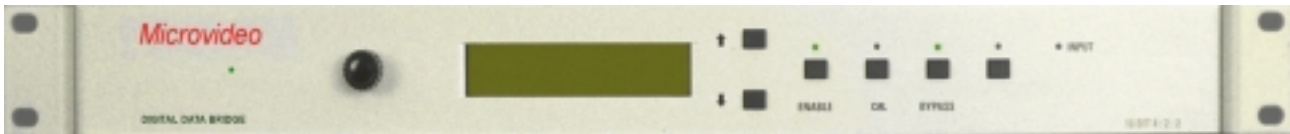


Serial Digital VBI Data Bridge with 4 Analogue Inputs

- Inserts Analogue VBI data into SDV
- Copy VBI data
- Move data between VBI lines
- Advanced sync reference output



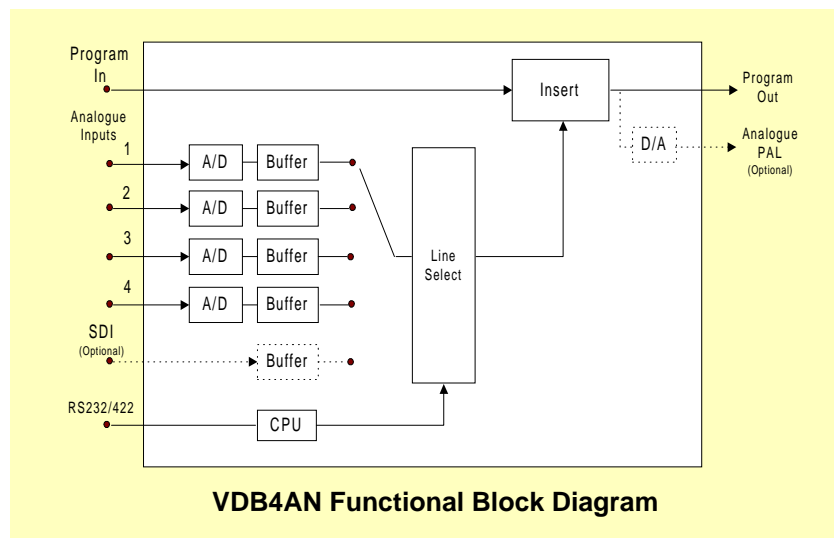
Microvideo data bridges are designed to provide a solution to several systems integration problems involving data signals carried on video lines in the vertical interval. To specifically transfer analogue data signals into Serial Digital Video systems the VDB4AN has four analogue inputs. Each input has a full specification CCIR 601 A/D converter and a data buffer for the storage of the luminance (Y only) VBI data. This buffer stores 18 VBI lines per field, and selected VBI lines from the buffers are inserted into the program signal. Data can be inserted onto a different line from which it is read, this enables analogue VBI signals, which are out of phase to the program stream, to be inserted. Because each input has its own independent buffer each input may be asynchronous.

The front panel control allows the user to select which lines are taken from each of the analogue inputs, and which line they are inserted into on the SDV program output. Each line on the output can be copied from any input line and may be repeated, blanked, passed from the program SDV input or have an ITS signal inserted. The VBI data is stored in the buffer as a video signal but is not decoded or re-generated, and therefore can work with any type of VBI data.

Typical applications for the VDB4AN include Teletext, Closed Captions, Widescreen Signalling, Video Index Coding, VPS and data broadcasting applications. Video Index data may be

passed from the program input to the output, even when inserting luminance data from the analogue input, on the same line.

To enhance the versatility of the VDB4AN, an optional asynchronous Serial Digital Video data input is available in addition to the 4 analogue inputs. This can be used at the same time as the analogue input and can therefore mix lines from analogue and digital sources. Setting up the VDB4AN can be done with the front panel controls or via the RS232/422 ports. GPI inputs are available for special applications, such as the selection of WSS signals stored as ITS. For installations that use two independent mains supplies option -DM is available, this provides a second IEC mains inlet and transformer and will allow either mains source to be used.



VDB4AN Functional Block Diagram

Specifications:

Inputs:

Program	1 x BNC. SDV 270Mb/s to EBU tech 3267, SMPTE 250M.
VBI Data	4 x BNC. Analogue composite PAL/NTSC 1v p-p into 75R. Y only sampling with full spec CCIR 601 filters.
SDV Data (Optional)	1 x BNC. SDV 270Mb/s to EBU tech 3267, SMPTE 250M.

Outputs:

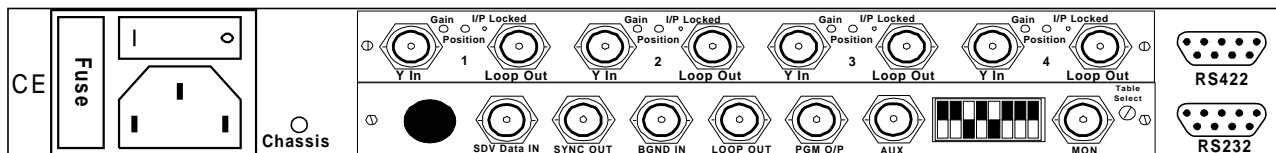
Program	1 x BNC. SDV 270Mb/s to EBU tech 3267, SMPTE 250M with power fail bypass relay.
Out	1 x BNC. Looped output of program in. SDV 270Mb/s to EBU tech 3267, SMPTE 250M.
Aux	1 x BNC. SDV 270Mb/s to EBU tech 3267, SMPTE 250M.
Mon	1 x BNC. Analogue composite PAL/NTSC, 1v p-p into 75R.
Analogue	4 x BNC. Analogue composite PAL/NTSC looped output of each analogue data input. 1v p-p into 75R.
Syncs	1 x BNC. Analogue advanced syncs & black, 0.3v or 2v. Timing range 0-1us in 74ns steps.

Control:

RS232/GPI	1 x 9 way male 'D' RS232 to control the set up. 1 x GPI for bypass, 3 x GPI for special applications such as selection of WSS signals stored as ITS.
RS422	1 x 9 way male 'D' to control the set up.

Physical:

19" rackmounting 1U case, 400mm deep.



Ordering Information:

VDB4AN VBI data bridge for SDV with 4 analogue data inputs.

Options:

-B	Asynchronous SDV data input.
-MON	Analogue composite video output for PAL/NTSC monitoring.
-ITS	Insertion Test Signals, UK or CCIR.
-DM	Dual IEC mains inlet & transformer for dual mains operation.