

## A-VBIDEC

Audio-in-VBI Decoder

# Preliminary Operating Instructions

## Introduction

The A-VBIDEC decoder decodes audio from an analog video channel which has been encoded by an A-VBIENC encoder. The decoder may also be used directly from off air through use of the built in tuner. Any off air channel from 1 through 63 can be selected. Audio outputs are separately provided for both the decoded audio and the off air main tuner audio. Any Vertical Blanking Interval (VBI) line can be selected from line 11 through 22 for decoding. The decoder may also be assigned a unique address allowing the common VBI line to be used with multiple decoders selectively.

## Rear Panel Connections

- **Power Inlet.** Power is applied to the decoder through the supplied AC line cord to the standard IEC power connector. The decoder is operable from 90VAC to 260VAC over a frequency range of 48 to 64Hz.
- **Video In BNC.** For applications requiring decode from an NTSC composite analog video source. The Tuner must be tuned to channel "0" to select this source.
- **Video Out BNC.** Duplicates and buffers the video in source. Also provide NTSC composite analog output of the selected tuner channel when the tuner is in use.
- **Tuner Audio Out male XLR.** Provides a +4dbu balanced output of the main audio channel of the selected tuner channel.
- **VBI decoded Audio Out male XLR.** Provides a +4dbu balanced output of the decoded audio.
- **Tuner In "F" connector.** For connection to an antenna or RF channel source.

## Front Panel Indicators and Buttons

- **Data LED.** Illuminates when valid encoded audio is detected.
- **Video LED.** Illuminates when proper NTSC composite video is detected.
- **Decoded Audio Level dbu.** 8 colored LED display arranged as a VU meter. Displays the instantaneous encoded and decoder output level. The red "clip" LED is calibrated to illuminate at +4.4dbu.
- **Function Select and LEDs.** Four LEDs which indicate whether "Decryption Key", "VBI line", "Address", or "Off-Air Channel" is selected. Depressing the "Function Select" button allows rotation through, and selection of, the desired function.
- **Three Digit Display.** Displays the parametric values programmed for the currently selected function. A pushbutton beneath each digit allows for setting of the respective digit.
- **Auto Mute.** A button and LED which alternately controls and displays the status of the Auto Mute feature. When enabled, causes the output to be muted when the decoded audio level is near inaudibility.
- **Fine Tune.** Two buttons which allow the fine tuning of the selected tuner channel.

- **Filter.** A button and LED which alternately controls and displays the status of an audio low pass filter. Useful in noisy environments.

## **Operating Instructions**

The decoder is operated by selecting functions and setting parameters on the three-digit display.

### **Decryption Key**

The Decryption Key function is not currently implemented. The value “000” must be set for proper operation of the decoder.

### **VBI Line**

The VBI Line function permits the selection of a VBI line to be decoded. The line number selected must agree with the line number programmed at the encoder.

### **Address**

The address function is useful for multiple remote situations. A single studio encoder can target a specific decoder by address for audio transmission. The address must be coordinated with the studio or director as IFB assigned. Setting the address of the decoder to zero permits all addressable channels to be heard (all call) or if addressing is not desired.

### **Off-Air Channel**

Selects the RF channel to be received and decoded. Fine Tune buttons can be used to fine tune to the desired channel. Setting the channel number to zeros causes selection of the NTSC composite video input for decoding.

## **Technical Support**

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