

Re-Clocker - Multi-Rate SD/HD

With the increasing use of HD video equipment one of the biggest problems with the new technology is distributing the video signals around a studio or OB site.

With a typical HD data rate of 1.485Gb/s most equipment will only transmit the signal over 200m of high quality video cable, or a much reduced distance, if ordinary video cable is used.

One option is to use fiber optic cables and transmission equipment. For really long distances this is essential, but can prove quite expensive for shorter distances.

Where the distances involved are of the order of 150-500m a more economical solution is to use a simple data re-clocker. This restores the 'quality' of the serial digital signal to the point where it can be sent over another 200m of cable before either reaching it's destination or being re-generated by another re-clocker unit.

The Camera Corps multi-rate re-clocker can be used to re-clock any serial digital SD or HD signal. Two re-clocked outputs are provided. It will normally accept and re-clock a serial digital HD input signal (1.485Gb/s)



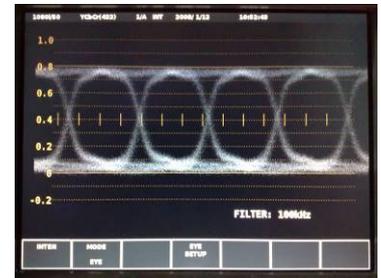
from up to 230m of Belden 1694A cable.

Operation is fully automatic with auto selection of any input data rate from 143Mb/s to 2.97Gb/s. The unit operates from any DC power input from 9-18v consuming just 1.5watts. A 5volt DC power input is also available as an option.

1.485Gb/s serial digital signal after transmission over 150m of cable



1.485Gb/s serial digital signal after re-clocking with Camera Corps multi-rate re-clocker



Technical Specifications

- SMPTE 424M, SMPTE 292M, SMPTE 259M compliant
- Multi standard operation from 143Mb/s to 2.97Gb/s (also DVB-ASI at 270Mb/s)
- Fully automatic data rate selection
- Typical equalised cable lengths for Belden 1694A:-
- 140m at 2.97Gb/s, 230m at 1.485Gb/s, 250m at 270Mb/s
- Output jitter max 0.10UI (typical .06UI) at 1.485Gb/s
- Lock detect light
- Power requirements 9-18v at 1.5watts. (Optional 5v DC power input)