SENSORAY CO., INC.

PCI MPEG Frame Grabber

Model 616

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7313 SW Tech Center Dr.
Tigard, OR 97223
Phone 503.684.8073 • Fax 503.684.8164
sales@sensoray.com
www.sensoray.com

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1. Limited Warranty

Sensoray Company, Incorporated (Sensoray) warrants the model 616 hardware to be free from defects in material and workmanship and perform to applicable published Sensoray specifications for two years from the date of shipment to purchaser. Sensoray will, at its option, repair or replace equipment that proves to be defective during the warranty period. This warranty includes parts and labor.

The warranty provided herein does not cover equipment subjected to abuse, misuse, accident, alteration, neglect, or unauthorized repair or installation. Sensoray shall have the right of final determination as to the existence and cause of defect.

As for items repaired or replaced under warranty, the warranty shall continue in effect for the remainder of the original warranty period, or for ninety days following date of shipment by Sensoray of the repaired or replaced part, whichever period is longer.

A Return Material Authorization (RMA) number must be obtained from the factory and clearly marked on the outside of the package before any equipment will be accepted for warranty work. Sensoray will pay the shipping costs of returning to the owner parts, which are covered by warranty.

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2. Special Handling Instructions

The Model 616 board contains CMOS circuitry that is sensitive to Electrostatic Discharge (ESD). Special care should be taken in handling, transporting, and installing the 616 to prevent ESD damage to the board. In particular:

- Do not remove the 616 from its protective antistatic bag until you are ready to install it in your computer.
- Handle the 616 only at grounded, ESD protected stations.
- Always turn off the computer before installing or removing the 616 board

3. Introduction

The Sensoray Model 616 is an MPEG video encoder/decoder board. Some of the features include:

General

- Real time MPEG-2 and MPEG-1 video encoder and decoder
- Support for variable bit rate and constant bit rate
- IPB pictures to 15Mbps for constant bit rate and 10Mbps for variable bit rate
- Supports multiple resolutions (704x480, 640x480, 352x240, etc.)
- Support for NTSC, PAL
- Composite and S-Video inputs and outputs
- During encoding and standby, video input is fed to output for easy adjustment
- Onboard audio CODEC
- PCI form factor
- Either BNC connectors or header for video input and output
- Mini phone jacks for audio input and output
- 4 relay inputs and/or outputs
- Low power

Video encoder

- Generates 13818 (MPEG-2) and 11172 (MPEG-1) compliant elementary streams (ES)
- Operates up to 30 frames per second
- Selectable bit rate

Video decoder

- Decodes both MPEG-1 and MPEG-2 streams
- Horizontal and vertical scaling

4. Hardware Configuration

Video, audio and digital I/O are presented on 6 back side connectors. S-Video output jumper connector located on the component side of the board.

