

Microvideo

Upgrade Information for VBI Data Inserters

Microvideo continues to develop their VBI Data Inserter products and are now up to their 3rd generation of design. The latest revision has many new features which would make it justifiable to consider upgrading your existing Microvideo Data Inserters. The new inserter hardware has the following additional features:

- 1. User programmable.** The original inserter had its setup data stored in EPROM which was programmed at the factory. The latest Inserters have the setup data stored in non volatile memory (EEPROM). This can be programmed in system using either a front panel (if fitted) or the Programming POD.
- 2. Composite output.** There is an optional composite analogue output. This could be used for checking the teletext that has been inserted. A marker may be inserted on the composite output to indicate which line is being set up when programming the unit.
- 3. Video Index.** A standard feature is the ability to pass Video Index data (this is encoded in bit 2 of the chroma samples) even when inserting or blanking on the lines which have video index data.
- 4. Improved limiting.** With improved data limiting, the output is always valid even if the input contains invalid data, which can often be a problem for lines in the vertical blanking.
- 5. Power fail relay bypass** is fitted to route the program input directly to the output in the event of a power failure.
- 6. Improved eye pattern and jitter** on the serial digital outputs. Improved return loss on input.
- 7. Removal of Sony 1601/1602 chips** from the board. It is known that these chips have reliability issues and so the latest data inserter hardware no longer uses these.

Note: The above features detail the improvements compared to the first generation (issue 1) Microvideo Inserter.

Which products are applicable for upgrade?

All the Microvideo VBI Data Inserter products, eg. INS-S, INS-WSS, etc. use a common video processing (inserter) board. All of the products shipped before August 2000 are issue 1 or issue 2 and so are applicable for upgrade. You can contact us to discuss the exact details of the units you have but as a guide to which products will benefit from an upgrade -

Serial No. up to Mi 393 will gain all of the additional features detailed above.

Serial No. Mi 394 to Mi 702 have a Sony 1602 input chip and so could be considered for an upgrade.

How is the upgrade done ?

It will depend on which Inserter you have but in many cases it is simply a board swap. The main video processing (inserter) board is removed from the rear of the unit and the new one inserted.

In some cases it may be necessary to return the unit to Microvideo, depending on your requirements.

Hand Held Programming POD

The low cost programming 'POD' connects to the rear of the unit via a cable and allows the user to change the insertion table of the unit while still in system and 'on air'. It may be used to view or alter any of the 16 insertion tables stored in the inserter's EEPROM. The insertion table instructs the VBI Inserter what to do on each line of the VBI.

It can be set to pass, blank or insert data from the analogue input. If the unit has one of the multiple analogue input options, up to 4 analogue inputs may be selected. If the unit has the ITS option, one of 4 insertion test signals may be selected.

The POD measures 75x35x105mm and uses Hex switches to select the Line Numbers and Data source. It takes its power from the Inserter and uses a seven segment display to show the setting stored for the selected VBI line.

Being small and light weight it can be easily carried in a pocket and ensures that only authorised persons can make changes to the inserter.

