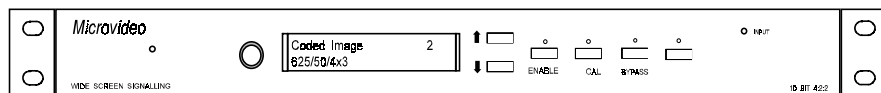


# Microvideo

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## Video Index Decoder for Aspect Ratio Signalling

- Supports AFD
- GPI outputs
- LCD Display
- RS232 / 422



In a broadcast system which is using both standard 4:3 and wide screen (16:9) format pictures it is useful to label the video signal with aspect ratio information. This allows equipment in the transmission chain to know what the picture format is. There are currently two different signals used by UK broadcasters; Video Index (line 11/324) and Wide Screen Signalling (line 23). We supply Generators and Decoders for both types of signalling. This datasheet covers the video index only.

### Data format

Video Index is a technique used to encode program and picture related source information in conjunction with a component digital video signal. The data is encoded in bit 2 of the chrominance signal (assuming a 10 bit signal where bit 0 is the lsb and bit 9 is the msb), on lines 11 and 324 for a 625 line signal, or lines 14 and 277 for a 525 line signal. The formatting for the data is defined by SMPTE RP186 and includes the aspect ratio of the 'coded' picture, this being 16:9 or 4:3.

UK broadcasters have also utilised some of the unused bits in the SMPTE RP186 standard to convey Active Format Descriptor (AFD). This AFD data will indicate how the picture should be treated / displayed, by equipment such as aspect ratio converters and set top boxes.

**Video Input** SDV(270Mb/s) as per SMPTE259M

**Video Output** 2 x SDV(270Mb/s) reclocked outputs - exact copy of input

**Data Interface** Coded (source) image and AFD is displayed on an LCD and output on 5 GPIs.

The GPIs are TTL level outputs on 9 way D type.

C1 Valid Data (1) or No Data Present (0).

C2 Aspect ratio of source material (16:9 or 4:3 CODED IMAGE).

C3,C4,C5 - The AFD information inserted - (using coding given above).

RS232 and RS422 interfaces. Protocol is defined by Microvideo.

**Physical** The product is supplied in 1U rack mounting frame with integral psu.

**Product Code** VIG-DEC: 1U rack mounting unit with RS232/422 interface and front panel controls.