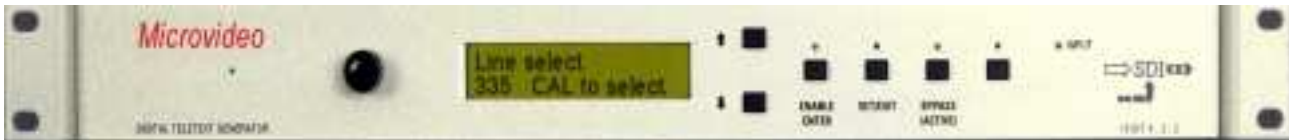


Digital Teletext Subtitle Encoder

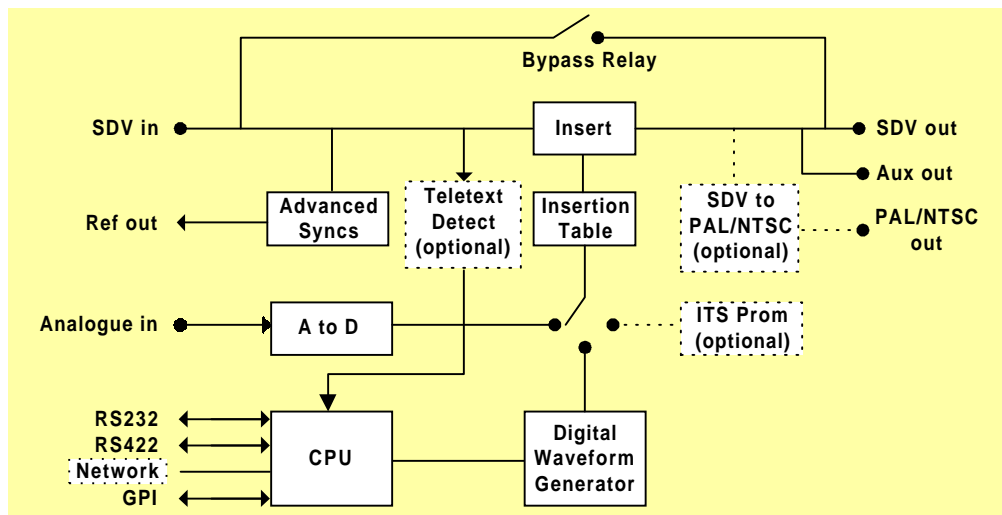


- Serial Digital Video Interface
- Teletext Waveform generated in digital domain
- RS232/422 or Ethernet Teletext Data input
- Full digital 10 bit data video path

The Microvideo Digital Teletext Subtitle Encoder INS-DTG, accepts subtitle data directly from a computer via an RS232 / RS422 interface. Using this data it constructs the teletext packet for the subtitle, synthesizes the waveform, and inserts it on a single VBI line into a serial digital video signal. This eliminates the need to have an analogue teletext signal generated in a digital stream, and therefore has the advantages of digitally defined signal levels and timing. The Encoder inserts the subtitle on any line, selectable from the front panel. A selection of apology captions are built in and may be triggered from the front panel.

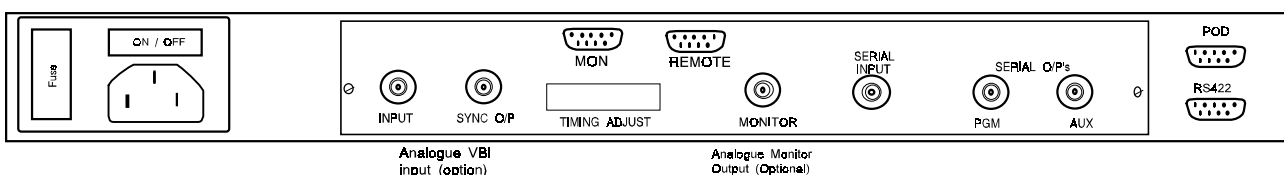
A number of hardware and software options are available to provide complete flexibility in using the INS-DTG. The teletext packet and waveform conform fully with the European teletext standard ETS 300-706.

There is support for a number of established subtitle data protocols, and the Microvideo proprietary protocol is available to subtitle software vendors. Please contact Microvideo for a list of protocols and software packages supporting the encoder.



INS-DTG Functional Block Diagram

Rear Panel Layout:



Specifications:

Inputs:	Programme in:	Serial Digital Video (270Mb/s) with bypass relay which connects to output on power failure.
	Analogue VBI in (optional):	Analogue composite PAL/NTSC.
	Data in:	RS232 data link for PC running subtitling software.
Outputs:	PGM out:	Serial Digital Video (270Mb/s)
	Aux out:	Serial Digital Video (270Mb/s)
	Monitor out (optional):	Analogue composite PAL/NTSC.
Physical:	1U rack mount, 420 mm deep. 220/240V or 110V operation, internal link selectable.	

The INS-DTG is supplied with RS232 and RS422 serial ports. There is the option of an analogue VBI data input, this will allow the insertion of signals from analogue VBI data generators. This may be used as either a back-up input for the subtitle data, or for other data services. Also available as an option is an analogue PAL/NTSC output for monitoring purposes. Insertion Test Signals (UK or CCIR) can also be inserted on any lines, as well as inserting teletext.

Features:

Test Mode:	In test mode the INS-DTG always inserts the last packet so that the waveform may be easily viewed on a waveform monitor.
Apology Captions:	A selection of apology captions are provided and may be triggered from the front panel.
View / Set Lines:	Allows each VBI line to be set to PASS, BLANK, ITS, insert analogue or insert subtitle.
Serial Ports:	Serial port parameters such as Baud rate can be set from the front panel.
Bypass:	On GPI input.

Additional Options:

Automatic clear packet generator.

Automatic caption generation, or triggered by GPI input. Typically, if no teletext is generated for 30 seconds a clear packet is sent. After a further 30 seconds an apology caption may be sent.

Ordering Information:

INS-DTG	Digital Teletext Subtitle Generator.
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Options:

-AN	Analogue Composite PAL/NTSC data input.
-ITS	Insertion Test Signals, UK or CCIR patterns available.
-MON	Analogue Composite PAL/NTSC monitoring output.
-AD	Teletext detect and auto clear.