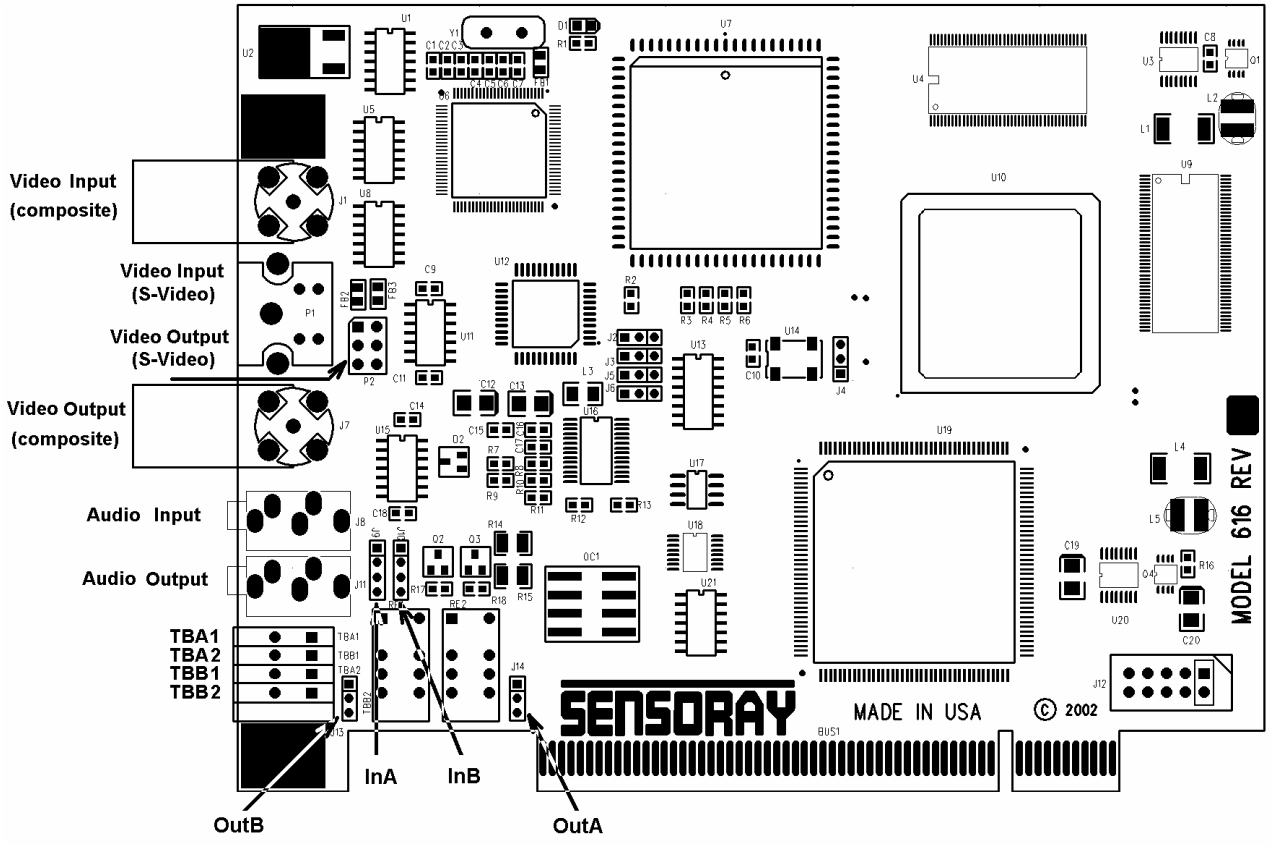

Figure 1. Board Layout

5. Connectors

The BNC connectors (if installed) are for composite video. J1 is composite video in and J7 is composite video out. The center pin is the signal and the out shell is video ground.

The P1 connector carries S-Video input signals. The pinout is given in Table 1.

Pin	Function	Pin	Function
1	S-Video in – C	3	Video ground
2	S-Video in – Y	4	Video ground

Table 1. P1 Connector Pinout

Note: the net "S-Video in – C" connected on the board to the composite video input.

The P2 connector carries S-Video output signals. The pinout is given in Table 2.

Pin	Function	Pin	Function
1	S-Video out – Y	3	Video ground
2	S-Video out – C	4	Video ground

