IMS-VSI: Studio Synchronization Input Card

This product is only compatible with Meinberg's line of modular **IMS LANTIME** systems.
Visit the [1]IMS Information Page to learn more.

The IMS-VSI module for Meinberg

Key Features

- Accepts black & burst (bi-level sync) signals with support for PAL and NTSC Comprehensive VITC support, both for standard SMPTE 12M and for SMPTE ST309/MJD and ITU-R.BR.1353 variants Black & burst is accepted without VITC for generating a reliable, accurate frequency signal (prescaler mode), or with VITC for full time-of-day, frequency, and phase support SMPTE 12M Linear Time Code (LTC) 25 fps input support Word clock input with support for any frequency from 1 kHz to 10 MHz Dedicated pulse-per-second (PPS) input for connection of an external phase reference.

Description

The IMS-VSI module operates as a multi-reference input card, with signal inputs for black & burst (bi-level sync, with both PAL & NTSC support), linear time code (LTC), and word clock signals. A pulse-per-second input is also provided for phase synchronization, to supplement those input signals which cannot be used as a phase reference (such as a word clock). These signals can be used to create a time reference for an IP network, for example as a bridge between the analog & SDI world and a PTP timing network. It provides studios with an alternative method of reference signal synchronization if GNSS synchronization is not feasible but an alternative reference signal that provides the requisite stability & accuracy is available, and allows analog & SDI-based equipment to be synchronized with modern IP-based equipment using PTP timing.

Black & burst signals both with and without VITC (Vertical Integrated TimeCode) are supported; a black & burst signal with integrated VITC is suitable for providing a time of day, frequency, and phase reference for your IMS LANTIME system. Even a black & burst signal without VITC or a word clock signal can be used as a frequency reference, which when combined with a phase reference such as a PPS signal can be used for genlock and sample clocks.
Should you wish to integrate analog & SDI-based equipment into your modern IP-based production network and have the ability to install a GNSS antenna, Meinberg also provides studio signal output modules in the form of the IMS-VSG cards, which generate black & burst, tri-level sync, DARS, LTC, and word clock signals based on an upstream reference.

Characteristics

Supported Reference Signals	
	* Black & burst (bi-level sync) signals with support for PAL and NTSC
	* VITC support, for standard SMPTE 12M and for SMPTE ST309/MJD and ITU-R.BR.1353 variants (VITC required for full time-of-day, phase, and frequency reference)
	* Linear Time Code (LTC) 25 fps input support (SMPTE 12M compliant)
	* Word clock input, frequency range 1 kHz to 10 MHz
	* Pulse-per-second (PPS) input for external phase reference.
Status Indicators	"**St**" LED: Internal initialization status of IMS-VSI "**In**" LED: Operating state of IMS-VSI "**A**" LED: Reserved for later use "**B**" LED: Reserved for later use

Module Connectors	4 x BNC female connector
Supply Voltage	5 V
Power Draw	1,25 W
Supported Temperature	Operational: 0 - 50 °C (32 - 122 °F) Storage: -20 - 70 °C (-4 - 158 °F)
Supported Humidity	Max. 85 % (non-condensing) at 40 °C
Warranty	Three-year warranty
RoHS Status of Product	This product is fully RoHS-compliant.
WEEE Status of Product	This product is handled as a B2B (Business to Business) category product. To ensure that the product is disposed of in a WEEE-compliant fashion, it can be returned to the manufacturer. Any transportation expenses for returning this product (at end-of-life) must be covered by the end user, while Meinberg will bear the costs for the waste disposal itself.

Manual

The English manual is available as a PDF file: [2]Download (PDF)

Links:

[1] https://www.meinbergglobal.com/english/products/modular-sync-system.htm
[2] https://www.meinbergglobal.com/download/docs/manuals/english/vsi180.pdf