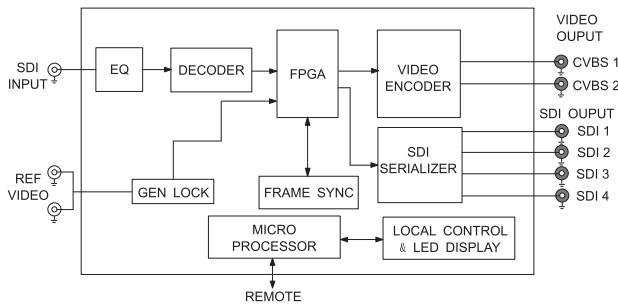


The DVF-2102 is a SDI frame synchronizer. It is used in i-MOD platform. The module accepts 1 SDI input and provides 4 SDI outputs genlocked to external reference input signals. 2 CVBS outputs are provided for monitoring. Continuous H/V phase adjustment is available. Equalizing is up to 656 ft (200 m).

The DVF-2102 can be controlled locally by means of an intuitive card-edge interface or remotely using i-MOD platform control software IM-MASTER.

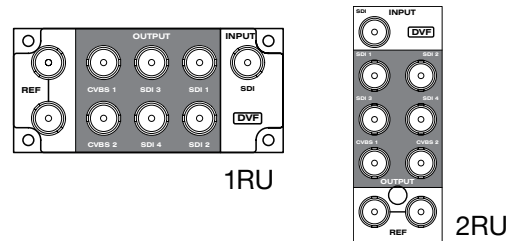
## BLOCK DIAGRAM



## FEATURES

- Supports SMPTE 259M-C, 525/625 component inputs
- 10-bit processing
- Reference video input, hi-z loop-thru supported
- Output frame sync and H/V phase adjustment available
- Auto alignment of H/V phase
- 2 CVBS outputs for monitoring
- Equalizing up to 656 ft (200 m)
- Non-volatile memory
- Hot-swappable
- IM-MASTER control supported

## BACK MODULES



## SPECIFICATIONS

Specifications are subject to change without notice.

### DIGITAL VIDEO INPUT

Signal Format.....SMPTE 259M-C, 270 Mbps, 4:2:2,  
10 bits, 525/625 component  
Connector.....BNC (x1)  
Impedance.....75 Ω  
Return Loss.....>15 dB @ 270 MHz  
Cable EQ.....<656 ft (200 m), 270 Mbps,  
Belden1694A cable or equivalent

### REF INPUT

Signal Format.....CVBS  
Standards.....NTSC, PAL  
Connector.....BNC (x2), hi-Z loop-thru

### DIGITAL VIDEO OUTPUT

Signal Format.....SMPTE 259M-C, 270 Mbps, 4:2:2,  
10 bits, 525/625 component  
Connector.....BNC (x4)  
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

H Adjustment Precision.....±1/2H  
V Adjustment Precision.....±1/2F

### ANALOG VIDEO OUTPUT

Signal Format.....CVBS  
Standards.....NTSC, PAL  
Quantization.....10 bits output  
Connector.....BNC (x2)  
Impedance.....75 Ω  
Amplitude.....1.0 Vp-p ±3%  
Chr/Lum Delay Diff.....<5 ns  
S/N Ratio.....>70 dB @ 6 MHz

### ELECTRICAL

Power.....5 W

### ENVIRONMENTAL

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