dB up to 1.5Gb/s |

Output

| | |
|--------------------------|---|
| HD Serial Video Standard | As per input |
| Number of Outputs | 2 (1 relay bypass protected, 1 broadcast quality monitoring output) |
| Signal Level | 800mV nominal |
| DC Offset | 0V \pm 0.5V |
| Rise and Fall Time | 90ps nominal for HD 3Gb/s, 600ps nominal for SD 270Mb/s |
| Overshoot | < 10% of amplitude |
| Return Loss | > 10dB up to 3Gb/s, > 15dB up to 1.5Gb/s |
| Wideband Jitter | < 0.2UI |

Miscellaneous

| | |
|----------------|---------------------------|
| Weight Approx | 175g |
| Operating Temp | 0 °C to +50 °C ambient |
| Dimensions | 16 x 100 x 237 mm (HxWxD) |
| Electrical | Voltage +5Vdc |

Frames

| | |
|---------|--|
| FR1U-10 | Rack mounting 1U frame with single PSU and 6 slots for Series 300 cards |
| FR10-20 | Rack mounting 1U frame with dual PSU and 4 slots for Series 300 cards |
| FR3U-10 | Rack mounting 3U frame with single PSU and 15 slots for Series 300 cards |
| FR3U-20 | Rack mounting 3U frame with dual PSU and 15 slots for Series 300 cards |