
VPS Signalling Encoder

Features

- **Insertion of basic VPS information**
- **Front Panel or Remote Control**
- **1U rack mounting unit**
- **Serial Digital Video**

The Microvideo VPS Signalling Encoder provides a means of inserting the basic control data that is provided within the VPS standard as described in document **IRT Paper no. 8R6, Jan. 1993.**

For Example

- Youth protection
- TV Station Identification
- Sound Coding Data

Note : The unit does not implement the VTR control information (program delivery data) words.

The unit can be controlled either from the front panel or remotely using GPI inputs.

1 of 4 functions can be controlled remotely.

- GPI 1 Youth Protection
- GPI 2 Audio Mono
- GPI 3 Audio Stereo
- GPI 4 2 Channel Audio

An analogue input option allows insertion of analogue teletext and analogue VPS data.

An Monitoring Option provides a Analogue PAL output

If required Insertion Test Signals can also be generated internally and inserted. These may be either ther UK patterns or the CCIR patterns (CCIR17,18,330,331)

Product Codes

INS-VPS	VPS Data Inserter for SDV(270Mb/s), in 1U frame with front panel controls
option	
-AN	Analogue Data (Teletext or VPS) input
-MON	Monitoring PAL output
-ITS	Insertion Test Signals (UK or CCIR)

Product Specification

INPUTS: SDV(270Mb/s) on BNC to EBU tech 3267, SMPTE 259M

OUTPUTS: 2 x SDV(270Mb/s) on BNC to EBU tech 3267, SMPTE 259M.
On power failure the SDV input is routed to the Main Program (PGM) output by an RF relay.

Note : The digital video path through the unit is 10 bit and transparent to Embedded Audio. The unit will pass the EDH checksum packet but does not recalculate a new value for it.

With the Analogue Input option the follow are also provided

Analogue 1 For Analogue Teletext VBI data

Analogue 2 For Analogue VPS data input.

Analogue Input Spec:

Gain and black level adjust on presets accessible from rear.

Fitted with full spec CCIR601 filters.

Frequency response: Y to 5.5MHz 0.2dB.

Sampled 8 bits at 13.5MHz.

Resulting Y data inserted into selected line.

U and V data held at level 128.

ADVANCED SYNC OUTPUT:

Syncs and black.

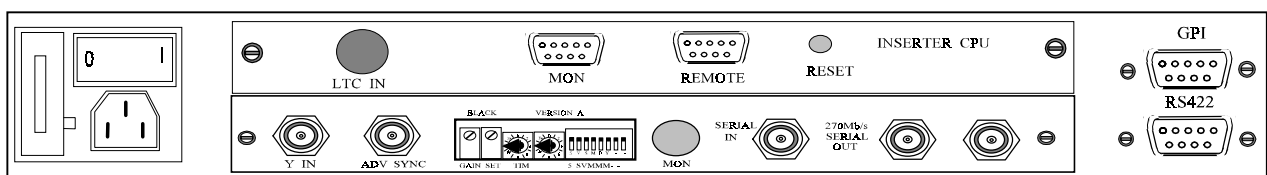
Sync level selectable 0.3v or 2v. Timing 0-1uS advance in 74nS steps.

Adjusted on switch accessible through rear panel.

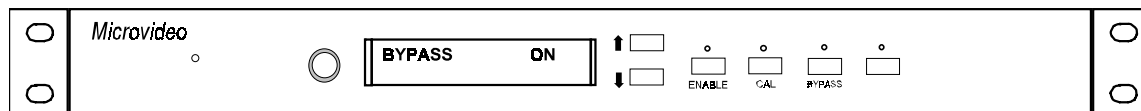
PHYSICAL:

1U case, 400mm deep.

Power requirements are 110/220/240V 60W, with voltage selection on internal links.



Control Panel Operation:



A control panel is fitted to the VPS Encoder. The current function is indicated on the LCD display. The up and down arrow buttons rotate through the functions. For each function the rotary knob sets the value of the parameters. The CAL button resets this parameter to the default value.

ENABLE This button can be pressed to disable the front panel.

BYPASS This is an active bypass, routing the SDI input to the PGM output.

The Following functions are controlled from the front panel :

SOURCE ID sets Word 3 of the VPS data
Turning the rotary knob selects value from 1 to 254.

TEXT selects 1 of 10 text sequences, Word 4 is an ASCII sequence, with 8 characters.
Turning the rotary knob selects 1 of 10 names. In the Text menu, press CAL to enter the Edit menu, > CAL = EDIT.

EDIT edits the name that has been selected in the Text menu.(only accessible from Text menu)

The up and down arrows go through the 8 characters of the selected name, and the rotary knob changes the individual character. Press CAL to exit the Edit menu and to re-enter the Text menu.

AUDIO sets Audio, Word 5 bits 1 & 2 of the VPS data, range 0 to 3.

- 0 2 Channel
- 1 Mono
- 2 Stereo
- 3 2 Channel

VPS sets VPS, Word 5 bits 3 & 4 of the VPS data, range 0 to 3

- 0 not protected ZDF
- 1 youth protect ZDF
- 2 youth protect ARD
- 3 not protected ARD

STATUS sets Program Status, Word 6 bits 1 & 2 of the VPS data, range 0 to 3

- 0 Program
- 1 Test: Studio
- 2 Test: Sender
- 3 Program

Front Panel Operation continued..

CLASS sets Qualification, Word 6 bits 3 & 4 of the VPS data, range 0 to 3.
 0 Private
 1 Program
 2 Program
 3 Program

VPS SOURCE sets VPS source, either external or internal
 0 external, analogue input 2
 1 internal

COUNTRY CODE sets the VPS country code bits in Words 13 & 14 of the VPS data, range 0 to 15.

ID LABEL sets the VPS ID label bits in Word 14, range 0 to 63.

ADDRESS AREA range 0 to 3

Note.

1. If any GPI is active, the Encoder will switch to internally generated VPS.
2. When in a menu that a GPI has any effect, i.e. VPS Source, and a GPI is selected ON, then the selection is disabled.

Example. In VPS Source menu, external is selected.

If one of the four GPI is now switched ON, this will result in internal being selected. Both internal and 'GPI' will be displayed on the front panel. Normally this menu can toggle between external and internal, but under these circumstances the rotary knob is disabled, this prohibits the external source being selected while a GPI is ON.

If the currently selected menu item has been overridden by a GPI, the display will show 'GPI' in the lower left corner.

GPI	9 way	
1	9	Youth Protection
2	5	Audio Mono
3	4	Audio Stereo
4	7	2 Channel Audio