Table 2. P2 Connector Pinout

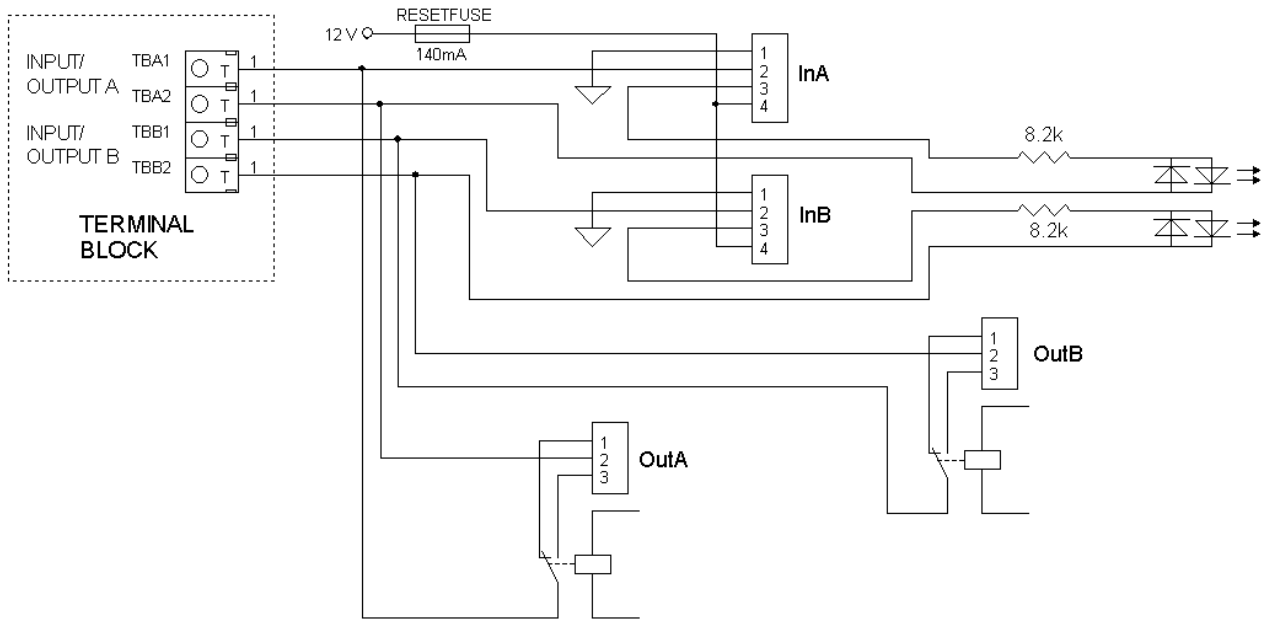

Figure 2. I/O Diagram

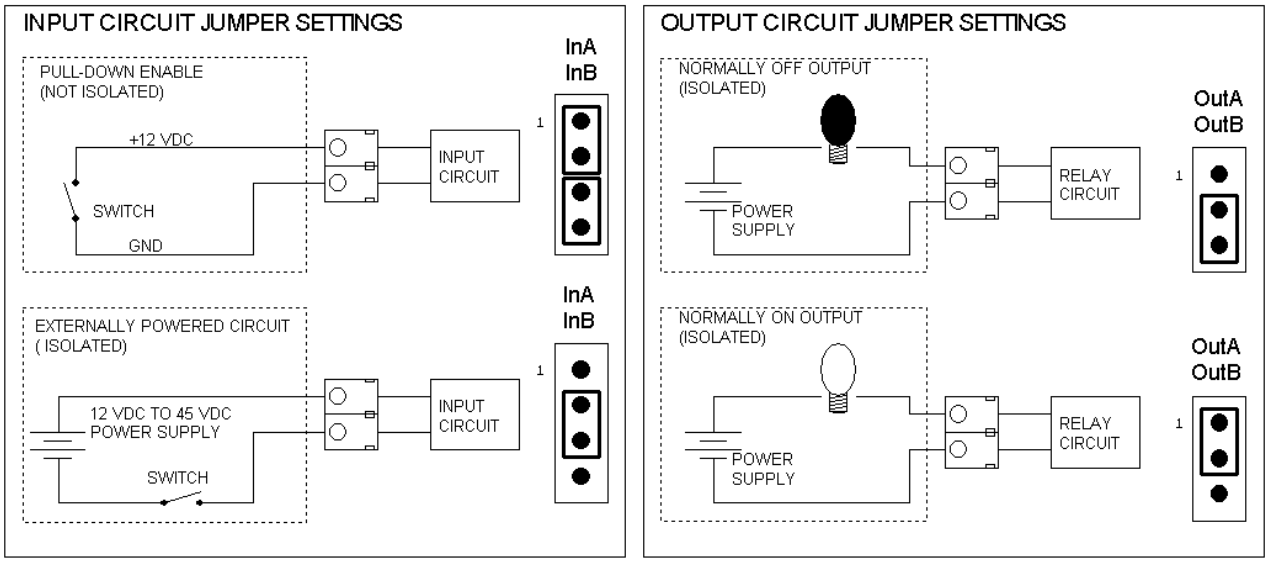

Figure 2. I/O Jumper Settings